

FOREWORD

This manual has been prepared for use when performing terminal repairs, wire repairs, or connector repairs on vehicles.

A step-by-step section on connector repair and terminal repair is included.

There is a section of charts with terminal and connector illustrations, part numbers, and notes on terminal removal.

By using this guide, a satisfactory repair of the wiring harness and connectors in Toyota vehicles will be easy to achieve.

All information in this manual is based on the latest product information at the time of publication. However, specifications and procedures are subject to change without notice.

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A

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INTRODUCTION—GENERAL INFORMATION

GENERAL INFORMATION

This manual provides instruction in the following repairs:

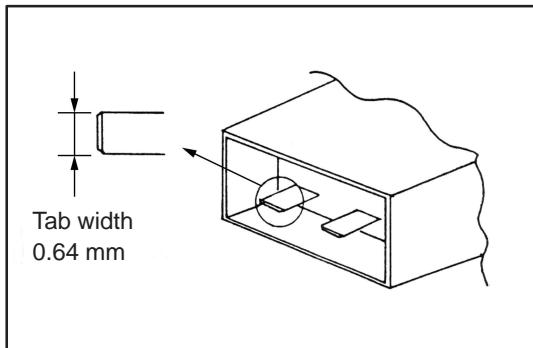
- How to Inspect for System Inspection
- Circuit Protection
- Terminal and Connector Repair Procedure

NOTICE:

When inspecting or repairing the SRS AIRBAG, be sure to carefully read the precautionary instructions and procedure in the Repair Manual for the applicable model.

After any electrical repair is made, always test the circuit by operating the devices in the circuit. This confirms not only that the repair is correct, but also that the cause of the complaint was correctly identified.

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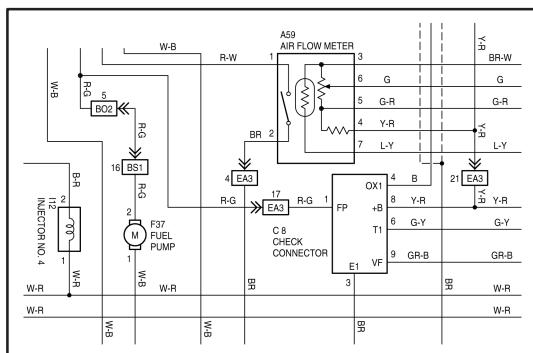
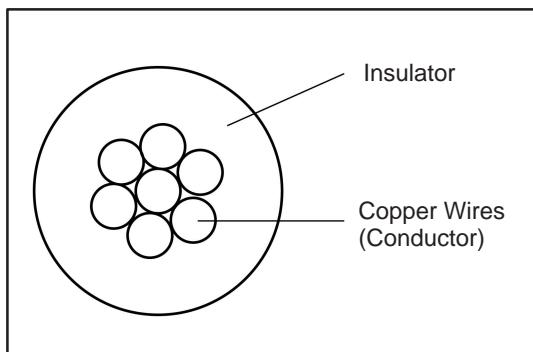
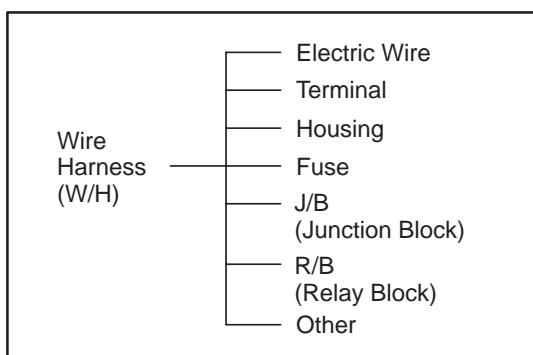
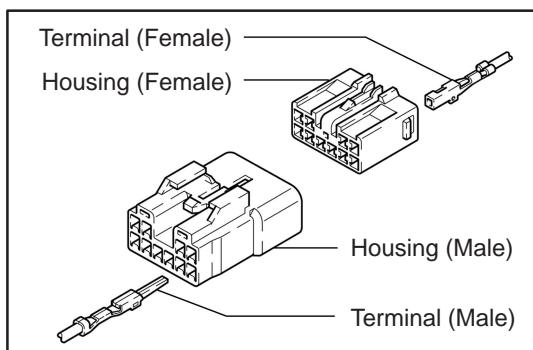
Terminal type number name

The terminal type number naming system has changed: the metric system will be used in place of the inch system. To be more specific, male tab width "in millimeters" will be used as terminal type number from now on — in place of male tab width in inches which has been in use so far.

Below is a table of comparison:

Old terminal type No. (inch)	→	New terminal type No. (mm)
025	→	0.64
040 (II, III, IV)	→	1.0 (II, III, IV)
050	→	1.3
060	→	1.5
070 (II)	→	1.8 (II)
090 (II)	→	2.3 (II)
110	→	2.8
187	→	4.8
250 (II)	→	6.3 (II)
305	→	7.7
312	→	8.0
375	→	9.5

For those connectors which are not shown above, the terminal type numbers remain unchanged.



B = Black	W = White
L = Blue	BR = Brown
V = Violet	SB = Sky Blue
R = Red	G = Green
P = Pink	LG = Light Green
Y = Yellow	GR = Gray
O = Orange	

What is Wire Harness?

The wire harness (W/H) is systems of electric wires for automobiles to connect all the electronics parts in automobile electrically and work them. As more electronics parts are introduced in automobiles recently, the electric wires used for the wire harness are increasing in number and the structure is becoming more complicated. As a result of that, there are hundreds of connectors, which is the parts which connects wires mechanically and electrically, in one vehicle. Therefore, numbers of the connector terminal (Terminal) or the connector housing (Housing) are designed to meet many kinds of uses of circuits. Various components have been improved to ensure the product reliability or realize a wider space in the vehicles.

Wire Harness Components

Wire harness mainly consists of wires, terminals, or housings.

There are various components are designed for many parts of vehicles, such as one with high heat-resistance, water-resistance, or bending ability, ones have different current capacities, or ones are hardly influenced by electromagnetic noise.

Electric Wire

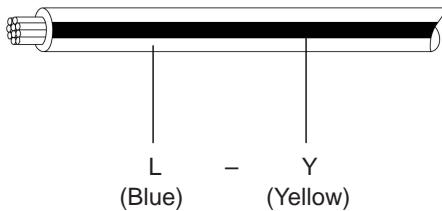
The electric wires used for the wire harness consists of the conductor made from numbers of twisted mild copper wire with a diameter of less than 0.5 mm and the insulator surrounding the conductor.

The insulator is generally made from vinyl chloride and covers the conductor with even thickness. The insulators are color-coded in order to distinguish each wire. The base colors or the stripe patterns is used to make difference between insulators. Each color of wires is indicated by the abbreviation in the repair manual and the electrical wiring diagram.

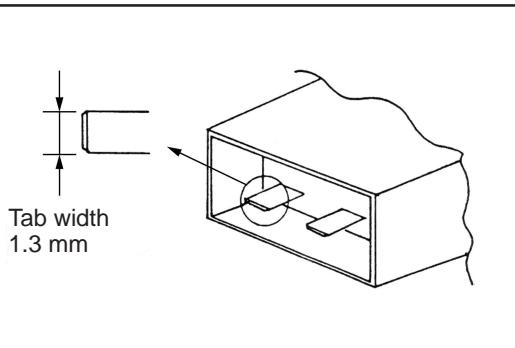
6	Wire Harness Repair Manual
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INTRODUCTION-GENERAL INFORMATION

Example: L-Y



The first letter indicates the basic wire color and the second letter indicates the color of the stripe.



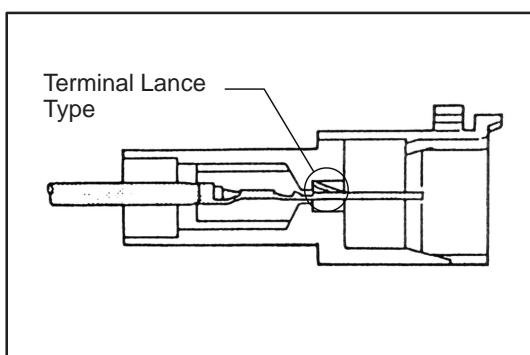
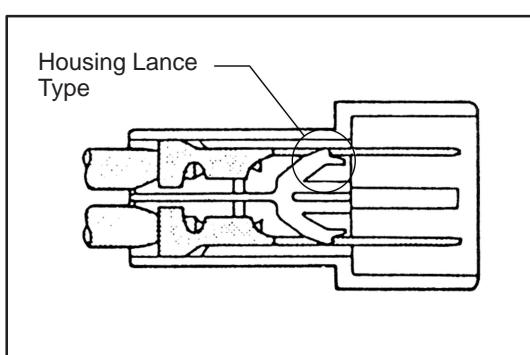
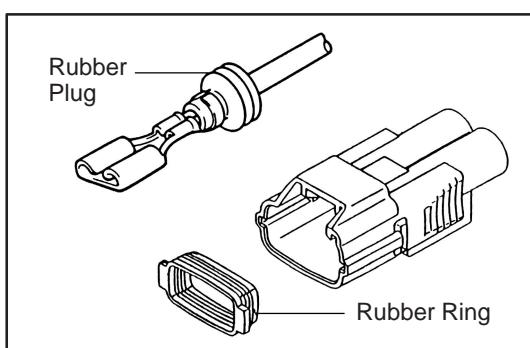
Terminal and housing

Terminal connects wires and housing insulates connecting parts.

There are the male terminal and the female terminal. The types of terminals are decided by tab width of male terminal. And the terminal with the rubber plug or the rubber ring is used in the part, such as the engine compartment, which become wet. For the circuit with slight current at EFI system or ABS system, the gold-plated terminal is introduced for ensuring reliabilities.

As the number of the circuit is increasing recently, there are new types of parts introduced. For example, there is the hybrid type housing, which is a combination of terminals with different tab width, such as the power source terminal or the signal terminal. Also, new type of connector such as the double lock housing, which is designed with the retainer in addition to the lance to prevent terminal from slipping off, is available. The new type of connectors are produced to realize higher product reliabilities and utilized widely recently. The major characteristics of these new connectors are shown in the table 1.

There are two types of lances: housing lance, which is inside the housing and terminal lance, which is inside the terminal.



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Table 1 : Characteristics of the new types of connector (Improvement)

Characteristics (Improvement)	Note
<p>1. Double Lock</p> <p>Lance (Primary Lock) Housing Terminal Retainer (Double Lock)</p>	<p>If terminal is not inserted to housing correctly, the retailer does not fit.</p>
<p>2. Extension of Housing</p> <p>Extension Housing Shortening Terminal</p>	<p>This is to prevent deformation of the terminal when it is inserted diagonally.</p>
<p>3. Change of Contact Structure and Introduction of Box-Shaped Structure</p>	<p>Expansion of contact section Stabilization of contact pressure</p>
<p>4. Change of Locking Shape</p> <p>Ribs are added</p>	<p>This improves the close fit of locking and you can hear the click sound and feel that the connector is completely installed.</p>

INTRODUCTION—HOW TO PERFORM FOR SYSTEM INSPECTION

HOW TO PERFORM FOR SYSTEM INSPECTION

This inspection procedure is a simple troubleshooting which should be carried out on the vehicle during system operation and is based on the assumption of system component trouble

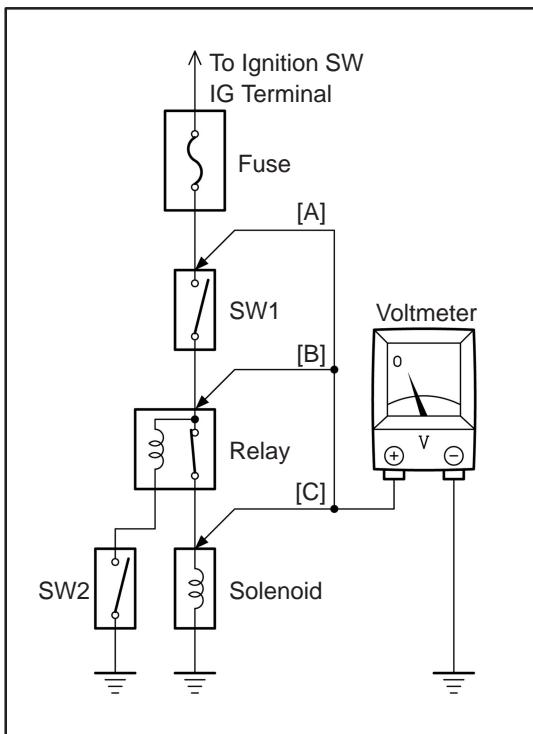
Always inspect the trouble taking the following items into consideration:

- Ground point fault
- Open or short circuit of the wire harness
- Connector or terminal connection fault
- Fuse or fusible link fault

NOTICE:

- This is an on-vehicle inspection during system operation. Therefore, inspect the trouble with due regard for safety.
- If connecting the battery directly, be careful not to cause a short circuit, and select the applicable voltage.

A



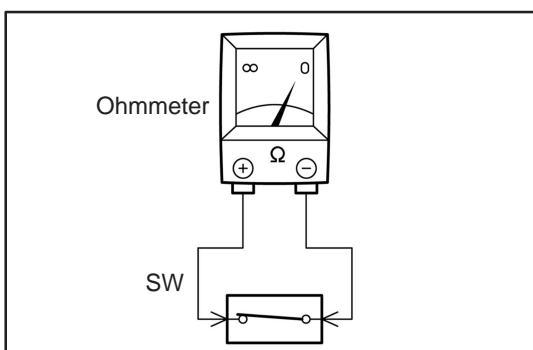
1. Voltage Check

- (a) Establish conditions in which voltage is present at the check point.

Example:

- [A] – Ignition SW on
- [B] – Ignition SW and SW 1 on
- [C] – Ignition SW, SW 1 and Relay on (SW 2 off)

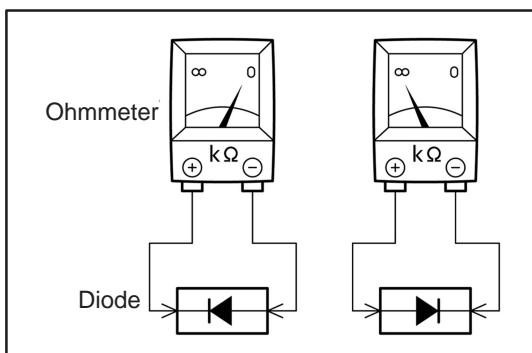
- (b) Using a voltmeter, connect the negative (–) lead to a good ground point or negative (–) battery terminal and the positive (+) lead to the connector or component terminal. This check can be done with a test bulb instead of a voltmeter.



2. Continuity and Resistance Check

- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.

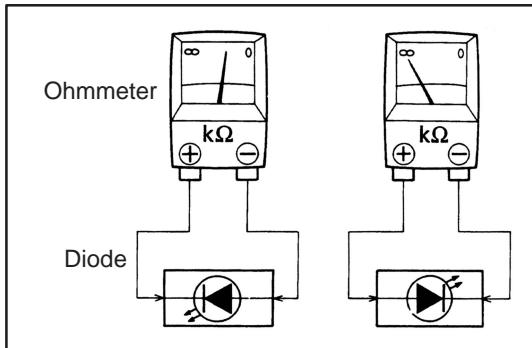
INTRODUCTION—HOW TO PERFORM FOR SYSTEM INSPECTION



If the circuit has diodes, reverse the two leads and check again.

When touching the negative (-) lead to the diode positive (+) side and the positive (+) lead to the negative (-) side, there should be continuity. When touching the two leads in reverse, there should be no continuity.

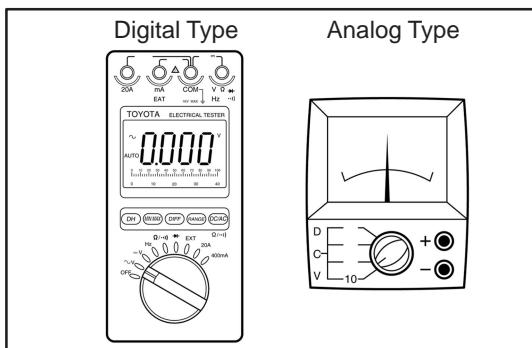
HINT: Specifications may vary depending on the type of tester, so refer to the tester's instruction manual before performing the inspection.



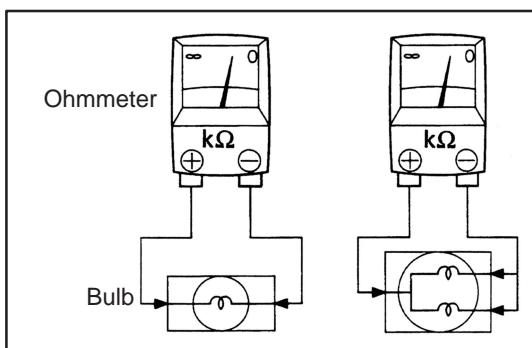
Check LED (Light Emitting Diode) in the same manner as that for diodes.

HINT:

- Use a tester with a power source of 3V or greater to overcome the circuit resistance.
- If a suitable tester is not available, apply battery voltage and check that the LED lights up.



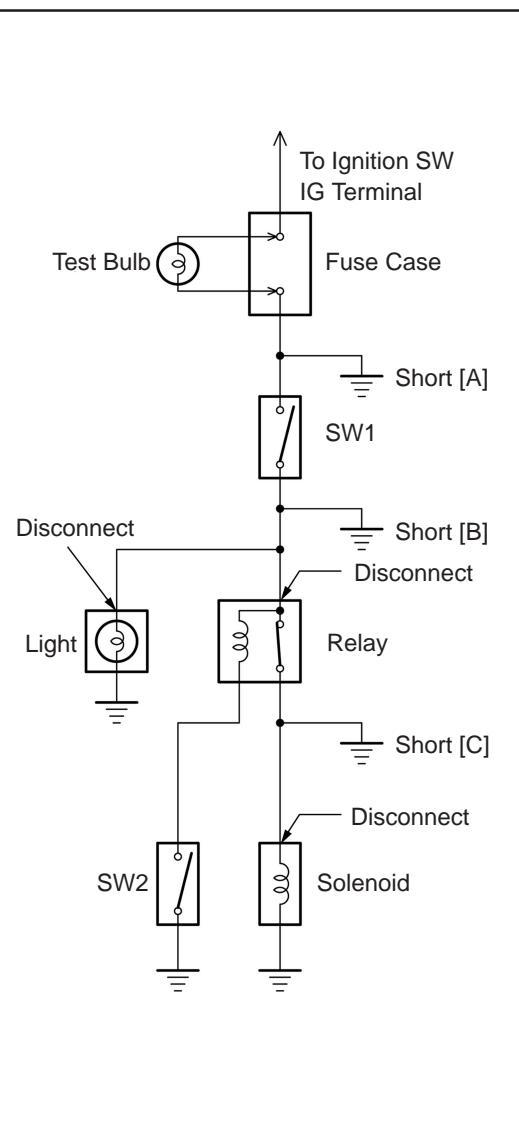
- (c) Use a volt/ohmmeter with high impedance ($10k\Omega/V$ minimum) for troubleshooting of the electrical circuit.



3. Bulb Check

- (a) Remove the bulb.
- (b) There should be continuity between the respective terminals of the bulb together with a certain amount of resistance.
- (c) Apply the two leads of the ohmmeter to each of the terminals.
- (d) Apply battery voltage and check that the bulb light up.

INTRODUCTION—HOW TO PERFORM FOR SYSTEM INSPECTION



4. Finding a Short Circuit

- Remove the blown fuse and eliminate all loads from the fuse.
- Connect a test bulb in place of the fuse.
- Establish conditions in which the test bulb comes on.

Example:

- [A] – Ignition SW on
- [B] – Ignition SW and SW 1 on
- [C] – Ignition SW, SW 1 and Relay on (Connect the Relay) and SW 2 off (or disconnect SW 2)

- Disconnect and reconnect the connectors while watching the test bulb. The short lies between the connector where the test bulb stays lit and the connector where the bulb goes out.
- Find the exact location of the short by lightly shaking the problem wire along the body.

CAUTION:

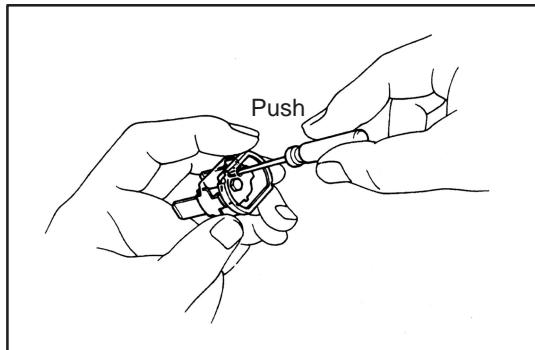
- Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)**
- When replacing the internal mechanism (ECU part) of the digital meter, be careful that no part of your body or clothing comes in contact with the terminals of leads from the IC, etc. of the replacement part (spare part).**

A

CIRCUIT PROTECTION

All electrical circuits are protected against excessive loads which might occur because of shorts or overloads in the wiring system. Such protection is provided by a fuse, circuit breaker, or fusible link. A short circuit may cause a fuse to blow or a circuit breaker to open.

A



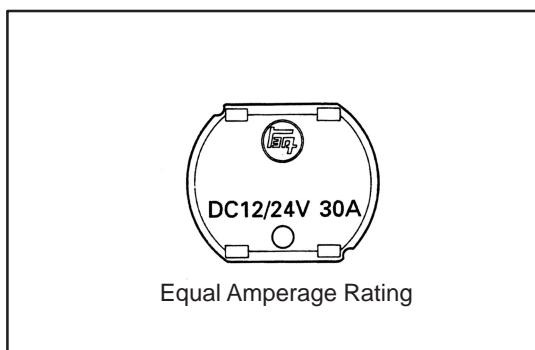
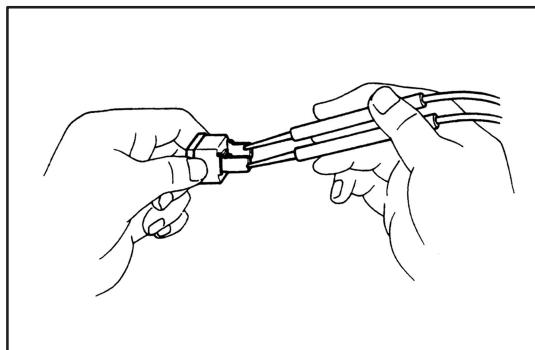
RESET CIRCUIT BREAKER

1. Remove Circuit Breaker

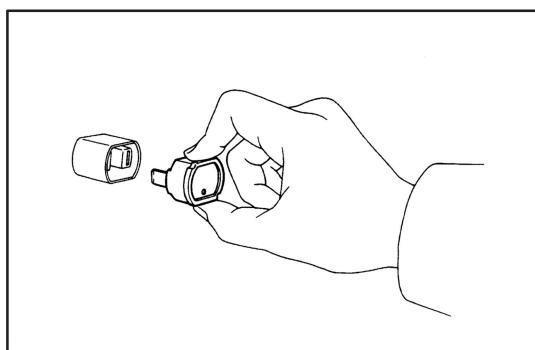
- Disconnect the negative (-) cable from the battery.
- Remove the circuit breaker.

2. Reset Circuit Breaker

- Insert the needle into the reset hole and push it.
- Using an ohmmeter, check that there is continuity between both terminals of the circuit breaker. If continuity is not as specified, replace the circuit breaker.



HINT: If replacing the circuit breaker, be sure to replace it with a breaker with an equal amperage rating.

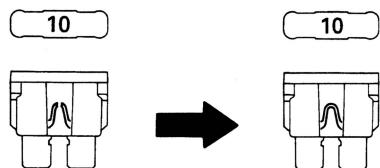


3. Install Circuit Breaker

- Install the circuit breaker.
 - Connect the negative (-) cable to the battery.
- HINT: If a circuit breaker continues to cut out, a short circuit is indicated. Have the system checked by a qualified technician.

INTRODUCTION-CIRCUIT PROTECTION

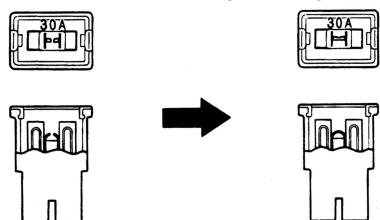
Equal Amperage Rating



REPLACEMENT OF FUSE AND FUSIBLE LINK

HINT: If replacing the fuse or fusible link, be sure to replace it with a fuse or fusible link with an equal amperage rating.

Equal Amperage Rating



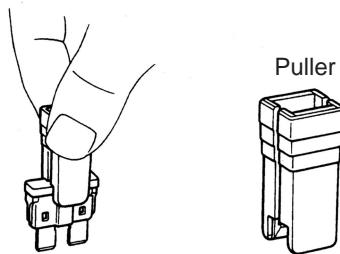
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NOTICE:

1. Turn off all electrical components and the ignition switch before replacing a fuse or fusible link. Do not exceed the fuse or fusible link amperage rating.
2. Always use a fuse puller for removing and inserting a fuse. Remove and insert straight in and out without twisting. Twisting could force open the terminals too much, resulting in a bad connection.

If a fuse or fusible link continues to blow, a short circuit is indicated. The system must be checked by a qualified technician.

HINT: The puller is located at Junction Block No.2.



A

TERMINAL AND CONNECTOR REPAIR

PREPARATORY ITEMS	B-1
CONNECTOR REPAIR	B-2
TERMINAL REPLACEMENT	B-3
HOW TO INSTALL AND REMOVE SPECIAL CONNECTORS	B-47

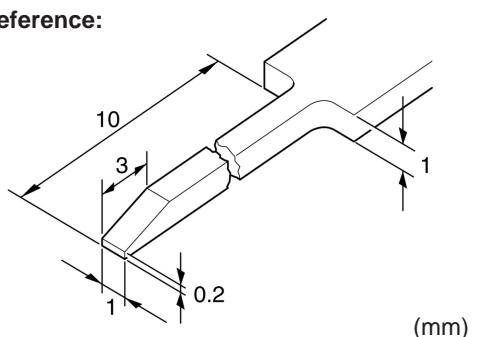
B

B

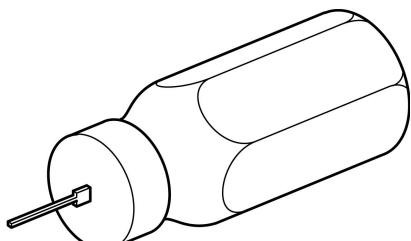
TERMINAL AND CONNECTOR REPAIR—PREPARATORY ITEMS

PREPARATORY ITEMS

Tool	Crimping tool	AMP Part No. 169060	For caulking press sleeves
	Special tool	Refer to the following illustration	To remove the terminal
	SST	09991-00500	To remove the 0.64 connector terminal
	SST	09992-01030	To remove the 0.64 II connector terminal
Gauge	Caliper	0-150 mm	To measure the diameter of the core
Others	Press sleeve	82999-12010 (Red)	
		82999-12020 (Blue)	To connect wires
		82999-12030 (Yellow)	
	Silicon tape	08231-00045	To waterproof the connected section

B
Reference:

Special Tool

HINT: To remove the terminal from the connector, please construct and use the special tool or like object shown on the left.

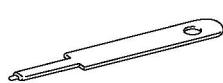


Preparation of the SST to release the 0.64 connector terminal.

SST 09991-00500

HINT:

This is a SST for releasing terminals from 0.64 connectors.



Preparation of the SST to release the 0.64 II connector terminal.

SST 09992-01030

HINT:

This is a SST for releasing terminals from 0.64 II connectors.

CONNECTOR REPAIR

The repair parts now in supply are limited to those connectors having common shapes and terminal cavity numbers. Therefore, when there is no available replacement connector of the same shape or terminal cavity number, please use one of the alternative methods described below. Make sure that the terminals are placed in the original order in the connector cavities, if possible, to aid in future diagnosis.

1. When a connector with a different number of terminals than the original part is used, select a connector having more terminal cavities than required, and replace both the male and female connector parts.

EXAMPLE: You need a connector with six terminals, but the only replacement available is a connector with eight terminal cavities. Replace both the male and female connector parts with the eight terminal part, transferring the terminals from the old connectors to the new connectors.

2. When several different type terminals are used in one connector, select an appropriate male and female connector part for each terminal type used, and replace both male and female connector parts.

EXAMPLE: You need to replace a connector that has two different types of terminals in one connector. Replace the original connector with two new connectors, one connector for one type of terminal, another connector for the other type of terminal.

3. When a different shape of connector is used, first select from available parts a connector with the appropriate number of terminal cavities, and one that uses terminals of the same size as, or larger than, the terminal size in the vehicle. The wire lead on the replacement terminal must also be the same size as, or larger than, the nominal size of the wire in the vehicle. ("Nominal" size may be found by looking at the illustrations in the section F or by direct measurement across the diameter of the insulation). Replace all existing terminals with the new terminals, then insert the terminals into the new connector.

EXAMPLE: You need to replace a connector that is round and has six terminal cavities. The only round replacement connector has three terminal cavities. You would select a replacement connector that has six or more terminal cavities and is not round, then select terminals that will fit the new connector. Replace the existing terminals, then insert them into the new connector and join the connector together.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

TERMINAL REPLACEMENT

These steps **must** be followed when replacing a terminal.

Step 1. Identify the connector and the terminal type.



Step 2. Disconnect the terminal from the connector.



Step 3. Replace the terminal.



Step 4. Install the terminal into the connector.

B

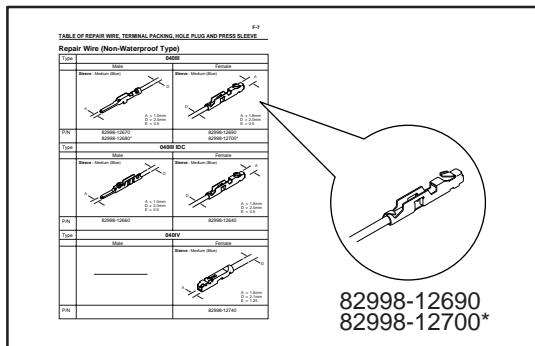
TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

Step 1. Identify the connector and the terminal type.

Confirm whether the connector you require is the non–waterproof, waterproof or combined terminal type connector from the pictures provided in the following charts.

Connector	Description
Non–Waterproof Type	Those connectors which are not of the waterproof or combined terminal type.
Waterproof Type	Waterproof material (hole plug or terminal packing) is provided on the terminal/connector body.
Combined Terminal Type	Terminals of different shape/size are located in one connector.

B



1. Terminal with Wire

Identify the part number of the terminal with wire by picking out the corresponding illustration from the pictures provided on the following charts.

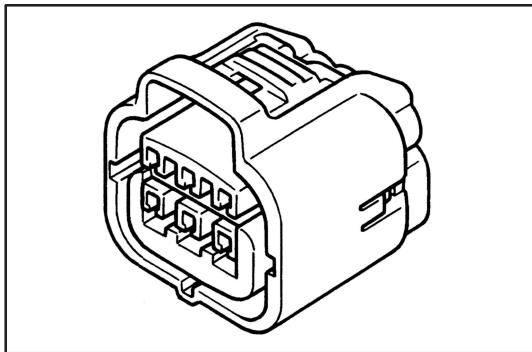
HINT: In some of the illustrations, there are two part numbers for the same illustration of terminal with wire, because although the shapes of the terminals are completely the same, there is a difference in with /without gold-plating (gilded).

Remark: The length of the wire connected to the terminal is approximately 150 mm.

TERMINAL AND CONNECTOR REPAIR—TERMINAL REPLACEMENT

NOTICE:

- When the terminal used is gold plated, be sure to replace it with a gold plated terminal when marking repairs.
- Do not use male and female terminals which are made of different materials from each other.



2. Connector Body

- (a) Identify the part number of the corresponding terminal with wire according to the above-mentioned 1.
- (b) Identify the part number of the connector body by picking out the correct one from the illustrations according to the number of terminals and the shape.

B

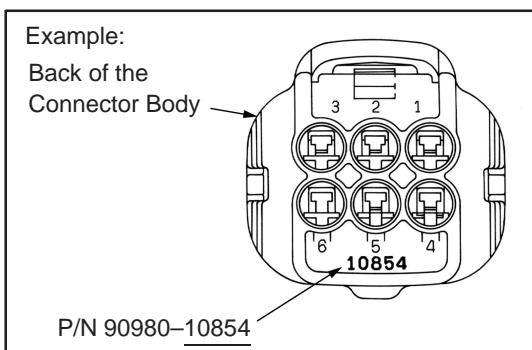
HINT:

- (a) If you can find no connector which matches the type you require, pick out male and female connector bodies as a set which have more terminals than you require.

For the combined terminal type connector body, pick out and appropriate connector body for each terminal being used.

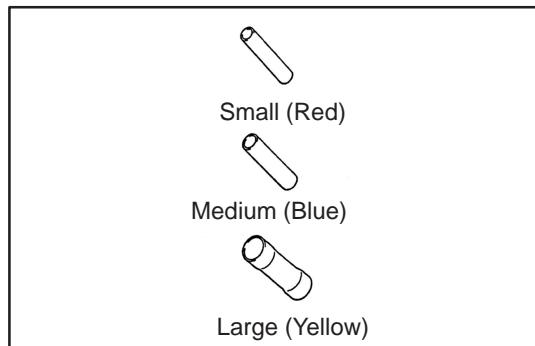
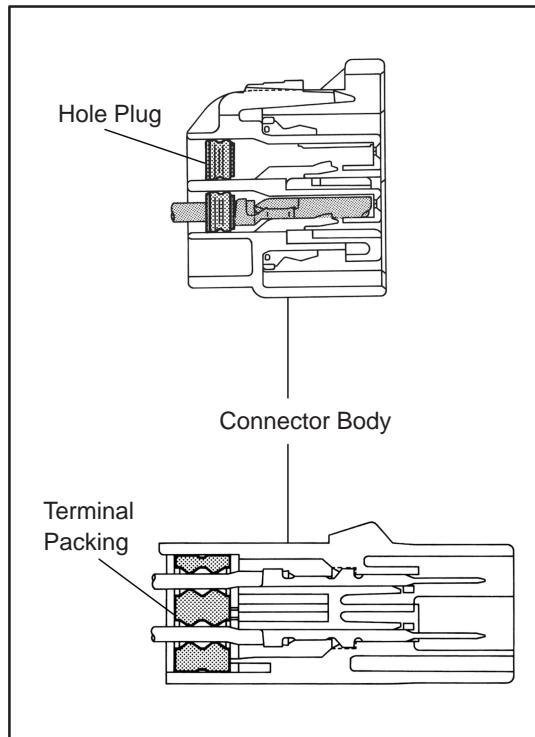
Example:

When two types of terminal are used in one connector body, pick out a male and female for two different connector bodies.



- (b) The part number has been stamped on the back of the connector body. (This will continue to be done to new types of connector.)

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



Wire Outside Diameter	Sleeve Size (Color)
0.2–1.0 mm	Small (Red)
1.0–2.0 mm	Medium (Blue)
3.0–5.0 mm	Large (Yellow)

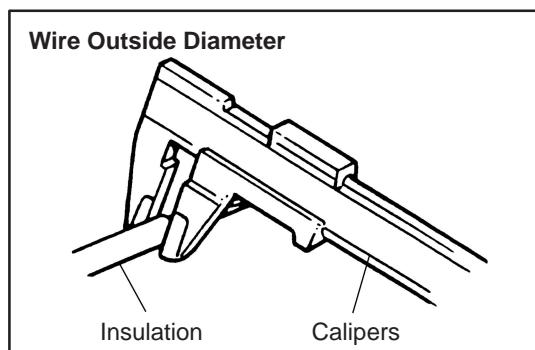
3. Hole Plug/Terminal Packing

- (a) Identify the part number of the appropriate terminal with wire/connector body from the illustrations of waterproof type connector according to the above-mentioned 1 and 2.
- (b) Identify the part number of the hole plug/terminal packing from the corresponding illustration.

4. Sleeve

When connecting two wires using a sleeve, select the sleeve according to the following table.

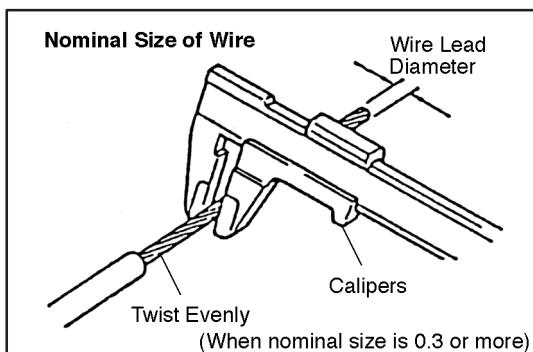
- (a) When size is based on the outside diameter of the wire.



TERMINAL AND CONNECTOR REPAIR-TERMINAL REPLACEMENT

*	0.13	0.22	0.3	0.5	0.85	1.25	2	3	5
0.13	—	—	—	S	—	—	—	—	—
0.22	—	—	—	S	—	—	—	—	—
0.3	—	—	S	M	M	M	M	L	L
0.5	S	S	M	M	M	M	M	L	L
0.85	—	—	M	M	M	M	L	L	L
1.25	—	—	M	M	M	M	L	L	L
2	—	—	M	M	L	L	L	L	—
3	—	—	L	L	L	L	L	L	—
5	—	—	L	L	L	L	—	—	—

* Nominal size of the wire



(b) When size is based on the nominal size of the wire.

Sleeve size

S : Small (Red)

M : Medium (Blue)

L : Large (Yellow)

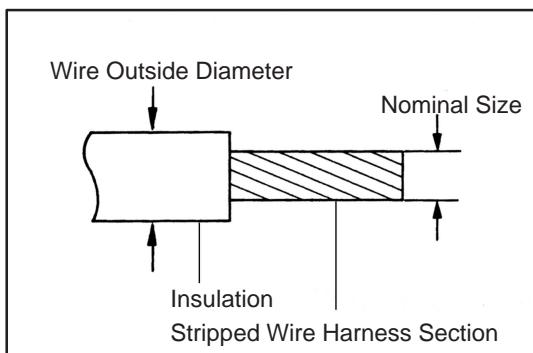
HINT: To calculate the "Nominal Size" of the wire.

Nominal size =

$$\frac{3.14 \times (\text{Diameter of stripped wire harness})^2}{4}$$

B

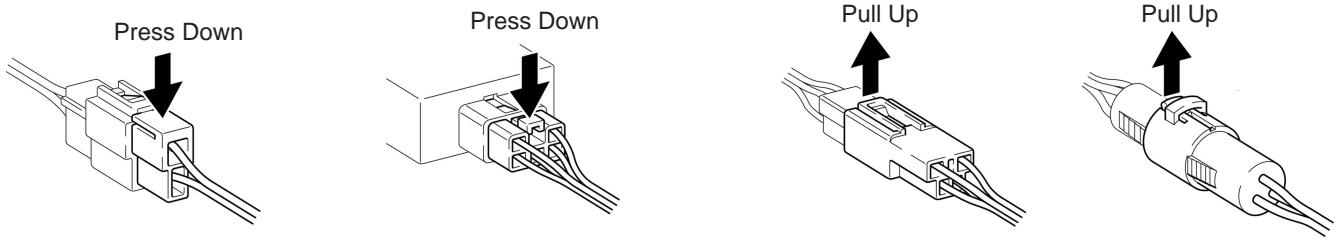
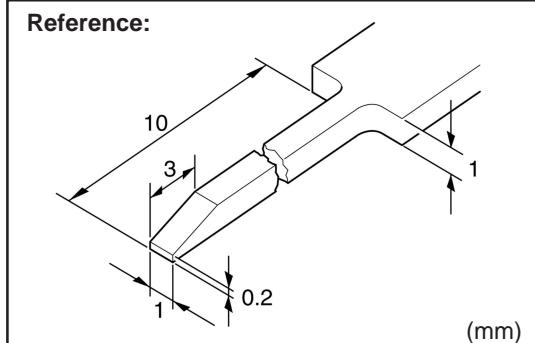
HINT: Outside Diameter and Nominal Size



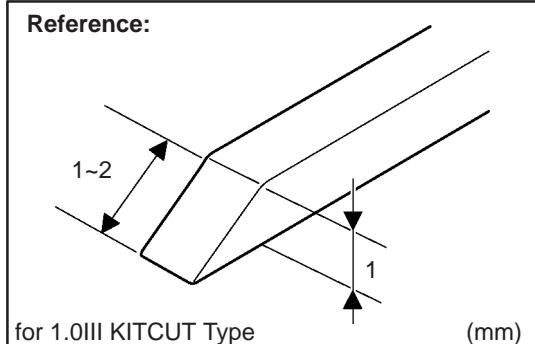
TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT**Step 2. Disconnect the Terminal from the Connector.****1. Disconnect Connector**

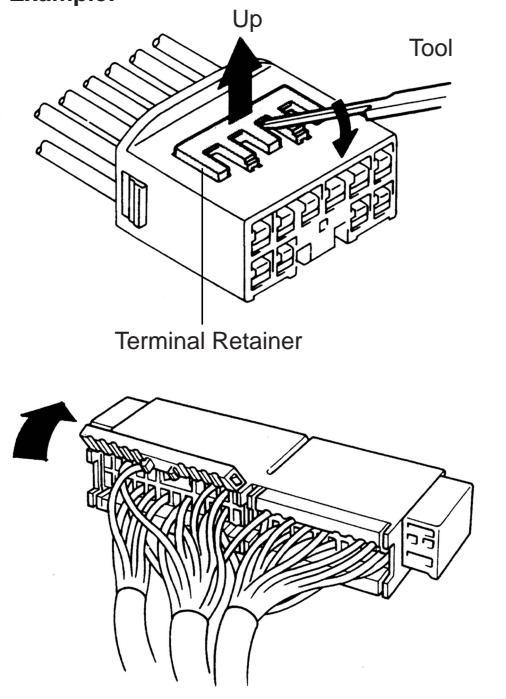
To pull apart the connectors, pull on the connector itself, not the wire harness.

HINT: Check to see what kind of connector you are disconnecting before pulling apart.
Press down type is mainly used.

Example:**B****Reference:****2. Prepare the Special Tool**

HINT: To remove the terminal from the connector, please construct and use the special tool or like object shown on the left.

Reference:

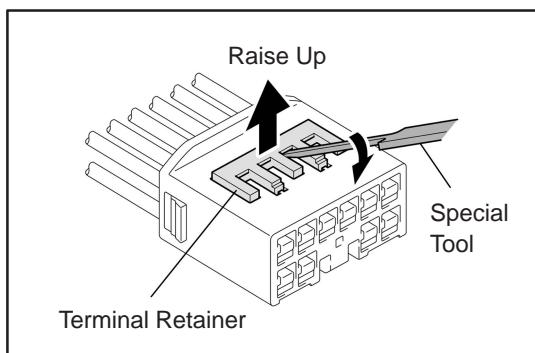
TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT**Example:****3. Disengage the double locking device or terminal retainer.**

- (a) Locking device must be disengaged before the terminal locking clip can be released and the terminal removed from the connector.
- (b) Use a special tool or the terminal pick to unlock the double locking device.

NOTICE:

Do not remove the terminal retainer from connector body.

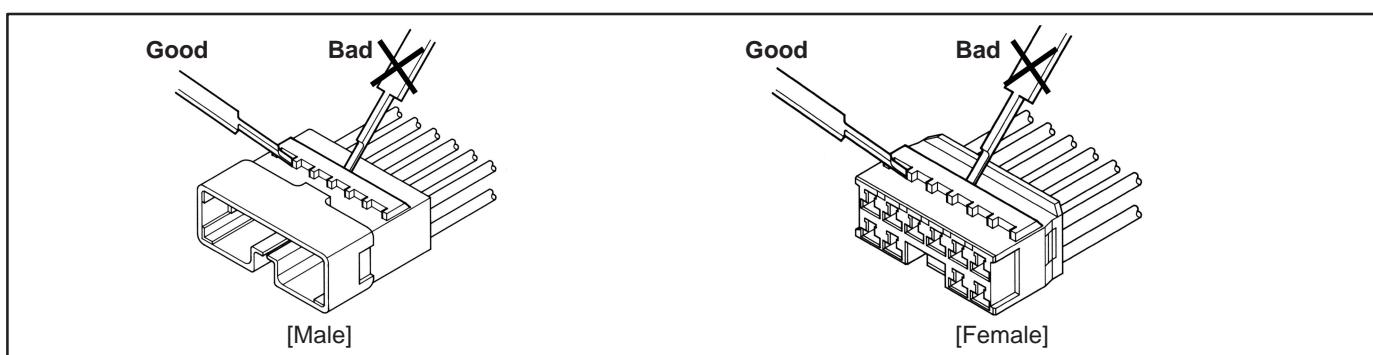
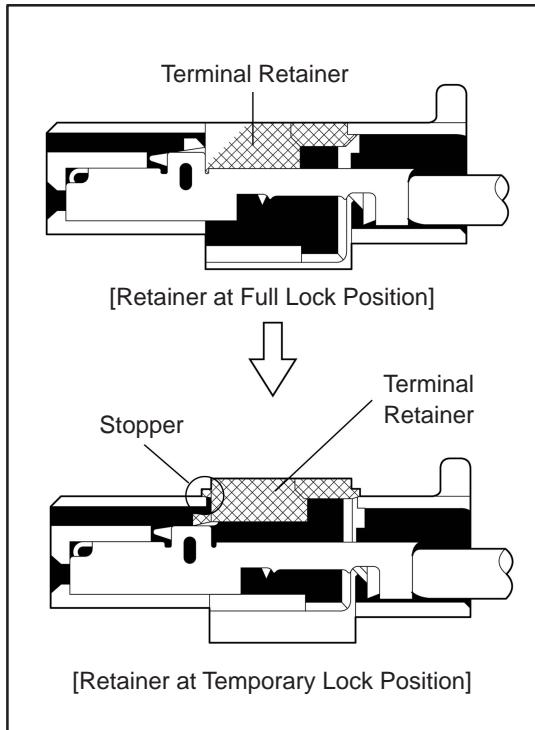
TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



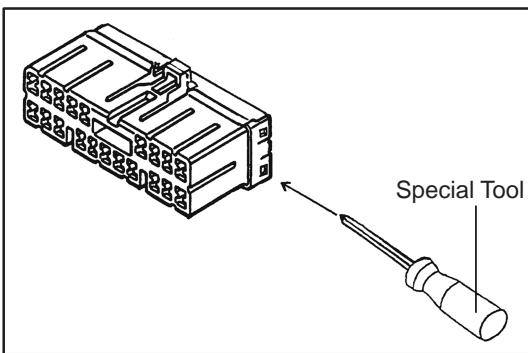
Type A (For 0.64II, 0.64III, 1.0II, 1.8, 2.3II, 4.8 and 8.0 of Non-Waterproof Type Connector)

- (1) Using the special tool, raise the retainer up to the temporary lock position.

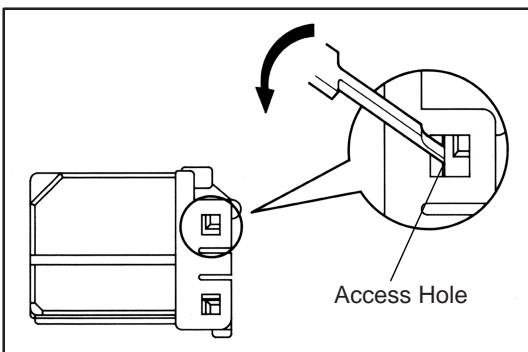
HINT: The needle insertion position varies according to the connector's shape (number of terminals, etc.), so check the position before inserting it.



TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

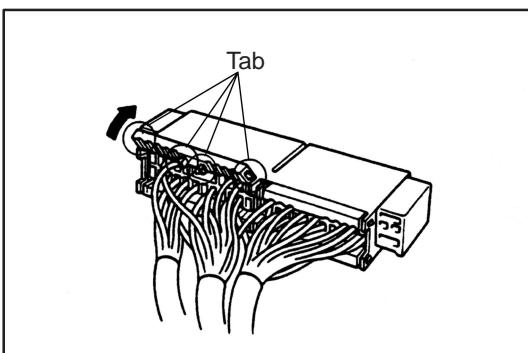


Type B (For 1.8, 1.0 and TLC of Non-Waterproof Type Connector)



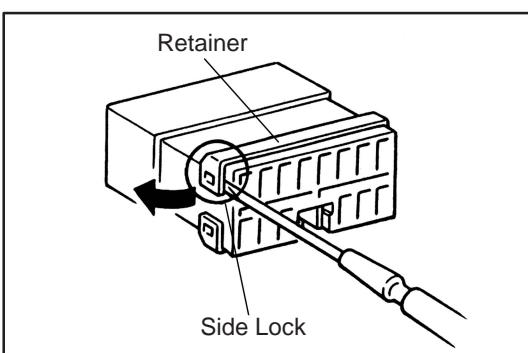
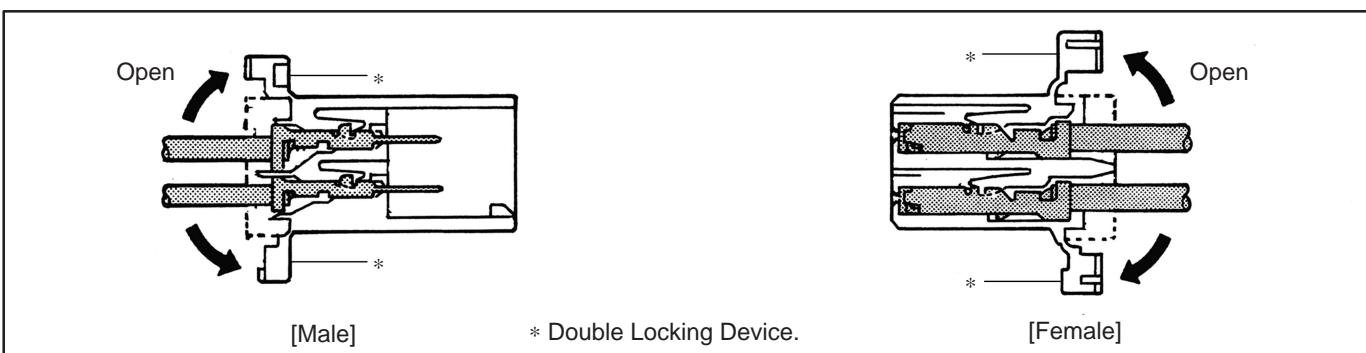
- (1) Press the special tool at a 45° angle into the locking lug access hole as shown.
Raise the double locking device up as far as possible.

B



- (2) Remove the special tool and open the double locking device

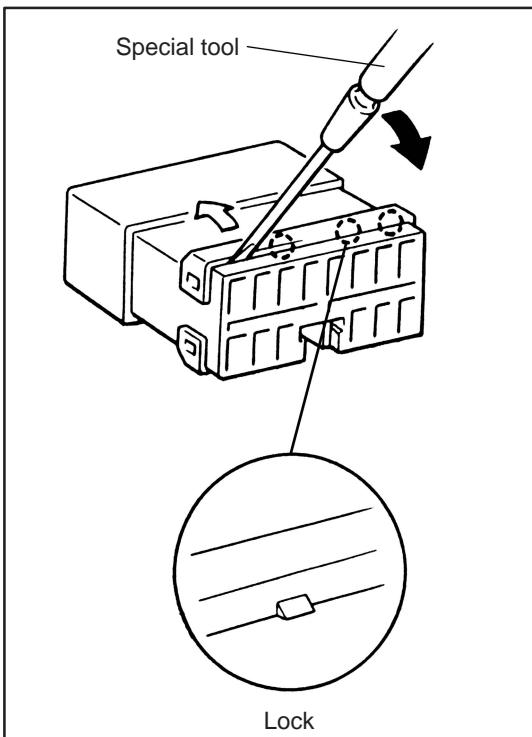
NOTICE:
TLC housing is not be reusable. Please replace it with the new one after replacement of the terminal.



Type C (For TNS, FTC Type Connector)

- (1) Widen the side lock part of the retainer from side to side using the special tool.

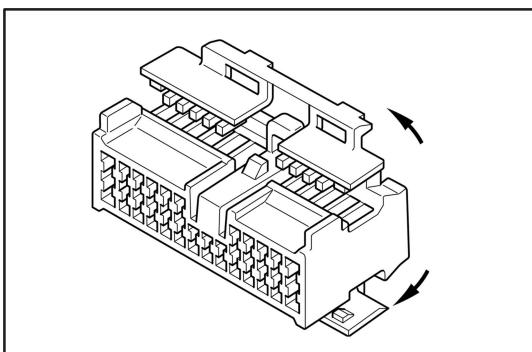
TERMINAL AND CONNECTOR REPAIR—TERMINAL REPLACEMENT



- (2) Insert the special tool into the chink between the retainer and the terminal itself. Then pry it to the direction of the arrow shown in the illustration and push the retainer up to release the lock.

NOTICE:

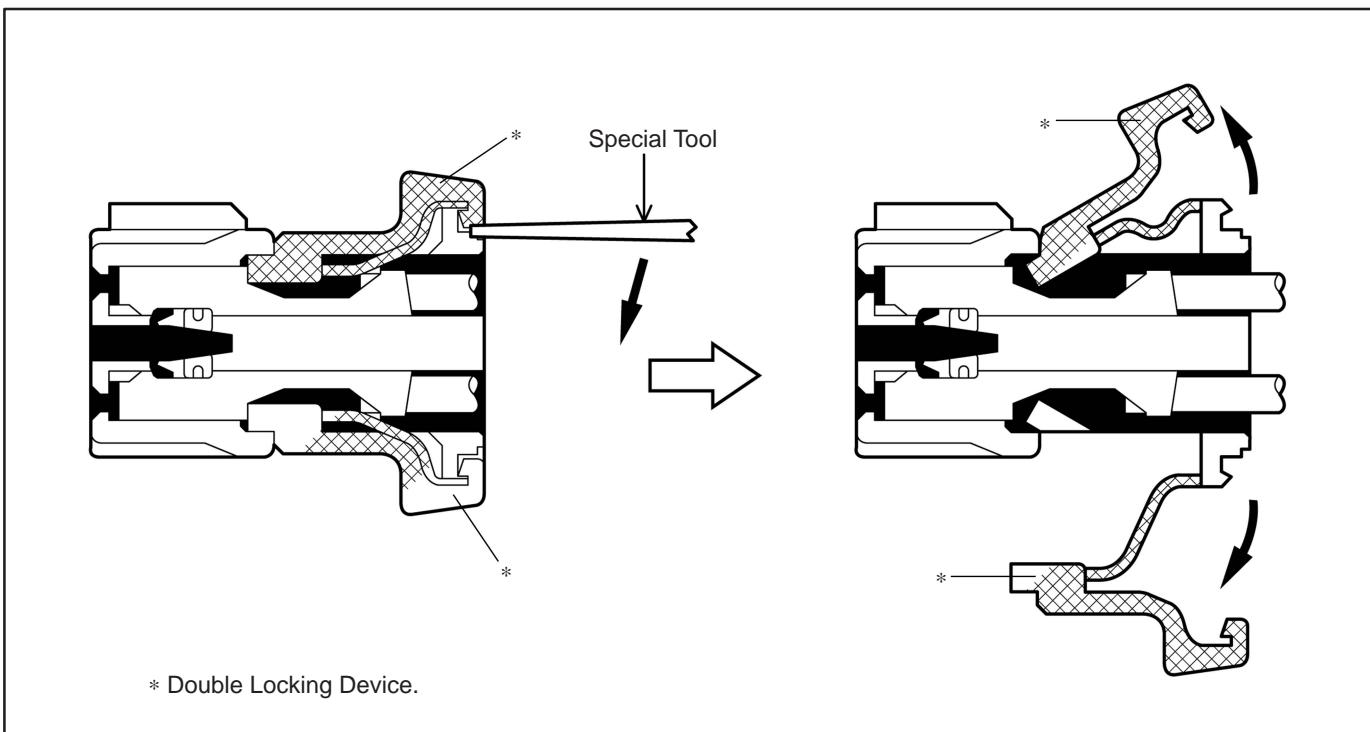
- Do not insert the special tool too much. It may cause damage on the fit section of the terminal and the wire harness.
- TNS housing is not reusable. Please replace it with the new one after replacement of the terminal.



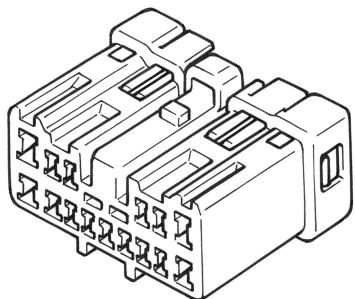
Type D (For 1.3 of Non-Waterproof Type Connector)

[Case 1]

- (1) Use the special tool to unlock the double locking device.

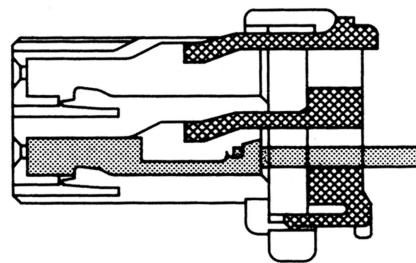
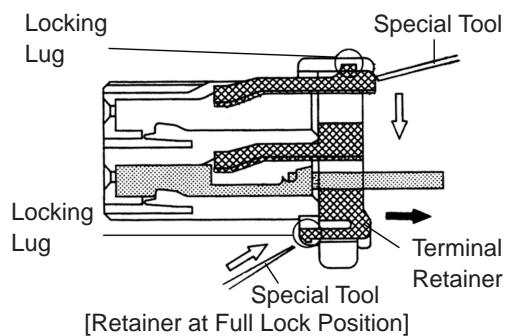


TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

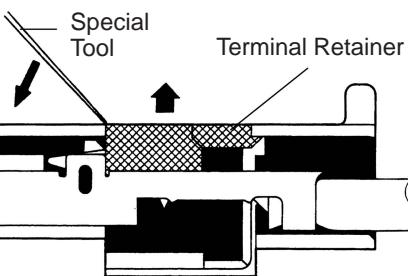


[Case 2]

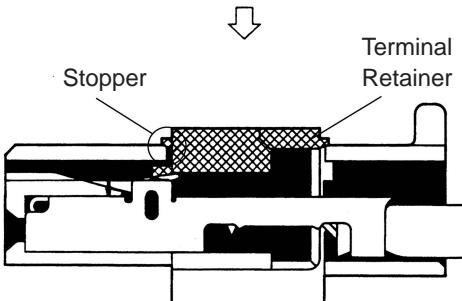
- (1) Using the special tool, push the terminal retainer locking lug (clip) and pull the terminal retainer up to the temporary lock position.



[Retainer at Temporary Lock Position]



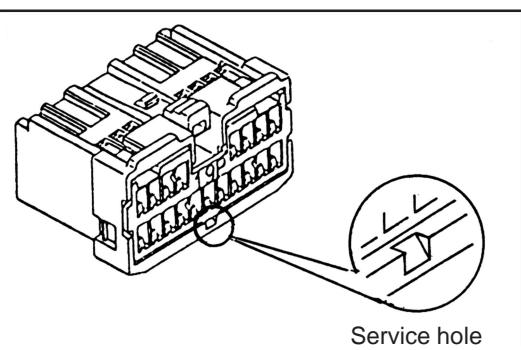
[Retainer at Full Lock Position]



[Retainer at Temporary Lock Position]

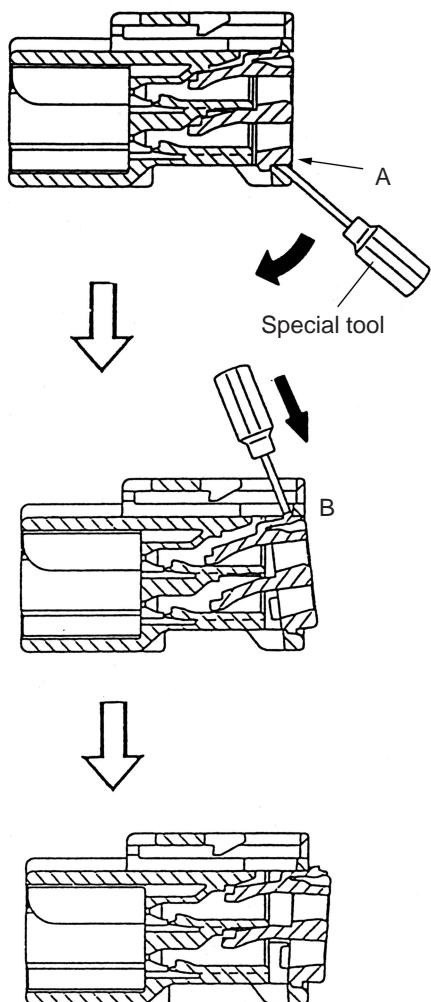
[Case 3]

- (1) Using the special tool, raise the retainer up to the temporary lock position.



[Case 4]

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



(1) Insert the special tool into the service hole and move it to the direction of the arrow to release the lock on the side A.

(2) Push the lock on the side B up by the special tool and release the lock. Then pull the retainer forward.

TERMINAL AND CONNECTOR REPAIR-TERMINAL REPLACEMENT

Type E (For 0.64 1.8, 2.3, 2.3II, 4.8, 6.3 and 8.0 of Waterproof Type Connector)

HINT: Terminal retainer color is different according to connector body.

Example:

Terminal Retainer	:	Connector body
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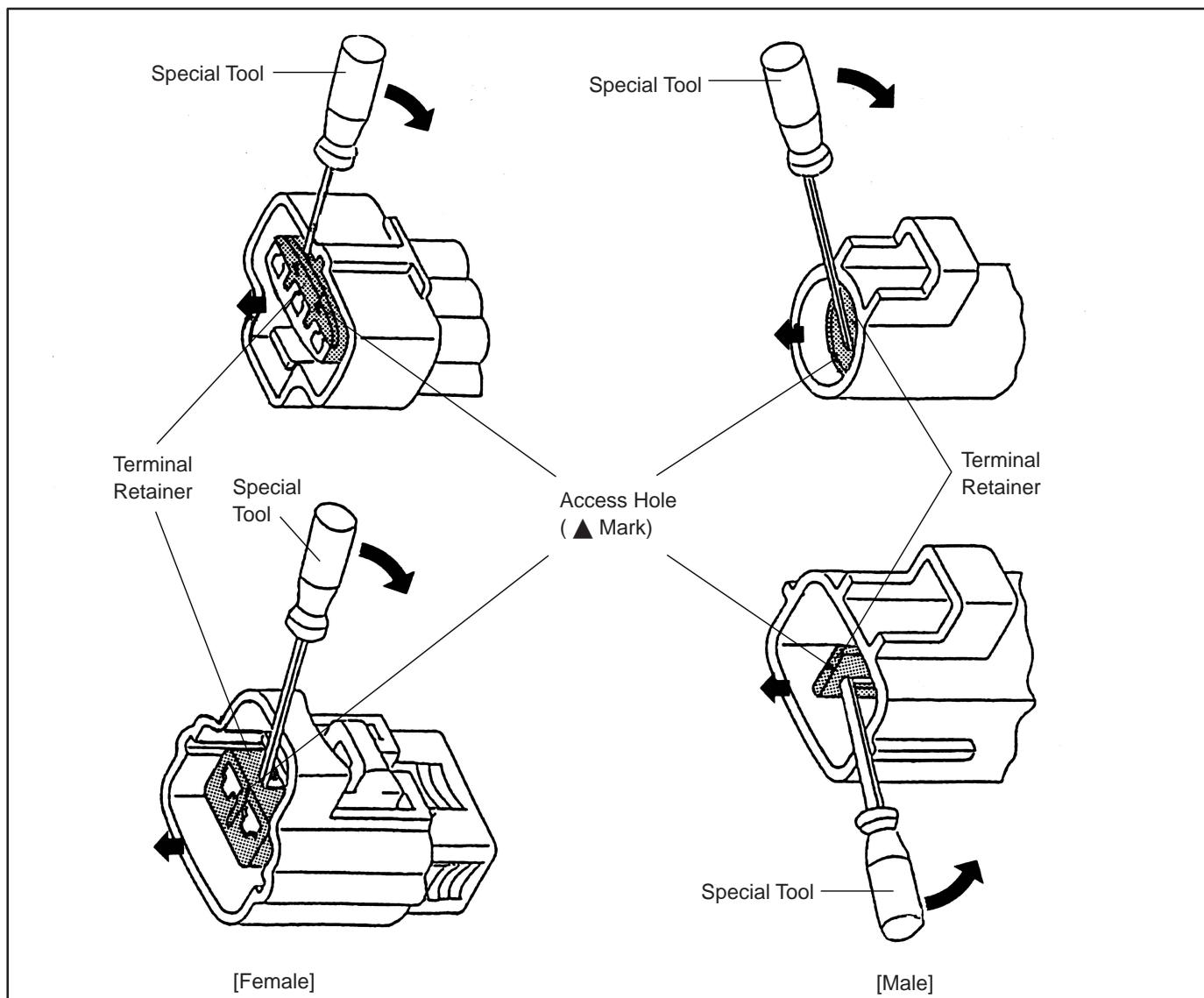
Black or White	:	Gray
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Black or White	:	Dark Gray
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Gray or White	:	Black
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[Case 1]

Type where terminal retainer is pulled up to the temporary lock position (Pull Type).

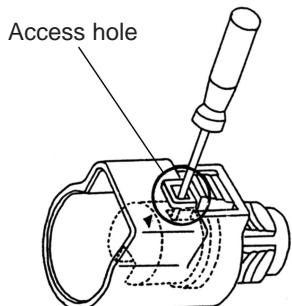
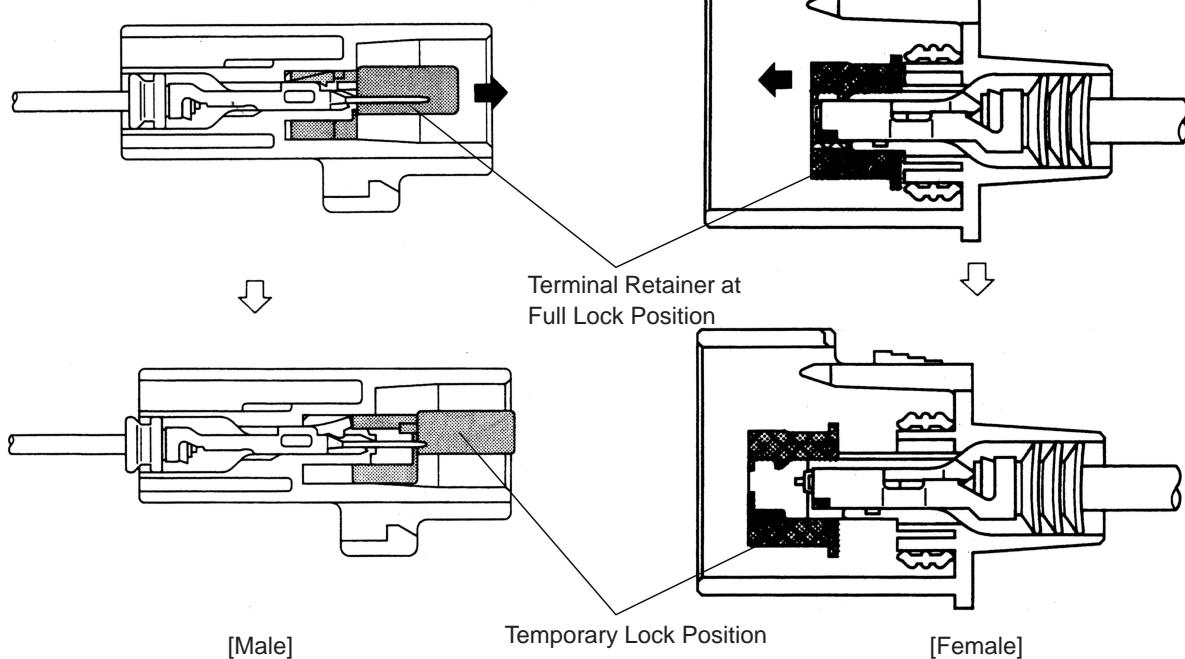


TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

- (1) Insert the special tool into the terminal retainer access hole (▲ Mark) and pull the terminal retainer up to the temporary lock position.

HINT: The needle insertion position varies according to the connector's shape (Number of terminals etc.), so check the position before inserting it.

Example:



HINT: In some cases insert the special tool from the access hole on the flank of the housing.

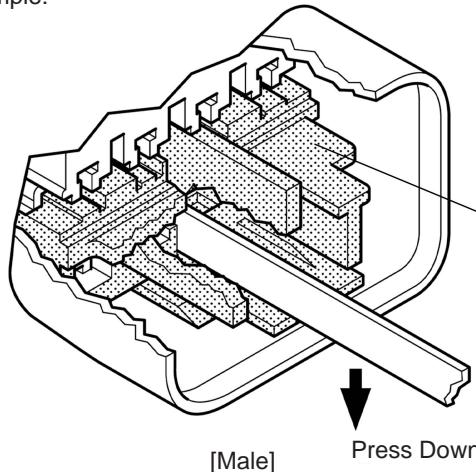
TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

[Case 2]

Type which cannot be pulled as far as Power Lock

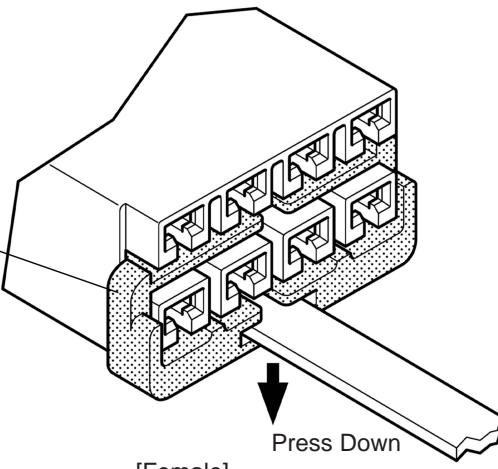
HINT: There are few cases of this type of connector

Example:



[Male]

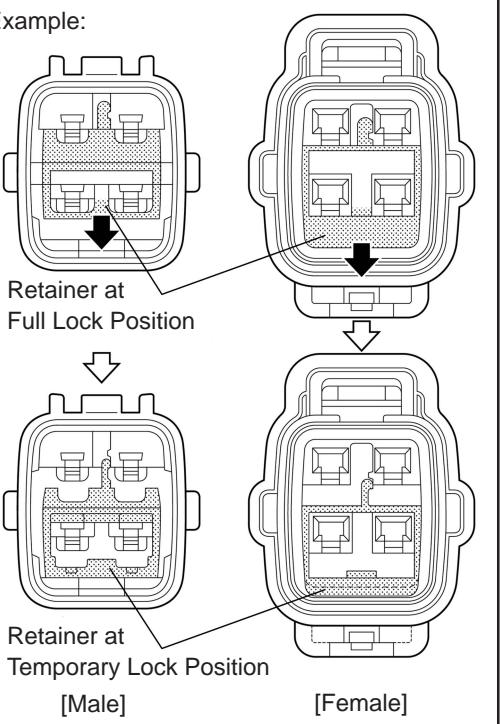
Terminal Retainer



[Female]

Press Down

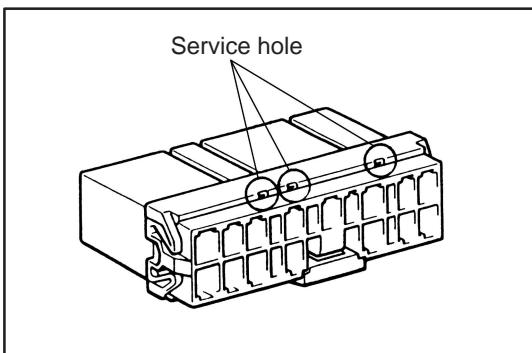
Example:



(1) Insert the tool straight into the access hole of terminal retainer as shown.

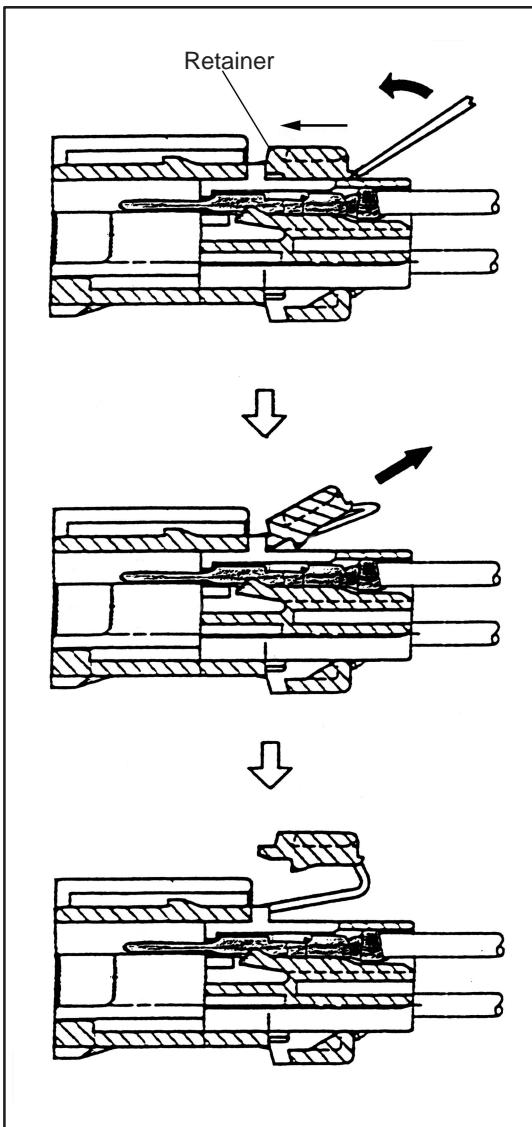
Push the terminal retainer down to the temporary lock position.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



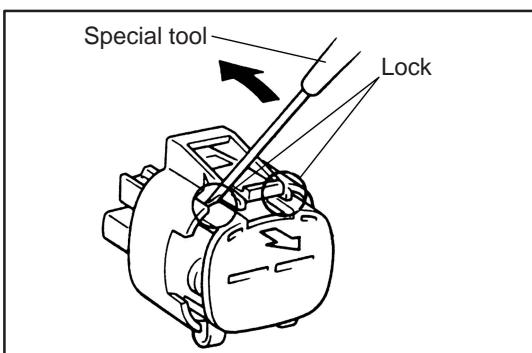
Type F (For C-Type Connector)

- (1) Insert the special tool into the service hole.



- (2) Move the special tool to the direction of the arrow and release the lock.

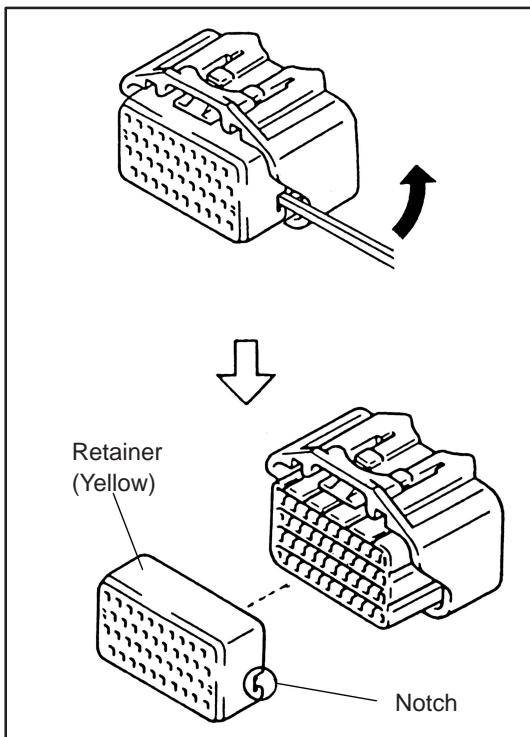
HINT: Lift the retainer up after moving it to the direction of the thin arrow shown in the illustration.



Type G

- Insert the special tool into the position shown in the illustration. Pry it to the direction of the arrow and push the lock up to release it.

TERMINAL AND CONNECTOR REPAIR-TERMINAL REPLACEMENT



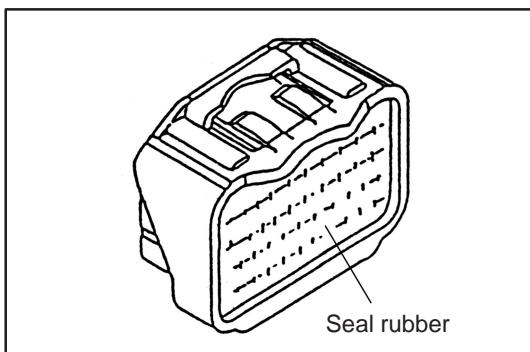
Type H (For 1.0II Type Connector)

- (1) Move the special tool into the notch of the retainer to the direction of the arrow with the edge of the housing as the fulcrum. Then the pull the retainer out.

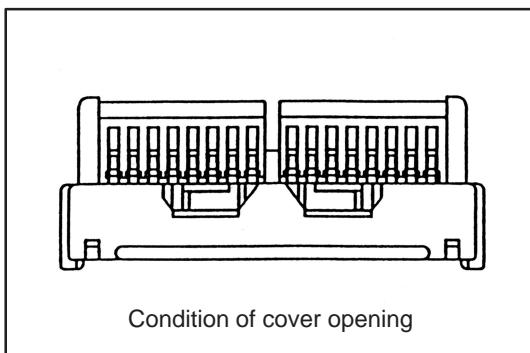
NOTICE:

Do not insert the special tool into areas except notches. (This may damage the seal ring that is attached behind the retainer.)

- (2) As same as the procedure (1), pull the retainer straight out using hand after releasing the lock on the other side.

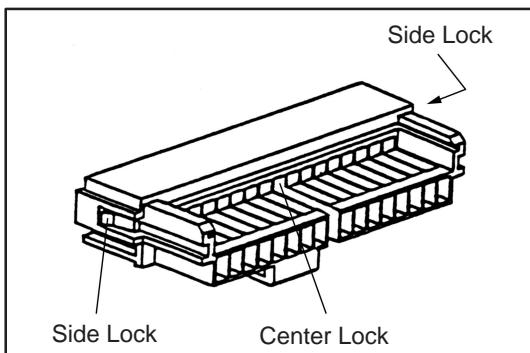
**NOTICE:**

- Do not remove the seal rubber when pulling the terminal out.
- If the seal rubber is peeled off when pulling the terminal out, press it down to stick it to the original condition.
- Be sure and not fit the connector when the retainer is not installed.



Type I (For SFPC Type Connector)

- (1) Open the cover (white)



- (2) Remove the side lock of the retainer. (One side)

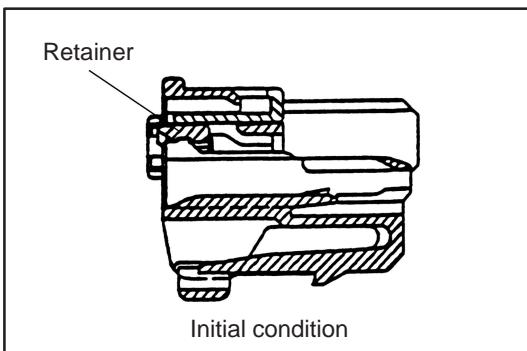
- (3) Remove the center lock of the housing.

- (4) Remove the side lock of the retainer. (The other side)

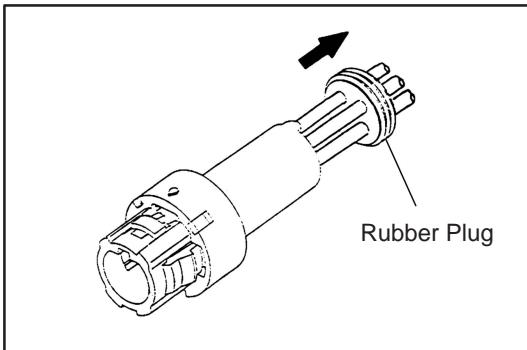
NOTICE:

- Following the above order is not required.
- No center lock on the housing with ten poles.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



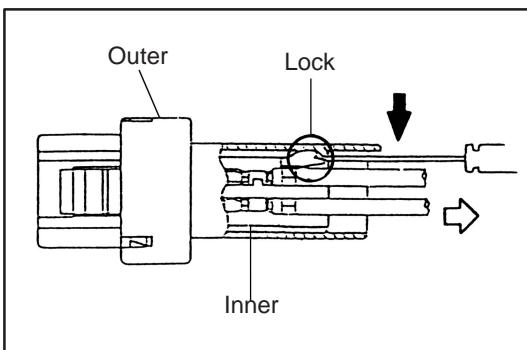
- (5) Move the retainer until it becomes the initial condition.



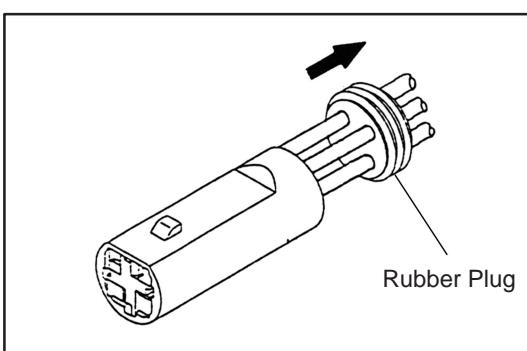
Type J

[Male]

- (1) Remove the rubber plug.

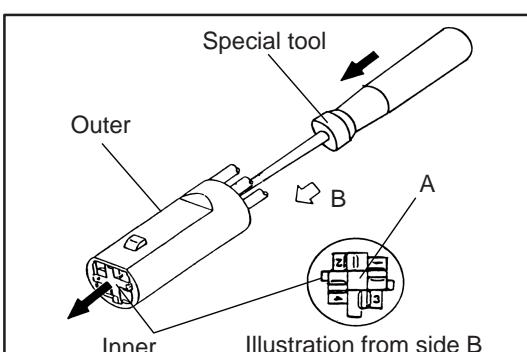


- (2) Push the lock of the inner using the special tool.
- (3) Pull the wire to the direction of the arrow pushing the lock up and remove the inner from the outer.



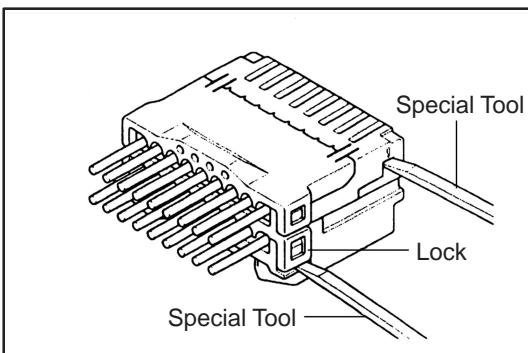
[Female]

- (1) Remove the rubber plug.



- (2) Insert the special tool into the outer shown in the illustration. Then push the area A of the inner and remove the inner from the outer.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



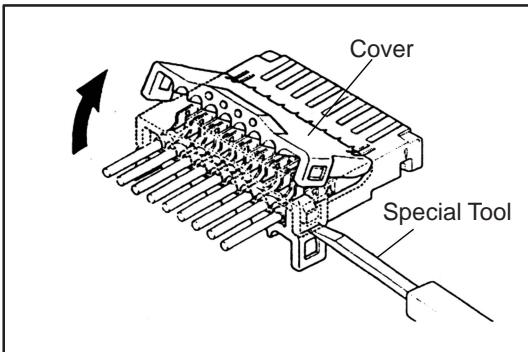
Type K (For Insulation Displacement Connector)

(1) Separate Connector

Using a special tool, release the lock and separate the connector into 2.

NOTICE:

Do not apply too much force to the lock arm.

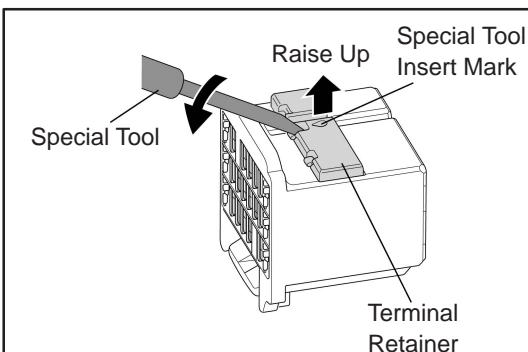


(2) w/ Cover : Open Connector Cover

Using a special tool, release the lock and open the cover.

NOTICE:

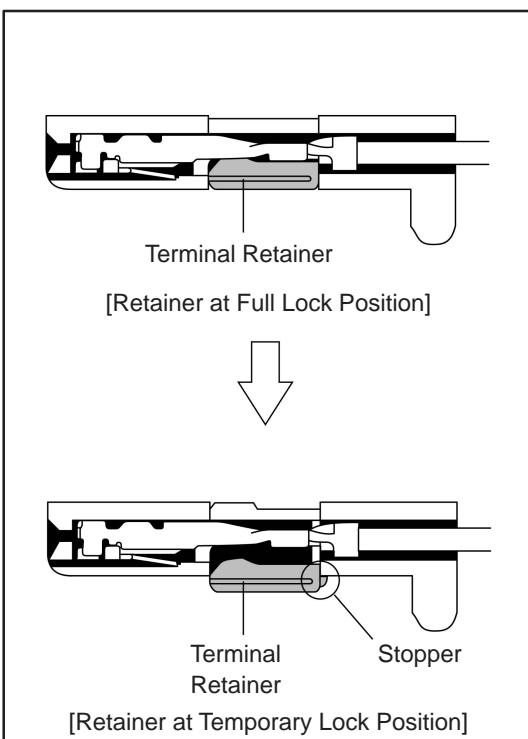
Do not apply too much force to the lock arm.



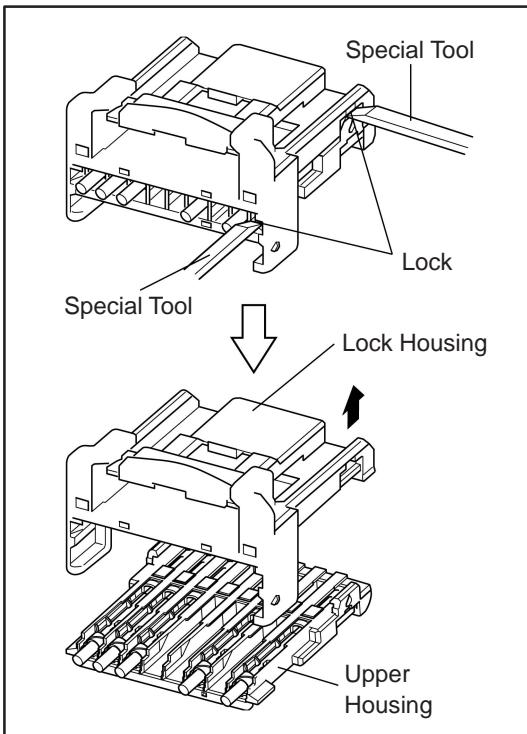
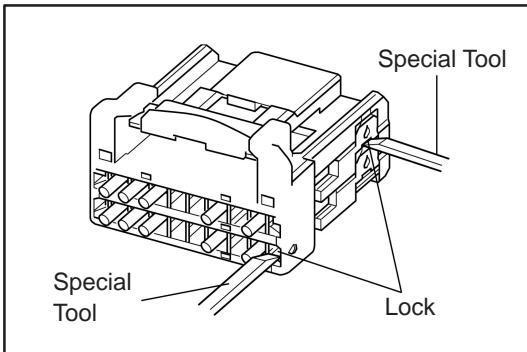
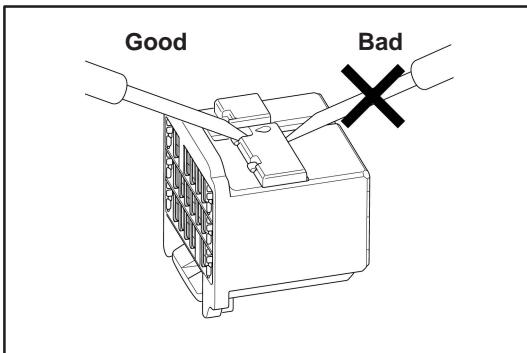
Type L (For 0.64 Type Connector)

(1) Using the special tool, raise the retainer up to the temporary lock position.

HINT: The needle insertion position varies according to the connector's shape (number of terminals, etc.), so check the position before inserting it.



TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



Type M (For 0.64 of Insulation Displacement Connector (IDC) Type)

(1) Remove the Lower Housing

Using a special tool, release the lock and remove the lower housing.

NOTICE:

- Do not apply too much force to the lock arm.
- Mark the upper housing and lower housing to prevent mistakes when putting them together.

(2) Remove the Upper Housing

Using a special tool, release the lock and remove the upper housing from the lock housing.

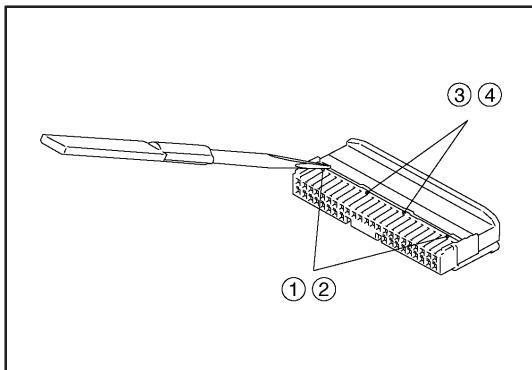
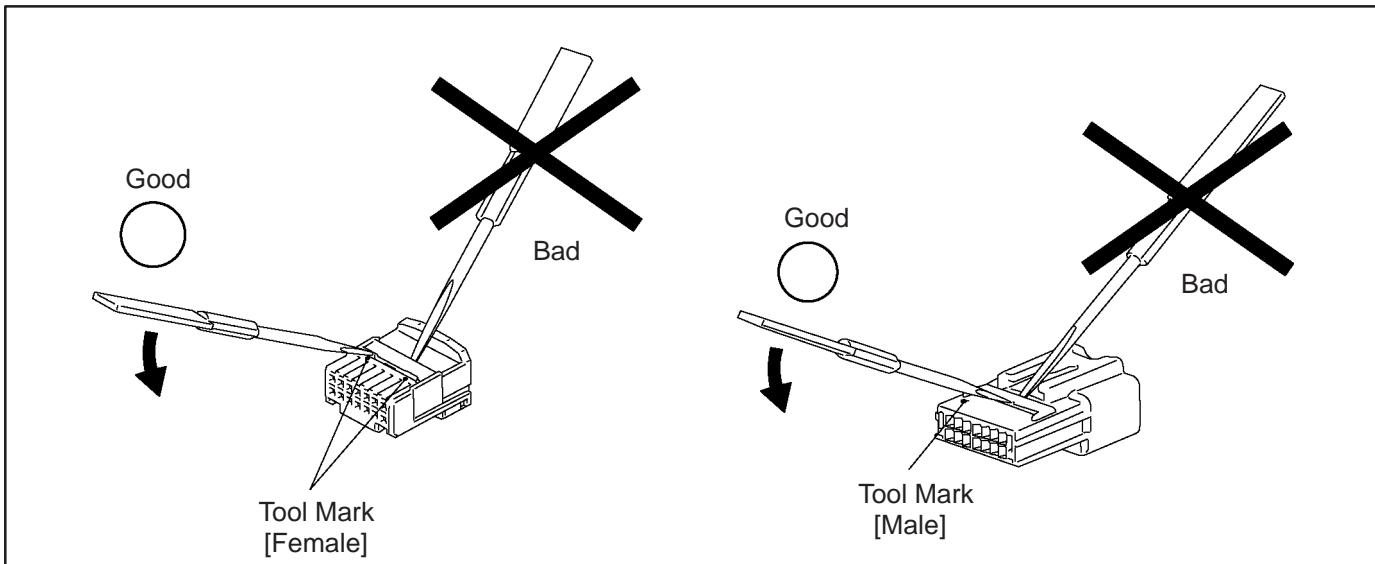
NOTICE:

- Do not apply too much force to the lock arm.
- Mark the upper housing and lower housing to prevent mistakes when putting them together.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

Type N (For 0.64II Type Connector)

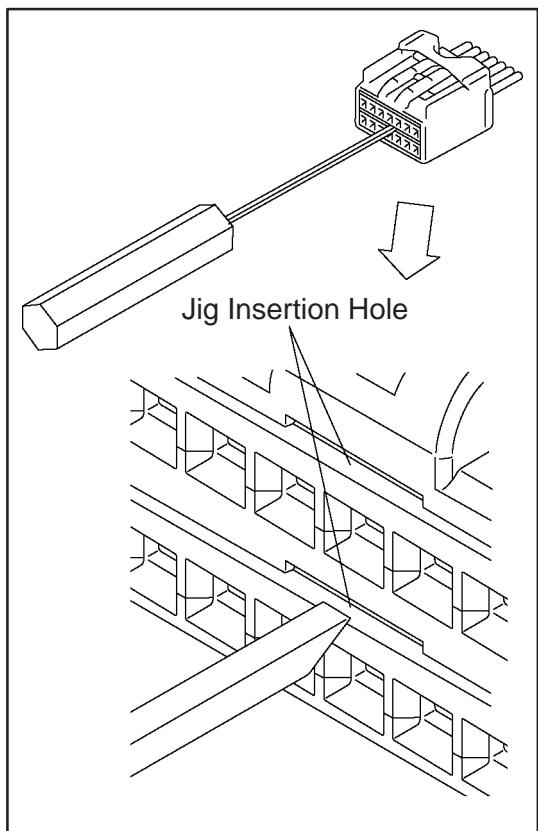
- (1) Insert the tool into the insertion position near the tool mark and raise the terminal retainer up to the temporary lock position using the tool.



Disengagement order

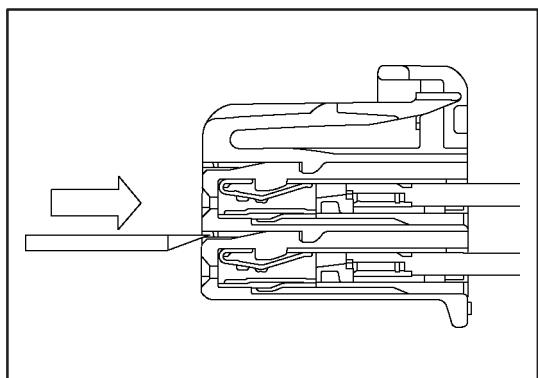
NOTICE:

- Use a precision screwdriver (1.2mm) or special tool when disengaging the terminal retainer.
- Do not insert the tool into any position other than the tool insertion positions. After disengaging the terminal retainer, be sure to check that the terminal retainer has not been deformed. If it has been deformed, replace it with a new one.
- Some connectors have 2 or more tool insertion positions. When disengaging the terminal retainer from these types of connectors, follow the disengagement order shown in the illustration on the left.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

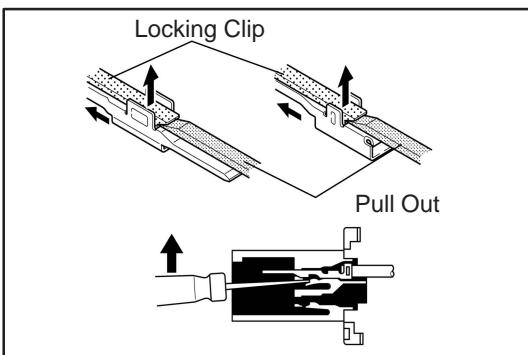
Type O (For 1.0III of KITCUT Type Connector)

- (1) Insert a jig horizontally into the jig insertion hole.
- (2) Push the jig in until it stops.



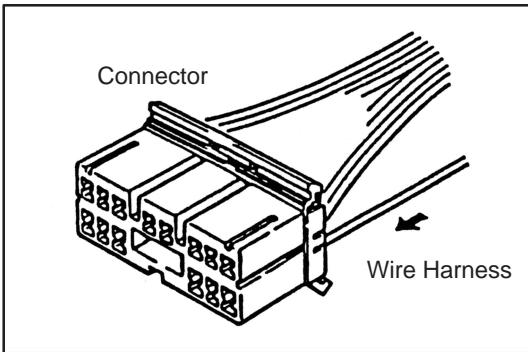
- (3) Pull out the wire in the direction indicated by the arrow and remove the housing.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

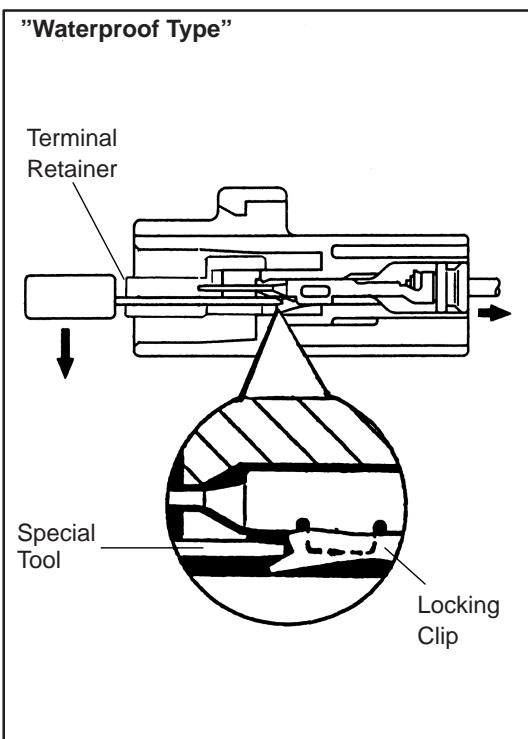


4. Disconnect Terminal from Connector

- (a) Determine the primary locking system from the charts.
 1. Lock Located on terminal
 2. Lock Located on connector
 3. Method of entry and operation



- (b) Push the terminal gently into the connector and hold it in this position.



- (c) Insert the special tool into the connector in the direction shown in the chart.

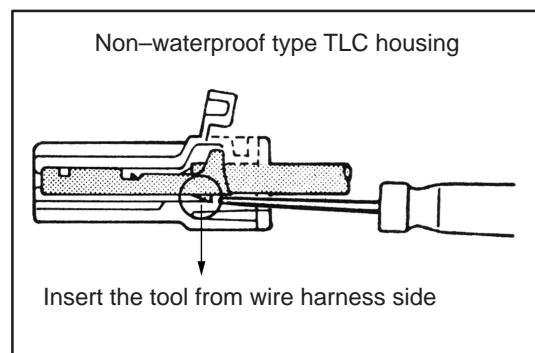
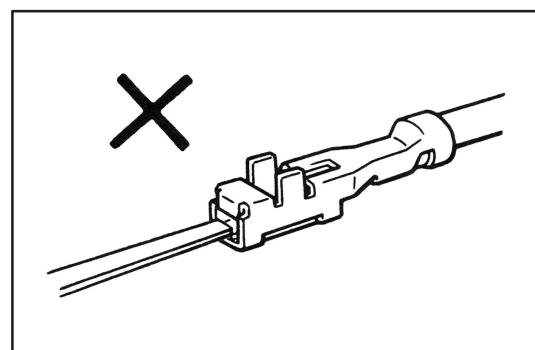
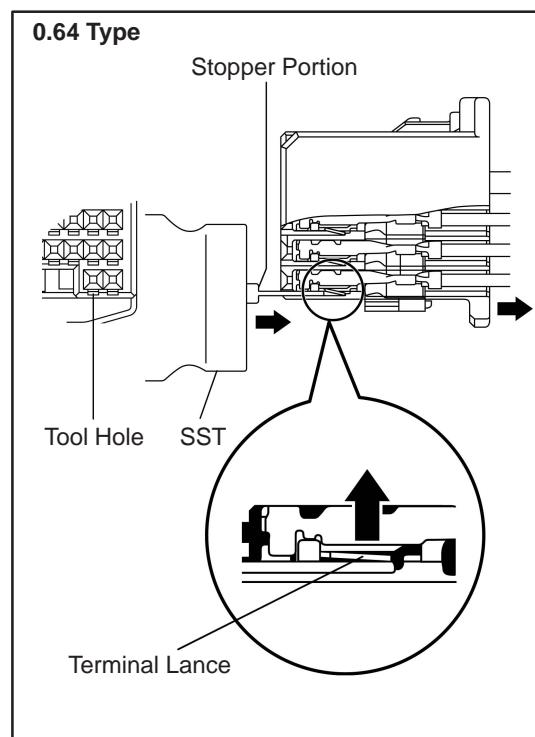
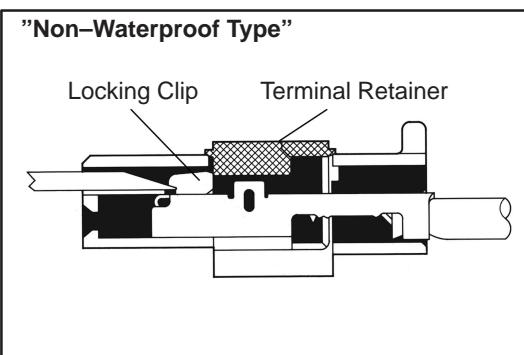
- (d) Move the locking clip to the unlock position and hold it there.

NOTE: Do not apply excessive force to the terminal.
Do not pry on the terminal with the special tool.

- (e) Carefully withdraw the terminal from the connector by pulling the lead toward the rear of the connector.

NOTE: Do not use too much force. If the terminal does not come out easily, repeat steps (a) through (e).

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



(f) Insert the SST into the connector in the direction shown in the chart.

(g) Insert the SST fully to the tool hole, and push the terminal lance.

NOTICE:

- The terminal has a lance shape, therefore, the housing may be damaged and the terminal may get stuck if forcibly pried by wires etc.
- Insert the SST so that the stopper portion surface is facing up.

(h) Carefully withdraw the terminal from the connector by pulling the lead toward the rear of the connector.

NOTICE:

Removal of the terminal from housing cavity will cause damage to the wire seal section, deteriorating waterproofing performance. Replace the connector with a new one.

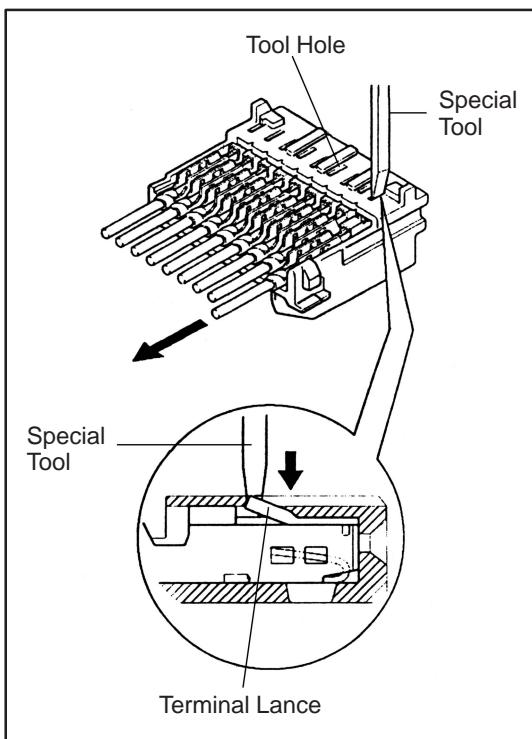
NOTICE:

Do not insert the special tool into the female terminal box. If you do so, replace the terminal with the new one whether the terminal is broken or not.

NOTICE:

As for Non-waterproof type TLC housing, insert the special tool into the housing from wire harness side.

TERMINAL AND CONNECTOR REPAIR-TERMINAL REPLACEMENT

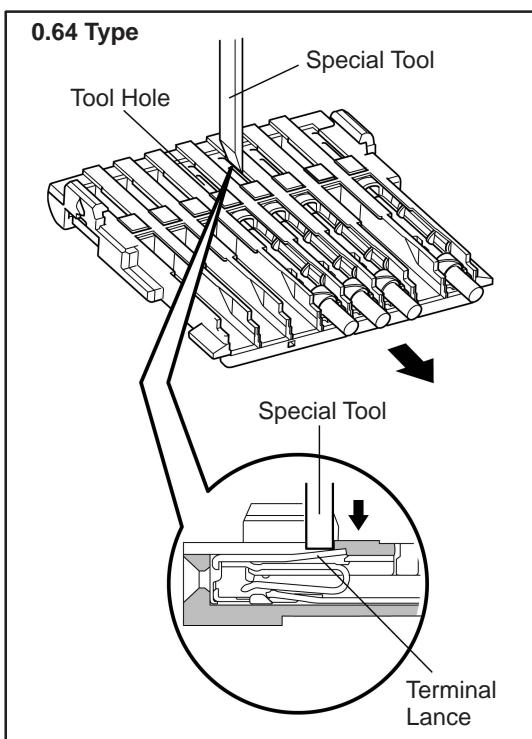


Insulation Displacement Connector Type

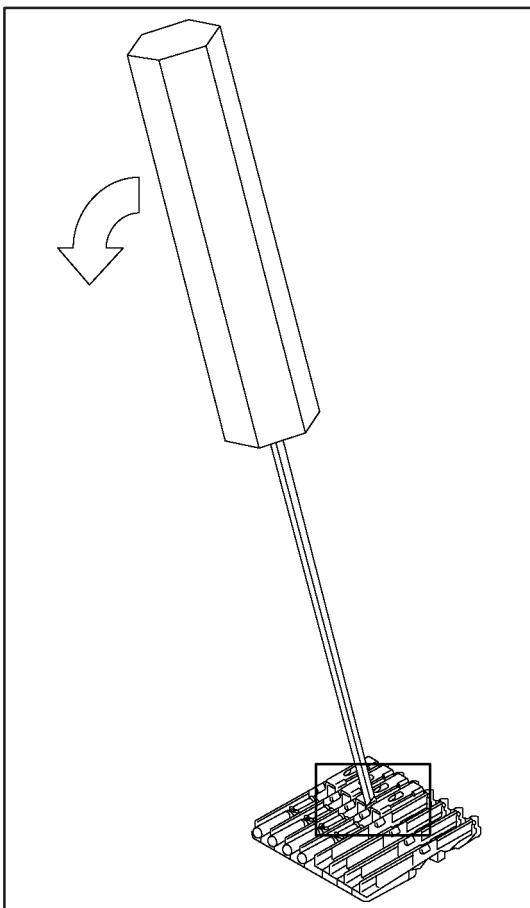
- Using a special tool, push the terminal lance from the tool hole.
- Carefully withdraw the terminal from the connector by pulling the lead toward the rear of the connector.

NOTICE:

- Do not use too much force. If the terminal does not come out easily, repeat step (a).**
- Always change the wire with the repair wire, in accordance with step3.**

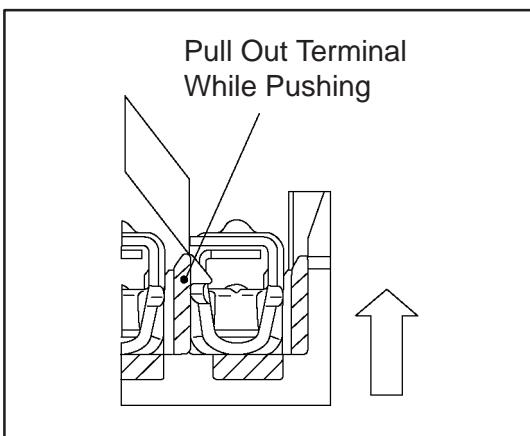
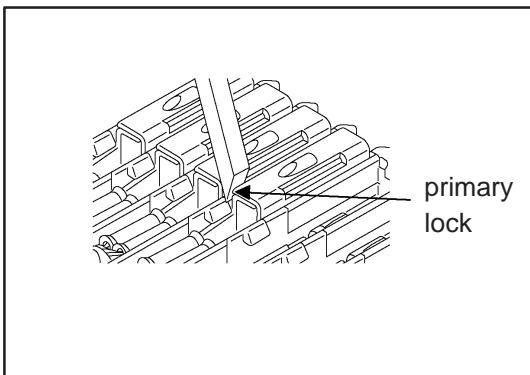


TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



1.0III of KITCUT Type Connector

- (a) Remove Female Terminal
- (1) Insert the jig tip at an angle, as shown in the illustration on the left.
- (2) Move the jig in the direction indicated by the arrow to push and release the primary lock.



- (3) Pull out the terminal in the direction indicated by the arrow and detach it.

NOTICE:

- Do not remove and reinstall the same terminal more than 3 times.
- If the terminal is deformed at all, dispose of it.
- Do not apply too much force when releasing the primary lock.
- Do not apply too much force when pulling out the terminal. If the terminal does not come out easily, repeat steps (1) to (3).

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

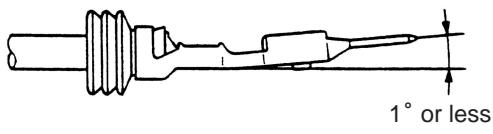
(b) Remove the insulation displacement female terminal

NOTICE:

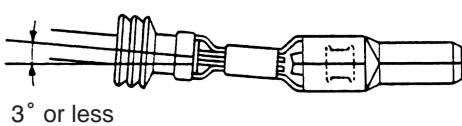
- Do not repair the insulation displacement female terminal.
- Always replace the part with a new one if any terminals are removed.

Terminal Deformation

(1) Terminal Bending in Vertical Direction

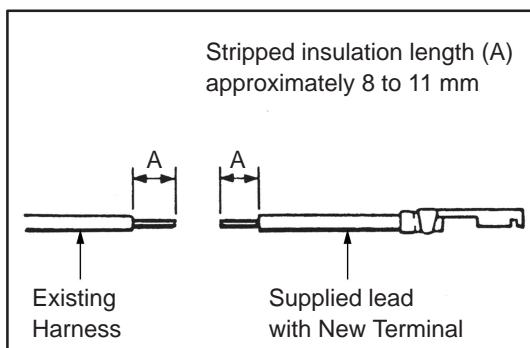
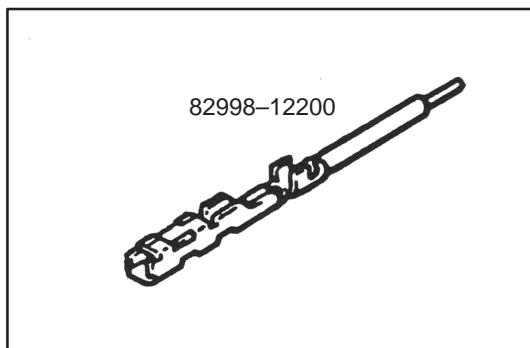
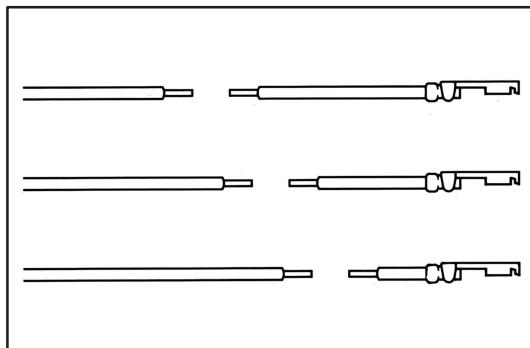
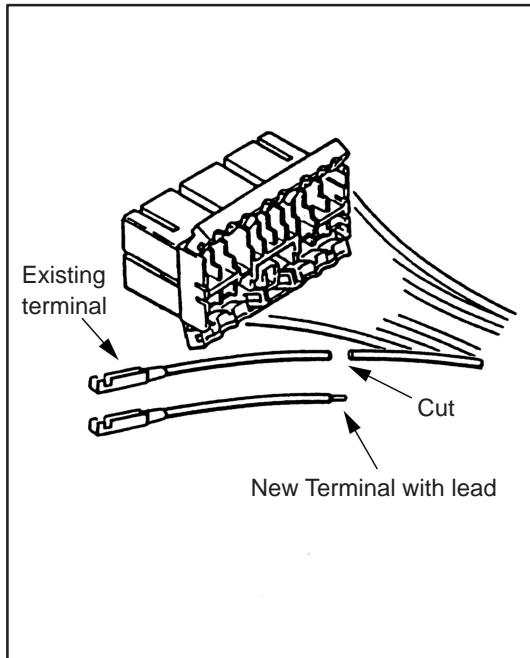


(2) Terminal Bending in Horizontal Direction

**5. Inspect the terminal and the connector for damage.****NOTE:**

- The locking clip is easily damaged.
- Do not reuse the damaged part.

TERMINAL AND CONNECTOR REPAIR—TERMINAL REPLACEMENT

Step 3. Replace the terminal.**1. Cut the Old Terminal from the Harness.**

- (a) Use the new wire lead as a guide for proper length.

NOTE: If the length of wire removed is not approximately the same length as the new piece, the following problems may develop:

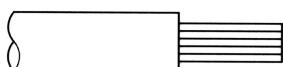
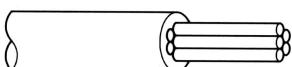
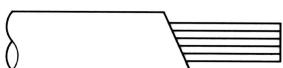
- Too short — tension on the terminal, splice, or the connector, causing an open circuit.
- Too long — excessive wire near the connector, may get pinched or abraded, causing a short circuit.

HINT: When connecting a wire harness at three or more spots to the same connector, cut the wire harness as shown on the left.

2. Select the correct replacement terminal with lead, from the supply parts.**3. Strip insulation from wire on the harness and replacement terminal lead.**

Start stripping at least 8 mm (0.31 in.) to 11 mm (0.43 in.) away from the end of the existing harness at vehicle side and also from the end of the repair wire.

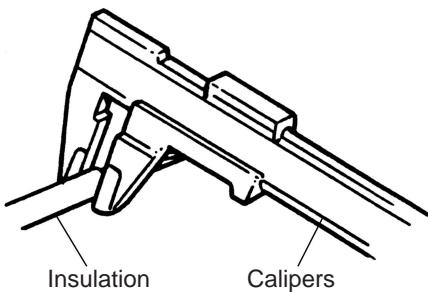
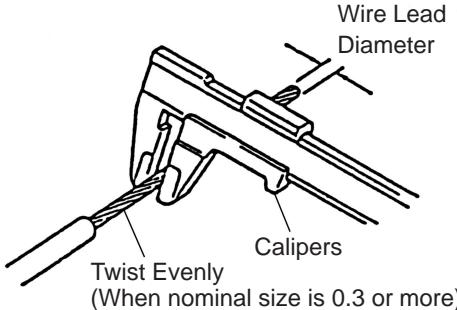
TERMINAL AND CONNECTOR REPAIR—TERMINAL REPLACEMENT

Good Example:**Bad Example:****NOTICE:**

Take care not to damage the wire when stripping the wire harness lead. After finishing the operation, visually inspect the wire. If there is any damage, perform the operation again.

HINT:

If the wire size is not known, start with largest stripper hole and work down until a clean strip of the insulation is removed without nicking or cutting the wire lead.

Wire Harness Outside Diameter**Nominal Size of the Wire****4. Select Correct Size of Sleeve from the Supply Parts.**

- (a) Measure the diameter of wire by using the measuring device as following:

- When size is based on the outside diameter of the wire harness

Measure the outside diameter of the wire harness by placing a measuring device, such as a micrometer or Vernier Caliper, across the diameter of the insulation on the lead and taking a reading.

- When size is based on the nominal size of the wire lead.

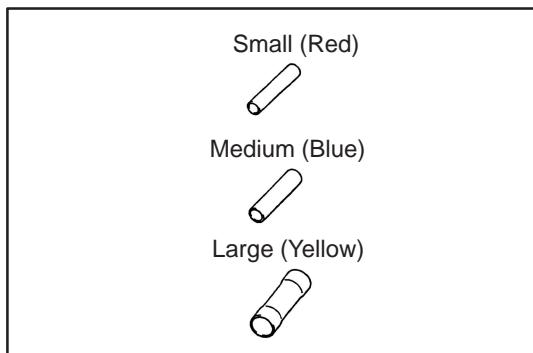
Measure the diameter of the wire lead by placing a measuring device, such as a micrometer or Vernier Caliper, across the diameter of the wire lead and taking a reading.

HINT:

To calculate the "nominal size" of wire

$$\text{Nominal size} = \frac{3.14 \times (\text{Diameter of wire lead})^2}{4}$$

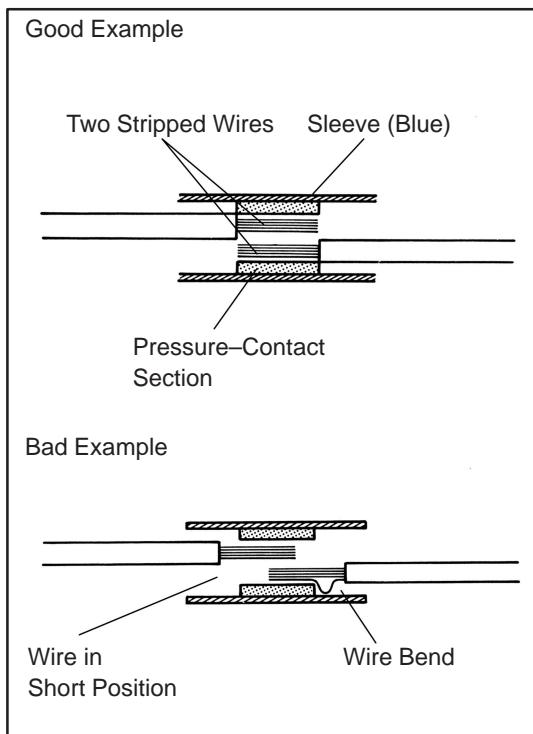
TERMINAL AND CONNECTOR REPAIR—TERMINAL REPLACEMENT



(b) Use the table to determine proper sleeve size

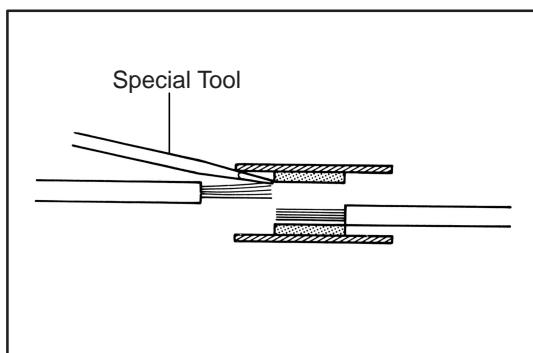
Part Number	Nominal size of wire (Outside Diameter of wire)
Small 82999-12010	0.3 or less (1.0 – 0.2 mm)
Medium 82999-12020	0.5 – 1.25 (2.0 – 1.0 mm)
Large 82999-12030	2 or more (5.0 – 3.0 mm)

NOTE: For details, refer to sleeve size table on item 4 of STEP 1



5. Crimp the Replacement Terminal Lead to the Harness Lead.

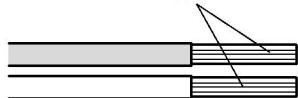
(a-1) When nominal size is 0.3 or more
Overlap the two stripped wire ends inside the sleeve as illustrated on the left.



HINT: You might find it easier if you use a miniature special tool as a guide as you insert wires into the sleeve.

TERMINAL AND CONNECTOR REPAIR—TERMINAL REPLACEMENT

Two Stripped Wires



It arranges it for the same.

(a-2) When nominal size is less than 0.3.

- Two stripped wire ends are arranged for the same as illustrated on the left.

Good Example



Wires are twisted uniformly together.

- Twist the two stripped wire ends together.

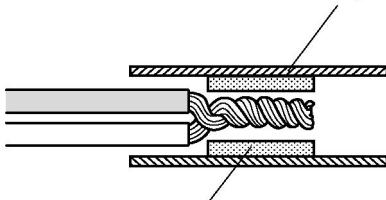
Bad Example



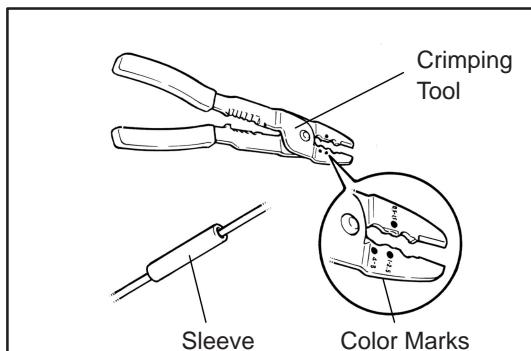
The thin wire is twisted around the thick wire.

- Insert the twisted wire ends into the sleeve.

Sleeve (Red)

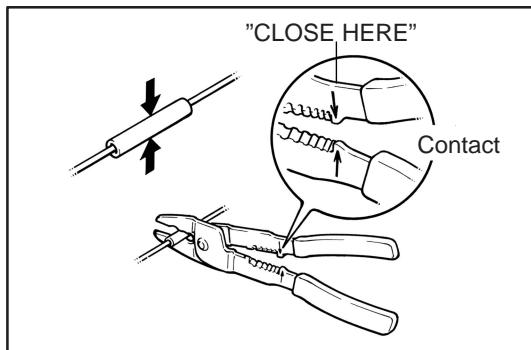


TERMINAL AND CONNECTOR REPAIR—TERMINAL REPLACEMENT



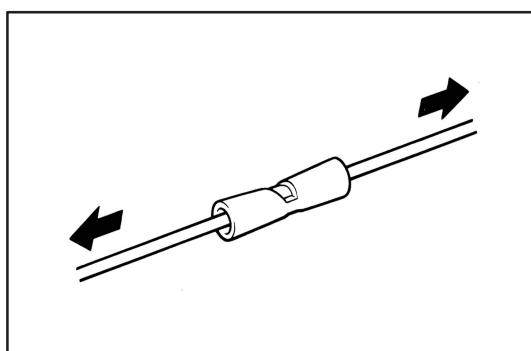
- (c) The crimping tool (AMP Part No. 169060) has color marks on it. Place the sleeve in the correct section of the tool according to the color of the sleeve itself.

HINT: For the crimping tool, AMP "Part No. 169060" is convenient to use.



- (d) With the center of the sleeve correctly placed between the crimping jaws, squeeze the crimping tool until either end comes into contact at the section marked by "CLOSE HERE".

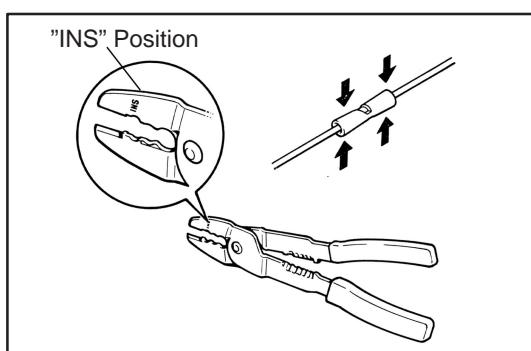
HINT: Check to see that the sleeve and wires are still in the correct position before closing the crimping tool ends with steady pressure.



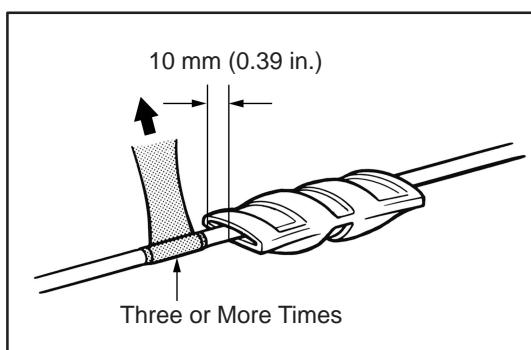
- (e) Pull the joined wires to either end. Make sure that they are joined firmly by the sleeve.

NOTICE:

If the joined wires come loose the splice is defective, so replace the sleeve and repeat the procedure.



- (f) Crimp both ends of the sleeve with the crimping tool at the "INS" position.

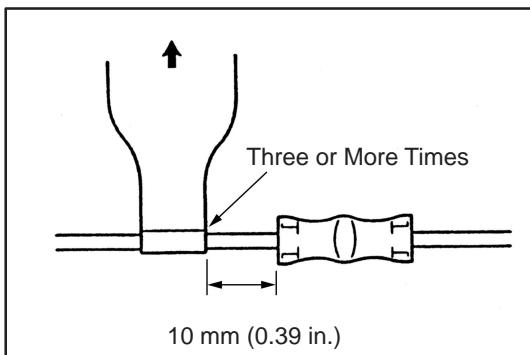


6. Protect Joined Section

Wrap silicon tape around the joins to protect them from moisture.

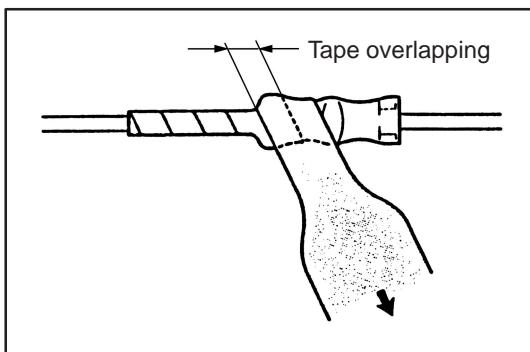
NOTE: This job is required in repairs of the engine compartment, under the floor and other moisture entry positions.

TERMINAL AND CONNECTOR REPAIR—TERMINAL REPLACEMENT

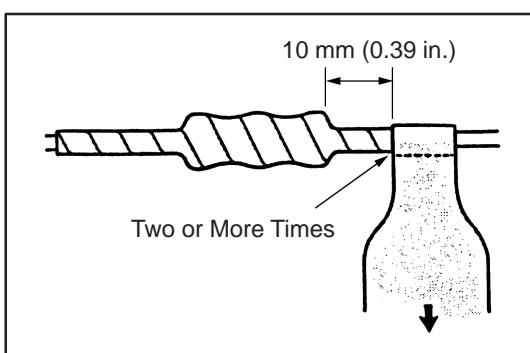


HINT:

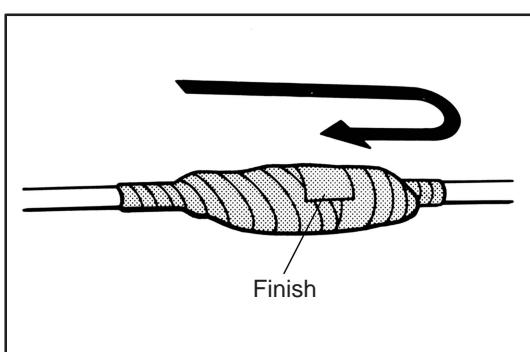
- Before starting the operation, thoroughly wipe dirt and grease off the sections to be joined.
 - If the adhesive surfaces of two tapes come in contact they will stick together and will not come apart, so do not remove the backing film except when using the tape.
 - Do not let oil and dust, etc. get on the tape surface.
- Ready about 100 mm (3.94 in.) of silicon tape (Part No. 08231-00045) and peel off the film.
 - Stretch the silicon tape until its width is reduced by half.
 - About 10 mm (0.39 in.) from the end of the sleeve, wrap the silicon tape around the sleeve three or more times while stretching the tape.



- Wrap the remaining part of the sleeve with half of the tape overlapping at each turn.

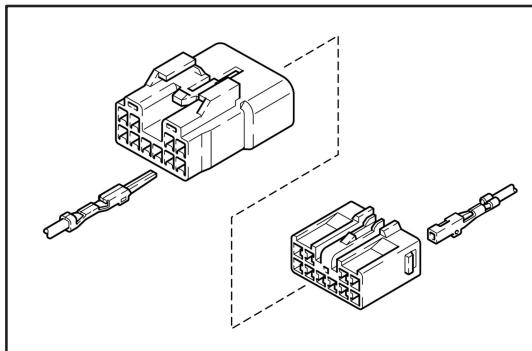


- Firmly wrap the tape two times or more about 10 mm (0.39 in.) from the other end of the sleeve, then wrap the tape back towards the start again and firmly finish winding the tape around the center of the sleeve.



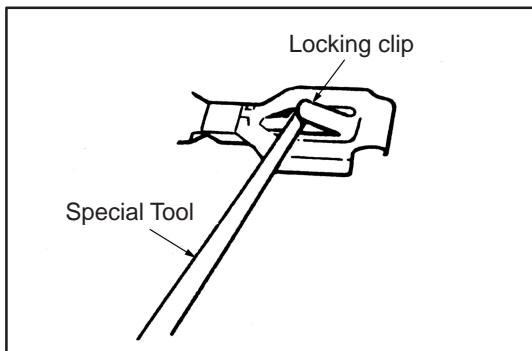
TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

Step 4. Install the terminal into the connector.



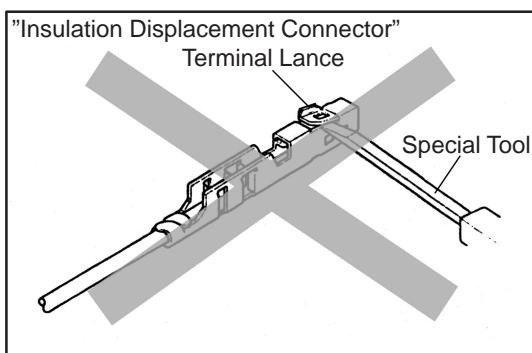
HINT:

- (a) Make sure the terminal is positioned correctly.
- (b) Insert the terminal until the locking clip locks firmly.
- (c) Insert the terminal with terminal retainer in the temporary lock position, if equipped.

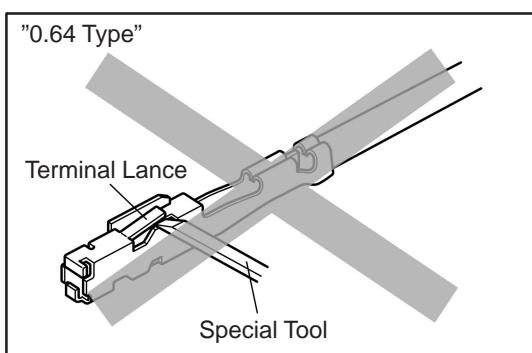


NOTE: If reusing a terminal, check that the locking clip is still in good condition and in the proper position.

- (a) If it is on the terminal and not in the proper position, use the special tool to gently bend the locking clip back to the original shape.
- (b) Check that the other parts of the terminal are in their original shape.

**NOTICE:**

Do not readjust or reuse the terminal lance of the insulation displacement connector type terminal. Always change the wire with the repair wire.

**NOTICE:**

As for 0.64 type terminal, do not adjust the terminal lance with the special tool.

Splash Proof Type Connector**NOTICE:**

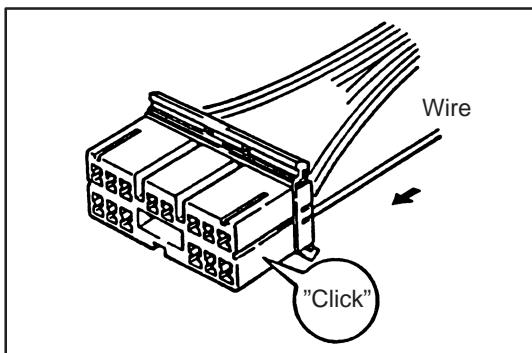
- Removal of the terminal from housing cavity will cause damage to rubber plug material (the wire seal), deteriorating waterproofing performance. Be sure to replace the housing with a new one.

- Check the withdrawn terminal for the following if trying to use it again.

- It is free of deformation and damage

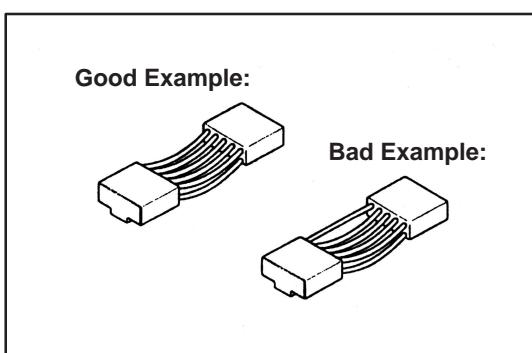
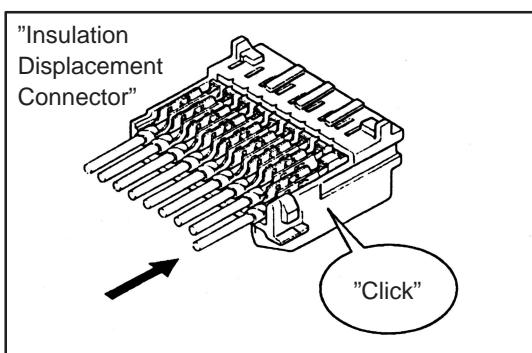
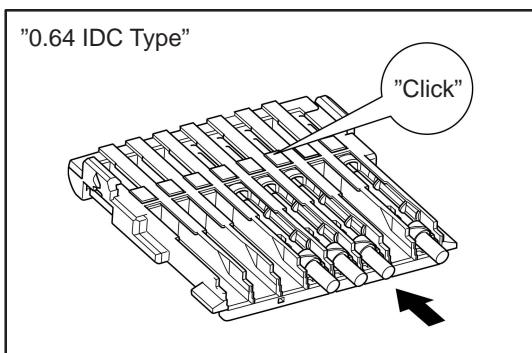
- It is free of adherents such as rubber plug material (wire seal)

- Replace any deformed terminal.

TERMINAL AND CONNECTOR REPAIR-TERMINAL REPLACEMENT

- Push the Terminal into the Connector until you hear a "click".**

NOTE: Not all terminals will give an audible "click".

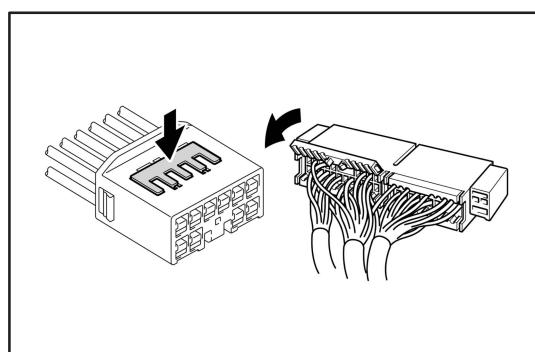
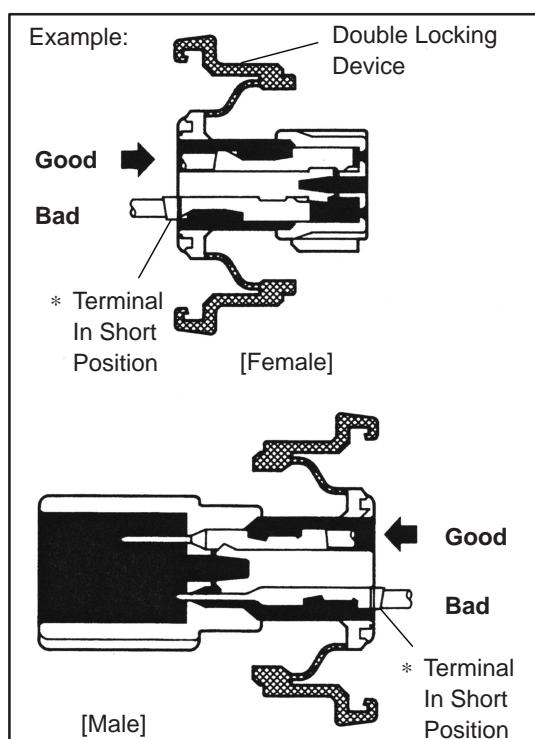
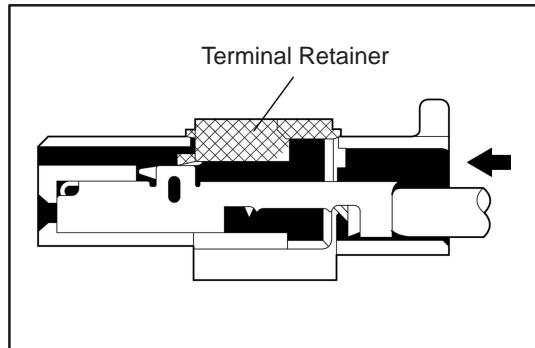
**NOTICE:**

- After repairing, never let only one harness stretch.
- In case that it becomes short, do over again using the repair wire.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

**2. Double Locking Type Connector
(with terminal retainer or double locking device)**

The connector is fitted with a terminal retainer, or a double locking device, it is in the temporary lock position at insert the terminal.



Type A (For 0.64III, 1.0, 1.0II, 1.3, 1.8, 2.3II 4.8 and 8.0 of Non-Waterproof Type Connector)

- (a) Insert the terminal.

HINT:

1. Make sure the terminal is positioned correctly.
 2. Insert the terminal with terminal retainer in the temporary lock position.
- (b) Insert the terminal until the locking clip locks firmly.

HINT:

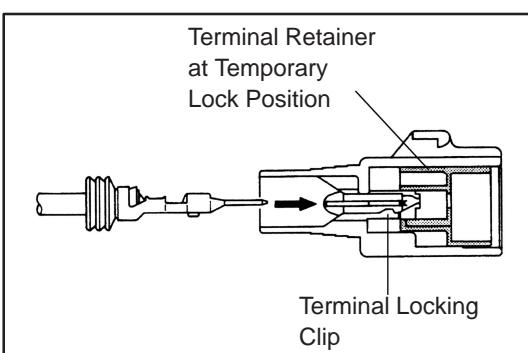
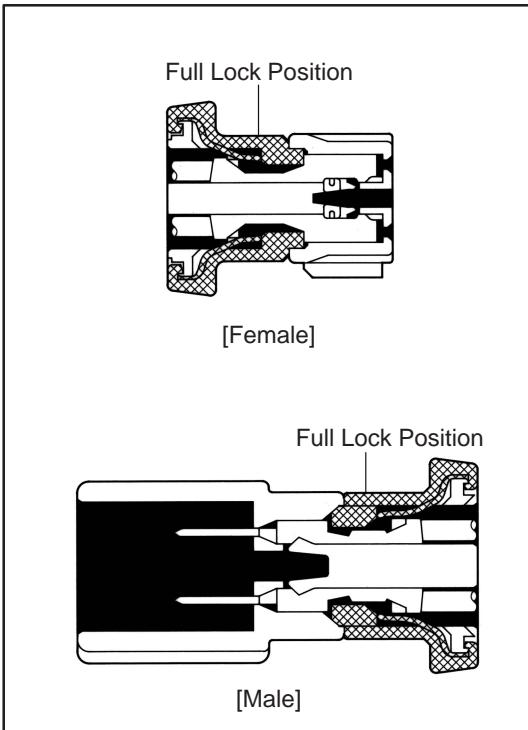
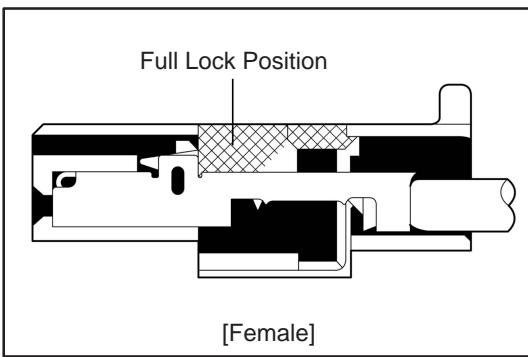
1. Pull the terminal back gently to check whether it is locked correctly.
2. If it cannot be inserted easily, check the terminal and the connector for damage.

NOTE: If the terminal to locking clip does not lock firmly, the double locking device cannot lock or terminal retainer does not lock at full lock position so the terminal backs out from connector.

- (c) Close terminal retainer or double locking device.

The connector is fitted with a terminal retainer, or a double locking device, return it to the full lock position.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



Type B (For 0.64, 1.8, 2.3, 2.3II, 4.8, 6.3 and 8.0 of Waterproof Type)
(For Male Connector)

- (a) Insert the terminal.

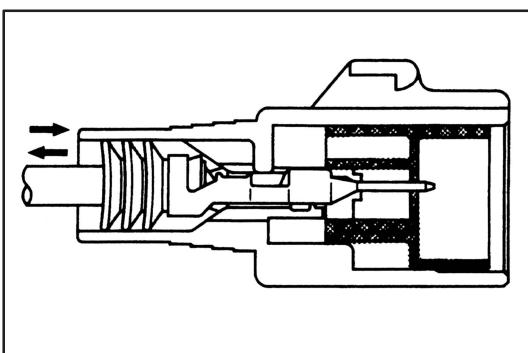
HINT:

1. Make sure the terminal is positioned correctly.
2. Insert the terminal with terminal retainer in the temporary lock position.

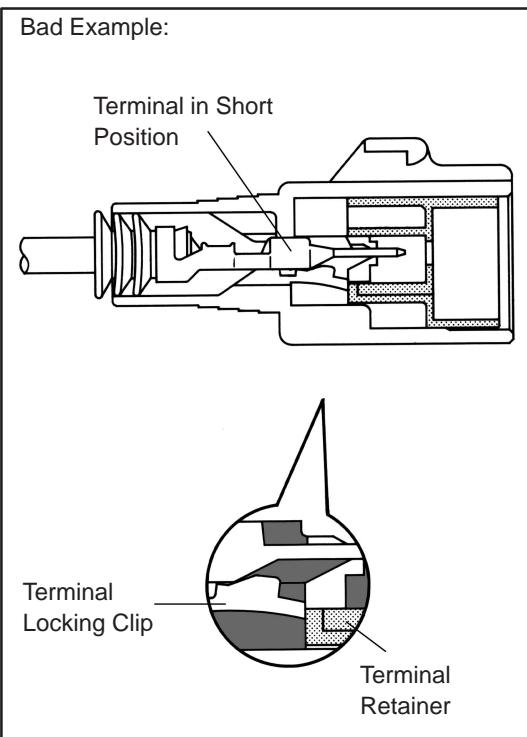
- (b) Insert the terminal until the locking clip locks firmly.

HINT:

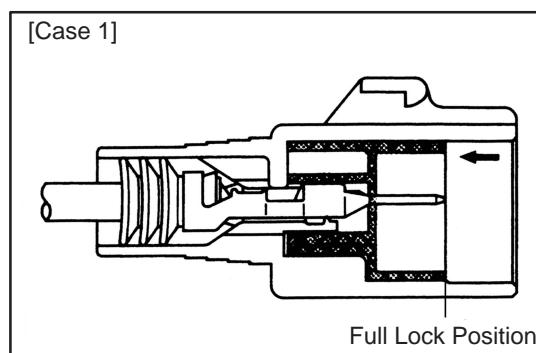
1. Pull the terminal back gently to check whether it is locked correctly.
2. If it cannot be inserted easily, check the terminal and the connector for damage.



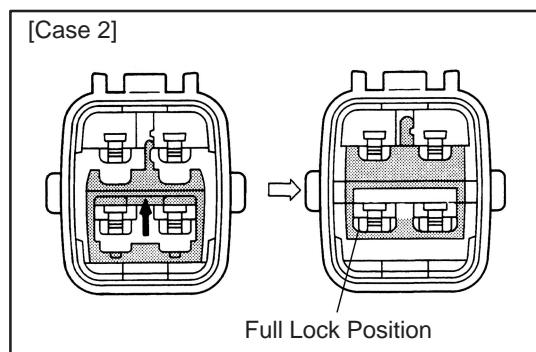
TERMINAL AND CONNECTOR REPAIR—TERMINAL REPLACEMENT



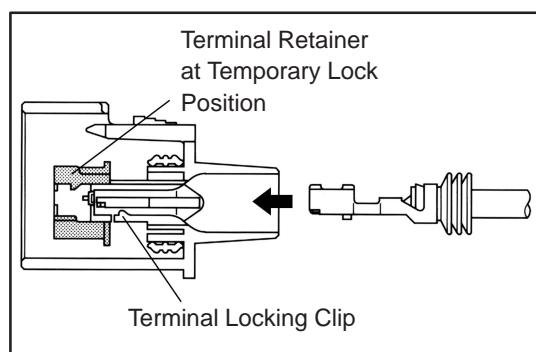
NOTE: If the terminal to locking clip does not lock firmly, terminal retainer can not lock at full lock position so the terminal backs out from connector.



- (c) "For Case 1"
Push the terminal retainer in to the full lock position.



- "For Case 2"
Raise the terminal retainer up to the full lock position.

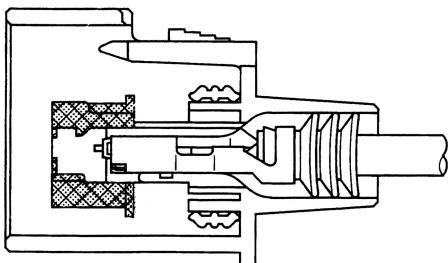


(For Female Connector)

- (a) Insert the terminal.

HINT:

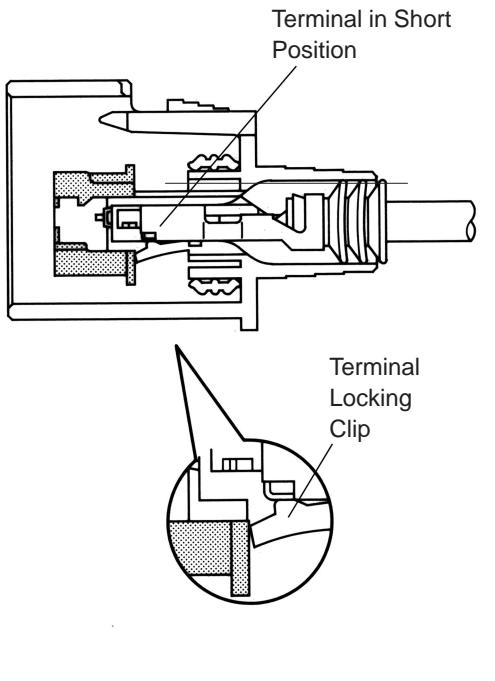
1. Make sure the terminal is positioned correctly.
2. Insert the terminal with terminal retainer in the temporary lock position.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

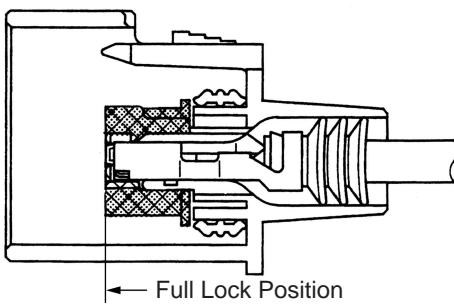
- (b) Insert the terminal until the locking clip locks firmly.

HINT:

1. Pull the terminal back gently to check whether it is locked correctly.
2. If it cannot be inserted easily, check the terminal and the connector for damage.

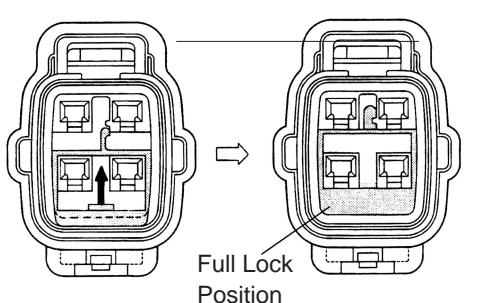
Bad Example:

NOTE: If the terminal to locking clip does not lock firmly, terminal retainer can not lock at full lock position so the terminal backs out from connector.

[Case 1]

- (c) "For Case 1"

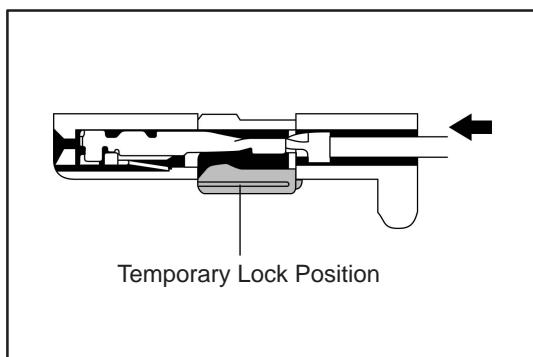
Push the terminal retainer in to the full lock position.

[Case 2]

- "For Case 2"

Raise the terminal retainer up to the full lock position.

TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT



Type C (For 0.64 Type Connector)

- (a) Insert the terminal.

HINT:

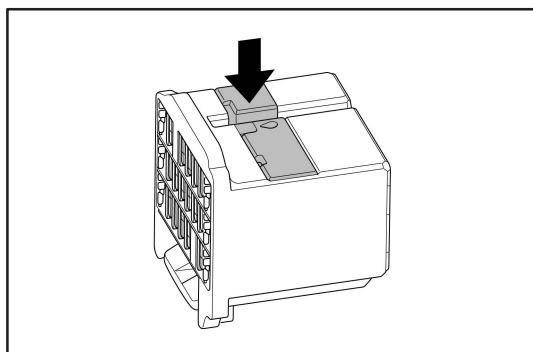
1. Make sure the terminal is positioned correctly.
2. Insert the terminal with terminal retainer in the temporary lock position.

- (b) Insert the terminal until the terminal lance locks firmly.

HINT:

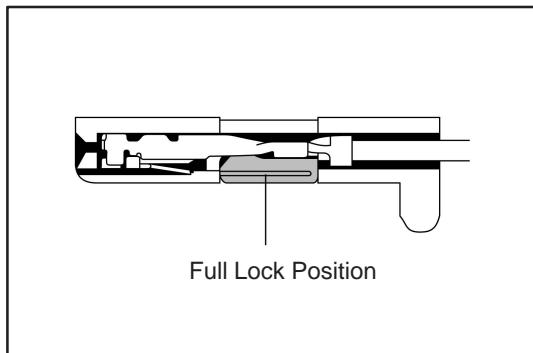
1. Pull the terminal back gently to check whether it is locked correctly.
2. If it cannot be inserted easily, check the terminal and the connector for damage.

NOTE: If the terminal to terminal lance does not lock firmly, the double locking device cannot lock or terminal retainer does not lock at full lock position so the terminal backs out from connector.



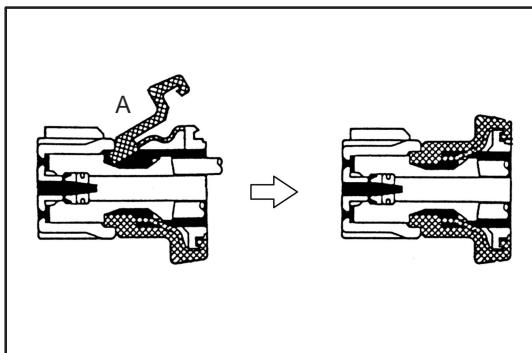
- (c) Close terminal retainer.

The connector is fitted with a terminal retainer, return it to the full lock position.

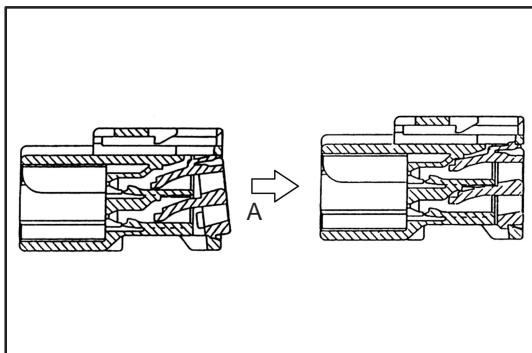


TERMINAL AND CONNECTOR REPAIR-TERMINAL REPLACEMENT**SPECIAL EXAMPLE**

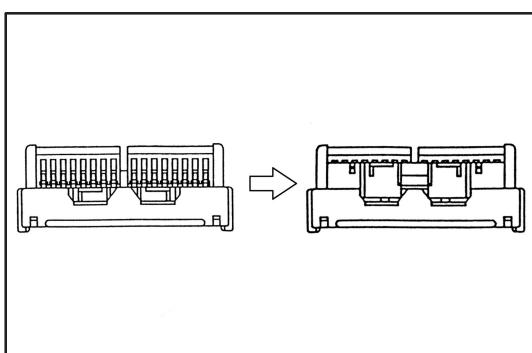
- First fit the section A.



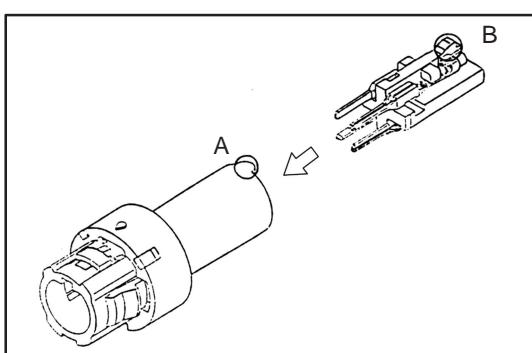
- Install the lock of the section A first.



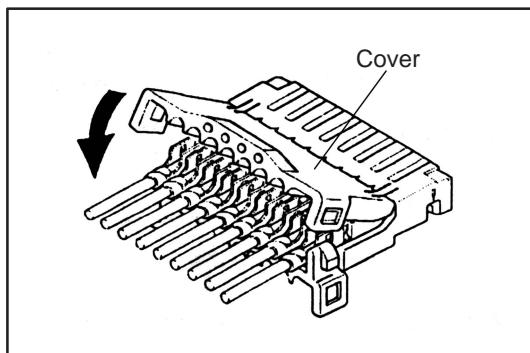
- Install the lock of the retainer and pull the white cover until you hear a click sound.



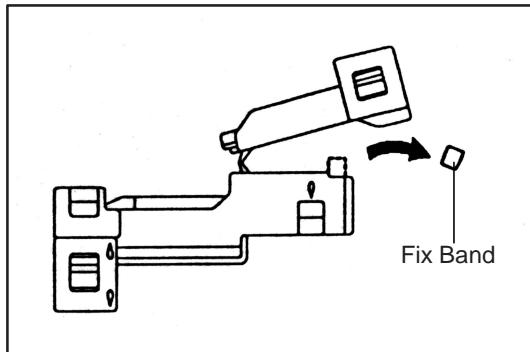
- Install the convex part (A) of the outer part correctly to the section B of the inner part.



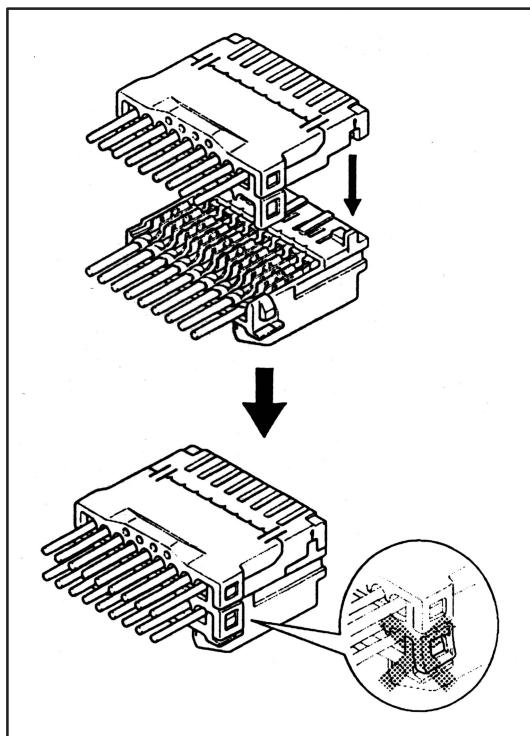
TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

**Insulation Displacement Connector****w/ Cover : CLOSE COVER**

NOTICE:
Securely lock it

**HINT:**

When replacing it to a new connector, cut off the fixing band without leaving it.

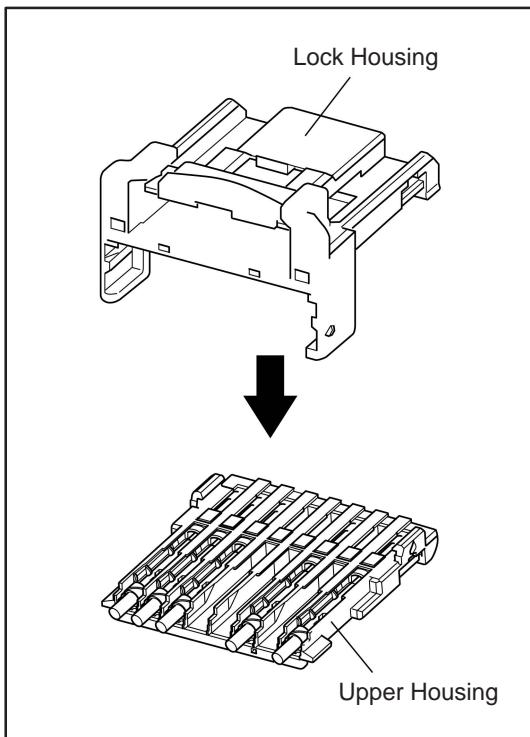
**UNITE CONNECTOR**

Make the projection of the front lock of the upper housing meet the ditch of the front lock of the lower housing and fix the rear lock.

NOTICE:

- After uniting, securely lock it for not leaving the rear lock arm deformed.
- Make sure that the terminals will not become loose by pulling the wires lightly.

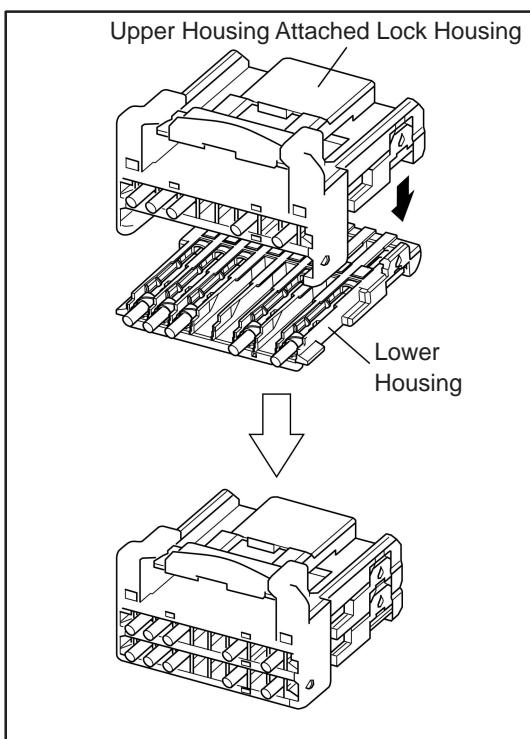
TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

**Insulation Displacement Connector (0.64 Type)**

- (a) Install the upper housing to the lock housing.

NOTICE:

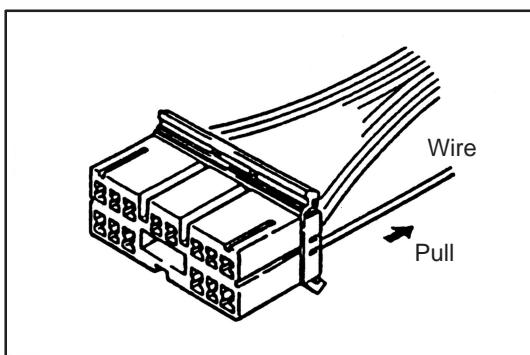
- Securely Lock it.
- Be careful not to mistake the upper housing and lower housing when putting together.



- (b) Make the projection of the front lock of the upper housing attached lock housing meet the ditch of the front lock of the lower housing and fix the rear lock.

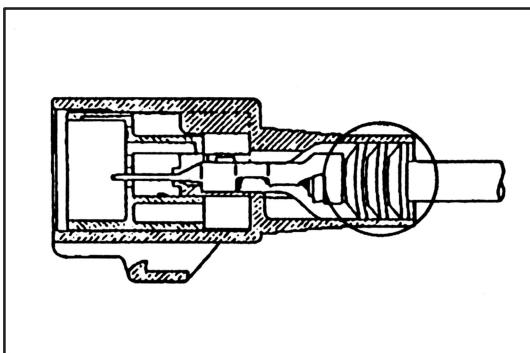
NOTICE:

- Afteruniting, securely lock it for not leaving the rear lock arm deformed.
- Make sure that the terminals will not become loose by pulling the wires lightly.
- Be careful not to mistake the upper housing and lower housing when putting together.

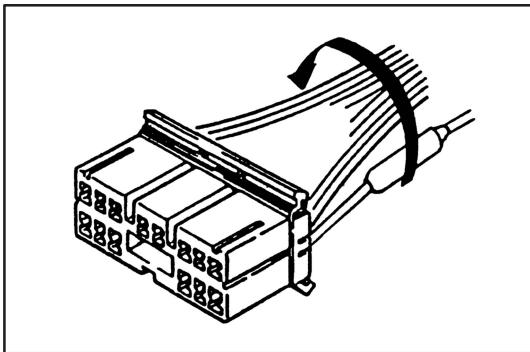


3. When properly installed, pulling gently on the wire lead will prove the terminal is locked in the connector.

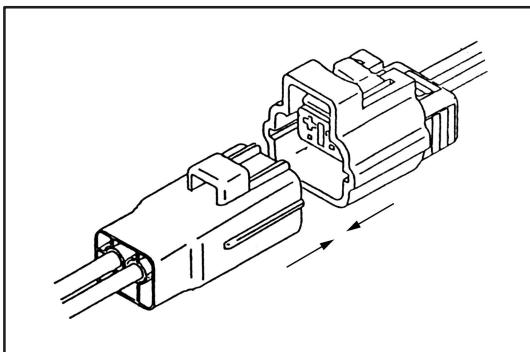
TERMINAL AND CONNECTOR REPAIR–TERMINAL REPLACEMENT

**NOTICE:**

If you working on the waterproof type, make sure that a rubber plug or a terminal gasket is inserted into the housing securely.

**4. Secure the Repaired Wire to the Harness**

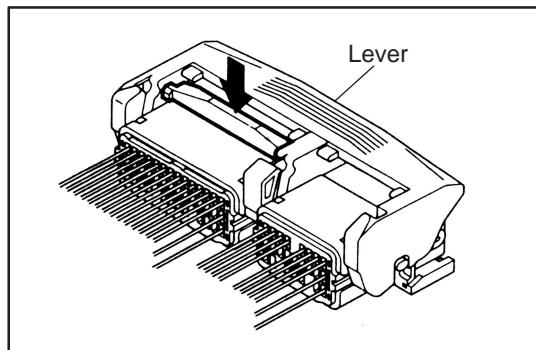
If the wire is not in the conduit, or secured by other means, wrap vinyl tape around the bundle to keep it together with the other wires.

**5. Connect Connector**

- Fit the male connector to the female terminal.

NOTICE:

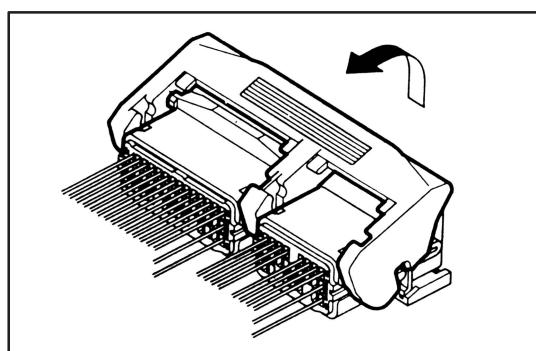
- Do not twist the connector when fitting.
- Insert it until fully locked.

TERMINAL AND CONNECTOR REPAIR—HOW TO INSTALL AND REMOVE SPECIAL CONNECTORS**HOW TO INSTALL AND REMOVE SPECIAL CONNECTORS****Low Fit and Lever Type Connector**

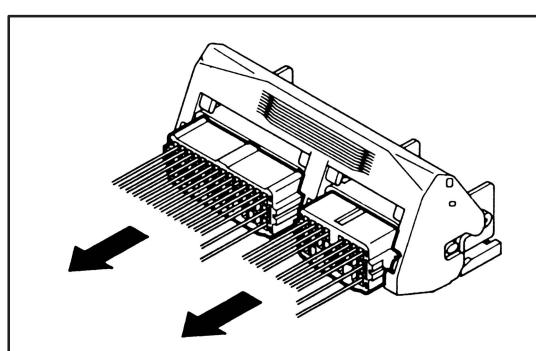
[Case 1]

1. Cut the connection of the connector

- (1) Push the place indicated by the arrow.
- (2) The lock is released and lever is lifted up.



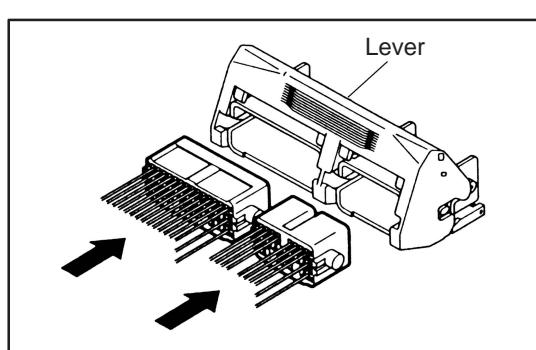
- (3) Lift the lever up until it stops.



- (4) Cut the connection of the connector.

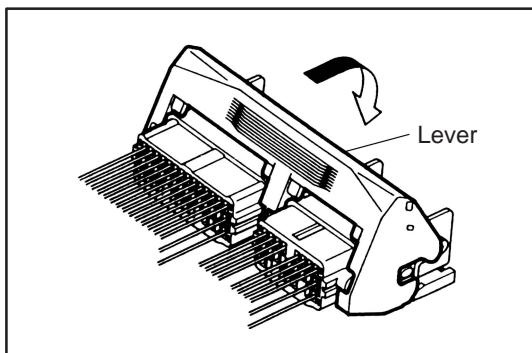
NOTICE:

Do not hold the wire harness to pull it.

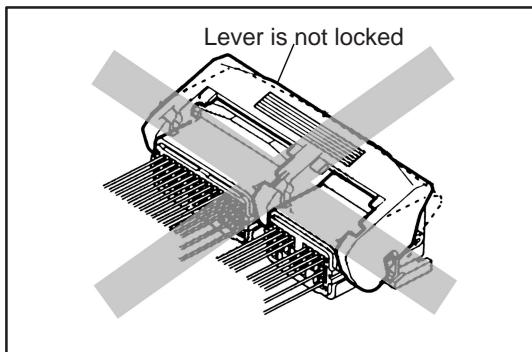
**2. Connect the connector**

- (1) Connect the connector in the condition that the lever is fully lifted up.

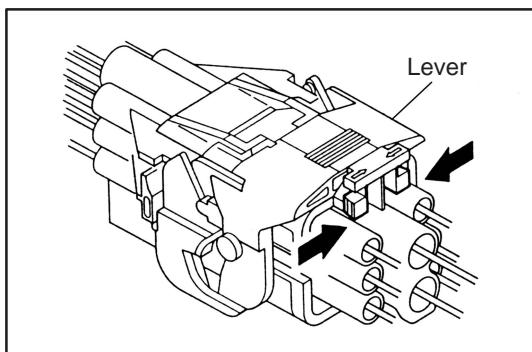
HINT: If the lever is locked at the lower position, follow the procedure [Case 1]. (1) to (3) and lift the lever up fully.

TERMINAL AND CONNECTOR REPAIR—HOW TO INSTALL AND REMOVE SPECIAL CONNECTORS

- (2) Hold the connector to prevent it from slipping off and push it down until you hear a click to lock it.



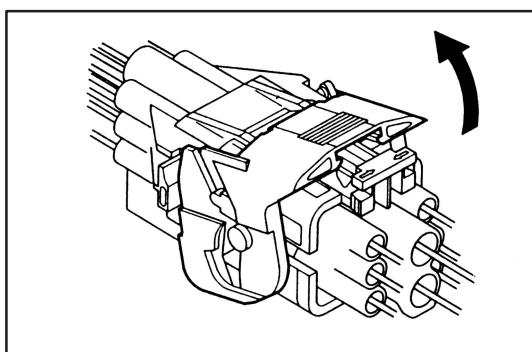
- (3) Confirm that the lever is securely locked.



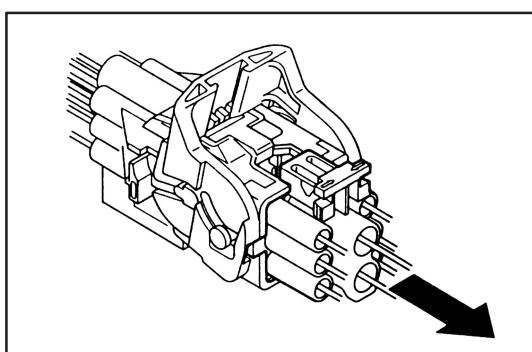
[Case 2]

1. Cut the connection of the connector

- (1) Hold the area indicated by the arrow in the illustration
 (2) The lock is released and the lever is lifted up.



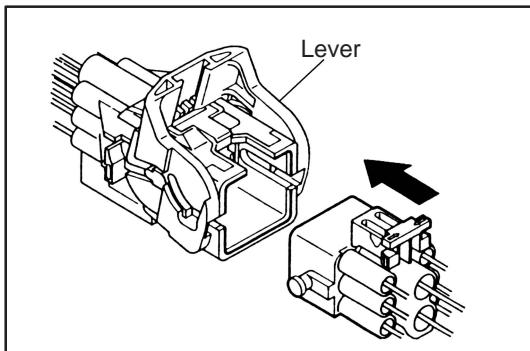
- (3) Lift the lever up fully.



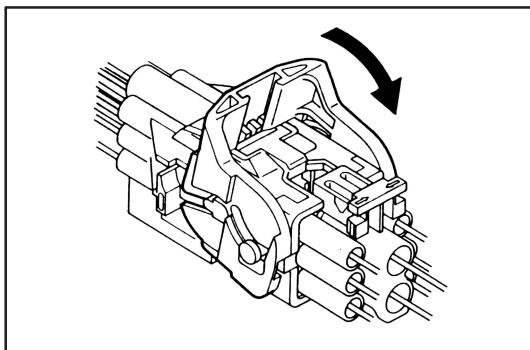
- (4) Cut the connection of the connector.

NOTICE:

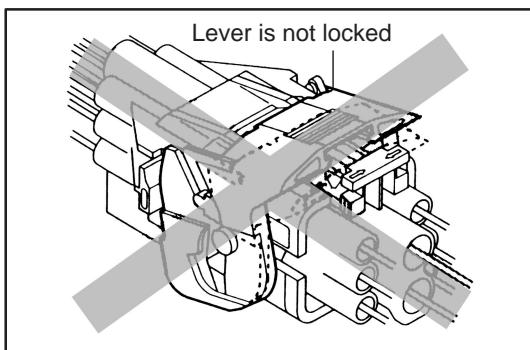
Do not hold the wire harness to pull it.

TERMINAL AND CONNECTOR REPAIR—HOW TO INSTALL AND REMOVE SPECIAL CONNECTORS**2. Connect the connector**

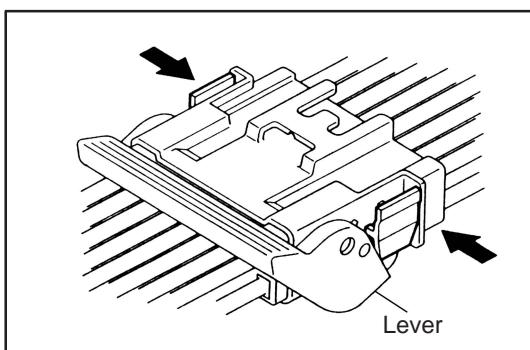
- (1) Connect the connector in the condition that the lever is fully lifted up.



- (2) Hold the connector to prevent it from slip off and push it down until you hear a click to lock it.



- (3) Confirm that the lever is securely locked.

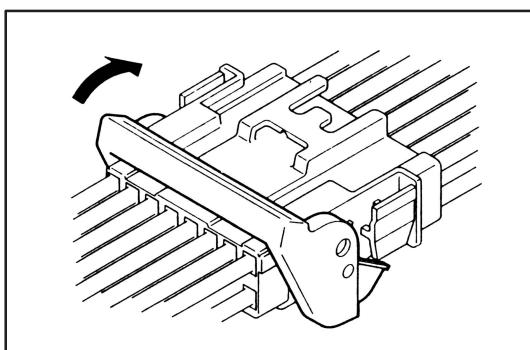


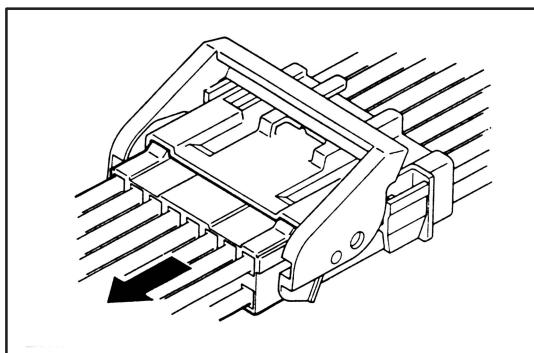
[Case 3]

1. Cut the connection of the connector

- (1) Pick the part indicated in the illustration by fingers.
- (2) The lock is released and the lever is lifted up.

- (3) Lift the lever up fully.

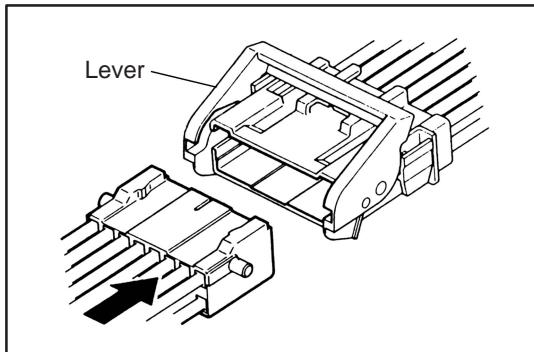


TERMINAL AND CONNECTOR REPAIR—HOW TO INSTALL AND REMOVE SPECIAL CONNECTORS

- (4) Cut the connection of the connector.

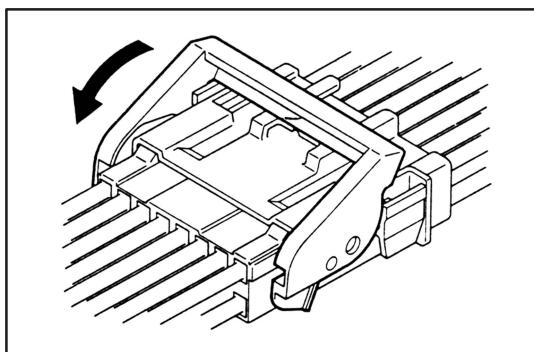
NOTICE:

Do not hold the wire harness to pull it.

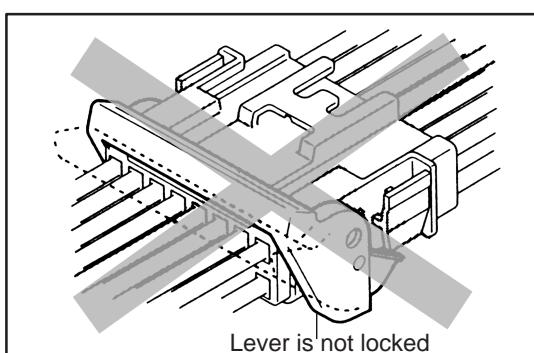
**2. Connect the connector**

- (1) Connect the connector in the condition that the lever is fully lifted up.

HINT: If the lever is locked at the lower position, follow the procedure [Case 3]. (1) to (3) and lift the lever up fully.

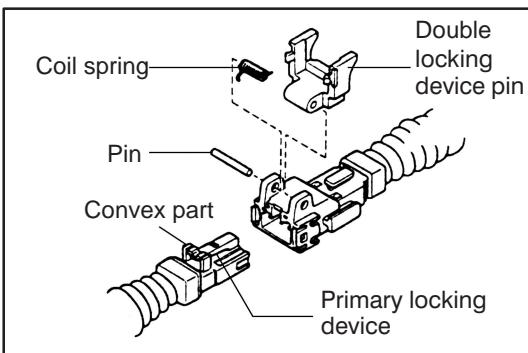


- (2) Hold the connector to prevent it from slip off and push it down until you hear a click to lock it.



- (3) Confirm that the lever is securely fitted

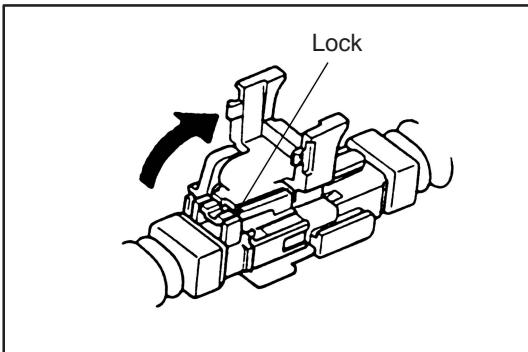
TERMINAL AND CONNECTOR REPAIR—HOW TO INSTALL AND REMOVE SPECIAL CONNECTORS



The connector with secondary locking device

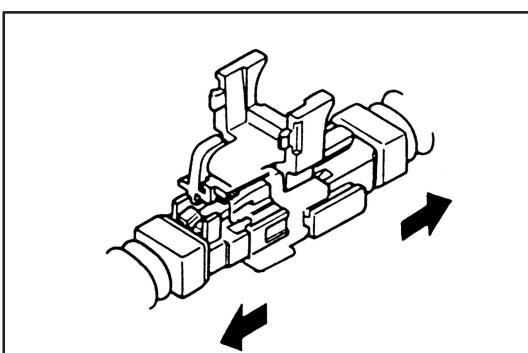
1. Area used

- Wire harness for SRS airbag deployment



2. Cut the connection of the connector.

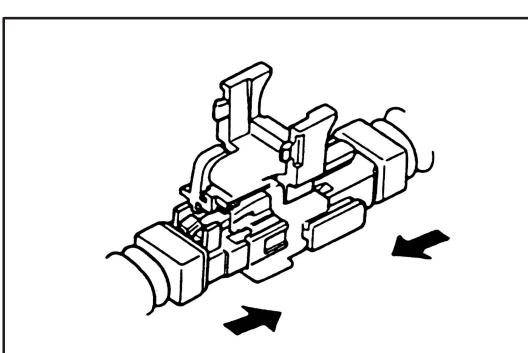
- (1) Release the double locking.



- (2) Release the primary locking and separate the connector.

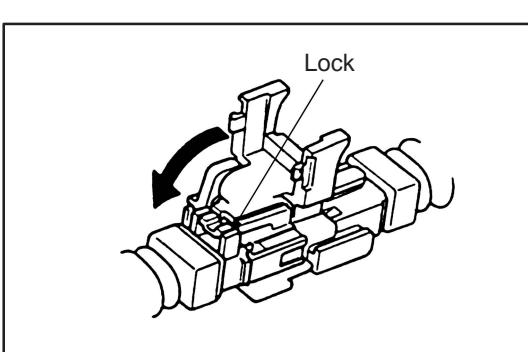
NOTICE:

Do not hold the wire harness to pull it.



3. Connect the connector

- (1) Install the primary locking device and connect the connector.



- (2) Install the double locking device.

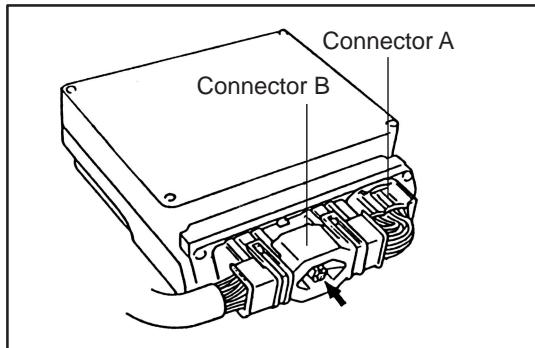
NOTICE:

The double locking device can not be installed unless the primary locking device is installed.

Connector fixed by bolts

1. Area used

- Engine control computer harness

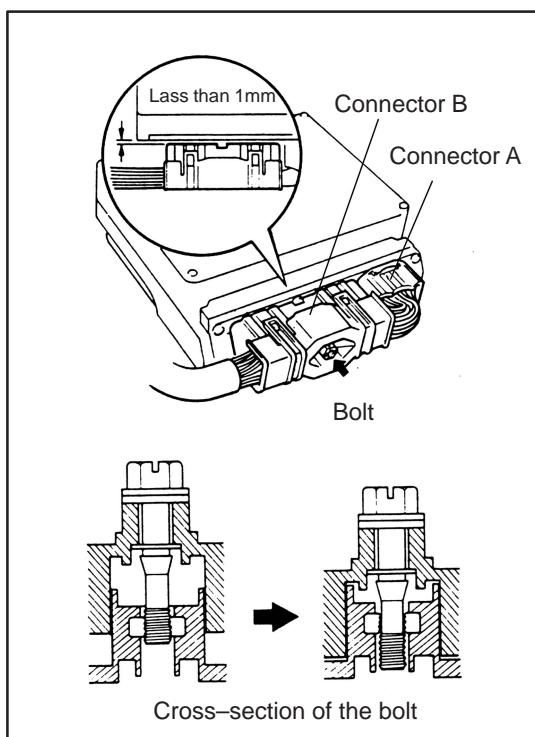


2. Cut the connection of the connector.

- (1) Remove the connector A.

- (2) Loose the bolt using a tool like driver until the connector B can be removed by hand and separate the connector.

HINT: If the bolt can not be removed, roll it while pulling forward.



3. Connection of the connector

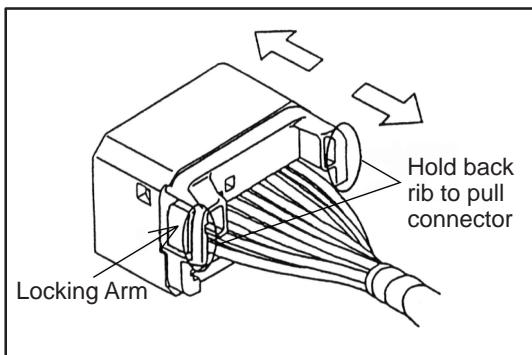
- (1) Temporarily fit the connector B.

- (2) Tighten the bolt by using tool like driver and fit the connector B completely.

NOTICE:

- Tighten the bolt until feeling it lighter. Then confirm that the width of chink of the connector B is less than 1mm.
- The bolt can be rolled after it is fitted.
- If the impact wrench is used, do not let it rolling more than three seconds. (The housing may be deformed by generated heat)
- Be sure and connect the connector B straight. Do not incline it while connecting.

- (3) Connect the connector A.

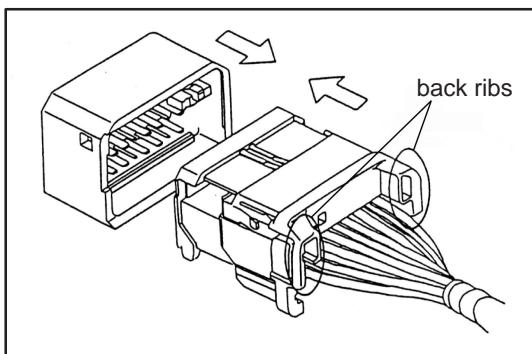
TERMINAL AND CONNECTOR REPAIR—HOW TO INSTALL AND REMOVE SPECIAL CONNECTORS**1. Cut the connection of the connector**

- (1) Push down on locking arm to unlock. Then hold the back ribs of connector to remove connector.

- (2) Cut the Connection of the connector.

NOTICE:

Do not hold the wire harness to pull it.

**2. Connect the Connector**

- (1) Align the direction of locking feature in same direction and mate the connector holding the back ribs in straight direction.
- (2) Insert it until a lock securely locks, and pull the connector lightly after the insertion, and confirm that a lock is enabled.

memo

TABLE OF HOUSING CROSS SECTION

C

C

TABLE OF HOUSING SHAPE

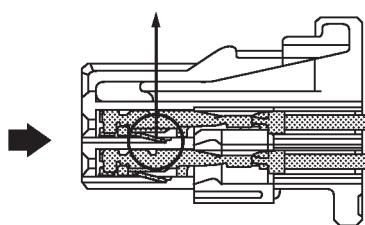
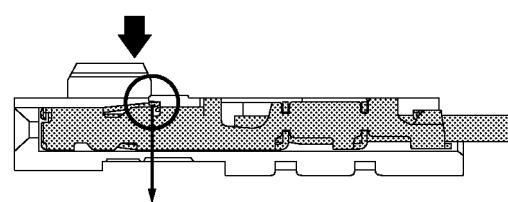
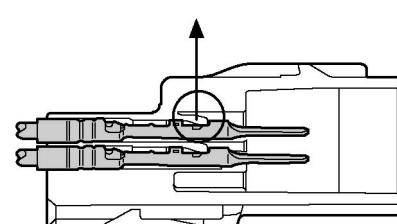
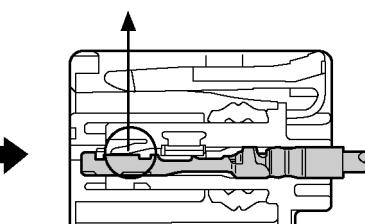
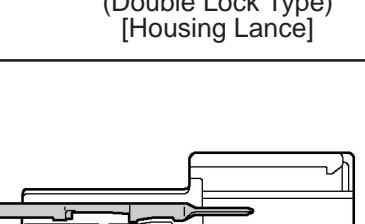
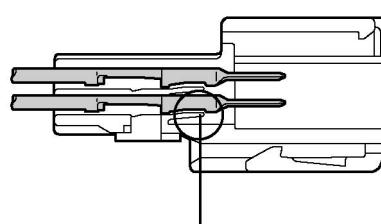
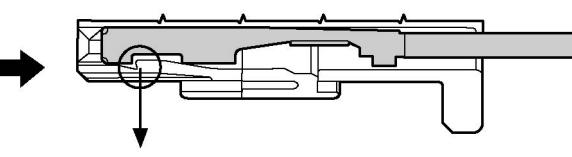
Type			 : Position of the lance  : Direction of lock released  : Direction of the special tool inserted	
	Male	Female		
0.64 Non-waterproof Type			 (Double Lock Type) [Terminal Lance]	
0.64 IDC			 [Terminal Lance]	C
0.64 Waterproof Type		 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]	
0.64II	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]		

TABLE OF HOUSING SHAPE

C

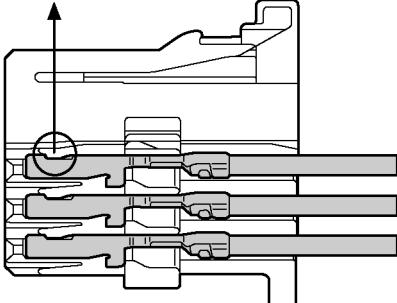
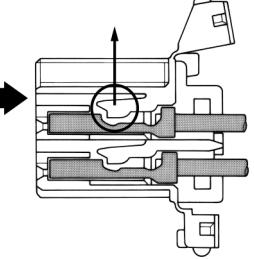
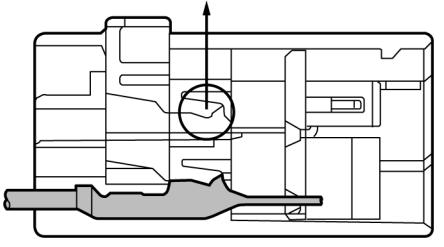
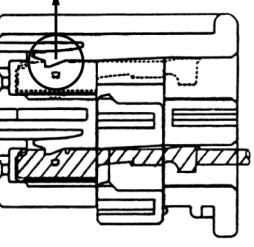
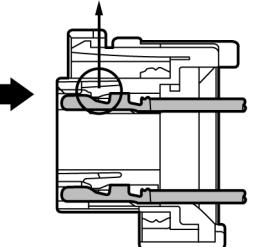
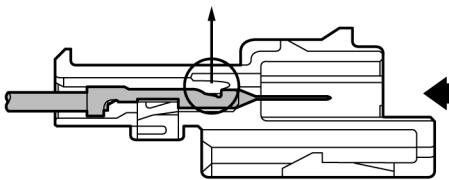
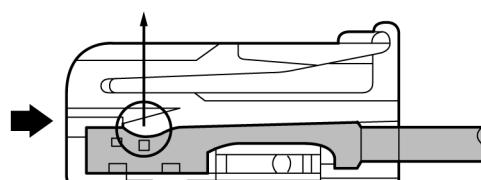
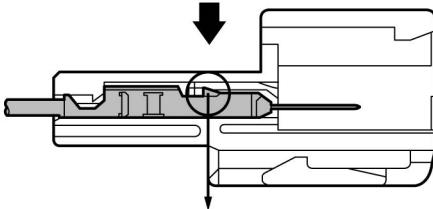
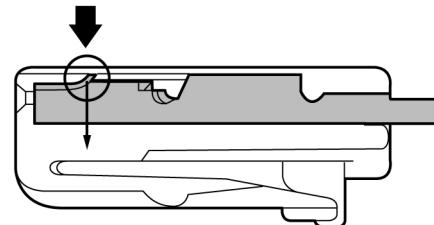
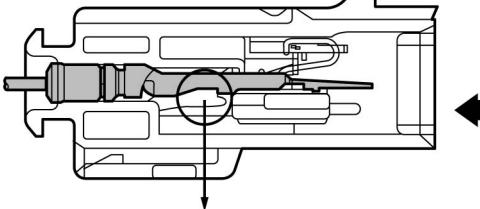
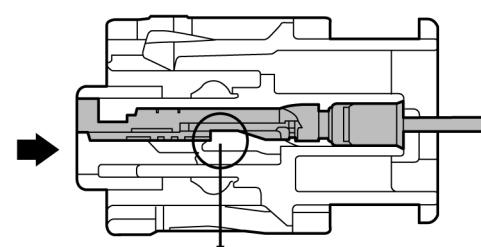
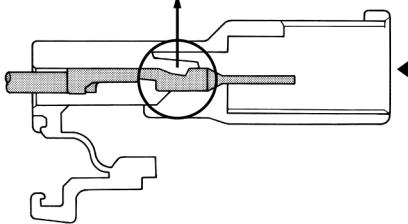
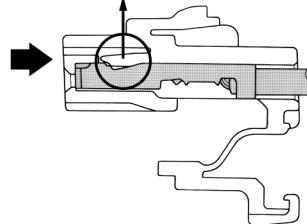
Type		
	Male	Female
0.64III		 <p>(Double Lock Type) [Housing Lance]</p>
1.0		 <p>(Double Lock Type) [Housing Lance]</p>
1.0II Non-waterproof Type	 <p>(Double Lock Type) [Housing Lance]</p>	 <p>(Double Lock Type) [Housing Lance]</p>
1.0II Waterproof Type		 <p>[Housing Lance]</p>

TABLE OF HOUSING SHAPE

Type			 : Position of the lance  : Direction of lock released  : Direction of the special tool inserted	
	Male	Female		
1.0III 1.0IV Non-waterproof Type	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]		
1.0III IDC	 [Terminal Lance]	 [Terminal Lance]		
1.0III Waterproof Type	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]		
1.3 Non-waterproof Type	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]		

C

TABLE OF HOUSING SHAPE

C

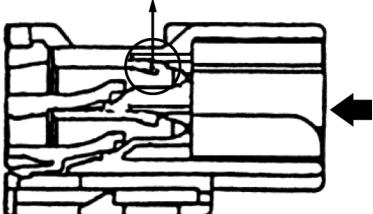
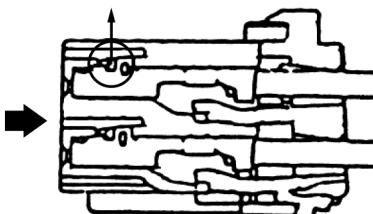
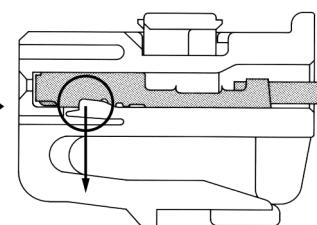
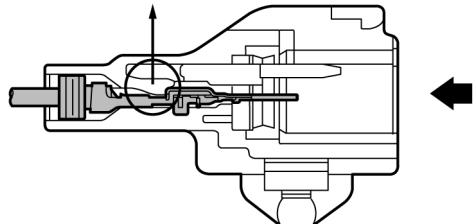
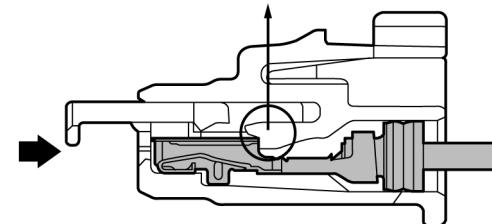
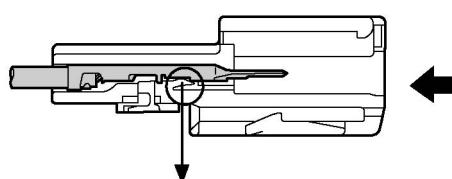
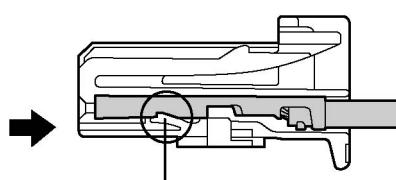
Type		
	Male	Female
1.3 Non-waterproof Type	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]
1.3 Non-waterproof Type		 (Double Lock Type) [Housing Lance]
1.3 Waterproof Type	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]
1.5	 [Housing Lance]	 [Housing Lance]

TABLE OF HOUSING SHAPE

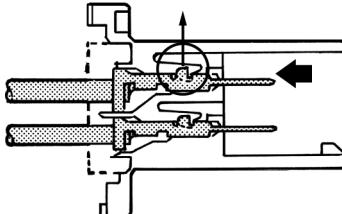
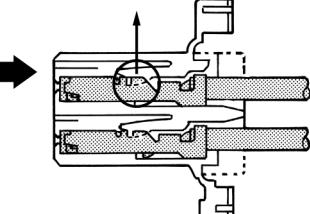
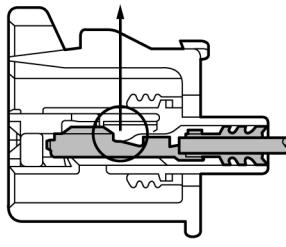
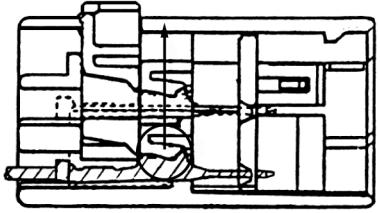
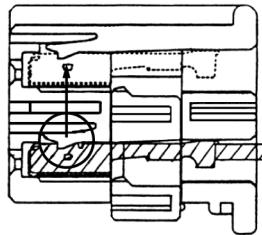
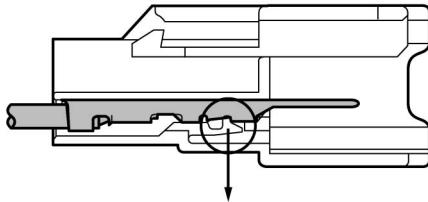
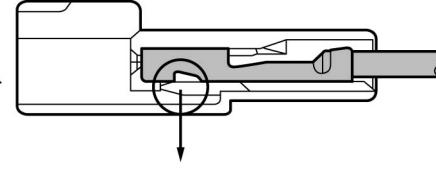
Type			 : Position of the lance  : Direction of lock released  : Direction of the special tool inserted
	Male	Female	
1.8 Non-waterproof Type	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]	
1.8 Waterproof Type		 (Double Lock Type) [Housing Lance]	C
1.8II	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]	
2.3 Non-waterproof Type	 [Housing Lance]	 [Housing Lance]	

TABLE OF HOUSING SHAPE

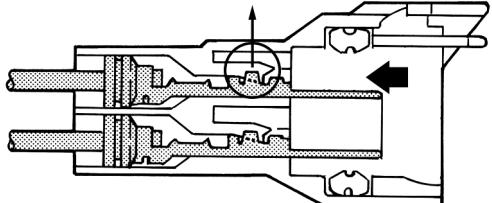
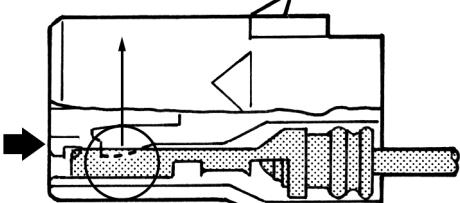
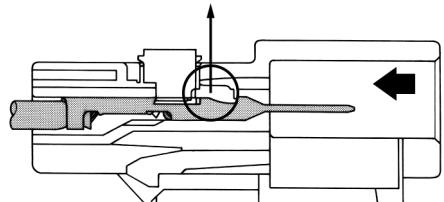
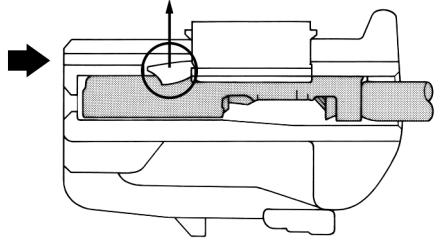
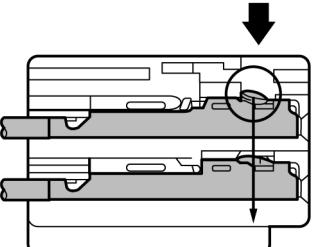
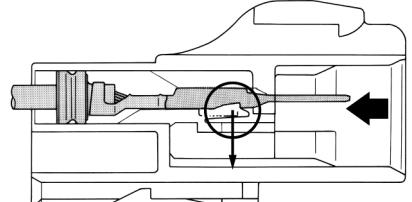
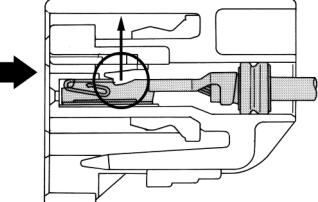
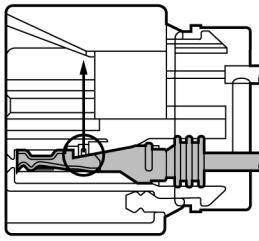
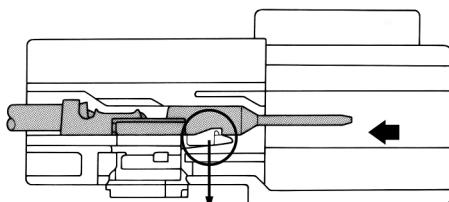
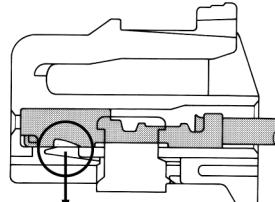
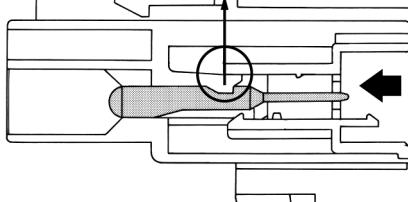
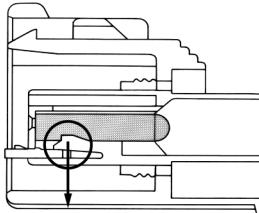
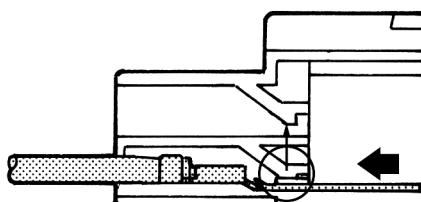
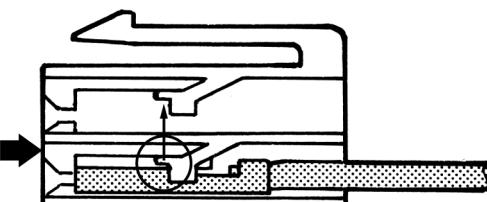
Type		
	Male	Female
2.3 Waterproof Type	 <p>[Housing Lance]</p>	 <p>[Housing Lance]</p>
2.3II Non-waterproof Type	 <p>(Double Lock Type) [Housing Lance]</p>	 <p>(Double Lock Type) [Housing Lance]</p>
2.3II IDC		 <p>[Terminal Lance]</p>
2.3II Waterproof Type	 <p>(Double Lock Type) [Housing Lance]</p>	 <p>(Double Lock Type) [Housing Lance]</p>

TABLE OF HOUSING SHAPE

Type			 : Position of the lance  : Direction of lock released  : Direction of the special tool inserted	
	Male	Female		
2.8 (HB3, HB4)				[Housing Lance]
4.8 Non-waterproof Type				(Double Lock Type) [Housing Lance]
4.8 Waterproof Type				(Double Lock Type) [Housing Lance]
6.3 Non-waterproof Type				[Housing Lance]
				[Housing Lance]

C

TABLE OF HOUSING SHAPE

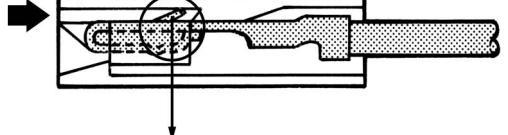
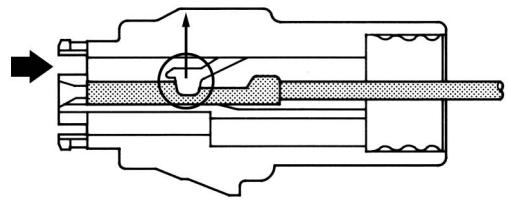
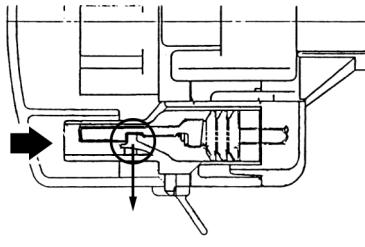
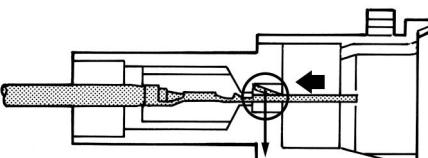
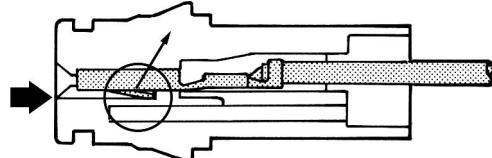
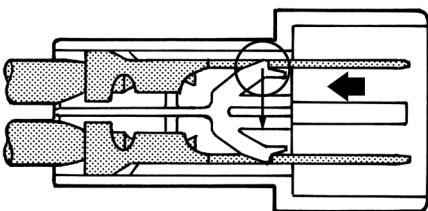
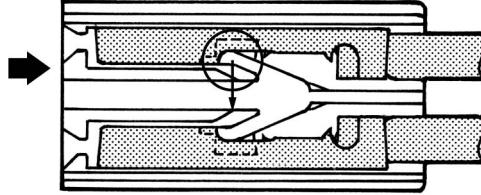
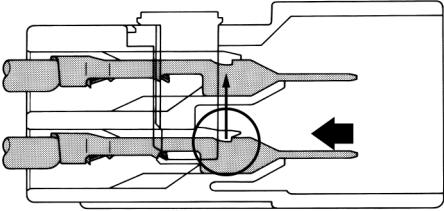
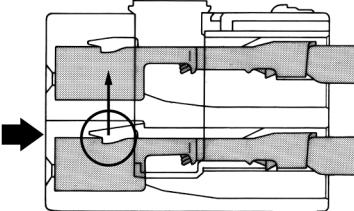
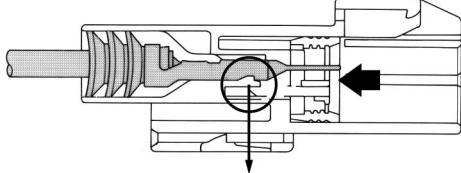
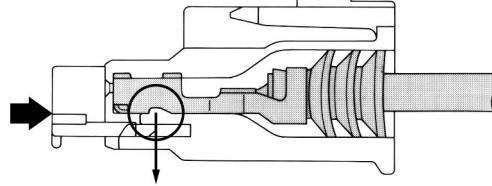
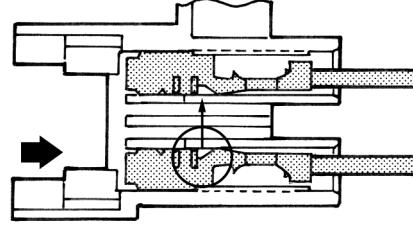
Type		
	Male	Female
6.3 Single Terminal		 <p>[Terminal Lance]</p>
6.3 Waterproof Type		 <p>[Housing Lance]</p>
6.3 Waterproof Type		 <p>[Housing Lance]</p>
7.7	 <p>[Terminal Lance]</p>	 <p>[Terminal Lance]</p>

TABLE OF HOUSING SHAPE

Type			 : Position of the lance  : Direction of lock released  : Direction of the special tool inserted	
	Male	Female		
7.7	 [Housing Lance]	 [Housing Lance]		
8.0 Non-waterproof Type	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]		
8.0 Waterproof Type	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]		
BLADE FUSE			 [Housing Lance]	

C

TABLE OF HOUSING SHAPE

C

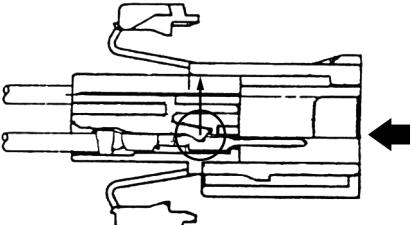
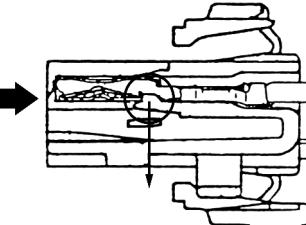
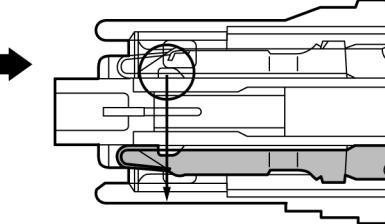
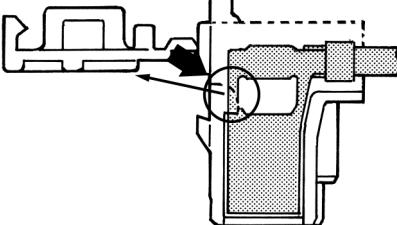
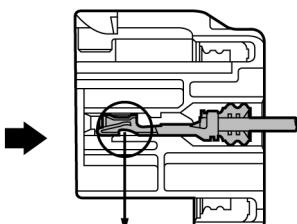
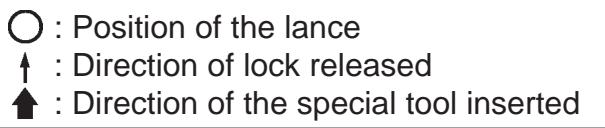
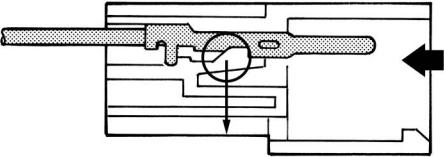
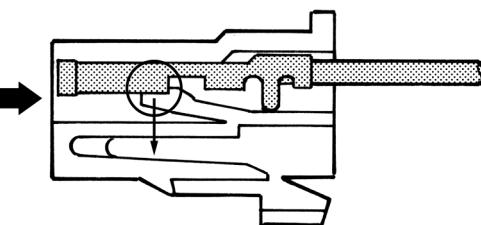
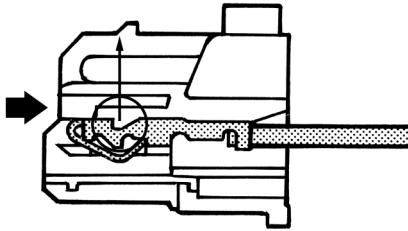
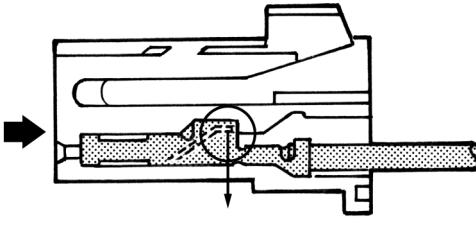
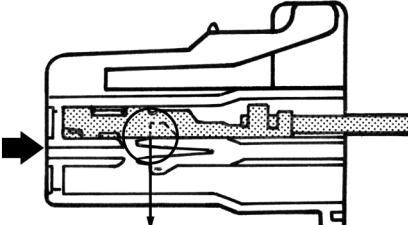
Type		
	Male	Female
C-Type	 (Double Lock Type) [Housing Lance]	 (Double Lock Type) [Housing Lance]
FOG-LP		 (Double Lock Type) [Housing Lance]
FTC		 (Double Lock Type) [Housing Lance]
HEAD LAMP Waterproof Type		 [Housing Lance]

TABLE OF HOUSING SHAPE

Type	 ○ : Position of the lance ↑ : Direction of lock released ↗ : Direction of the special tool inserted	
	Male	Female
LAC	 [Housing Lance]	 [Housing Lance]
MFPC		 [Housing Lance]
MIC		 [Terminal Lance]
PULSE LOCK		 [Housing Lance]

C

TABLE OF HOUSING SHAPE

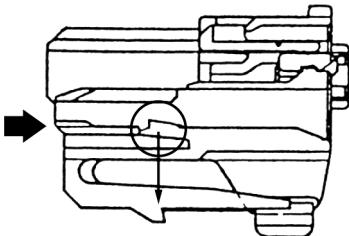
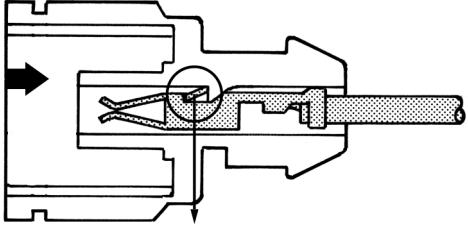
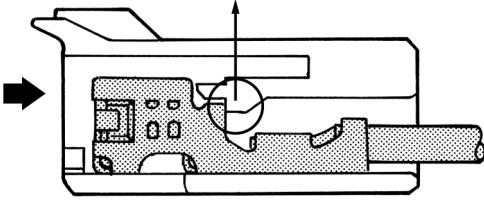
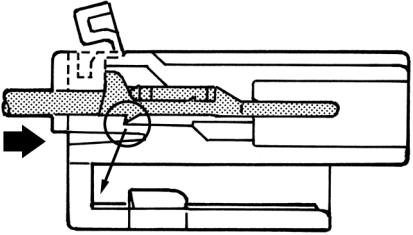
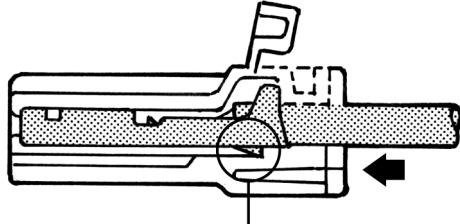
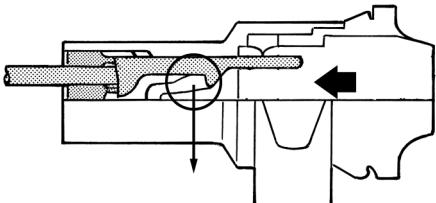
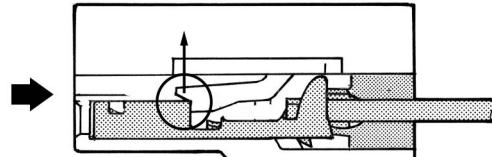
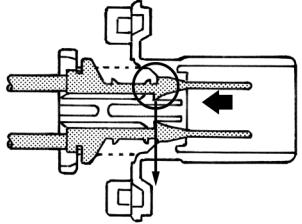
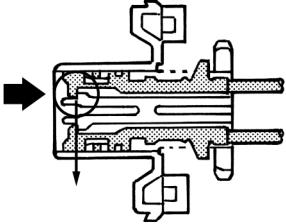
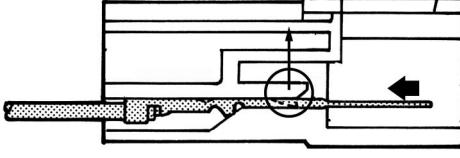
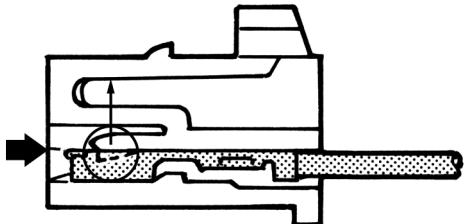
Type			  
	Male	Female	
SFPC			 [Housing Lance]
SL			 [Terminal Lance]
SP			 [Housing Lance]
TLC Non-waterproof Type	 (Double Lock Type) [Housing Lance]		 (Double Lock Type) [Housing Lance]

TABLE OF HOUSING SHAPE

Type			○ : Position of the lance ↑ : Direction of lock released ↗ : Direction of the special tool inserted
	Male	Female	
TLC Waterproof Type			[Housing Lance]
TNS			(Double Lock Type) [Housing Lance]
TODC			(Double Lock Type) [Housing Lance]

memo

TABLE OF HOUSING SHAPE

FEMALE

WATERPROOF TYPE D-1

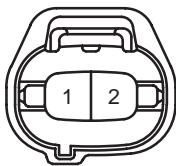
NON-WATERPROOF TYPE D-42

MALE

WATERPROOF TYPE D-157

NON-WATERPROOF TYPE D-179

The front view of the housing



90980-11156
(90980-12634)

D

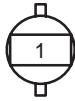
NOTICE:

- Part numbers in brackets are for multiple-manufacturer produced parts or HLC connectors. When multiple-manufacturer produced parts or HLC connectors are used, it is better to replace them with the original parts when fixing.
- Refer to the HOUSING PART NUMBER LIST for the availability of the supply parts.

D

TABLE OF HOUSING SHAPE

<FEMALE> 1P Waterproof Type

			
90980-10115 (Splash Proof)	90980-10125 (Splash Proof)	90980-10197 (Splash Proof)	90980-10201 (Splash Proof)
			
90980-10247 (Splash Proof)	90980-10439	90980-10705 (Splash Proof)	90980-10837
			
90980-10893	90980-10983	90980-11007	90980-11166
			
90980-11184	90980-11243	90980-11252	90980-11271
			
90980-11282	90980-11363	90980-11400	90980-11428

D

TABLE OF HOUSING SHAPE

<FEMALE> 1P Waterproof Type

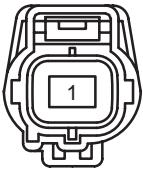
 90980-11963			

TABLE OF HOUSING SHAPE

<FEMALE> 2P Waterproof Type

A rectangular housing with two pins labeled 1 and 2.	A housing with two pins labeled 1 and 2, enclosed in a circular frame.	A housing with two pins labeled 1 and 2, enclosed in a circular frame.	A housing with two pins labeled 1 and 2, enclosed in a circular frame.
90980-10092 (Splash Proof)	90980-10116 (Splash Proof)	90980-10123 (Splash Proof)	90980-10157 (Splash Proof)
A housing with two pins labeled 1 and 2, enclosed in a circular frame with a flared base.	A housing with two pins labeled 1 and 2, enclosed in a circular frame.	A housing with two pins labeled 1 and 2, enclosed in a circular frame.	A housing with two pins labeled 1 and 2, enclosed in a circular frame with a flared base.
90980-10184 (Splash Proof)	90980-10193 (Splash Proof)	90980-10243 (Splash Proof)	90980-10352 (Splash Proof)
A rectangular housing with two pins labeled 1 and 2.	A rectangular housing with two pins labeled 1 and 2.	A rectangular housing with two pins labeled 1 and 2.	A rectangular housing with two pins labeled 1 and 2.
90980-10423	90980-10426	90980-10474	90980-10491
A rectangular housing with two pins labeled 1 and 2, with a flared base.	A rectangular housing with two pins labeled 1 and 2, with a flared base.	A rectangular housing with two pins labeled 1 and 2, with a flared base.	A rectangular housing with two pins labeled 1 and 2, with a flared base.
90980-10496	90980-10498	90980-10511	90980-10512
A housing with two pins labeled 1 and 2, enclosed in a circular frame.	A housing with two pins labeled 1 and 2, enclosed in a circular frame.	A housing with two pins labeled 1 and 2, enclosed in a circular frame.	A housing with two pins labeled 1 and 2, enclosed in a circular frame.
90980-10532	90980-10534	90980-10556	90980-10567

D

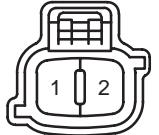
TABLE OF HOUSING SHAPE

<FEMALE> 2P Waterproof Type

			
90980-10572	90980-10576	90980-10578	90980-10581
			
90980-10583	90980-10593	90980-10595	90980-10598
			
90980-10609	90980-10617	90980-10622	90980-10623
			
90980-10626	90980-10702	90980-10706	90980-10720
			
90980-10734	90980-10735	90980-10736	90980-10737

TABLE OF HOUSING SHAPE

<FEMALE> 2P Waterproof Type

			
90980-10748	90980-10839	90980-10843	90980-10846
			
90980-10847	90980-10853	90980-10887	90980-10899
			
90980-10901	90980-10923	90980-10928	90980-10947
			
90980-10949	90980-10974	90980-11003	90980-11005
			
90980-11009	90980-11019	90980-11025	90980-11030

D

TABLE OF HOUSING SHAPE

<FEMALE> 2P Waterproof Type

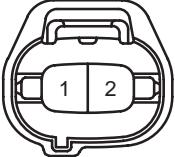
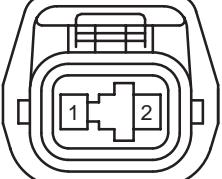
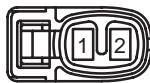
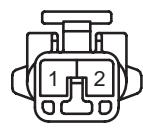
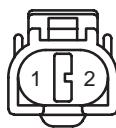
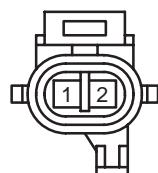
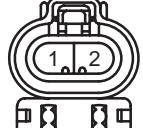
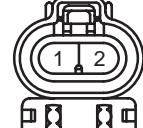
 90980-11032	 90980-11038	 90980-11051	 90980-11061
 90980-11062	 90980-11068	 90980-11070	 90980-11075
 90980-11095	 90980-11096	 90980-11140	 90980-11142
 90980-11149	 90980-11153	 90980-11154	 90980-11156 (90980-12634)
 90980-11162	 90980-11163	 90980-11176	 90980-11185

TABLE OF HOUSING SHAPE

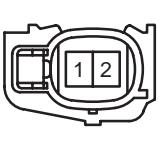
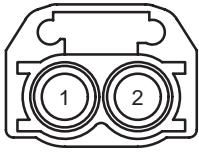
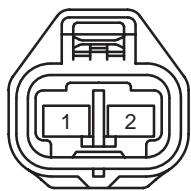
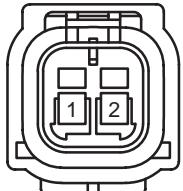
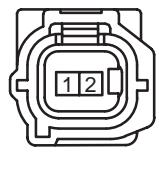
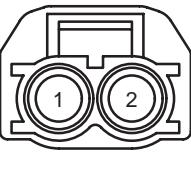
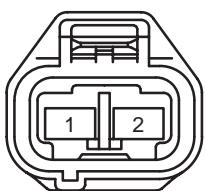
<FEMALE> 2P Waterproof Type

			
90980-11189	90980-11207	90980-11235	90980-11237
			
90980-11246	90980-11248	90980-11250	90980-11255
			
90980-11273	90980-11284	90980-11285	90980-11286
			
90980-11401	90980-11410	90980-11448	90980-11467
			
90980-11519	90980-11520	90980-11659	90980-11660

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TABLE OF HOUSING SHAPE

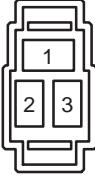
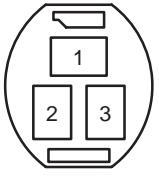
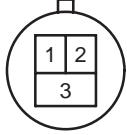
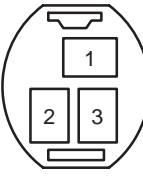
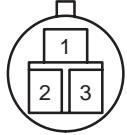
<FEMALE> 2P Waterproof Type

			
90980-11773	90980-11859	90980-11864	90980-11875
			
90980-11900	90980-12028	90980-12068	90980-12117
			
90980-12188	90980-12195	90980-12416	90980-12611
			
90980-12669	90980-12728		

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TABLE OF HOUSING SHAPE

<FEMALE> 3P Waterproof Type

			
90980-10088 (Splash Proof)	90980-10110 (Splash Proof)	90980-10168 (Splash Proof)	90980-10191 (Splash Proof)
			
90980-10199 (Splash Proof)	90980-10236 (Splash Proof)	90980-10239 (Splash Proof)	90980-10245 (Splash Proof)
			
90980-10249 (Splash Proof)	90980-10341 (Splash Proof)	90980-10353 (Splash Proof)	90980-10395
			
90980-10494	90980-10501	90980-10554	90980-10574
			
90980-10579	90980-10629	90980-10690	90980-10695

D

TABLE OF HOUSING SHAPE

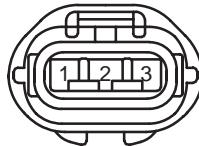
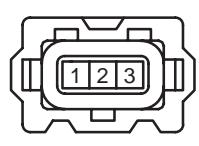
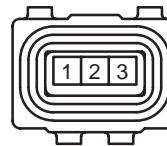
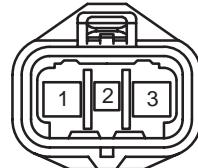
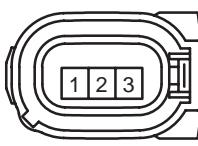
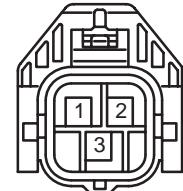
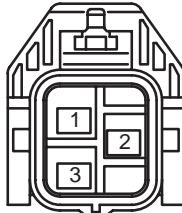
<FEMALE> 3P Waterproof Type

A circular housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.
90980-10708 (Splash Proof)	90980-10834	90980-10841	90980-10845 (90980-12636)
An elongated housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.
90980-10902	90980-10919	90980-10981	90980-11016
An elongated housing with three rectangular terminals labeled 1, 2, and 3.	A compact housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.
90980-11020	90980-11045	90980-11108	90980-11132
An elongated housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.	An elongated housing with three rectangular terminals labeled 1, 2, and 3.
90980-11143	90980-11145	90980-11157	90980-11161
A compact housing with three rectangular terminals labeled 1, 2, and 3.	A compact housing with three rectangular terminals labeled 1, 2, and 3.	A compact housing with three rectangular terminals labeled 1, 2, and 3.	A compact housing with three rectangular terminals labeled 1, 2, and 3.
90980-11170	90980-11245	90980-11261	90980-11294

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TABLE OF HOUSING SHAPE

<FEMALE> 3P Waterproof Type

			
90980-11349	90980-11414	90980-11451	90980-11491 (Splash Proof)
			
90980-11860	90980-11907	90980-12058	90980-12168
			
90980-12353	90980-12354	90980-12496	90980-12648

D

TABLE OF HOUSING SHAPE

<FEMALE> 4P Waterproof Type

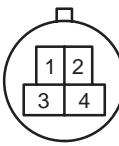
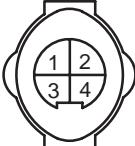
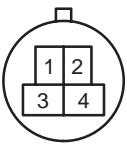
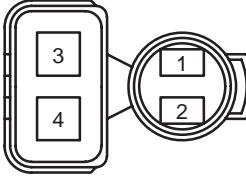
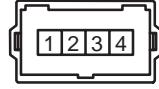
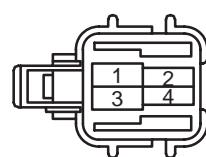
			
90980-10140 (Splash Proof)	90980-10203 (Splash Proof)	90980-10218 (Splash Proof)	90980-10220 (Splash Proof)
			
90980-10373 (Splash Proof)	90980-10378	90980-10476	90980-10549
			
90980-10551 (90980-10616)	90980-10591	90980-10649	90980-10685
			
90980-10701	90980-10711	90980-10831	90980-10844
			
90980-10869	90980-10929	90980-10940	90980-10942

TABLE OF HOUSING SHAPE

<FEMALE> 4P Waterproof Type

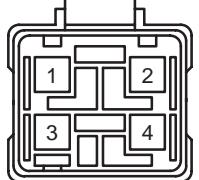
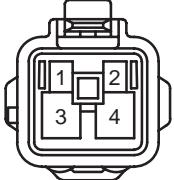
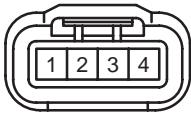
			
90980-10943	90980-10990	90980-11028	90980-11036
			
90980-11037	90980-11139	90980-11150 (90980-12057)	90980-11152
			
90980-11178	90980-11269	90980-11283	90980-11288
			
90980-11292	90980-11304	90980-11522	90980-11569
			
90980-11885 (90980-12176)	90980-11930	90980-11964	90980-12005

TABLE OF HOUSING SHAPE

<FEMALE> 4P Waterproof Type

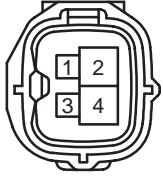
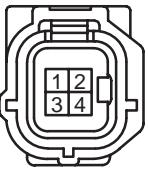
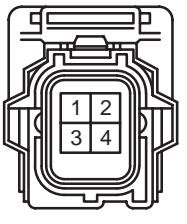
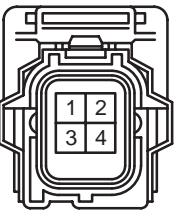
			
90980-12294	90980-12495	90980-12654	90980-12704

TABLE OF HOUSING SHAPE

<FEMALE> 5P Waterproof Type

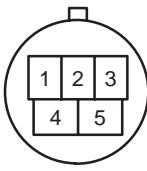
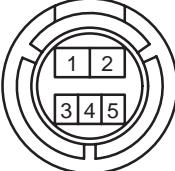
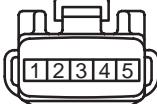
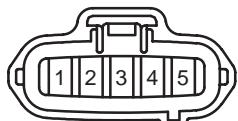
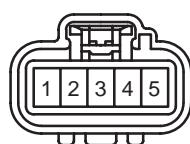
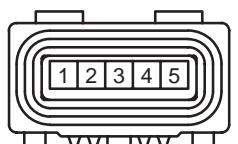
			
90980-10162 (Splash Proof)	90980-10393 (Splash Proof)	90980-10550	90980-10558
			
90980-10624	90980-10710	90980-10712	90980-10946
			
90980-11022	90980-11024	90980-11049	90980-11077
			
90980-11182	90980-11232	90980-11317	90980-11413
			
90980-11599	90980-11904	90980-11908	90980-11960

TABLE OF HOUSING SHAPE

<FEMALE> 5P Waterproof Type

			
90980-12292			

TABLE OF HOUSING SHAPE

<FEMALE> 6P Waterproof Type

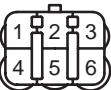
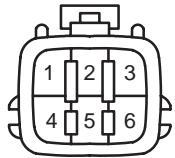
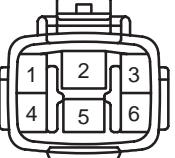
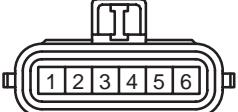
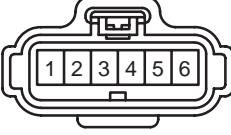
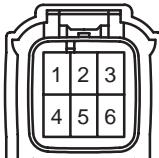
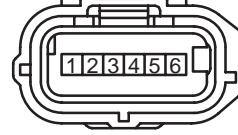
			
90980-10097 (Splash Proof)	90980-10195 (Splash Proof)	90980-10478	90980-10597
			
90980-10643	90980-10651	90980-10854	90980-10939
			
90980-10988	90980-11034	90980-11144	90980-11194 (90980-12635)
			
90980-11197	90980-11290	90980-11517	90980-11663
			
90980-11858	90980-12257	90980-12303	90980-12382

TABLE OF HOUSING SHAPE

<FEMALE> 6P Waterproof Type

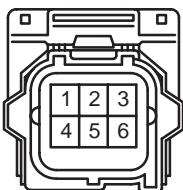
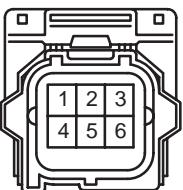
			
90980-12651	90980-12655	90980-12656	

TABLE OF HOUSING SHAPE

<FEMALE> 7P Waterproof Type

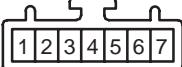
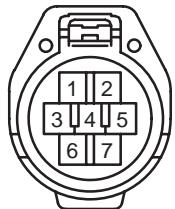
	 90980-10931	 90980-11172	

TABLE OF HOUSING SHAPE

<FEMALE> 8P Waterproof Type

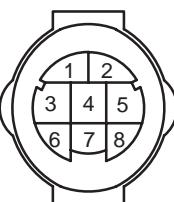
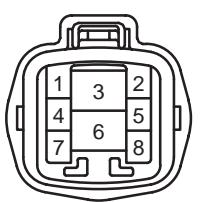
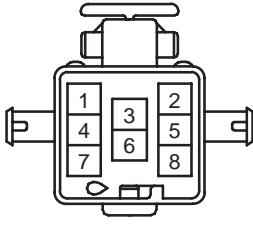
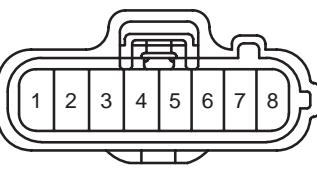
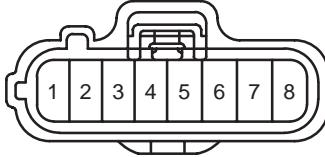
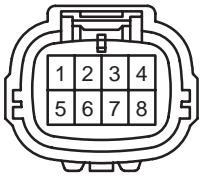
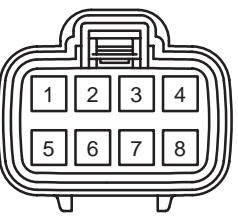
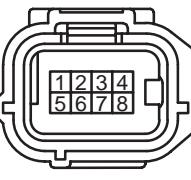
			
90980-10205 (Splash Proof)	90980-10891	90980-10895	90980-10897
			
90980-11190	90980-11242	90980-11461	90980-11592
			
90980-11593	90980-12080	90980-12164	90980-12520

TABLE OF HOUSING SHAPE

<FEMALE> 9P Waterproof Type

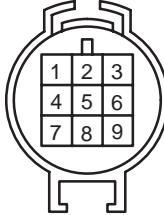
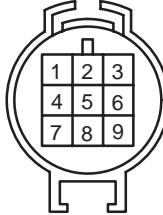
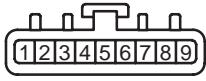
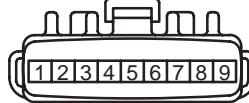
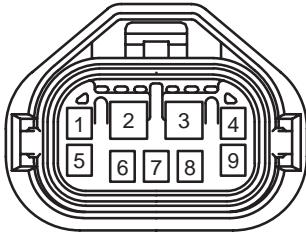
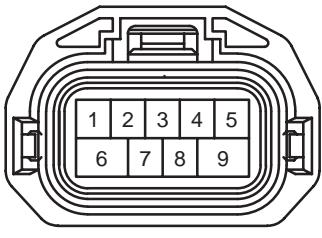
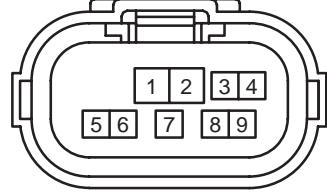
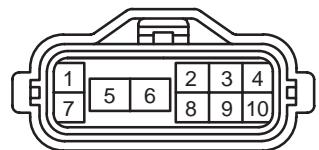
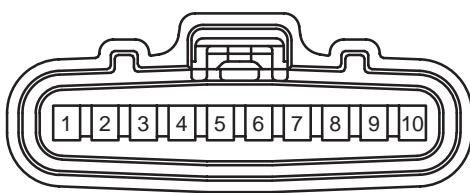
		
90980-10380 (Splash Proof)	90980-10381 (Splash Proof)	90980-10678
		
90980-10686	90980-10776 (Splash Proof)	90980-11192
		
90980-11643	90980-11784	90980-12362

TABLE OF HOUSING SHAPE

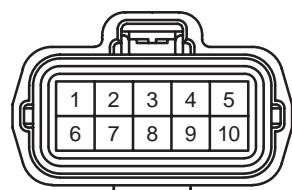
<FEMALE> 10P Waterproof Type



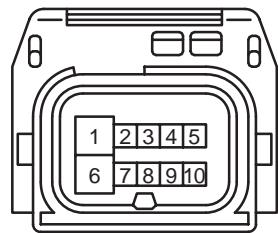
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90980-11653



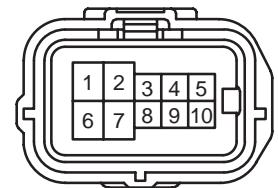
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90980-12295



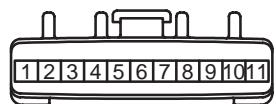
90980-12380



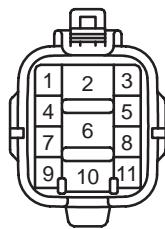
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TABLE OF HOUSING SHAPE

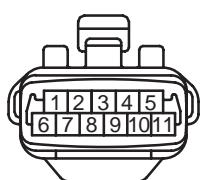
<FEMALE> 11P Waterproof Type



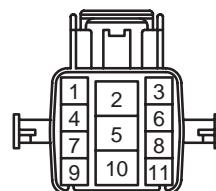
90980-11174



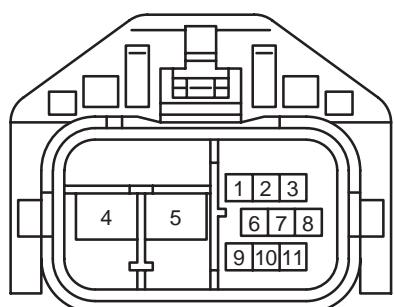
90980-11240



90980-11257



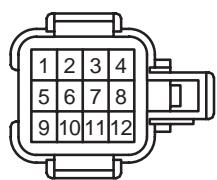
90980-11612



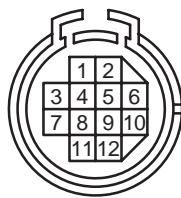
90980-12483

TABLE OF HOUSING SHAPE

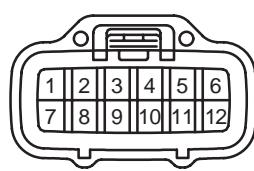
<FEMALE> 12P Waterproof Type



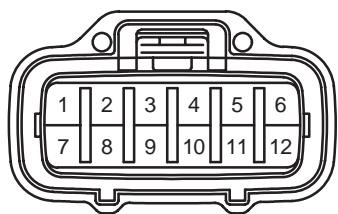
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90980-10569
(Splash Proof)

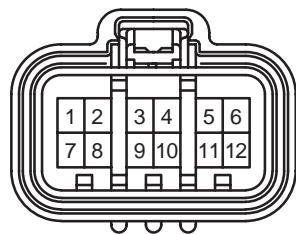
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90980-11151



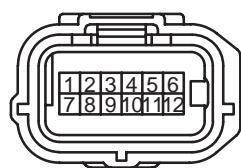
90980-11664



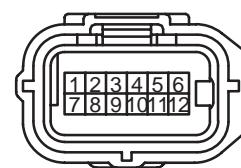
90980-11698

TABLE OF HOUSING SHAPE

<FEMALE> 12P Waterproof Type

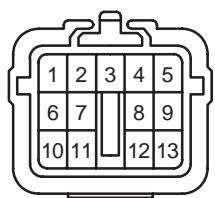


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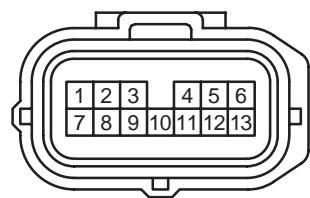


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TABLE OF HOUSING SHAPE

<FEMALE> 13P Waterproof Type

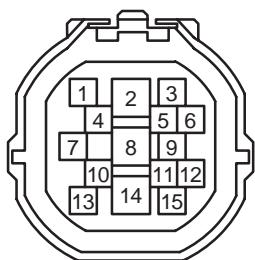
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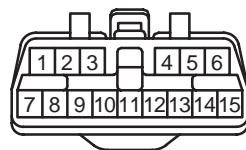
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TABLE OF HOUSING SHAPE

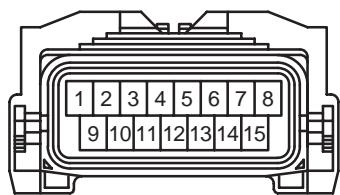
<FEMALE> 15P Waterproof Type



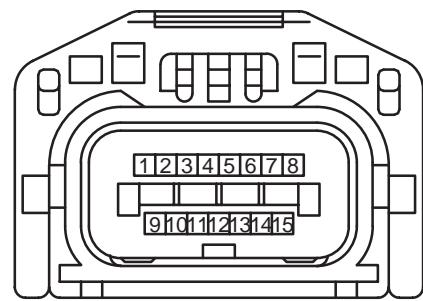
90980-10443



90980-11089



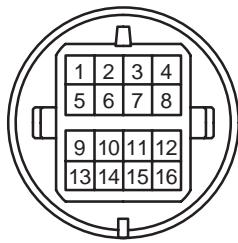
90980-11677



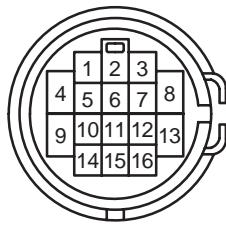
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TABLE OF HOUSING SHAPE

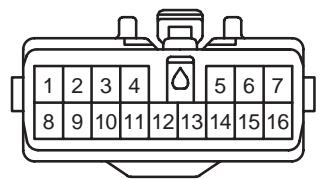
<FEMALE> 16P Waterproof Type



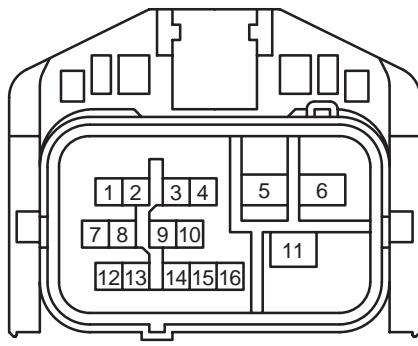
90980-10101
(Splash Proof)



90980-10288
(Splash Proof)

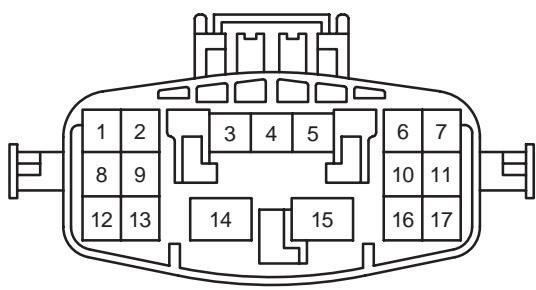


90980-11463



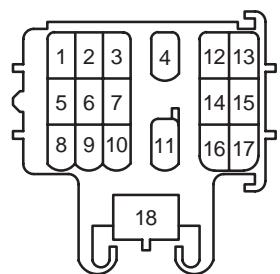
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TABLE OF HOUSING SHAPE

<FEMALE> 17P Waterproof Type

90980-11601

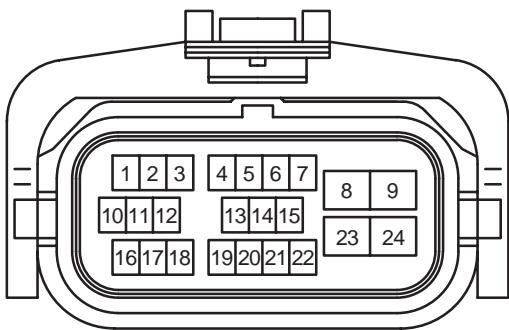
TABLE OF HOUSING SHAPE

<FEMALE> 18P Waterproof Type

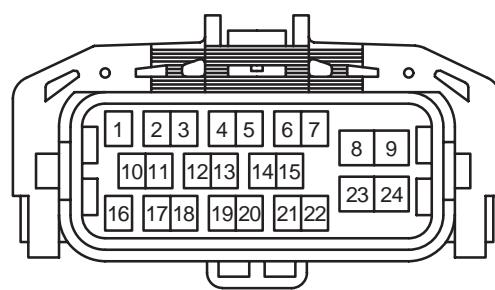
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TABLE OF HOUSING SHAPE

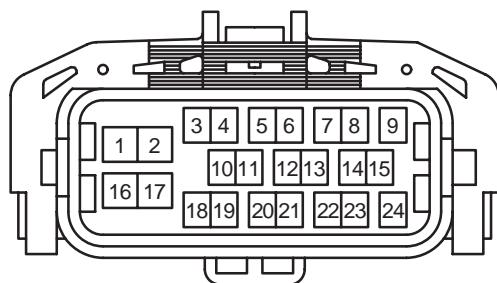
<FEMALE> 24P Waterproof Type



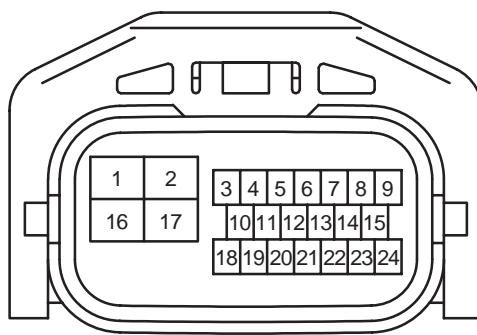
90980-11851



90980-11882

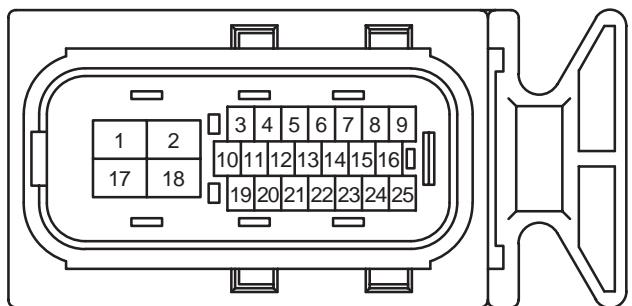


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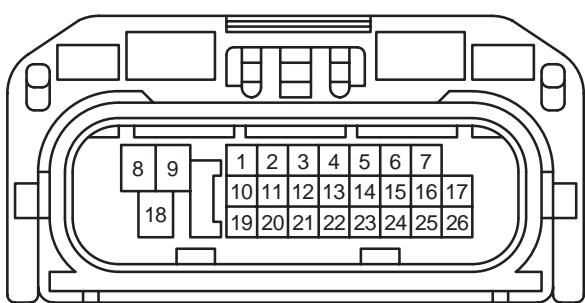
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TABLE OF HOUSING SHAPE

<FEMALE> 25P Waterproof Type

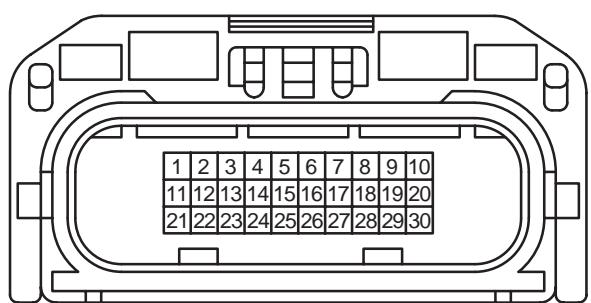
90980-11861

TABLE OF HOUSING SHAPE

<FEMALE> 26P Waterproof Type

90980-12649

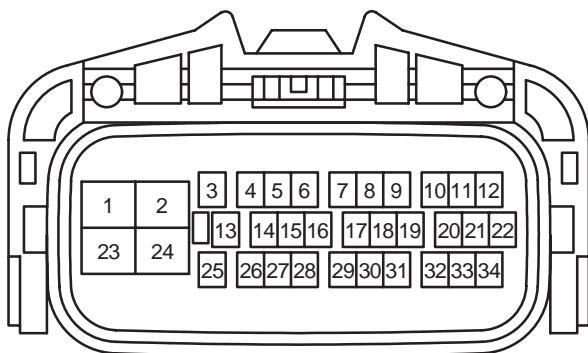
TABLE OF HOUSING SHAPE

<FEMALE> 30P Waterproof Type

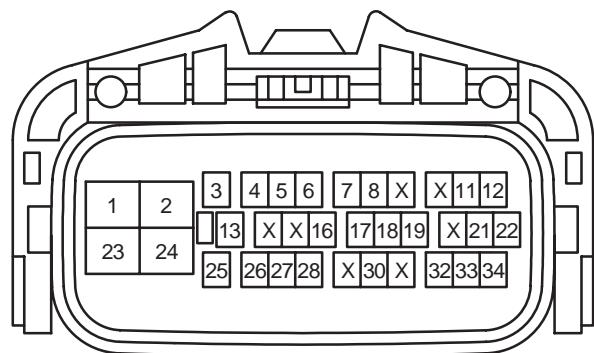
90980-12712

TABLE OF HOUSING SHAPE

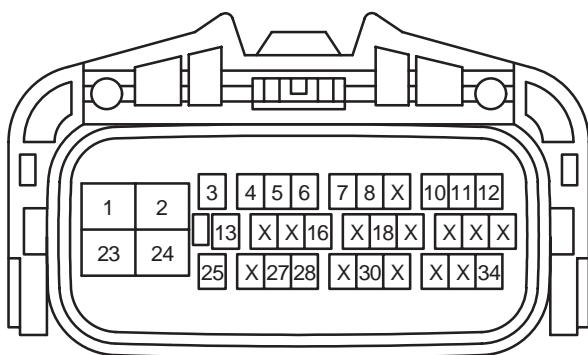
<FEMALE> 34P Waterproof Type



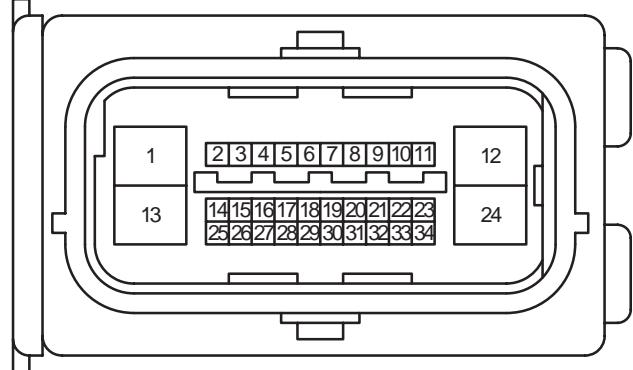
90980-12020



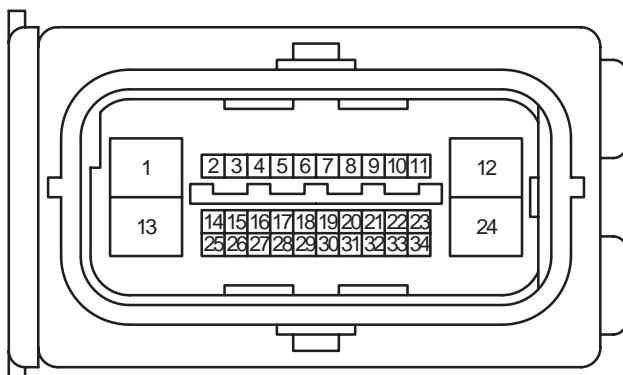
90980-12021



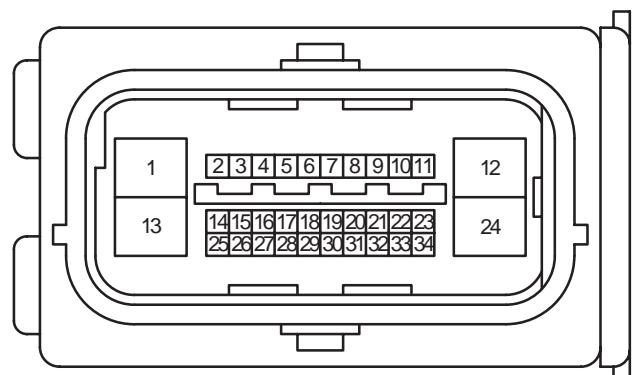
90980-12022



90980-12658

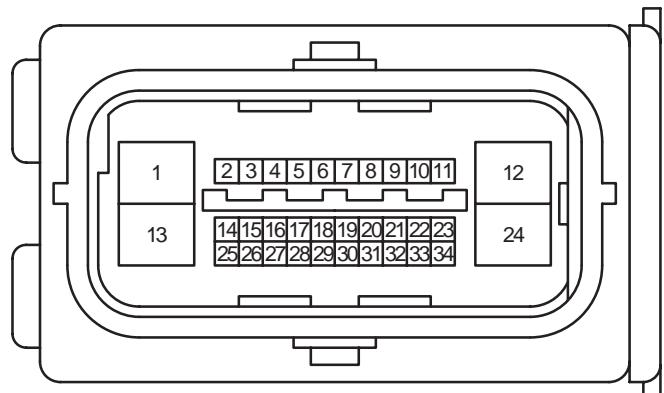


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90980-12686

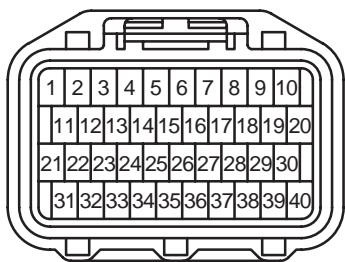
TABLE OF HOUSING SHAPE

<FEMALE> 34P Waterproof Type

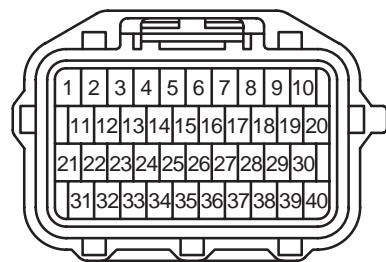
90980-12687

TABLE OF HOUSING SHAPE

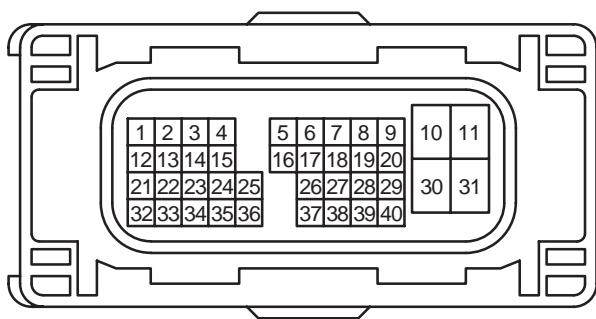
<FEMALE> 40P Waterproof Type



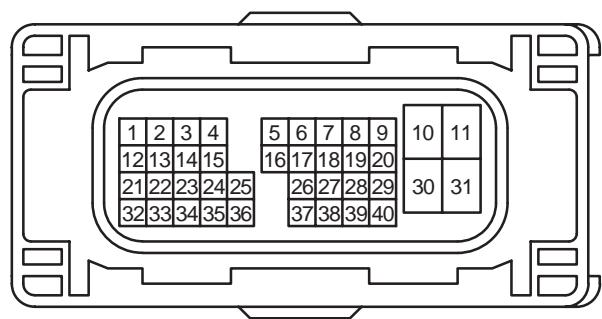
90980-11215



90980-11566

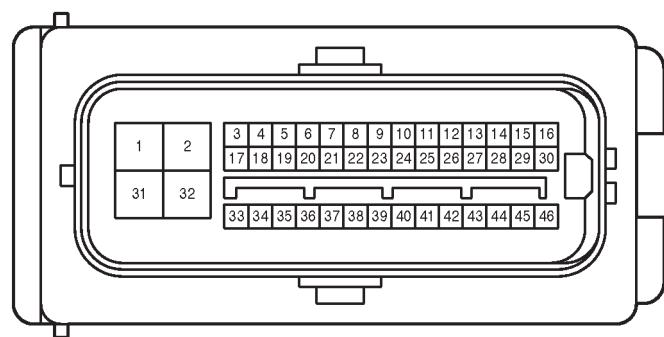


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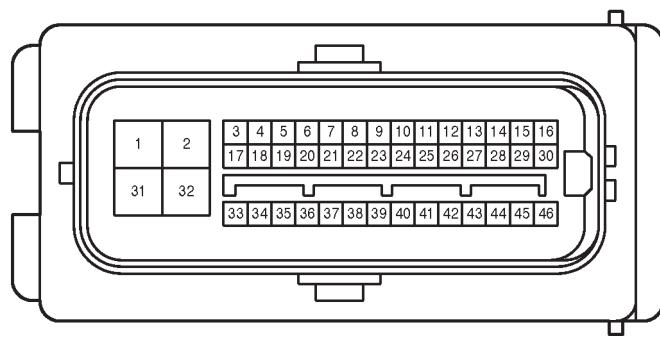


90980-12652

TABLE OF HOUSING SHAPE

<FEMALE> 46P Waterproof Type

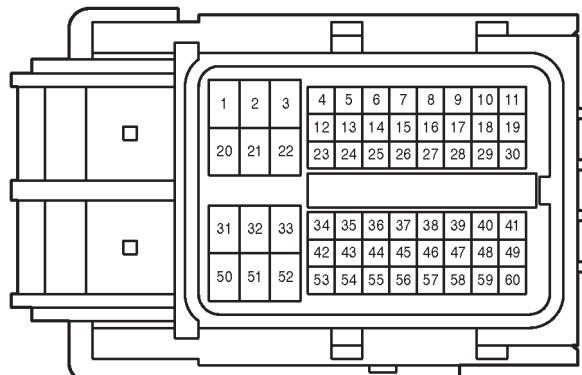
90980-12297



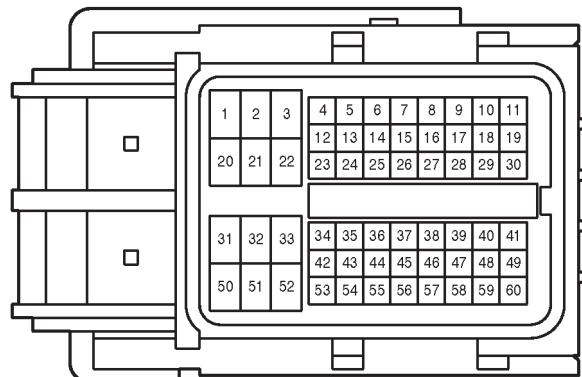
90980-12426

TABLE OF HOUSING SHAPE

<FEMALE> 60P Waterproof Type

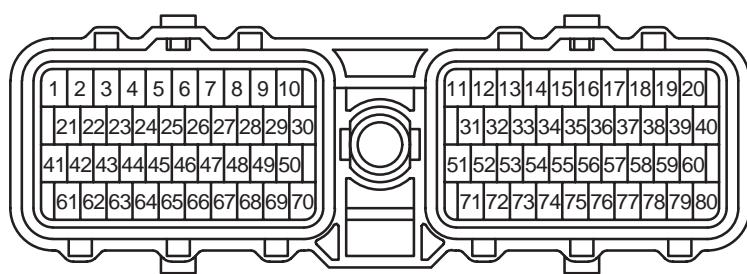


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90980-12462

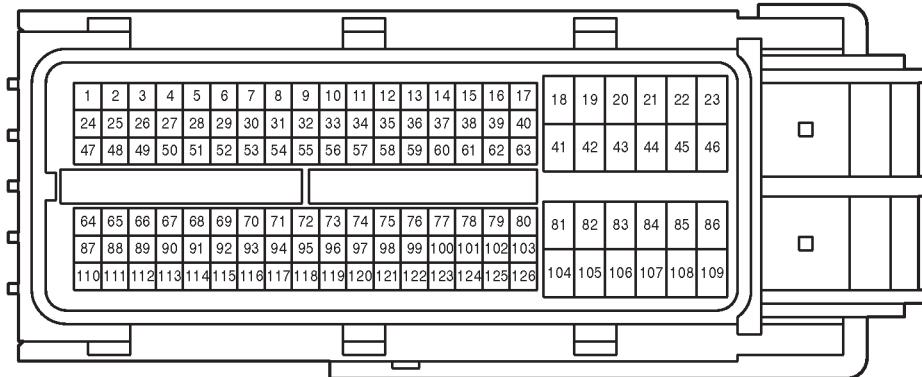
TABLE OF HOUSING SHAPE

<FEMALE> 80P Waterproof Type

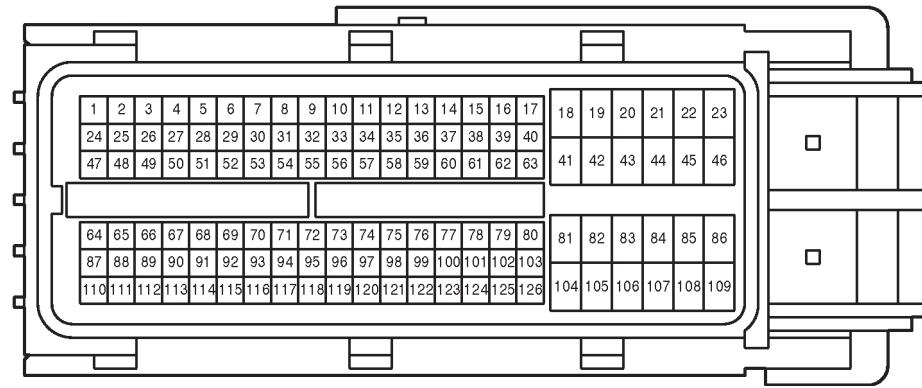
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TABLE OF HOUSING SHAPE

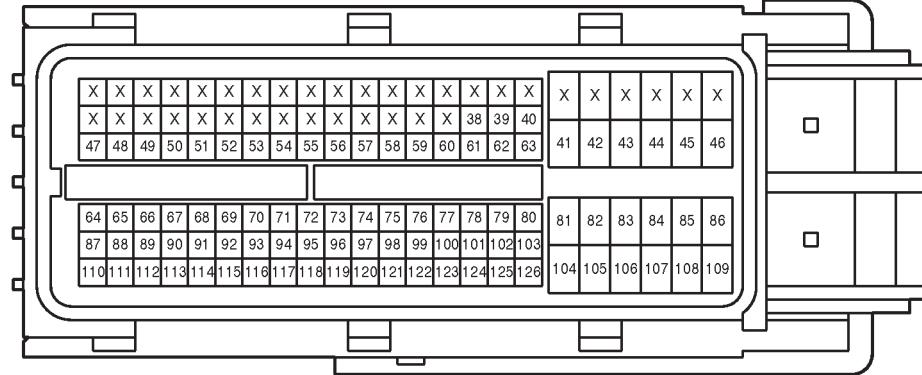
<FEMALE> 126P Waterproof Type



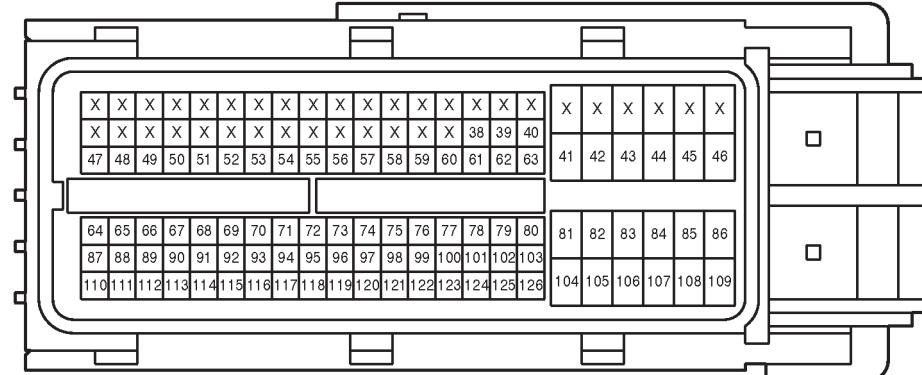
90980-12396



90980-12397



90980-12398



90980-12399

TABLE OF HOUSING SHAPE

<FEMALE> 1P Non-waterproof Type

			
90980-10165	90980-10179	90980-10183	90980-10229
			
90980-10250	90980-10252	90980-10254	90980-10332
			
90980-10343	90980-10359	90980-10363	90980-10398
			
90980-10435	90980-10619	90980-10652	90980-10688
			
90980-10703	90980-10782	90980-10786	90980-10792

TABLE OF HOUSING SHAPE

<FEMALE> 1P Non-waterproof Type

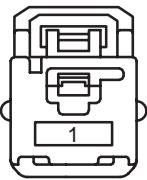
			
90980-10871 (90980-11703) (90980-12340) (90980-12470)	90980-10911	90980-10912	90980-10913
			
90980-10914	90980-10995	90980-11147	90980-11259 (90980-12487)
			
90980-11315	90980-11738	90980-11775 (90980-12489)	90980-11853
			
90980-11881	90980-12756		

TABLE OF HOUSING SHAPE

<FEMALE> 2P Non-waterproof Type

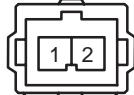
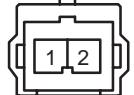
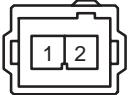
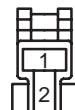
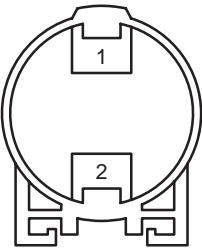
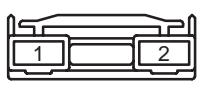
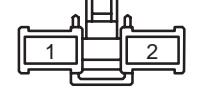
			
90980-10039	90980-10069	90980-10108	90980-10109
			
90980-10121	90980-10124	90980-10141	90980-10185
			
90980-10214 (90980-11804)	90980-10238	90980-10256	90980-10298
			
90980-10320	90980-10333	90980-10345	90980-10348
			
90980-10355	90980-10357	90980-10362	90980-10385

TABLE OF HOUSING SHAPE

<FEMALE> 2P Non-waterproof Type

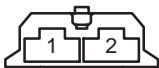
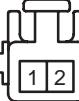
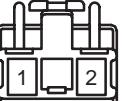
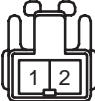
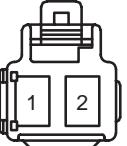
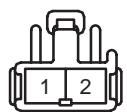
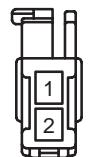
			
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90980-10760	90980-10783		
	 90980-10860 (90980-11769) (90980-12342) (90980-12472)	 90980-10903	 90980-10906 (90980-11736)
90980-10855			
	 90980-10935 (90980-11723) (90980-12343) (90980-12347)		 90980-11080
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TABLE OF HOUSING SHAPE

<FEMALE> 2P Non-waterproof Type

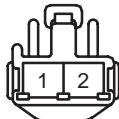
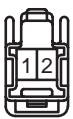
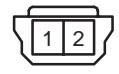
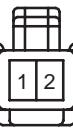
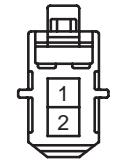
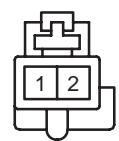
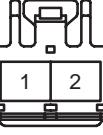
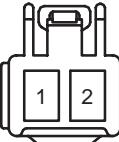
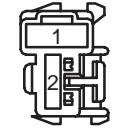
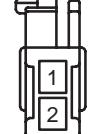
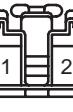
			
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90980-11386	90980-11388	90980-11396	90980-11429
			
90980-11436	90980-11512	90980-11579 (90980-11824)	90980-11608
			
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TABLE OF HOUSING SHAPE

<FEMALE> 2P Non-waterproof Type

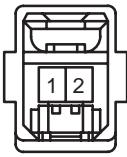
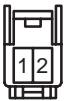
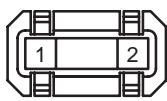
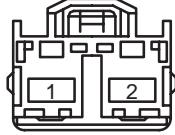
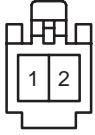
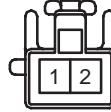
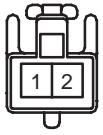
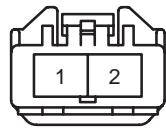
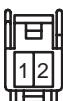
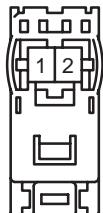
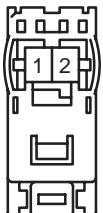
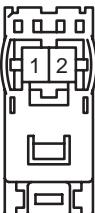
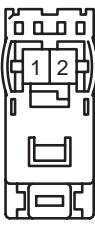
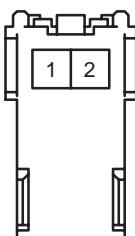
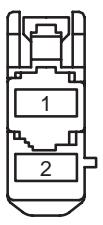
			
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90980-12128	90980-12219	90980-12224	90980-12242
			90980-12300 (90980-12653)
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TABLE OF HOUSING SHAPE

<FEMALE> 2P Non-waterproof Type

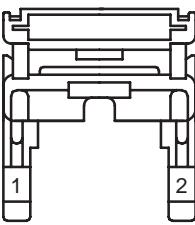
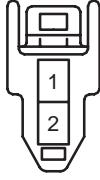
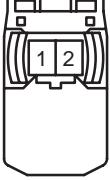
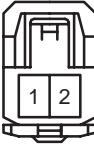
			
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TABLE OF HOUSING SHAPE

<FEMALE> 3P Non-waterproof Type

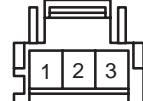
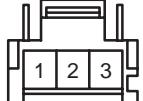
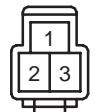
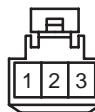
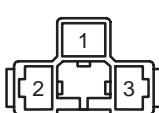
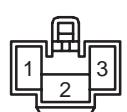
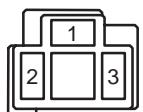
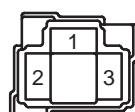
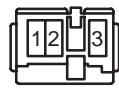
			
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90980-10258	90980-10365	90980-10420	90980-10428
			
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TABLE OF HOUSING SHAPE

<FEMALE> 3P Non-waterproof Type

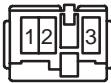
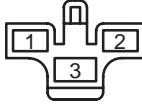
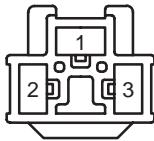
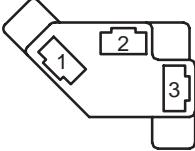
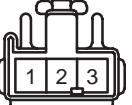
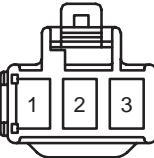
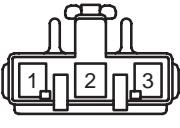
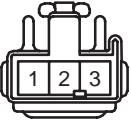
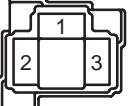
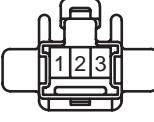
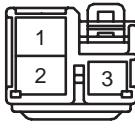
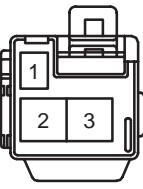
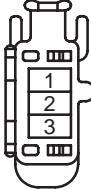
			
			
			
			
			

TABLE OF HOUSING SHAPE

<FEMALE> 3P Non-waterproof Type

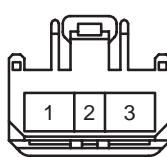
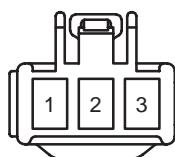
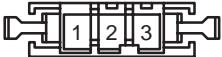
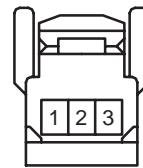
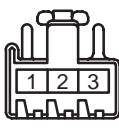
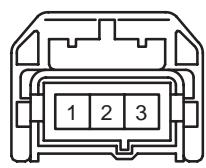
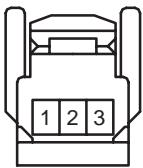
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 90980-12296	 90980-12321	 90980-12664	 90980-12695

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<FEMALE> 4P Non-waterproof Type

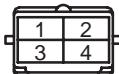
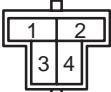
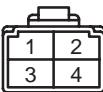
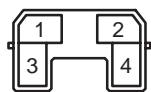
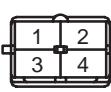
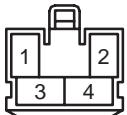
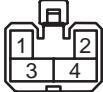
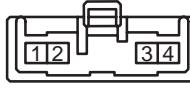
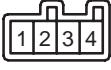
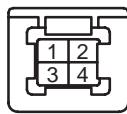
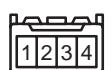
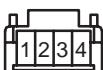
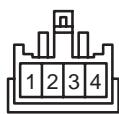
			
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90980-10514	90980-10515	90980-10601	90980-10645
			
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<FEMALE> 4P Non-waterproof Type

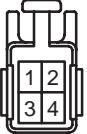
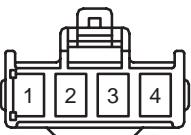
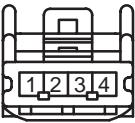
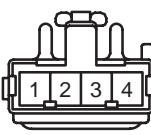
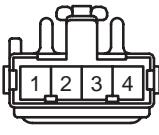
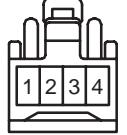
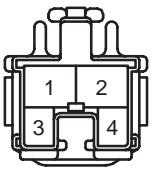
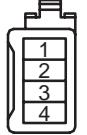
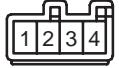
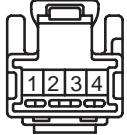
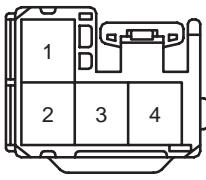
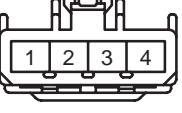
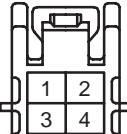
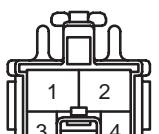
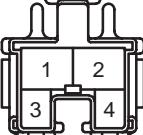
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 90980-11090	 90980-11107	 90980-11118 (90980-12637)	 90980-11136
 90980-11187	 90980-11313	 90980-11398	 90980-11494
 90980-11495	 90980-11606	 90980-11662	 90980-11676
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TABLE OF HOUSING SHAPE

<FEMALE> 4P Non-waterproof Type

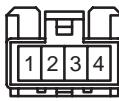
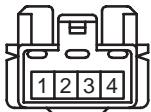
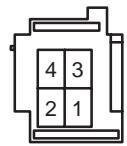
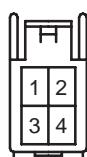
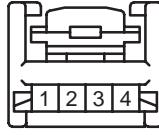
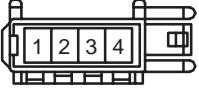
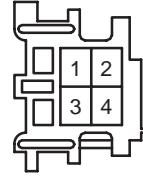
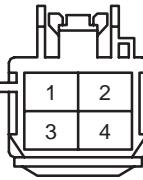
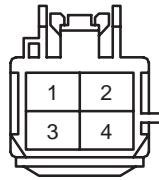
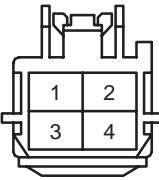
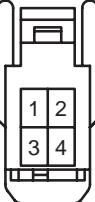
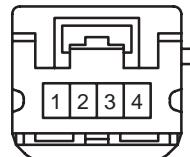
			
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TABLE OF HOUSING SHAPE

<FEMALE> 5P Non-waterproof Type

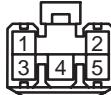
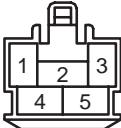
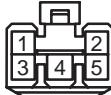
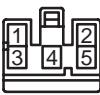
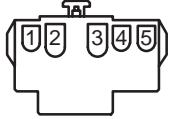
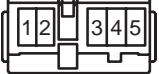
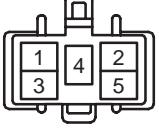
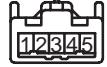
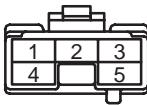
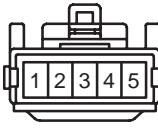
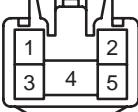
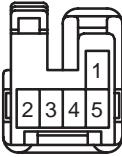
			
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90980-10631	90980-10644	90980-10659	90980-10713
			
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TABLE OF HOUSING SHAPE

<FEMALE> 5P Non-waterproof Type

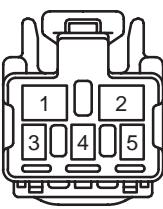
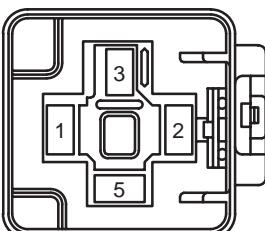
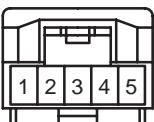
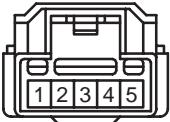
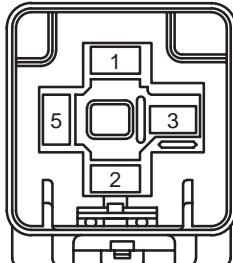
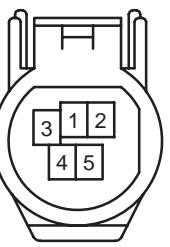
			
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TABLE OF HOUSING SHAPE

<FEMALE> 6P Non-waterproof Type

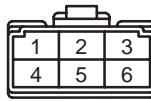
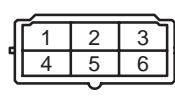
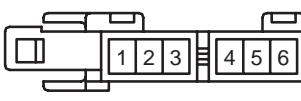
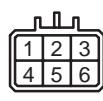
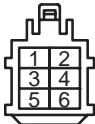
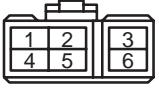
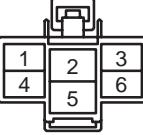
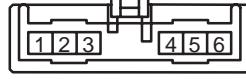
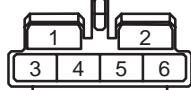
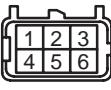
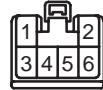
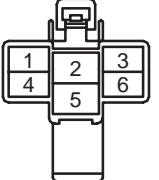
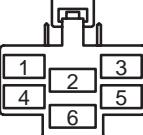
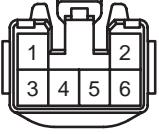
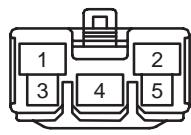
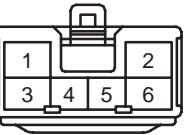
			
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90980-10785	90980-10797 (90980-12180) (90980-12344) (90980-12349)	90980-10888	90980-10889

TABLE OF HOUSING SHAPE

<FEMALE> 6P Non-waterproof Type

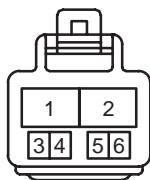
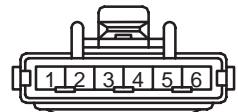
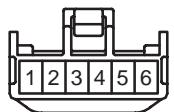
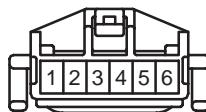
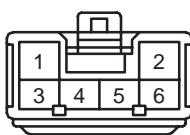
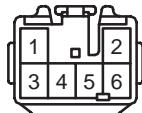
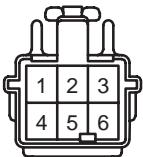
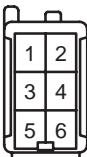
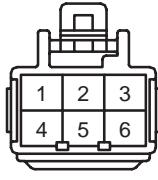
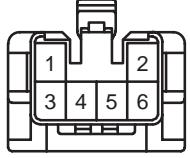
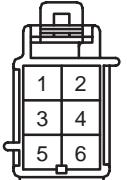
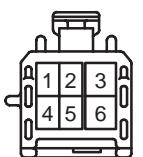
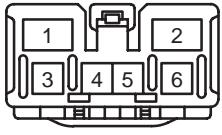
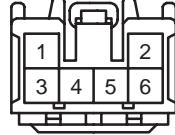
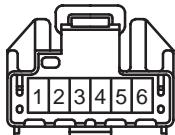
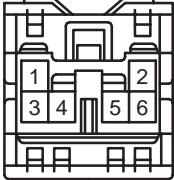
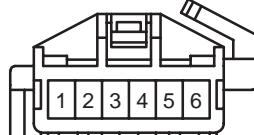
			
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TABLE OF HOUSING SHAPE

<FEMALE> 6P Non-waterproof Type

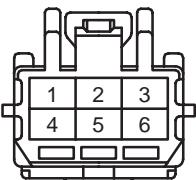
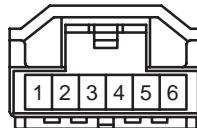
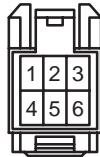
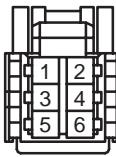
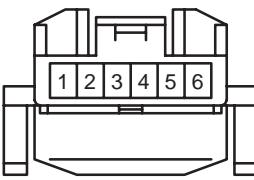
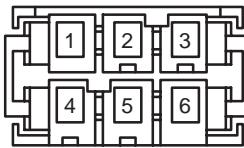
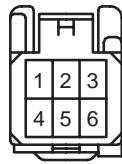
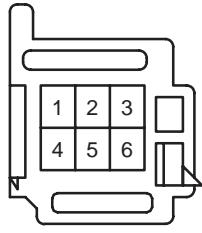
			
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TABLE OF HOUSING SHAPE

<FEMALE> 7P Non-waterproof Type

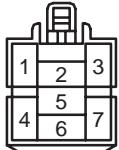
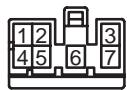
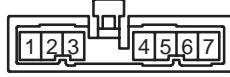
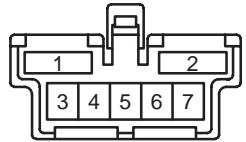
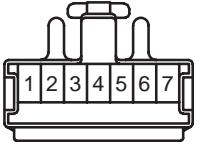
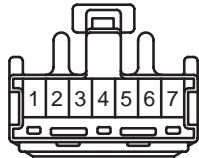
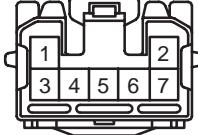
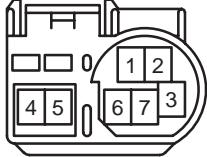
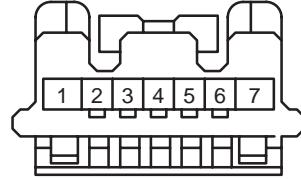
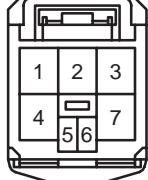
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 90980-10460	 90980-10729	 90980-11165	 90980-11340
 90980-11529 (90980-11740) (90980-12336)	 90980-11794	 90980-12060	 90980-12092
 90980-12358			

TABLE OF HOUSING SHAPE

<FEMALE> 8P Non-waterproof Type

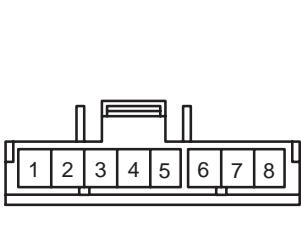
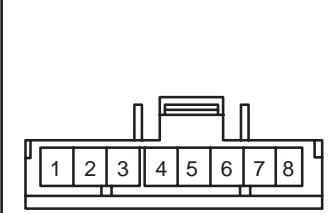
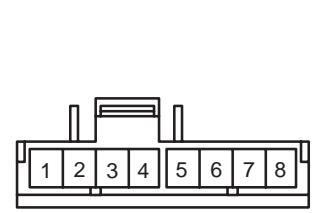
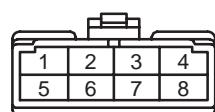
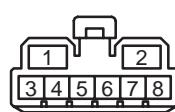
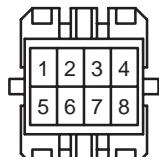
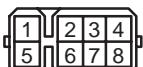
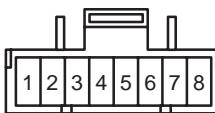
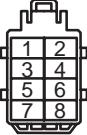
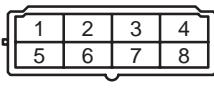
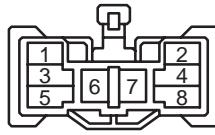
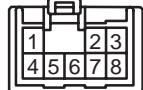
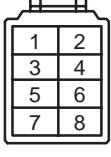
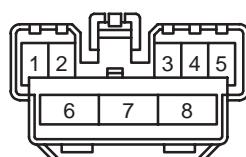
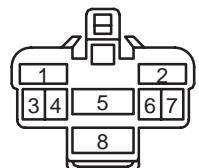
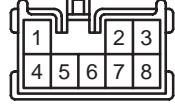
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 90980-10404	 90980-10419	 90980-10431	 90980-10449
 90980-10463	 90980-10517	 90980-10523	 90980-10799 (90980-12181) (90980-12475) (90980-12532)

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<FEMALE> 8P Non-waterproof Type

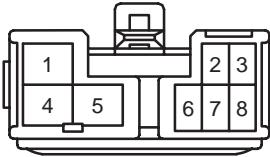
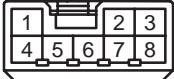
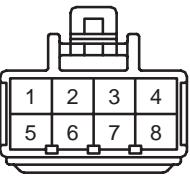
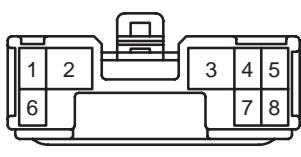
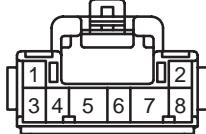
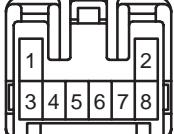
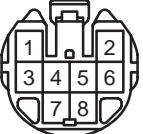
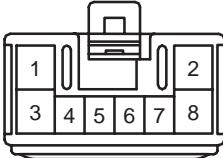
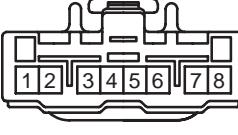
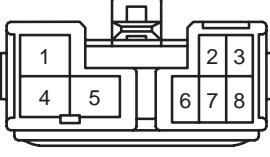
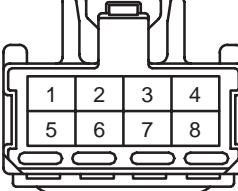
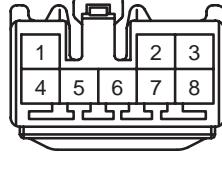
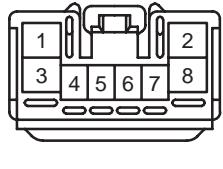
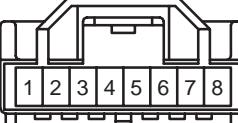
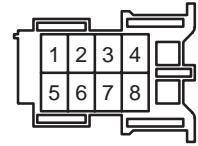
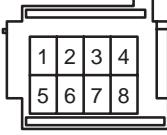
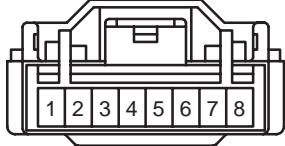
			
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90980-11615 (90980-11852)	90980-11633	90980-11686	90980-11701
			
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<FEMALE> 8P Non-waterproof Type

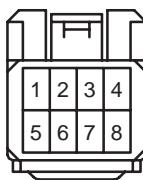
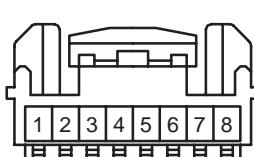
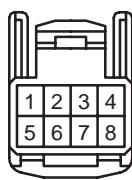
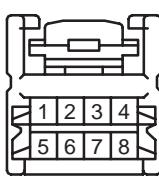
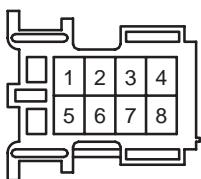
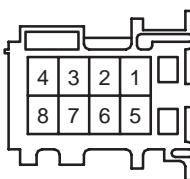
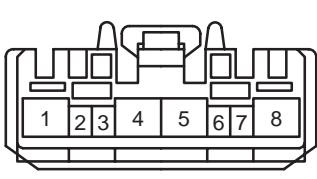
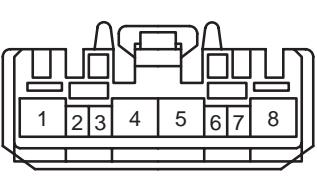
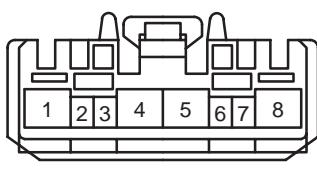
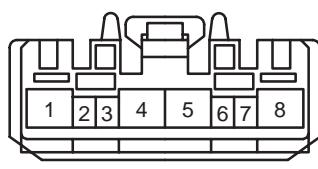
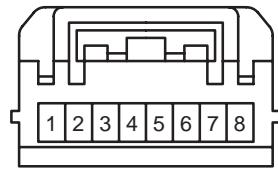
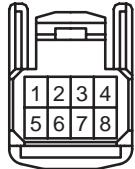
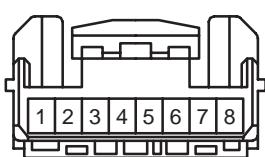
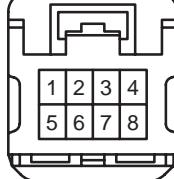
			
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<FEMALE> 9P Non-waterproof Type

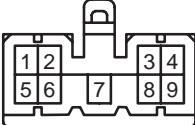
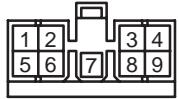
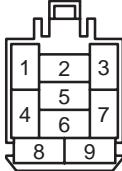
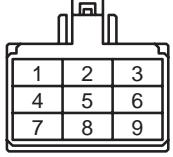
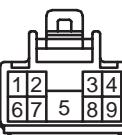
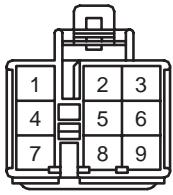
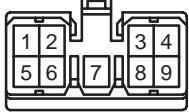
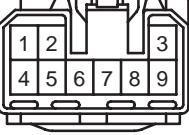
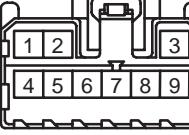
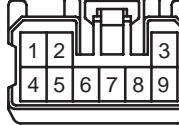
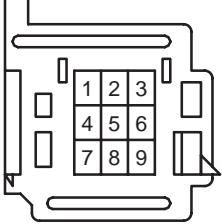
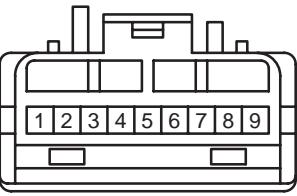
			
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		 90980-11535 (90980-11710)	
90980-11302	90980-11479	90980-11535 (90980-11710)	90980-12026
			
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<FEMALE> 10P Non-waterproof Type

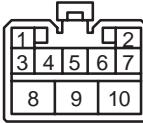
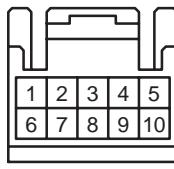
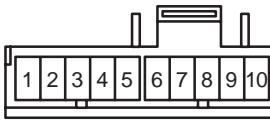
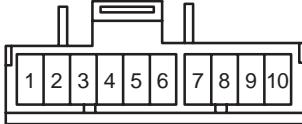
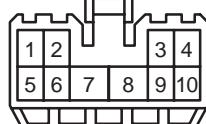
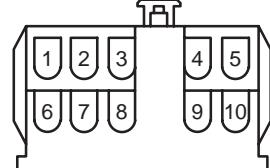
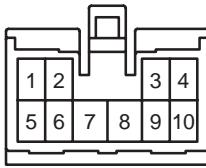
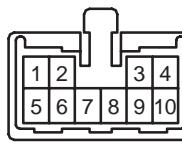
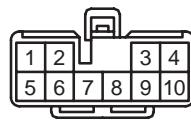
		
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TABLE OF HOUSING SHAPE

<FEMALE> 10P Non-waterproof Type

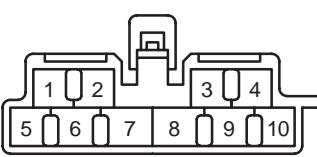
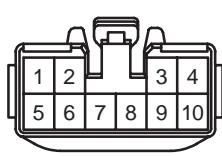
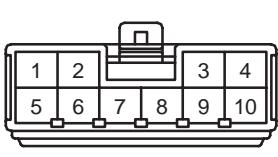
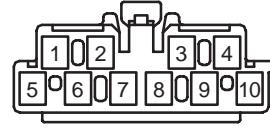
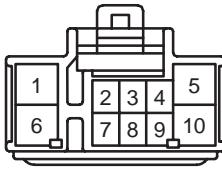
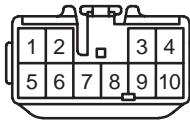
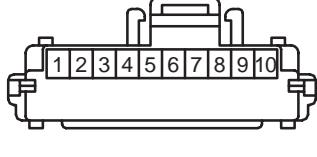
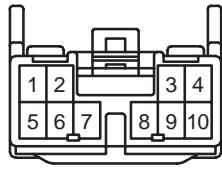
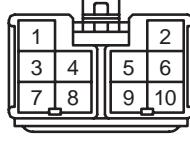
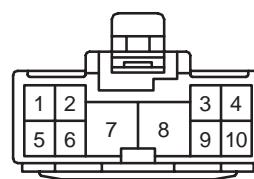
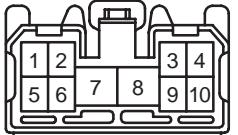
		
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TABLE OF HOUSING SHAPE

<FEMALE> 10P Non-waterproof Type

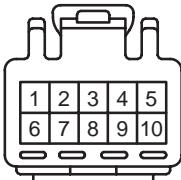
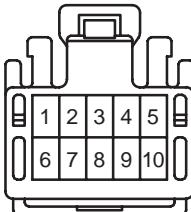
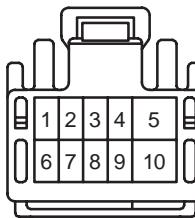
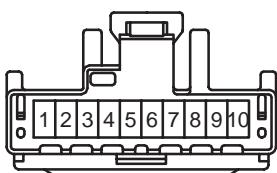
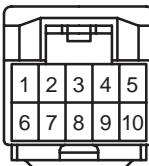
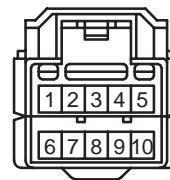
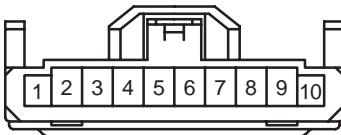
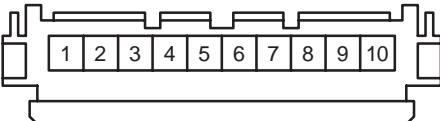
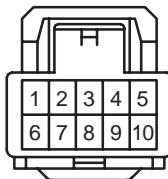
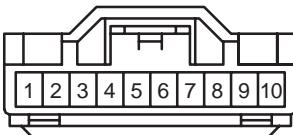
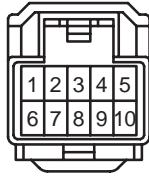
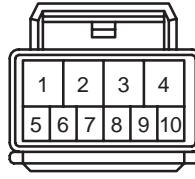
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TABLE OF HOUSING SHAPE

<FEMALE> 10P Non-waterproof Type

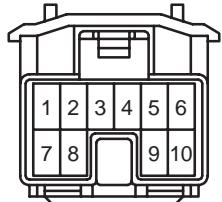
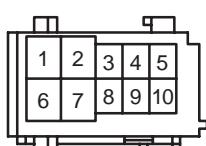
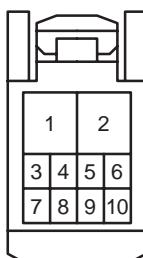
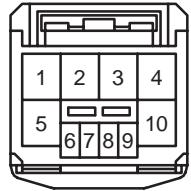
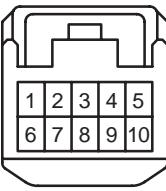
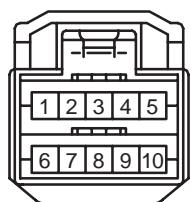
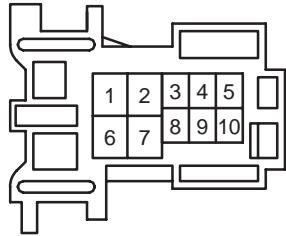
		
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TABLE OF HOUSING SHAPE

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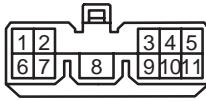
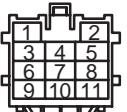
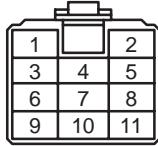
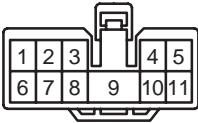
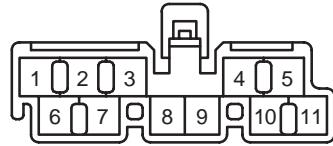
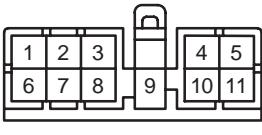
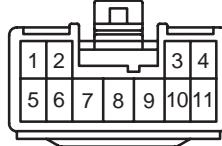
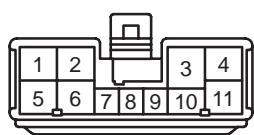
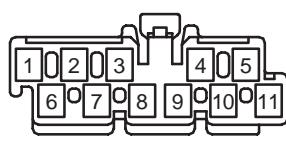
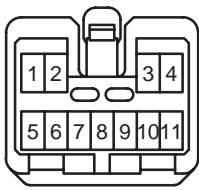
		
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TABLE OF HOUSING SHAPE

<FEMALE> 11P Non-waterproof Type

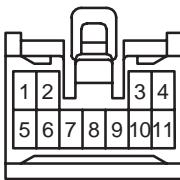
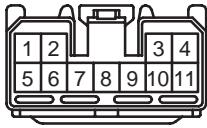
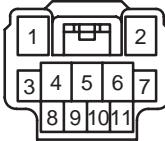
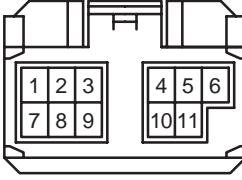
		
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TABLE OF HOUSING SHAPE

<FEMALE> 12P Non-waterproof Type

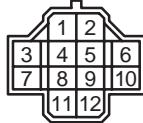
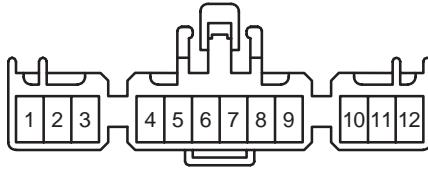
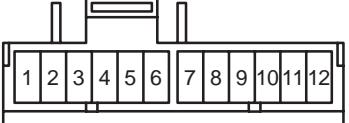
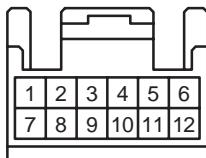
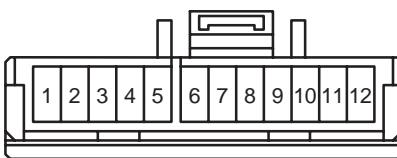
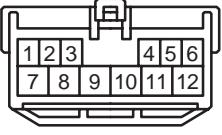
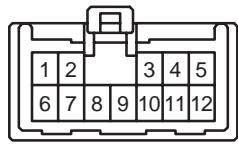
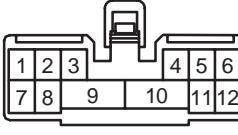
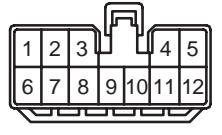
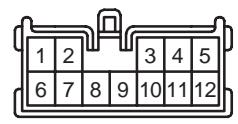
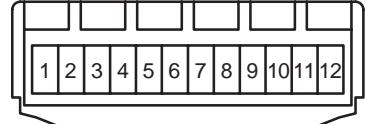
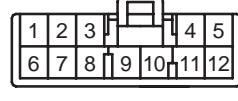
		
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TABLE OF HOUSING SHAPE

<FEMALE> 12P Non-waterproof Type

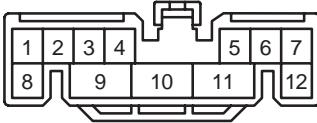
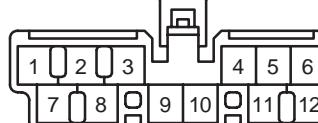
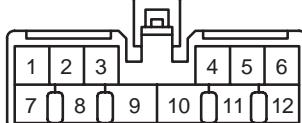
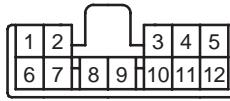
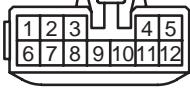
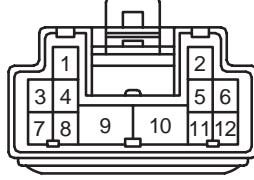
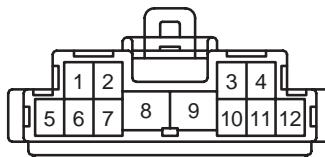
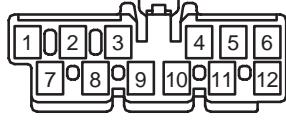
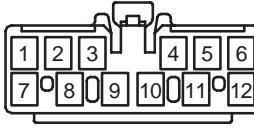
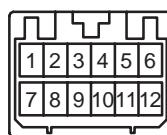
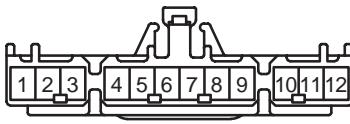
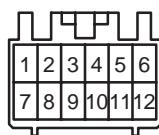
		
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TABLE OF HOUSING SHAPE

<FEMALE> 12P Non-waterproof Type

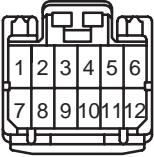
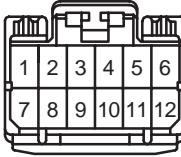
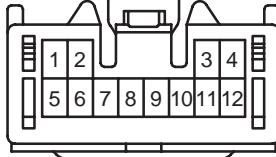
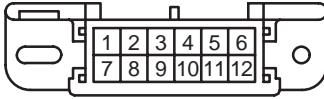
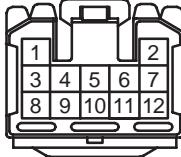
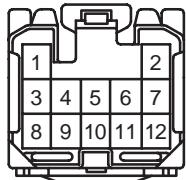
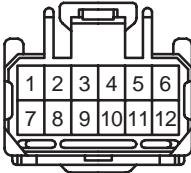
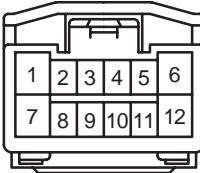
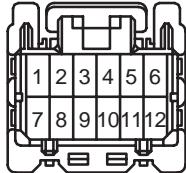
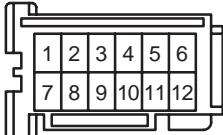
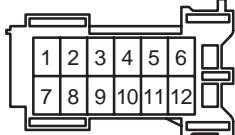
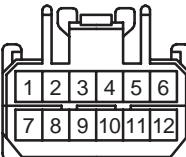
		
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TABLE OF HOUSING SHAPE

<FEMALE> 12P Non-waterproof Type

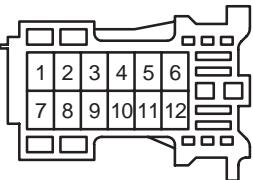
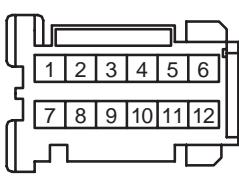
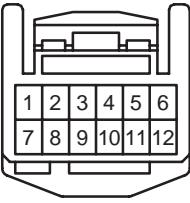
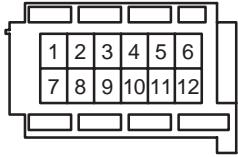
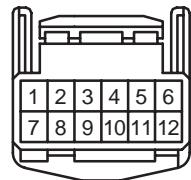
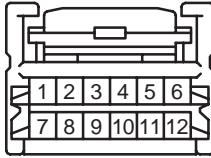
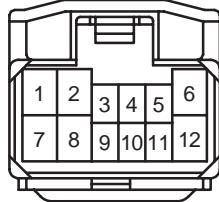
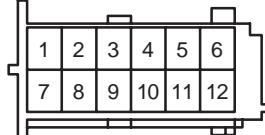
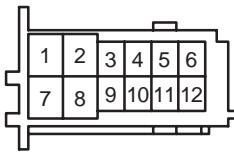
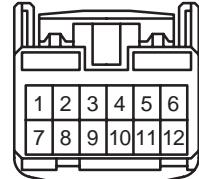
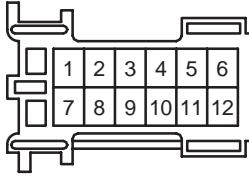
		
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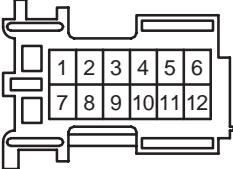
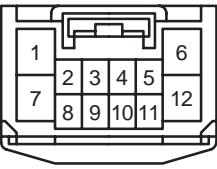
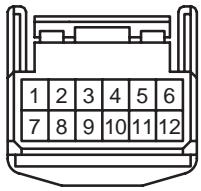
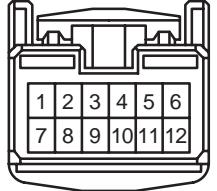
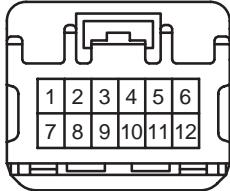
		
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TABLE OF HOUSING SHAPE

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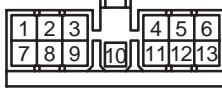
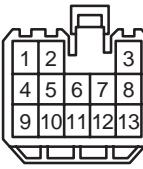
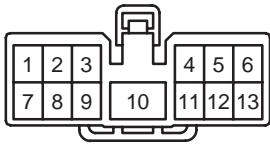
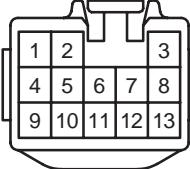
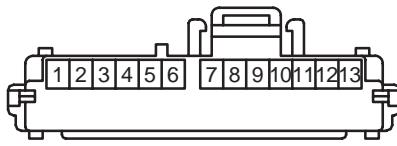
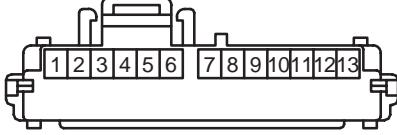
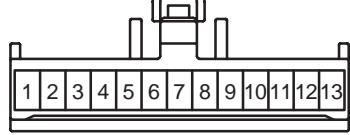
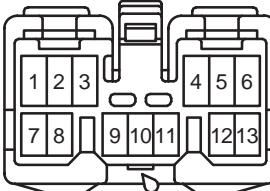
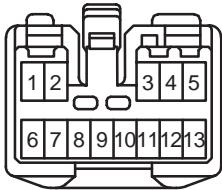
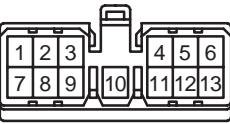
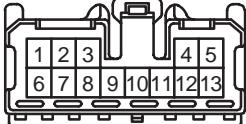
		
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		 90980-11542 (90980-11695) (90980-11714) (90980-12346) (90980-12479)
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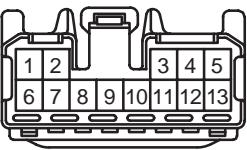
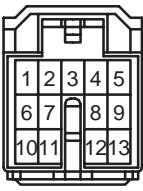
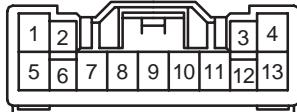
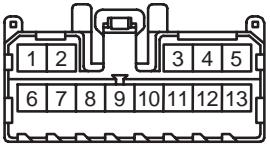
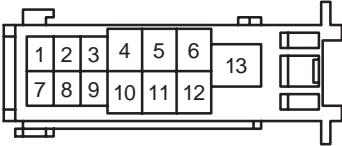
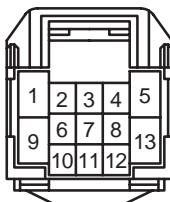
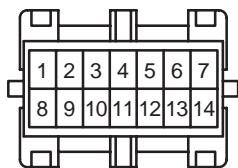
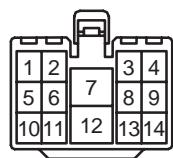
		
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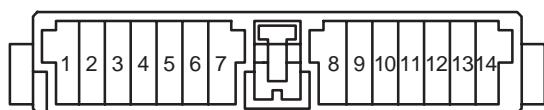
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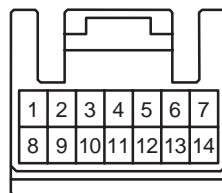
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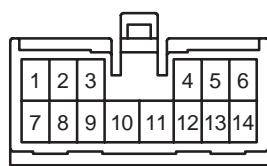
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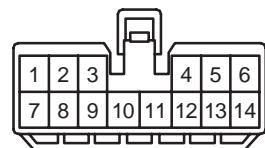
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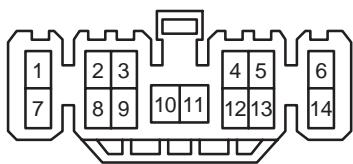
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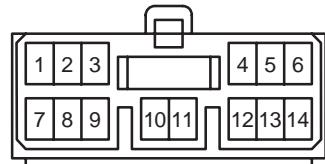
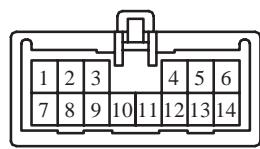
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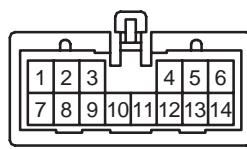
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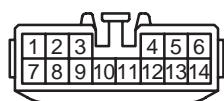
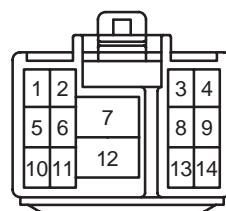
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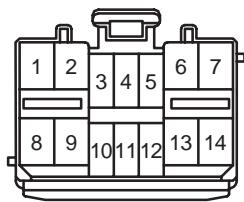
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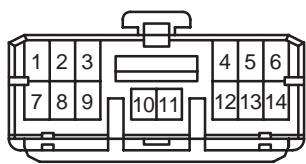
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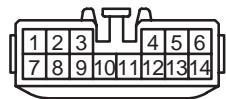
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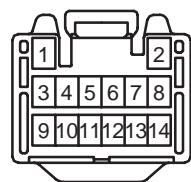
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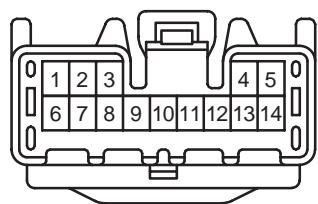
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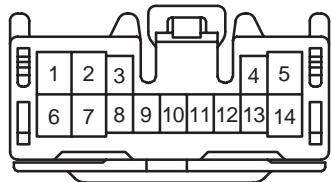
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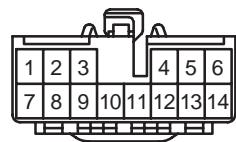
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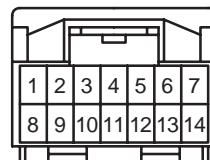
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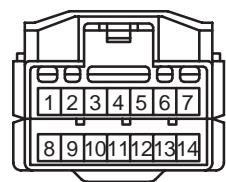
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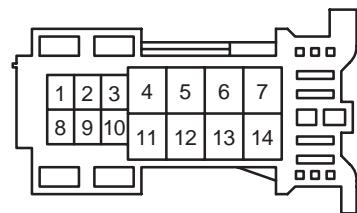
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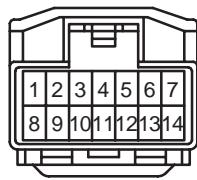
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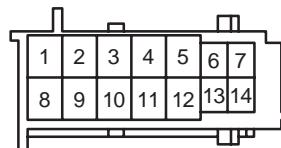
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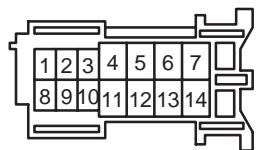
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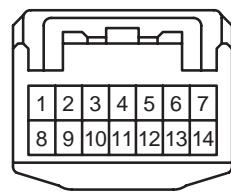
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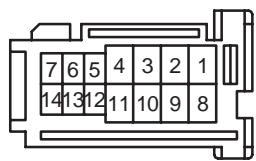
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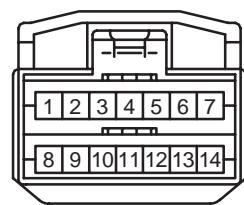
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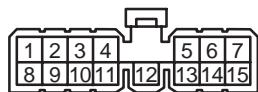
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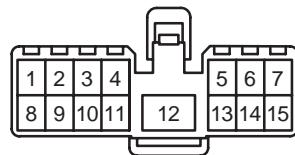
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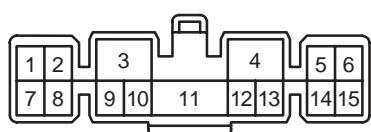
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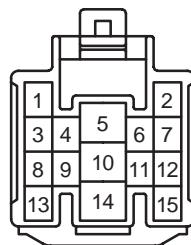
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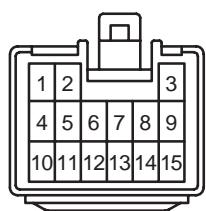
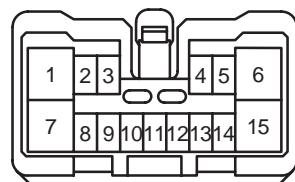
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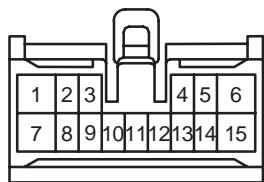
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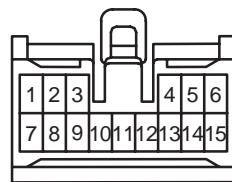
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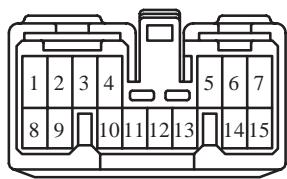
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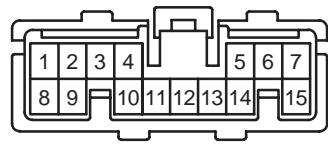
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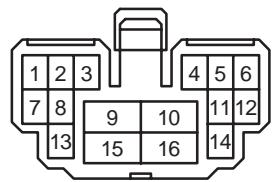
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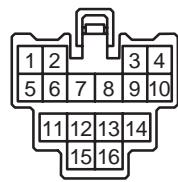
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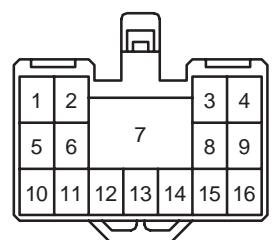
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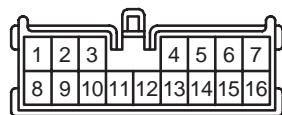
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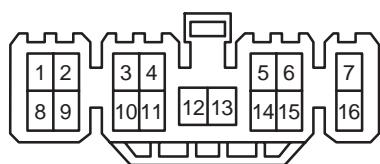
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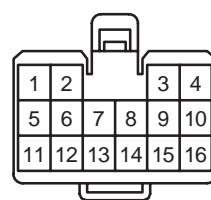
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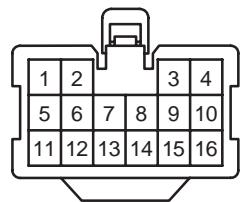
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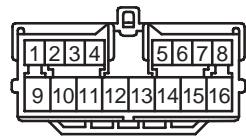
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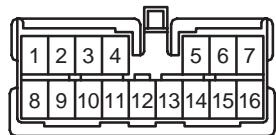
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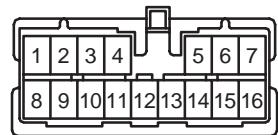
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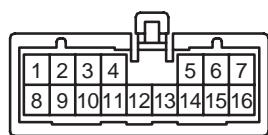
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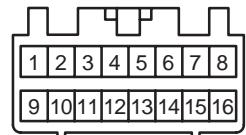
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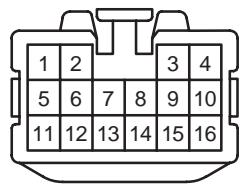
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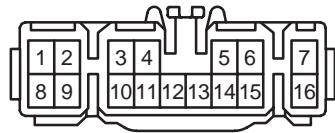
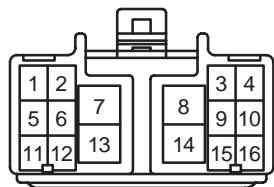
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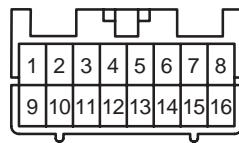
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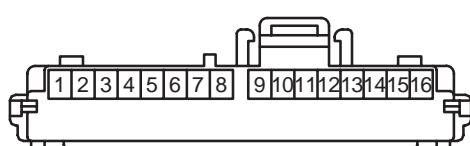
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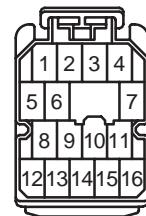
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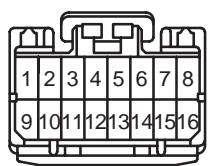
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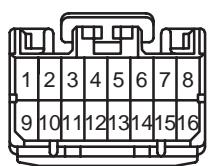
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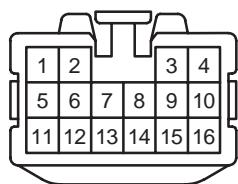
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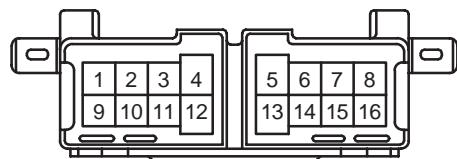
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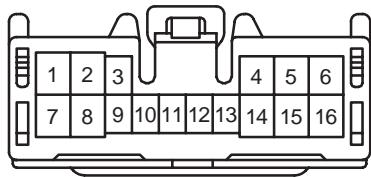
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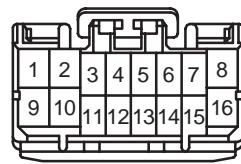
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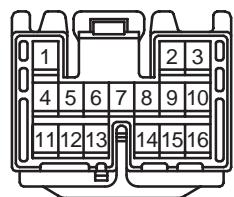
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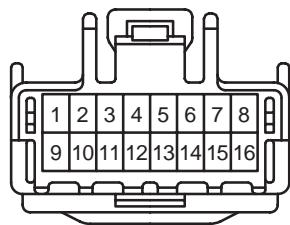
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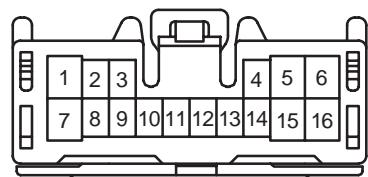
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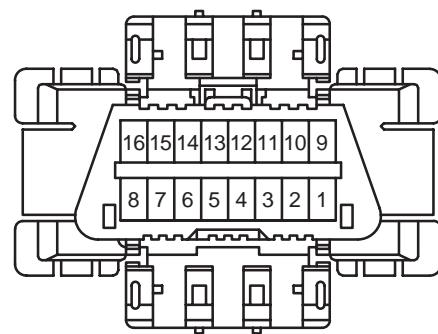
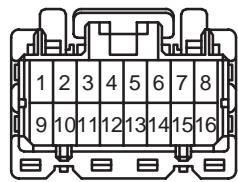
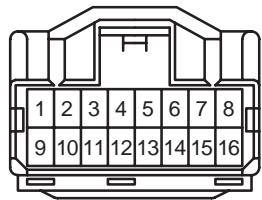
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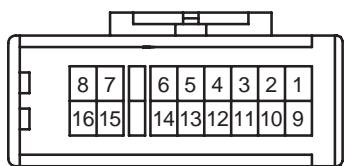
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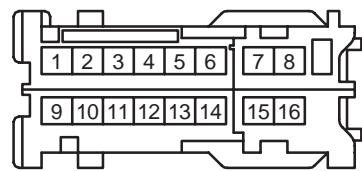
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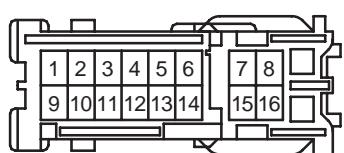
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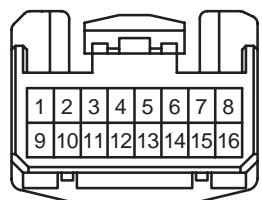
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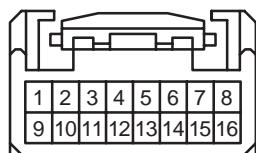
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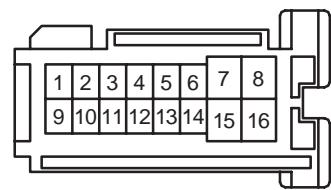
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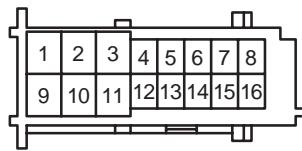
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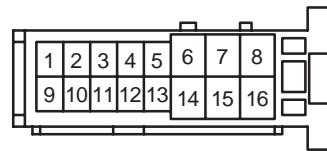
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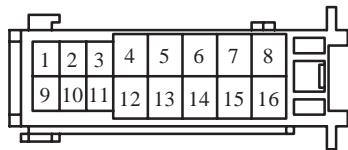
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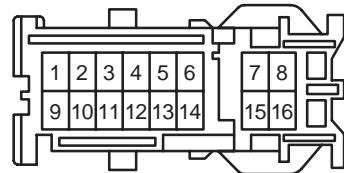
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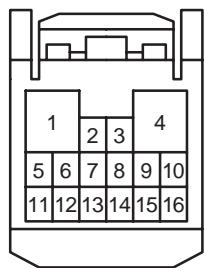


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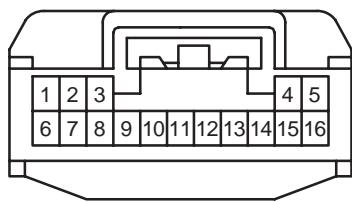


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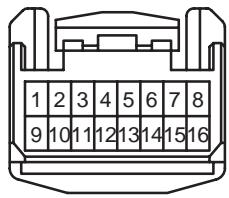
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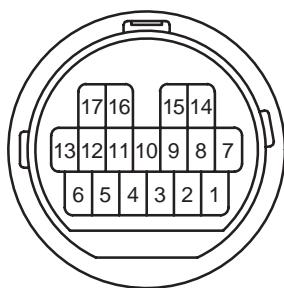
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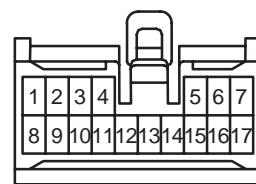
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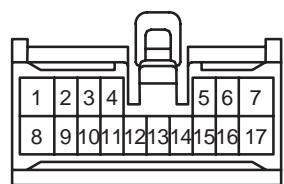
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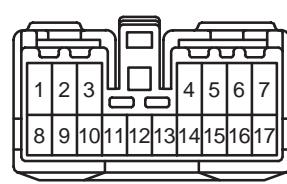
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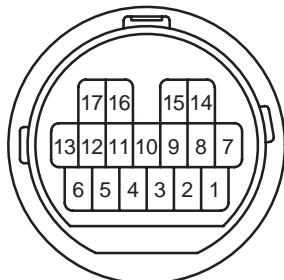
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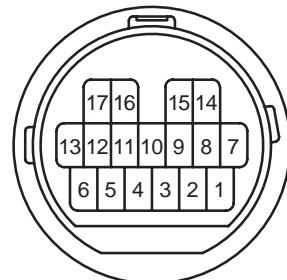
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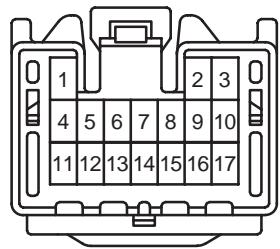
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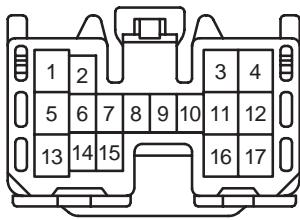
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TABLE OF HOUSING SHAPE

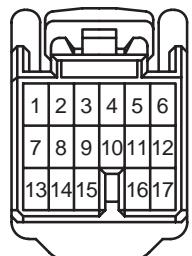
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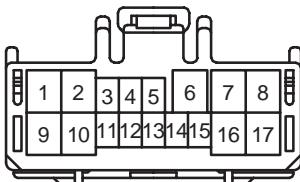
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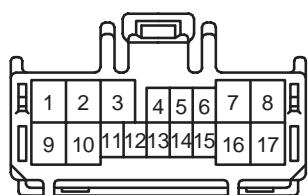
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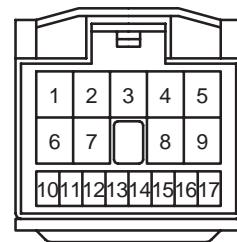
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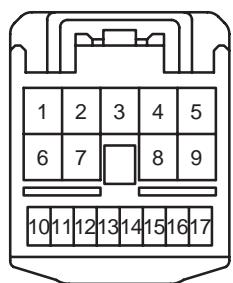


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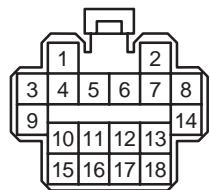
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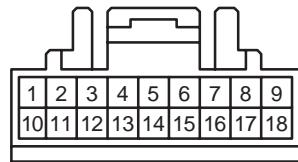
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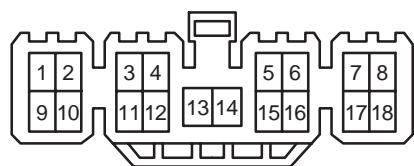
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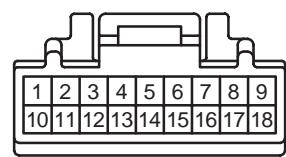
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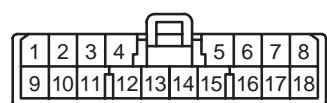
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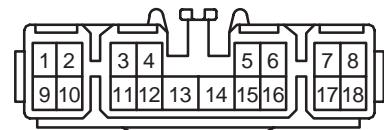
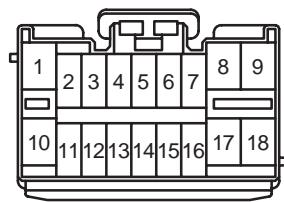
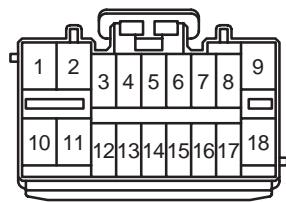
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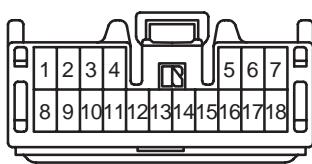
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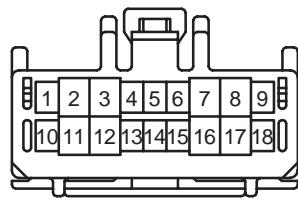
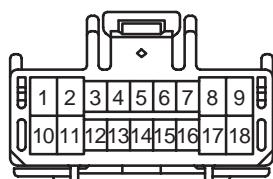
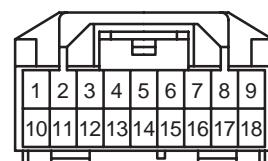
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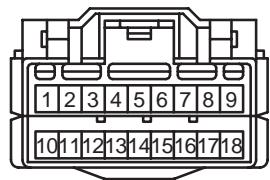
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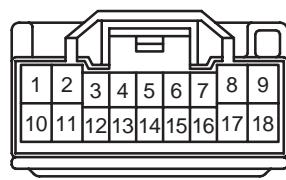
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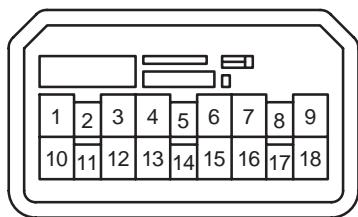
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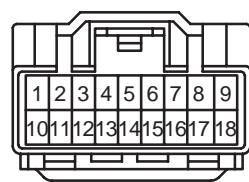
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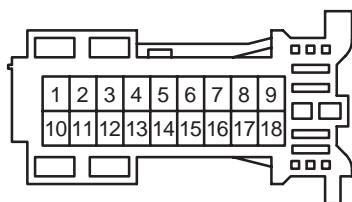
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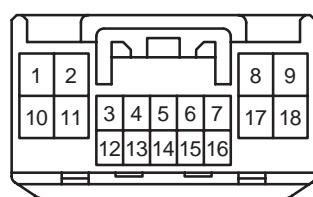
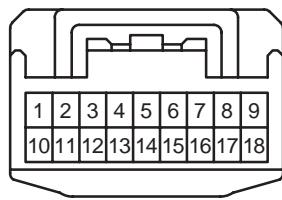
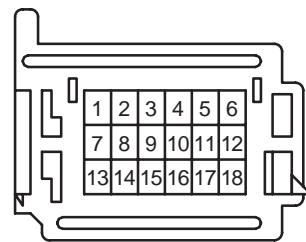
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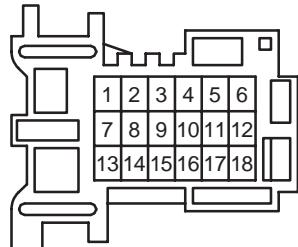
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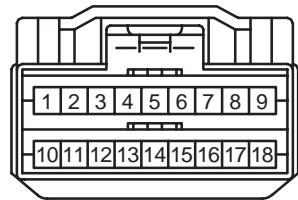
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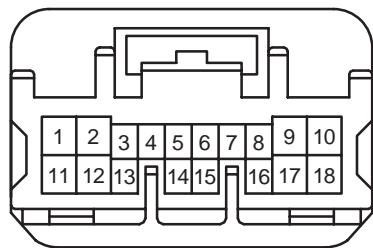
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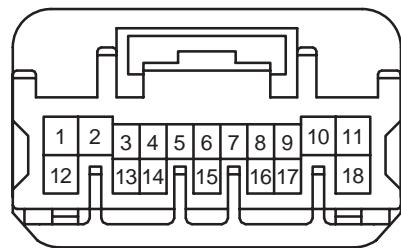
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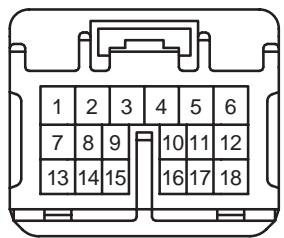


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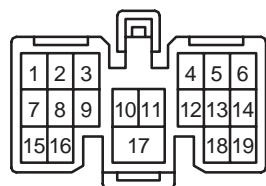
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<FEMALE> 18P Non-waterproof Type

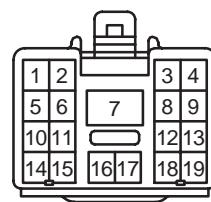
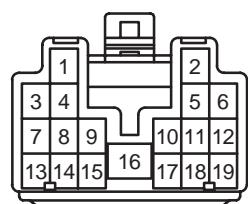
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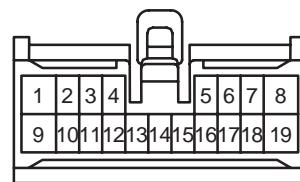
<FEMALE> 19P Non-waterproof Type



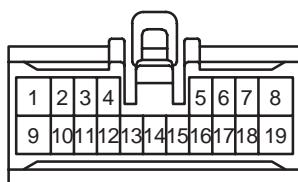
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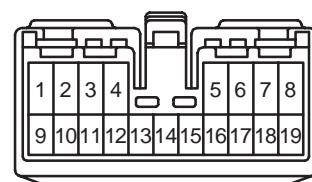
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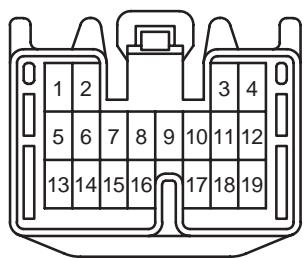
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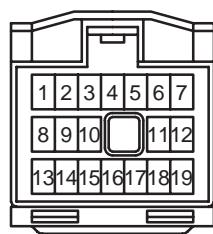
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TABLE OF HOUSING SHAPE

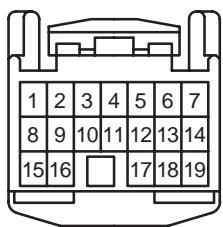
<FEMALE> 19P Non-waterproof Type



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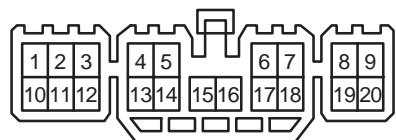
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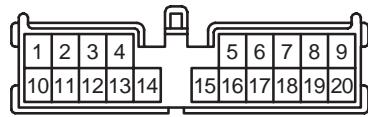
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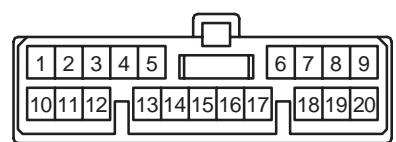
<FEMALE> 20P Non-waterproof Type



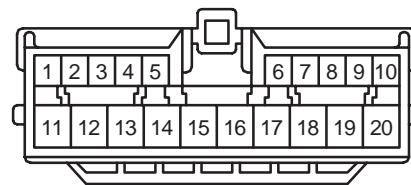
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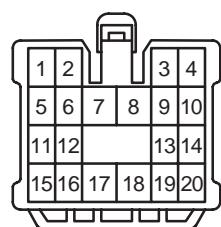
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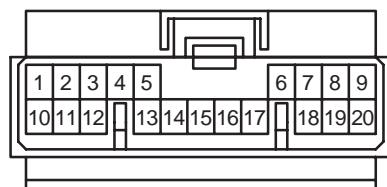
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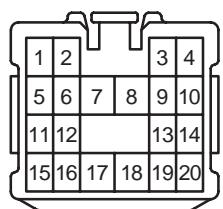
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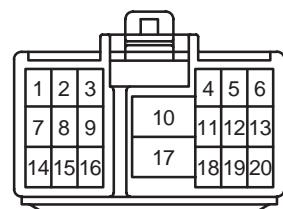
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TABLE OF HOUSING SHAPE

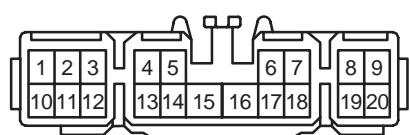
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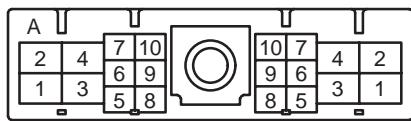
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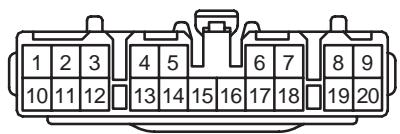
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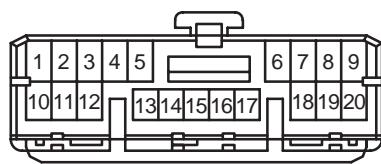
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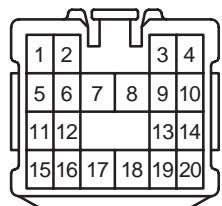
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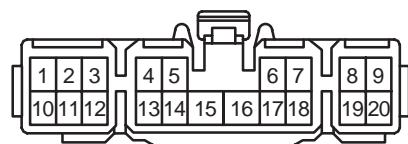
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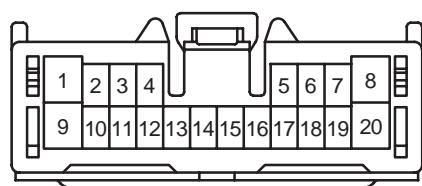
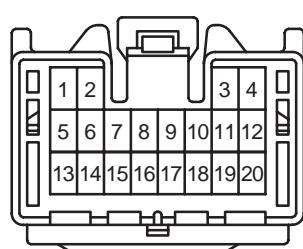
<FEMALE> 20P Non-waterproof Type



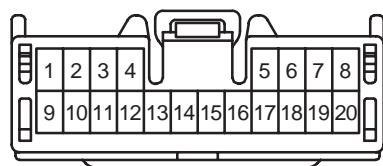
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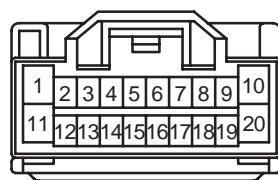
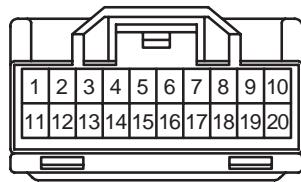
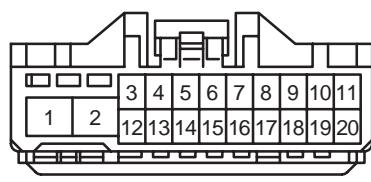
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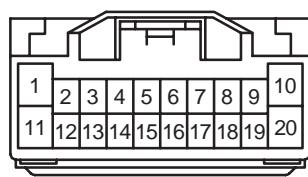
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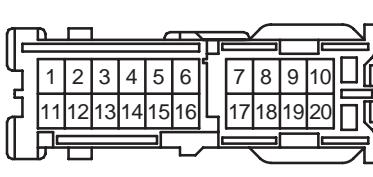
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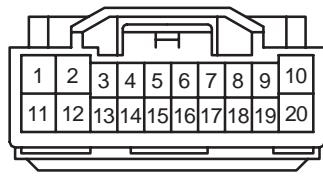
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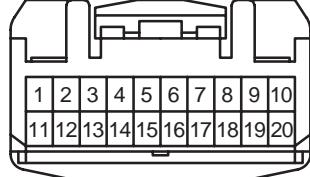
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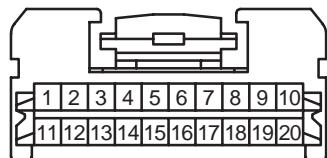
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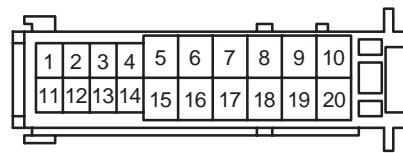
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TABLE OF HOUSING SHAPE

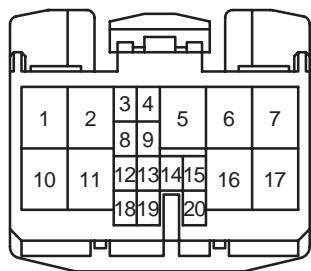
<FEMALE> 20P Non-waterproof Type



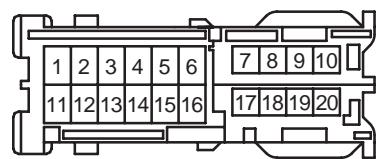
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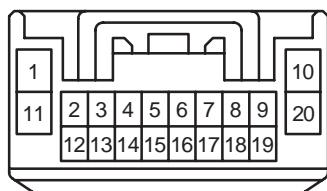
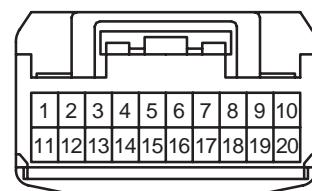
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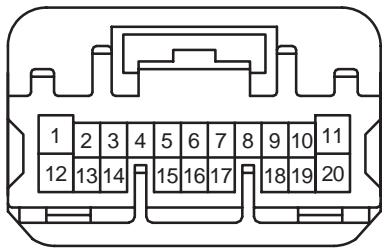


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90980-12460

TABLE OF HOUSING SHAPE

<FEMALE> 20P Non-waterproof Type

90980-12741

TABLE OF HOUSING SHAPE

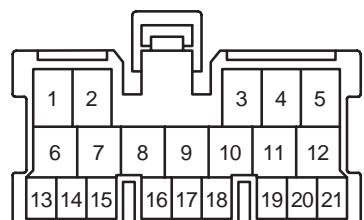
<FEMALE> 21P Non-waterproof Type



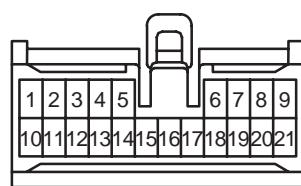
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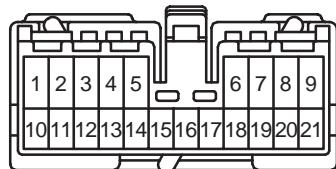
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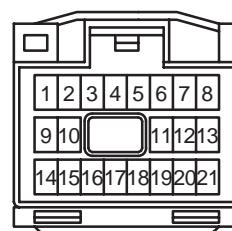
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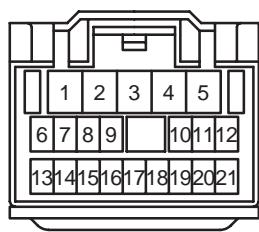


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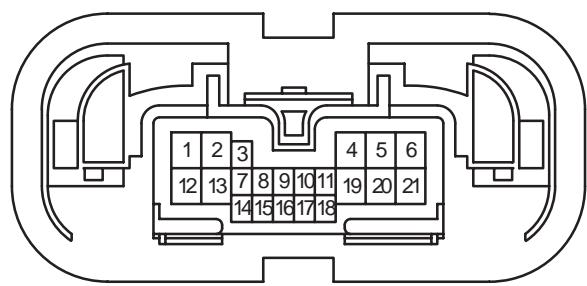


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TABLE OF HOUSING SHAPE

<FEMALE> 21P Non-waterproof Type

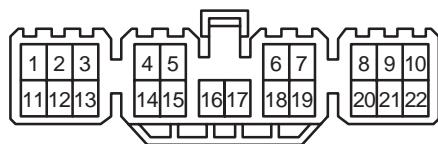
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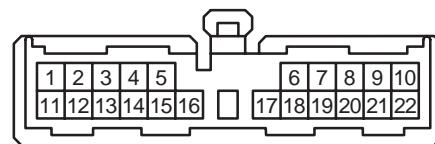
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TABLE OF HOUSING SHAPE

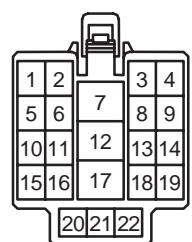
<FEMALE> 22P Non-waterproof Type



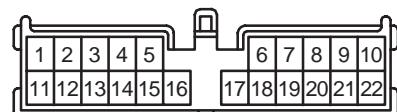
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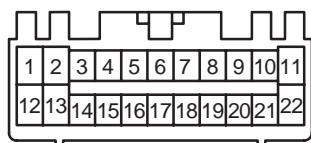
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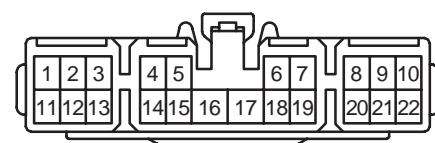
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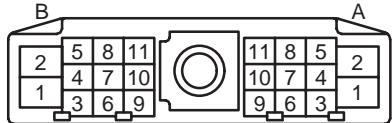
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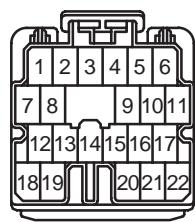
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TABLE OF HOUSING SHAPE

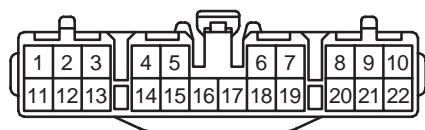
<FEMALE> 22P Non-waterproof Type



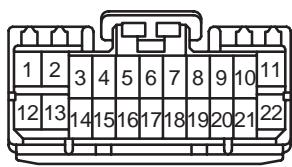
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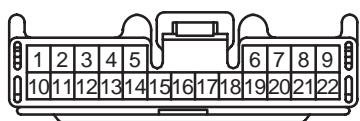
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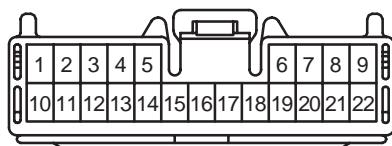
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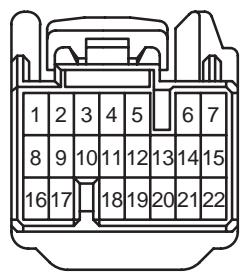
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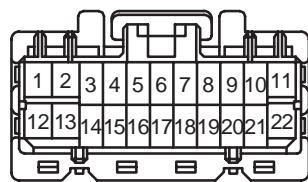
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TABLE OF HOUSING SHAPE

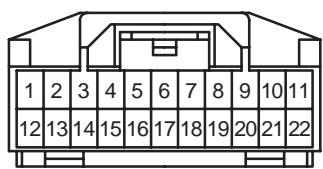
<FEMALE> 22P Non-waterproof Type



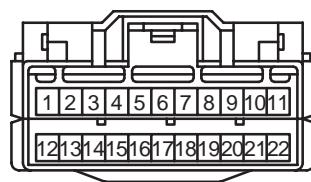
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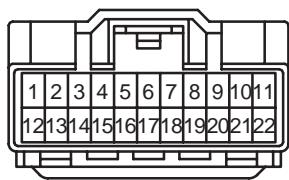
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90980-11915



90980-11927



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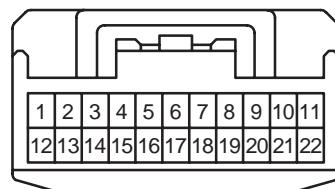
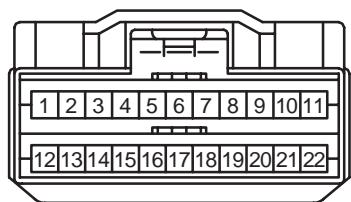
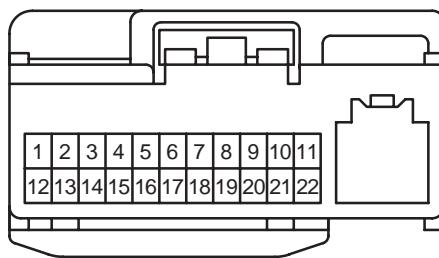
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TABLE OF HOUSING SHAPE

<FEMALE> 22P Non-waterproof Type

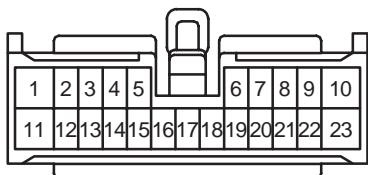
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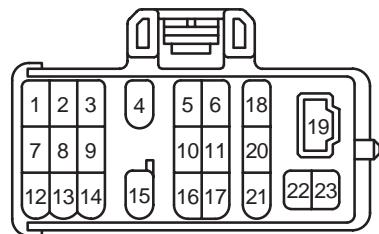
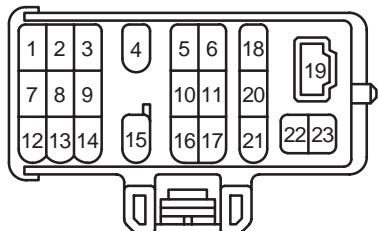
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TABLE OF HOUSING SHAPE

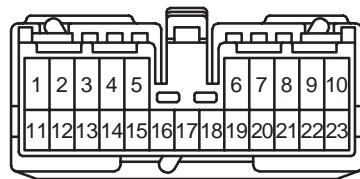
<FEMALE> 23P Non-waterproof Type



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90980-11195
(90980-11802)

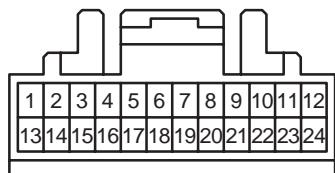
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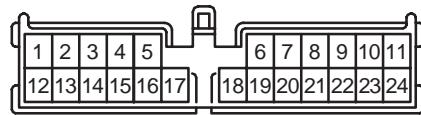
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TABLE OF HOUSING SHAPE

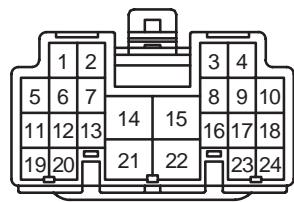
<FEMALE> 24P Non-waterproof Type



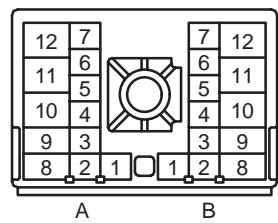
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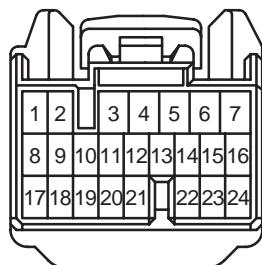
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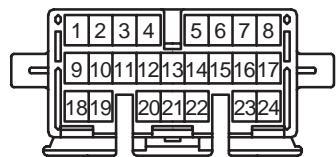
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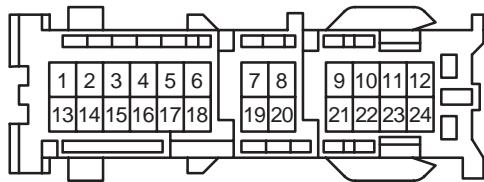
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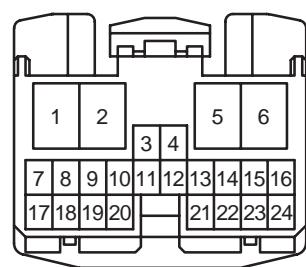
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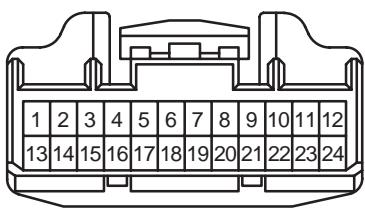
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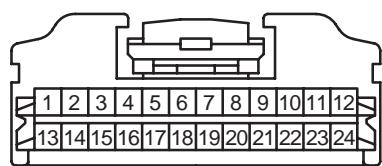
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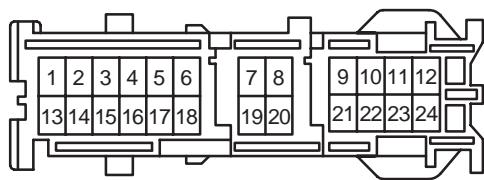
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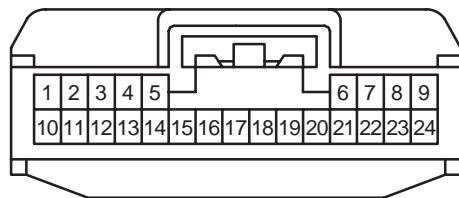
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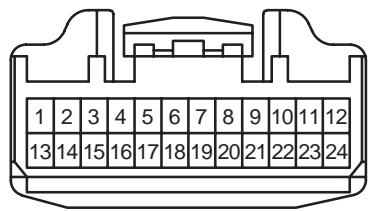
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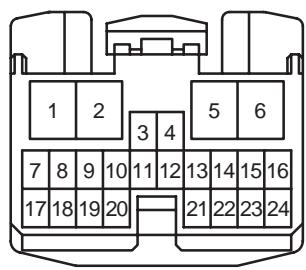
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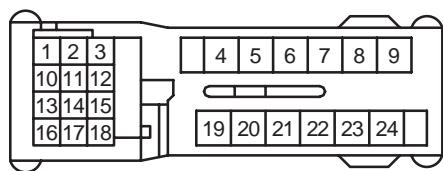
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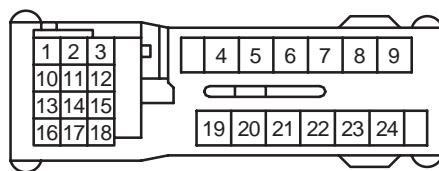
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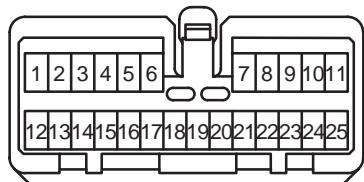
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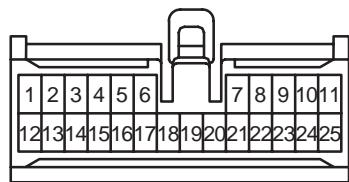
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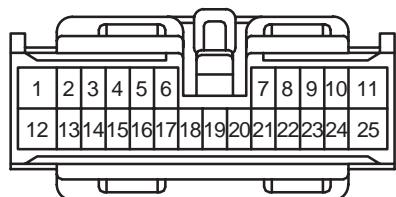
<FEMALE> 25P Non-waterproof Type



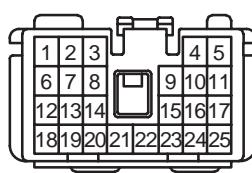
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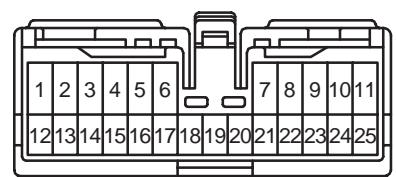
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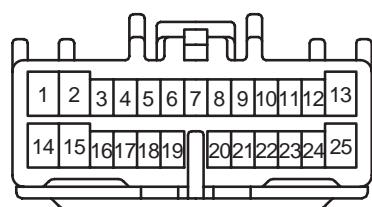
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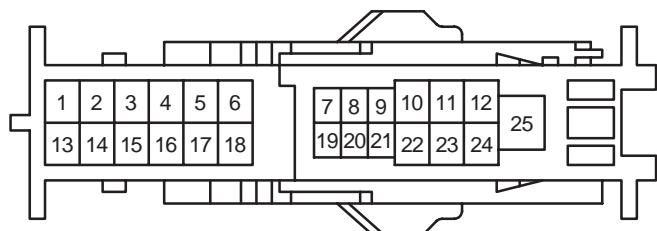


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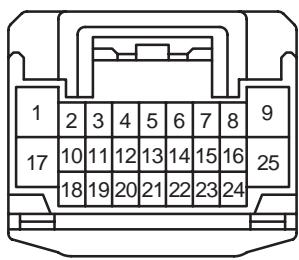


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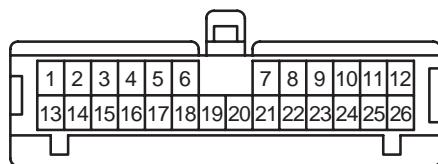
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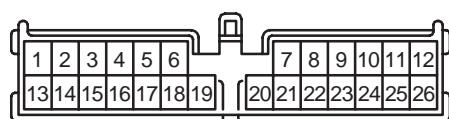
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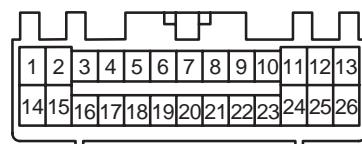
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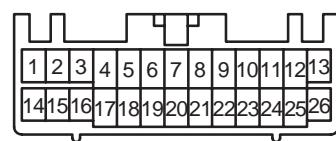
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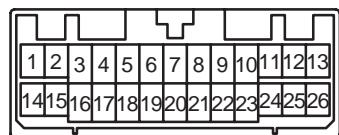


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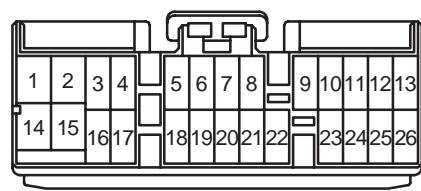


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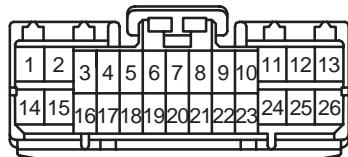
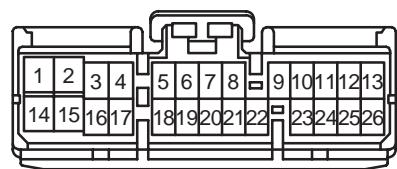
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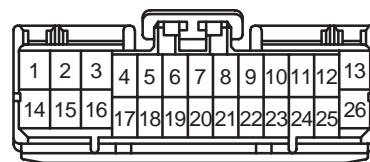
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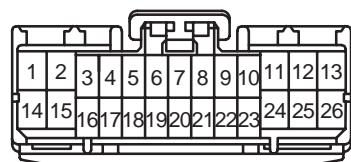
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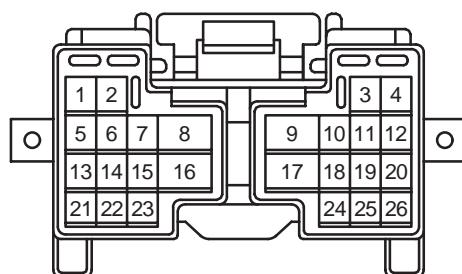
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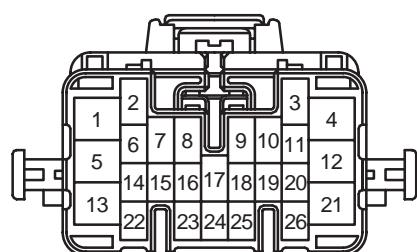
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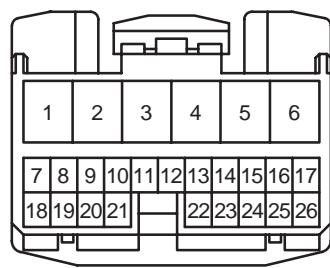


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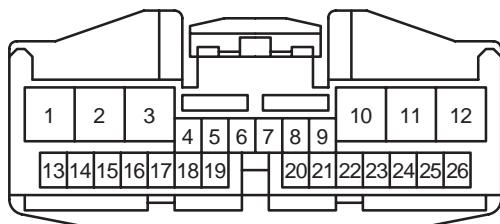


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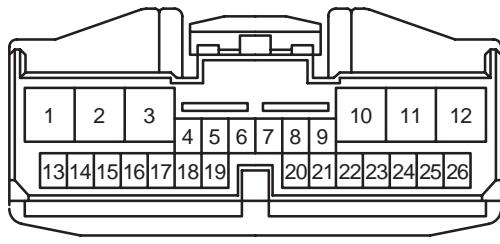
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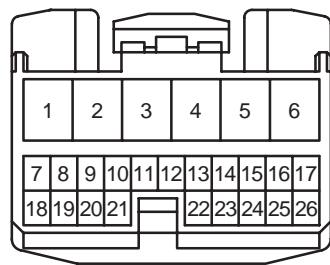
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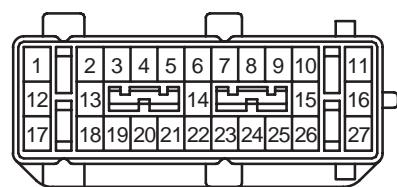


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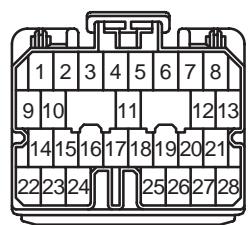
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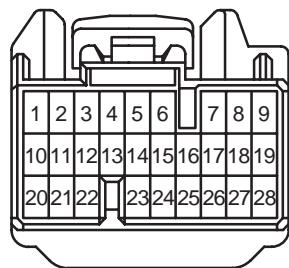
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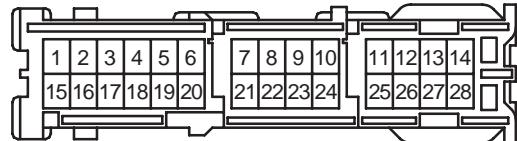
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<FEMALE> 28P Non-waterproof Type

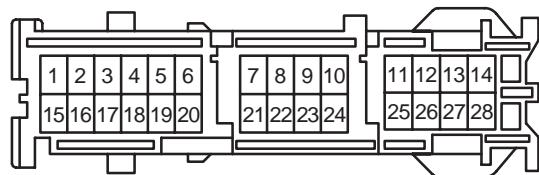
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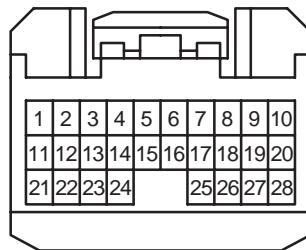
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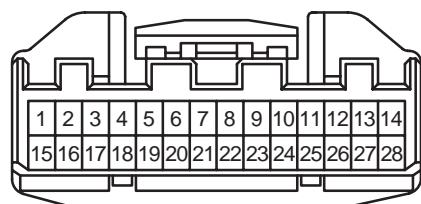
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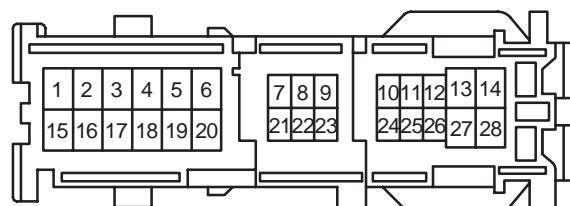
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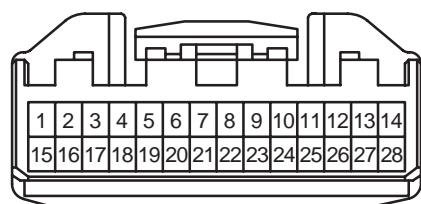
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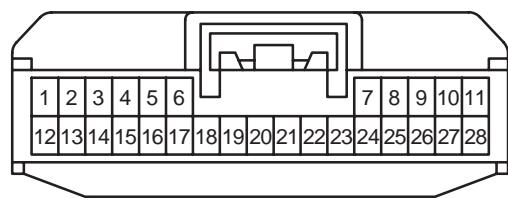


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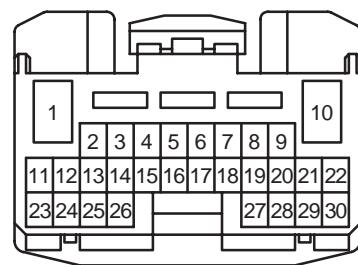
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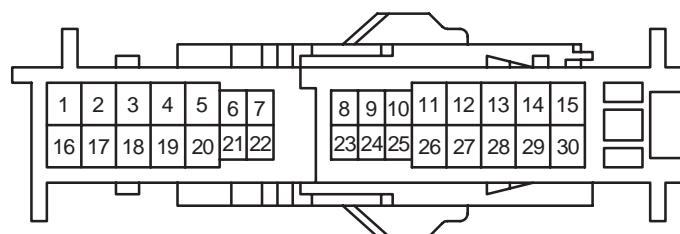
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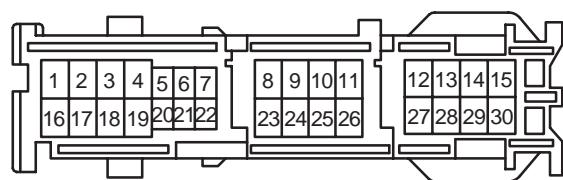
<FEMALE> 30P Non-waterproof Type



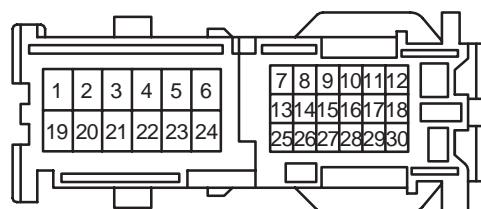
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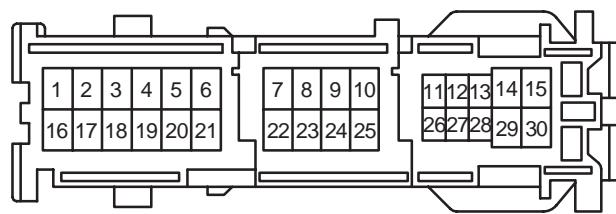


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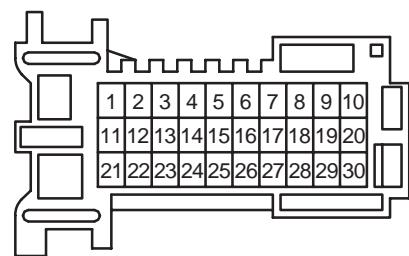


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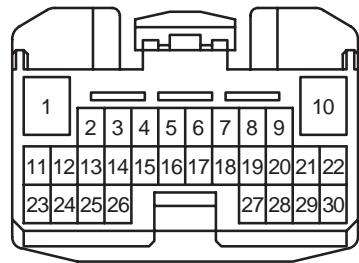
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<FEMALE> 30P Non-waterproof Type

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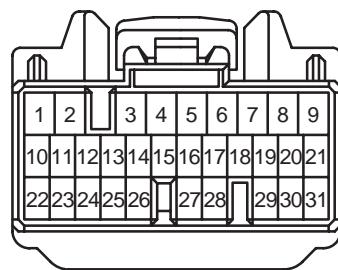
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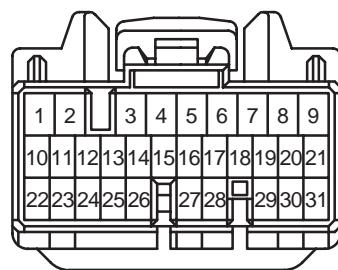
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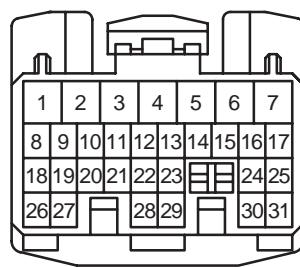
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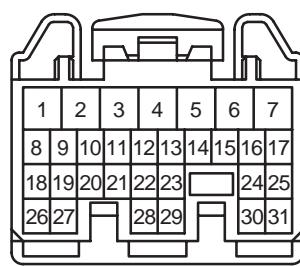
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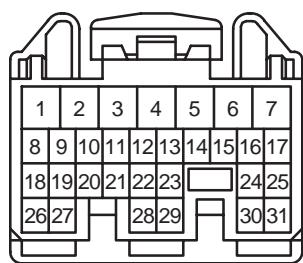


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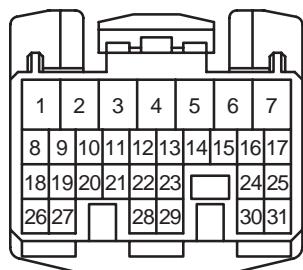


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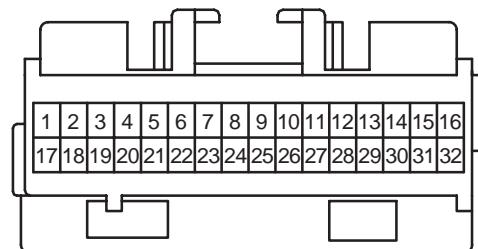
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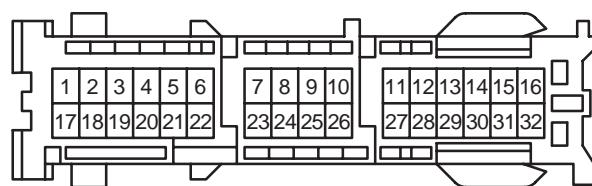
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TABLE OF HOUSING SHAPE

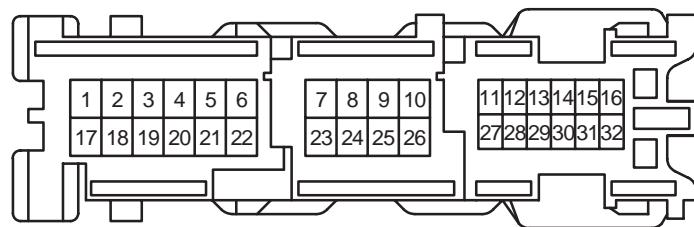
<FEMALE> 32P Non-waterproof Type



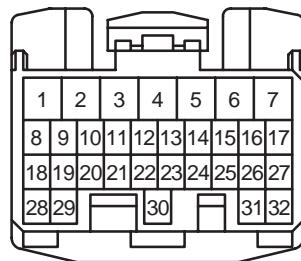
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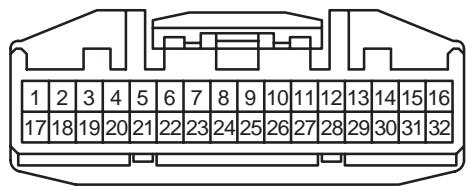
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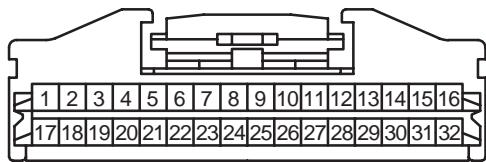
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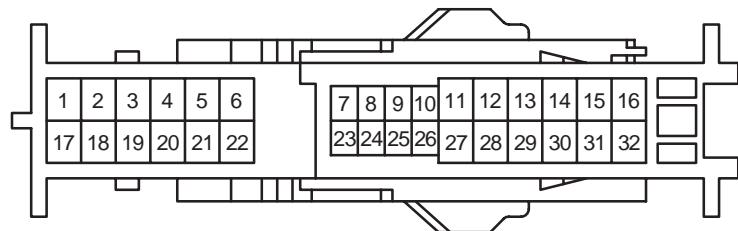
<FEMALE> 32P Non-waterproof Type



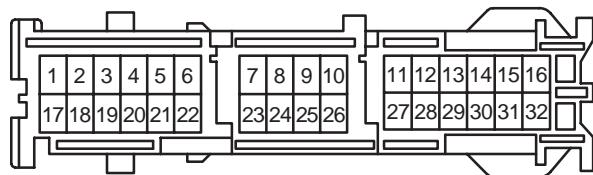
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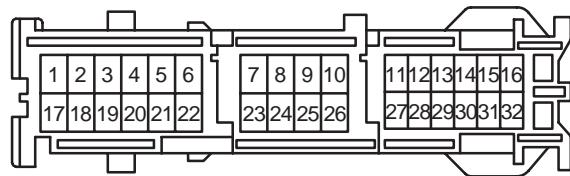
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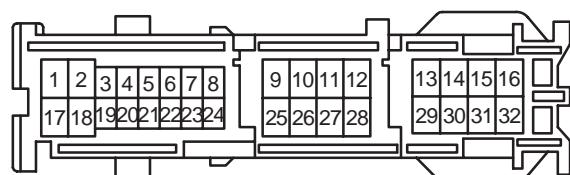
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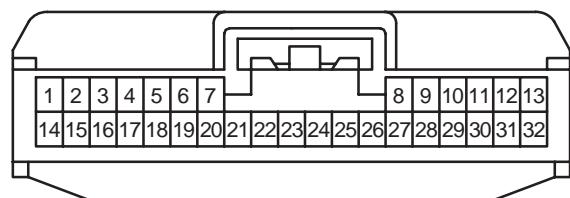
<FEMALE> 32P Non-waterproof Type



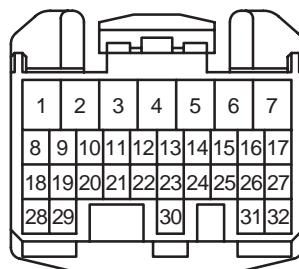
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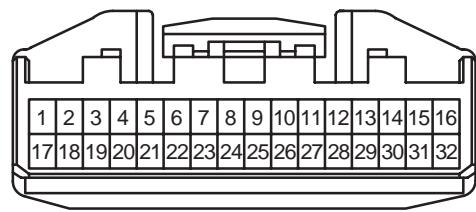


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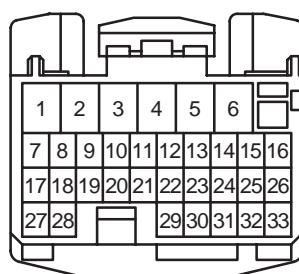
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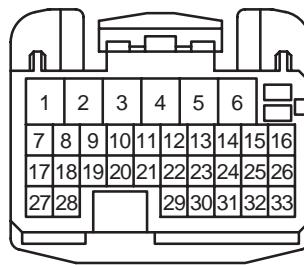
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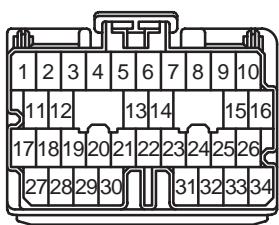


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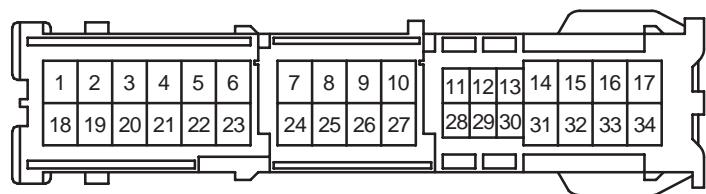


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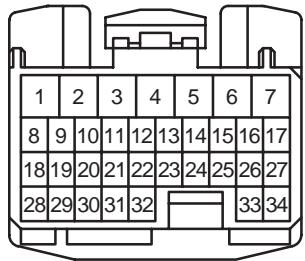
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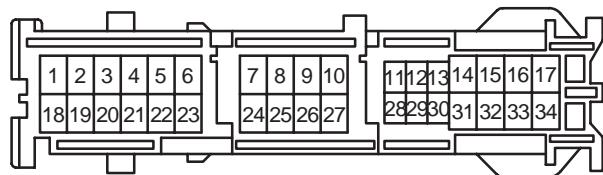
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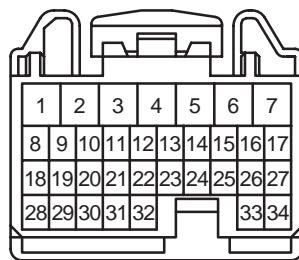
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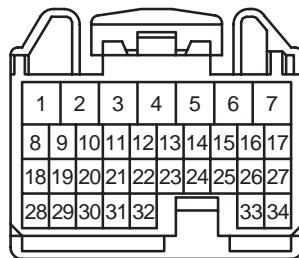
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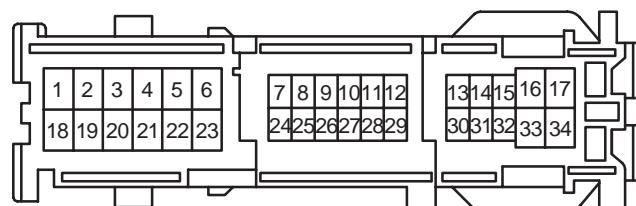
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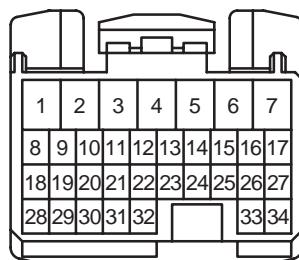
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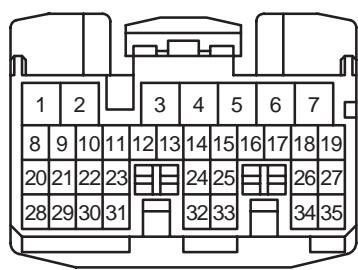
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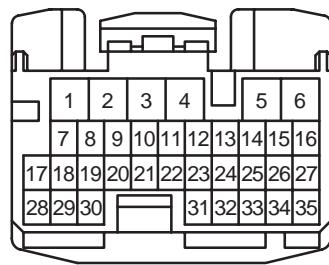
90980-12527

TABLE OF HOUSING SHAPE

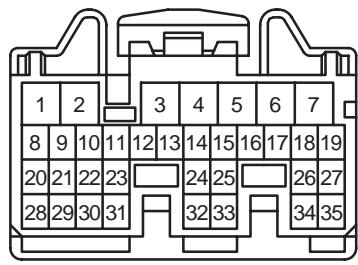
<FEMALE> 35P Non-waterproof Type



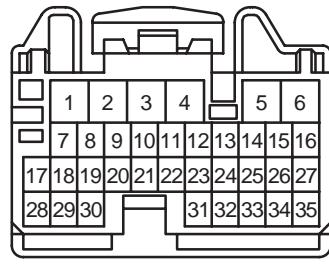
90980-12145



90980-12146



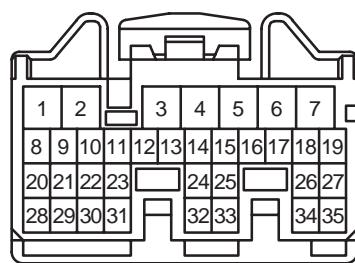
90980-12428



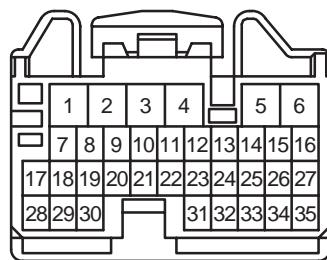
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TABLE OF HOUSING SHAPE

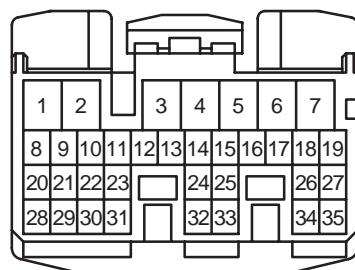
<FEMALE> 35P Non-waterproof Type



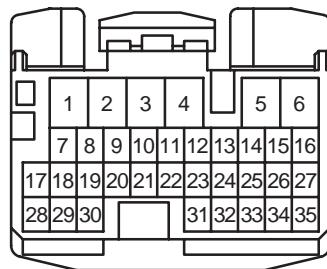
90980-12454



90980-12455

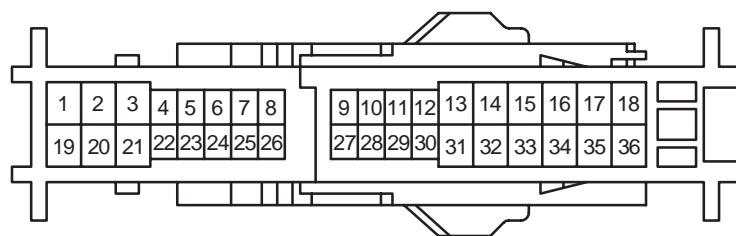


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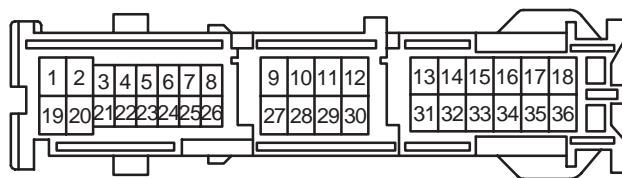


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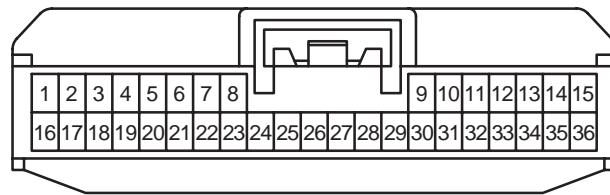
TABLE OF HOUSING SHAPE

<FEMALE> 36P Non-waterproof Type

90980-12274



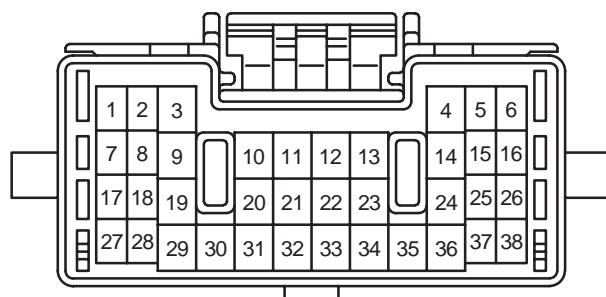
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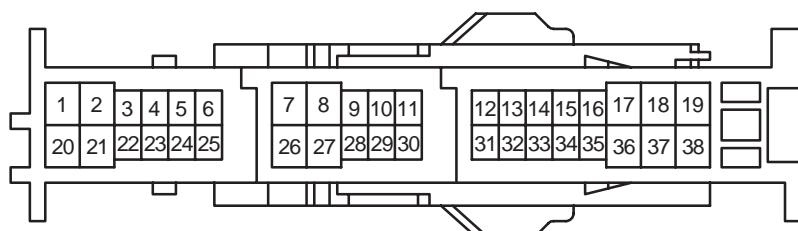
90980-12564

TABLE OF HOUSING SHAPE

<FEMALE> 38P Non-waterproof Type

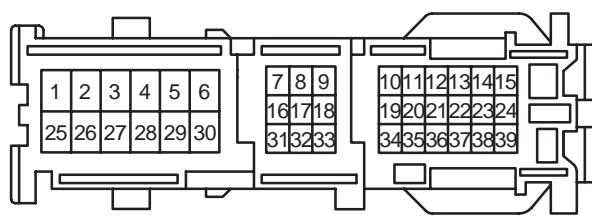


90980-11555



90980-12276

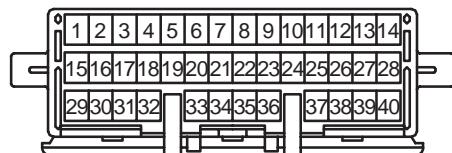
TABLE OF HOUSING SHAPE

<FEMALE> 39P Non-waterproof Type

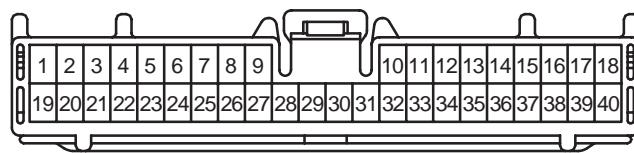
90980-12502

TABLE OF HOUSING SHAPE

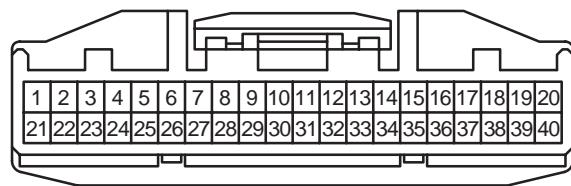
<FEMALE> 40P Non-waterproof Type



90980-11508

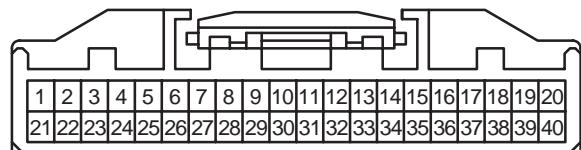


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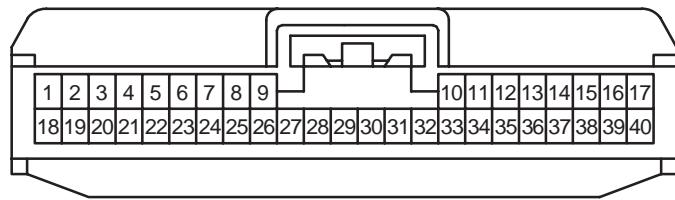


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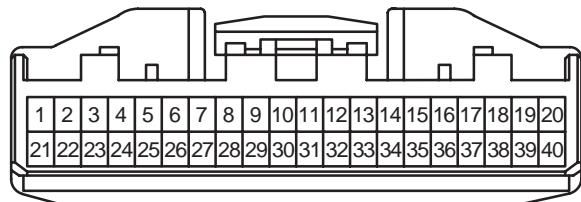
TABLE OF HOUSING SHAPE

<FEMALE> 40P Non-waterproof Type

90980-12170



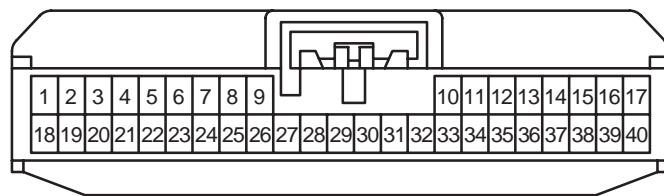
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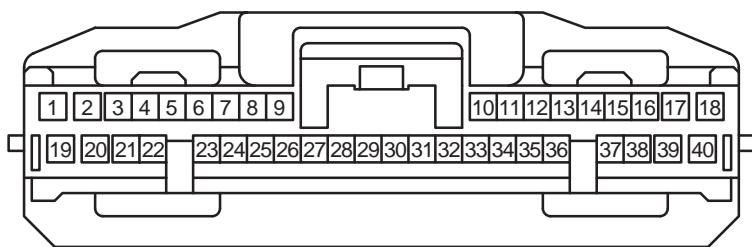
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TABLE OF HOUSING SHAPE

<FEMALE> 40P Non-waterproof Type

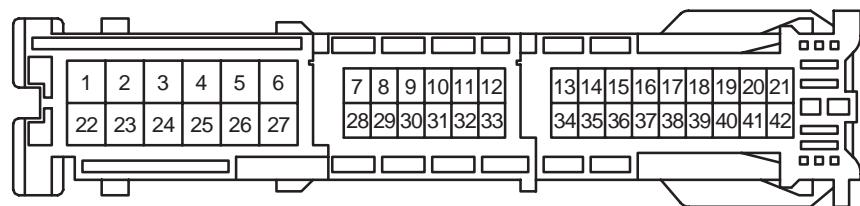


90980-12567



90980-12708

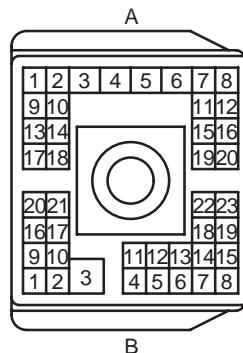
TABLE OF HOUSING SHAPE

<FEMALE> 42P Non-waterproof Type

90980-12184

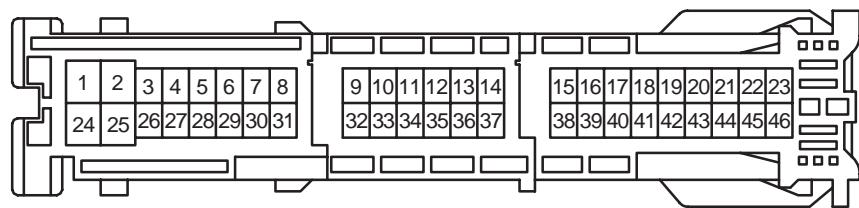
TABLE OF HOUSING SHAPE

<FEMALE> 43P Non-waterproof Type



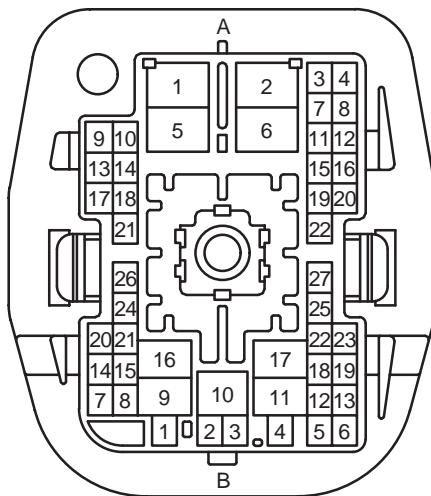
90980-11360

TABLE OF HOUSING SHAPE

<FEMALE> 46P Non-waterproof Type

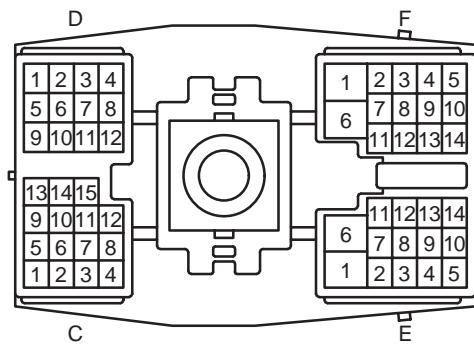
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TABLE OF HOUSING SHAPE

<FEMALE> 49P Non-waterproof Type

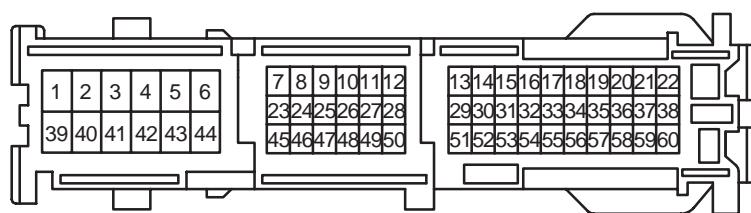
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TABLE OF HOUSING SHAPE

<FEMALE> 55P Non-waterproof Type

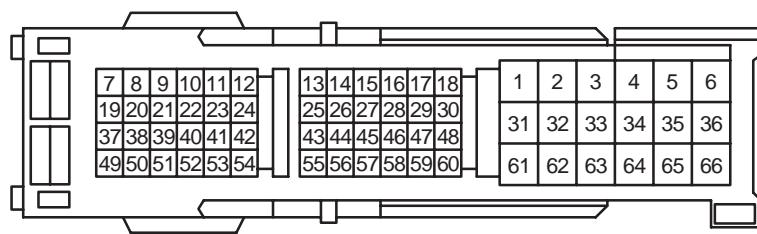
90980-11359

TABLE OF HOUSING SHAPE

<FEMALE> 60P Non-waterproof Type

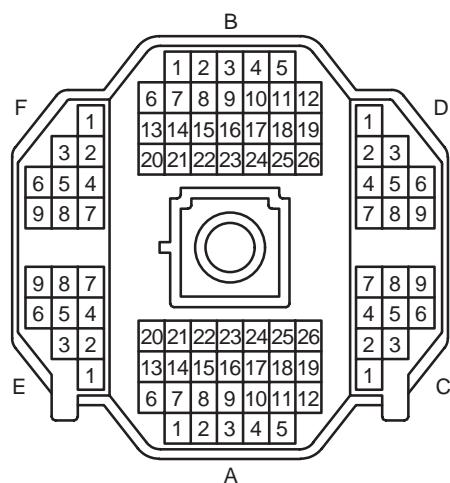
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TABLE OF HOUSING SHAPE

<FEMALE> 66P Non-waterproof Type

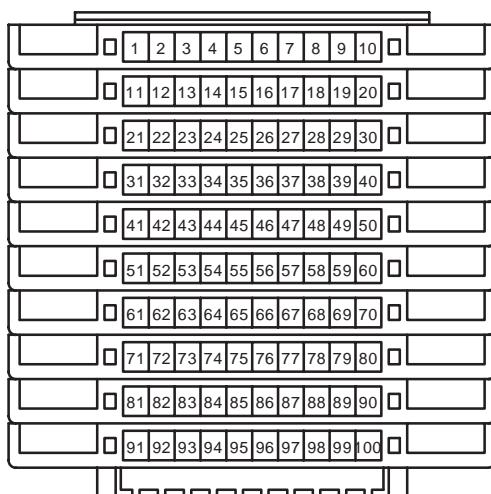
90980-12672

TABLE OF HOUSING SHAPE

<FEMALE> 88P Non-waterproof Type

90980-10950

TABLE OF HOUSING SHAPE

<FEMALE> 100P Non-waterproof Type

90980-12585

TABLE OF HOUSING SHAPE

<MALE> 1P Waterproof Type

			
90980-10114 (Splash Proof)	90980-10200 (Splash Proof)	90980-10246 (Splash Proof)	90980-10438
			
90980-10836	90980-10892	90980-10982	90980-11006
			
90980-11183	90980-11270	90980-11962	

TABLE OF HOUSING SHAPE

<MALE> 2P Waterproof Type

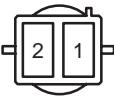
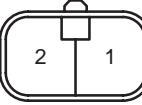
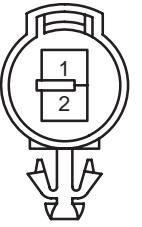
			
90980-10091 (Splash Proof)	90980-10122 (Splash Proof)	90980-10156 (Splash Proof)	90980-10192 (Splash Proof)
			
90980-10242 (Splash Proof)	90980-10374 (Splash Proof)	90980-10412 (Splash Proof)	90980-10495
			
90980-10497	90980-10533	90980-10555	90980-10566
			
90980-10571	90980-10580	90980-10582	90980-10592
			
90980-10594	90980-10625	90980-10665	90980-10707

TABLE OF HOUSING SHAPE

<MALE> 2P Waterproof Type

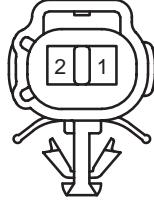
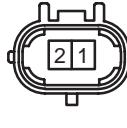
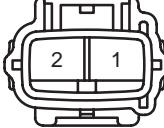
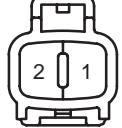
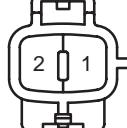
			
90980-10788	90980-10838	90980-10842	90980-10886
			
90980-10898	90980-10900	90980-10927	90980-10948
			
90980-10959	90980-10970 (Splash Proof)	90980-11002	90980-11004
			
90980-11008	90980-11029	90980-11031	90980-11050
			
90980-11069	90980-11072	90980-11073	90980-11074

TABLE OF HOUSING SHAPE

<MALE> 2P Waterproof Type

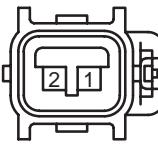
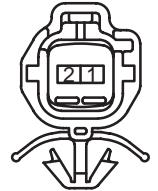
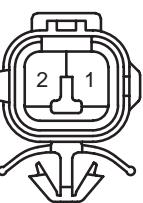
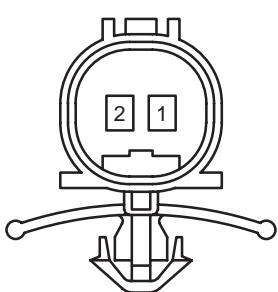
			
90980-11137	90980-11141	90980-11155	90980-11168
			
90980-11175	90980-11188	90980-11236	90980-11247
			
90980-11249	90980-11254	90980-11272	90980-11303
			
90980-11322	90980-11409	90980-11447	90980-11466
			
90980-11486	90980-11901	90980-12194	90980-12627

TABLE OF HOUSING SHAPE

<MALE> 2P Waterproof Type

			
90980-12697			

TABLE OF HOUSING SHAPE

<MALE> 3P Waterproof Type

A circular housing with three rectangular cutouts labeled 1, 2, and 3 from top to bottom.	A circular housing with three rectangular cutouts labeled 1, 3, and 2 from top to bottom.	A circular housing with three rectangular cutouts labeled 2, 1, and 3 from top to bottom, with a cable exiting from the bottom.	A circular housing with three rectangular cutouts labeled 2, 1, and 3 from top to bottom.
A circular housing with three rectangular cutouts labeled 1, 3, and 2 from top to bottom.	A circular housing with three rectangular cutouts labeled 1, 3, and 2 from top to bottom.	A circular housing with three rectangular cutouts labeled 1, 3, and 2 from top to bottom, with a cable exit at the top.	A circular housing with three rectangular cutouts labeled 3, 2, and 1 from top to bottom, with a cable exit at the top.
A horizontal oval housing with three rectangular cutouts labeled 3, 2, and 1 from left to right.	A horizontal oval housing with three rectangular cutouts labeled 2, 1, and 3 from left to right.	A horizontal oval housing with three rectangular cutouts labeled 2, 1, and 3 from left to right, with a cable exit at the bottom.	A horizontal oval housing with three rectangular cutouts labeled 3, 2, and 1 from left to right, with a cable exit at the bottom.
A vertical oval housing with three rectangular cutouts labeled 2, 1, and 3 from top to bottom, with a cable exit at the bottom.	A vertical oval housing with three rectangular cutouts labeled 2, 1, and 3 from top to bottom, with a cable exit at the bottom.	A vertical oval housing with three rectangular cutouts labeled ②, ①, and ③ from top to bottom, with a cable exit at the bottom.	A vertical oval housing with three rectangular cutouts labeled 2, 1, and 3 from top to bottom, with a cable exit at the bottom.
A horizontal oval housing with three rectangular cutouts labeled 2, 1, and 3 from left to right, with a cable exit at the bottom.	A horizontal oval housing with three rectangular cutouts labeled 2, 1, and 3 from left to right, with a cable exit at the bottom.	A horizontal oval housing with three rectangular cutouts labeled 2, 1, and 3 from left to right, with a cable exit at the bottom.	A horizontal oval housing with three rectangular cutouts labeled 2, 1, and 3 from left to right, with a cable exit at the bottom.

TABLE OF HOUSING SHAPE

<MALE> 3P Waterproof Type

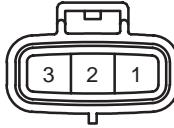
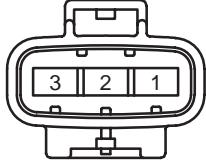
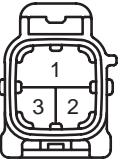
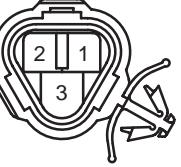
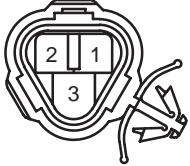
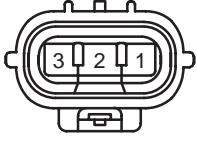
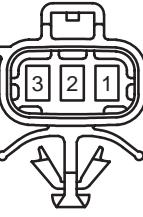
			
90980-10840	90980-10944	90980-11015	90980-11044
			
90980-11131	90980-11160	90980-11169	90980-11244
			
90980-11293	90980-11295	90980-11341	90980-11348
			
90980-11407	90980-11607	90980-11622	90980-12179

TABLE OF HOUSING SHAPE

<MALE> 4P Waterproof Type

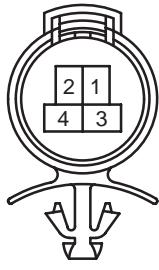
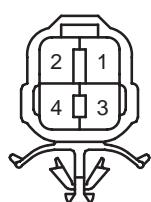
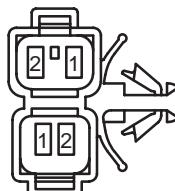
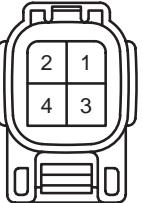
			
90980-10139 (Splash Proof)	90980-10202 (Splash Proof)	90980-10217 (Splash Proof)	90980-10475
			
90980-10510	90980-10590	90980-10646 (Splash Proof)	90980-10648
			
90980-10662	90980-10749	90980-10751	90980-10768
			
90980-10868	90980-10941	90980-10989	90980-11027
			
90980-11035	90980-11076	90980-11122	90980-11138

TABLE OF HOUSING SHAPE

<MALE> 4P Waterproof Type

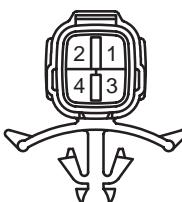
 90980-11177	 90980-11268	 90980-11287	 90980-11291
 90980-11929			

TABLE OF HOUSING SHAPE

<MALE> 5P Waterproof Type

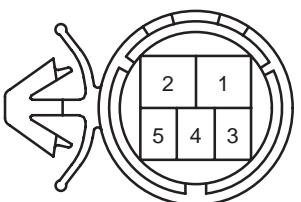
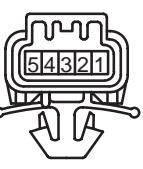
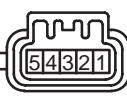
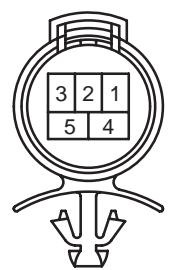
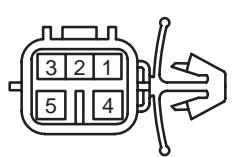
			
90980-10161 (Splash Proof)	90980-10392 (Splash Proof)	90980-10557	90980-10570
			
90980-10647 (Splash Proof)	90980-10709	90980-10945	90980-11021
			
90980-11078	90980-11181	90980-11412	90980-11598

TABLE OF HOUSING SHAPE

<MALE> 6P Waterproof Type

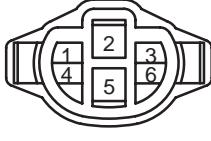
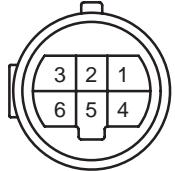
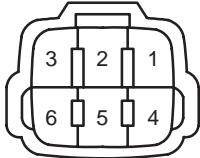
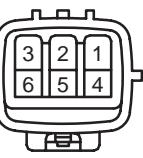
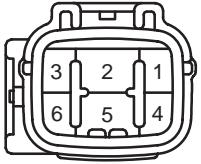
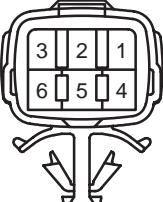
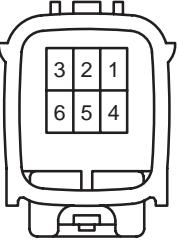
			
90980-10096 (Splash Proof)	90980-10194 (Splash Proof)	90980-10477	90980-10596
			
90980-10984	90980-10987	90980-11033	90980-11193
			
90980-11196	90980-11267	90980-11289	90980-12256
			
90980-12381			

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<MALE> 7P Waterproof Type

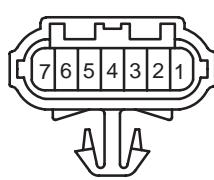
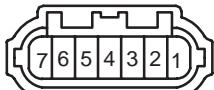
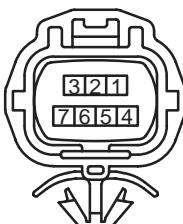
			

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<MALE> 8P Waterproof Type

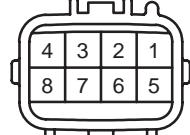
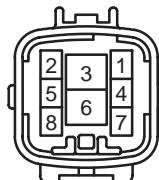
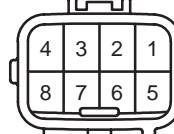
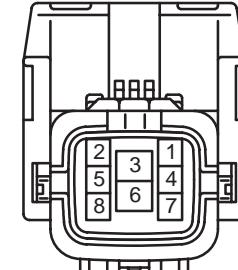
		
90980-10204 (Splash Proof)	90980-10890	90980-10894
		
90980-10896	90980-11241	90980-11460
		
90980-12519		

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<MALE> 9P Waterproof Type

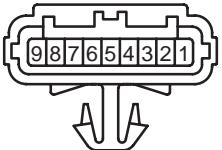
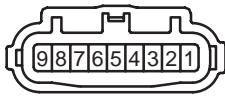
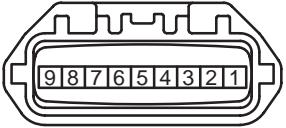
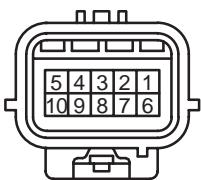
 90980-10379 (Splash Proof)	 90980-10677	 90980-10775 (Splash Proof)
 90980-10826	 90980-11191	

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<MALE> 10P Waterproof Type

90980-12379

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<MALE> 11P Waterproof Type

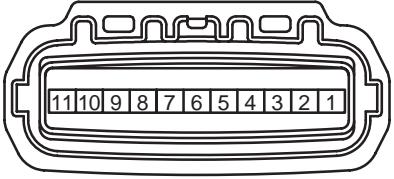
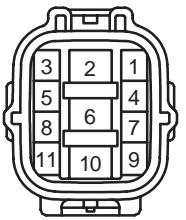
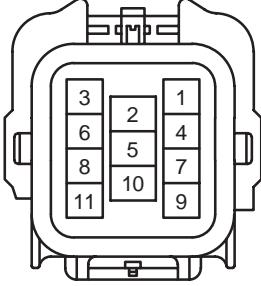
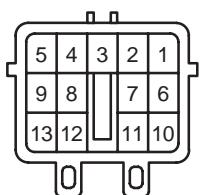
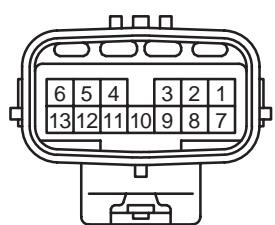
 90980-11173	 90980-11239	 90980-11256
 90980-11609		

TABLE OF HOUSING SHAPE

<MALE> 13P Waterproof Type



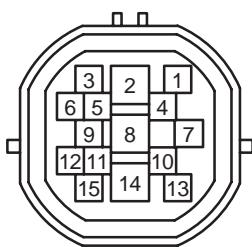
90980-10653



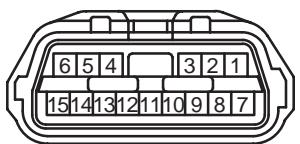
90980-12716

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<MALE> 15P Waterproof Type



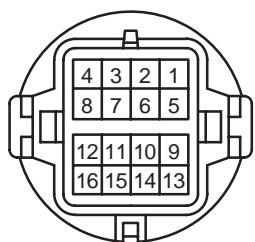
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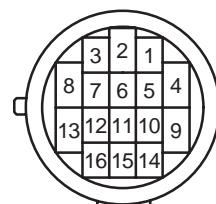
90980-11088

TABLE OF HOUSING SHAPE

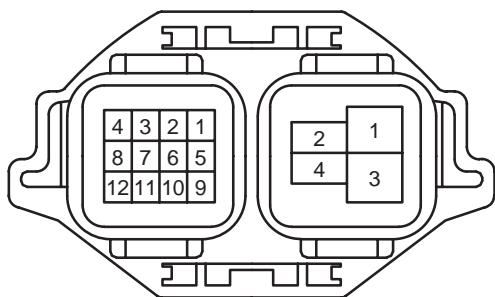
<MALE> 16P Waterproof Type



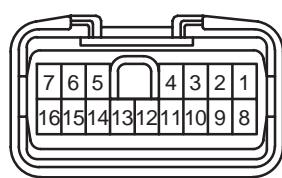
90980-10100
(Splash Proof)



90980-10287
(Splash Proof)

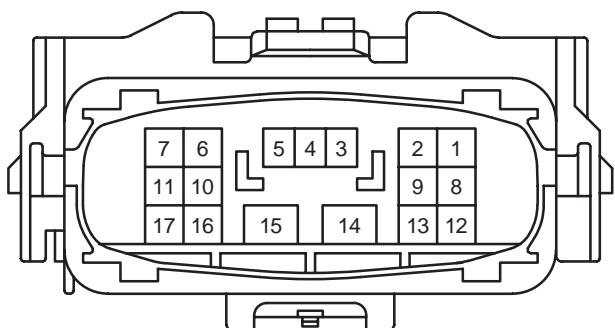


90980-10547



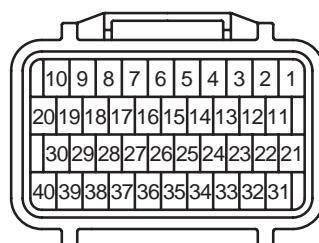
90980-11462

TABLE OF HOUSING SHAPE

<MALE> 17P Waterproof Type

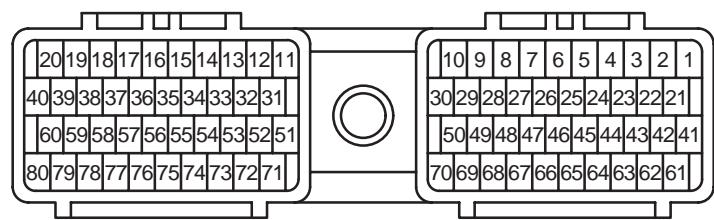
90980-11600

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<MALE> 40P Waterproof Type

90980-11342

TABLE OF HOUSING SHAPE

<MALE> 150P Waterproof Type

90980-11338

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<MALE> 1P Non-waterproof Type

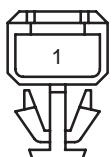
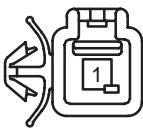
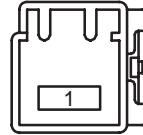
			
90980-10160	90980-10178 (90980-11741)	90980-10182	90980-10251
			
90980-10253	90980-10342	90980-10433	90980-10434
			
90980-10499	90980-10870 (90980-11737)	90980-10994	90980-11026
			
90980-11097 (90980-11767)	90980-11146	90980-11258	90980-11774

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<MALE> 2P Non-waterproof Type

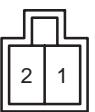
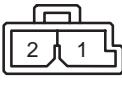
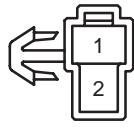
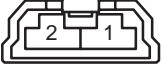
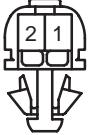
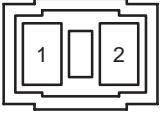
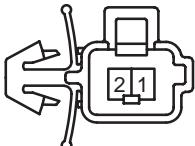
			
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90980-10297	90980-10305	90980-10344	90980-10346
			
90980-10354	90980-10356	90980-10424	90980-10437
			
90980-10620	90980-10687	90980-10700	90980-10824
			
90980-10833 (90980-11761)	90980-10859	90980-10905 (90980-11702) (90980-11735)	90980-10915

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<MALE> 2P Non-waterproof Type

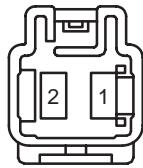
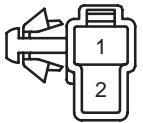
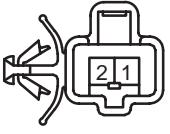
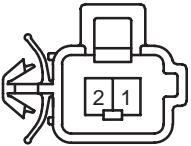
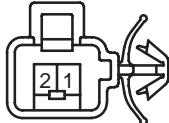
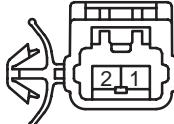
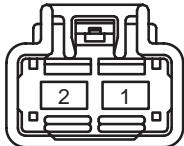
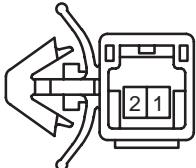
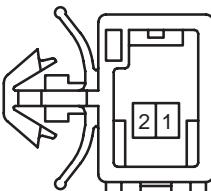
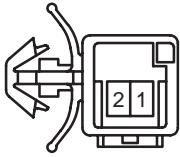
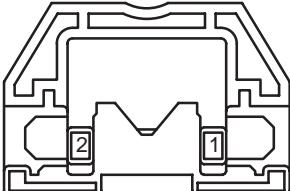
			
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90980-11093	90980-11159 (90980-11803)	90980-11211	90980-11299
			
90980-11300	90980-11305	90980-11367	90980-11368
			
90980-11395	90980-11655	90980-11917	90980-11933
			
90980-11967	90980-12029	90980-12062	90980-12322

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<MALE> 3P Non-waterproof Type

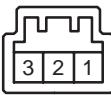
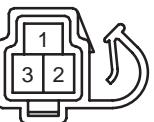
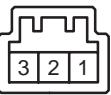
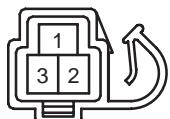
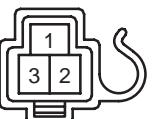
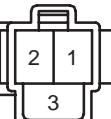
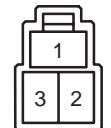
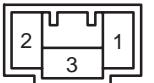
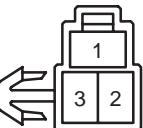
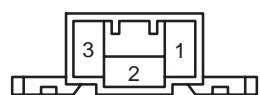
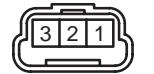
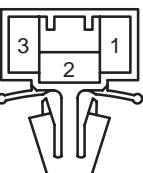
			
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90980-10180	90980-10186	90980-10187	90980-10188
			
90980-10215	90980-10231	90980-10257	90980-10283
			
90980-10299	90980-10300	90980-10364	90980-10410
			
90980-10554	90980-10573	90980-10907 (90980-11763)	90980-10979

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<MALE> 3P Non-waterproof Type

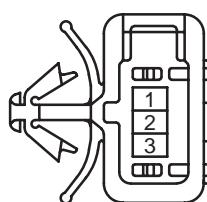
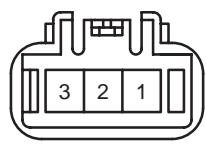
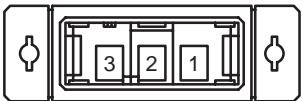
			
90980-11052	90980-11298	90980-11385	90980-11470
			
90980-11484	90980-11489	90980-11936	90980-12196

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<MALE> 4P Non-waterproof Type

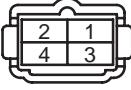
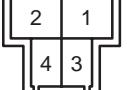
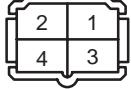
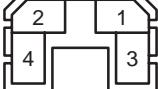
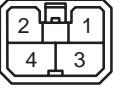
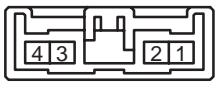
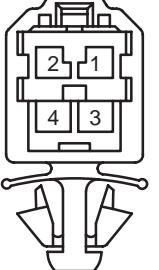
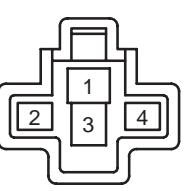
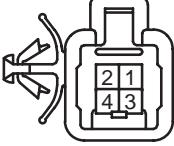
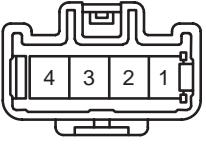
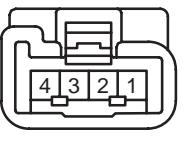
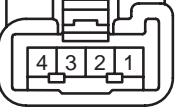
			
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90980-10219	90980-10237	90980-10259	90980-10306
			
90980-10399	90980-10466	90980-10502	90980-10503
			 90980-10794 (90980-11726) (90980-11765)
90980-10600	90980-10758	90980-10791	
			
90980-10858 (90980-11801)	90980-10866	90980-11012 (90980-11812)	90980-11100

TABLE OF HOUSING SHAPE

<MALE> 4P Non-waterproof Type

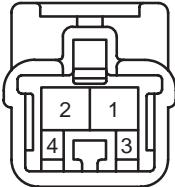
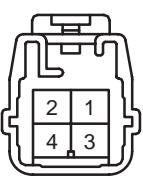
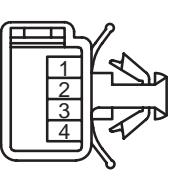
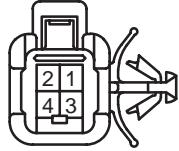
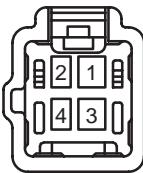
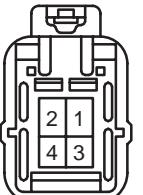
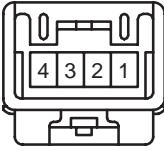
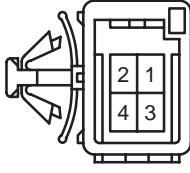
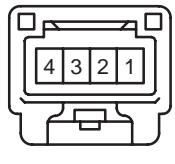
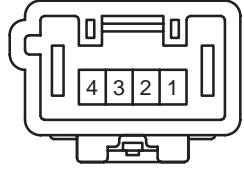
			
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90980-11399 (90980-11779) (90980-11811)	90980-11605	90980-11878 (90980-11809)	90980-12123
			
90980-12212	90980-12247	90980-12732	

TABLE OF HOUSING SHAPE

<MALE> 5P Non-waterproof Type

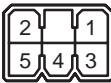
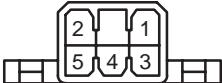
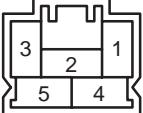
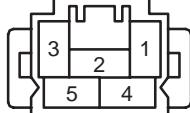
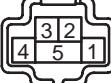
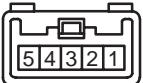
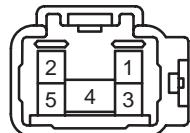
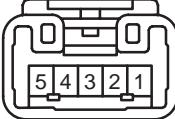
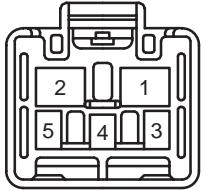
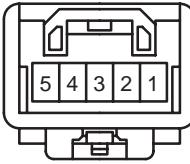
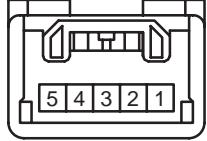
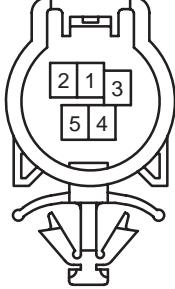
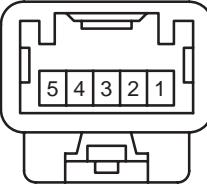
			
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90980-10518	90980-10519	90980-10762	90980-10985
			
90980-11085 (90980-11719) (90980-11843)	90980-11327	90980-11602	90980-11920
			
90980-12036	90980-12189	90980-12365	90980-12419

TABLE OF HOUSING SHAPE

<MALE> 6P Non-waterproof Type

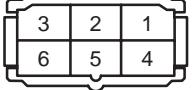
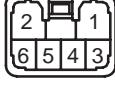
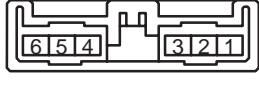
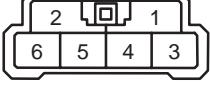
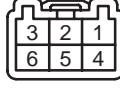
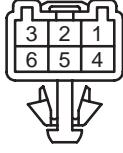
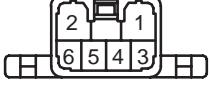
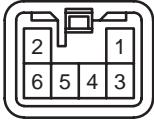
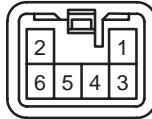
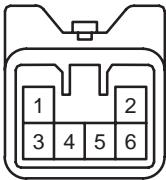
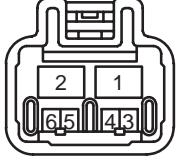
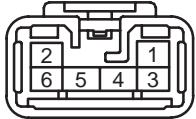
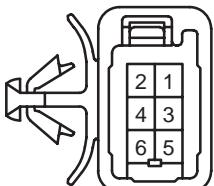
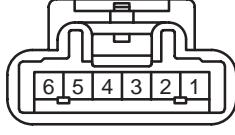
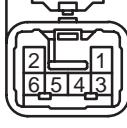
			
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90980-10602	90980-10603	90980-10641	90980-10694
			
90980-10745	90980-10796	90980-10909	90980-10975 (90980-11756)
			
90980-10998 (90980-11706)	90980-11010 (90980-11729)	90980-11099	90980-11101

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<MALE> 6P Non-waterproof Type

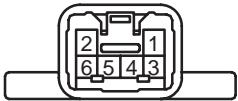
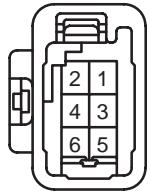
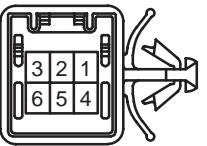
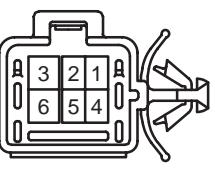
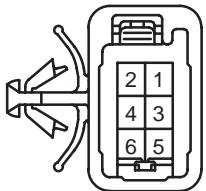
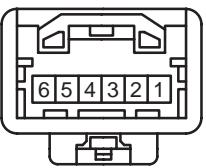
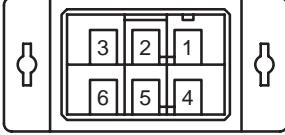
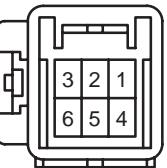
			
90980-11110	90980-11452	90980-11487	90980-11492
			
90980-11587 (90980-11814)	90980-12004	90980-12198	90980-12204

TABLE OF HOUSING SHAPE

<MALE> 7P Non-waterproof Type

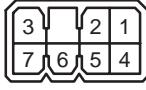
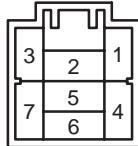
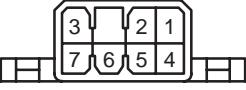
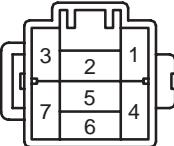
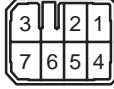
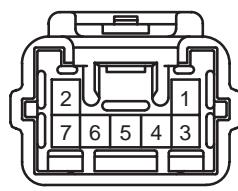
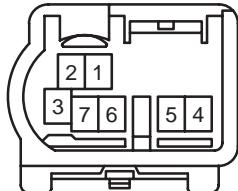
			
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	 90980-11528 (90980-11739)	 90980-12059	

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<MALE> 8P Non-waterproof Type

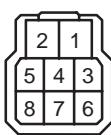
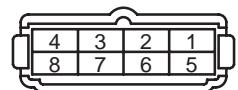
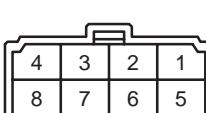
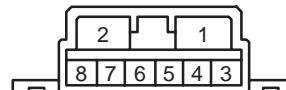
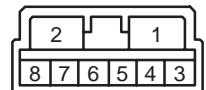
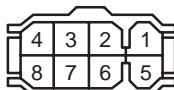
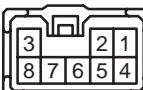
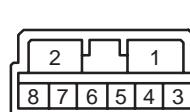
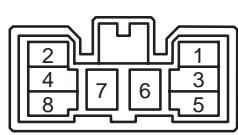
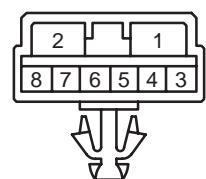
		
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90980-10208	90980-10210	90980-10225
		
90980-10272	90980-10279	90980-10360
		
90980-10383	90980-10403	90980-10411

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<MALE> 8P Non-waterproof Type

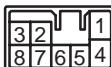
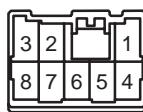
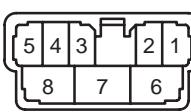
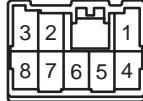
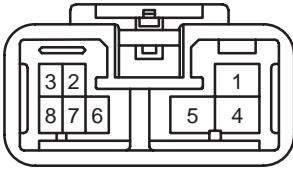
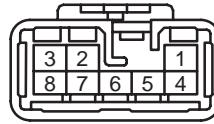
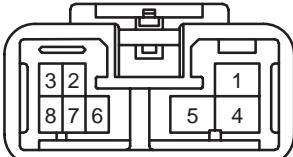
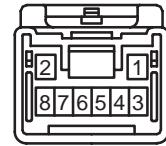
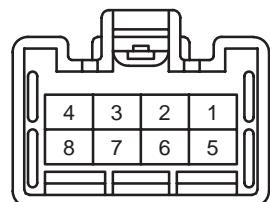
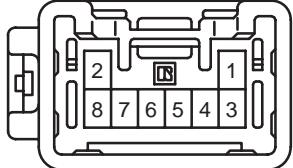
		
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90980-10546	90980-10798 (90980-12480) (90980-12534)	90980-10876
		
90980-10963	90980-11353	90980-11438
		
90980-11532	90980-11551	90980-11582

TABLE OF HOUSING SHAPE

<MALE> 8P Non-waterproof Type

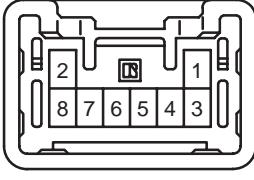
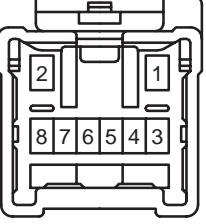
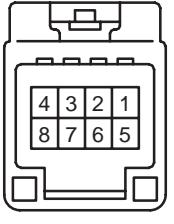
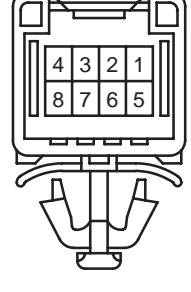
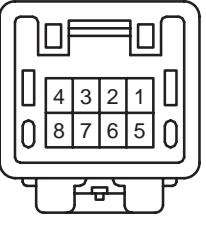
		
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90980-12364	90980-12734	

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<MALE> 9P Non-waterproof Type

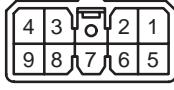
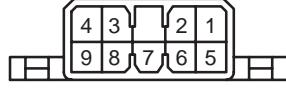
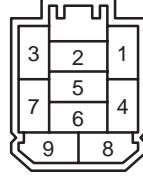
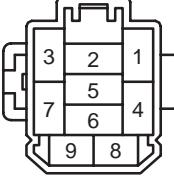
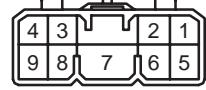
		
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90980-10278	90980-10317	90980-11534 (90980-11709) (90980-12533)

TABLE OF HOUSING SHAPE

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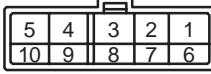
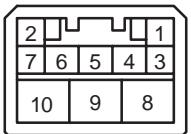
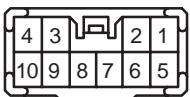
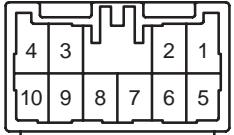
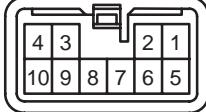
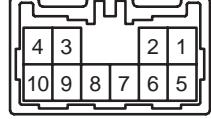
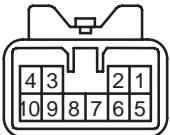
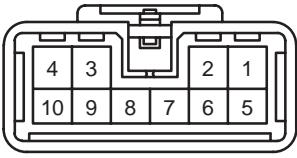
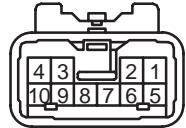
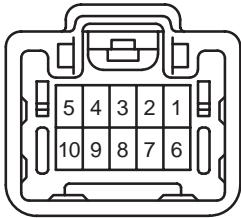
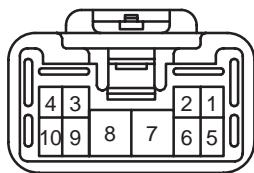
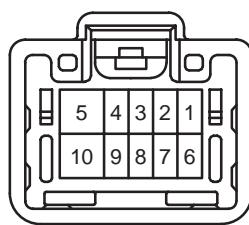
		
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90980-10427	90980-10468	90980-10693
		
90980-10719	90980-10800 (90980-11757)	90980-10861
		
90980-11102	90980-11536 (90980-11823) (90980-12481)	90980-11580

TABLE OF HOUSING SHAPE

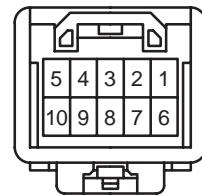
<MALE> 10P Non-waterproof Type



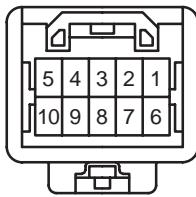
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(90980-11849)



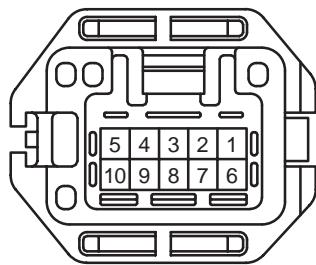
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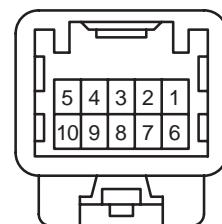
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90980-12023



90980-12249



90980-12367
(90980-12542)

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<MALE> 11P Non-waterproof Type

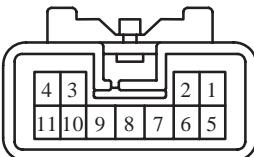
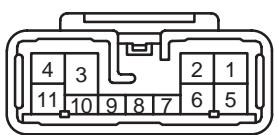
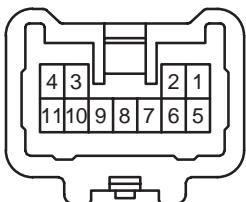
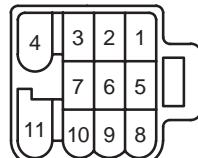
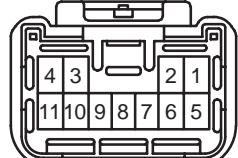
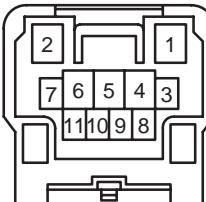
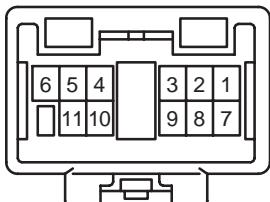
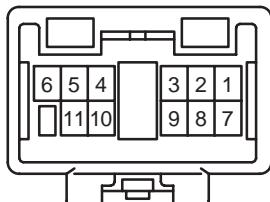
		
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90980-10531	90980-11538 (90980-11711)	90980-12002
		
90980-12250	90980-12610	

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<MALE> 12P Non-waterproof Type

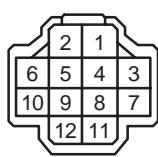
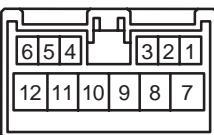
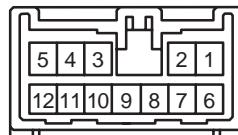
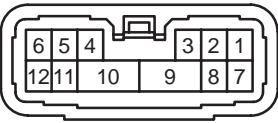
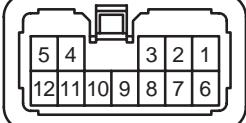
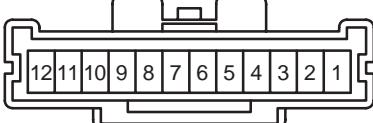
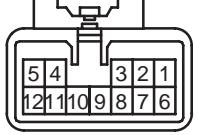
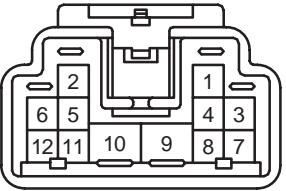
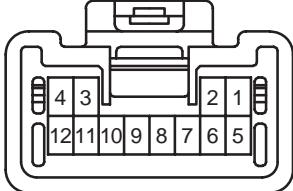
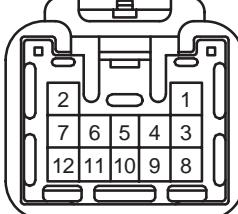
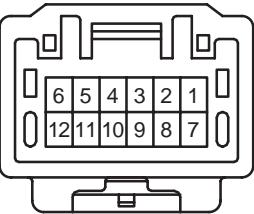
		
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90980-10415	90980-10513	90980-10564
		
90980-10802	90980-10878	90980-11500
		
90980-11530	90980-11692	90980-12736

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<MALE> 13P Non-waterproof Type

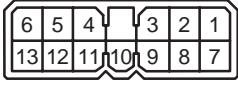
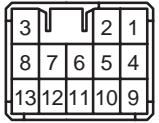
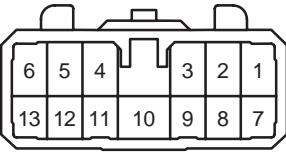
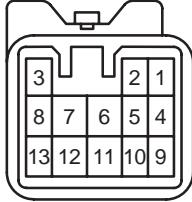
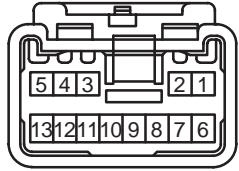
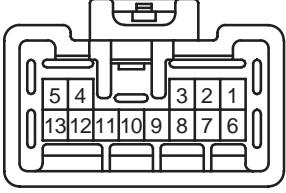
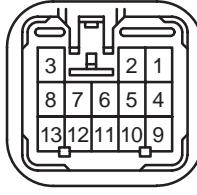
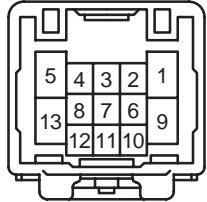
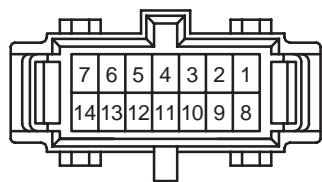
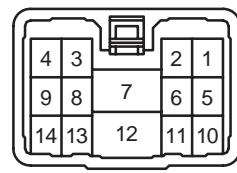
		
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		 90980-11541 (90980-11694) (90980-11713) (90980-12482) (90980-12531)
90980-10804	90980-11393	
		
90980-11568	90980-12499	

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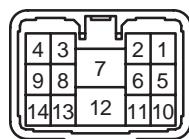
<MALE> 14P Non-waterproof Type



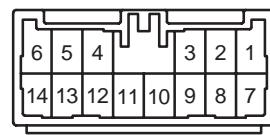
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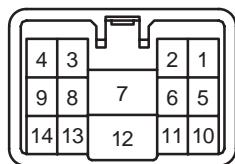
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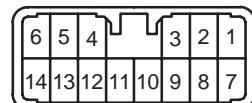
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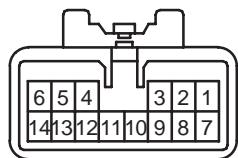
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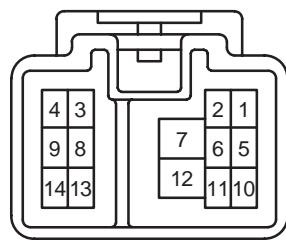
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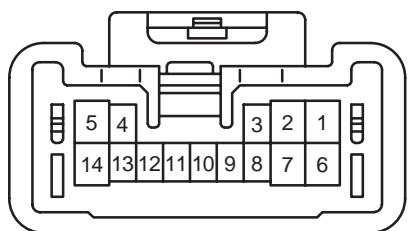
<MALE> 14P Non-waterproof Type



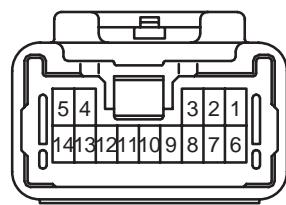
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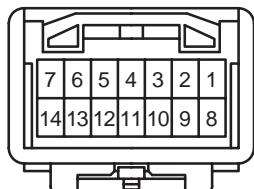
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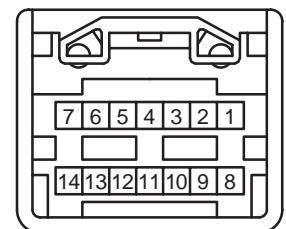
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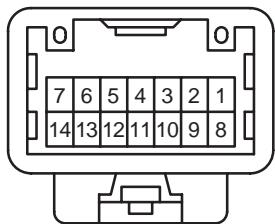


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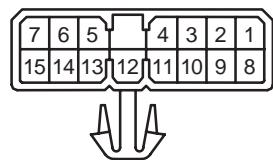
TABLE OF HOUSING SHAPE

<MALE> 14P Non-waterproof Type

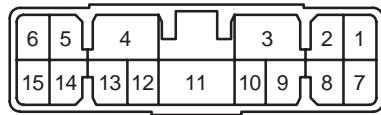
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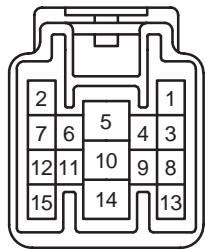
<MALE> 15P Non-waterproof Type



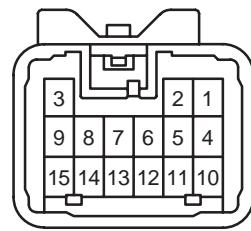
90980-10461



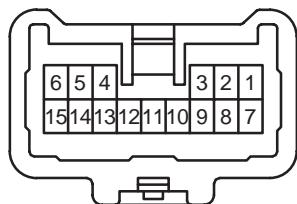
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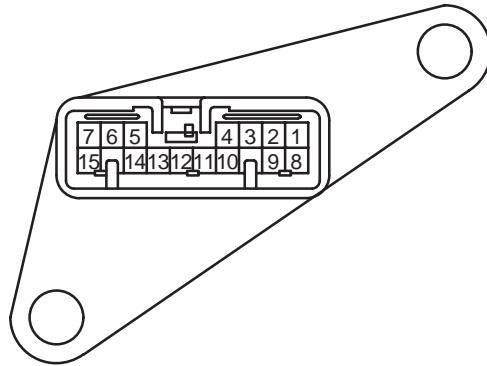
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90980-10827

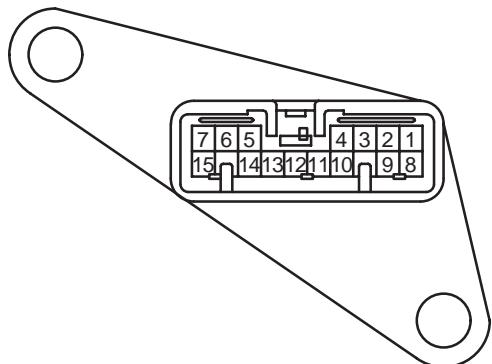


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90980-11370

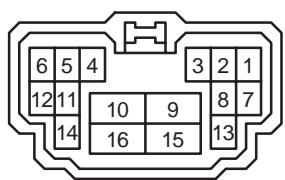
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<MALE> 15P Non-waterproof Type

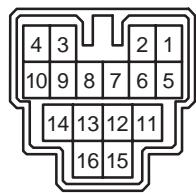
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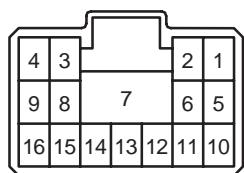
<MALE> 16P Non-waterproof Type



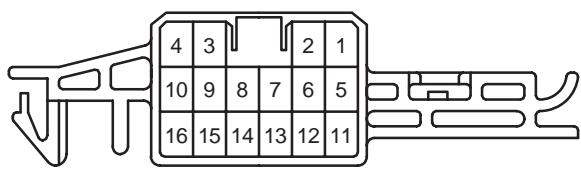
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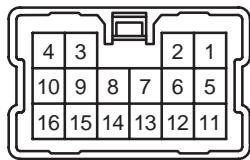
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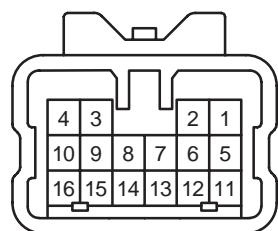
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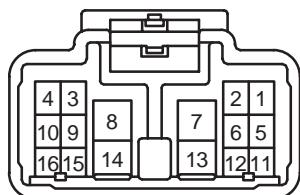
90980-10560



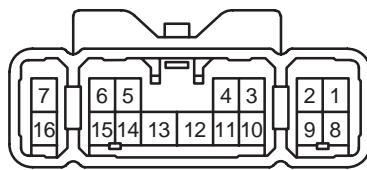
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TABLE OF HOUSING SHAPE

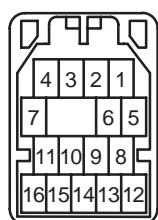
<MALE> 16P Non-waterproof Type



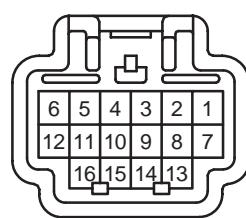
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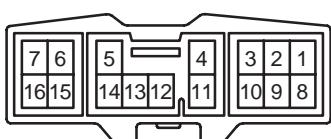
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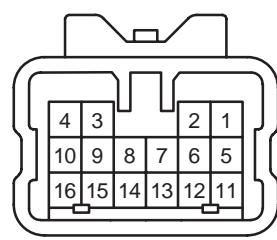
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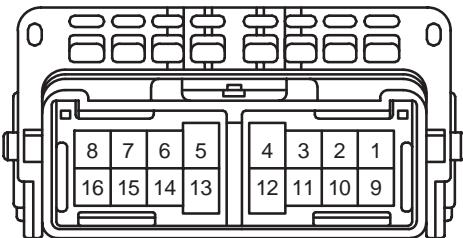
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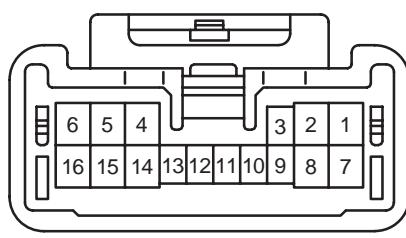
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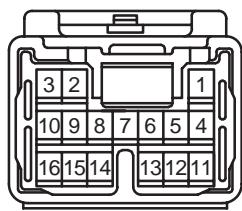
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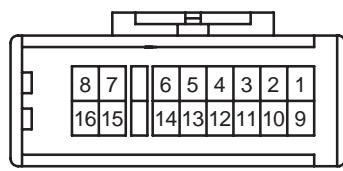
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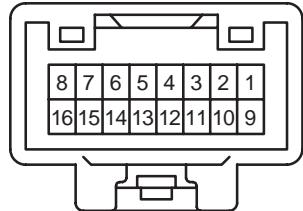
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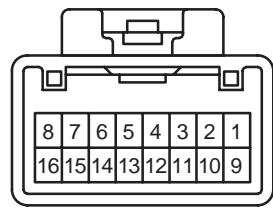
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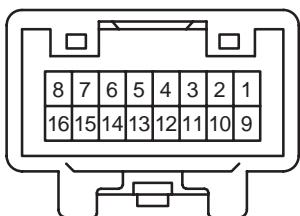


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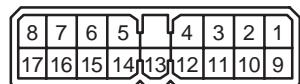
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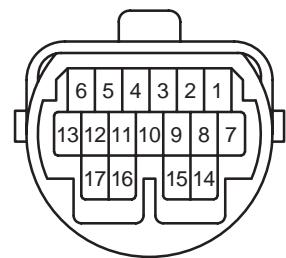
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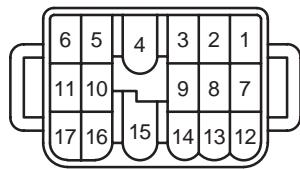
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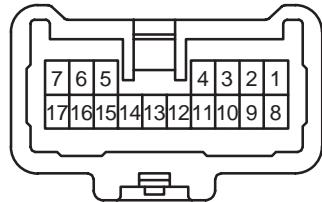
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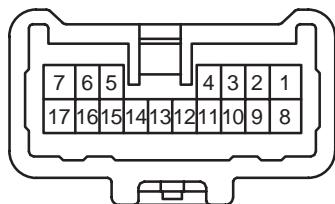
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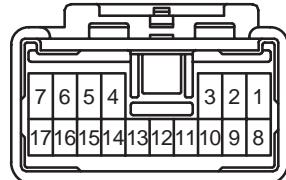
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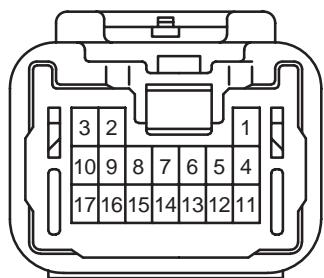
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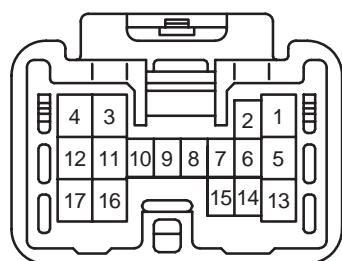
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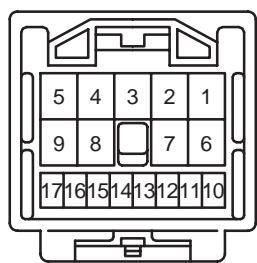
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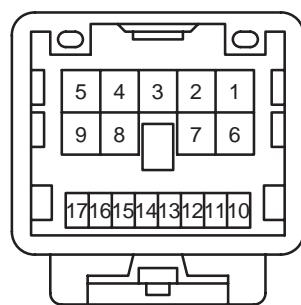
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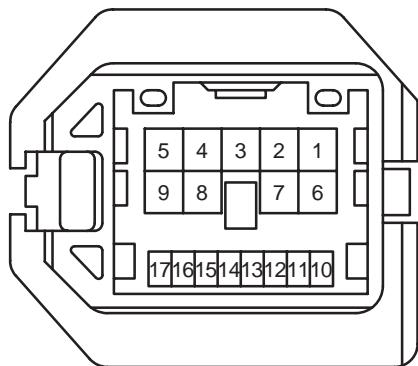
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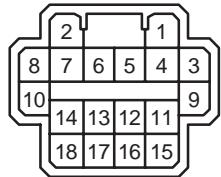
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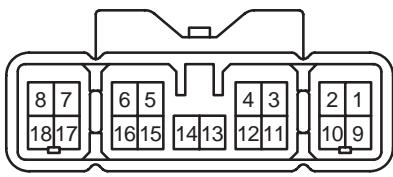
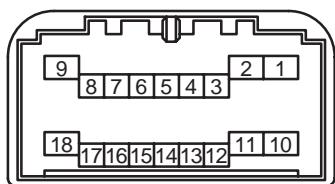
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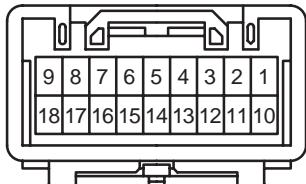
<MALE> 18P Non-waterproof Type



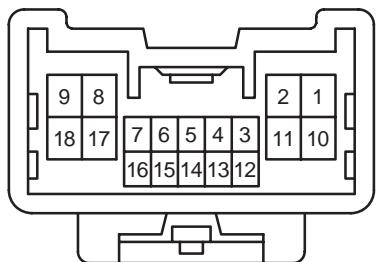
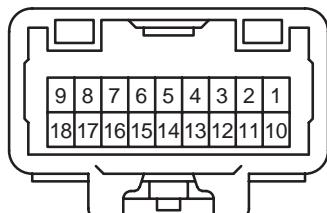
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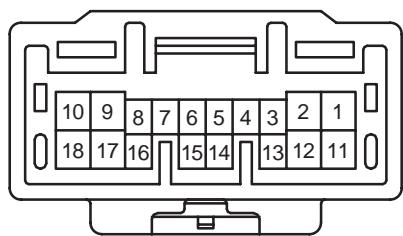
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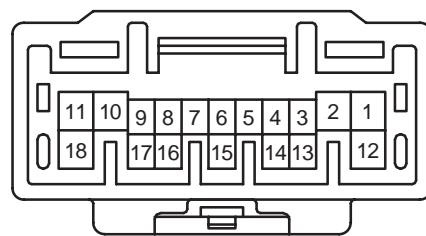
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TABLE OF HOUSING SHAPE

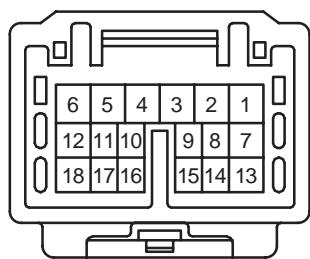
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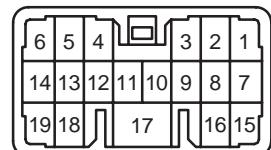
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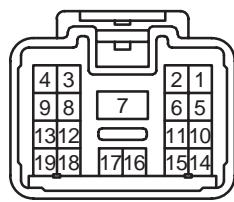
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TABLE OF HOUSING SHAPE

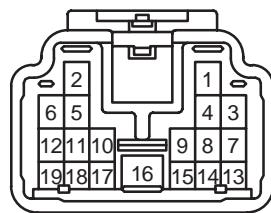
<MALE> 19P Non-waterproof Type



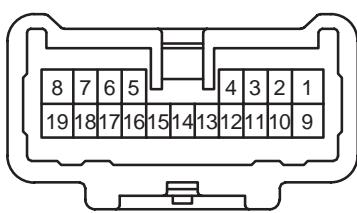
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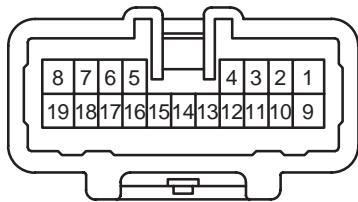
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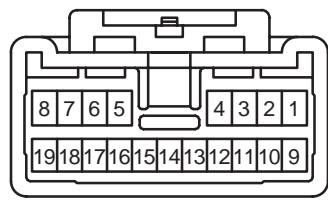
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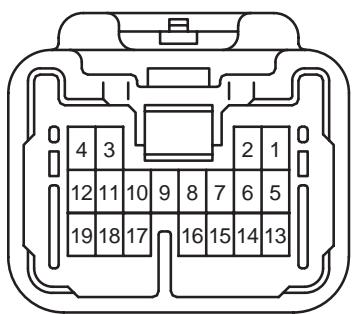


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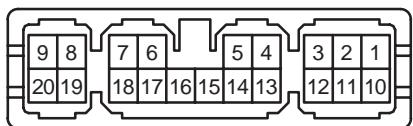
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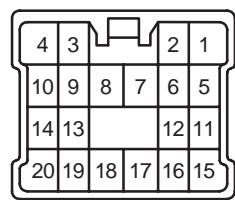
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TABLE OF HOUSING SHAPE

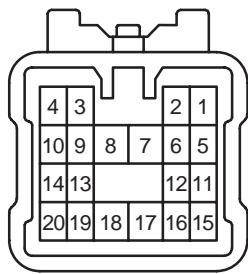
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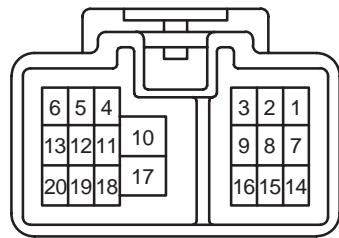
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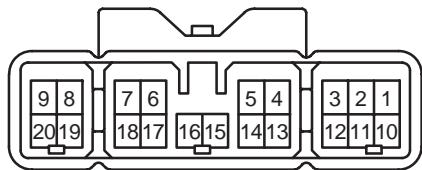
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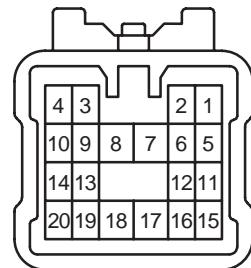
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90980-10816



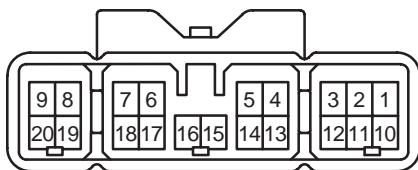
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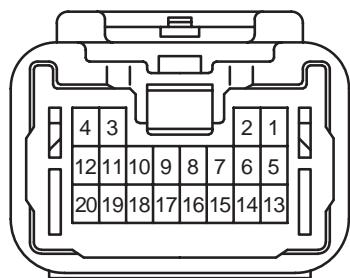
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TABLE OF HOUSING SHAPE

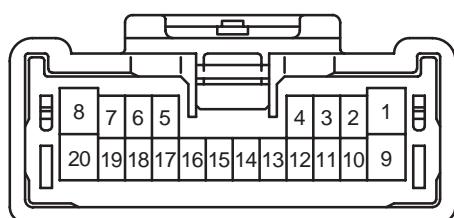
<MALE> 20P Non-waterproof Type



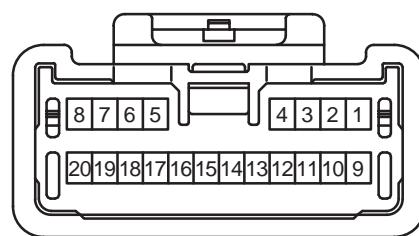
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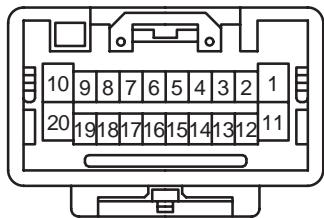
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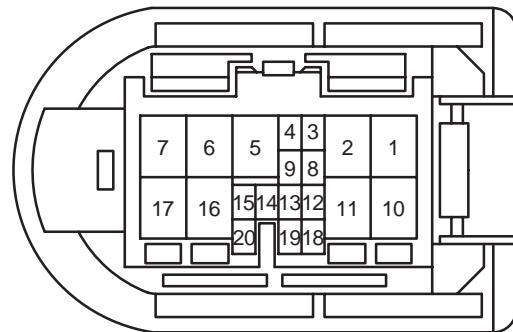
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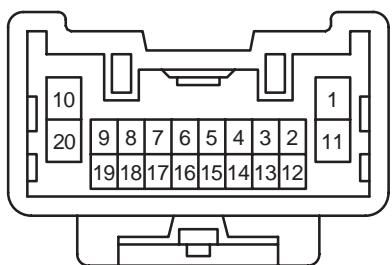


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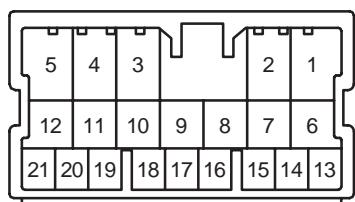
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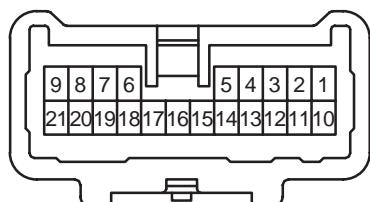
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TABLE OF HOUSING SHAPE

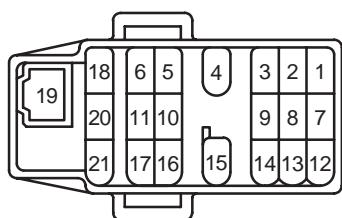
<MALE> 21P Non-waterproof Type



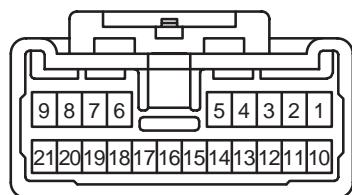
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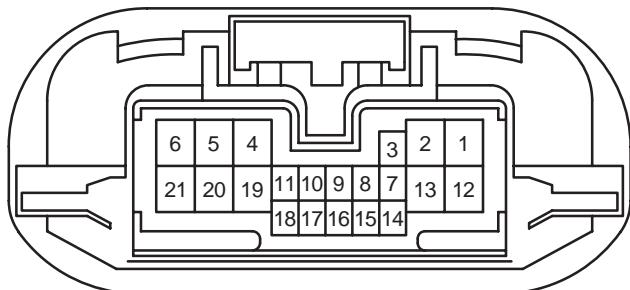
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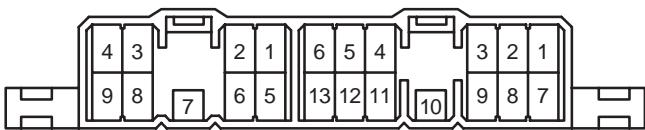
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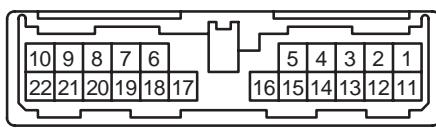
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TABLE OF HOUSING SHAPE

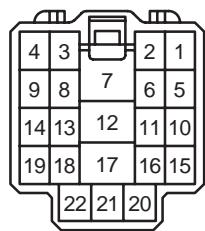
<MALE> 22P Non-waterproof Type



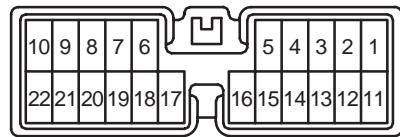
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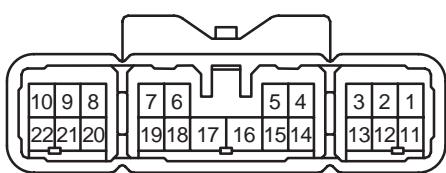
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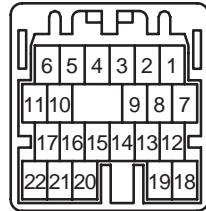
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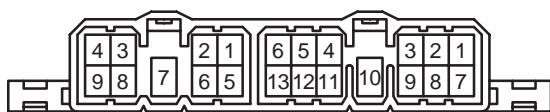
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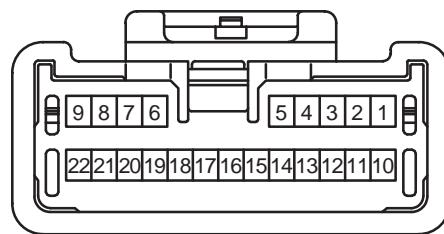
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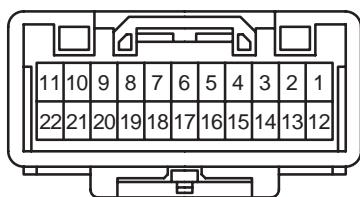
<MALE> 22P Non-waterproof Type



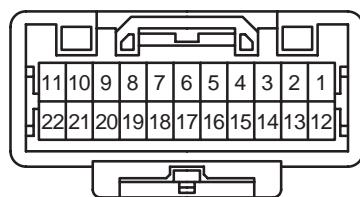
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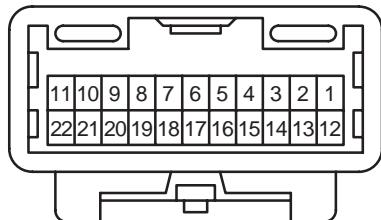
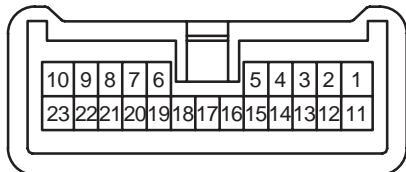
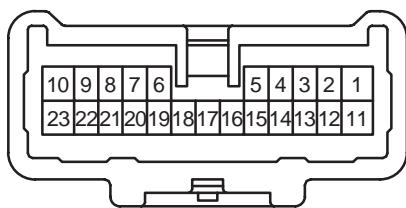
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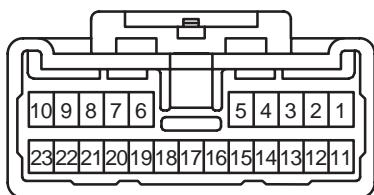
<MALE> 23P Non-waterproof Type



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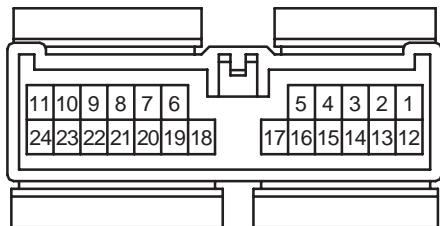
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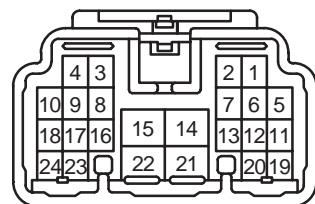
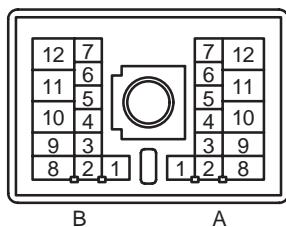
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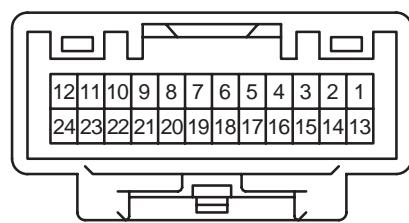
<MALE> 24P Non-waterproof Type



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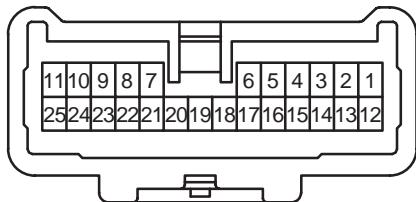
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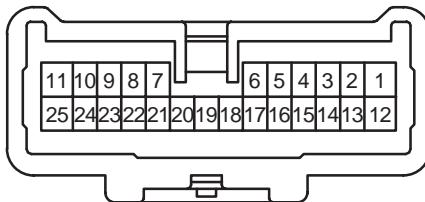
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TABLE OF HOUSING SHAPE

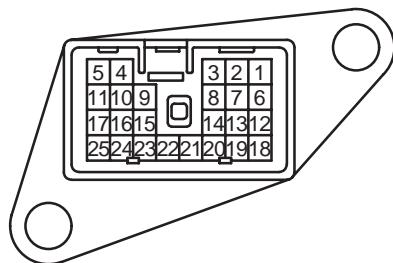
<MALE> 25P Non-waterproof Type



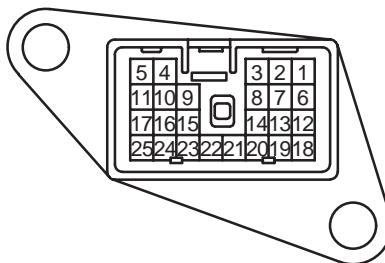
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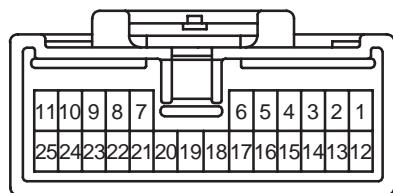
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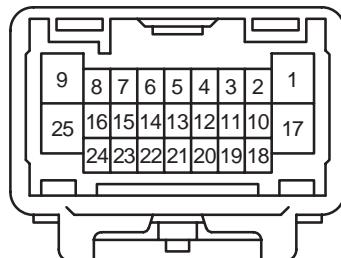
90980-11373



90980-11374

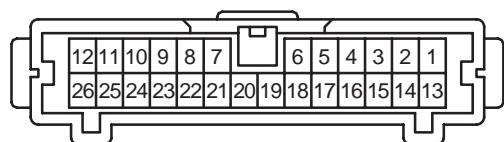


90980-11403

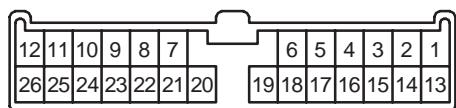


90980-12413

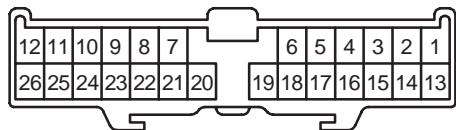
TABLE OF HOUSING SHAPE

<MALE> 26P Non-waterproof Type

90980-10315

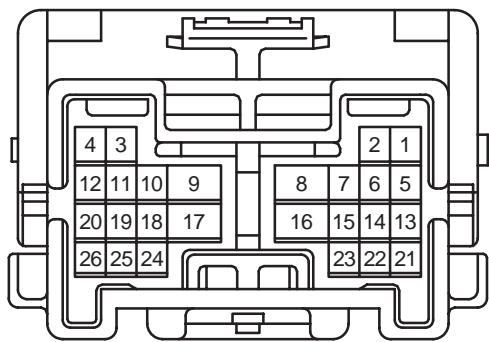


90980-10599

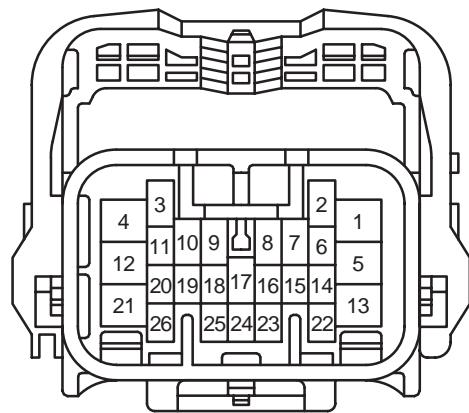


90980-10750

TABLE OF HOUSING SHAPE

<MALE> 26P Non-waterproof Type

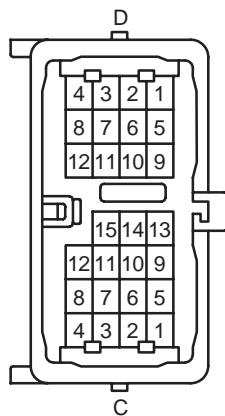
90980-11610



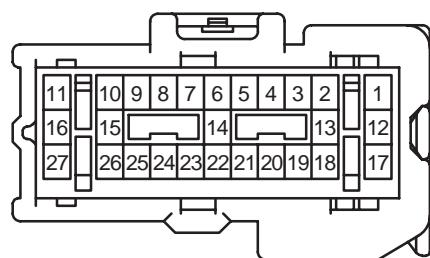
90980-11631

TABLE OF HOUSING SHAPE

<MALE> 27P Non-waterproof Type

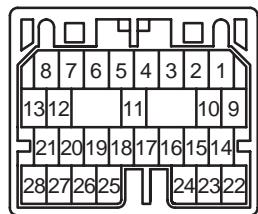


90980-11357

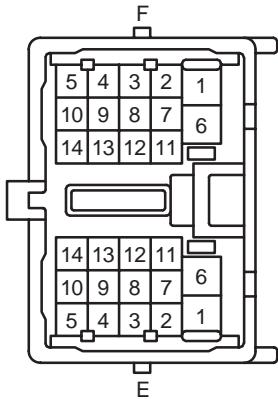


90980-11669

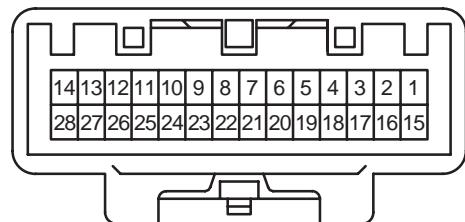
TABLE OF HOUSING SHAPE

<MALE> 28P Non-waterproof Type

90980-11343

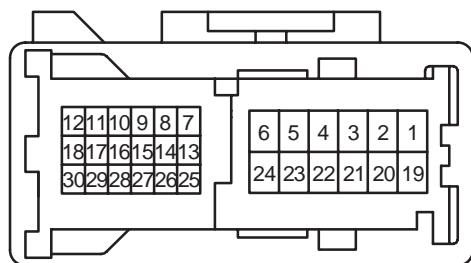


90980-11356



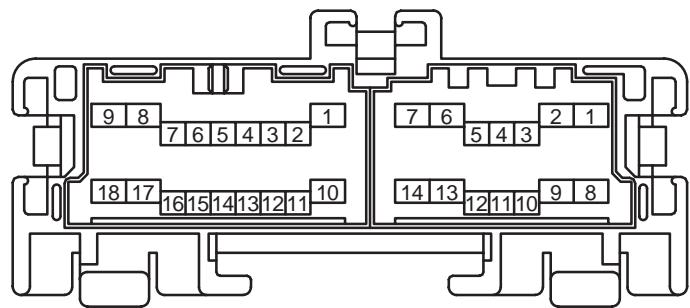
90980-12409

TABLE OF HOUSING SHAPE

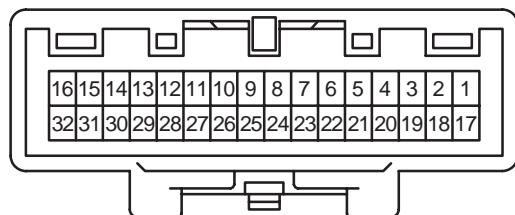
<MALE> 30P Non-waterproof Type

90980-12516

TABLE OF HOUSING SHAPE

<MALE> 32P Non-waterproof Type

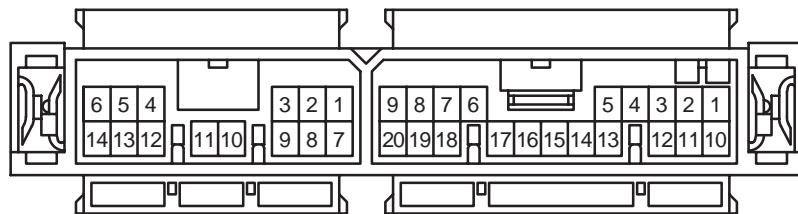
90980-11222



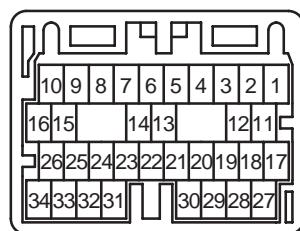
90980-12262

TABLE OF HOUSING SHAPE

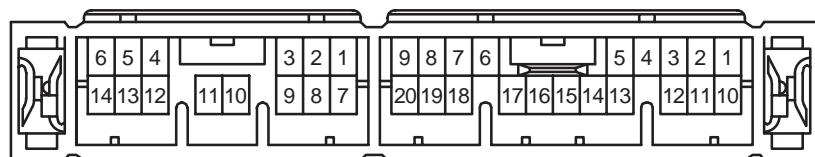
<MALE> 34P Non-waterproof Type



90980-10606
(90980-10722)

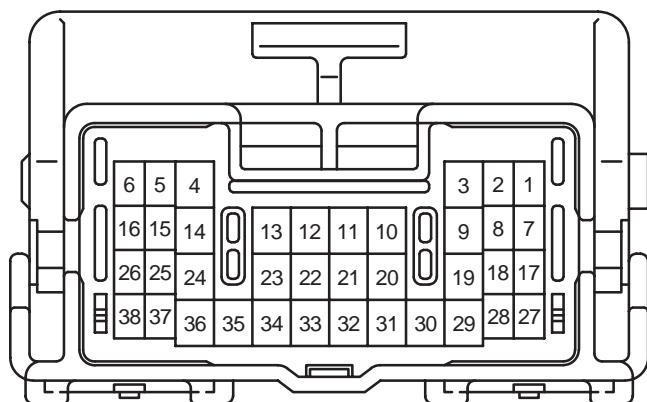


90980-11346



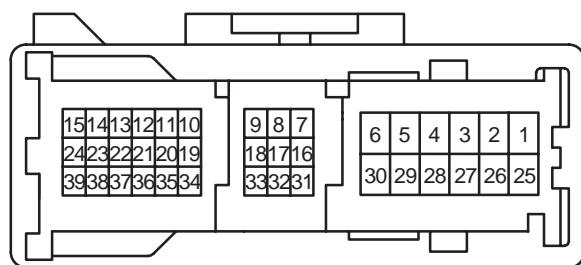
90980-11549

TABLE OF HOUSING SHAPE

<MALE> 38P Non-waterproof Type

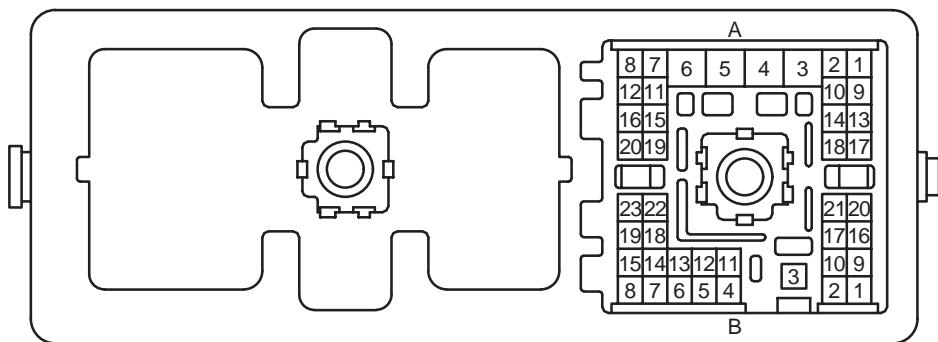
90980-11554

TABLE OF HOUSING SHAPE

<MALE> 39P Non-waterproof Type

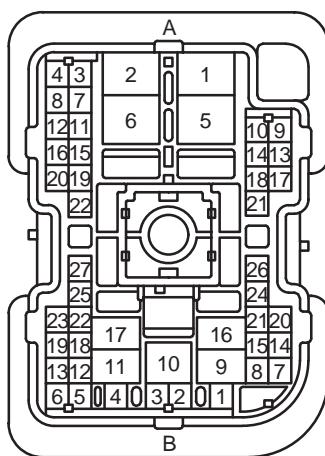
90980-12515

TABLE OF HOUSING SHAPE

<MALE> 43P Non-waterproof Type

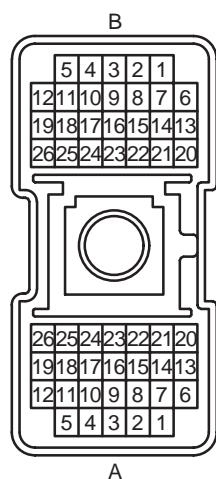
90980-11355

TABLE OF HOUSING SHAPE

<MALE> 49P Non-waterproof Type

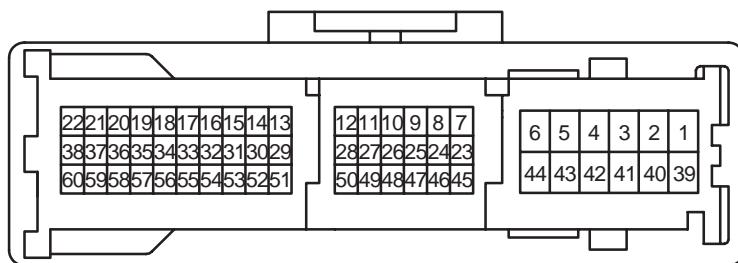
90980-11430

TABLE OF HOUSING SHAPE

<MALE> 52P Non-waterproof Type

90980-10951

TABLE OF HOUSING SHAPE

<MALE> 60P Non-waterproof Type

90980-12514

memo

HOUSING PART NUMBER LIST

HINT:

- The housing, which have more than two or more types mentioned at the terminal items, is hybrid type housing.
- The availability of the supply parts is effective as of the end of February, 2007.

NOTES:

The following marks are used in the table.

O	Supply parts are available
X	Supply parts are not available
M	Male
F	Female
S	Sealed (Waterproof Type)
U	Unsealed (Non-waterproof Type)
*	Gold-plated repair wire is available
Y	Yellow
L	Blue
R	Red
PCB	Printed Circuit Board
IDC	Insulation Displacement Connector

E

HOUSING PART NUMBER LIST

List of equivalent for the gold and tin-plated repair wire

Repair Wire Part No.	
Tin-plated (Sn)	Gold-plated (Au)
82998-12160 (2.3.M.U)	-24050
-12190 (1.8.F.U)	-12300
-12260 (2.3.M.S)	-24070
-12270 (2.3.F.S)	-24080
-12310 (1.0.F.U)	-12320
-12330 (2.3II.M.U)	-12350
-12340 (2.3II.F.U)	-12360
-12430 (2.3II.M.S)	-12450
-12440 (2.3II.F.S)	-12460
-12670 (1.0III.M.U)	-12680
-12690 (1.0III.F.U)	-12880
-12720 (1.0III.F.S)	-12730
-12750 (0.64.F.U)	-12760
-12790 (2.3II.F.S)	-12780
-12830 (1.0JII.F.U)	-12850
-12870 (0.64III.F.U)	-12860
-24020 (1.0II.F.U)	-24110
-24090 (1.8II.M.U)	-24130
-24230 (0.64.M.U)	-24240
-24250 (0.64.F.S)	-24260
-24270 (0.64II.M.U)	-24280
-24290 (0.64II.F.U)	-24300
-24310 (1.0J.F.U)	-24320
-24360 (0.64.M.S)	-24370

E

* Example : 82998-24050 indicates the gold-plated 82998-12160.

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10030	X	TODC	M	17	U	12080	–	Y	
10032	X	TODC	M	13	U	12080	–	Y	
10038	X	TODC	M	2	U	12080	–	Y	
10039	O	TODC	F	2	U	12090	–	Y	
10040	O	TODC	M	5	U	12080	–	Y	
10041	X	TODC	F	5	U	12090	–	Y	
10042	X	TODC	M	7	U	12080	–	Y	
10043	O	TODC	F	7	U	12090	–	Y	
10055	O	TODC	M	3	U	12080	–	Y	
10056	O	TODC	F	3	U	12090	–	Y	
10064	O	MIC	F	21	U	12120	–	Y	
10066	X	TODC	F	15	U	12090	–	Y	
10069	O	SL	F	2	S	–	–	–	
10087	O	TODC	M	9	U	12080	–	Y	
10088	X	6.3	F	3	U	–	–	–	Splash Proof, Terminal Lance Type1
10091	O	6.3	M	2	U	–	–	–	Splash Proof, Terminal Lance
10092	O	6.3	F	2	U	–	–	–	Splash Proof, Terminal Lance Type1
10093	O	6.3	M	3	U	–	–	–	Splash Proof, Terminal Lance
10096	X	TODC	M	6	U	12080	–	Y	Splash Proof
10097	O	TODC	F	6	U	12090	–	Y	Splash Proof
10100	X	TODC	M	16	U	12080	–	Y	Splash Proof
10101	X	TODC	F	16	U	12090	–	Y	Splash Proof
10104	X	6.3	M	4	U	–	–	–	Terminal Lance
10105	X	6.3	F	4	U	–	–	–	Terminal Lance Type1
10108	X	SL	F	2	S	–	–	–	
10109	X	SL	F	2	S	–	–	–	
10110	X	6.3	F	3	U	–	–	–	Splash Proof, Terminal Lance Type1
10111	X	FPC	F	3	U	–	–	–	
10112	X	FPC	F	8	U	–	–	–	
10113	X	FPC	F	8	U	–	–	–	
10114	O	7.7	M	1	U	12010	–	–	Splash Proof, Terminal Lance
10115	O	7.7	F	1	U	12020	–	–	Splash Proof, Terminal Lance

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10116	O	6.3	F	2	U	82998– –	82998– –	–	Splash Proof, Terminal Lance Type1
10117	O	TODC	M	5	U	12080	–	Y	
10118	O	7.7	F	3	U	12020	–	–	Terminal Lance
10119	X	FPC	F	8	U	–	–	–	
10121	O	TODC	F	2	U	12090	–	Y	
10122	X	7.7	M	2	U	12010	–	–	Splash Proof, Terminal Lance
10123	O	7.7	F	2	U	12020	–	–	Splash Proof, Terminal Lance
10124	X	6.3	F	2	U	12060	12580	Y	Housing Lance Type1
10125	X	TODC	M	1	U	12080	–	Y	Splash Proof
10126	O	TODC	M	4	U	12080	–	Y	
10127	O	TODC	F	4	U	12090	–	Y	
10132	O	LAC	F	13	U	12110	–	Y	
10133	O	LAC	F	9	U	12110	–	Y	
10134	X	6.3	M	6	U	–	–	–	Terminal Lance
10136	X	LAC	F	13	U	12110	–	Y	
10137	X	LAC	F	9	U	12110	–	Y	
10139	O	6.3	M	4	U	–	–	–	Splash Proof, Terminal Lance
10140	X	6.3	F	4	U	–	–	–	Splash Proof, Terminal Lance Type1
10141	X	SL	F	2	S	–	–	–	
10142	O	6.3	F	4	U	–	–	–	Terminal Lance Type1
10143	X	FPC	F	3	U	–	–	–	
10144	X	6.3	M	4	U	–	–	–	Terminal Lance
10145	X	6.3 7.7	M	2 1	U	– 12010	– –	–	Terminal Lance
10146	X	6.3 7.7	F	2 1	U	– 12020	– –	–	Terminal Lance Type1 Terminal Lance
10147	X	TODC	M	8	U	12080	–	Y	
10148	X	TODC	F	8	U	12090	–	Y	
10149	O	TODC	M	12	U	12080	–	Y	
10150	X	TODC	F	12	U	12090	–	Y	
10152	O	MIC	F	9	U	12120	–	Y	
10153	O	2.3	F	12	U	12170	–	Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10154	X	6.3 7.7	M	2 1	U	82998– – 12010	82998– – –	– –	Terminal Lance
10156	O	6.3	M	2	U	–	–	–	Splash Proof, Terminal Lance, w/o Clamp
10157	O	6.3	F	2	U	–	–	–	Splash Proof, Terminal Lance Type1
10158	X	FPC	F	10	U	–	–	–	
10159	X	FPC	F	10	U	–	–	–	
10160	O	7.7	M	1	U	12010	–	–	Terminal Lance
10161	O	6.3	M	5	U	–	–	–	Splash Proof, Terminal Lance, w/o Clamp
10162	O	6.3	F	5	U	–	–	–	Splash Proof, Terminal Lance Type1
10163	O	TODC	M	3	U	12080	–	Y	
10164	X	TODC	F	3	U	12090	–	Y	
10165	O	7.7	F	1	U	12020	–	–	Terminal Lance
10168	X	6.3	F	2	U	–	–	–	Splash Proof, Terminal Lance Type1
		7.7		1		12020	–	–	Splash Proof, Terminal Lance
10169	X	6.3	M	8	U	–	–	–	Terminal Lance
10170	O	6.3	M	4	U	12050	–	Y	Housing Lance, w/o Clamp
10171	O	6.3	F	4	U	12060	12580	Y	Housing Lance Type1
10173	O	6.3	F	6	U	12060	12580	Y	Housing Lance Type1
10174	O	6.3	M	8	U	12050	–	Y	Housing Lance
10175	O	6.3	F	8	U	12060	12580	Y	Housing Lance Type1
10176	O	6.3	M	10	U	12050	–	Y	Housing Lance
10177	O	6.3	F	10	U	12060	12580	Y	Housing Lance Type1
10178	O	6.3	M	1	U	12050	–	Y	Housing Lance
10179	O	6.3	F	1	U	12060	12580	Y	Housing Lance Type1
10180	X	6.3	M	3	U	–	–	–	Terminal Lance
10181	X	6.3	F	3	U	–	–	–	Terminal Lance Type1
10182	O	TODC	M	1	U	12080	–	Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10183	O	TODC	F	1	U	82998– 12090	82998– –	Y	
10184	X	TODC	F	2	U	12090	–	Y	Splash Proof
10185	X	7.7	F	2	U	12020	–	–	Terminal Lance
10186	O	6.3 7.7	M	2 1	U	12050 12030	– –	Y –	Housing Lance, w/ Clamp Housing Lance Type1, w/ Clamp
10187	O	6.3 7.7	M	2 1	U	12050 12030	– –	Y –	Housing Lance, w/ Clamp Housing Lance Type1, w/ Clamp
10188	O	6.3 7.7	M	2 1	U	12050 12030	– –	Y –	Housing Lance Housing Lance Type1
10189	O	6.3 7.7	F	2 1	U	12060 12040	12580 –	Y –	Housing Lance Type1 Housing Lance
10190	O	LAC	M	3	U	12100	–	Y	Splash Proof
10191	O	LAC	F	3	U	12110	–	Y	Splash Proof
10192	O	LAC	M	2	U	12100	–	Y	Splash Proof
10193	O	LAC	F	2	U	12110	–	Y	Splash Proof
10194	O	TODC	M	6	U	12080	–	Y	Splash Proof
10195	O	TODC	F	6	U	12090	–	Y	Splash Proof
10196	X	6.3	F	4	U	12060	12580	Y	Housing Lance Type1
10197	O	TODC	F	1	U	12090	–	Y	Splash Proof
10198	X	6.3 7.7	M	2 1	U	12050 12030	– –	Y –	Splash Proof, Housing Lance, w/ Clamp Splash Proof, Housing Lance Type1, w/ Clamp
10199	O	6.3 7.7	F	2 1	U	– 12020	– –	– –	Splash Proof, Terminal Lance, w/o Clamp
10200	O	LAC	M	1	U	12100	–	Y	Splash Proof
10201	O	LAC	F	1	U	12110	–	Y	Splash Proof
10202	O	LAC	M	4	U	12100	–	Y	Splash Proof
10203	O	LAC	F	4	U	12110	–	Y	Splash Proof
10204	O	LAC	M	8	U	12100	–	Y	Splash Proof
10205	O	LAC	F	8	U	12110	–	Y	Splash Proof

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–10207	X	TODC	F	21	U	82998–12090	82998––	Y	
10208	O	6.3 TODC	M	2 6	U	12050 12080	– –	Y Y	Housing Lance, w/ Flange w/ Flange
10209	O	6.3 TODC	F	2 6	U	12060 12090	12580 –	Y Y	Housing Lance Type1
10210	O	6.3 TODC	M	2 6	U	12050 12080	– –	Y Y	Housing Lance, w/o Clamp w/o Clamp
10213	O	6.3	M	2	U	12050	–	Y	Housing Lance, w/o Clamp
10214	O	6.3	F	2	U	12060	12580	Y	Housing Lance Type1
10215	O	6.3	M	3	U	12050	–	Y	Housing Lance, w/o Clamp
10216	O	6.3	F	3	U	12060	12580	Y	Housing Lance Type1
10217	O	TODC	M	4	U	12080	–	Y	Splash Proof
10218	O	TODC	F	4	U	12090	–	Y	Splash Proof
10219	O	6.3	M	4	U	12050	–	Y	Housing Lance
10220	O	6.3	F	4	U	–	–	–	Splash Proof, Terminal Lance Type1
10221	O	6.3	F	4	U	12060	12580	Y	Housing Lance Type1
10222	X	6.3	F	3	U	12060	12580	Y	Housing Lance Type1
10223	O	6.3	M	6	U	12050	–	Y	Housing Lance
10224	O	6.3	F	6	U	12060	12580	Y	Housing Lance Type1
10225	X	6.3	M	8	U	12050	–	Y	Housing Lance
10228	O	8.0	F	3	U	–	–	–	Terminal Lance Type1, Head Lamp
10229	X	6.3	F	1	U	–	–	–	Terminal Lance Type2
10231	O	6.3	M	3	U	12050	–	Y	Housing Lance
10232	O	6.3	F	3	U	12060	12580	Y	Housing Lance Type1
10233	X	6.3 TODC	M	2 23	U	12050 12080	– –	Y Y	Housing Lance
10235	O	6.3 7.7	M	2 1	U	– 12010	– –	– –	Splash Proof, Terminal Lance, w/ Clamp

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10236	X	6.3 7.7	F	2 1	U	82998– 12060 12040	82998– 12580 –	Y	Splash Proof, Housing Lance Type1
									Splash Proof, Housing Lance
10237	X	6.3	M	4	U	12050	–	Y	Housing Lance
10238	X	7.7	F	2	U	12040	–	–	Housing Lance
10239	O	6.3	F	3	U	12060	12580	Y	Splash Proof, Housing Lance Type1
10242	O	TODC	M	2	U	12080	–	Y	Splash Proof
10243	X	TODC	F	2	U	12090	–	Y	Splash Proof
10244	O	TODC	M	3	U	12080	–	Y	Splash Proof
10245	X	TODC	F	3	U	12090	–	Y	Splash Proof
10246	O	6.3	M	1	U	12050	–	Y	Splash Proof, Housing Lance, w/o Clamp
10247	O	6.3	F	1	U	12060	12580	Y	Splash Proof, Housing Lance Type1
10248	O	6.3	M	3	U	12050	–	Y	Splash Proof, Housing Lance, w/o Clamp
10249	O	6.3	F	3	U	12060	12580	Y	Splash Proof, Housing Lance Type1
10250	O	6.3	F	1	U	–	–	–	Terminal Lance Type3
10251	O	6.3	M	1	U	12050	–	Y	Housing Lance, w/o Clamp
10252	X	6.3	F	1	U	12060	12580	Y	Housing Lance Type1
10253	O	6.3	M	1	U	12050	–	Y	Housing Lance
10254	X	6.3	F	1	U	12060	12580	Y	Housing Lance Type1
10255	O	6.3	M	2	U	12050	–	Y	Housing Lance
10256	O	6.3	F	2	U	12060	12580	Y	Housing Lance Type1
10257	X	6.3	M	3	U	12050	–	Y	Housing Lance, w/o Clamp
10258	X	6.3	F	1	U	–	–	–	Terminal Lance Type3
10259	X	6.3	M	4	U	12050	–	Y	Housing Lance
10260	X	6.3	F	4	U	12060	12580	Y	Housing Lance Type1
10261	X	6.3	M	5	U	12050	–	Y	Housing Lance

E

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10262	X	6.3	F	5	U	12060	12580	Y	Housing Lance Type1
10263	X	6.3	M	7	U	12050	–	Y	Housing Lance
10264	X	6.3	F	7	U	12060	12580	Y	Housing Lance Type1
10265	X	6.3	M	9	U	12050	–	Y	Housing Lance
10266	X	6.3	F	9	U	12060	12580	Y	Housing Lance Type1
10272	X	LC	M	8	U	–	–	–	
10273	X	LC	F	8	U	–	–	–	
10274	O	TODC	F	5	U	12090	–	Y	
10275	O	TODC	M	7	U	12080	–	Y	
10276	O	6.3	M	5	U	12050	–	Y	Housing Lance
10277	X	6.3	M	7	U	12050	–	Y	Housing Lance
10278	X	6.3	M	9	U	12050	–	Y	Housing Lance
10279	O	TODC	M	8	U	12080	–	Y	
10280	O	TODC	F	8	U	12090	–	Y	
10281	O	6.3	M	3	U	12050	–	Y	Housing Lance
		TODC		7		12080	–	Y	
10282	O	6.3	F	3	U	12060	12580	Y	Housing Lance Type1
		TODC		7		12090	–	Y	
10283	O	6.3	M	3	U	12050	–	Y	Housing Lance, w/ Clamp
10284	X	TODC	M	18	U	12080	–	Y	
10285	X	TODC	F	18	U	12090	–	Y	
10286	X	TODC	M	2	U	12080	–	Y	
10287	O	TODC	M	16	U	12080	–	Y	Splash Proof
10288	X	TODC	F	16	U	12090	–	Y	Splash Proof
10290	X	LC	F	6	U	–	–	–	
10291	X	LC	M	14	U	–	–	–	
10292	X	LC	F	14	U	–	–	–	
10294	O	PULSE LOCK	F	10	U	12210	–	L	
10295	O	PULSE LOCK	F	18	U	12210	–	L	
10296	O	PULSE LOCK	F	24	U	12210	–	L	
10297	O	TODC	M	2	U	12080	–	Y	
10298	O	TODC	F	2	U	12090	–	Y	
10299	X	6.3	M	3	U	12050	–	Y	Housing Lance

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10300	O	6.3	M	3	U	12050	–	Y	Housing Lance, w/ Flange
10301	O	MFPC	F	8	U	12150	–	L	
10302	O	MFPC	F	10	U	12150	–	L	
10303	O	MFPC	F	12	U	12150	–	L	
10304	O	MFPC	F	10	U	12150	–	L	
10305	O	6.3	M	2	U	12050	–	Y	Housing Lance, w/ Clamp
10306	O	6.3 TODC	M	2 2	U	12050 12080	– –	Y Y	Housing Lance
10307	X	6.3 TODC	F	2 2	U	12060 12090	12580 –	Y Y	Housing Lance Type1
10309	O	MIC	F	5	U	12120	–	Y	
10311	O	MIC	F	7	U	12120	–	Y	
10312	O	TODC	M	6	U	12080	–	Y	
10313	O	TODC	F	6	U	12090	–	Y	
10314	X	TODC	M	5	U	12080	–	Y	
10315	X	MODU	M	26	U	–	–	–	
10316	X	MODU	F	26	U	–	–	–	
10317	O	6.3 TODC	M	1 8	U	12050 12080	– –	Y Y	Housing Lance
10318	O	6.3 TODC	F	1 8	U	12060 12090	12580 –	Y Y	Housing Lance Type1
10319	O	6.3 TODC	F	1 10	U	12060 12090	12580 –	Y Y	Housing Lance Type1
10320	X	2.3	F	2	U	12170	–	Y	
10321	O	2.3	F	8	U	12170	–	Y	
10322	O	2.3	F	10	U	12170	–	Y	
10323	O	2.3	M	13	U	12160*	–	L,Y	
10324	O	2.3	F	13	U	12170	–	Y	
10326	O	2.3	F	18	U	12170	–	Y	
10327	X	2.3	F	20	U	12170	–	Y	
10328	X	2.3	F	22	U	12170	–	Y	
10329	X	2.3 6.3	M	12 2	U	12160* 12050	– –	L,Y Y	Housing Lance
10330	O	2.3 6.3	F	12 2	U	12170 12060	– 12580	Y Y	Housing Lance Type1

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HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10331	X	2.3 6.3	F	14 1	U	82998– 12170 12060	82998– – 12580	Y Y	Housing Lance Type1
10332	O	7.7	F	1	U	12040	–	–	Housing Lance
10333	X	6.3	F	2	U	12060	12580	Y	Housing Lance Type1
10334	O	6.3	F	6	U	12060	12580	Y	Housing Lance Type1
10335	O	6.3	F	6	U	12060	12580	Y	Housing Lance Type1
10336	X	6.3	F	8	U	12060	12580	Y	Housing Lance Type1
10337	X	6.3	F	11	U	12060	12580	Y	Housing Lance Type1
10338	O	6.3	F	11	U	12060	12580	Y	Housing Lance Type1
10339	X	6.3 7.7	F	4 1	U	12060 12040	12580 –	Y –	Housing Lance Type1 Housing Lance
10340	O	6.3 7.7	F	2 3	U	12060 12040	12580 –	Y –	Housing Lance Type1 Housing Lance
10341	O	6.3	F	3	U	12060	12580	Y	Splash Proof, Housing Lance Type1
10342	X	7.7	M	1	U	12030	–	–	Housing Lance Type1
10343	O	7.7	F	1	U	12040	–	–	Housing Lance
10344	O	6.3	M	2	U	12050	–	Y	Housing Lance, w/o Clamp
10345	X	6.3	F	2	U	12060	12580	Y	Housing Lance Type1
10346	O	6.3	M	2	U	12050	–	Y	Housing Lance, w/ Clamp
10347	O	6.3	M	3	U	12050	–	Y	Splash Proof, Housing Lance, w/o Clamp
10348	X	6.3	F	2	U	–	–	–	Terminal Lance Type2
10350	O	PULSE LOCK	F	18	U	12210	–	L	
10351	O	PULSE LOCK	F	12	U	12210	–	L	
10352	O	TODC	F	2	U	12090	–	Y	Splash Proof, w/ Clamp
10353	O	TODC	F	3	U	12090	–	Y	Splash Proof, w/ Clamp

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–10354	X	2.3	M	2	U	82998–12160*	82998–	L,Y	w/o Clamp
10355	O	2.3	F	2	U	12170	–	Y	
10356	O	7.7	M	2	U	12030	–	–	Housing Lance Type1
10357	O	7.7	F	2	U	12040	–	–	Housing Lance
10358	O	6.3	F	8	U	12060	12580	Y	Housing Lance Type1
10359	O	6.3	F	1	U	–	–	–	Terminal Lance Type2
10360	X	2.3	M	8	U	12160*	–	L,Y	
10361	O	2.3	M	20	U	12160*	–	L,Y	
10362	O	SP	F	2	U	12530	–	L	Signal
10363	O	5.2	F	1	U	–	–	–	
10364	X	2.3	M	3	U	12160*	–	L,Y	w/o Clamp
10365	O	2.3	F	3	U	12170	–	Y	
10366	O	2.3	M	6	U	12160*	–	L,Y	w/o Clamp
10367	O	2.3	F	6	U	12170	–	Y	
10368	O	MFPC	F	14	U	12150	–	L	
10371	O	PULSE LOCK	F	14	U	12210	–	L	
10372	O	MFPC	F	12	U	12150	–	L	
10373	X	7.7 TODC	F	2 2	U	12040 12090	– –	– Y	Splash Proof, Housing Lance Splash Proof
10374	O	7.7	M	2	U	12030	–	–	Splash Proof, Housing Lance Type1
10375	O	2.3	M	10	U	12160*	–	L,Y	w/o Flange
10376	O	SP	F	3 2	U	12530 12520	– –	L L	Signal Power
10377	X	SP	F	10	U	12530	–	L	Signal
10378	O	MIC	F	4	S	–	–	–	
10379	O	TODC	M	9	U	12080	–	Y	Splash Proof
10380	X	TODC	F	9	U	12090	–	Y	Splash Proof, w/o Clamp
10381	O	TODC	F	9	U	12090	–	Y	Splash Proof, w/ Clamp
10382	O	6.3 7.7	F	4 2	U	12060 12040	12580	Y –	Housing Lance Type1 Housing Lance
10383	X	6.3 TODC	M	2 6	U	12050 12080	– –	Y Y	Housing Lance, w/ Flange w/ Flange

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10384	O	2.3	M	6	U	82998– 12160*	82998– –	L,Y	w/o Flange
10385	O	7.7	F	2	U	12040	–	–	Housing Lance
10386	O	6.3	F	9	U	12060	12580	Y	Housing Lance Type1
10392	X	TLC TODC	M	3 2	U	12220 12080	– –	L Y	Splash Proof, w/ Clamp
10393	X	TLC TODC	F	3 2	U	12230 12090	– –	L Y	Splash Proof
10394	O	TLC	M	3	S	12280	–	R	w/ Clamp
10395	O	TLC	F	3	S	12290	–	R	
10398	X	TLC	F	1	U	12230	–	L	
10399	O	TLC	M	4	U	12220	–	L	
10400	O	TLC	F	4	U	12230	–	L	
10401	O	TLC	M	6	U	12220	–	L	
10402	O	TLC	F	6	U	12230	–	L	
10403	O	TLC TODC	M	6 2	U	12220 12080	– –	L Y	
10404	O	TLC TODC	F	6 2	U	12230 12090	– –	L Y	
10405	O	2.3 TLC	M	6 6	U	12160* 12220	– –	L,Y L	
10406	O	2.3 TLC	F	6 6	U	12170 12230	– –	Y L	
10407	O	TLC	M	12	U	12220	–	L	
10408	O	TLC	F	12	U	12230	–	L	
10410	O	6.3	M	3	U	12050	–	Y	Housing Lance, w/ Clamp
10411	X	6.3 TODC	M	2 6	U	12050 12080	– –	Y Y	Housing Lance, w/ Clamp w/ Clamp
10412	O	6.3	M	2	U	–	–	–	Splash Proof, Terminal Lance, w/o Clamp
10413	X	2.3	M	18	U	12160*	–	L,Y	
10414	O	2.3	F	6	U	12170	–	Y	
10415	O	2.3 6.3	M	10 2	U	12160* 12050	– –	L,Y Y	Housing Lance
10418	O	2.3 TODC	M	6 2	U	12160* 12080	– –	L,Y Y	
10419	O	2.3 TODC	F	6 2	U	12170 12090	– –	Y Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–10420	O	2.3	F	3	U	82998–12170	82998–	Y	
10421	O	2.3	F	10	U	12170	–	Y	Housing Lance Type1
		6.3		2		12060	12580	Y	
10422	X	2.3 6.3	M	12 2	U	12160* 12050	– –	L,Y Y	Housing Lance
10423	O	MIC	F	2	S	–	–	–	
10424	X	6.3	M	2	U	12050	–	Y	Housing Lance
10425	X	6.3	F	2	U	12060	12580	Y	Housing Lance Type1
10426	O	MIC	F	2	S	–	–	–	
10427	X	2.3	M	10	U	12160*	–	L,Y	w/ Flange
10428	O	8.0	F	3	U	24140	24200	Y	Housing Lance Type1, Head Lamp
10430	O	TLC	M	8	U	12220	–	L	
10431	O	TLC	F	8	U	12230	–	L	
10432	O	2.3	F	12	U	12170	–	Y	
10433	X	2.3	M	1	U	12160*	–	L,Y	w/o Clamp
10434	X	2.3	M	1	U	12160*	–	L,Y	w/ Clamp
10435	X	2.3	F	1	U	12170	–	Y	
10437	O	2.3	M	2	U	12160*	–	L,Y	w/ Clamp
10438	X	2.3	M	1	S	12260*	–	L	w/ Clamp
10439	X	2.3	F	1	S	12270*	12600	L,Y	
10442	X	1.8 6.3	M	12 3	S	– –	– –	–	Housing Lance
10443	X	1.8 6.3	F	12 3	S	12620 12540	– –	L Y	Housing Lance
10444	O	TLC	M	3	S	12280	–	R	w/o Clamp
10446	O	6.3 7.7	M	4 2	U	12050 12030	– –	Y –	Housing Lance Housing Lance Type1
10447	O	6.3 7.7	F	4 2	U	12060 12040	12580 –	Y –	Housing Lance Type1 Housing Lance
10448	O	8.0	F	3	U	24140	24200	Y	Housing Lance Type1, Head Lamp
10449	O	6.3 II	F	8	U	24170	–	Y	
10450	O	6.3 II	F	11	U	24170	–	Y	
10451	X	6.3	M	7	U	12050	–	Y	Housing Lance

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10452	X	6.3	F	7	U	12060	12580	Y	Housing Lance Type1
10453	O	2.3 6.3	M	12 4	U	12160* 12050	– –	L,Y Y	Housing Lance
10454	O	2.3 6.3	F	12 4	U	12170 12060	– 12580	Y Y	Housing Lance Type1
10455	O	TLC	M	22	U	12220	–	L	
10456	O	TLC	F	22	U	12230	–	L	
10457	O	2.3 6.3	M	19 3	U	12160* 12050	– –	L,Y Y	Housing Lance
10458	X	2.3 6.3	F	19 3	U	12170 12060	– 12580	Y Y	Housing Lance Type1
10460	O	TLC	F	7	U	12230	–	L	
10461	X	TODC	M	15	U	12080	–	Y	w/ Clamp
10462	O	2.3 6.3	M	5 3	U	12160* 12050	– –	L,Y Y	Housing Lance
10463	O	2.3 6.3	F	5 3	U	12170 12060	– 12580	Y Y	Housing Lance Type1
10464	X	TODC	F	3	U	12090	–	Y	
10465	X	2.3	F	2	U	12170	–	Y	
10466	O	TNS	M	4	U	12240	–	L	
10467	O	TNS	F	4	U	12250	–	L	
10468	O	TNS	M	10	U	12240	–	L	
10469	O	TNS	F	10	U	12250	–	L	
10470	O	TNS	M	14	U	12240	–	L	
10471	O	TNS	F	14	U	12250	–	L	
10472	O	2.3 TNS	M	12 9	U	12160* 12240	– –	L,Y L	
10473	O	2.3 TNS	F	12 9	U	12170 12250	– –	Y L	
10474	O	2.3	F	2	S	12270*	12600	L,Y	
10475	O	2.3	M	4	S	12260*	–	L	
10476	O	2.3	F	4	S	12270*	12600	L,Y	
10477	X	2.3	M	6	S	12260*	–	L	
10478	X	2.3	F	6	S	12270*	12600	L,Y	
10479	O	2.3 6.3	M	12 1	U	12160* 12050	– –	L,Y Y	Housing Lance

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10480	O	2.3 6.3	F	12 1	U	82998– 12170 12060	82998– – 12580	Y Y	Housing Lance Type1
							24210	Y	
10481	O	6.3	F	2	U	–		Y	Housing Lance Type2, FOG-LP
10482	X	2.3	F	2	U	12170	–	Y	
10483	O	2.3	F	3	U	12170	–	Y	
10484	O	2.3	F	4	U	12170	–	Y	
10485	X	2.3 TODC	M	10 6	U	12160*	–	L,Y	
						12080	–	Y	
10486	X	2.3 TODC	F	10 6	U	12170 12090	– –	Y Y	
10487	O	FTC	F	5	U	12510	–	Y	
10488	O	FTC	F	5	U	12510	–	Y	
10489	O	FTC	F	3	U	12510	–	Y	
10490	O	FTC	F	3	U	12510	–	Y	
10491	O	MIC	F	2	U	12120	–	Y	
10492	O	2.3	M	3	S	12260*	–	L	w/o Clamp
10493	O	2.3	M	3	S	12260*	–	L	w/ Clamp
10494	O	2.3	F	3	S	12270*	12600	L,Y	
10495	O	2.3	M	2	S	12260*	–	L	
10496	O	2.3	F	2	S	12270*	12600	L,Y	
10497	X	2.3	M	2	S	12260*	–	L	
10498	O	2.3	F	2	S	12270*	12600	L,Y	w/ Clamp
10499	O	6.3	M	1	U	12050	–	Y	Housing Lance, w/ Clamp
10500	O	2.3	M	3	S	12260*	–	L	w/ Clamp
10501	O	2.3	F	3	S	12270*	12600	L,Y	
10502	O	2.3	M	4	U	12160*	–	L,Y	
10503	O	2.3	M	4	U	12160*	–	L,Y	w/ Clamp
10504	O	2.3	F	4	U	12170	–	Y	
10505	X	2.3	M	6	U	12160*	–	L,Y	w/ Clamp
10507	X	2.3	F	14	U	12170	–	Y	
10509	O	TODC	F	5	U	12090	–	Y	
10510	O	TNS	M	4	S	–	–	–	w/o Clamp
10511	O	TNS	F	2	S	–	–	–	
10512	O	TNS	F	2	S	–	–	–	
10513	O	2.3	M	12	U	12160*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10514	X	2.3 6.3	F	2 2	U	82998– 12170 12060	82998– – 12580	Y Y	Housing Lance Type1
						12170	–	Y	
10515	O	2.3	F	4	U	12170	–	Y	
10517	X	2.3 6.3 7.7	F	4 2 2	U	12170 12060 12040	– 12580 –	Y Y –	Housing Lance Type1 Housing Lance
						12160*	–	L,Y	
10518	O	2.3 6.3	M	4 1	U	12160* 12050	– –	Y	Housing Lance
						12050	–	Y	
10519	X	2.3 6.3	M	4 1	U	12160* 12050	– –	L,Y Y	w/ Clamp Housing Lance, w/ Clamp
						12050	–	Y	
10520	X	2.3 6.3	F	4 1	U	12170 12060	– 12580	Y Y	Housing Lance Type1
						12060	12580	Y	
10521	O	2.3 7.7	M	15 1	U	12160* 12030	– –	L,Y –	Housing Lance Type1
						12030	–	–	
10522	X	2.3 7.7	F	15 1	U	12170 12040	– –	Y –	Housing Lance
						12040	–	–	
10523	O	TNS	F	8	U	12250	–	L	
10524	O	TNS	F	12	U	12250	–	L	
10525	O	TNS	F	16	U	12250	–	L	
10526	O	TNS	F	22	U	12250	–	L	
10528	O	TLC	F	10	U	12230	–	L	
10531	X	2.3	M	11	U	12160*	–	L,Y	
10532	O	2.3	F	2	S	12270*	12600	L,Y	
10533	O	2.3	M	2	S	12260*	–	L	w/ Clamp
10534	O	2.3	F	2	S	12270*	12600	L,Y	
10536	O	2.3 6.3	F	8 1	U	12170 12060	– 12580	Y Y	Housing Lance Type1
						12060	12580	Y	
10537	O	2.3 6.3	F	10 1	U	12170 12060	– 12580	Y Y	Housing Lance Type1
						12060	12580	Y	
10538	O	2.3	F	14	U	12170	–	Y	
10539	O	2.3	F	16	U	12170	–	Y	
10542	X	2.3	M	16	U	12160*	–	L,Y	w/ Clamp
10543	X	2.3	F	16	U	12170	–	Y	
10544	X	2.3	M	3	U	12160*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10545	X	2.3 6.3	M	12 2	U	82998– 12160* 12050	82998– – –	L,Y Y	Housing Lance
10546	X	TLC	M	8	U	12220	–	L	
10547	X	2.3 6.3 7.7	M	12 2 2	S	12260*	– – –	L – –	Housing Lance Housing Lance Type1
10548	X	2.3	F	12	S	12270*	12600	L,Y	
10549	O	6.3 7.7	F	2 2	S	– –	– –	– –	Housing Lance
10550	X	2.3 6.3	F	3 2	S	12270* 12540	12600 –	L,Y Y	Housing Lance
10551	X	6.3	F	4	U	12060	12580	Y	Housing Lance Type1
10552	O	TNS	M	22	U	12240	–	L	
10553	O	TLC	M	3	S	12280	–	R	w/ Clamp
10554	O	TLC	F	3	S	12290	–	R	
10555	O	2.3	M	2	S	12260*	–	L	
10556	O	2.3	F	2	S	12270*	12600	L,Y	
10557	O	TLC	M	5	S	12280	–	R	w/ Clamp
10558	O	TLC	F	5	S	12290	–	R	
10559	O	7.7	F	2	U	12040	–	–	Housing Lance
10560	O	2.3	M	16	U	12160*	–	L,Y	
10561	O	2.3	F	16	U	12170	–	Y	
10562	X	2.3 6.3 7.7	M	12 2 1	U	12160* 12050 –	– – –	L,Y Y –	Housing Lance Housing Lance Type2
10563	X	2.3 6.3 7.7	F	12 2 1	U	12170 12060 12040	– 12580 –	Y Y –	Housing Lance Type1 Housing Lance
10564	X	1.8	M	12	U	12180	–	L	
10565	X	1.8	F	12	U	12190*	–	L	
10566	X	6.3	M	2	S	–	–	–	Housing Lance, w/ Clamp
10567	O	6.3	F	2	S	–	–	–	Housing Lance
10568	O	TODC	M	12	U	12080	–	Y	Splash Proof
10569	O	TODC	F	12	U	12090	–	Y	Splash Proof
10570	O	TLC	M	5	S	12280	–	R	w/o Clamp
10571	O	2.3	M	2	S	12260*	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10572	O	2.3	F	2	S	12270*	12600	L,Y	
10573	O	2.3	M	3	U	12160*	–	L,Y	w/ Clamp
10574	O	2.8	F	3	S	12550	12610	Y	HB3,HB4
10576	O	2.3	F	2	S	12270*	12600	L,Y	
10577	O	TLC	M	3	S	12280	–	R	w/ Clamp
10578	O	2.3	F	2	S	12270*	12600	L,Y	
10579	O	2.8	F	3	S	12550	12610	Y	HB3,HB4
10580	O	2.3	M	2	S	12260*	–	L	
10581	X	2.3	F	2	S	12270*	12600	L,Y	
10582	X	2.3	M	2	S	12260*	–	L	w/ Clamp
10583	X	2.3	F	2	S	12270*	12600	L,Y	
10585	O	TNS	F	24	U	12250	–	L	
10587	O	TNS	F	26	U	12250	–	L	
10589	O	TNS	F	20	U	12250	–	L	
10590	O	2.3	M	4	S	12260*	–	L	
10591	O	2.3	F	4	S	12270*	12600	L,Y	
10592	O	2.3	M	2	S	12260*	–	L	
10593	O	2.3	F	2	S	12270*	12600	L,Y	
10594	O	2.3	M	2	S	12260*	–	L	
10595	O	2.3	F	2	S	12270*	12600	L,Y	
10596	O	2.3	M	6	S	12260*	–	L	
10597	O	2.3	F	6	S	12270*	12600	L,Y	
10598	O	2.3	F	2	S	12270*	12600	L,Y	
10599	O	TNS	M	26	U	12240	–	L	
10600	X	2.3	M	4	U	12160*	–	L,Y	
10601	O	2.3	F	4	U	12170	–	Y	
10602	X	2.3	M	6	U	12160*	–	L,Y	
10603	X	2.3	M	6	U	12160*	–	L,Y	w/ Clamp
10604	O	2.3	F	6	U	12170	–	Y	
10605	O	2.3	F	6	U	12170	–	Y	
10606	O	1.8	M	34	U	12180	–	L	
10607	O	1.8	F	20	U	12190*	–	L	
10608	O	1.8	F	14	U	12190*	–	L	
10609	O	2.3	F	2	S	12270*	12600	L,Y	
10610	O	2.3 TNS	F	1 4	U	12170 12250	– –	Y L	
10611	O	2.3 TNS	F	8 8	U	12170 12250	– –	Y L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10612	O	2.3 TNS	F	10 10	U	82998– 12170 12250	82998– – –	Y L	
10613	O	TNS	F	16	U	12250	–	L	
10614	O	TNS	F	16	U	12250	–	L	
10616	O	6.3	F	4	U	12060	12580	Y	Housing Lance Type1
10617	O	2.3	F	2	S	12270*	12600	L,Y	
10618	O	6.3 7.7	F	2 1	U	12060 12040	12580 –	Y –	Housing Lance Type1 Housing Lance
10619	O	6.3	F	1	U	12060	12580	Y	Housing Lance Type1
10620	X	TLC	M	2	U	12220	–	L	
10621	O	TLC	F	2	U	12230	–	L	
10622	O	2.3	F	2	S	12270*	12600	L,Y	
10623	O	2.3	F	2	S	12270*	12600	L,Y	
10624	O	2.3	F	5	S	12270*	12600	L,Y	
10625	O	2.3	M	2	S	12260*	–	L	w/ Clamp
10626	O	2.3	F	2	S	12270*	12600	L,Y	
10627	O	TLC	M	7	S	12280	–	R	w/ Clamp
10628	O	TLC	F	7	S	12290	–	R	
10629	O	2.3	F	3	S	12270*	12600	L,Y	
10631	O	2.3	F	5	U	12170	–	Y	
10633	X	TLC	F	14	U	12230	–	L	
10634	O	TLC	F	14	U	12230	–	L	
10636	O	TLC	F	16	U	12230	–	L	
10637	X	2.3	F	2	U	12170	–	Y	
10638	O	2.3	F	3	U	12170	–	Y	
10639	O	2.3	M	20	U	12160*	–	L,Y	
10640	O	2.3	F	20	U	12170	–	Y	
10641	O	2.3	M	6	U	12160*	–	L,Y	w/ Flange
10643	O	2.3	F	6	S	12270*	12600	L,Y	
10644	O	2.3	F	5	U	12170	–	Y	
10645	O	MFPC	F	4	U	12150	–	L	
10646	O	6.3	M	4	U	–	–	–	Splash Proof, Terminal Lance, w/ Clamp
10647	O	6.3	M	5	U	–	–	–	Splash Proof, Terminal Lance, w/ Clamp
10648	O	2.3	M	4	S	12260*	–	L	w/ Clamp

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10649	O	2.3	F	4	S	12270*	12600	L,Y	
10651	O	2.3	F	6	S	12270*	12600	L,Y	
10652	O	7.7	F	1	U	12040	–	–	Housing Lance
10653	O	1.8	M	13	S	–	–	–	
10654	O	1.8	F	13	S	12620	–	L	
10656	O	1.8	F	18	U	12190*	–	L	
10658	O	1.8	F	12	U	12190*	–	L	
10659	X	FTC	F	5	U	12510	–	Y	
10660	O	2.3	F	3	U	12170	–	Y	
10662	O	TNS	M	4	S	–	–	–	
10665	O	2.3	M	2	S	12260*	–	L	
10669	O	2.3	F	10	U	12170	–	Y	
10672	O	2.3	F	6	U	12170	–	Y	
10673	X	6.3	F	4	U	12060	12580	Y	Housing Lance Type1
		7.7		2		12040	–	–	Housing Lance
10674	O	2.3	M	18	U	12160*	–	L,Y	
		6.3		1		12050	–	Y	Housing Lance
10675	X	2.3	F	18	U	12170	–	Y	
		6.3		1		12060	12580	Y	Housing Lance Type1
10676	O	TLC	M	7	S	12280	–	R	
10677	O	TLC	M	9	S	12280	–	R	w/ Clamp
10678	O	TLC	F	9	S	12290	–	R	
10679	O	2.3	F	2	U	12170	–	Y	
10682	O	TNS	M	3	S	–	–	–	
10685	X	2.3	F	2	S	12270*	12600	L,Y	
		6.3		2		–	–	–	Housing Lance
10686	O	2.3	F	7	S	12270*	12600	L,Y	
		6.3		2		–	–	–	Housing Lance
10687	X	2.3	M	2	U	12160*	–	L,Y	w/ Clamp
10688	O	5.2	F	1	U	–	–	–	
10689	O	2.3	M	3	S	12260*	–	L	
10690	O	2.3	F	3	S	12270*	12600	L,Y	
10692	O	TNS	F	4	U	12250	–	L	
10693	O	2.3	M	10	U	12160*	–	L,Y	
10694	O	2.3	M	6	U	12160*	–	L,Y	
10695	O	2.3	F	3	S	12270*	12600	L,Y	
10696	O	1.8	F	20	U	12190*	–	L	
10697	O	1.8	F	14	U	12190*	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–10698	O	TLC	M	3	S	82998–12280	82998–	R	
10700	O	6.3	M	2	U	–	–	–	Terminal Lance
10701	X	6.3	F	4	U	12060	12580	Y	Housing Lance Type1
10702	O	2.3	F	2	S	12270*	12600	L,Y	
10703	O	6.3	F	1	U	–	–	–	Housing Lance Type3
10704	O	6.3	F	3	U	–	–	–	Housing Lance Type3
10705	O	6.3	F	1	U	12060	12580	Y	Splash Proof, Housing Lance Type1
10706	O	2.3	F	2	S	12270*	12600	L,Y	w/ Clamp
10707	X	2.3	M	2	S	12260*	–	L	
10708	O	6.3	F	3	U	12060	12580	Y	Splash Proof, Housing Lance Type1
10709	O	2.3 TLC	M	2 3	S	12260* 12280	– –	L R	w/ Clamp
10710	O	2.3 TLC	F	2 3	S	12270* 12290	12600 –	L,Y R	
10711	O	1.8	F	4	S	12620	–	L	
10712	X	2.3	F	5	S	12270*	12600	L,Y	
10713	O	6.3 7.7	F	3 2	U	12060 12040	12580 –	Y –	Housing Lance Type1 Housing Lance
10714	O	2.3 6.3	F	9 3	U	12170 12060	– 12580	Y Y	Housing Lance Type1
10715	O	2.3	M	14	U	12160*	–	L,Y	
10716	O	2.3	F	4	U	12170	–	Y	
10717	O	2.3	F	4	U	12170	–	Y	
10718	O	6.3	F	5	U	12060	12580	Y	Housing Lance Type1
10719	O	TLC	M	10	U	12220	–	L	
10720	O	2.3	F	2	S	12270*	12600	L,Y	
10721	X	2.3	F	10	U	12170	–	Y	
10722	O	1.8	M	34	U	12180	–	L	
10723	O	2.3	F	11	U	12170	–	Y	
10724	X	2.3	F	12	U	12170	–	Y	
10725	X	2.3	F	12	U	12170	–	Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10729	O	2.3 6.3	F	5 2	U	82998– 12170 12060	82998– – 12580	Y Y	Housing Lance Type1
10730	O	2.3	M	17	U	12160*	–	L,Y	
10731	O	2.3	F	17	U	12170	–	Y	
10734	X	1.8	F	2	S	12620	–	L	
10735	O	1.8	F	2	S	12620	–	L	
10736	O	1.8	F	2	S	12620	–	L	
10737	O	1.8	F	2	S	12620	–	L	
10743	O	1.8	F	12	U	12190*	–	L	
10747	X	8.0	F	3	U	–	–	–	Terminal Lance Type2, Head Lamp
10748	O	2.3	F	2	S	12270*	12600	L,Y	
10749	O	4.8 2.3 II	M	2 2	S	12470	–	Y	
						12430*	–	L,Y	
10750	X	TNS	M	26	U	12240	–	L	
10751	O	2.3	M	4	S	12260*	–	L	w/ Clamp
10757	X	Optical fiber	M	8	U	–	–	–	
10758	O	6.3	M	4	U	12050	–	Y	Housing Lance, w/ Clamp
10759	O	6.3 7.7	F	2 2	U	–	–	–	Terminal Lance Type1
						12020	–	–	Terminal Lance
10760	O	5.2 6.3	F	1 1	U	–	–	–	Housing Lance Type3
						–	–	–	
10762	X	2.3	M	5	U	12160*	–	L,Y	
10763	O	1.8 1.0	F	10 16	U	12190*	–	L	
						12310*	–	L	
10764	O	1.0	F	16	U	12310*	–	L	
10765	O	1.8 1.0	F	6 16	U	12190*	–	L	
						12310*	–	L	
10766	O	6.3 7.7	F	4 2	U	12060	12580	Y	Housing Lance Type1 Housing Lance
						12040	–		
10768	O	2.3	M	4	S	12260*	–	L	w/o Clamp
10772	O	2.3 6.3	F	5 2	U	12170	–	Y	
						–	–	–	
10774	X	2.3	M	3	S	12260*	–	L	w/ Clamp
10775	O	TODC	M	9	U	12080	–	Y	Splash Proof

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–10776	O	TODC	F	9	U	82998–12090	82998–	Y	Splash Proof
10777	O	TLC	M	3	S	12280	–	R	w/ Clamp
10778	O	2.3 2.3 6.3	F	2 15 1	S U	12270* 12170 12060	12600 – 12580	L,Y Y Y	Housing Lance Type1
10779	O	TNS	M	24	U	12240	–	L	
10781	O	MIC	F	11	U	12120	–	Y	
10782	O	7.7	F	1	U	12040	–	–	Housing Lance
10783	O	7.7	F	2	U	12040	–	–	Housing Lance
10784	O	6.3 7.7	F	2 1	U	12060 12040	12580 –	Y –	Housing Lance Type1 Housing Lance
10785	X	2.3	F	6	U	12170	–	Y	
10786	O	6.3	F	1	U	12070	–	Y	Terminal Lance Type4,DEFG
10787	X	2.3	M	3	S	12260*	–	L	w/ Clamp
10788	O	2.3	M	2	S	12260*	–	L	w/ Clamp
10789	O	2.3 II	F	5	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10791	X	2.3 6.3	M	2 2	U	12160* 12050	– –	L,Y Y	Housing Lance
10792	O	6.3	F	1	U	12070	–	Y	Terminal Lance Type4,DEFG
10794	O	2.3 II	M	4	U	12330*	–	L,Y	
10795	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10796	O	2.3 II	M	6	U	12330*	–	L,Y	
10797	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10798	O	2.3 II	M	8	U	12330*	–	L,Y	
10799	O	2.3 II	F	8	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10800	O	2.3 II	M	10	U	12330*	–	L,Y	
10801	O	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10802	O	2.3 II	M	12	U	12330*	–	L,Y	
10803	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10804	O	2.3 II	M	13	U	12330*	–	L,Y	
10805	O	2.3 II	F	13	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10806	O	2.3 II	M	14	U	12330*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10807	O	2.3 II	F	14	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10808	O	2.3 II	M	16	U	12330*	–	L,Y	
10809	O	2.3 II	F	16	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10810	O	2.3 II	M	20	U	12330*	–	L,Y	
10811	O	2.3 II	F	20	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10812	O	4.8 2.3 II	M	2 12	U	12370 12330*	– –	Y L,Y	
10813	O	4.8 2.3 II	F	2 12	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10814	O	4.8 2.3 II	M	3 12	U	12370 12330*	– –	Y L,Y	
10815	O	4.8 2.3 II	F	3 12	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10816	O	4.8 2.3 II	M	2 18	U	12370 12330*	– –	Y L,Y	
10817	O	4.8 2.3 II	F	2 18	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10818	O	2.3 II	M	18	U	12330*	–	L,Y	
10819	O	2.3 II	F	18	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10820	O	2.3 II	M	20	U	12330*	–	L,Y	
10821	O	2.3 II	F	20	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10824	O	2.3 II	M	2	U	12330*	–	L,Y	
10825	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10826	X	TLC	M	9	S	12280	–	R	
10827	O	2.3 II	M	15	U	12330*	–	L,Y	
10828	O	2.3 II	F	15	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10829	O	2.3 II	M	11	U	12330*	–	L,Y	
10830	O	2.3 II	F	11	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10831	O	2.3	F	4	S	12270*	12600	L,Y	
10833	O	2.3 II	M	2	U	12330*	–	L,Y	w/ Clamp

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10834	O	2.3 II	F	3	S	82998– 12440*	82998– 12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10836	O	8.0	M	1	S	12490	–	–	
10837	O	8.0	F	1	S	12500	–	–	
10838	O	8.0	M	2	S	12490	–	–	
10839	O	8.0	F	2	S	12500	–	–	
10840	O	4.8	M	3	S	12470	–	Y	
10841	O	4.8	F	3	S	12480	–	Y	
10842	O	2.3 II	M	2	S	12430*	–	L,Y	
10843	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10844	O	4.8 2.3 II	F	2	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
10845	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10846	O	2.3	F	2	S	12270*	12600	L,Y	
10847	O	2.3	F	2	S	12270*	12600	L,Y	
10848	O	2.3 II	F	16	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10854	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10855	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10856	O	2.3 II 8.0	M	18 1	U	12330* 12390	– –	L,Y –	
10857	O	2.3 II 8.0	F	18 1	U	12340* (24380) 12400	– –	L,Y –	(Low Insertion Force) Housing Lance Type2
10858	O	2.3 II	M	4	U	12330*	–	L,Y	w/ Clamp
10859	O	2.3 II	M	2	U	12330*	–	L,Y	
10860	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10861	O	4.8	M	10	U	12370	–	Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10862	O	4.8	F	10	U	82998– 12380	82998– –	Y	
10866	O	8.0	M	4	U	12390	–	–	
10867	O	8.0	F	4	U	12400	–	–	Housing Lance Type2
10868	O	2.3 II	M	4	S	12430*	–	L,Y	
10869	O	2.3 II	F	4	S	12440* 12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)	
10870	O	2.3 II	M	1	U	12330*	–	L,Y	w/o Clamp
10871	O	2.3 II	F	1	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10872	O	4.8 2.3 II	M	7 4	U	12370 12330*	– –	Y L,Y	
10873	O	4.8 2.3 II	F	7 4	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10875	O	2.3 II	F	22	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10876	O	4.8 2.3 II	M	3 5	U	12370 12330*	– –	Y L,Y	
10877	O	4.8 2.3 II	F	3 5	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10878	O	4.8 2.3 II	M	2 10	U	12370 12330*	– –	Y L,Y	
10879	O	4.8 2.3 II	F	2 10	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10880	O	4.8 2.3 II	M	4 20	U	12370 12330*	– –	Y L,Y	
10881	O	4.8 2.3 II	F	4 20	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10882	O	4.8 2.3 II	M	1 18	U	12370 12330*	– –	Y L,Y	
10883	O	4.8 2.3 II	F	1 18	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10884	O	4.8 2.3 II	M	4 12	U	12370 12330*	– –	Y L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10885	O	4.8 2.3 II	F	4 12	U	82998– 12380 12340* (24380)	82998– – –	Y L,Y	(Low Insertion Force)
						12430*	–		
10886	O	2.3 II	M	2	S	12430*	–	L,Y	
10887	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10888	O	4.8 8.0	F	2 3	U	12380 12400	– –	Y –	Housing Lance Type2
						12380 12400	– –		
10889	O	4.8 8.0	F	4 2	U	12380 12400	– –	Y –	Housing Lance Type2
						12380 12400	– –		
10890	O	2.3 II	M	8	S	12430*	–	L,Y	
10891	O	2.3 II	F	8	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10892	O	2.3 II	M	1	S	12430*	–	L,Y	
10893	O	2.3 II	F	1	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10894	O	4.8 2.3 II	M	2 6	S	12470 12430*	– –	Y L,Y	
						12470 12430*	– –		
10895	O	4.8 2.3 II	F	2 6	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
						12480 12440*	– 12590 (24400) 12800 (24410)		
10896	O	2.3 II	M	8	S	12430*	–	L,Y	
10897	O	2.3 II	F	8	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10898	O	2.3 II	M	2	S	12430*	–	L,Y	
10899	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10900	O	2.3 II	M	2	S	12430*	–	L,Y	
10901	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10902	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10903	O	8.0	F	2	U	12400	–	–	Housing Lance Type2
10905	O	2.3 II	M	2	U	12330*	–	L,Y	
10906	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10907	O	2.3 II	M	3	U	12330*	–	L,Y	
10908	O	2.3 II	F	3	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10909	O	2.3 II 8.0	M	4 2	U	12330* 12390	– –	L,Y –	
10910	O	2.3 II 8.0	F	4 2	U	12340* (24380) 12400	– –	L,Y –	(Low Insertion Force) Housing Lance Type2
10911	O	4.8	F	1	U	12380	–	Y	
10912	O	4.8	F	1	U	12380	–	Y	
10913	O	6.3	F	1	U	12070	–	Y	Terminal Lance Type4,DEFG
10914	X	6.3	F	1	U	12070	–	Y	Terminal Lance Type4,DEFG
10915	O	4.8	M	2	U	12370	–	Y	
10916	O	4.8	F	2	U	12380	–	Y	
10918	O	1.8 1.0	F	8 18	U	12190* 12310*	– –	L L	
10919	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10920	O	1.3 2.3 II	M	19 4	U	12410 12330*	– –	L L,Y	
10921	O	1.3 2.3 II	F	19 4	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
10923	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10925	O	1.8 1.0	F	10 16	U	12190* 12310*	– –	L L	
10926	O	4.8	F	8	U	12380	–	Y	
10927	O	4.8	M	2	S	12470	–	Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 10928	O	4.8	F	2	S	82998– 12480	82998– –	Y	
10929	O	1.8	F	4	S	12620	–	L	
10930	O	2.3 II	M	7	S	12430*	–	L,Y	
10931	O	2.3 II	F	7	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10932	O	4.8 2.3 II	F	2 10	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10933	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10934	O	2.3 II	M	2	U	12330*	–	L,Y	
10935	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10939	O	4.8 2.3 II	F	2 4	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
10940	O	4.8 2.3 II	F	2 2	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
10941	O	2.3 II	M	4	S	12430*	–	L,Y	
10942	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10943	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10944	O	4.8	M	3	S	12470	–	Y	
10945	O	4.8 2.3 II	M	2 3	S	12470 12430*	– –	Y L,Y	
10946	O	4.8 2.3 II	F	2 3	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
10947	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10948	O	2.3 II	M	2	S	12430*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10949	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10950	X	2.3 II	F	88	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10951	X	2.3 II	M	52	U	12330*	–	L,Y	
10952	O	4.8 8.0	F	12 8	U	12380 12400	– –	Y –	Housing Lance Type2
10953	X	4.8 8.0	F	18 4	U	12380 12400	– –	Y –	Housing Lance Type2
10954	O	4.8 8.0	M	18 6	U	12370 12390	– –	Y –	
10955	X	4.8 8.0	F	18 6	U	12380 12400	– –	Y –	Housing Lance Type2
10956	O	8.0	F	3	U	12400	–	–	Housing Lance Type2
10957	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10958	O	8.0	M	2	U	12390	–	–	
10959	O	2.3 II	M	2	S	12430*	–	L,Y	
10962	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10963	O	4.8	M	8	U	12370	–	Y	
10964	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10965	O	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10966	O	2.3 II	F	11	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10967	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10968	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10970	O	7.7	M	2	U	12010	–	–	Splash Proof, Terminal Lance
10973	O	1.8	F	12	U	12190*	–	L	
10974	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10975	O	4.8	M	6	U	12370	–	Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
10976	O	4.8	F	6	U	12380	–	Y	
10977	O	2.3 II	M	22	U	12330*	–	L,Y	
10979	O	4.8	M	3	U	12370	–	Y	
10980	O	4.8	F	3	U	12380	–	Y	
10981	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10982	O	4.8	M	1	S	12470	–	Y	
10983	O	4.8	F	1	S	12480	–	Y	
10984	O	2.3	M	6	S	12260*	–	L	w/o Clamp
10985	O	4.8 2.3 II	M	1 4	U	12370 12330*	– –	Y L,Y	
10986	O	4.8 2.3 II	F	1 4	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10987	O	2.3 II	M	6	S	12430*	–	L,Y	
10988	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
10989	O	4.8	M	4	S	12470	–	Y	
10990	O	4.8	F	4	S	12480	–	Y	
10993	O	4.8 2.3 II	F	4 6	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
10994	O	8.0	M	1	U	12390	–	–	
10995	O	8.0	F	1	U	12400	–	–	Housing Lance Type2
10996	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10997	O	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)
10998	O	2.3 II	M	6	U	12330*	–	L,Y	
11001	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11002	O	2.3 II	M	2	S	12430*	–	L,Y	w/ Clamp
11003	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11004	O	2.3 II	M	2	S	12430*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11005	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11006	O	2.3 II	M	1	S	12430*	–	L,Y	
11007	O	2.3 II	F	1	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11008	O	2.3 II	M	2	S	12430*	–	L,Y	
11009	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11010	O	2.3 II	M	6	U	12330*	–	L,Y	w/ Clamp
11011	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11012	O	2.3 II	M	4	U	12330*	–	L,Y	
11013	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11014	O	6.3	M	2	U	12050	–	Y	Housing Lance, w/ Clamp
11015	O	2.3 II	M	3	S	12430*	–	L,Y	
11016	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11019	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11020	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11021	O	4.8 2.3 II	M	2 3	S	12470 12430*	– –	Y L,Y	
11022	O	4.8 2.3 II	F	2 3	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
11024	O	2.3 II	F	5	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11025	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11026	O	2.3 II	M	1	U	12330*	–	L,Y	w/ Clamp
11027	O	2.3 II	M	4	S	12430*	–	L,Y	
11028	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11029	O	2.3 II	M	2	S	12430*	–	L,Y	
11030	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11031	O	8.0	M	2	S	12490	–	–	
11032	O	8.0	F	2	S	12500	–	–	
11033	O	2.3 II	M	6	S	12430*	–	L,Y	
11034	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11035	O	4.8	M	4	S	12470	–	Y	
11036	O	4.8	F	4	S	12480	–	Y	
11037	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11038	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11041	O	1.3	F	11	U	12420	–	L	
11042	O	1.3 2.3 II	F	11 4	U	12420 12340* (24380)	– –	L,Y	(Low Insertion Force)
11043	O	1.3	F	25	U	12420	–	L	
11044	O	4.8 8.0	M	2 1	S	12470 12490	– –	Y –	
11045	O	4.8 8.0	F	2 1	S	12480 12500	– –	Y –	
11046	O	2.3 II	M	17	U	12330*	–	L,Y	
11049	O	2.3 II	F	5	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11050	O	2.3 II	M	2	S	82998– 12430*	82998– –	L,Y	
11051	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11052	O	1.3	M	3	U	12410	–	L	
11053	O	1.3	F	3	U	12420	–	L	
11055	O	1.3	F	25	U	12420	–	L	
11056	O	1.3 2.3 II	F	11 4	U	12420 12340* (24380)	– –	L, L,Y	(Low Insertion Force)
11058	O	1.3 2.3 II	F	21 4	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11060	O	2.3 II	M	2	U	12330*	–	L,Y	w/ Clamp
11061	O	1.8	F	2	S	12620	–	L	
11062	O	1.8	F	2	S	12620	–	L	
11068	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11069	O	2.3 II	M	2	S	12430*	–	L,Y	
11070	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11071	O	2.3 II	F	3	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11072	O	2.3 II	M	2	S	12430*	–	L,Y	
11073	O	2.3 II	M	2	S	12430*	–	L,Y	w/o Clamp
11074	O	2.3 II	M	2	S	12430*	–	L,Y	w/ Clamp
11075	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11076	X	TNS	M	4	S	–	–	–	w/ Clamp
11077	O	2.3 II	F	5	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11078	O	2.3 II	M	5	S	12430*	–	L,Y	
11079	O	2.3 II	F	3	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11080	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11082	O	1.0	F	16	U	12310*	–	L	
11083	O	1.3	F	11	U	12420	–	L	
11085	O	2.3 II	M	5	U	12330*	–	L,Y	
11086	O	2.3 II	M	12	S	12430*	–	L,Y	
11087	O	2.3 II	F	12	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11088	O	1.3	M	15	S	12630	–	L	
11089	O	1.3	F	15	S	12650	–	L	
11090	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11091	O	4.8	F	6	U	12380	–	Y	
11092	O	4.8	F	8	U	12380	–	Y	
11093	O	4.8	M	2	U	12370	–	Y	
11094	O	4.8	F	2	U	12380	–	Y	
11095	O	2.8	F	2	S	12550	12610	Y	HB3, HB4
11096	O	2.8	F	2	S	12550	12610	Y	HB3, HB4
11097	O	2.3 II	M	1	U	12330*	–	L,Y	w/ Clamp
11098	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11099	O	2.3 II	M	6	U	12330*	–	L,Y	
11100	O	2.3 II	M	4	U	12330*	–	L,Y	
11101	O	2.3 II	M	6	U	12330*	–	L,Y	
11102	O	2.3 II	M	10	U	12330*	–	L,Y	
11107	O	1.3	F	4	U	12420	–	L	
11108	X	MP 280	F	3	S	–	–	–	
11110	O	2.3 II	M	6	U	12330*	–	L,Y	
11112	X	6.3	F	3	U	12060	12580	Y	Splash Proof, Housing Lance Type1
11113	O	SFPC	F	16	U	24180	–	L	
11114	O	SFPC	F	13	U	24180	–	L	
11115	O	SFPC	F	13	U	24180	–	L	
11116	O	SFPC	F	10	U	24180	–	L	
11118	O	4.8 2.3 II	F	2 2	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11121	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11122	O	2.3 II	M	4	S	12430*	–	L,Y	
11125	O	1.3	F	21	U	12420	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11126	O	4.8 2.3 II	M	2 2	U	82998– 12370 12330*	82998– – –	Y L,Y	
11129	O	1.0	F	12	U	12310*	–	L	
11130	O	4.8 2.3 II	F	2 6	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11131	O	2.3 II	M	3	S	12430*	–	L,Y	
11132	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11133	O	1.3	M	25	U	12410	–	L	
11135	O	4.8	M	4	U	12370	–	Y	
11136	O	4.8	F	4	U	12380	–	Y	
11137	O	2.3 II	M	2	S	12430*	–	L,Y	
11138	O	4.8 8.0	M	2 2	S	12470 12490	– –	Y –	
11139	O	4.8 8.0	F	2 2	S	12480 12500	– –	Y –	
11140	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11141	O	2.3 II	M	2	S	12430*	–	L,Y	
11142	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11143	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11144	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11145	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11146	O	2.3 II	M	1	U	12330*	–	L,Y	w/ Clamp
11147	O	2.3 II	F	1	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11148	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11149	O	2.3 II	F	2	S	82998– 12440*	82998– 12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11150	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11151	O	2.3 II	F	12	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11152	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11153	O	2.3 II	F	2	S	–	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
11154	O	2.3 II	F	2	S	–	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
11155	O	2.3 II	M	2	S	12430*	–	L,Y	
11156	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11157	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11158	O	1.3 2.3 II	M	21 4	U	12410 12330*	– –	L L,Y	
11159	O	2.3 II	M	2	U	12330*	–	L,Y	
11160	O	4.8 2.3 II	M	1 2	S	12470 12430*	– –	Y L,Y	
11161	O	4.8 2.3 II	F	1 2	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
11162	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11163	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11165	O	1.3	F	7	U	82998– 12420	82998– –	L	
11166	O	2.3 II	F	1	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11167	O	2.3 II	M	16	U	12330*	–	L,Y	
11168	O	2.3 II	M	2	S	12430*	–	L,Y	
11169	O	1.3	M	3	S	12630	–	L	w/ Clamp
11170	O	1.3	F	3	S	12650	–	L	
11171	O	1.3	M	7	S	12630	–	L	w/ Clamp
11172	O	1.3	F	7	S	12650	–	L	
11173	O	1.3	M	11	S	12630	–	L	
11174	O	1.3	F	11	S	12650	–	L	
11175	O	2.3 II	M	2	S	12430*	–	L,Y	
11176	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11177	O	2.3 II	M	4	S	12430*	–	L,Y	
11178	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11179	O	1.3	F	15	U	12420	–	L	
11181	O	1.3	M	5	S	12630	–	L	
11182	O	1.3	F	5	S	12650	–	L	
11183	O	8.0	M	1	S	12490	–	–	
11184	O	8.0	F	1	S	12500	–	–	
11185	X	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11186	O	1.3	M	4	U	12410	–	L	w/ Clamp
11187	O	1.3	F	4	U	12420	–	L	
11188	O	1.3	M	2	S	12630	–	L	w/ Clamp
11189	O	1.3	F	2	S	12650	–	L	
11190	O	2.3 II	F	8	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11191	O	1.3	M	9	S	12630	–	L	
11192	O	1.3	F	9	S	12650	–	L	
11193	O	2.3 II	M	6	S	12430*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11194	O	2.3 II	F	6	S	82998– 12440*	82998– 12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11195	O	2.3 II 6.3 II	F	22 1	U S	12340* (24380) 24160	– –	L,Y L	(Low Insertion Force)
11196	O	2.3 II	M	6	S	12430*	–	L,Y	
11197	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11199	O	1.3	F	13	U	12420	–	L	
11200	O	1.3	M	11	U	12410	–	L	
11201	O	1.3	M	15	U	12410	–	L	
11202	O	1.3	M	17	U	12410	–	L	
11203	O	1.3	F	17	U	12420	–	L	
11204	O	1.3 2.3 II	M	15 4	U	12410 12330*	– –	L L,Y	
11205	O	1.3 2.3 II	F	15 4	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11206	O	1.3	M	21	U	12410	–	L	
11207	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11208	O	1.3 2.3 II	M	19 4	U	12410 12330*	– –	L L,Y	
11211	O	1.3	M	2	U	12410	–	L	w/ Clamp
11212	O	1.3	F	2	U	12420	–	L	
11214	O	1.0	F	80	S	–	–	–	
11215	O	1.0	F	40	S	–	–	–	
11218	O	1.0 II	F	28	U	24020* –	– –	L L	Terminal Size S Terminal Size M
11219	O	1.0 II	F	16	U	24020* –	– –	L L	Terminal Size S Terminal Size M
11220	O	1.0 II	F	22	U	24020* –	– –	L L	Terminal Size S Terminal Size M
11221	O	1.0 II	F	34	U	24020* –	– –	L L	Terminal Size S Terminal Size M

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11222	O	1.0 II	M	18	U	82998– 24010 24030 24090*	82998– – – –	L Y L	Terminal Size L Terminal Size S,M
		1.8 II		6					
		1.8 II		8					
11223	O	1.0 II	M	12	U	24010 24090*	– –	L L Y	Terminal Size S,M Terminal Size L
		1.8 II		2					
		1.8 II		4		24030	–		
11224	O	1.0 II	F	12	U	24020*	–	L	Terminal Size S
		1.8 II		2		24100	–	L	Terminal Size S,M
		1.8 II		4		24040	–	Y	Terminal Size L
11225	O	1.0 II	F	6	U	24020*	–	L	Terminal Size S
		1.8 II		2		24040	–	Y	Terminal Size L
		1.8 II		6		24100	–	L	Terminal Size S,M
11226	O	1.0 II	F	12	U	24020*	–	L	Terminal Size S
		1.8 II		2		24100	–	L	Terminal Size S,M
		1.8 II		4		24040	–	Y	Terminal Size L
11227	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11232	O	2.3 II	F	5	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11234	X	1.8 1.0	F	4 22	U	12190* 12310*	– –	L L	
11235	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11236	X	4.8	M	2	S	12470	–	Y	
11237	O	4.8	F	2	S	12480	–	Y	
11238	O	2.3 II	F	22	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11239	O	4.8 2.3 II	M	3 8	S	12470 12430*	– –	Y L,Y	
11240	O	4.8 2.3 II	F	3 8	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11241	O	2.3 II 8.0	M	6 2	S	82998– 12430* 12490	82998– – –	L,Y –	
11242	O	2.3 II 8.0	F	6 2	S	12440* 12500	12590 (24400) 12800 (24410) –	L,Y –	6mm Pitch Type (Low Insertion Force)
11243	O	2.3 II	F	1	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11244	O	2.3 II	M	3	S	12430*	–	L,Y	w/ Clamp
11245	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11246	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11247	O	2.3 II	M	2	S	12430*	–	L,Y	w/ Clamp
11248	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11249	O	2.3 II	M	2	S	12430*	–	L,Y	
11250	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11251	O	2.3 II	F	3	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11252	O	2.3 II	F	1	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11254	O	2.3 II	M	2	S	12430*	–	L,Y	
11255	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11256	O	1.3	M	11	S	12630	–	L	
11257	O	1.3	F	11	S	12650	–	L	
11258	O	4.8	M	1	U	12370	–	Y	
11259	O	4.8	F	1	U	12380	–	Y	
11260	O	2.3 II	F	20	U	12340* (24380)	–	L,Y	(Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11261	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11264	O	1.3	F	15	U	12420	–	L	
11267	O	4.8 2.3 II	M	2 4	S	12470 12430*	– –	Y L,Y	
11268	O	2.3 II	M	4	S	12430*	–	L,Y	
11269	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11270	O	2.3 II	M	1	S	12430*	–	L,Y	w/ Clamp
11271	O	2.3 II	F	1	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11272	O	2.3 II	M	2	S	12430*	–	L,Y	
11273	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11276	O	4.8	F	10	U	12380	–	Y	
11277	O	4.8 2.3 II	F	1 8	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11278	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11279	O	4.8 2.3 II	F	2 6	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11280	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11282	O	2.3 II	F	1	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11283	O	4.8 2.3 II	F	2	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
11284	O	2.3 II	F	2	S	–	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11285	O	2.3 II	F	2	S	82998– –	82998– 12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
11286	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11287	O	2.3 II 8.0	M	2 2	S	12430* 12490	– –	L,Y –	
11288	O	2.3 II 8.0	F	2 2	S	12440* 12500	12590 (24400) 12800 (24410) –	L,Y –	6mm Pitch Type (Low Insertion Force)
11289	O	2.3 II	M	6	S	12430*	–	L,Y	
11290	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11291	O	2.3 II	M	4	S	12430*	–	L,Y	w/ Clamp
11292	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11293	O	2.3 II	M	3	S	12430*	–	L,Y	w/ Clamp
11294	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11295	O	2.3 II	M	3	S	12430*	–	L,Y	w/ Clamp
11296	O	2.3 II	F	3	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11297	O	4.8	F	6	U	12380	–	Y	
11298	O	2.3 II	M	3	U	12330*	–	L,Y	
11299	O	2.3 II	M	2	U	12330*	–	L,Y	w/ Clamp
11300	O	2.3 II	M	2	U	12330*	–	L,Y	w/ Clamp
11301	O	2.3 II	M	4	U	12330*	–	L,Y	
11302	O	4.8	F	9	U	12380	–	Y	
11303	O	2.3 II	M	2	S	12430*	–	L,Y	
11304	O	4.8 2.3 II	F	2 2	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
11305	O	1.3	M	2	U	12410	–	L	
11306	O	1.3	F	2	U	12420	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11307	O	1.3 2.3 II	M	15 4	U	82998– 12410 12330*	82998– – –	L L,Y	
11308	O	1.3 2.3 II	F	15 4	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11309	O	1.3 2.3 II	M	13 4	U	12410 12330*	– –	L L,Y	
11310	O	1.3 2.3 II	F	13 4	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11313	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11314	O	8.0	F	3	U	24140	24200	Y	Housing Lance Type1, Head Lamp
11315	O	2.3 II	F	1	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11316	O	2.3 II 6.3 II	M	20 1	U	12330*	– –	L,Y	
11317	O	2.3 II	F	5	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11319	O	1.3	F	5	U	12420	–	L	
11321	O	1.3	F	8	U	12420	–	L	
11322	O	2.3 II	M	2	S	12430*	–	L,Y	
11323	O	2.3 II	F	22	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
		2.3 II		22		12340* (24380)	–		(Low Insertion Force)
		6.3 II		1		24160	–		L
11326	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11327	O	2.3 II	M	5	U	12330*	–	L,Y	w/ Clamp
11332	O	4.8	F	2	S	12480	–	Y L,Y	
		2.3 II		8		12440*	12590 (24400) 12800 (24410)		6mm Pitch Type (Low Insertion Force)
11334	O	1.3	M	17	U	12410	–	L	
11335	O	1.3	F	17	U	12420	–	L	
11336	O	1.3	F	3	U	12420	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11338	X	1.0	M	80	S	82998– –	82998– –	–	
11340	O	1.3	F	7	U	12420	–	L	
11341	O	2.3 II	M	3	S	12430*	–	L,Y	
11342	X	1.0	M	40	S	–	–	–	
11343	X	1.0	M	28	U	–	–	–	
11344	X	1.0	M	16	U	–	–	–	
11345	X	1.0	M	22	U	–	–	–	
11346	X	1.0	M	34	U	–	–	–	
11348	O	2.3 II	M	3	S	12430*	–	L,Y	
11349	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11350	X	1.3	F	13	U	12420	–	L	
11353	O	2.3 II	M	8	U	12330*	–	L,Y	
11354	O	2.3 II	F	8	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11355	O	2.3 II	M	4.8	4	12370	–	Y	
				38	U	12330*	–	L,Y	
				8.0	1	12390	–	–	
11356	O	4.8 2.3 II	M	4	U	12370	–	Y	
				24	U	12330*	–	L,Y	
11357	O	2.3 II	M	27	U	12330*	–	L,Y	
11359	O	4.8 2.3 II	F	4	U	12380	–	Y	
				51	U	12340* (24380)	–	L,Y	(Low Insertion Force)
				4.8	U	12380	–	Y	
11360	O	2.3 II	F	38	U	12340* (24380)	–	L,Y	(Low Insertion Force)
				8.0	1	12400	–	–	Housing Lance Type2
				4	U	12380	–	Y	
11362	O	4.8 2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
				4	U	12380	–	Y	
11363	O	2.3 II	F	1	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11366	O	4.8 2.3 II	F	2	U	12380	–	Y	
				8	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11367	O	1.3	M	2	U	12410	–	L	w/ Clamp
11368	O	1.3	M	2	U	12410	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11369	O	1.3	F	2	U	12420	–	L	
11370	O	2.3 II	M	15	U	12330*	–	L,Y	
11371	O	2.3 II	M	15	U	12330*	–	L,Y	
11372	O	2.3 II	F	15	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11373	O	2.3 II	M	25	U	12330*	–	L,Y	
11374	O	2.3 II	M	25	U	12330*	–	L,Y	
11375	O	2.3 II	F	25	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11376	O	1.3	M	19	U	12410	–	L	
11377	O	1.3	F	19	U	12420	–	L	
11378	O	1.3	M	21	U	12410	–	L	
11379	O	1.3	F	21	U	12420	–	L	
11380	O	1.3	M	23	U	12410	–	L	
11381	O	1.3	F	23	U	12420	–	L	
11385	O	8.0	M	3	U	12390	–	–	
11386	O	8.0	F	2	U	12400	–	–	Housing Lance Type2
11387	O	4.8	F	1	U	12380	–	Y	
		8.0		2		12400	–	–	Housing Lance Type2
11388	X	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11390	O	1.0 II	F	16	U	24020*	–	L	Terminal Size S
		1.8 II		10		24100	–	L	Terminal Size S,M
11391	O	1.0 II	F	16	U	24020*	–	L	Terminal Size S
11392	O	1.0 II	F	16	U	24020*	–	L	Terminal Size S
		1.8 II		6		24100	–	L	Terminal Size S,M
11393	O	1.3	M	13	U	12410	–	L	
11394	O	1.3	F	13	U	12420	–	L	
11395	O	2.3 II	M	2	U	12330*	–	L,Y	w/ Clamp
11396	O	2.3 II	F	2	U	12340* (24380)*	–	L,Y	(Low Insertion Force)
11397	X	2.3 II	F	8	U	12340* (24380)*	–	L,Y	(Low Insertion Force)
11398	O	2.3 II	F	4	U	12340* (24380)*	–	L,Y	(Low Insertion Force)
11399	O	2.3 II	M	4	U	12330*	–	L,Y	w/ Clamp
11400	O	4.8	F	1	S	12480	–	Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980-						82998-	82998-		
11401	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11403	O	1.3	M	25	U	12410	-	L	
11404	X	1.3	F	25	U	12420	-	L	
11406	O	1.0 II 1.8 II	F	22 4	U	24020* 24100	- -	L L	Terminal Size S Terminal Size S,M
11407	O	2.3 II	M	3	S	12430*	-	L,Y	w/o Clamp
11408	O	1.0 II	F	12	U	24020*	-	L	Terminal Size S
11409	X	4.8	M	2	S	12470	-	Y	
11410	O	4.8	F	2	S	12480	-	Y	
11412	O	4.8 2.3 II	M	3 2	S	12470 12430*	- -	Y L,Y	
11413	O	4.8 2.3 II	F	3 2	S	12480 12440*	- 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
11414	X	SL	F	3	S	-	-	-	
11415	O	2.3 II	M	16	U	12330*	-	L,Y	
11416	O	2.3 II	F	16	U	12340* (24380)	-	L,Y	(Low Insertion Force)
11417	O	2.3 II	F	17	U	12340* (24380)	-	L,Y	(Low Insertion Force)
11420	O	2.3	F	17	U	12170	-	Y	
11421	O	1.0 III 1.0 IV	F	20 11	U	12690* 12740	- -	L L	
11422	O	1.0 II 1.8 II	F	18 8	U	24020* 24100	- -	L L	Terminal Size S Terminal Size S,M
11423	O	1.0 II 1.8 II	F	16 10	U	24020* 24100	- -	L L	Terminal Size S Terminal Size S,M
11424	O	1.8 II	F	12	U	24100	-	L	Terminal Size S,M
11425	O	1.0 II	F	16	U	24020*	-	L	Terminal Size S
11427	X	2.3 II	F	4	U	12340* (24380)	-	L,Y	(Low Insertion Force)
11428	O	2.3 II	F	1	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11430	O	4.8 2.3 II 8.0	M	40 5	U	12370 12330* 12390	– – –	Y L,Y –	
11431	O	4.8 2.3 II 8.0	F	40 5	U	12380 12340* (24380) 12400	– – –	Y L,Y –	(Low Insertion Force) Housing Lance Type2
11432	O	1.8 II	F	20	U	24100 24040	– –	L Y	Terminal Size S,M Terminal Size L
11433	O	1.8 II 1.8 II	F	14 14	U	24100 24040	– –	L Y	Terminal Size S,M Terminal Size L
11434	X	C-TYPE	M	16	U	–	–	–	
11435	X	C-TYPE	F	16	U	12570	–	L	
11436	O	1.3	F	2	U	12420	–	L	
11437	O	2.3 II	F	14	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11438	X	4.8 2.3 II	M	3 5	U	12370 12330*	– –	Y L,Y	
11439	X	4.8 2.3 II	F	3 5	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11440	O	2.3 II	M	20	U	12330*	–	L,Y	
11441	O	2.3 II	F	20	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11442	O	2.3 II	M	20	U	12330*	–	L,Y	
11443	X	2.3 II	F	20	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11444	O	2.3 II	M	16	U	12330*	–	L,Y	
11445	O	2.3 II	F	16	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11447	O	2.3 II	M	2	S	12430*	–	L,Y	
11448	O	2.3 II	F	2	S	12590 (24400) 12800 (24410) 12440*	L,Y	6mm Pitch Type (Low Insertion Force)	
11450	O	1.3	F	10	U	12420	–	L	
11451	O	2.3 II	F	3	S	–	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
11452	O	2.3 II	M	6	U	12330*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11459	X	2.3 II	F	8	U	82998– 12340* (24380)	82998– –	L,Y	(Low Insertion Force)
11460	O	4.8 2.3 II	M	2 6	S	12470 12430*	– –	Y L,Y	
11461	O	4.8 2.3 II	F	2 6	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
11462	O	1.3	M	16	S	12630	–	L	
11463	X	1.3	F	16	S	12650	–	L	
11466	O	2.3 II	M	2	S	12430*	–	L,Y	
11467	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11469	O	1.3 2.3 II	F	16 4	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11470	O	1.3	M	3	U	12410	–	L	
11471	O	1.3	F	3	U	12420	–	L	
11475	O	1.3	F	12	U	12420	–	L	
11476	O	1.0 III 1.0 IV	F	17 7	U	12690* 12740	– –	L L	
11477	O	LAC	M	22	U	12100	–	Y	
11478	O	LAC	F	13	U	12110	–	Y	
11479	O	LAC	F	9	U	12110	–	Y	
11484	O	2.3 II 8.0	M	1 2	U	12330* 12390	– –	L,Y –	
11485	O	2.3 II 8.0	F	1 2	U	12340* (24380) 12400	– –	L,Y –	(Low Insertion Force) Housing Lance Type2
11486	O	2.3 II	M	2	S	12430*	–	L,Y	
11487	O	1.3	M	6	U	12410	–	L	w/ Clamp
11488	O	1.3	F	6	U	12420	–	L	
11489	O	1.3	M	3	U	12410	–	L	w/ Clamp
11490	O	1.3	F	3	U	12420	–	L	
11491	X	6.3	F	3	U	12060	12580	Y	Splash Proof, Housing Lance Type1
11492	O	1.3 2.3 II	M	4 2	U	12410 12330*	– –	L L,Y	w/ Clamp

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11493	O	1.3 2.3 II	F	4 2	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11494	O	1.3	F	4	U	12420	–	L	
11495	O	1.3	F	4	U	12420	–	L	
11497	O	1.3	F	18	U	12420	–	L	
11498	X	1.3	M	20	U	12410	–	L	
11499	X	1.3	F	20	U	12420	–	L	
11500	O	1.3	M	12	U	12410	–	L	
11502	O	1.3	F	22	U	12420	–	L	
11503	O	1.3	M	22	U	12410	–	L	
11504	O	1.3 2.3 II	M	16 4	U	12410 12330*	– –	L L,Y	
11505	X	1.3	M	17	U	12410	–	L	
11506	X	1.3	F	17	U	12420	–	L	
11508	O	1.3	F	40	U	12420	–	L	
11509	O	1.3	F	24	U	12420	–	L	
11511	O	1.3	F	14	U	12420	–	L	
11512	X	4.8	F	2	U	12380	–	Y	
11514	X	MIC100	F	32	U	01010	–	L	
11517	X	MP280	F	6	S	–	–	–	
11519	X	MP150	F	2	S	–	–	–	
11520	X	MP150	F	2	S	–	–	–	
11522	X	MP280	F	4	S	–	–	–	
11524	X	MP280	F	12	U	01020	–	L	
11527	O	4.8 2.3 II	F	2 8	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11528	O	2.3 II	M	7	U	12330*	–	L,Y	
11529	O	2.3 II	F	7	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11530	O	2.3 II	M	12	U	12330*	–	L,Y	
11531	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11532	O	1.3	M	8	U	12410	–	L	
11533	O	1.3	F	8	U	12420	–	L	
11534	O	2.3 II	M	9	U	12330*	–	L,Y	
11535	O	2.3 II	F	9	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11536	O	2.3 II	M	10	U	12330*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11537	O	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11538	O	2.3 II	M	11	U	12330*	–	L,Y	
11539	O	2.3 II	F	11	U	24220 12340* (24380)	–	L L,Y	IDC (Low Insertion Force)
11541	O	2.3 II	M	13	U	12330*	–	L,Y	
11542	O	2.3 II	F	13	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11546	O	4.8 2.3 II	M	4 12	U	12370 12330*	– –	Y L,Y	
11547	O	4.8 2.3 II	F	4 12	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11549	O	1.8 II 1.8 II	M	34 34	U	24030 24090*	– –	Y L	Terminal Size L Terminal Size S,M
11551	O	4.8	M	8	U	12370	–	Y	
11552	O	4.8 8.0	F	4 2	U	12380 12400	– –	Y –	Housing Lance Type2
11554	X	1.3 2.3 II	M	16 22	U	12410 12330*	– –	L L,Y	
11555	O	1.3 2.3 II	F	16 22	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11556	O	1.3	F	14	U	12420	–	L	
11558	O	1.3	F	20	U	12420	–	L	
11559	O	1.3 2.3 II	M	8 9	U	12410 12330*	– –	L L,Y	
11560	O	1.3 2.3 II	F	8 9	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11561	O	1.3 2.3 II	M	6 10	U	12410 12330*	– –	L L,Y	
11562	O	1.3 2.3 II	F	6 10	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11565	O	1.0 II 1.8 II	F	10 6	U	24020* 24100	– –	L L	Terminal Size S Terminal Size S,M
11566	O	1.0 II	F	40	S	24060	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–11568	O	2.3 II	M	13	U	82998–12330*	82998––	L,Y	
11569	O	2.3 II 8.0	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
						12500	–		
11570	O	1.3	M	19	U	12410	–	L	
11571	O	1.3	F	19	U	12420	–	L	
11573	O	1.3	M	16	U	12410	–	L	
11574	O	1.3	F	16	U	12420	–	L	
11579	O	8.0	F	2	U	12400	–	–	Housing Lance Type2
11580	O	1.3	M	10	U	12410	–	L	
11581	O	1.3	F	10	U	12420	–	L	
11582	X	1.3	M	8	U	12410	–	L	
11583	O	4.8	F	6	U	12380	–	Y	
11586	O	1.0 III	F	17	U	12640	–	L	IDC
11587	O	2.3 II	M	6	U	12330*	–	L,Y	w/ Clamp
11588	O	1.3	M	8	U	12410	–	L	
11590	O	1.3 2.3 II	M	8 6	U	12410	–	L	
						12330*	–	L,Y	
11591	O	1.3 2.3 II	F	8 6	U	12420	–	L	
						12340* (24380)	–	L,Y	(Low Insertion Force)
11592	O	2.3 II	F	8	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11593	O	2.3 II	F	8	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11594	O	1.3 2.3 II	F	10 8	U	12420	–	L	
						12340* (24380)	–	L,Y	(Low Insertion Force)
11595	O	1.3 2.3 II	F	10 8	U	12420	–	L	
						12340* (24380)	–	L,Y	(Low Insertion Force)
11596	O	4.8 2.3 II	M	2 8	U	12370	–	Y	
						12330*	–	L,Y	
11598	O	2.3 II	M	5	S	12430*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11599	O	2.3 II	F	5	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11600	O	4.8 2.3 II 8.0	M	3 12 2	S	12470 12430* 12490	– – –	Y L,Y –	
11601	O	4.8 2.3 II 8.0	F	3 12 2	S	12480 12440* 12500	– 12590 (24400) 12800 (24410) –	Y L,Y –	6mm Pitch Type (Low Insertion Force)
11602	O	4.8 2.3 II	M	2 3	U	12370 12330*	– –	Y L,Y	
11603	O	4.8 2.3 II	F	2 3	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11604	O	2.3 II	F	13	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11605	O	1.3 2.3 II	M	2 2	U	12410 12330*	– –	L L,Y	
11606	O	1.3 2.3 II	F	2 2	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11607	O	2.3 II	M	3	S	12430*	–	L,Y	
11608	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11609	O	4.8 2.3 II	M	3 8	S	12470 12430*	– –	Y L,Y	
11610	X	4.8 2.3 II	M	4 22	U	12370 12330*	– –	Y L,Y	
11611	O	4.8 2.3 II	F	4 22	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11612	O	4.8 2.3 II	F	3 8	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
11613	O	1.3 2.3 II	M	8 2	U	12410 12330*	– –	L L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11614	O	1.3 2.3 II	F	8 2	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11615	O	4.8	F	8	U	12380	–	Y	
11616	O	1.3	F	6	U	12420	–	L	
11617	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11618	O	1.3	F	40	U	12420	–	L	
11622	O	2.3 II	M	3	S	12430*	–	L,Y	w/ Clamp
11623	O	1.3	M	8	U	12410	–	L	
11626	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11627	O	1.3	M	20	U	12410	–	L	
11628	O	1.3	F	22	U	12420	–	L	
11631	O	4.8 2.3 II	M	6 20	U	12370 12330*	– –	Y L,Y	
11632	O	4.8 2.3 II	F	6 20	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11633	O	1.3	F	8	U	12420	–	L	
11637	O	1.0 III	F	28	U	12690*	–	L	
11638	X	1.0 III 1.0 IV	F	16 6	U	12690* 12740	– –	L L	
11639	X	HID	F	1	S	–	–	–	HID Socket
11640	X	6.3 II	F	4	S	24160	–	L	
11643	O	4.8 2.3 II	F	2 7	S	12480 12440* 12590 (24400) 12800 (24410)	– – L,Y	Y 6mm Pitch Type (Low Insertion Force)	
11648	O	1.3	F	16	U	12420	–	L	
11652	O	1.3 2.3 II	F	10 6	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11653	O	2.3 II	F	10	S	12440* 12590 (24400) 12800 (24410)	– L,Y	6mm Pitch Type (Low Insertion Force)	
11654	O	1.3	M	14	U	12410	–	L	
11655	O	8.0	M	2	U	12390	–	–	
11657	O	1.3	F	10	U	12420	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11658	O	2.3 II	F	10	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11659	O	2.8	F	2	S	12550	12610	Y	HB3,HB4
11660	O	2.8	F	2	S	12550	12610	Y	HB3,HB4
11661	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11662	O	8.0	F	4	U	12400	–	–	Housing Lance Type2
11663	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11664	O	2.3 II	F	12	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11665	O	OBD II	F	16	U	–	–	–	
11667	O	4.8 8.0	F	1 2	U	12380 12400	– –	Y –	Housing Lance Type2
11669	O	2.3 II	M	27	U	12330*	–	L,Y	
11670	O	2.3 II	F	27	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11671	O	1.3 2.3 II	F	8 9	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11672	O	1.3 2.3 II	F	8 9	U	12420 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11676	O	8.0	F	4	U	12400	–	–	Housing Lance Type2
11677	O	2.3 II	F	15	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11684	O	8.0	F	2	U	12400	–	–	Housing Lance Type2
11685	O	8.0	F	3	U	12400	–	–	Housing Lance Type2
11686	O	4.8	F	8	U	12380	–	Y	
11687	O	6.3	F	1	U	12060 –	12580 –	Y –	Housing Lance Type1 Terminal Lance Type2
11692	O	2.3 II	M	12	U	12330*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11693	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11694	O	2.3 II	M	13	U	12330*	–	L,Y	
11695	O	2.3 II	F	13	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11697	O	1.5	F	6	U	–	–	–	Type1
11698	O	1.3	F	12	S	12650	–	L	
11701	O	4.8 2.3 II	F	4	U	12380 12340* (24380)	–	Y L,Y	(Low Insertion Force)
11702	O	2.3 II	M	2	U	12330*	–	L,Y	
11703	O	2.3 II	F	1	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11704	O	2.3 II	F	18	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11705	O	2.3 II	F	15	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11706	O	2.3 II	M	6	U	12330*	–	L,Y	
11707	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11708	O	1.3	F	22	U	12420	–	L	
11709	O	2.3 II	M	9	U	12330*	–	L,Y	
11710	O	2.3 II	F	9	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11711	O	2.3 II	M	11	U	12330*	–	L,Y	
11712	O	2.3 II	F	11	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11713	O	2.3 II	M	13	U	12330*	–	L,Y	
11714	O	2.3 II	F	13	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11715	O	1.3 2.3 II	F	16 4	U	12420 12340* (24380)	–	L L,Y	(Low Insertion Force)
11716	O	1.3 2.3 II	F	10 8	U	12420 12340* (24380)	–	L L,Y	(Low Insertion Force)
11717	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11718	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11719	O	2.3 II	M	5	U	12330*	–	L,Y	
11720	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11721	O	2.3 II	M	14	U	12330*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11722	O	1.3 2.3 II	F	10 8	U	82998– 12420 12340* (24380)	82998– – –	L L,Y	(Low Insertion Force)
11723	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11724	O	2.3 II	M	2	U	12330*	–	L,Y	w/ Clamp
11725	O	2.3 II	M	2	U	12330*	–	L,Y	
11726	O	2.3 II	M	4	U	12330*	–	L,Y	
11727	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11728	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11729	O	2.3 II	M	6	U	12330*	–	L,Y	w/ Clamp
11730	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11731	O	8.0	F	3	U	24140	24200	Y	Housing Lance Type1, Head Lamp
11732	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11734	O	2.3 II	M	14	U	12330*	–	L,Y	
11735	O	2.3 II	M	2	U	12330*	–	L,Y	
11736	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11737	O	2.3 II	M	1	U	12330*	–	L,Y	
11738	O	2.3 II	F	1	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11739	O	2.3 II	M	7	U	12330*	–	L,Y	
11740	O	2.3 II	F	7	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
11741	O	6.3 II	M	1	U	–	–	–	
11742	O	4.8	F	4	U	12380	–	Y	
11754	X	2.3 II 8.0	F	18 1	U	12340* (24380) 12400	– –	L,Y –	(Low Insertion Force) Housing Lance Type2
11755	X	4.8 2.3 II	F	2 10	U	12380 12340* (24380)	– –	Y L,Y	Low Insertion Force)
11756	X	4.8	M	6	U	12370	–	Y	
11757	O	2.3 II	M	10	U	12330*	–	L,Y	
11758	X	4.8	F	6	U	12380	–	Y	
11759	O	2.3 II	M	18	U	12330*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 11760	X	2.3 II	F	22	U	82998– 12340* (24380)	82998– –	L,Y	(Low Insertion Force)
11761	O	2.3 II	M	2	U	12330*	–	L,Y	w/ Clamp
11762	X	4.8 2.3 II	M	4 20	U	12370 12330*	– –	Y L,Y	
11763	O	2.3 II	M	3	U	12330*	–	L,Y	
11764	O	2.3 II	F	3	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11765	O	2.3 II	M	4	U	12330*	–	L,Y	
11766	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11767	O	2.3 II	M	1	U	12330*	–	L,Y	w/ Clamp
11768	O	2.3 II	M	2	U	12330*	–	L,Y	w/ Clamp
11769	O	2.3 II	F	2	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
11770	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11771	O	4.8 2.3 II	F	2 2	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11772	O	2.3 II	F	5	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
11773	O	2.3 II	F	2	S	12440* 12590 (24400) 12800 (24410)	L,Y		6mm Pitch Type (Low Insertion Force)
11774	O	9.5	M	1	U	–	–	–	
11775	O	9.5	F	1	U	–	–	–	
11776	O	1.3	F	10	U	12420	–	L	
11777	O	1.3	F	3	U	12420	–	L	
11778	O	4.8	F	6	U	12380	–	Y	
11779	O	2.3 II	M	4	U	12330*	–	L,Y	w/ Clamp
11780	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11781	O	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11782	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11784	O	4.8 2.3 II	F	2 7	S	12480 12440*	– 12590 (24400) 12800 (24410)	Y L,Y	6mm Pitch Type (Low Insertion Force)
11786	O	1.0 J 1.8 J	F	16 10	U	24310* 24330	– –	L Y	
11787	O	1.0 J 1.8 J	F	16 6	U	24310* 24330	– –	L Y	
11788	O	1.0 J	F	16	U	24310*	–	L	
11791	O	2.3 II	F	14	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11792	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11794	O	VH	F	7	U	–	–	–	
11797	O	2.3 II	F	5	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11799	O	4.8	F	4	U	12380	–	Y	
11800	O	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11801	O	2.3 II	M	4	U	12330*	–	L,Y	w/ Clamp
11802	O	2.3 II 2.3 II 6.3 II	F	2 20 1	S U S	12440* 12340* (24380) 24160	12590 (24400) 12800 (24410) – –	L,Y L,Y L	6mm Pitch Type (Low Insertion Force) (Low Insertion Force)
11803	O	2.3 II	M	2	U	12330*	–	L,Y	
11804	O	6.3	F	2	U	12060	12580	Y	Housing Lance Type1
11805	O	2.3 II	F	14	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11806	O	2.3 II	F	16	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11807	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11808	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11809	O	4.8	M	4	U	12370	–	Y	
11811	O	2.3 II	M	4	U	12330*	–	L,Y	w/ Clamp
11812	O	2.3 II	M	4	U	12330*	–	L,Y	
11814	O	2.3 II	M	6	U	12330*	–	L,Y	w/ Clamp
11817	O	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11820	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11823	O	2.3 II	M	10	U	12330*	–	L,Y	
11824	O	8.0	F	2	U	12400	–	–	Housing Lance Type2
11827	O	2.3 II	F	13	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11835	O	4.8 2.3 II	F	2	U	12380 12340* (24380)	– –	Y L,Y	(Low Insertion Force)
11840	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11841	O	2.3 II	F	4	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
11842	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11843	O	2.3 II	M	5	U	12330*	–	L,Y	
11847	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11848	O	2.3 II	F	13	U	12340* (24380)	–	L,Y	(Low Insertion Force)
11849	O	4.8 2.3 II	M	2 8	U	12370 12330*	– –	Y L,Y	
11850	O	4.8 2.3 II 2.3 II	F	2 8	U	12380 24220 12340* (24380)	– – –	Y L L,Y	IDC (Low Insertion Force)
11851	O	4.8 2.3 II	F	4 20	S	12480 –	– 12790* (24420)	Y L,Y	5mm Pitch Type (Low Insertion Force)
11852	O	4.8	F	8	U	12380	–	Y	
11853	O	6.3	F	1	U	12070	–	Y	Terminal Lance Type4,DEFG
11858	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11859	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11860	O	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11861	O	4.8 1.5	F	4 21	S	12480 –	– –	Y –	
11867	O	1.0 III	F	12	U	12690*	–	L	
11869	O	1.0 III	F	12	U	12690*	–	L	
11871	O	1.0 III	F	12	U	12690*	–	L	
11872	O	1.0 III	F	28	U	12690*	–	L	
11873	O	1.0 III	F	12	U	12690*	–	L	
11875	O	2.3 II	F	2	S	–	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
11877	O	1.0 III 2.3 II	F	19 6	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11878	O	4.8	M	4	U	12370	–	Y	
11879	O	4.8	F	6	U	12380	–	Y	
11880	O	8.0	F	3	U	12400	–	–	Housing Lance Type2
11881	O	9.5	F	1	U	–	–	–	
11882	O	4.8 2.3 II	F	4 20	S	12480 –	– 12790* (24420)	Y L,Y	5mm Pitch Type (Low Insertion Force)
11885	O	2.3 II	F	4	S	–	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
11893	O	4.8 2.3 II	F	4 20	S	12480 –	– 12790* (24420)	Y L,Y	5mm Pitch Type (Low Insertion Force)
11900	O	2.3 II	F	2	S	–	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
11901	O	2.3 II	M	2	S	12430*	–	L,Y	
11904	O	1.0 III	F	5	S	12720*	–	L	
11909	O	1.0 III	F	5	U	12690*	–	L	
11910	O	1.0 III	M	14	U	12670*	–	L	
11911	O	1.0 III	F	14	U	12690*	–	L	
11912	O	1.0 III	M	18	U	12670*	–	L	
11913	O	1.0 III	F	18	U	12690*	–	L	
11914	X	1.0 III	F	18	U	12640	–	L	IDC

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
11915	O	1.0 III	F	22	U	12690*	–	L	
11917	O	1.0 III	M	2	U	12670*	–	L	
11918	O	1.0 III	F	2	U	12690*	–	L	
11919	X	1.0 III	F	2	U	12640	–	L	IDC
11920	O	1.0 III	M	5	U	12670*	–	L	
11921	X	1.0 III	F	5	U	12640	–	L	IDC
11922	O	1.0 III	M	10	U	12670*	–	L	
11923	O	1.0 III	F	10	U	12690*	–	L	
11924	X	1.0 III	F	10	U	12640	–	L	IDC
11925	X	1.0 III	F	14	U	12640	–	L	IDC
11926	O	1.0 III	M	22	U	12670*	–	L	
11927	X	1.0 III	F	22	U	12640	–	L	IDC
11929	O	2.3 II	M	4	S	12430*	–	L,Y	
11930	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11932	X	HID	F	1	S	–	–	–	HID Socket
11933	X	1.0 III	M	2	U	12670*	–	L	w/ Clamp
11935	O	1.0 III 1.0 IV	F	20 11	U	12690* 12740	– –	L L	
11936	O	8.0	M	3	U	12390	–	–	
11943	O	SOCK-ET	F	1	S	–	–	–	
11944	O	SOCK-ET	F	1	S	–	–	–	
11945	O	PIN	M	2	S	–	–	–	
11947	O	1.0 III 2.3 II	F	8 4	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11948	X	1.0 III	F	10	U	12640	–	L	IDC
11950	O	1.0 III	F	4	U	12690*	–	L	
11952	O	1.0 III	F	13	U	12690*	–	L	
11954	O	1.0 III 2.3 II	F	8 9	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
11955	O	1.0 III	F	19	U	12690*	–	L	
11956	O	1.0 III	F	21	U	12690*	–	L	
11957	O	1.0 III 2.3 II	F	16 5	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980-						82998-	82998-		
11960	O	2.3 II	F	5	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11962	O	9.5	M	1	S	-	-	-	
11963	O	9.5	F	1	S	-	-	-	
11964	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
11967	O	1.0 III	M	2	U	12670*	-	L	w/ Clamp
11971	O	1.0 III 2.3 II	F	16 4	U	12690* 12340* (24380)	- -	L L,Y	(Low Insertion Force)
11973	O	1.0 III 2.3 II	F	10 8	U	12690* 12340* (24380)	- -	L L,Y	(Low Insertion Force)
11974	O	1.0 III	F	20	U	12690*	-	L	
11975	O	6.3 II	F	4	U	24170	-	Y	
11977	X	MINI FUSE	F	3	U	12810	-	Y	
11978	O	OBD II	F	16	U	-	-	-	
11986	O	1.0 III	F	6	U	12690*	-	L	
11987	O	1.0 III	F	3	U	12690*	-	L	
11988	X	1.0 III	F	4	U	12640	-	L	IDC
11989	O	1.0 III	F	8	U	12690*	-	L	
11996	O	9.5	F	2	U	-	-	-	
12002	O	1.0 III 2.3 II	M	6 5	U	12670* 12330*	- -	L L,Y	
12003	O	1.0 III 2.3 II	F	6 5	U	12690* 12340* (24380)	- -	L L,Y	(Low Insertion Force)
12004	X	1.0 III	M	6	U	12660	-	L	IDC
12005	O	2.3 II	F	4	S	-	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
12006	O	1.0 III	M	2	U	-	-	-	
12007	O	1.0 III 2.3 II	F	4 9	U	12690* 12340* (24380)	- -	L L,Y	(Low Insertion Force)
12008	O	1.0 III 2.3 II	F	2 8	U	12690* 12340* (24380)	- -	L L,Y	(Low Insertion Force)
12012	O	1.0 III	F	6	U	12690*	-	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
12014	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12018	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12019	X	1.0 III	F	4	U	12640	–	L	IDC
12020	O	4.8 1.0 III	F	4 30	S	12480 12720*	– –	Y L	
12021	O	4.8 1.0 III	F	4 23	S	12480 12720*	– –	Y L	
12022	O	4.8 1.0 III	F	4 16	S	12480 12720*	– –	Y L	
12023	X	1.0 III	M	10	U	12660	–	L	IDC
12024	X	1.0 III	M	22	U	12660	–	L	IDC
12025	O	1.0 III 2.3 II	M	16 4	U	12670* 12330*	– –	L L,Y	
12026	X	2.3 II	F	9	U	24220	–	L	IDC
12027	X	2.3 II	F	13	U	24220	–	L	IDC
12028	O	2.3 II	F	2	S	12440* 12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)	
12029	X	1.0 III	M	2	U	–	–	–	IDC,FPC
12032	O	1.0 J	F	12	U	24310*	–	L	
12034	O	4.8 1.0 III	F	2 18	U	12380 12690*	– –	Y L	
12038	O	1.0 III 2.3 II	F	16 4	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12039	O	VH	F	2	U	–	–	–	
12056	O	0.64	F	6	U	12750*	–	L	
12057	O	2.3 II	F	4	S	12440* 12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)	
12058	O	4.8 8.0	F	1 2	S	12480 12500	– –	Y –	
12059	O	1.0 III	M	7	U	12670*	–	L	
12060	O	1.0 III	F	7	U	12690*	–	L	
12062	X	1.0 III	M	2	U	12670*	–	L	w/ Clamp
12063	O	1.0 III	F	2	U	12690*	–	L	
12065	X	HID	F	1	S	–	–	–	HID Socket
12067	O	1.0 III	F	6	U	12690*	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–12068	O	8.0	F	2	S	82998–12500	82998–	–	–
12069	O	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12070	X	2.3 II	F	24	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12071	X	2.3 II	F	32	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12072	O	–	F	–	U	–	–	–	Lever
12073	O	–	F	–	U	–	–	–	Lever
12074	O	2.3 II	F	8	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12075	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12076	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12077	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12078	O	2.3 II	F	8	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12080	O	1.0 III	F	8	S	12720*	–	L	
12083	O	2.3 II	F	13	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12085	O	IDC J/C	F	10	U	–	–	–	IDC
12086	O	–	F	–	U	–	–	–	Lever
12088	X	2.3 II	F	2	U	24220	–	L	IDC
12089	X	2.3 II	F	2	U	24220	–	L	IDC
12090	X	2.3 II	F	12	U	24220	–	L	IDC
12091	X	1.0 III	F	8	U	12640	–	L	IDC
12092	O	0.64	F	5	U	12750*	–	L	
		1.0 III		2		12690*	–	L	
		1.0 IV		2		12740	–	L	
12094	O	1.0 III	F	16	U	12690*	–	L	
12096	X	1.0 III	F	12	U	12690*	–	L	
		2.3 II		20		12340* (24380)	–	L,Y	(Low Insertion Force)
12097	O	–	F	–	U	–	–	–	Lever
12098	O	1.0 III	F	12	U	12690*	–	L	
12099	X	2.3 II	F	4	U	24220	–	L	IDC
12100	X	2.3 II	F	12	U	24220	–	L	IDC
12101	X	2.3 II	F	16	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12102	X	2.3 II	F	28	U	12340* (24380)	–	L,Y	(Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
12103	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12104	O	2.3 II	F	16	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12105	O	2.3 II	M	16	U	12330*	–	L,Y	
12106	O	2.3 II	F	20	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12107	O	–	F	–	U	–	–	–	Lever
12110	X	SOCK-ET	F	2	U	–	–	–	
12111	X	SOCK-ET	F	2	U	–	–	–	
12113	O	1.0 III	F	8	U	12690*	–	L	
12114	O	1.0 III 2.3 II	F	6 28	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12115	O	1.0 III 2.3 II	F	6 8	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12116	O	4.8 1.0 III	F	4 20	S	12480 12720*	– –	Y L	
12117	O	2.3 II	F	2	S	–	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
12120	O	8.0	F	2	U	12400	–	–	Housing Lance Type2
12121	X	HID	F	1	S	–	–	–	HID Scoket
12122	O	1.0 III 2.3 II	F	6 12	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12123	O	1.0 III	M	4	U	12670*	–	L	
12128	O	1.0 III	F	2	U	12640 12690*	– –	L L	IDC
12135	O	1.0 III	F	10	U	12690*	–	L	
12142	O	0.64 1.0 III 1.0 IV	F	24 7 7	U	12750* 12690* 12740	– – –	L L L	
12143	O	0.64 1.0 III 1.0 IV	F	25 7 7	U	12750* 12690* 12740	– – –	L L L	
12144	O	0.64 1.0 III 1.0 IV	F	27 7 7	U	12750* 12690* 12740	– – –	L L L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980-	O	0.64 1.0 III 1.0 IV	F	28 7 7	U	82998-	82998-	L	
						12750*	-		
						12690*	-		
12145	O	0.64 1.0 III 1.0 IV	F	29 6 6	U	12740	-	L	
						12750*	-		
						12690*	-		
12146	O	0.64 1.0 III 1.0 IV	F	20 4	U	12740	-	L	
						12750*	-		
						12340* (24380)	-		
12149	O	0.64 2.3 II	F	20 4	U	12740	-	L,Y	(Low Insertion Force)
						12750*	-		
						12340* (24380)	-		
12150	O	0.64 2.3 II	F	20 6	U	12750*	-	L	
						12340* (24380)	-		
						12750*	-		
12151	O	0.64 2.3 II	F	28 2	U	12340* (24380)	-	L,Y	(Low Insertion Force)
						12750*	-		
						12690*	-		
12153	O	0.64	F	32	U	12750*	-	L	
12155	O	0.64	F	16	U	12750*	-	L	
12156	X	0.64	F	16	U	12770	-	L	IDC
12158	O	1.0 III	F	5	U	12640 12690*	-	L	IDC
12161	O	1.0 III 2.3 II	M	8 9	U	12670* 12330*	-	L L,Y	
12162	O	1.0 III	F	10	U	12690*	-	L	
12163	X	2.3 II	M	8	S	12430*	-	L,Y	
12164	X	2.3 II	F	8	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12166	O	1.0 III 2.3 II	F	14 6	U	12690* 12340* (24380)	-	L L,Y	(Low Insertion Force)
12168	O	1.0 III	F	3	S	12720*	-	L	
12169	O	0.64	F	40	U	12750*	-	L	
12170	X	0.64	F	40	U	12770	-	L	IDC
12172	O	1.0 III	F	10	U	12640 12690*	-	L	IDC
12173	O	1.0 III	F	14	U	12640 12690*	-	L	IDC
12174	O	1.0 III	F	18	U	12640 12690*	-	L	IDC

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 12175	O	1.0 III	F	22	U	82998– 12640 12690*	82998– – –	L L	IDC
12176	O	2.3 II	F	4	S	–	12790* (24420)	L,Y	5mm Pitch Type (Low Insertion Force)
12179	O	1.0 III 2.3 II	F	42 4	U	12640 12690* 24220	– – –	L L L	IDC IDC
12180	O	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12181	O	2.3 II	F	8	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12183	O	0.64	F	12	U	12750*	–	L	
12184	O	1.0 III 2.3 II	F	30 12	U	12640 12690* 24220	– – –	L L L	IDC IDC
12185	O	1.0 III	F	18	U	12640 12690*	– –	L L	IDC
12186	O	1.0 III	F	12	U	12640 12690*	– –	L L	IDC
12187	O	1.0 III 2.3 II	F	12 4	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12188	X	2.3 II	F	2	S	12440* 12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)	
12189	O	1.0 III	M	5	U	12670*	–	L	
12190	X	1.0 III	F	5	U	12690*	–	L	
12192	X	0.64	M	16	U	24230*	–	L	
12193	X	0.64	M	24	U	24230*	–	L	
12194	O	1.0 III	M	2	S	12710	–	L	w/ Clamp
12195	O	1.0 III	F	2	S	12720*	–	L	
12196	O	D-3	M	3	U	–	–	–	
12197	X	D-3	F	3	U	–	–	–	
12198	X	D-3	M	6	U	–	–	–	
12199	O	D-3	F	6	U	–	–	–	
12200	O	0.64	F	24	U	12750*	–	L	
12203	O	0.64 2.3 II	F	20 6	U	12750* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12204	O	1.0 III	M	6	U	12670*	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–12209	O	1.0 III	F	6	U	82998–12690*	82998–	L	
12211	O	1.0 III	F	4	U	12690*	–	L	
12212	O	1.0 III	M	4	U	12670*	–	L	w/ Clamp
12217	O	0.64	F	8	U	12750*	–	L	
12219	X	PAI 1	F	2	U	–	82988–12010	L	A/B
12221	O	0.64	F	8	U	12750*	–	L	
12222	O	0.64	F	12	U	12750*	–	L	
12224	X	PAI 1	F	2	U	–	82988–12020	L	A/B
12225	O	0.64	F	4	U	–	–	–	Splash Proof, A/B
12226	O	1.0 III 2.3 II	F	6 4	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12239	O	1.0 III 2.3 II	F	16 4	U	12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
12241	O	0.64	F	2	U	–	–	–	Splash Proof, A/B
12242	X	PAI 1	F	2	U	–	82988–12030	L	A/B
12243	X	PAI 1	F	2	U	–	82988–12040	L	A/B
12244	X	1.0 III	F	12	U	12690*	–	L	
12247	X	0.64	M	4	U	24230*	–	L	
12248	O	0.64	M	8	U	24230*	–	L	
12249	O	2.3 II	M	10	U	12330*	–	L,Y	
12250	O	0.64	M	11	U	24230*	–	L	
12251	X	0.64	F	11	U	12750*	–	L	
12252	O	0.64	M	16	U	24230*	–	L	
12253	X	PAI 1	F	2	U	–	82988–12050	L	A/B
12255	X	2.3 II	F	3	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12256	O	1.0 III	M	6	S	12170	–	L	
12257	O	1.0 III	F	6	S	12720*	–	L	
12259	O	0.64	F	20	U	12750*	–	L	
12261	O	0.64	M	16	U	24230*	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 12262	O	0.64	M	32	U	82998– 24230*	82998– –	L	
12263	X	0.64	F	4	U	12770	–	L	IDC
12264	X	0.64	F	8	U	12770	–	L	IDC
12265	X	0.64	F	12	U	12770	–	L	IDC
12266	X	0.64	F	20	U	12770	–	L	IDC
12267	X	0.64	F	24	U	12770	–	L	IDC
12268	X	0.64	F	32	U	12770	–	L	IDC
12272	O	1.0 III	F	10	U	12690*	–	L	
12273	O	1.0 III	F	6	U	12640	–	L	IDC
		2.3 II				12690*	–	L	
						24220	–	L	IDC
						12340* (24380)	–	L,Y	(Low Insertion Force)
12274	O	1.0 III	F	18	U	12640	–	L	IDC
		2.3 II				12690*	–	L	
						24220	–	L	IDC
						12340* (24380)	–	L,Y	(Low Insertion Force)
12275	O	1.0 III	F	8	U	12640	–	L	IDC
		2.3 II				12690*	–	L	
						24220	–	L	IDC
						12340* (24380)	–	L,Y	(Low Insertion Force)
12276	O	1.0 III	F	24	U	12640	–	L	IDC
		2.3 II				12690*	–	L	
						24220	–	L	IDC
						12340* (24380)	–	L,Y	(Low Insertion Force)
12277	O	1.0 III	F	10	U	12640	–	L	IDC
		2.3 II				12690*	–	L	
						24220	–	L	IDC
						12340* (24380)	–	L,Y	(Low Insertion Force)
12278	O	4.8	F	1 6 18	U	12380	–	Y	
		1.0 III				12690*	–	L	
		2.3 II				12640	–	L	IDC
						12340* (24380)	–	L,Y	(Low Insertion Force)
						24220	–	L	IDC
12279	O	–	F	–	U	–	–	–	Lever
12280	O	–	F	–	U	–	–	–	Lever

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 12281	O	1.0 III 2.3 II	F	10 6	U	82998– 12640 12690* 24220 12340* (24380)	82998– – – – –	L L L L,Y	IDC IDC (Low Insertion Force)
						12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
12282	O	1.0 III 2.3 II	F	8 12	U	12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
						24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12283	O	2.3 II	F	12	U	12640 12690* 24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
						12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
12284	O	1.0 III 2.3 II	F	8 4	U	12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
						12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
12285	O	1.0 III 2.3 II	F	6 4	U	12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
						12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
12286	O	1.0 III 2.3 II	F	10 6	U	12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
						12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
12287	O	1.0 III 2.3 II	F	4 10	U	12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
						12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)
12288	O	1.0 III 2.3 II	F	6 10	U	12640 12690* 24220 12340* (24380)	– – – –	L L L L,Y	IDC IDC (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
12289	O	4.8 1.0 III 2.3 II	F	1 6	U	12380 12640 12690* 24220 12340* (24380)	– – – – –	Y L L L L,Y	IDC IDC (Low Insertion Force)
12290	O	0.64	F	12	U	12750*	–	L	
12292	O	0.64	F	5	S	–	24250*	L	
12293	O	0.64	F	15	S	–	24250*	L	
12294	O	0.64 4.8	F	2	S	– 12480	24250* –	L Y	
12295	X	0.64 4.8	F	8 2	S	– 12480	24250* –	L Y	
12296	O	0.64	F	3	U	12750*	–	L	
12297	O	0.64 4.8	F	42 4	S	– 12480	24250* –	L Y	
12299	O	9.5	F	2	U	–	–	–	
12300	O	9.5	F	2	U	–	–	–	
12301	O	0.64 2.3 II	M	11 9	U	24230* 12330*	– –	L L,Y	
12302	O	0.64 2.3 II	F	11 9	U	12750* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12303	O	0.64	F	6	S	–	24250*	L	
12304	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12306	O	2.3 II	F	8	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12307	O	–	F	–	U	–	–	–	Lever
12308	X	2.3 II	F	24	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12309	O	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12310	O	–	F	–	U	–	–	–	Lever
12311	X	2.3 II	F	32	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12312	O	1.0 III	F	12	U	12690*	–	L	
12313	O	–	F	–	U	–	–	–	Lever
12314	X	1.0 III 2.3 II	F	12 20	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–						82998–	82998–		
12315	X	2.3 II	F	28	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12316	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12317	O	–	F	–	U	–	–	–	Lever
12318	X	2.3 II	F	16	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12319	O	1.0 III 2.3 II	F	6 8	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12320	X	1.0 III 2.3 II	F	6 28	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12321	X	2.3 II	F	3	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12322	O	1.0	M	2	U	–	–	–	IDC,Sunvisor
12323	O	1.0	F	2	U	–	–	–	Sunvisor
12324	X	2.3 II	F	8 12	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12325	X	2.3 II	F	8	U	24220	–	L	IDC
12326	O	0.64	F	13	S	–	24250*	L	
12328	X	0.64 II 2.3 II	F	8 2	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12329	O	0.64 II 2.3 II	F	14 2	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12330	O	0.64 II	F	28	U	24290*	–	L	
12331	O	8.0	F	4	U	12400	–	–	Housing Lance Type2
12332	O	8.0	F	4	U	12400	–	–	Housing Lance Type2
12333	O	8.0	F	4	U	12400	–	–	Housing Lance Type2
12334	X	2.3 II	F	4	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12335	X	2.3 II	F	4	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12336	X	2.3 II	F	7	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 12337	X	2.3 II	F	9	U	82998– 24220 12340* (24380)	82998– – –	L L,Y	IDC (Low Insertion Force)
12338	X	2.3 II	F	10	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12339	X	2.3 II	F	12	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12340	X	2.3 II	F	1	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12341	X	2.3 II	F	2	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12342	X	2.3 II	F	2	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12343	X	2.3 II	F	2	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12344	X	2.3 II	F	6	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12345	X	2.3 II	F	11	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12346	X	2.3 II	F	13	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
12347	X	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12348	X	2.3 II	F	5	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12349	X	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12350	X	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12351	X	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12352	O	0.64	F	2	U	–	–	–	Splash Proof, A/B
12353	O	0.64	F	3	S	–	24250*	L	
12354	O	0.64	F	3	S	–	24250*	L	
12355	O	1.0 III	F	2	U	12690*	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–12356	O	0.64	F	12	S	82998–	82998–	L	
12357	O	0.64	F	12	S	–	24250*	L	
12358	O	0.64 II 2.3 II	F	2 5	U	24290* 12340* (24380)	– –	L,Y	(Low Insertion Force)
12359	O	0.64 II 2.3 II	F	4 6	U	24290* 12340* (24380)	– –	L,Y	(Low Insertion Force)
12360	O	0.64 II	F	4	U	24290*	–	L	
12361	O	0.64 II	F	10	U	24290*	–	L	
12362	X	0.64 2.3 II	F	7 2	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12364	O	0.64	M	8	U	24230*	–	L	w/ Clamp
12365	O	0.64 II	M	5	U	24270*	–	L	
12366	O	0.64 II	F	5	U	24290*	–	L	
12367	O	0.64 II	M	10	U	24270*	–	L	
12368	O	0.64 II	F	10	U	24290*	–	L	
12369	O	0.64 II	M	14	U	24270*	–	L	
12370	O	0.64 II	F	14	U	24290*	–	L	
12371	O	0.64 II	M	22	U	24270*	–	L	
12372	O	0.64 II	F	22	U	24290*	–	L	
12373	O	0.64 II 2.3 II	M	8 9	U	24270* 12330*	– –	L,Y	
12374	O	0.64 II 2.3 II	F	8 9	U	24290* 24220 12340* (24380)	– – –	L,Y	IDC (Low Insertion Force)
12375	O	0.64 II 2.3 II	M	10 8	U	24270* 12330*	– –	L,Y	
12376	O	0.64 II 2.3 II	F	10 8	U	24290* 24220 12340* (24380)	– – –	L,Y	IDC (Low Insertion Force)
12377	O	0.64 II 2.3 II	M	16 4	U	24270* 12330*	– –	L,Y	
12378	O	0.64 II 2.3 II	F	16 4	U	24290* 24220 12340* (24380)	– – –	L,Y	IDC (Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–12379	O	0.64	M	10	S	82998–	82998–	L	
						–	24360*		
12380	O	0.64	F	10	S	–	24250*	L	
12381	X	0.64	M	6	S	–	24360*	L	
12382	O	0.64	F	6	S	–	24250*	L	
12383	X	1.0 III 2.3 II	F	12 24	U	12690* 12340* (24380)	– –	L, L,Y	(Low Insertion Force)
12384	X	1.0 III 2.3 II	F	12 20	U	12690* 12340* (24380)	– –	L, L,Y	(Low Insertion Force)
12385	X	1.0 III 2.3 II	F	6 24	U	12690* 12340* (24380)	– –	L, L,Y	(Low Insertion Force)
12386	O	1.0 III 2.3 II	F	6 8	U	12690* 12340* (24380)	– –	L, L,Y	(Low Insertion Force)
12388	O	0.64 II	F	40	U	24290*	–	L	
12396	O	0.64 2.3 II	F	102 24	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L, L,Y	6mm Pitch Type (Low Insertion Force)
12397	O	0.64 2.3 II	F	102 24	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L, L,Y	6mm Pitch Type (Low Insertion Force)
12398	O	0.64 2.3 II	F	71 18	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L, L,Y	6mm Pitch Type (Low Insertion Force)
12399	O	0.64 2.3 II	F	71 18	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L, L,Y	6mm Pitch Type (Low Insertion Force)
12404	O	0.64 II	F	24	U	24290*	–	L	
12407	O	0.64 1.0 III 1.0 IV	F	27 6 6	U	12750* 12690* 12740	– – –	L L L	
12409	O	0.64	M	28	U	24230*	–	L	
12410	O	0.64	F	28	U	12750*	–	L	
12411	O	0.64 II	M	18	U	24270*	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–12412	O	0.64 II	F	18	U	82998–24290*	82998–	L	
12413	O	0.64 II 2.3 II	M	21 4	U	24270* 12330*	– –	L,Y	
12414	O	0.64 II 2.3 II	F	21 4	U	24290* 12340* (24380)	– –	L,Y	(Low Insertion Force)
12416	O	0.64	F	2	S	–	24250*	L	
12419	O	0.64 II	M	5	U	24270*	–	L	
12422	O	0.64 II	F	32	U	24290*	–	L	
12423	O	0.64 II	F	16	U	24290*	–	L	
12426	O	0.64 4.8	F	36 4	S	– 12480	24250*	L Y	
12428	O	0.64 1.0 JII	F	28 7	U	12750* 12830* 12840	– – –	L L L	Terminal Size M Terminal Size L
12429	O	0.64 1.0 JII	F	29 6	U	12750* 12830* 12840	– – –	L L L	Terminal Size M Terminal Size L
12430	O	0.64 1.0 JII	F	27 7	U	12750* 12830* 12840	– – –	L L L	Terminal Size M Terminal Size L
12431	O	0.64 1.0 JII	F	24 7	U	12750* 12830* 12840	– – –	L L L	Terminal Size M Terminal Size L
12444	O	0.64 III 2.3 II	F	20 6	U	12870* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12446	O	0.64 2.3 II	F	6 4	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L L,Y	6mm Pitch Type (Low Insertion Force)
12448	O	–	F	–	U	–	–	–	Outer,A/B
12452	X	PAI 1	F	2	U	–	82988–12060	L	A/B
12454	X	0.64 1.0 JII	F	28 7	U	12750* 12830* 12840	– – –	L L L	Terminal Size M Terminal Size L
12455	X	0.64 1.0 JII	F	29 6	U	12750* 12830* 12840	– – –	L L	Terminal Size M Terminal Size L

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 12456	X	0.64 1.0 JII	F	27 7	U	82998– 12750* 12830* 12840	82998– – – –	L L L	Terminal Size M Terminal Size L
						12750* 12830* 12840	– – –	L L L	
12457	X	0.64 1.0 JII	F	24 7	U	12750* 12830* 12840	– – –	L L L	Terminal Size M Terminal Size L
						12750* 12830* 12840	– – –	L L L	
12458	O	0.64 II	F	19	U	24290*	–	L	
12460	O	0.64 II	F	20	U	24290*	–	L	
12461	O	0.64 2.3 II	F	48 12	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L L,Y	6mm Pitch Type (Low Insertion Force)
						– 12440*	24250* 12590 (24400) 12800 (24410)	L L,Y	
12462	O	0.64 2.3 II	F	48 12	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L L,Y	6mm Pitch Type (Low Insertion Force)
12463	X	1.0 III	F	10	U	12690*	–	L	
12468	O	1.0 III 4.8	F	4 4	U	12690* 12380	– –	L Y	
						12690* 12380	– –	L Y	
12469	O	1.0 III 4.8	F	4 4	U	12690* 12380	– –	L Y	
						12690* 12380	– –	L Y	
12470	X	2.3 II	F	1	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12471	X	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12472	X	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12473	X	2.3 II	F	3	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12474	X	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12475	X	2.3 II	F	8	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12476	X	2.3 II	F	11	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12477	X	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12478	X	2.3 II	F	12	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12479	X	2.3 II	F	13	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12480	X	2.3 II	M	8	U	12330*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–12481	X	2.3 II	M	10	U	82998–12330*	82998–	L,Y	
12482	X	2.3 II	M	13	U	12330*	–	L,Y	
12483	O	1.0 III 8.0	F	9 2	S	12720* 12500	– –	L –	
12485	O	1.0 III 4.8	F	4 4	U	12690* 12380	– –	L Y	
12486	O	1.0 III 4.8	F	4 4	U	12690* 12380	– –	L Y	
12487	X	4.8	F	1	U	12380	–	Y	
12488	X	4.8	F	2	U	12380	–	Y	
12489	X	9.5	F	1	U	–	–	–	
12495	O	0.64	F	4	S	–	24250*	L	
12496	O	4.8	F	3	S	12480	–	Y	
12498	O	2.3 II	F	2	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12499	O	0.64 II 2.3 II	M	9 4	U	24270* 12330*	– –	L L,Y	
12500	O	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12501	X	0.64 II 2.3 II	F	48 12	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12502	X	0.64 II 2.3 II	F	27 12	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12503	X	0.64 II 2.3 II	F	18 12	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12504	X	1.0 III 2.3 II	F	6 24	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12505	X	1.0 III 2.3 II	F	12 16	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12506	X	1.0 III 2.3 II	F	18 16	U	12690* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12507	O	0.64 II	F	30	U	24290*	–	L	
12508	O	0.64 II	F	18	U	24290*	–	L	
12509	O	0.64 II	F	18	U	24290*	–	L	
12510	O	0.64 II	F	9	U	24290*	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 12511	O	1.0 III 2.3 II	F	6 4	U	82998– 12690* 12340* (24380)	82998– – –	L L,Y	(Low Insertion Force)
						12690*	–	L	
12512	O	1.0 III	F	6	U	12690*	–	L	
12513	O	–	F	–	U	–	–	–	Lever
12514	X	0.64 II 2.3 II	M	48 12	U	24270* 12330*	– –	L L,Y	
						24270* 12330*	– –	L L,Y	
12515	X	0.64 II 2.3 II	M	27 12	U	24270* 12330*	– –	L L,Y	
						24270* 12330*	– –	L L,Y	
12516	X	0.64 II 2.3 II	M	18 12	U	24270* 12330*	– –	L L,Y	
						24270* 12330*	– –	L L,Y	
12517	O	1.0	F	9	U	–	–	–	IDC,RCL
12518	O	1.0 III 4.8	F	13 3	U	12690* 12380	– –	L Y	
						12690* 12380	– –	L Y	
12519	O	0.64	M	6	S	–	24360*	L	
12520	O	0.64	F	8	S	–	24250*	L	
12522	O	0.64 II 2.3 II	F	8 4	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
						24290* 12340* (24380)	– –	L L,Y	
12525	O	0.64 III 1.0 III 1.0 IV	F	24 7 7	U	12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
12526	O	0.64 III 1.0 III 1.0 IV	F	25 7 7	U	12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
12527	O	0.64 III 1.0 III 1.0 IV	F	27 7 7	U	12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
12528	O	0.64 III 1.0 III 1.0 IV	F	28 7 7	U	12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
12529	O	0.64 III 1.0 III 1.0 IV	F	29 6 6	U	12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
						12870* 12690* 12740	– – –	L L L	
12530	X	4.8	F	2	U	12380	–	Y	
12531	X	2.3 II	M	13	U	12330*	–	L,Y	
12532	X	2.3 II	F	8	U	24220 12340* (24380)	– –	L L,Y	IDC (Low Insertion Force)
						24220 12340* (24380)	– –	L L,Y	
12533	X	2.3 II	M	9	U	12330*	–	L,Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–12534	X	2.3 II	M	8	U	82998–12330*	82998–	L,Y	
12539	X	2.3 II	F	6	U	24220 12340* (24380)	–	L L,Y	IDC (Low Insertion Force)
12540	X	2.3 II	F	10	U	24220 12340* (24380)	–	L L,Y	IDC (Low Insertion Force)
12541	O	0.64 II	F	5	U	24290*	–	L	
12542	O	0.64 II	M	10	U	24270*	–	L	
12543	O	0.64 II	F	10	U	24290*	–	L	
12544	O	0.64 II	M	22	U	24270*	–	L	
12545	O	0.64 II	F	22	U	24290*	–	L	
12546	O	0.64 II 2.3 II	M	10 8	U	24270* 12330*	–	L L,Y	
12547	O	0.64 II 2.3 II	F	10 8	U	24290* 12340* (24380)	–	L L,Y	(Low Insertion Force)
12550	O	0.64 II	F	8	U	24290*	–	L	
12551	O	0.64 III	F	8	U	12870*	–	L	
12552	O	0.64 III	F	12	U	12870*	–	L	
12553	O	0.64 III	F	16	U	12870*	–	L	
12554	O	0.64 III	F	24	U	12870*	–	L	
12555	O	0.64 III	F	28	U	12870*	–	L	
12556	O	0.64 III	F	32	U	12870*	–	L	
12557	O	0.64 III	F	40	U	12870*	–	L	
12558	O	0.64 III	F	8	U	12870*	–	L	
12559	O	0.64 III	F	12	U	12870*	–	L	
12560	O	0.64 III 2.3 II	F	20 4	U	12870* 12340* (24380)	–	L L,Y	(Low Insertion Force)
12561	O	0.64 III 2.3 II	F	20 6	U	12870* 12340* (24380)	–	L L,Y	(Low Insertion Force)
12562	O	0.64 III 2.3 II	F	28 2	U	12870* 12340* (24380)	–	L L,Y	(Low Insertion Force)
12564	O	0.64 II	F	36	U	24290*	–	L	
12566	X	0.64 II	F	28	U	24290*	–	L	
12567	O	0.64 II	F	40	U	24290*	–	L	
12569	X	1.0 III	F	14	U	12690*	–	L	
12570	X	1.0 III	F	18	U	12690*	–	L	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–12571	X	1.0 III	F	22	U	82998–12690*	82998–	L	
12574	O	0.64 II	M	8 9	U	24270*	–	L	
		2.3 II				12330*	–	L,Y	
12585	X	0.64 II	F	10	U	24290*	–	L	
12586	O	–	F	–	S	–	–	–	Lever
12587	O	–	F	–	S	–	–	–	Lever
12588	O	–	F	–	S	–	–	–	Lever
12589	O	–	F	–	S	–	–	–	Lever
12610	O	0.64 II	M	11	U	24270*	–	L	
12611	O	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12614	O	0.64 III	F	12	U	12870*	–	L	
12627	O	0.64	M	2	S	–	24360*	L	w/ Clamp
12630	X	0.64 2.3 II	F	36 4	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12634	X	2.3 II	F	2	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12635	X	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12636	X	2.3 II	F	3	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12637	X	2.3 II 4.8	F	2 2	U	12340* (24380) 24220 12380	– – –	L,Y L Y	(Low Insertion Force) IDC
12638	O	0.64 II 2.3 II	M	16 4	U	24270* 12330*	– –	L L,Y	
12639	O	0.64 II 2.3 II	F	16 4	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12648	O	4.8	F	3	S	12480	–	Y	

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 12649	O	0.64 2.3 II	F	23 3	S	82998– 12440*	82998– 24250* 12590 (24400) 12800 (24410)	L L,Y	6mm Pitch Type (Low Insertion Force)
12651	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12652	X	0.64 2.3 II	F	36 4	S	– 12440*	24250* 12590 (24400) 12800 (24410)	L L,Y	6mm Pitch Type (Low Insertion Force)
12653	X	9.5	F	2	S	–	–	–	
12654	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12655	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12656	O	2.3 II	F	6	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12658	X	0.64 4.8	F	30 4	S	– 12480	24250* –	L Y	
12659	X	0.64 4.8	F	30 4	S	– 12480	24250* –	L Y	
12669	O	8.0	F	2	S	12500	–	–	
12670	O	0.64 II 2.3 II	M	11 10	U	24270* 12330*	– –	L L,Y	
12671	O	0.64 II 2.3 II	F	11 10	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12672	X	0.64 II 2.3 II	F	48 18	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12673	X	0.64 II 2.3 II	F	12	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)
12674	X	0.64 II 2.3 II	F	12	U	24290* 12340* (24380)	– –	L L,Y	(Low Insertion Force)

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980–12678	O	–	–	–	–	82998–	82998–	–	Volt,EV
12686	O	0.64 4.8	F	30 4	S	– 12480	24250* –	L Y	
12687	X	0.64 4.8	F	30 4	S	– 12480	24250* –	L Y	
12689	X	2.3 II	F	4	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12690	X	2.3 II	F	6	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12691	X	2.3 II	F	10	U	12340* (24380)	–	L,Y	(Low Insertion Force)
12694	X	HID	F	1	S	–	–	–	HID Socket
12695	X	0.64 II	F	3	U	24290*	–	L	
12699	O	0.64 II	F	4	U	–	–	–	Splash Proof, A/B
12700	O	0.64 III 1.0 III 1.0 IV	F	20 13 13	U	12870* 12690* 12740	– – –	L L L	
12704	O	2.3 II	F	4	S	12440*	12590 (24400) 12800 (24410)	L,Y	6mm Pitch Type (Low Insertion Force)
12708	X	0.50	F	40	U	–	–	–	
12710	O	0.64 II	F	30	U	24290*	–	L	
12712	O	0.64	F	30	S	–	24250*	L	
12716	O	0.64	M	13	U	24230*	–	L	
12717	O	0.64 II	F	2	U	–	–	–	Splash Proof, A/B
12719	O	0.64	M	3	S	–	24360*	L	
12728	X	0.64	F	2	S	–	24250*	L	
12732	X	1.5	M	4	U	24340	–	Y	Type2
12733	X	1.5	F	4	U	24350	–	Y	Type2
12734	X	1.5	M	8	U	24340	–	Y	Type2
12735	X	1.5	F	8	U	24350	–	Y	Type2
12736	X	1.5	M	12	U	24340	–	Y	Type2
12737	X	1.5	F	12	U	24350	–	Y	Type2
12738	X	0.64 II 1.5	M	10 8	U	24270* 24340	– –	L Y	Type2
12739	X	0.64 II 1.5	F	10 8	U	24290* 24350	– –	L Y	Type2
12740	X	0.64 II 1.5	M	16 4	U	24270* 24340	– –	L Y	Type2

HOUSING PART NUMBER LIST

Part No. of Connector Body	Supply	Terminal	Male Female	Cav. No.	Terminal Sealing Ability	Part No. of Repair Wire		Sleeve Color	Memo
						160 mm Type	500 mm Type		
90980– 12741	X	0.64 II 1.5	F	16 4	U	82998– 24290* 24350	82998– – –	L Y	Type2
12742	X	0.64 II 1.5	M	12 6	U	24270* 24340	– –	L Y	Type2
12743	X	0.64 II 1.5	F	12 6	U	24290* 24350	– –	L Y	Type2
12744	X	0.64 II 1.5	M	8 10	U	24270* 24340	– –	L Y	Type2
12745	X	0.64 II 1.5	F	8 10	U	24290* 24350	– –	L Y	Type2
12756	X	9.5	F	1	U	–	–	–	

memo

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

REPAIR WIRE

WATERPROOF TYPE	F-1
NON-WATERPROOF TYPE	F-7
TERMINAL PACKING	F-25
HOLE PLUG	F-26
PRESS SLEEVE	F-28

HINT:

Waterproof exclusive repair wires for 7.7 and TODC are not available.
(Available wires are for both waterproof and non-waterproof)

NOTES:

The following marks are used in the table.

A	Terminal width
B	Terminal diameter
C	Terminal guide width
D	Wire outside diameter
E	Nominal size of wire
*	Glod plated (Gilded)

F

F

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Waterproof Type)

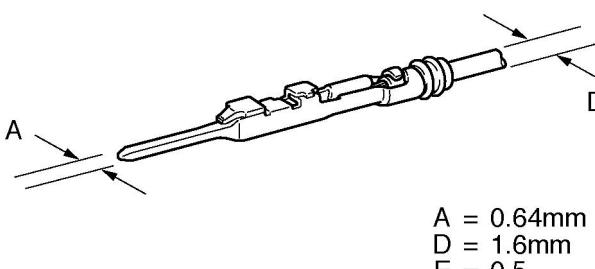
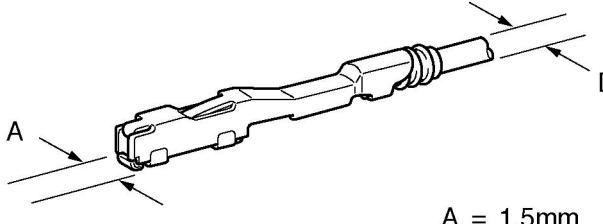
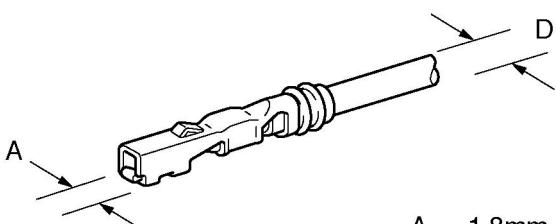
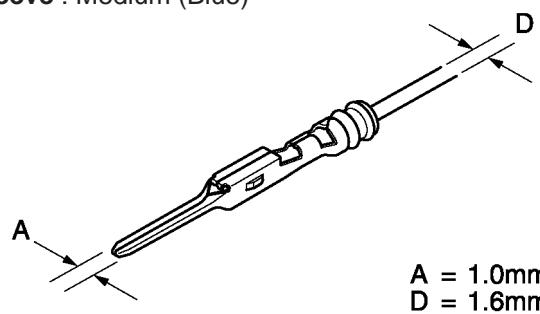
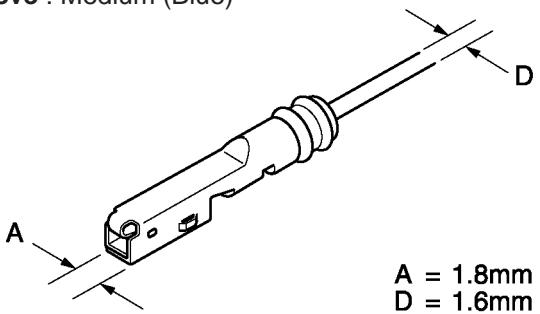
Type	0.64	
	Male	Female
	 <p>A = 0.64mm D = 1.6mm E = 0.5</p>	 <p>A = 1.5mm D = 1.6mm E = 0.5</p>
P/N	82998-24360(500mm) 82998-24370*	82998-24250(500mm) 82998-24260*
Type	1.0II	
	Male	Female
		 <p>A = 1.8mm D = 2.1mm E = 1.25</p>
P/N		82998-24060*
Type	1.0III	
	Male	Female
	Sleeve : Medium (Blue)  <p>A = 1.0mm D = 1.6mm E = 0.5</p>	Sleeve : Medium (Blue)  <p>A = 1.8mm D = 1.6mm E = 0.5</p>
P/N	82998-12710*	82998-12720 82998-12730*

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Waterproof Type)

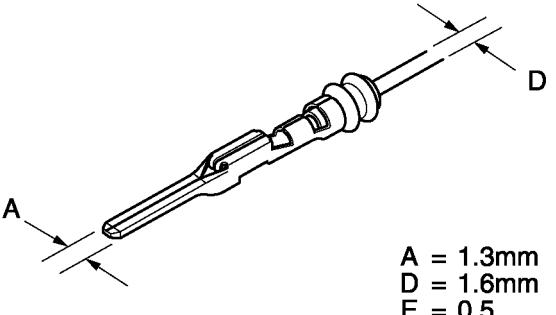
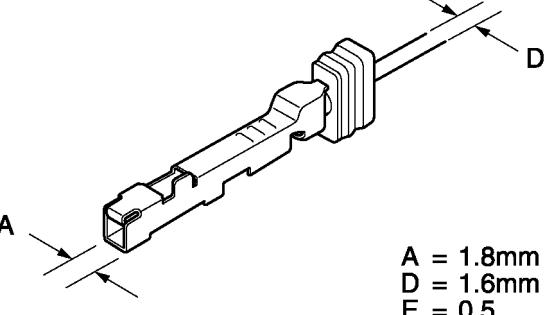
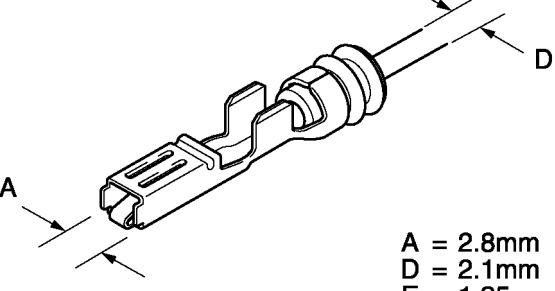
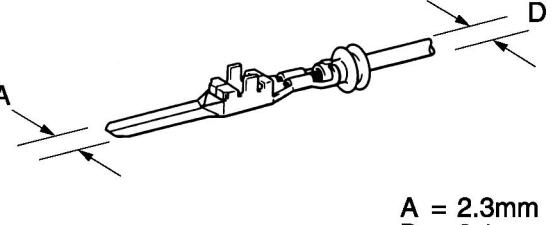
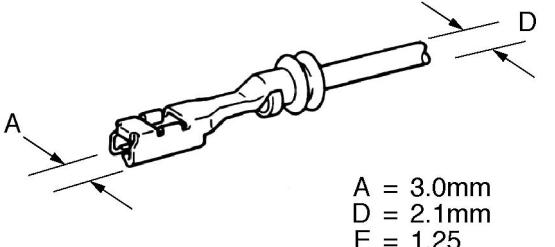
Type	1.3	
	Male	Female
	Sleeve : Medium (Blue)  A = 1.3mm D = 1.6mm E = 0.5	Sleeve : Medium (Blue)  A = 1.8mm D = 1.6mm E = 0.5
P/N	82998-12630	82998-12650
Type	1.8	
	Male	Female
		Sleeve : Medium (Blue)  A = 2.8mm D = 2.1mm E = 1.25
P/N		82998-12620
Type	2.3	
	Male	Female
	Sleeve : Medium (Blue)  A = 2.3mm D = 2.1mm E = 1.25	Sleeve : Medium (Blue) or Large (Yellow)  A = 3.0mm D = 2.1mm E = 1.25 2.00(500mm)
P/N	82998-12260 82998-24070*	82998-12270(160mm) 82998-12600(500mm) 82998-24080*

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Waterproof Type)

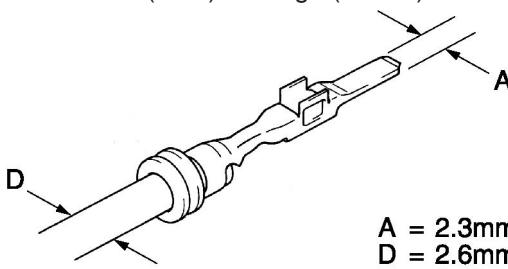
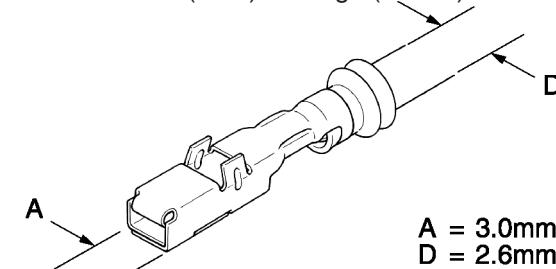
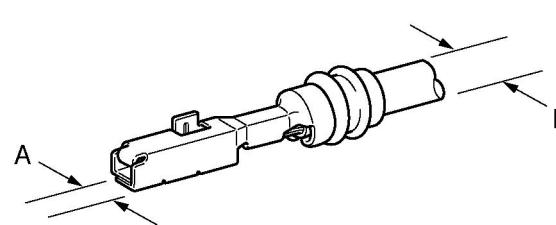
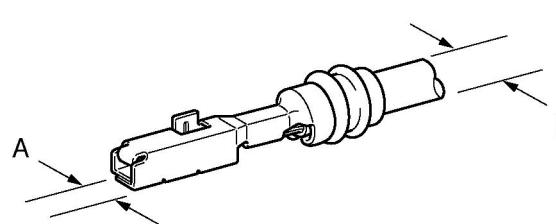
Type	2.3II (6mm Pitch Type)	
	Male	Female
	<p>Sleeve : Medium (Blue) or Large (Yellow)</p>  <p>A = 2.3mm D = 2.6mm E = 2.00 1.25*</p>	<p>Sleeve : Medium (Blue) or Large (Yellow)</p>  <p>A = 3.0mm D = 2.6mm E = 2.00 1.25*</p>
P/N	82998-12430 82998-12450*	82998-12440(160mm) 82998-12460 * 82998-12590(500mm) 82998-12800(500mm)
Type	2.3II (6mm Pitch Type Low Insertion Force)	
	Male	Female
		 <p>A = 3.0mm D = 2.6mm E = 2.0</p>
P/N		82998-24400(500mm) 82998-24410(500mm)
Type	2.3II (5mm Pitch Type Low Insertion Force)	
	Male	Female
		 <p>A = 3.0mm D = 2.6mm E = 2.0</p>
P/N		82998-24420(500mm)

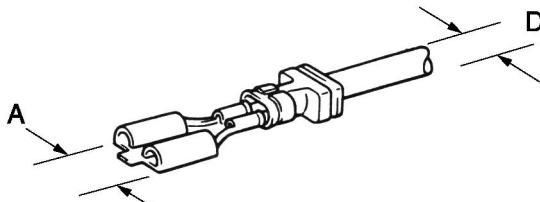
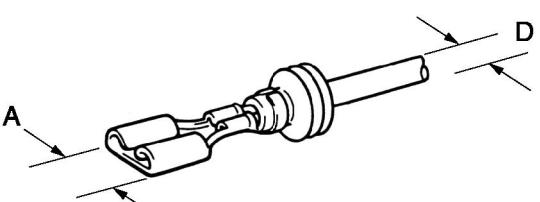
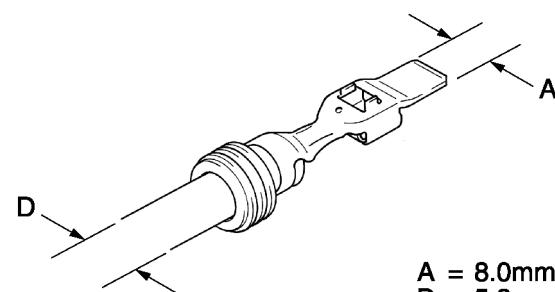
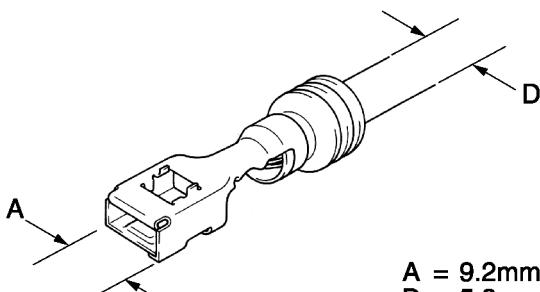
TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Waterproof Type)

Type	2.3II (5mm Pitch Type)	
	Male	Female
		<p>Sleeve : Medium (Blue) or Large (Yellow)</p> <p>A = 3.0mm D = 2.6mm E = 2.0 1.25*</p>
P/N		82998-12790(500mm) 82998-12780*
Type	2.8 (HB3, HB4)	
	Male	Female
		<p>Sleeve : Large (Yellow)</p> <p>A = 4.4mm D = 2.6mm E = 2.0</p>
P/N		82998-12550(160mm) 82998-12610(500mm)
Type	4.8	
	Male	Female
	<p>Sleeve : Large (Yellow)</p> <p>A = 4.8mm D = 3.6mm E = 3</p>	<p>Sleeve : Large (Yellow)</p> <p>A = 6.0mm D = 3.6mm E = 3</p>
P/N	82998-12470	82998-12480

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Waterproof Type)

Type	6.3	
	Male	Female
	 <p>Sleeve : Large (Yellow)</p> <p>A = 7.5mm D = 3.6mm E = 3</p>	
P/N	82998-12540	
Type	6.3II	
	Male	Female
	 <p>Sleeve : Medium (Blue)</p> <p>A = 7.8mm D = 1.6mm E = 0.5</p>	
P/N	82998-24160	
Type	8.0	
	Male	Female
	 <p>A = 8.0mm D = 5.3mm E = 8</p>	 <p>A = 9.2mm D = 5.3mm E = 8</p>
P/N	82998-12490	82998-12500

F

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE**Repair Wire (Waterproof Type)**

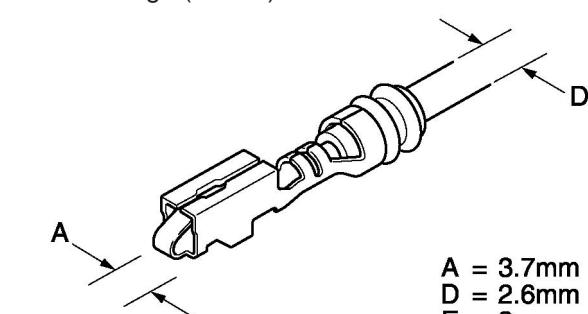
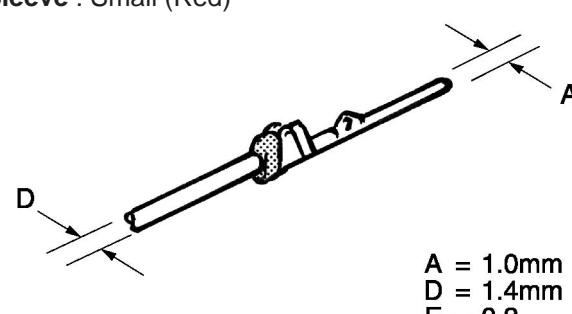
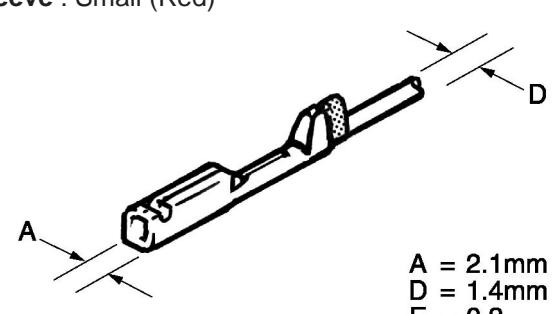
Type	HEAD LAMP	
	Male	Female
		Sleeve : Large (Yellow)  <p>A = 3.7mm D = 2.6mm E = 2</p>
P/N		82998-24150(160mm) 82998-24190(500mm)
Type	TLC	
	Male	Female
	Sleeve : Small (Red)  <p>A = 1.0mm D = 1.4mm E = 0.3</p>	Sleeve : Small (Red)  <p>A = 2.1mm D = 1.4mm E = 0.3</p>
P/N	82998-12280	82998-12290

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

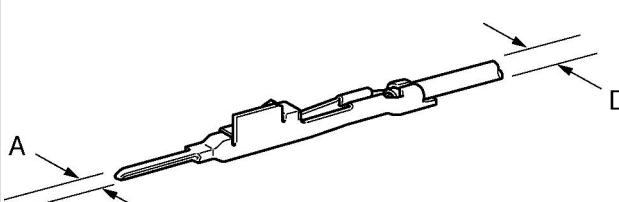
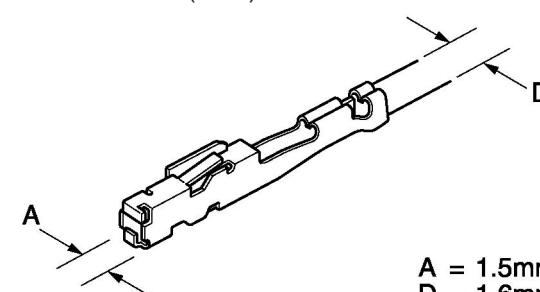
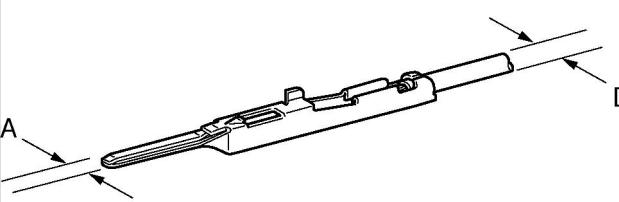
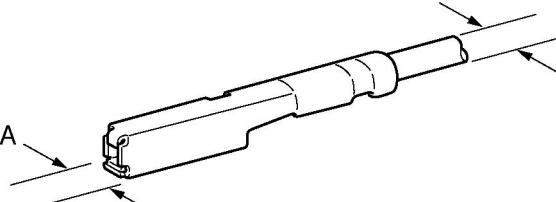
Type	0.64	
	Male	Female
	Sleeve : Medium (Blue)  A = 0.64mm D = 1.6mm E = 0.5	Sleeve : Medium (Blue)  A = 1.5mm D = 1.6mm E = 0.5
P/N	82998-24230 82998-24240*	82998-12750 82998-12760*
Type	0.64 IDC	
	Male	Female
		Sleeve : Medium (Blue)  A = 1.5mm D = 1.6mm E = 0.5
P/N		82998-12770
Type	0.64II	
	Male	Female
	Sleeve : Medium (Blue)  A = 0.64mm D = 1.6mm E = 0.5	Sleeve : Medium (Blue)  A = 1.5mm D = 1.6mm E = 0.5
P/N	82998-24270 82998-24280*	82998-24290 82998-24300*

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

Type	0.64II	
	Male	Female (Outer)
		<p>Sleeve : Medium (Blue)</p> <p>A = 1.5mm D = 1.6mm E = 0.5</p>
P/N	82998-24390*	
Type	0.64III	
	Male	Female
		<p>Sleeve : Medium (Blue)</p> <p>A = 1.6mm D = 1.6mm E = 0.5</p>
P/N	82998-12870 82998-12860*	
Type	1.0	
	Male	Female
		<p>Sleeve : Medium (Blue)</p> <p>A = 1.8mm D = 1.6mm E = 0.5</p>
P/N	82998-12310 82998-12320*	

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

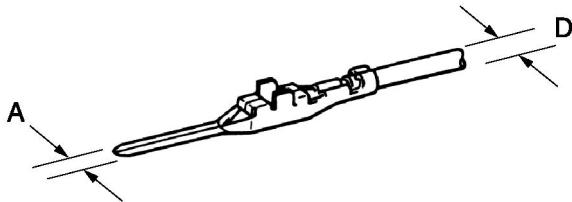
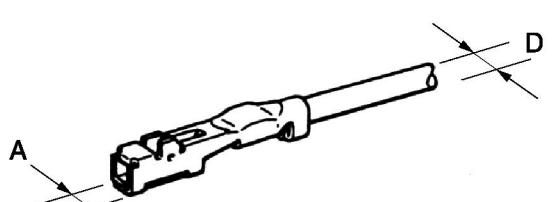
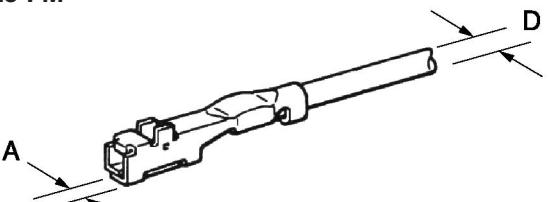
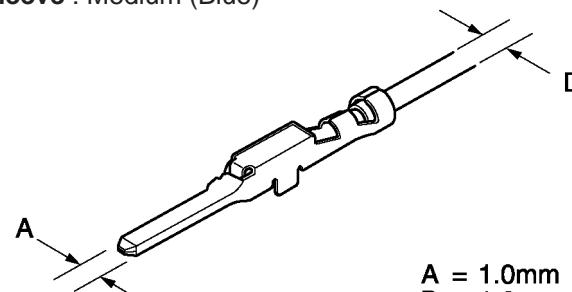
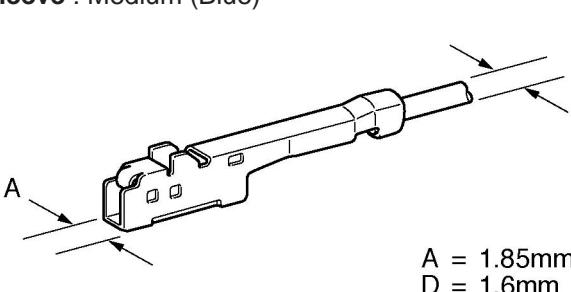
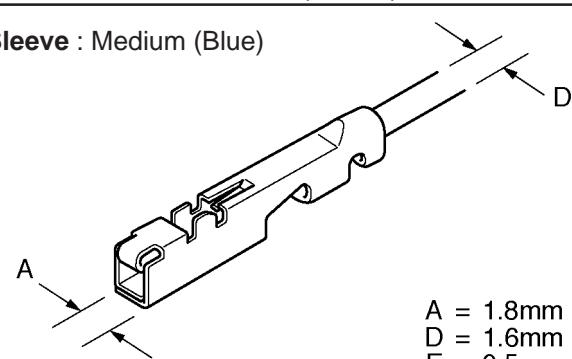
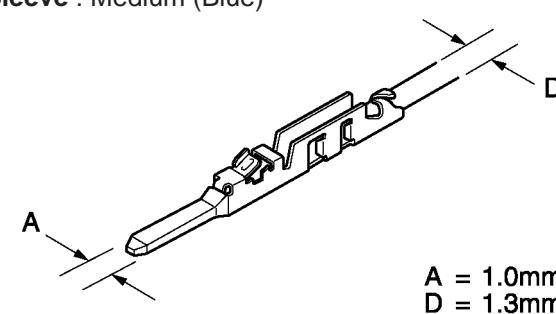
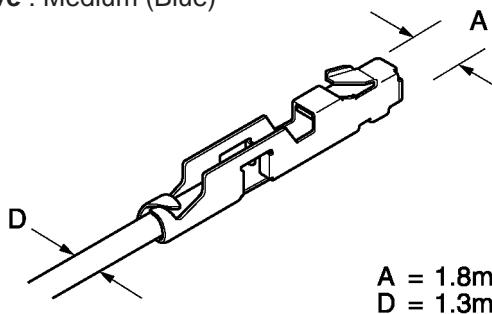
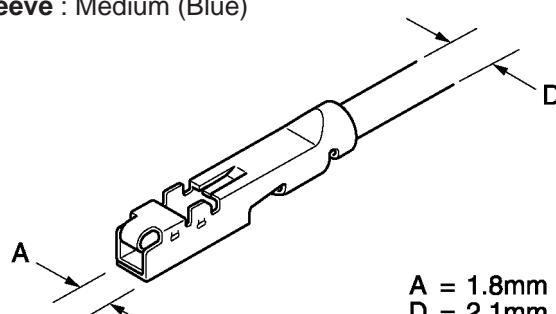
Type	1.0II	
	Male	Female
	Sleeve : Medium (Blue)  A = 1.0mm D = 1.5mm E = 0.85	Sleeve : Medium (Blue) Size : S  A = 1.8mm D = 1.5mm E = 0.85
P/N	82998-24010	82998-24020 82998-24110*
Type	1.0II	
	Male	Female
		Sleeve : Medium (Blue) Size : M  A = 1.8mm D = 2.1mm E = 1.25
P/N		82998-24120*
Type	1.0III	
	Male	Female
	Sleeve : Medium (Blue)  A = 1.0mm D = 1.6mm E = 0.5	Sleeve : Medium (Blue)  A = 1.85mm D = 1.6mm E = 0.5
P/N	82998-12670 82998-12680*	82998-12690 82998-12880*

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

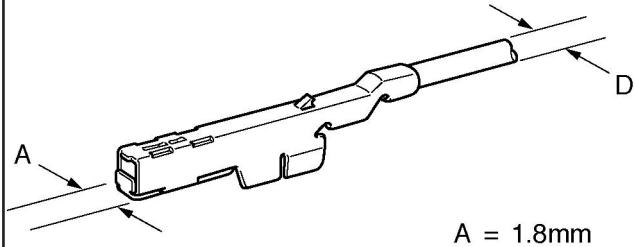
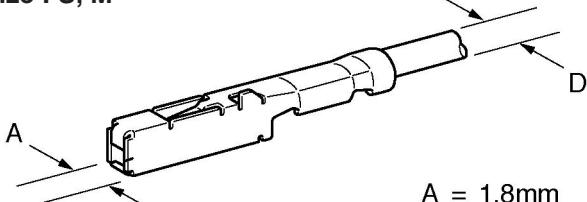
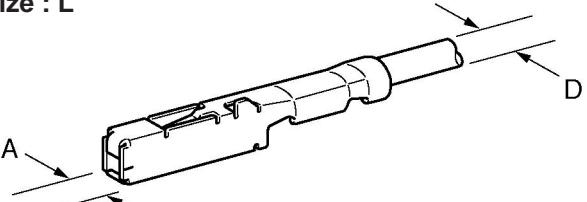
Repair Wire (Non-waterproof Type)

Type	1.0III	
	Male	Female (Outer)
		Sleeve : Medium (Blue)  <p>A = 1.8mm D = 1.6mm E = 0.5</p>
P/N	82998-12700*	
Type	1.0III IDC	
	Male	Female
F	Sleeve : Medium (Blue)  <p>A = 1.0mm D = 1.3mm E = 0.5</p>	Sleeve : Medium (Blue)  <p>A = 1.8mm D = 1.3mm E = 0.5</p>
P/N	82998-12660	82998-12640
Type	1.0IV	
	Male	Female
		Sleeve : Medium (Blue)  <p>A = 1.8mm D = 2.1mm E = 1.25</p>
P/N	82998-12740	

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TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

Type	1.0J	
	Male	Female
		Sleeve : Medium (Blue)  A = 1.8mm D = 1.6mm E = 0.5
P/N		82998-24310 82998-24320*
Type	1.0JII	
	Male	Female
		Sleeve : Medium (Blue) Size : S, M  A = 1.8mm D = 2.1mm E = 1.25 0.85*
P/N		82998-12830 82998-12850*
Type	1.0JII	
	Male	Female
		Sleeve : Medium (Blue) Size : L  A = 1.8mm D = 1.85mm E = 1.5
P/N		82998-12840

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TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

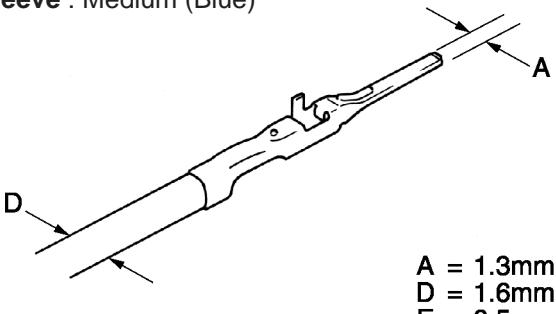
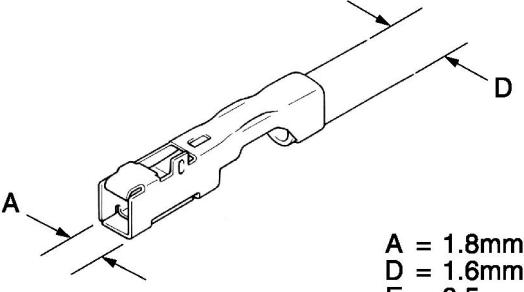
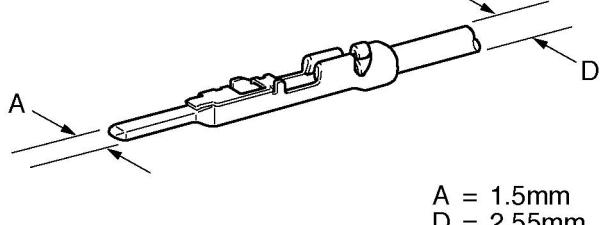
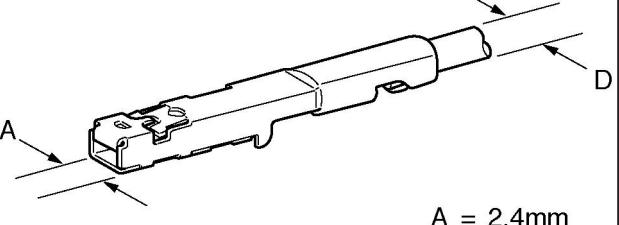
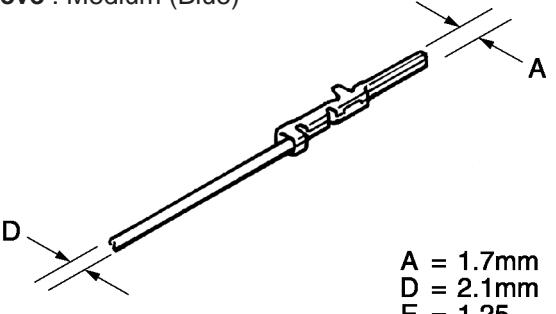
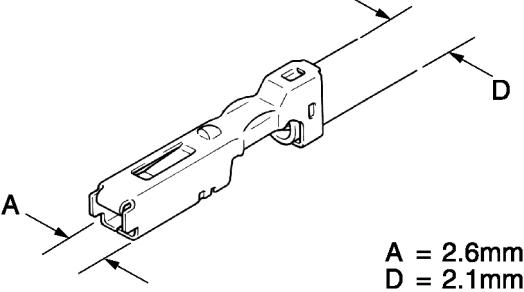
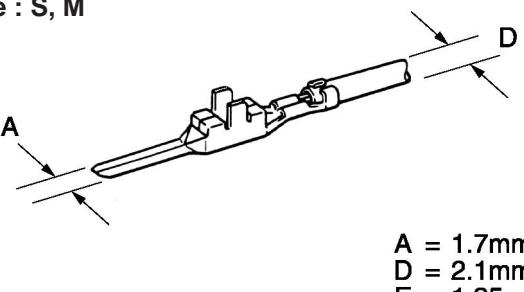
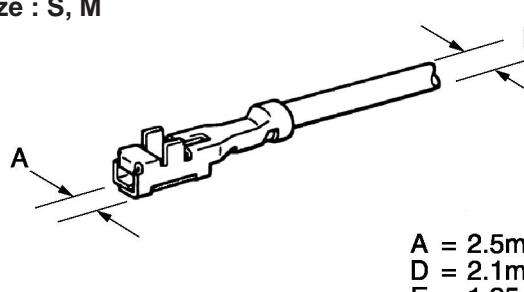
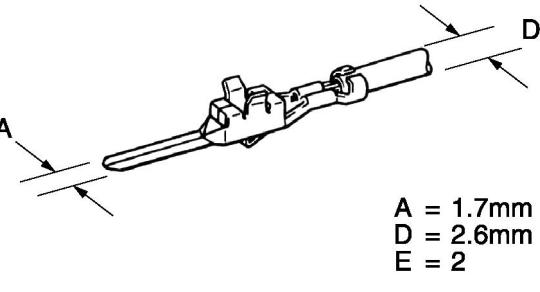
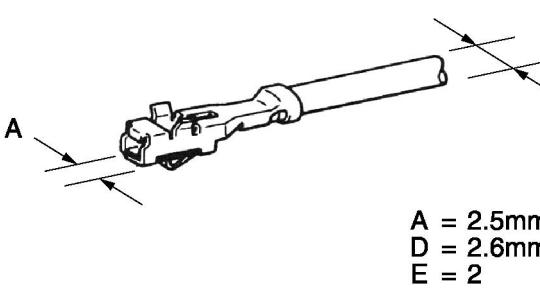
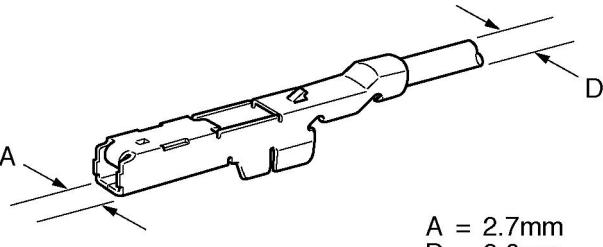
Type	1.3	
	Male	Female
	Sleeve : Medium (Blue)  <p>A = 1.3mm D = 1.6mm E = 0.5</p>	Sleeve : Medium (Blue)  <p>A = 1.8mm D = 1.6mm E = 0.5</p>
P/N	82998-12410	82998-12420
Type	1.5	
	Male	Female
	Sleeve : Large (Yellow)  <p>A = 1.5mm D = 2.55mm E = 2.0</p>	Sleeve : Large (Yellow)  <p>A = 2.4mm D = 2.55mm E = 2.0</p>
P/N	82998-24340	82998-24350
Type	1.8	
	Male	Female
	Sleeve : Medium (Blue)  <p>A = 1.7mm D = 2.1mm E = 1.25</p>	Sleeve : Medium (Blue)  <p>A = 2.6mm D = 2.1mm E = 1.25</p>
P/N	82998-12180	82998-12190 82998-12300*

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

Type	1.8II	
	Male	Female
	Sleeve : Medium (Blue) Size : S, M  <p>A = 1.7mm D = 2.1mm E = 1.25</p>	Sleeve : Medium (Blue) Size : S, M  <p>A = 2.5mm D = 2.1mm E = 1.25</p>
P/N	82998-24090 82998-24130*	82998-24100
Type	1.8II	
	Male	Female
	Sleeve : Large (Yellow) Size : L  <p>A = 1.7mm D = 2.6mm E = 2</p>	Sleeve : Large (Yellow) Size : L  <p>A = 2.5mm D = 2.6mm E = 2</p>
P/N	82998-24030	82998-24040
Type	1.8J	
	Male	Female
		Sleeve : Large (Yellow)  <p>A = 2.7mm D = 2.6mm E = 2.0</p>
P/N		82998-24330

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TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

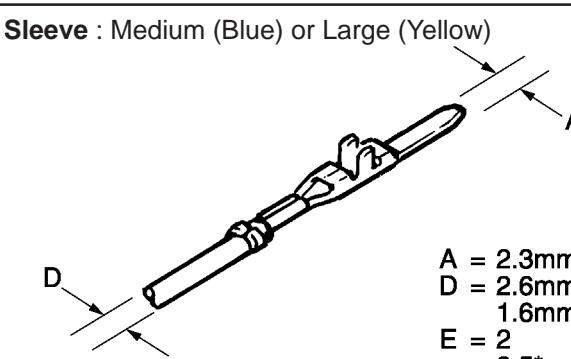
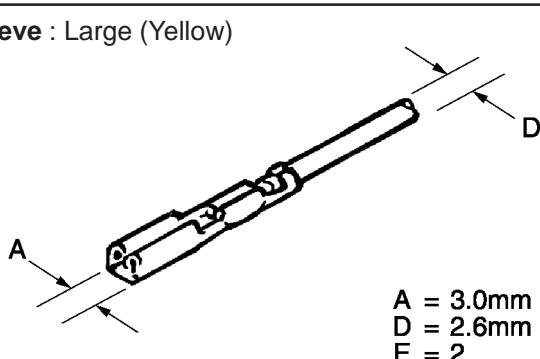
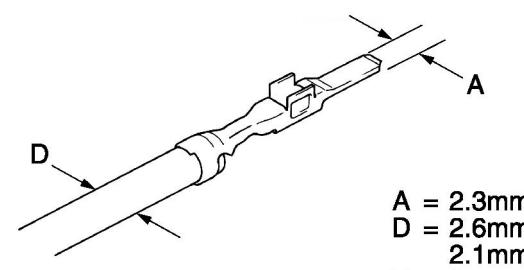
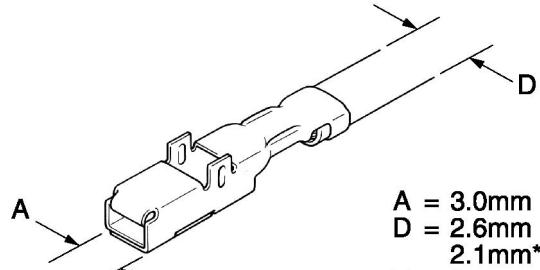
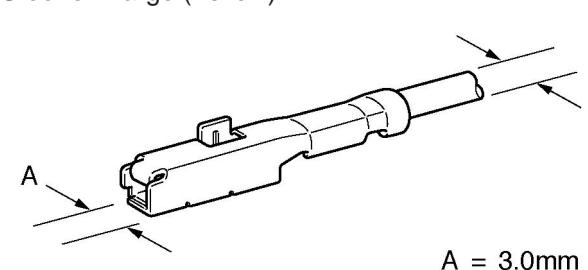
Type	2.3	
	Male	Female
	 <p>Sleeve : Medium (Blue) or Large (Yellow)</p> <p>A = 2.3mm D = 2.6mm E = 2.0mm 0.5*</p>	 <p>Sleeve : Large (Yellow)</p> <p>A = 3.0mm D = 2.6mm E = 2.0</p>
P/N	82998-12160 82998-24050*	82998-12170
Type	2.3II	
	Male	Female
	 <p>Sleeve : Medium (Blue) or Large (Yellow)</p> <p>A = 2.3mm D = 2.6mm E = 2.0mm 1.25*</p>	 <p>Sleeve : Medium (Blue) or Large (Yellow)</p> <p>A = 3.0mm D = 2.6mm E = 2.0mm 1.25*</p>
P/N	82998-12330 82998-12350*	82998-12340 82998-12360*
Type	2.3II (Low Insertion Force)	
	Male	Female
		 <p>Sleeve : Large (Yellow)</p> <p>A = 3.0mm D = 2.6mm E = 2.0</p>
P/N		82998-24380

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

Type	2.3II IDC	
	Male	Female
		<p>Sleeve : Medium (Blue)</p> <p>A = 3.0mm D = 1.8mm E = 1.25</p>
P/N	82998-24220	
Type	4.8	
	Male	Female
	<p>Sleeve : Large (Yellow)</p> <p>A = 4.8mm D = 3.6mm E = 3</p>	<p>Sleeve : Large (Yellow)</p> <p>A = 6.0mm D = 3.6mm E = 3</p>
P/N	82998-12370	82998-12380
Type	6.3 Housing Lance	
	Male	Female
	<p>Sleeve : Large (Yellow)</p> <p>A = 6.0mm D = 3.6mm E = 3</p>	<p>Sleeve : Large (Yellow)</p> <p>A = 7.5mm D = 3.6mm E = 3</p>
P/N	82998-12050	82998-12060(160mm) 82998-12580(500mm)

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TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE**Repair Wire (Non-waterproof Type)**

Type	6.3 Terminal Lance	
	Male	Female
		<p>Sleeve : Large (Yellow)</p> <p>A = 7.6mm D = 3.6mm E = 3</p>
P/N	82998-12070	
Type	6.3II	
	Male	Female
		<p>Sleeve : Large (Yellow)</p> <p>A = 7.8mm D = 3.6mm E = 3</p>
P/N	82998-24170	
Type	7.7 Terminal Lance	
	Male	Female
	<p>A = 7.8mm D = 4.4mm E = 5</p>	<p>A = 8.9mm D = 4.4mm E = 5</p>
P/N	82998-12010	82998-12020

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

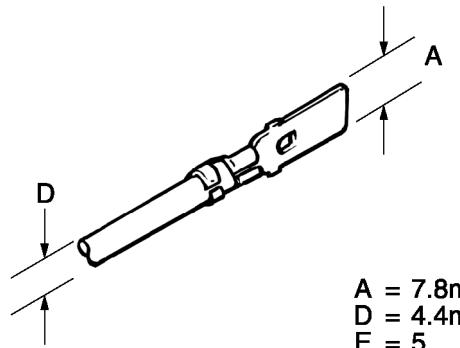
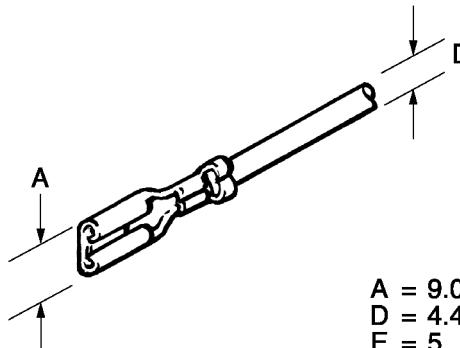
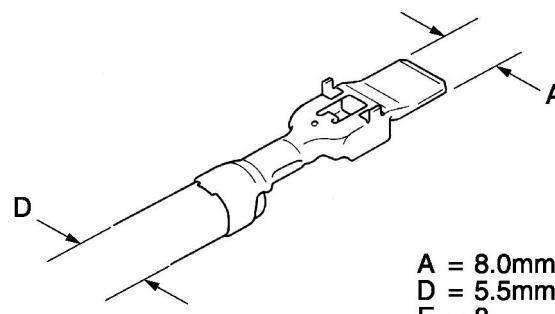
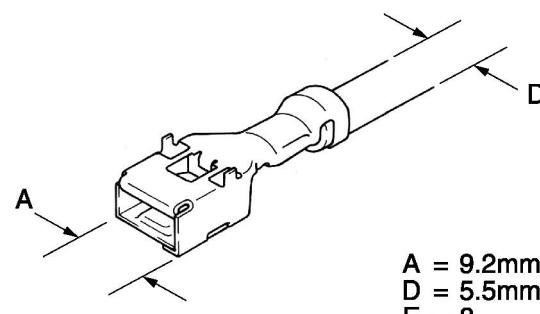
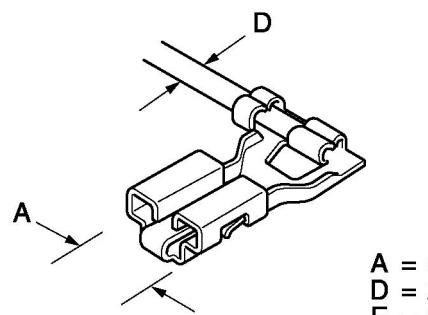
Type	7.7 Housing Lance	
	Male	Female
	 <p>A = 7.8mm D = 4.4mm E = 5</p>	 <p>A = 9.0mm D = 4.4mm E = 5</p>
P/N	82998-12030	82998-12040
Type	8.0	
	Male	Female
	 <p>A = 8.0mm D = 5.5mm E = 8</p>	 <p>A = 9.2mm D = 5.5mm E = 8</p>
P/N	82998-12390	82998-12400
Type	8.0 (HEAD LAMP)	
	Male	Female
		Sleeve : Large (Yellow)  <p>A = 8.9mm D = 2.6mm E = 2.0</p>
P/N		82998-24140(160mm) 82998-24200(500mm)

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

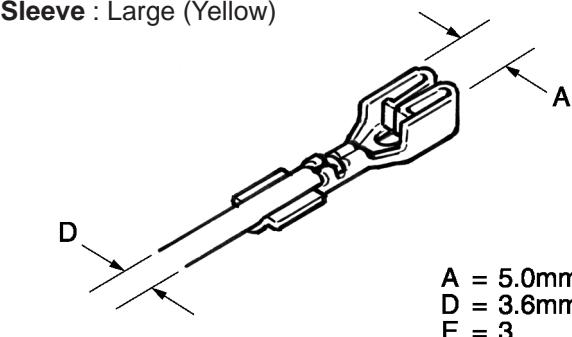
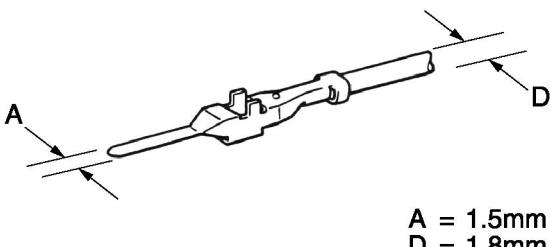
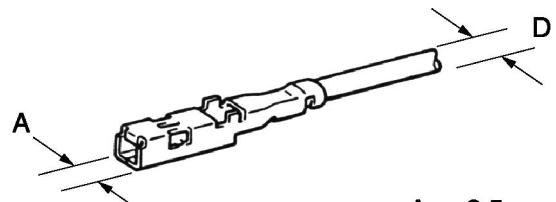
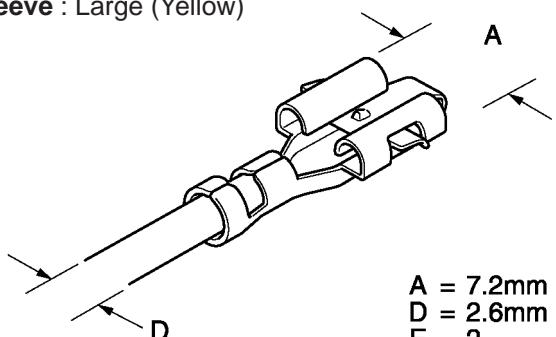
Type	BLADE FUSE	
	Male	Female
		<p>Sleeve : Large (Yellow)</p>  <p>A = 5.0mm D = 3.6mm E = 3</p>
P/N	82998-12140	
Type	C-Type	
	Male	Female
	<p>Sleeve : Medium (Blue)</p>  <p>A = 1.5mm D = 1.8mm E = 0.85</p>	<p>Sleeve : Medium (Blue)</p>  <p>A = 2.5mm D = 1.8mm E = 0.85</p>
P/N	82998-12560	82998-12570
Type	FOG-LP	
	Male	Female
		<p>Sleeve : Large (Yellow)</p>  <p>A = 7.2mm D = 2.6mm E = 2</p>
P/N	82998-24210(500mm)	

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

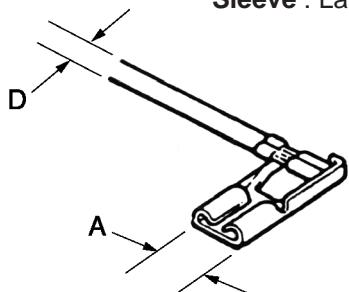
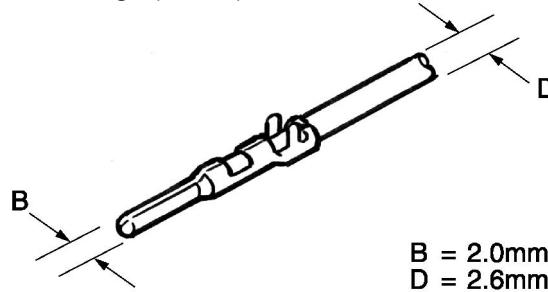
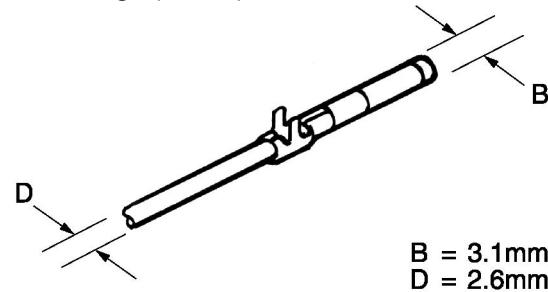
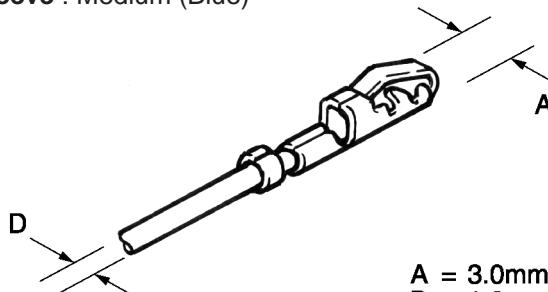
Type	FTC	
	Male	Female
		 <p>Sleeve : Large (Yellow)</p> <p>A = 6.2mm D = 2.6mm E = 2</p>
P/N	82998-12510	
Type	LAC	
	Male	Female
	<p>Sleeve : Large (Yellow)</p>  <p>B = 2.0mm D = 2.6mm E = 2</p>	<p>Sleeve : Large (Yellow)</p>  <p>B = 3.1mm D = 2.6mm E = 2</p>
P/N	82998-12100	82998-12110
Type	MFPC	
	Male	Female
		 <p>Sleeve : Medium (Blue)</p> <p>A = 3.0mm D = 1.8mm E = 0.85</p>
P/N	82998-12150	

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

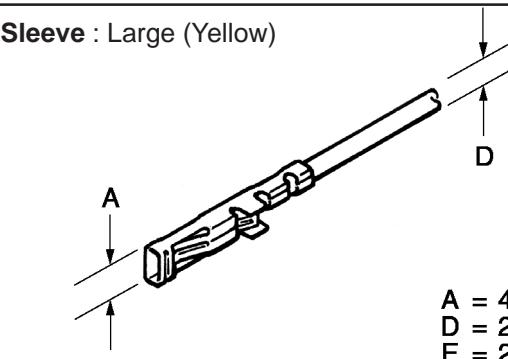
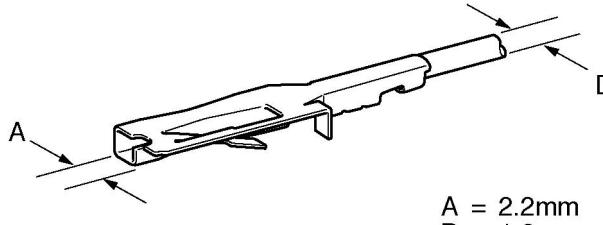
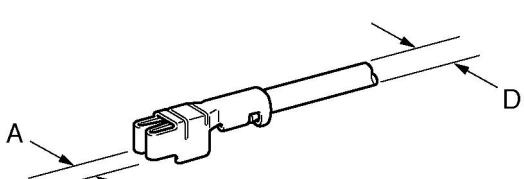
Type	MIC	
	Male	Female
		<p>Sleeve : Large (Yellow)</p>  <p>A = 4.0mm D = 2.6mm E = 2</p>
P/N	82998-12120	
Type	MIC100	
	Male	Female
		<p>Sleeve : Medium (Blue)</p>  <p>A = 2.2mm D = 1.6mm E = 0.5</p>
P/N	82998-01010	
Type	MINI FUSE	
	Male	Female
		<p>Sleeve : Large (Yellow)</p>  <p>A = 4.5mm D = 3.6mm E = 3.0</p>
P/N	82998-12810	

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE**Repair Wire (Non-waterproof Type)**

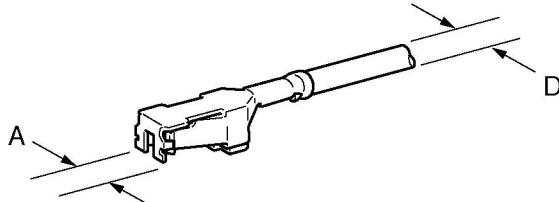
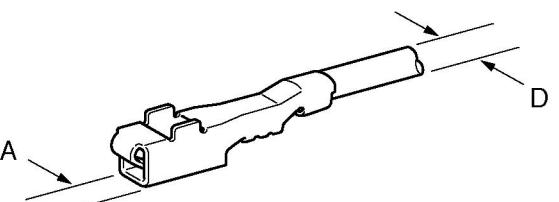
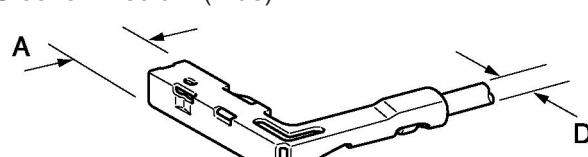
Type	MINI FUSE (Low Profile)	
	Male	Female
		Sleeve : Large (Yellow)  A = 4.425mm D = 3.6mm E = 3.0
P/N		82998-12820
Type	MP280	
	Male	Female
		Sleeve : Large (Yellow)  A = 2.8mm D = 2.6mm E = 2.0
P/N		82998-01020
Type	PAI1	
	Male	Female
		Sleeve : Medium (Blue)  A = 2.2mm D = 1.6mm E = 0.5
P/N		82988-12010*(500mm) 82988-12030*(500mm) 82988-12020*(500mm) 82988-12040*(500mm)

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

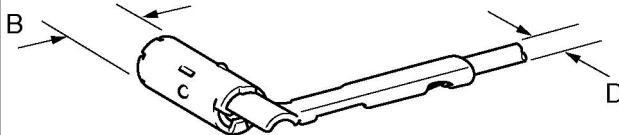
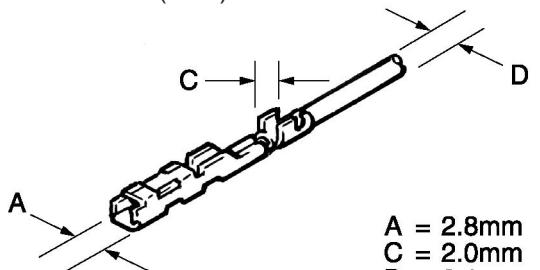
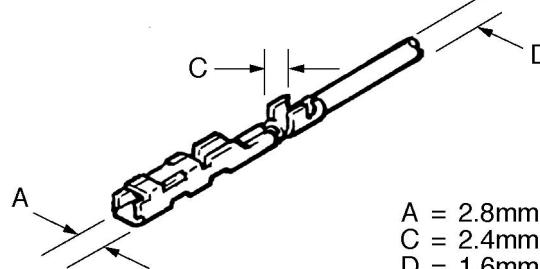
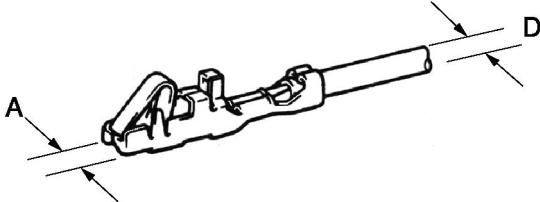
Type	PAI1	
	Male	Female
		Sleeve : Medium (Blue)  B = 2.6mm D = 1.6mm E = 0.5
P/N	82988-12050*(500mm) 82988-12060*(500mm)	
Type	PULSE LOCK	
	Female (Power)	Female (Signal)
	Sleeve : Medium (Blue)  A = 2.8mm C = 2.0mm D = 2.1mm E = 1.25	Sleeve : Medium (Blue)  A = 2.8mm C = 2.4mm D = 1.6mm E = 0.5
P/N	82998-12200	82998-12210
Type	SFPC	
	Male	Female
		Sleeve : Medium (Blue)  A = 2.2mm D = 1.6mm E = 0.5
P/N	82998-24180	

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

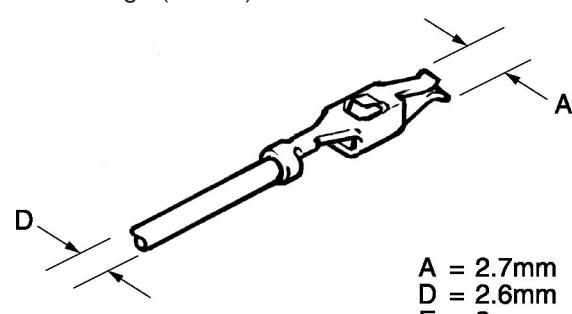
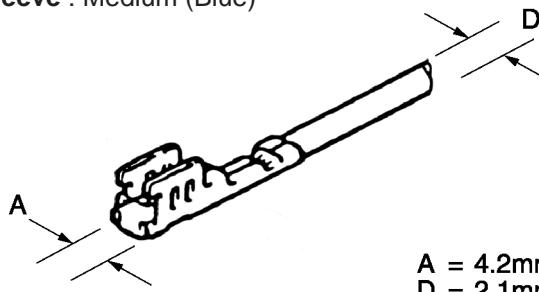
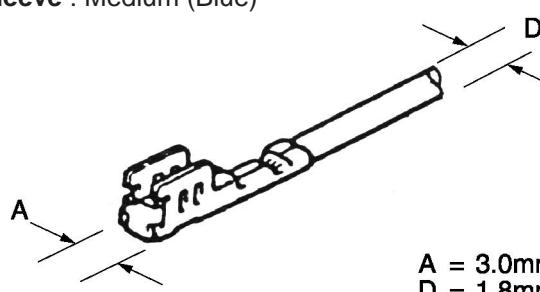
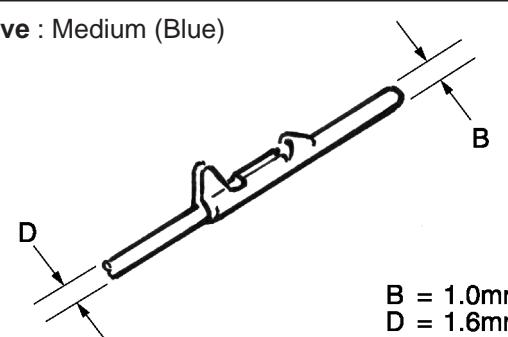
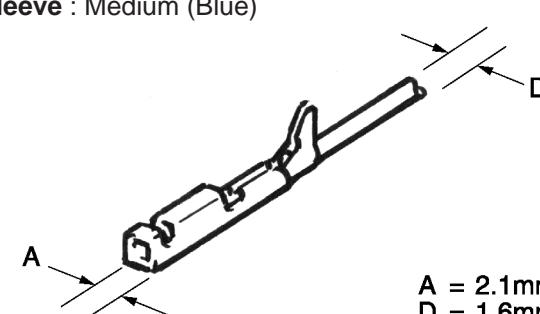
Type	SL	
	Male	Female
		Sleeve : Large (Yellow)  <p>A = 2.7mm D = 2.6mm E = 2</p>
P/N	82998-12130*	
Type	SP	
	Female (Power)	Female (Signal)
	Sleeve : Medium (Blue)  <p>A = 4.2mm D = 2.1mm E = 1.25</p>	Sleeve : Medium (Blue)  <p>A = 3.0mm D = 1.8mm E = 0.85</p>
P/N	82998-12520	82998-12530
Type	TLC	
	Male	Female
	Sleeve : Medium (Blue)  <p>B = 1.0mm D = 1.6mm E = 0.5</p>	Sleeve : Medium (Blue)  <p>A = 2.1mm D = 1.6mm E = 0.5</p>
P/N	82998-12220	82998-12230

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE

Repair Wire (Non-waterproof Type)

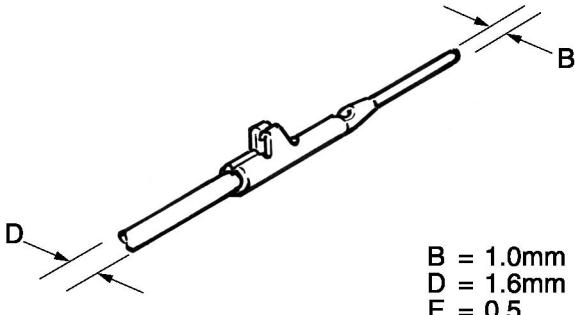
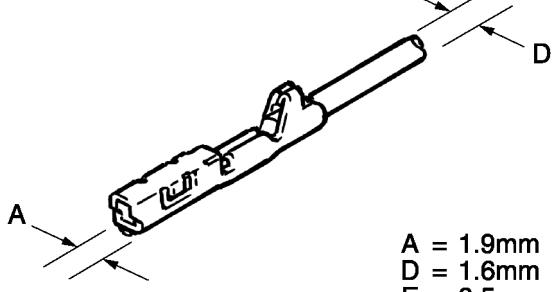
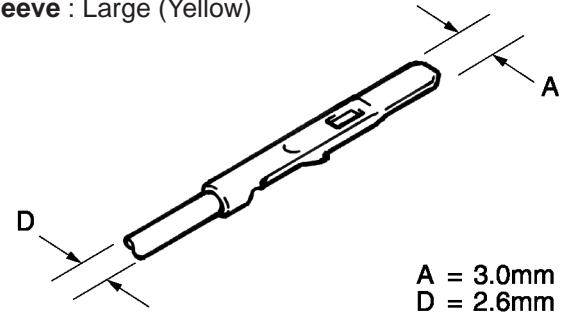
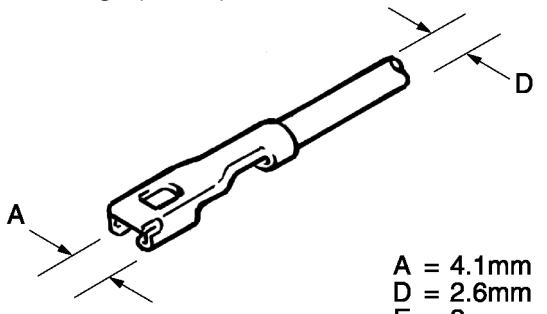
Type	TNS	
	Male	Female
	<p>Sleeve : Medium (Blue)</p>  <p>B = 1.0mm D = 1.6mm E = 0.5</p>	<p>Sleeve : Medium (Blue)</p>  <p>A = 1.9mm D = 1.6mm E = 0.5</p>
P/N	82998-12240	82998-12250
Type	TODC	
	Male	Female
	<p>Sleeve : Large (Yellow)</p>  <p>A = 3.0mm D = 2.6mm E = 2</p>	<p>Sleeve : Large (Yellow)</p>  <p>A = 4.1mm D = 2.6mm E = 2</p>
P/N	82998-12080	82998-12090

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE**Terminal Packing**

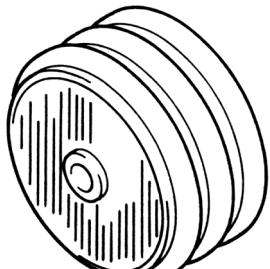
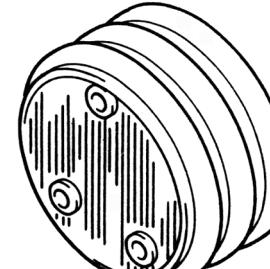
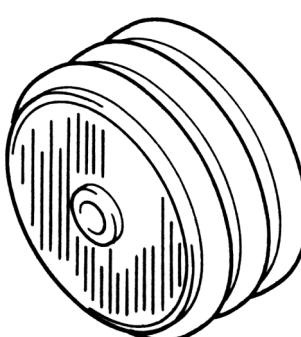
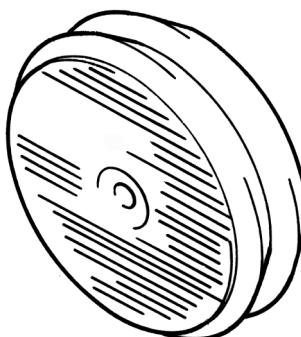
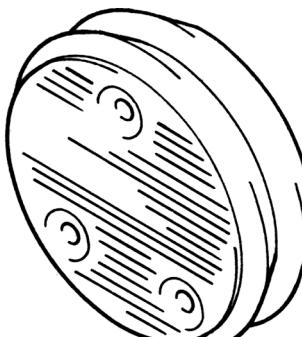
Type	6.3	
Cav. No.	1	3
		
P/N	90980-09210	90980-09211
Type	7.7	
Cav. No.	1	
		
P/N	90980-09380	
Type	TODC	
Cav. No.	1	3
		
P/N	90980-09378	90980-09379

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE**Hole Plug**

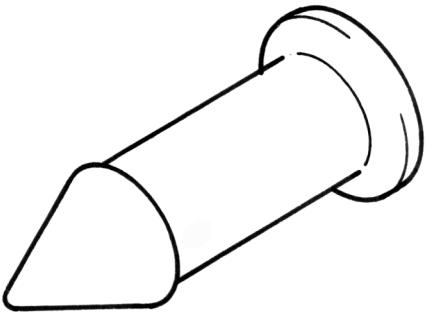
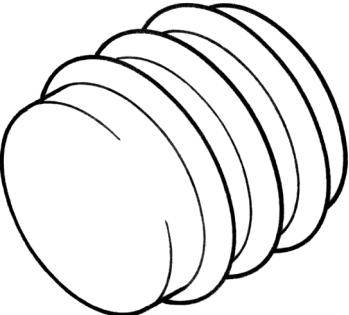
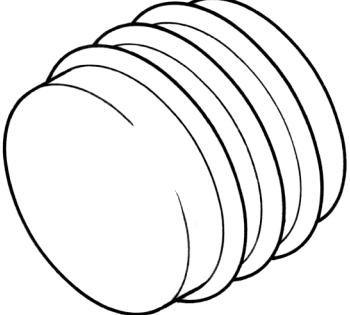
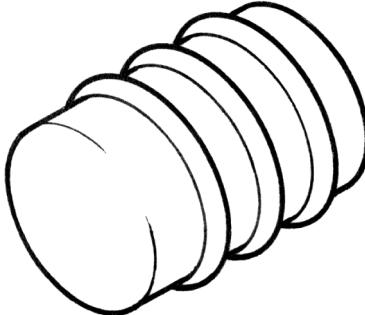
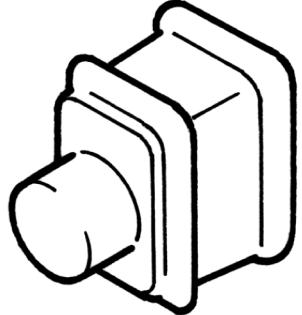
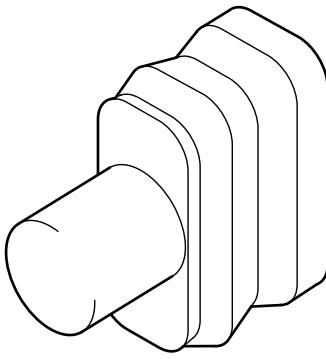
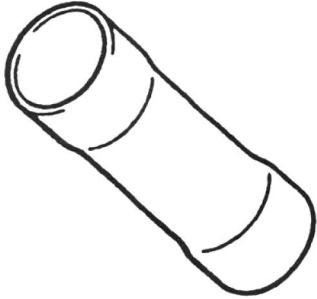
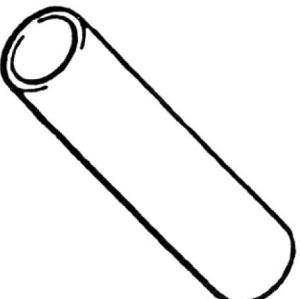
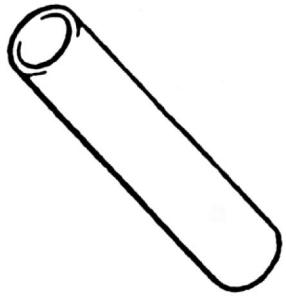
Type	6.3, 7.7, TODC	4.8
		
P/N	90950-01730	90980-09325
Type	8.0	2.3II
		
P/N	90980-09353	90980-09152(6mm) 90980-09229(5mm)
Type	TLC	1.3
		
P/N	90980-09162	90980-09414

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE**Hole Plug**

Type	1.0III	0.64
P/N	90980-09717	90980-09871
Type		
P/N		
Type		
P/N		
P/N		

TABLE OF REPAIR WIRE, TERMINAL PACKING, HOLE PLUG AND PRESS SLEEVE**Press Sleeve**

Color	YELLOW	BLUE
		
P/N	82999-12030	82999-12020
Color	RED	
		
P/N	82999-12010	

APPENDIX

WIRE HARNESS REPAIR KIT WITH CASE . . .	G-1
REPORTING OF WIRE HARNESS PROBLEM	G-2

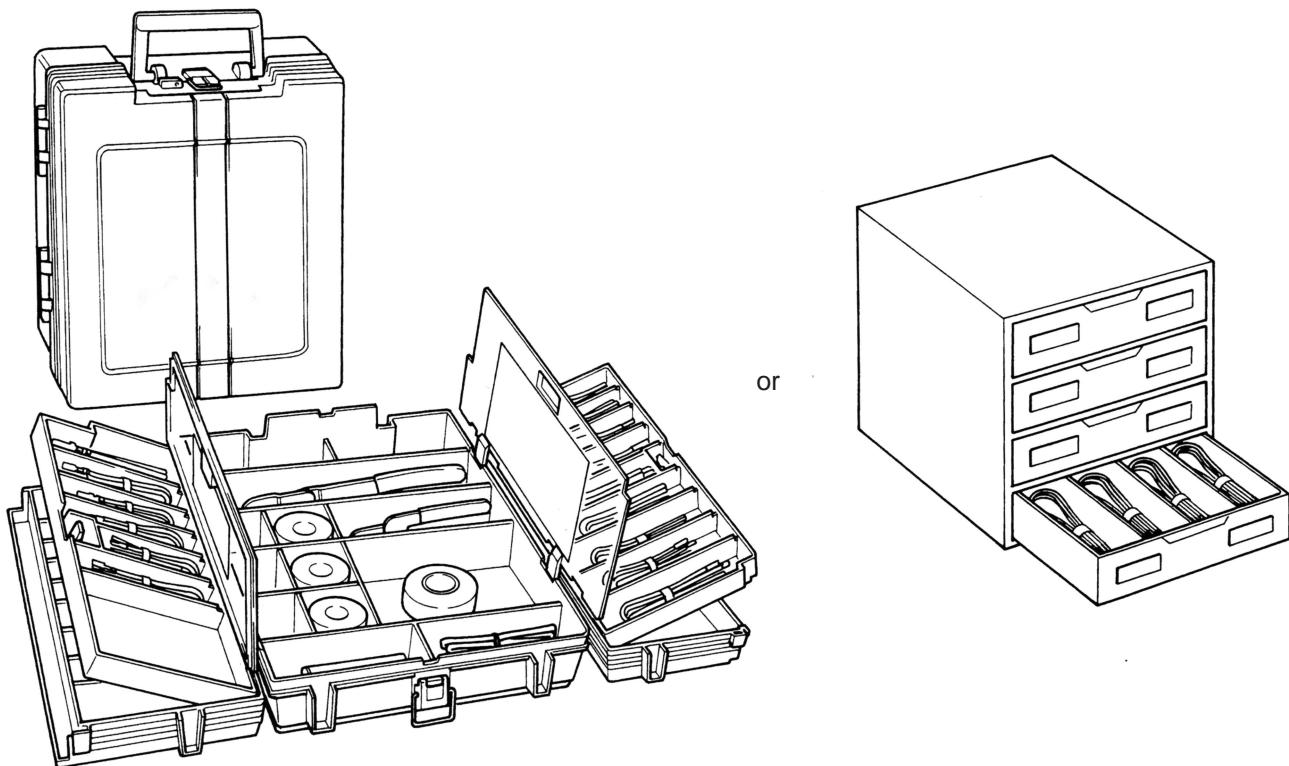
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APPENDIX—WIRE HARNESS REPAIR KIT WITH CASE**WIRE HARNESS REPAIR KIT WITH CASE (REFERENCE ONLY)**

We would like to recommend to you use of the "Wire Harness Repair Kit with the Case" according to your after service market demand.

Example:



[portable type]

[stationary type]

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Remark: This kind of kit is not available from Toyota Motor Corporation.

REPORTING OF WIRE HARNESS PROBLEM

It is more difficult to understand the cause of wire harness problems and to make production improvements, due to the number of wire harness routings and connectors and their wide scope of use.

The position of the problem occurrence and the problem cause will be very clear if you proceed with wire harness/connector repairs.

We request that when you perform repairs, you fill in the attached "WIRE HARNESS/CONNECTOR PROBLEM CHECK SHEET" and send it to your distributor.

Toyota Motor Corporation will be able to make production improvements more quickly and surely based on the results of the above mentioned reports (Check Sheets).

APPENDIX—REPORTING OF WIRE HARNESS PROBLEM

WIRE HARNESS/CONNECTOR PROBLEM CHECK SHEET page 1/3

Please use the TOYOTA ELECTRICAL WIRING DIAGRAM (EWD) manual to answer this questionnaire accurately.

Dealer Name _____ Dealer Code _____

Full Model Code _____ Frame No. _____

P/D _____ / km-reading/Mileage _____ Date of Problem _____ / _____ /

Customer Complaint: _____

Electrical Component with Problem: _____

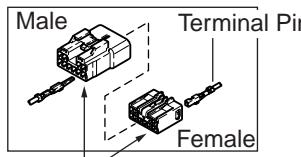
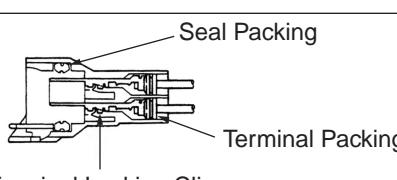
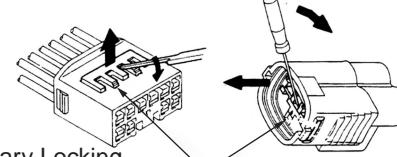
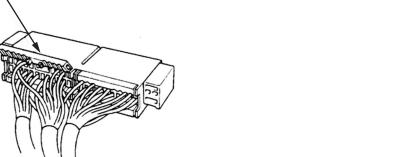
Condition: Intermittent operation Inoperative Others

Symptom: Short Open circuit Moisture

Others (Eg.Rattle,Noise etc. - Please proceed to "Box B" on next page.)

CONNECTOR PROBLEM:

Please fill in the required information in the brackets and check the appropriate box.

EWD page () CONNECTOR NO.()		 Male Terminal Pin Female
<input type="checkbox"/> TERMINAL <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="checkbox"/> Male </div> <div style="text-align: center;"> <input type="checkbox"/> Female </div> </div> PIN No. () WIRE COLOR ()		<input type="checkbox"/> CONNECTOR BODY <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="checkbox"/> Male </div> <div style="text-align: center;"> <input type="checkbox"/> Female </div> </div>
<input type="checkbox"/> TERMINAL MISSING (Terminal Coming off) <input type="checkbox"/> TERMINAL BROKEN <input type="checkbox"/> TERMINAL BENT (Male) <input type="checkbox"/> TERMINAL EXPANDED (Female) <input type="checkbox"/> WIRE POORLY CRIMPED AT TERMINAL <input type="checkbox"/> CORROSION, RUST, MOISTURE <input type="checkbox"/> POOR CONTACT <input type="checkbox"/> OTHERS ()		<input type="checkbox"/> NOT CONNECTED/HALF CONNECTED <input type="checkbox"/> BROKEN CONNECTOR <input type="checkbox"/> BROKEN LOCKING CLIP OF CONNECTOR <input type="checkbox"/> OTHERS ()
<input type="checkbox"/> NON-WATERPROOF TYPE <input type="checkbox"/> WATERPROOF TYPE → WATER ENTERING FROM: <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="checkbox"/> SEAL PACKING </div> <div style="text-align: center;"> <input type="checkbox"/> WIRE HARNESS </div> </div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="checkbox"/> TERMINAL PACKING </div> <div style="text-align: center;"> <input type="checkbox"/> UNCLEAR, OTHERS </div> </div>		<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Fig.1 Used for All Models  </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Used from '89 CRESSIDA  </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Mainly Used for Engine ECU  </div>
<input type="checkbox"/> BROKEN LOCKING CLIP OF CONNECTOR <input type="checkbox"/> TERMINAL LOCKING CLIP MISSING <input type="checkbox"/> TERMINAL RETAINER BROKEN <input type="checkbox"/> SECONDARY LOCKING PLATE MISSING <input type="checkbox"/> OTHERS; ()		

Please refer to Fig. 1

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WIRE HARNESS PROBLEM:

page 2/3

Please fill in the required information in the brackets and check the appropriate box.

Problem occurred between <input style="width: 100px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/> E.W.D Page (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>) *CONNECTOR NO.A (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>) PIN NO. (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>) WIRE COLOR (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>)	and <input style="width: 100px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/> CONNECTOR NO.B (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>) PIN NO. (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>) WIRE COLOR (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>)		
* The problem indicated below occurred at a distance of (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/> mm) from connector A (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>)			
<input type="checkbox"/> SHORT	<input type="checkbox"/> OPEN		
		<input type="checkbox"/> POOR CONTACT OF RING TYPE TERMINAL	
<input type="checkbox"/> PINCHED <input type="checkbox"/> INTERFERENCE/ABRASION <input type="checkbox"/> MOISTURE <input type="checkbox"/> CORROSION, RUST <input type="checkbox"/> OTHERS;		<input type="checkbox"/> CUT WIRE <input type="checkbox"/> SPLICE POINT <input type="checkbox"/> OTHERS;	
<input type="checkbox"/> BODY <input type="checkbox"/> PART <input type="checkbox"/> OTHERS		<input type="checkbox"/> EARTH TERMINAL <input type="checkbox"/> POWER SOURCE TERMINAL → <input type="checkbox"/> BATTERY → <input type="checkbox"/> STARTER → <input type="checkbox"/> ALTERNATOR	
Name of the other part which cause the short/open of wire <input type="checkbox"/> NAME		INSULATION: <input type="checkbox"/> YES <input type="checkbox"/> NO → <input type="checkbox"/> CONDUIT TUBE → <input type="checkbox"/> VINYL TUBE → <input type="checkbox"/> VINYL TAPE → <input type="checkbox"/> VINYL SHEET → <input type="checkbox"/> OTHERS (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>)	
		<input type="checkbox"/> LOOSE SET BOLT <input type="checkbox"/> CORROSION, RUST <input type="checkbox"/> OTHERS (<input style="width: 20px; height: 15px; border: 1px solid black; margin-bottom: 5px;" type="text"/>)	

Note: If possible, attach an illustration or photo to show the part causing the short or open, and the position of the wire and the other part.

This will help to make the cause of the problem clear and help us to take prompt action.

Box B	
If you checked the "Others" box in the "Symptom" section on page 3-1, please describe:	
Symptom: _____	
Condition: _____	
Related Wire Harness or Connector;	
Name or Part NO.:	
Location:	

APPENDIX—REPORTING OF WIRE HARNESS PROBLEM

REPAIR:

page 3/3

1. Please identify repair method:

Troubleshooting methods

- WIRING DIAGRAM
 VOLTMETER: ANALOG _____, DIGITAL _____

2. Please check one box and fill in prethesis:

 REPLACE WIRE HARNESS

- REPLACE CONNECTOR OR TERMINAL
 REPAIR TERMINAL
 OTHERS ()

WIRE HARNESS TOOLS

- CRIMPING PLIERS
 PICK
 OTHERS ()

 SOLDER CONNECTION

3. Please attach a copy of the TOYOTA ELECTRICAL WIRING DIAGRAM for the vehicle repaired:

Indicate the affected connector number by arrow, or circle and identify the affected wire harness.

EXAMPLE: COROLLA (ZZE 110)

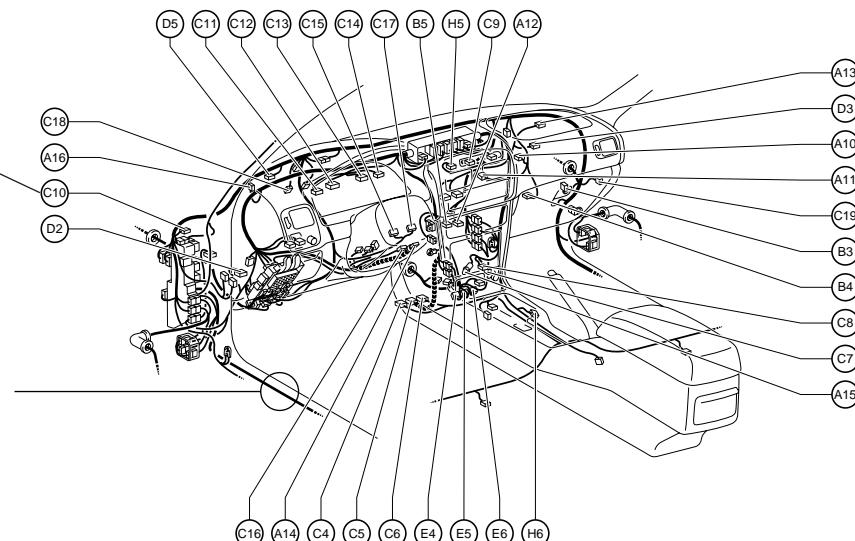
Condition: Engine does not start

Cause: Connector pin backed out from female connector at clutch start switch

Component: Clutch start awitch inoperation

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Indicate by ARROW



Indicate by CIRCLE

Waterproof Type [1]

(Cont. next page)

	1	2			3		4	5	6	7	8	9	10	11
1.0														
1.0 III		M:11863 F:11856												
1.3		M:11188 F:11189			M:11169 F:11170		M:11063 F:11065	M:11181 F:11182		M:11171 F:11172		M:11191 F:11192		M:11173 F:11174
							M:11064 F:11066							
1.8		F:10737					F:10711							
		F:11062												
2.3		M:10495 F:10496	M:10580	F:10609			M:10475 F:10476		M:10650					
		F:10474	M:10592	F:10532			M:10590							
		M:10575	F:10598	F:10572			M:10648							
2.3 II	M:10892 F:10893	M:10842 F:10843	M:11486 F:11019	M:11247 F:11248	F:11207	M:11015 F:11016	F:11143	M:10868 F:10869	M:11078 F:11077	M:10987 F:10988	M:10930 F:10931	M:10890 F:10891		F:11231
	M:11006 F:11007	M:10886 F:10887	M:11029 F:11030	M:11272 F:11273	F:11235	M:11131 F:11132	F:11145	M:10941 F:10942	M:11033 F:11024	M:11034 F:11024		M:10890 F:11190		
	M:11270 F:11271	M:10898 F:10899	M:11137 F:11038	F:10974	F:11246	M:11244 F:11245	F:11261	M:11027 F:11028	M:11049 F:11049	M:11193 F:11194		M:10896 F:10897		
	M:11166 F:11166	M:10900 F:10901	M:11050 F:11051	F:11025	F:11250	M:11295 F:11245	F:11294	M:11122 F:11037	M:11232 F:11232	M:11196 F:11197				
	M:11072 F:11243	M:11069 F:10923	F:11070	F:11068	F:11255	F:10834	F:11349	M:11177 F:11178	F:11317	M:11289 F:11290				
	M:10959 F:11363	M:11073 F:10947	F:11075	F:11140	F:11285	F:10845	M:11348	M:11291 F:11292	F:11599	F:10854				
	M:10948 F:11428	M:11074 F:10949	F:11075	F:11149	F:12028	F:10902		F:10943		F:11144				
	M:11002 F:11252	M:11141 F:11142	F:11153			F:10919		F:11150		F:11858				
	M:11004 F:11005	M:11155 F:11156	F:11154			F:10981		F:11152						
	M:11008 F:11009	M:11168 F:11162	F:11163			F:11020								

M : Male

F : Female

Waterproof Type [1] (Cont'd)

	12	15	40	80																
1.0				F:11215	F:11214															
1.0 III																				
1.3	F:11698	M:11088 F:11089																		
1.8																				
2.3																				
2.3 II	M:11086 F:11087																			
	F:11151																			

M : Male

F : Female

Waterproof Type [2]

	1	2	3	4	5	6	8	9	10	11	23	34
4.8	M:10982 F:10983	M:10927 F:10928		M:10840 F:10841		M:10989 F:10990						
	F:11400	F:11237		M:10944 F:10841		M:11035 F:11036						
6.3	M:10246 F:10247	M:10156 F:10157		M:10347 F:10249								
7.7	M:10114 F:10115											
8.0	M:10836 F:10837	M:10838 F:10839										
	M:11183 F:11184	M:11031 F:11032										
HB3		F:11095	F:11659									
HB4		F:11096	F:11660									
PIN		M:11945										
TLC				F:10554	M:10577							
TODC	M:10240 F:10241			M:10244	F:10353							
1.0 III+4.8											F:12020	F:12021
2.3+6.3										F:10686		
2.3 II+4.8			M:11160 F:11161		M:10749 F:10844	M:10945 F:10946	F:10939	M:10894 F:10895	F:11643	M:11239 F:11332		
					F:10940	M:11021 F:11022			F:11784			
						M:11412 F:11413						
2.3 II+6.3 II											F:11195	
											F:11323	
2.3 II+8.0								M:11241 F:11242				
4.8+8.0				M:11044 F:11045		M:11138 F:11139						

M : Male

F : Female

Non-waterproof Type [1]

(Cont. next page)

	1	2		3	4	5	6		7	8		9	10	11
1.0														
1.0 II														
1.0 III		M:11967 F:11919			F:11988	F:11921							F:11924	
						F:11909							F:11948	
1.3		M:11211 F:11212		M:11052 F:11053	M:11186 F:11187	F:11319	F:11616		F:11165	M:11532 F:11533	M:11623		F:11450	F:11041
		M:11368 F:11369		F:11471	F:11107					F:10630			F:11642	F:11083
		F:11436			F:11494								F:11657	
1.8														
1.8 II														
2.3		M:10437 F:10355		M:10573 F:10365	F:10504		M:10384 F:10414	F:10672					F:10322	
					F:10601								F:10669	
2.3 II	M:10870 F:10871	M:10824 F:10825	M:10905 F:10906	F:11080	M:10907 F:10908	M:10794 F:10795		M:10796 F:10797	M:11528 F:11529	M:10798 F:10799		M:11534 F:11535	M:10800 F:10801	M:10829 F:10830
	M:11026 F:10871	M:10833 F:10825	M:10934 F:10935	F:11098	F:11071	M:10858 F:10795		M:11110 F:10797	F:10964				M:11102 F:10997	M:11538 F:11539
	M:11097 F:10871	M:11299 F:10825	M:11159 F:11148	F:11227	F:11079	M:11399 F:10795		M:11099 F:10933	F:11280				M:11536 F:11537	F:10966
	M:11146 F:11147	M:11300 F:10825	F:10823	F:11278		M:11012 F:11013		M:11101 F:10996					F:10822	
		M:10849 F:10850		F:10835	F:11608		M:11023 F:10904		M:10998 F:11001				F:10965	
		M:10859 F:10860		F:10855			M:11100 F:11090		M:11010 F:11011					
		M:11060 F:10860		F:10962			M:11085 F:10789		M:11587 F:11011					

M : Male

F : Female

Non-waterproof Type [1] (Cont'd)

	12	13	14	15	16	17	18	19	20	21	22	25	28	34
1.0	F:11129				F:10764									
1.0 II	F:11408				F:11219					F:11220		F:11218	F:11221	
					F:11391									
1.0 III			F:11925				F:11914			M:11962 F:11927				
			F:11911				F:11913			M:11926 F:11915				
1.3			M:11654 F:11556	F:11179	M:11573 F:11574			M:11570 F:11571		F:11125	M:11503 F:11502	M:11133 F:11055		
				F:11264							F:11628	F:11043		
														M:10722
1.8	F:10658	F:10973		F:10697			F:10656		F:10696					
		F:10743												
1.8 II	F:11424			F:11433										
2.3	M:10513 F:10432						M:10325 F:10326							
2.3 II	M:10802 F:10803		M:10804 F:10805	M:10806 F:10807	M:10827 F:10828	M:10808 F:10809	F:11417	M:10818 F:10819		M:10810 F:10811		M:10977 F:10875		
	M:11530 F:11531		M:11541 F:11542	F:10852		M:11167 F:10848				M:10820 F:10821		F:11552		
	F:10967		F:11604											
	F:10968													
	F:11121													
	F:11661													

M : Male

F : Female

Non-waterproof Type [2]

	1	2	3	4	5	6	8	9	10	12	13	14	17	22
4.8	M:11258 F:11259	M:10915 F:10916	F:10980	M:11135 F:11136		M:10975 F:10976	F:11778	M:10963 F:10926		M:10861 F:10862				
	F:10911	M:11093 F:11094		M:11878 F:11742		F:11091		F:11092						
	F:10912					F:11583		F:11615						
								F:11686						
6.3	M:10178 F:10179	M:10213 F:10214	M:10283 F:10216			M:10172 F:10173		M:10174 F:10175		M:10176 F:10177				
	F:10619													
	F:10786													
	F:10792													
7.7		M:10356 F:10357												
8.0	M:10994 F:10995	M:10958 F:10903	F:10956	M:10866 F:10867										
		M:11655 F:11579	F:11314											
		F:11684	F:11685											
FOG-LP		F:10481												
FTC			F:10489		F:10487									
			F:10490		F:10488									
HEAD-LANP			F:10428											
LAC								F:10133			F:10132			M:10131
LC						M:10289								
MFPC				F:10645				F:10301		F:10302	F:10303		F:10369	
										F:10304	F:10372			

M : Male

F : Female

Non-waterproof Type [3]

(Cont. next page)

	1	2	3	4	5	6	7	8	9	10	12	13	14	15	16
MIC				F:10378					F:10152			F:10062			
OBD II															F:11665
PULSE LOCK										F:10294	F:10351		F:10371		
										F:11116		F:11114			F:11113
SFPC												F:11115			
SL			F:10070				F:10071								
SP		F:10362			F:10376										
TLC						M:10401 F:10402				M:10719 F:10528					F:10635
TNS				M:10466 F:10467								M:10470 F:10471			
TODC	M:10182 F:10183				M:10040 F:10274				M:10044 F:10045						
1.0+1.8															
1.0 II+1.8 II													F:11225		F:11565
1.0 III+2.3 II															
1.3+2.3 II										M:11613				F:11042	
														F:11056	
2.3+6.3								F:10463							

M : Male

F : Female

Non-waterproof Type [3] (Cont'd)

	17	18	20	22	23	24	25	26	32				
MIC	F:10037												
OBD II													
PULSE LOCK		F:10295					F:10296						
		F:10350											
SFPC													
SL													
SP													
TLC													
TNS					M:10552 F:10526			M:10599 F:10587					
TODC													
1.0+1.8					F:10765			F:10925 F:10918					
								F:10763					
1.0 II+1.8 II		M:11223 F:11226	M:11223 F:11224		F:11392			F:11390 F:11423	M:11222				
1.0 III+2.3 II								F:11877					
1.3+2.3 II	F:11671	F:11594		F:11469		M:10920 F:10921		M:11158 F:11058					
		F:11595		M:11504 F:11469		M:11208 F:10921							
2.3+6.3													

M : Male

F : Female

Non-waterproof Type [4]

	4	5	6	8	10	11	12	14	15	16	19	20	24	26	
2.3 II+4.8	M:11126 F:11118	M:10985 F:10986		M:10876 F:10877	M:11596 F:11527	M:10872 F:10873	M:10878 F:10879	M:10812 F:10813	M:10814 F:10815	M:10884 F:10885	M:10882 F:10883	M:10816 F:10817	M:10880 F:10881	M:11631	
				F:11130	F:10993		F:10932								
				F:11279											
				F:11701											
2.3 II+8.0			M:10909 F:10910								M:10856 F:10857				
4.8+8.0		F:10888	F:10889												
6.3+7.7			F:10447												

M : Male

F : Female