

NOTE This Instruction Sheet shows about the male connector and 0.64Ⅲ female connector & terminal only. About 9.5 female connector & contact, see the applicable manufacturer's instruction sheet.

1. Part Name and Part Number

1.1 Housing

| tyco Part Number* ¹ | Part Name |
|--------------------------------|--|
| 1747080 | 0.64 SER 26POS. CAP ASSY (Male Connector) |
| 1747082 | 0.64/9.5 SER 28POS. CAP ASSY (Male Connector) |
| 1747085 | 0.64Ⅲ SER 6POS. PLUG ASSY (Female Housing) |
| 1747088 | 0.64Ⅲ SER 8POS. PLUG ASSY (Female Connector) |
| 1747375 | 0.64Ⅲ SER 12POS. PLUG ASSY (Female Connector) |
| - | 9.5 2POS. PLUG ASSY (Female Connector)* ² |

Fig.1

*¹Note : Part number is consisted from listed base number and 1 digit numeric prefix and suffix with dash. Refer to catalog or customer drawing for specific part numbers for each base number. When prefix is zero, zero and dash are omitted.

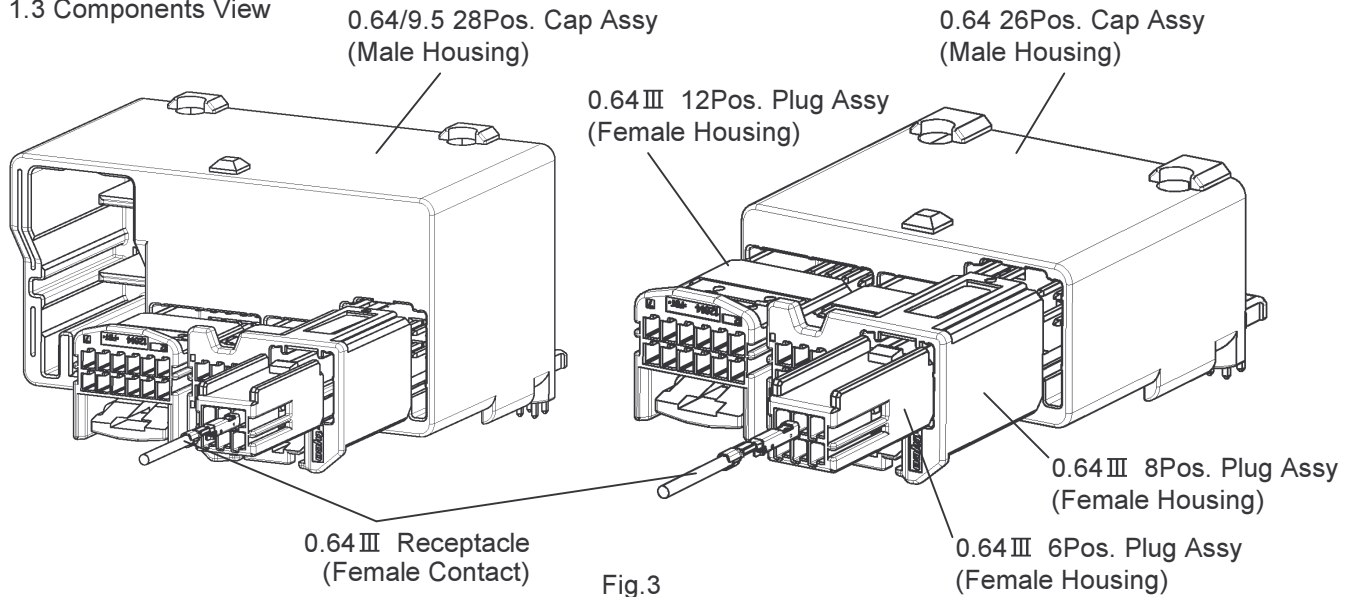
*²Note:About 9.5 female connector, see the applicable manufacturer's part number.

1.2 Contact

| tyco Part Number | Description | Wire Type (○: Applicable, —: Not Applicable) | | |
|------------------|--------------------------------------|--|-----|-----|
| | | Type | 0.3 | 0.5 |
| 1674311-1 | 0.64Ⅲ Receptacle (Female Contact) | CAVUS/CAVS | ○ | ○ |
| 1674311-2 | | AVSS/AVSSH/AESSX | ○ | ○ |
| — | 9.5 Receptacle (Female Contact) | See the applicable manufacturer's Spec. | | |

Fig.2

1.3 Components View



NOTE Inquire the applicable manufacturer about 9.5 female connector & contact.

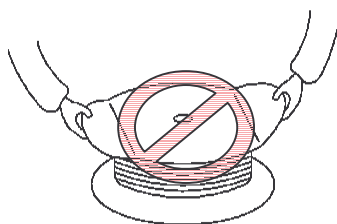
2. Customer Receiving Inspection

We conduct inspections according to our quality control regulations to maintain an over all lot control. In addition, the customers should conduct receiving inspections based on the specific customer drawings.

3.Storage and Carrying

3.1 Contact

- (1) Avoid leaving or carrying the contact reel in an open area without wrapping it in proper material.
- (2) Do not lift up and carry the contact reel by gripping one the side of reel, this may result in damage to the reel, and contacts before use. (See Fig.4)



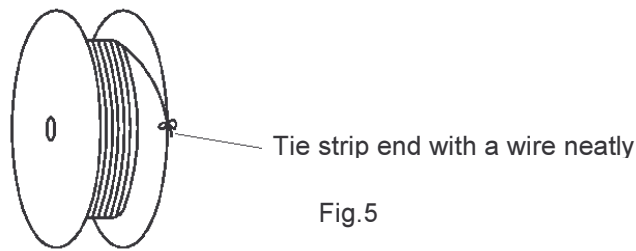
Do not lift up laterally holding one side only.



Acceptable

Fig.4

- (3) Avoid storing the contact reel in a moist or dusty place. Stock the reel in a comparatively dry and clean place (5~35°C, 45~85%RH) away from direct sunlight.
- (4) When removing the contact reel from the machine, fasten the end of contact strip onto the edge of the reel with use of proper string or wire. (See Fig.5)



3.2 Housing

- (1) Avoid storing the contact reel in a moist or dusty place. Stock the reel in a comparatively dry and clean place (5~35°C, 45~85%RH) away from direct sunlight.
- (2) Avoid leaving or carrying the contact reel in an open area without wrapping it in proper material.
- (3) Do not drop or shock the housing when carrying it.

4. Fixing Housing and PC Board

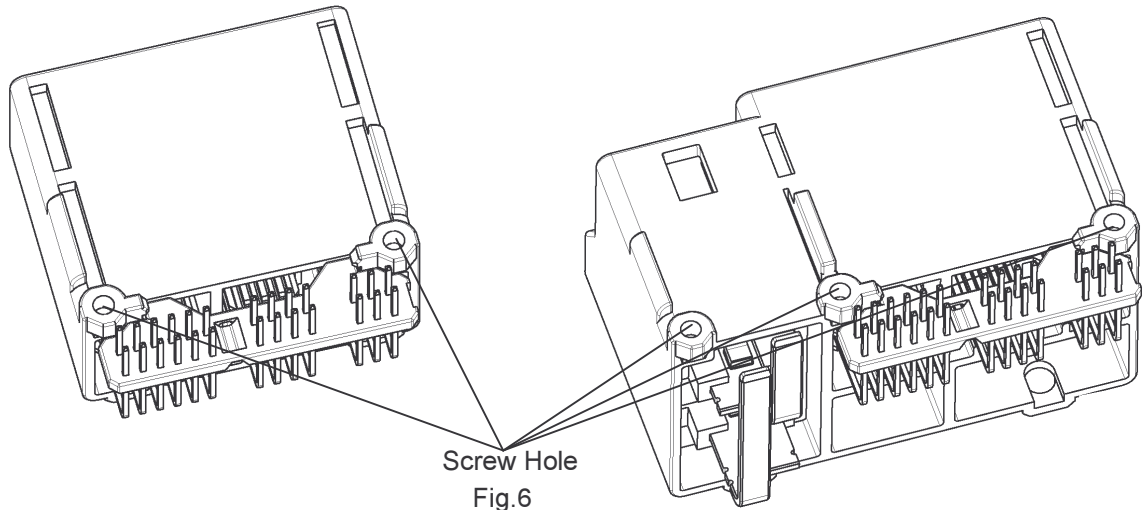
Insert the contact of the male connector into the hole of PC Board. Then after fixing the housing and the board with a screw, solder the contacts. And take care of the following at the work.

- (1) See the customer drawing for the PC Board dimension.
- (2) Do not deform the contact (PC Board side), otherwise the male connector can not be fixed on the PC. Board.
- (3) The fixing should be made with the proper type of screw and torque.

Recommended Screw: JIS B1115, B1122, TAPPING SCREW, PAN HEAD, CLASS2, M3x6

Recommended Torque: Set the management value at each combination of the PC Board and the screw actually used.

- (4) No discoloration nor deformation should be caused by the heat of soldering.
- (5) In addition, both sides (mating side and solder side) of the contact and the housing must not be damaged or deformed by the operation. No foreign substances are permissible in the mating area.



5.Crimping Operation

Any crimping of contacts must be performed by using appropriate AMP tools according to the applicable Instruction Sheet and Specification.

NOTE See the applicable manufacturer’s instruction sheet for 9.5 contact.

5.1 Wire

5.1.1 Applicable Wire

See Fig.2 for applicable wire.

5.1.2 Notes for Stripping of Wire End

Wire end must be stripped without nick, cutoff, or damage of wire strands.

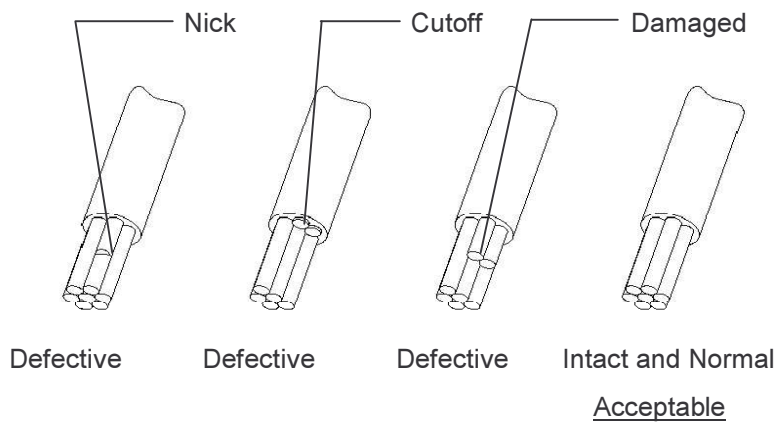


Fig.7

5.2 Operation of Crimping Machine

In the case of “0.64 III Receptacle Contact”, see instruction sheet “412-5022(separate volume)” for automatic terminating machine.

5.3 Crimping Specification

In the case of “0.64 III Receptacle Contact”, see application specification “114-5329(separate volume)” .

5.4 Storage and Handling of 0.64 III Crimped Products

- (1) Store the products in a clean, dry area, cover with proper sheet or paper when placed in an open area until the next day.
- (2) Crimped leads should be processed in bundles of less than 100 pieces. In addition, care should be taken in case the leads catch together or be tangled, causing damage of the products.
- (3) Avoid stacking and piling up the in-process products in large volume. Deformation of the contact will result in malfunction of contacting parts electrically.

6.Harness Making

NOTE See the applicable manufacturer’s instruction sheet for 9.5 female connector.

6.1 Procedure for Female Contact Insertion into Housing

- (1) Confirm the retainer is in pre-assembled condition. When the retainer is in final lock condition, it must be unlocked to pre-assembled condition. See para.6.3. The contact can not be inserted in final lock condition.

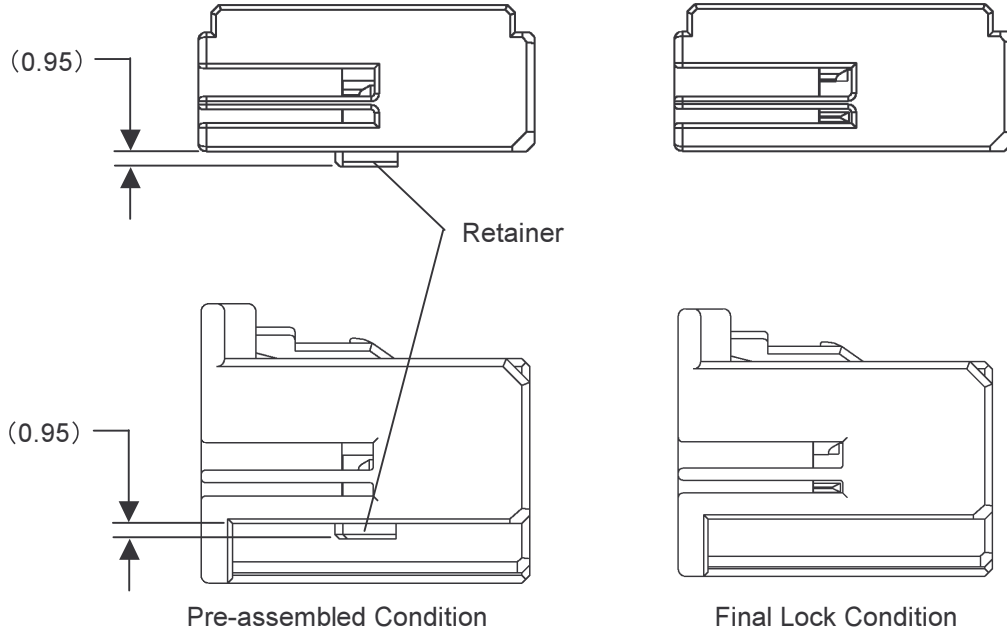


Fig.8

- (2) Confirm type of plating on the contact. It must be the same type of plating on the female contact and on the male contact.

The type of plating can be seen on the customer drawing.

NOTE Connection between different types of contacts should never be allowed.

- (3) Insert the contacts into the housing with same direction as shown in Fig.9. The insertion is finished when the lance is locked and the contact can not be more inserted.

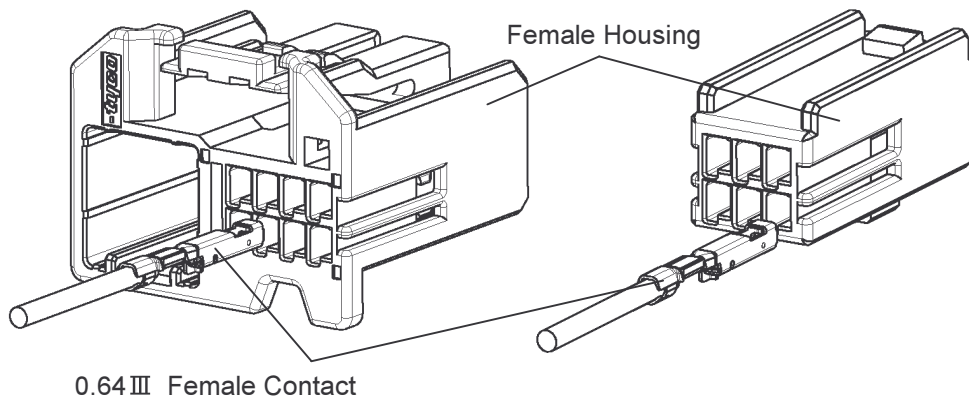


Fig.9

- (4) By pulling the contact by 20N MAX, check to make sure that the contact can not be withdrawn.

6.2 Double Lock (Secondary Lock) Operation

(1) After insertion of all of the contacts, press the retainer for final lock condition. The double lock operation is finished by confirmation that the retainer is kept in the final condition.

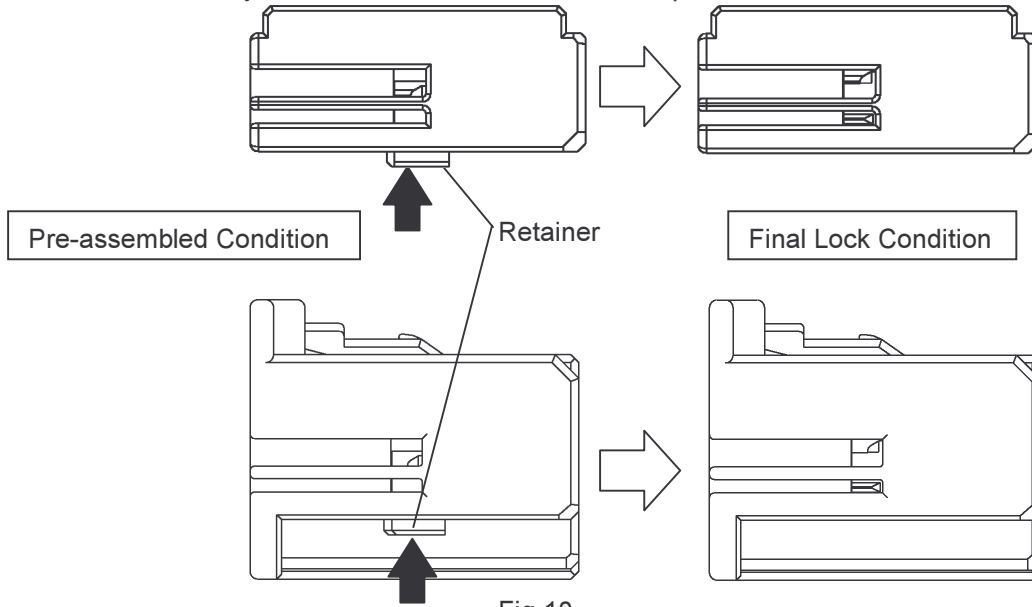


Fig.10

(2) The double lock operation can not be completed if there are any half-inserted contacts. When the retainer can not be pressed to the final condition, do not press by force, find the half inserted contact, and insert it to proper position. See para.6.1.

6.3 How to Unlock Retainer from Final Lock Condition

When the female contact requires insertion or extraction, the retainer must be in the pre-assembled condition. The insertion or extraction can not be done in final lock condition.

- (1) Insert the jig, 1mm blade screw driver, into the window of the retainer pointed by the tear drop mark. See Fig.11.
- (2) Draw out the retainer, about 1mm, to pre-assembled condition. Confirm that all of the projection is unlocked. See Fig.11.

NOTE *Do not extract the retainer more than appropriate length. Otherwise the retainer may be damaged.*

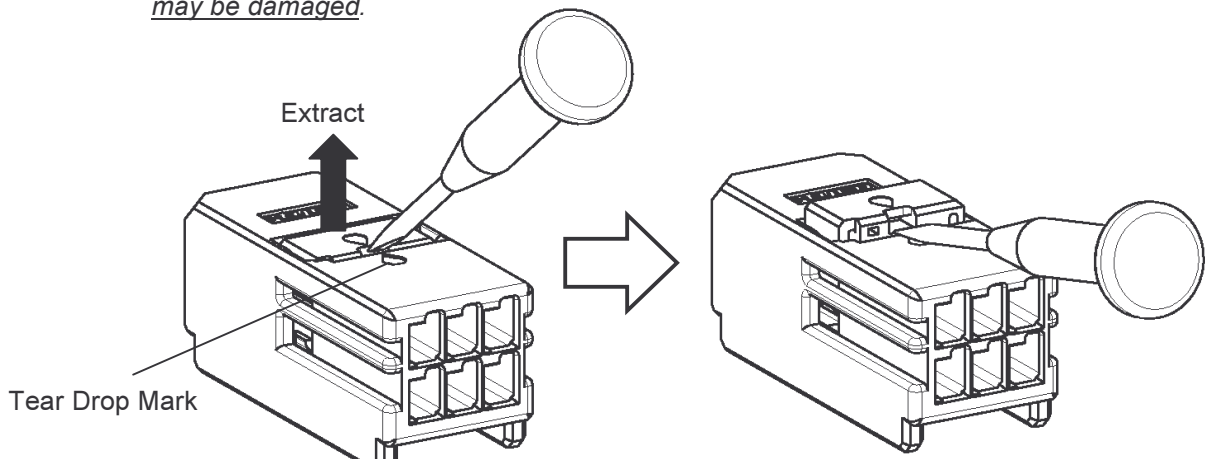


Fig.11

6.4 How to Extract Female Contact

- (1) Confirm the retainer is in pre-assembled condition. When the retainer is in final lock condition, it must be changed to pre-assembled condition. See para.6.3. The female contact can not be extracted in final assembled condition.
- (2) Recommend to use the special tool (PN:1729375-1) for extracting Female Contact. Use the tool according to the Instruction sheet (411-78139).
- (3) The case of not existing of the special tool, Insert 1mm blade screw driver into the proper hole to the end, remove the loaded contact from housing while pull the crimped wire. See Fig.12.
- (4) When the female contact can not be extracted, do not pull the wire by force but ensure the housing lance is unlocked.

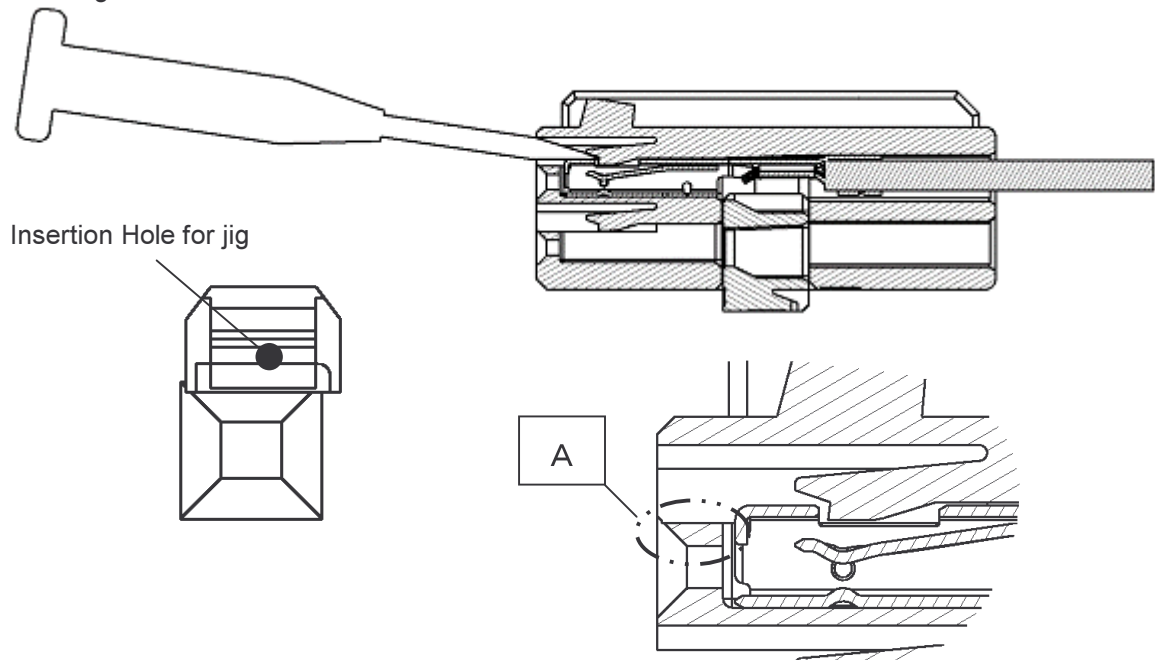


Fig.12

NOTE Please do not applying unnecessary force to the A. It becomes the cause of breakage.

NOTE Take care not to apply unnecessary force, otherwise the deformation of the jig occurs or it is cause for falling of retention force by the deformation of the contact lance.

And do not repeat extract more than 10 times, otherwise the retention force has fallen.

NOTE Take care not to insert the screwdriver or the extractive jig into the female contact. If those should be inserted, the female contact must be renewed. Re-using is never allowed.

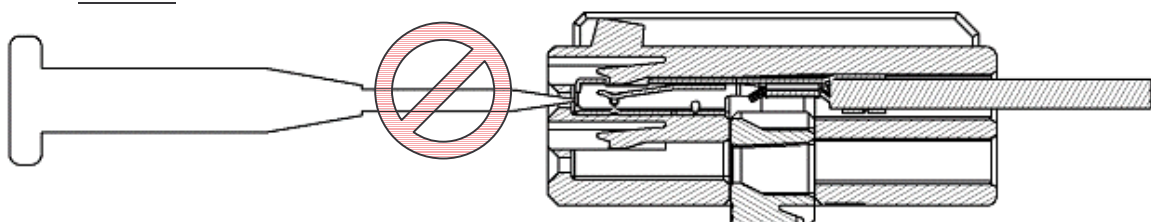


Fig.13

6.5 Harness Control

6.5.1 Handling

Take care not to apply unnecessary force or shock to the connector or the wire.

6.5.2 Taping up Wires

The wires must not be taped up more than 30mm from the end of the housing to avoid applying unnecessary force to the wires.

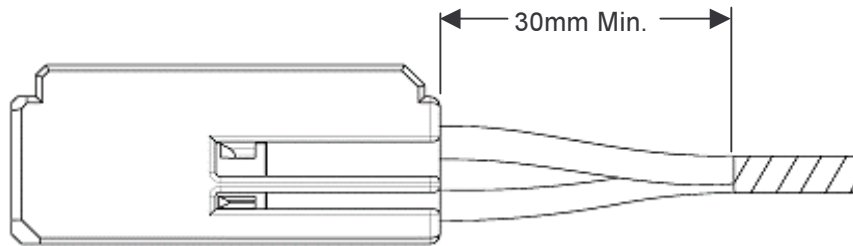


Fig.14

6.5.3 Electric Circuit Check

- (1) For making a check on electric circuit, the applicable mating half or equivalent product should be used.
- (2) Never insert the probe pin for the inspection into the female contact. The pin must be probed from the wire side.

NOTE *If the probe pin should be inserted, the female contact must be renewed.*

- (3) Please report to our company the treatment device for energizing inspection use.

6.5.4 Storage

Avoid storing the connector in a moist or dusty place. Stock the connector away from direct sunlight.

6.5.5 Shipping and Carrying

The connector should be used with the proper packaging to prevent the ingress of dust, moisture, etc.

7. Mating and Extraction of Connector

7.1 Unite 6Pos. female housing with 8Pos. female housing

- (1) Check to make sure that the contact is inserted into the housing in proper condition, the wire is taped up from proper position, and the retainer is in final lock condition. If the retainer is in pre-assembled condition, it must be changed to be in final lock condition. See para.6.
- (2) And then check the contact and the housing into the male housing for defects, deformation, discoloration, damage, rust, crack, deficit, etc.

NOTE *The connector must be renewed if any defects are found.*

- (3) Insert the 6Pos. female housing into the 8Pos. female housing straight with notice direction as shown in Fig.15. The operation is finished when you hear the click sound and can not insert further. When you can not insert the housing, do not insert by force, and check the items in (1), (2), (3).

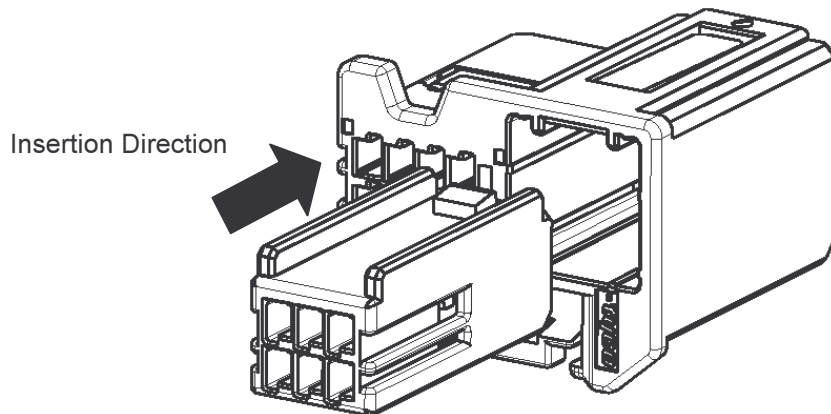


Fig.15

NOTE Insert the 6Pos. housing into 8Pos. housing surely.
If 6Pos. housing is in the state of half insertion, the Lance for holding 6Pos. housing protrude.
It is not possible to insert female connector into male connector. (Fig.16)

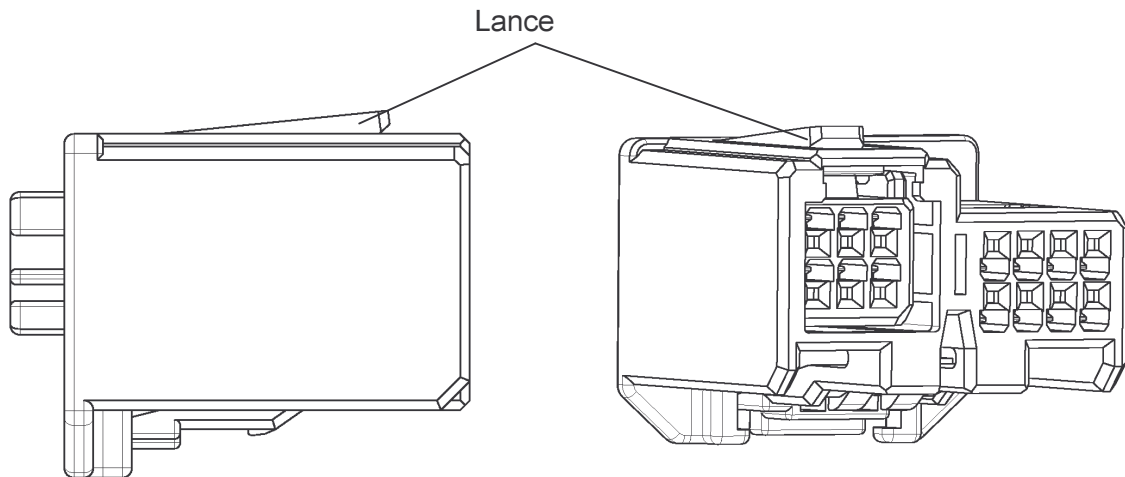


Fig.16

7.2 Mating of Connector

- (1) Check to make sure that the contact is inserted into the housing in proper condition, the wire is taped up from proper position, and the retainer is in final lock condition. If the retainer is in pre-assembled condition, it must be changed to be in final lock condition. See para.6.
- (2) And then check the contact and the housing into the male housing for defects, deformation, discoloration, damage, rust, crack, deficit, etc.

NOTE The connector must be renewed if any defects are found.

- (3) Check to make sure that the 6Pos. female housing is inserted into the 8Pos. female housing in proper condition.

NOTE The 6Pos. female housing can not enter the 8Pos female housing, after 8Pos. female housing mated with the male housing.

If 8Pos. female housing is not combined with 6Pos. female housing mated with male housing,

Firstly you must remove the 8Pos. female housing from male housing.

And combined with 6Pos. female housing, please mate them again.

If you insert the 6Pos. female housing into the 8Pos. female housing mated with male housing

by force, the breakage of connector and terminal will be occurred.

- (4) Insert the proper female housing into the male housing straight with same direction as shown in Fig.17. The operation is finished when you hear the click sound and can not insert further. When you can not insert the housing, do not insert by force, and check the items in (1), (2).

NOTE At the insertion operation, take care not to apply force except in the insertion direction.

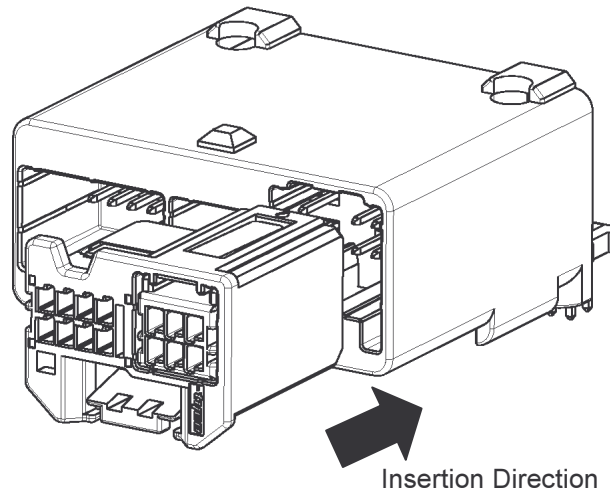


Fig.17

- (5) By pulling the female connector lightly, check to make sure that the connector can not be with drawn.

7.3 Extraction of Connector

- (1) Grip the female housing, and then draw straight out while pressing down the locking lever.

When the housing can not be drawn out, do not pull it by force but check to make sure if the locking mechanism is released.

NOTE At the extraction operation, take care not to apply force except in the extraction direction.

NOTE *Do not pull the wire only.*

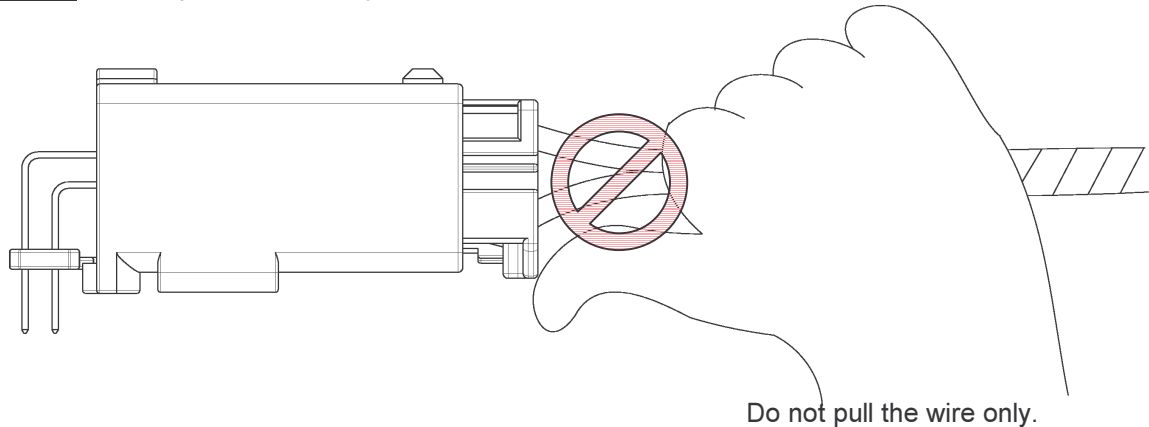


Fig.18

(2) Extract 6Pos. female housing from 8Pos. female housing

- ① Insert the jig, 1mm blade screw driver, into the point shown on Fig.19, and draw out the lance.
- ② Check to make sure that the 6Pos. female housing can not be with drawn by pulling the housing.

NOTE *When you pull the 6Pos. housing from 8Pos. housing, check that the lance was lifted. If you pull it by force, the breakage of connector and terminal will be occurred.*

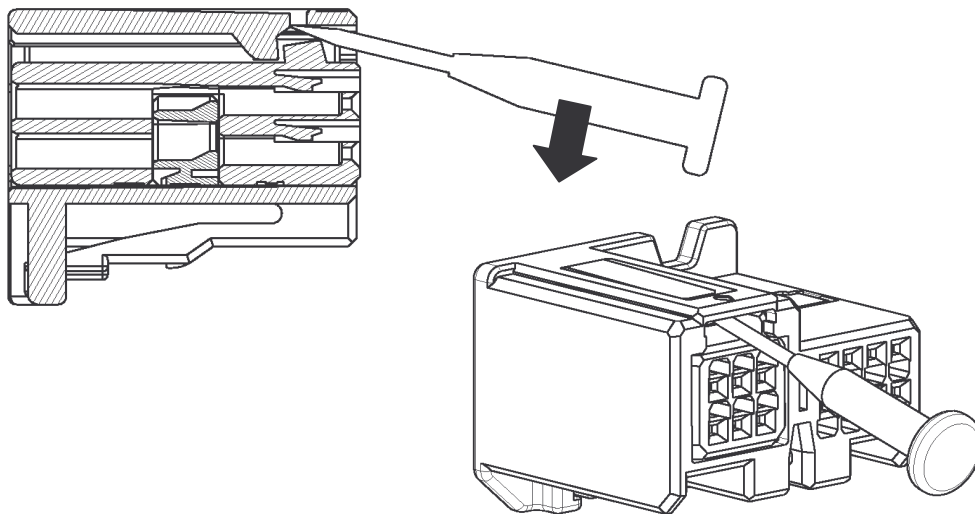


Fig.19

NOTE *Take care not to insert the screwdriver or the extractive jig into the female contact. If those should be inserted, the female contact must be renewed. Re-using is never allowed.*

7.4 General Attention Matters

- (1) Do not mate and extract the connector unnecessarily.
- (2) Do not insert any objects except the proper connector.
- (3) At mating/extraction operation, or after mating operation, take care not to apply unnecessary force or shock to the wire and the connector.