1. Part Names and Part Numbers

1.1 Housings

These products have keying variations. Please check the customer drawings of the following products.

Part Number*	Part Name
1473672	4Pos. Plug Housing
1612035	4Pos. Cap Housing

Fig.1

*Note : 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.

1.2 Terminals

Part Number*	Part Name	Applicable Wire (Nominal)		
		Type	0.3mm^2	0.5mm^2
1674298	025 Receptacle (Female Terminal)	CAVUS/CAVS	O	O
		AVSS/AVSSH	O	O
1674742	025 TH Tab (Male Terminal)	CAVUS/CAVS	O	O
		AVSS/AVSSH	O	O

Fig.2

*Note : 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. Make sure terminal finish. Do not use xen-finished terminal in bad combination.

1.3 Components View

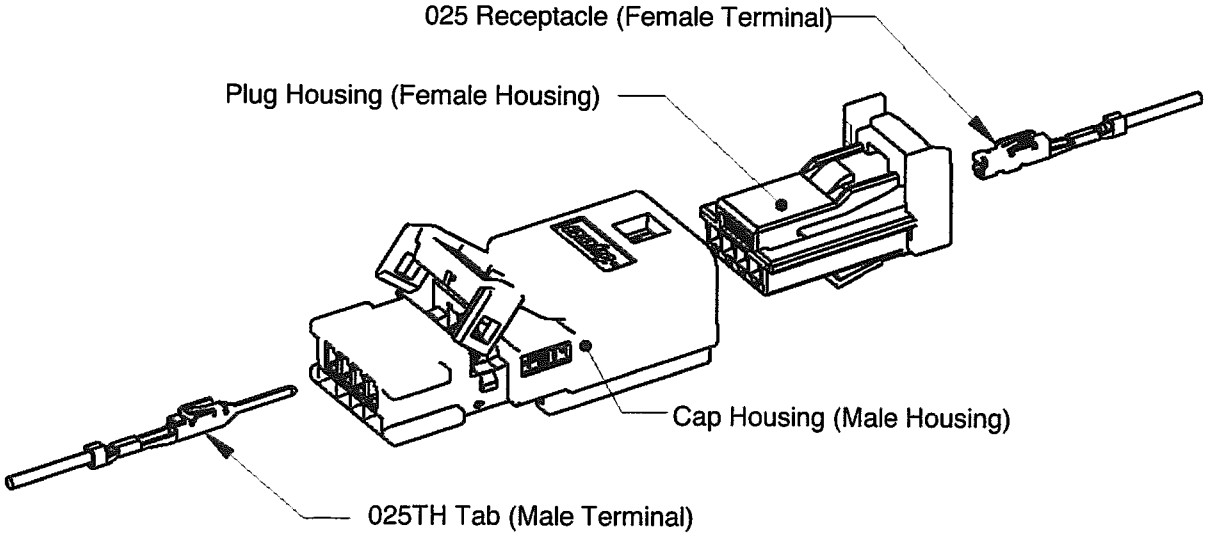

Fig.3

2. Inspection of Terminals and Housings

2.1 Pre-shipment Inspection by Tyco Electronics AMP K.K.

All the pre-shipment inspection by Tyco Electronics AMP K.K. are carried put for each shipment lot based on the quality control rules and applicable standards by means of the statistical control method. As a general rule, the manufacturing date is shown on each of the comparisons with the inspection records, manufacturing records, adjustment records for the machines and measurement instruments. Note that the manufacturing date is shown using a date code specified below.

89 40 2

- 2 — Represents a day of the week. (This example shows Monday)
- 40 — Represents a week of the year. (This example shows the 40th week of the year)
- 89 — Represents the last two digits of the western year. (This example shows 1989)

2.2 Customer Receiving Inspection

Although, the products are thoroughly inspected before delivery, it is recommend that the customer, be attentive to confirm the status of products, to check out if the products incurred any damage during transit.

<Terminals>

Item	Check Points	Measuring Apparatus
Visual Inspection	1) Configuration and appearance	Visual
	2) Plating Finish	
	3) Reeling status of strip terminals	
Dimensional Inspection	1) Width and height of wire barrel	Calipers
	2) Width and height of insulation barrel	

Upon Receiving, the reeled terminal products should be classified by manufacturing date codes and put under the inspection in accordance with the inspection level II of MIL-STD-105 at acceptable quality level of 4%, visually and dimensionally to check the first five terminals in reel. Acceptable of the products is verified by proving the products meeting the specified requirements.

<Housings>

Item	Check Points	Measuring Apparatus
Visual Inspection	1) Burrs, discoloration and deformation	Visual
	2) Cracks, breakage and chipping off	
Dimensional Inspection	1) Mating Check to see if the connector mate and unmate smoothly.	Calipers

The housing products submitted to inspection, are classified by manufacturing date code and put under the inspection in accordance with the inspection level II of MIL-STD-105 at acceptable quality level 4%, visually and dimensionally to the randomly selected five pieces out of the lot. Acceptable of the products is verified by proving the products meeting the specified requirements.

3.Storage and Carrying

3.1 Terminal

(1) Avoid leaving or carrying the terminal reel in an open area without wrapping it in proper material.

(2) Do not lift up and carry the terminal reel by gripping one the side of reel, this may result in damage to the reel, and terminals before use. (See Fig.4)

Fig.4

(3) Avoid storing the terminal reel in a moist or dusty place. Stock the reel in a comparatively dry and clean place (5~35℃, 45~85%RH) away from direct sunlight.

(4) When removing the terminal reel from the machine, fasten the end of terminal strip onto the edge of the reel with use of proper string or wire. (See Fig.5)

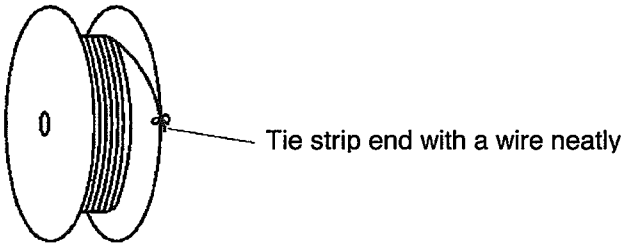

Fig.5

3.2 Housing

(1) Avoid storing the terminal reel in a moist or dusty place. Stock the reel in a comparatively dry and clean place (5~35℃, 45~85%RH) away from direct sunlight.

(2) Avoid leaving or carrying the terminal reel in an open area without wrapping it in proper material.

(3) Do not drop or shock the housing when carrying it.

4. Crimping Operation

Terminals must be crimped by using Tyco Electronics AMP K.K. specified application tooling in accordance with the procedure specified in applicable instruction sheet.
After completion and of one crimping lot, It is necessary to record the part number, quantity and the date code for future reference.

4.1 Wire

4.1.1 Applicable Wire
See Fig.2 for applicable wire.

4.1.2 Notes for Stripping of Wire End
Wire end must be stripped without nick, cutoff, or damage of wire strands.

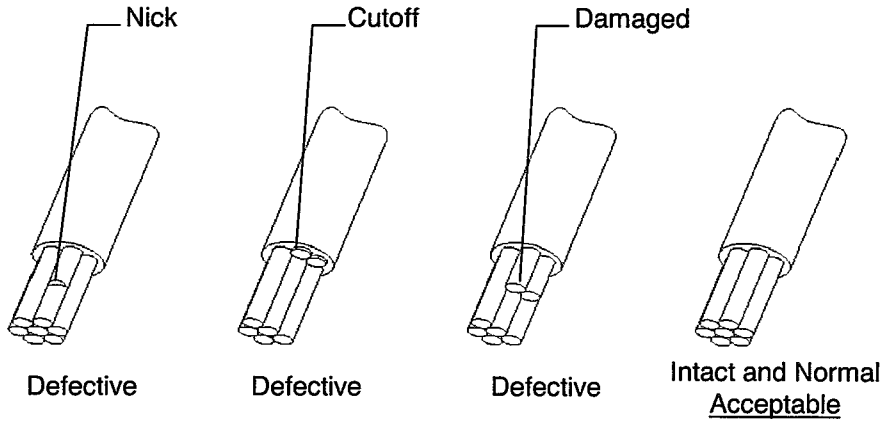

Fig.6

4.2 Operation of Crimping Machine
See the following instruction sheet for automatic terminating machine.

025 Tab & Receptacle	412-5022

4.3 Crimping Specification
See the following application specification.

025 Receptacle	114-5250-2
025 TH Tab	114-5340

4.4 Storage and Handling of 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.
Take care of the tangle and damage (Specially the lance of terminal and Tab terminal) on the products.
(3) Avoid stacking and piling up the in-process products in large volume.
Terminal failure and fall of retention force occur by deformation of the terminal and specially lance.
(4) Don't tap or hit the top of terminals for arranging them.
Obstacle of mating and performance may be occurred by the damage of terminal.

5. Harness Making

5.1 Procedure for Female terminal insertion into Female housing

(1) Confirm the retainer is in pre-locked condition. See para.5.3. The terminal cannot be inserted in final locked condition.

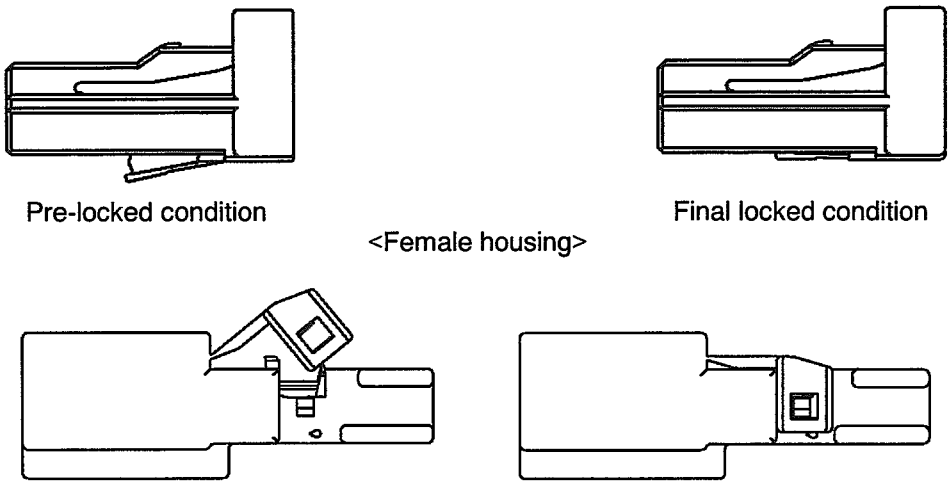

Fig. 7

(2) Confirm type of terminal and housing.
It must be the same type of terminal and housing. (Insert the male terminal to the male housing and the female terminal to the female housing)

(3) Insert the terminals into the housing with same direction as shown in Fig. 8. The insertion is finished when the lance is locked and the terminal cannot be inserted more.

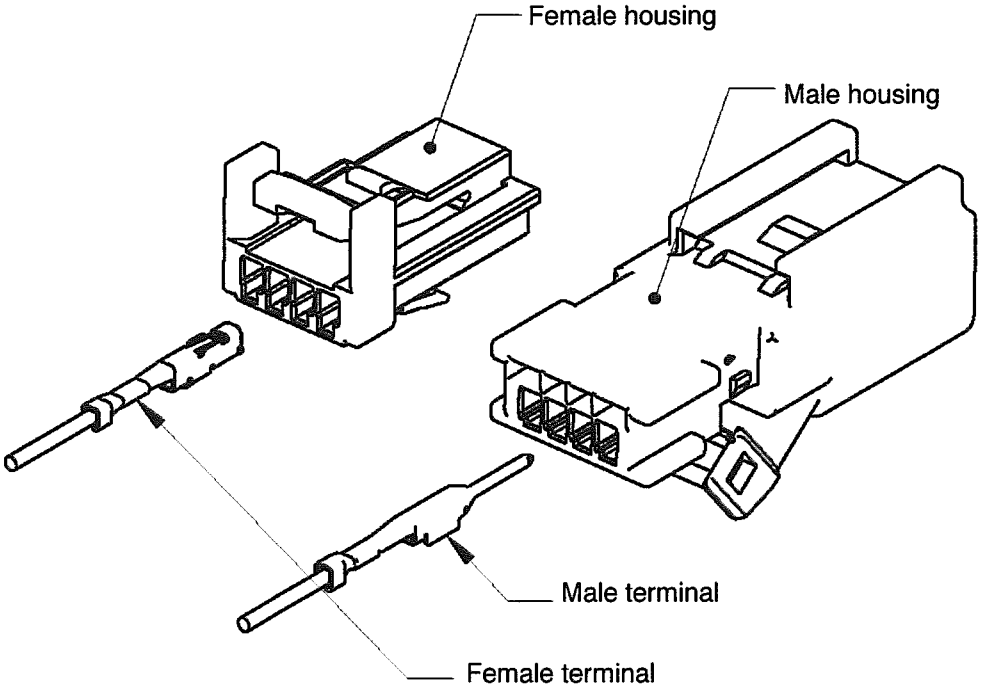

Fig.8

NOTE Should not insert the terminal to different type housing.
If you insert different type, the terminal and housing should be exchanged, not use.

(4) By pulling the terminal lightly (MAX 20N), make sure that the terminal cannot be withdrawn.

NOTE When you insert terminals, you should have wire and take cares the breakage of lance and terminal point.

5.2 Retainer (Final Lock) Operation

(1) After insertion of all of the terminals, press the retainer for final locked condition. The retainer operation is finished by confirmation of the following items.

Female housing; Make sure the retainer closure and its dimension.
Male housing; Make sure the retainer closure, two locking parts on the side of housing and its dimension.

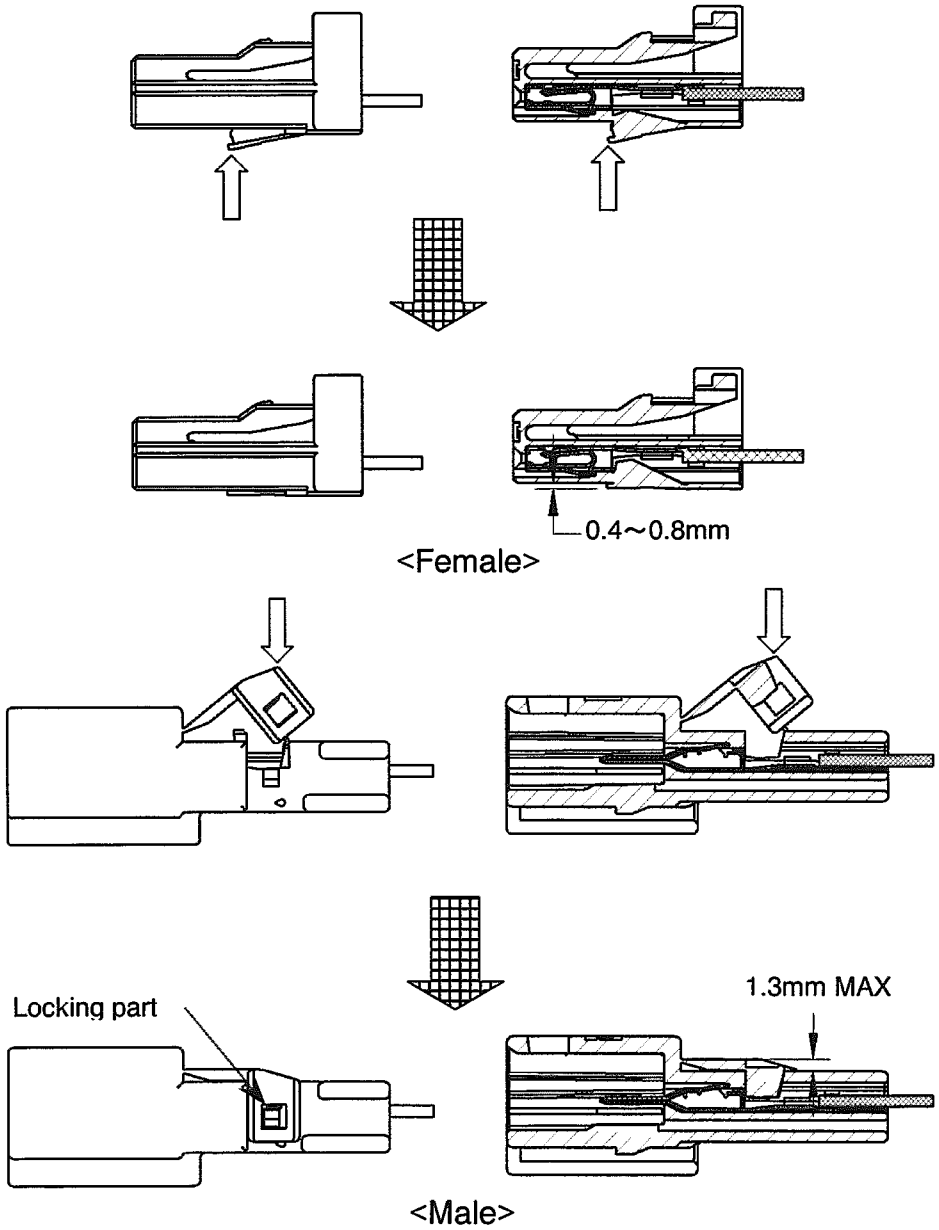

Fig.9

(2) The retainer operation cannot be completed if there are any half-inserted terminals. When the retainer cannot be pressed to the final condition, do not press by force, find the half inserted terminal, and insert it to proper position. See para.5.1.

5.3 How to Unlock Retainer from Final Lock Condition

When the terminal requires insertion or extraction, the retainer must be in the pre-assembled condition. The insertion or extraction cannot be done in final lock condition. (See Fig.10, 11)

<Female housing>

(1) Tough the tip of precision screwdriver with 1mm blade onto the following area in Fig. 10.
(2) Draw out the retainer as pre-assembled condition or opened condition.

NOTE Do not open retainer more then 90° . Otherwise the retainer may be damaged.

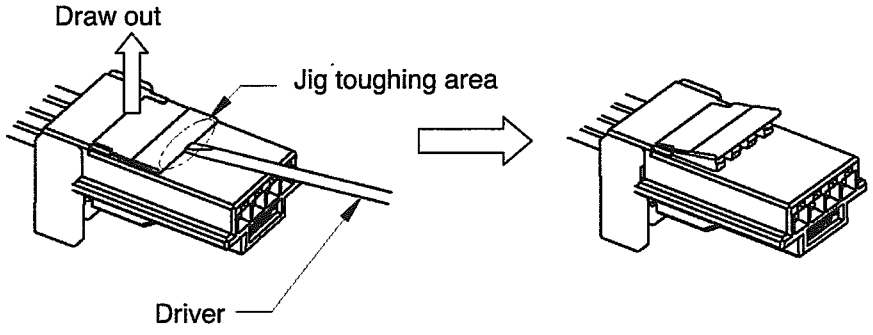

Fig.10

<Male housing>

(1) Draw out two locking parts one by one with precision screwdriver.
(2) Release the retainer to opened condition.

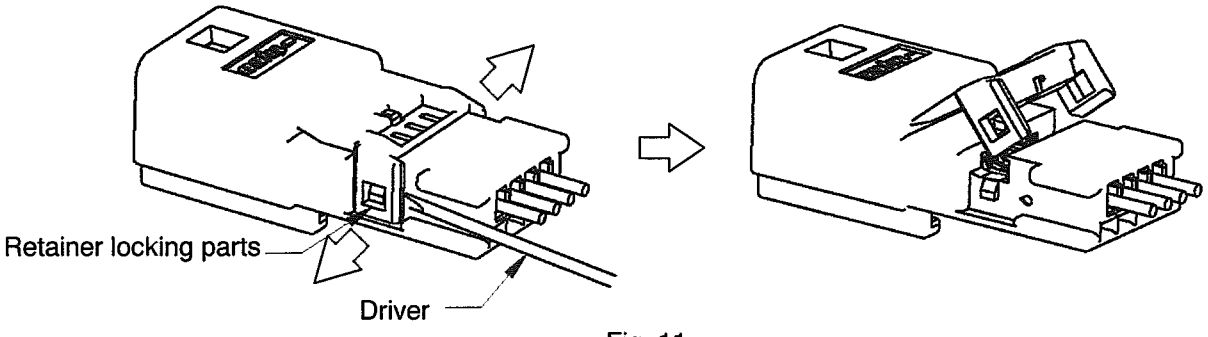

Fig. 11

NOTE Do not release the locking parts more then necessary. Otherwise the locking parts may be damaged.

NOTE Do not open retainer more then 90° . Otherwise the retainer may be damaged.

5.4 How to Extract Terminal

Confirm the retainer is in pre-assembled condition or opened condition. If the retainer is in final lock condition, it must be changed to pre-assembled condition. See para.5.3. In this case he female terminal cannot be extracted in final locked condition

<Female terminal>

①Insert the special extractive jig (Part number:1276565-1) into the proper hole to the end.

②Remove the loaded terminal from housing while the crimped wire. See Fig.12

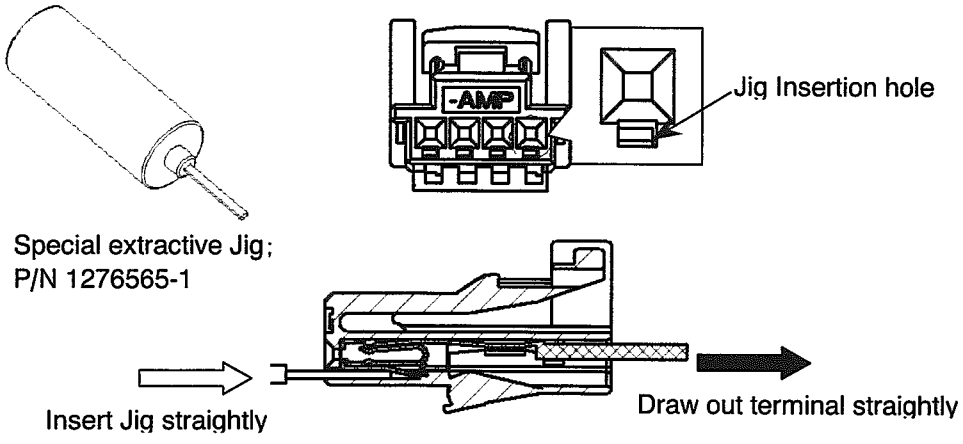

Fig.12

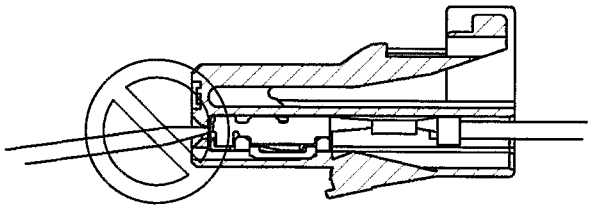

Fig. 13

NOTE

①Do not insert the extractive jig or a screw driver into the female terminal. If you insert this, the terminal should be exchanged, not use.

②If you can't draw out the terminal, draw out the jig once, thrust the terminal with wire and insert the jig again. If the jig is not inserted straightly, the jig may be damaged and the terminal retention force may be declined. Do not extract the terminal repeatedly more than 10 times. The terminal retention force may be declined.

③Make arrangements about the terminal and housing at the jig inserting.

④If you can't draw out the terminal, do not force yourself to draw out it, Make sure the lance release.

⑤If you damage the terminal, make a replacement a new one.

⑥Do not extract the retainer by using the special extractive jig for 025 terminal.

<Male terminal>

①Insert the special extractive jig (Part number:1366865-1) into the proper hole to the end.

②Remove the loaded terminal from housing while the crimped wire. See Fig.14

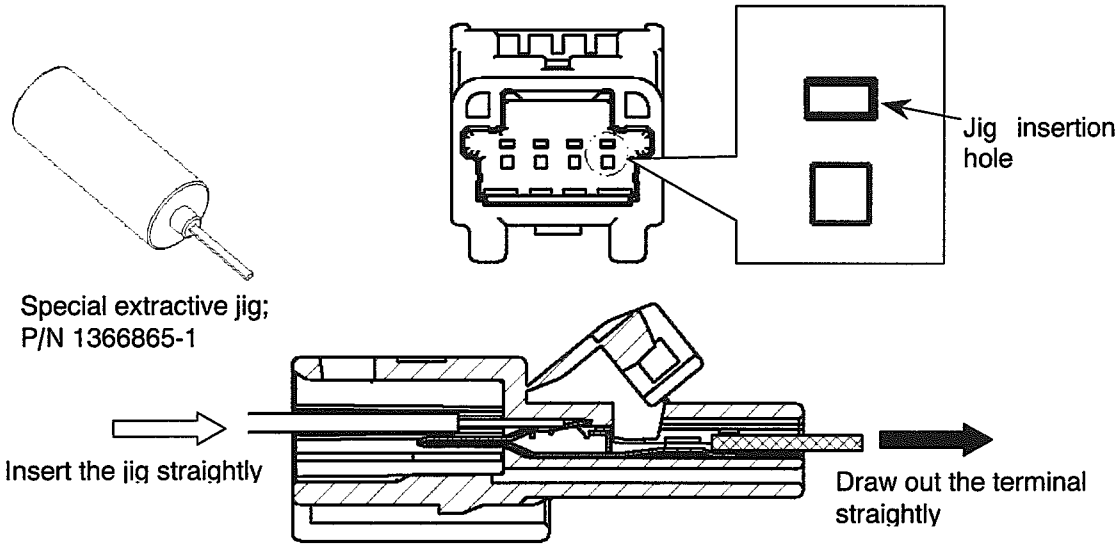

Fig.14

NOTE ①Attend to the crack and break of male terminal when you insert the extractive jig. If you damage the terminal, make a replacement a new one. Do not use.

②If you can't draw out the terminal, draw out the jig once, thrust the terminal with wire and insert the jig again. If the jig is not inserted straightly, the jig may be damaged and the terminal retention force may be declined. Do not extract the terminal repeatedly more than 10 times. The terminal retention force may be declined.

③Make arrangements about the terminal and housing at the jig inserting.

④If you can't draw out the terminal, do not force yourself to draw out it, Make sure the lance release.

⑤If you damage the terminal, make a replacement a new one.

⑥Do not extract the retainer by using the special extractive jig for 025 terminal.

5.5 Control of Harness

5.5.1 Handling

Don't apply excess force or shock to the connector and wire.

5.5.2 Taping up wire

Tape up the wire at intervals of more than 30mm from the end of housing, not apply excess force to the wires.

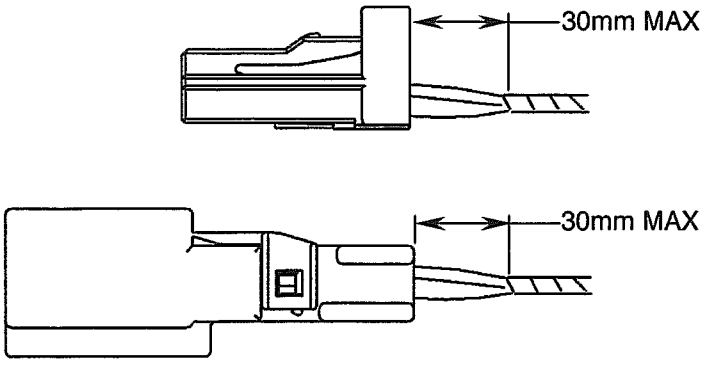

Fig.15

5.5.3 Inspection of Electric Circuit

(1) For inspection of electric circuit, use the applicable mating connector or equivalent.

(2) Must not insert the probe pin for the inspection into the female terminal. Put the probe pin from the wire side.

NOTE Exchange the terminal, if insert the probe pin into the female terminal.

5.5.4 Storage

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

5.5.5 Shipping and Carrying

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

6. Mating and Unmating of connector

6.1 Mating of connector

(1) Check the condition of terminal inserted into housing, the position of taping up wire, and the lock of retainer. If the retainer is in pre-assembled condition, press the retainer for final lock condition.

(2) Check the defects, deformation, discoloration, damage, rust, crack, deficit, etc. of housing and terminal.

NOTE Exchange the connector, if any defects are found.

(3) Insert the proper female housing straight into the male housing with the direction shown on Fig.14. If the operation is finished, you can hear the click sound and can't insert further. Don't apply excess force, if you can't insert into the male housing, and check the items of (1) and (2).

NOTE Don't apply excess force without the insertion direction at inserting.

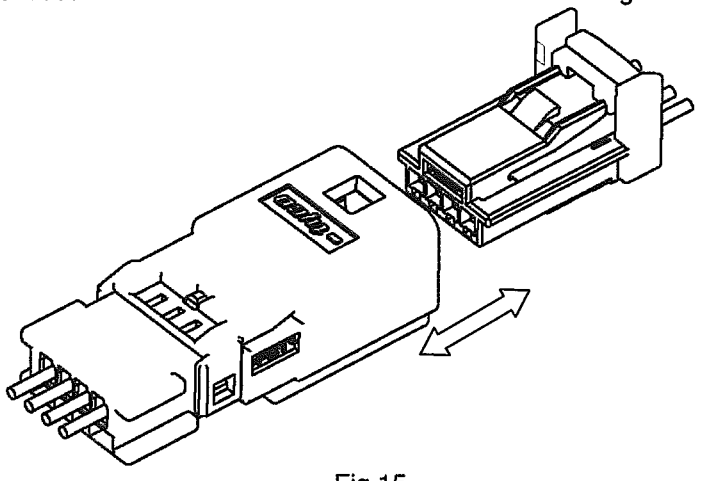

Fig.15

(4) Check the connector cannot be withdrawn by pulling the female connector lightly.

6.2 Unmating of Connector

Grip the male and female housing, and then draw straight out while pressing down the locking lever. If the housing cannot be drawn out, do not pull by excess force but check to make sure if the locking mechanism is released.

NOTE Don't apply excess force without the insertion direction at unmating.
NOTE Don't pull only the wire.

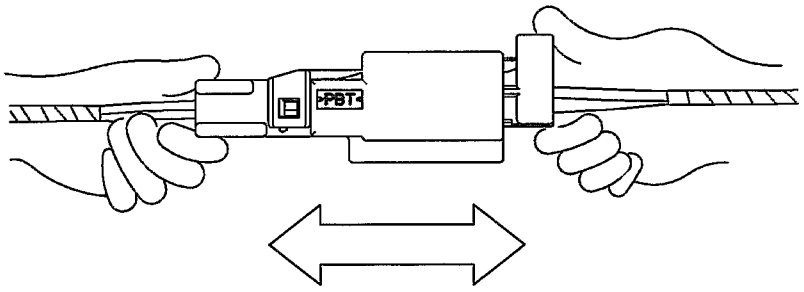

Fig.17

6.3 General Attention Matters
(1) Don't mate and unmate the connector unnecessarily.
(2) Don't insert any objects except the proper connector.
(5) Don't apply unnecessary force or shock to the wire and connector at mating and unmating operation.

7. Installation of connector to vehicles

(1) Don't force to pull connector out, when you run the connector through the hole of vehicle.
(2) At inserting to bracket,
①Take male and female housing.
②Check position and direction between bracket and cassette.
③Don't apply excess force without the insertion direction at inserting
(3) If the operation is finished, you can hear the click sound.