1. Part Name and Part Number

1.1 Housing

Part Number	Part Name
1897129, 2005256, 2005360, 2109430	HEADER ASSEMBLY
1897133, 2309307	39P PLUG ASSEMBLY
1897138	39P COVER ASSEMBLY
1897141, 2309306	27P PLUG ASSEMBLY
1897146	27P COVER ASSEMBLY
936054	CAVITY PLUG for MQS

Fig. 1

1.2 Contact

Part Number	Part Name	Applicable Wire Range
1393364-2	GET 064 CONTACT (FEMALE)	0.22/0.35 mm^2
1393365-2	GET 064 CONTACT (FEMALE)	0.5/0.75 mm^2

Fig. 2

1.3 Component View

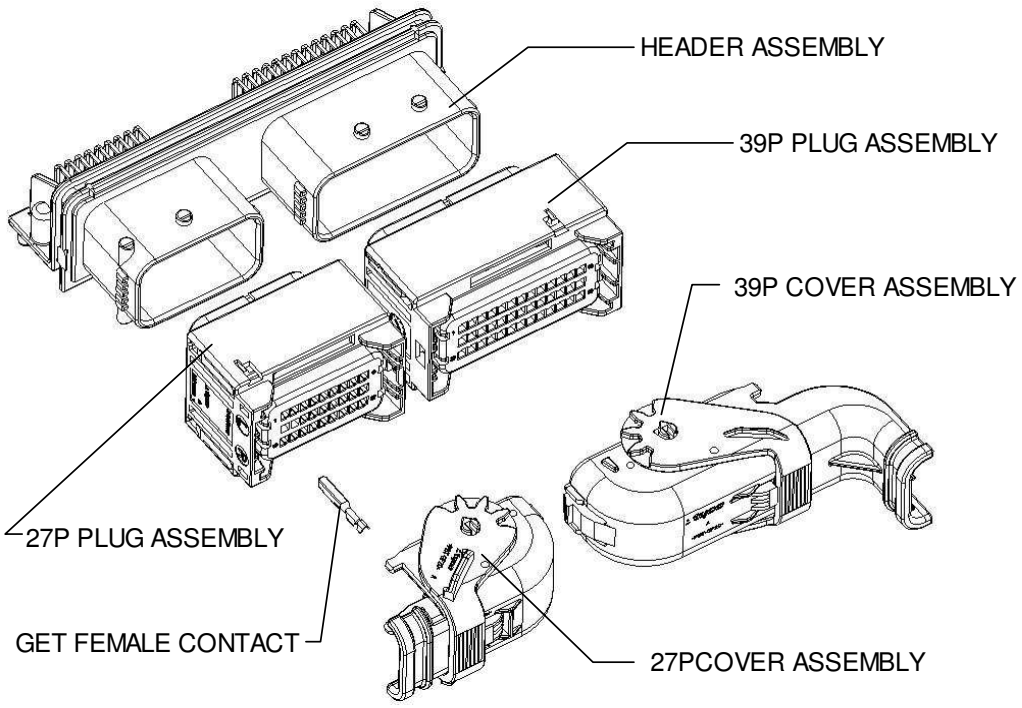


Fig. 4

2. Customer receiving inspection

Tyco conducts inspections according to their quality regulations to maintain an over all lot control. In addition, the customers should conduct receiving inspections based on the specific customer drawing.

3. Storage and Carrying

3.1 TML

(1) Avoid receiving or carrying the TML reel in an open area without wrapping it in proper material.
(2) Do not lift and carry the TML by gripping one side or the reel, this may occur damage on the reel and TML before use.

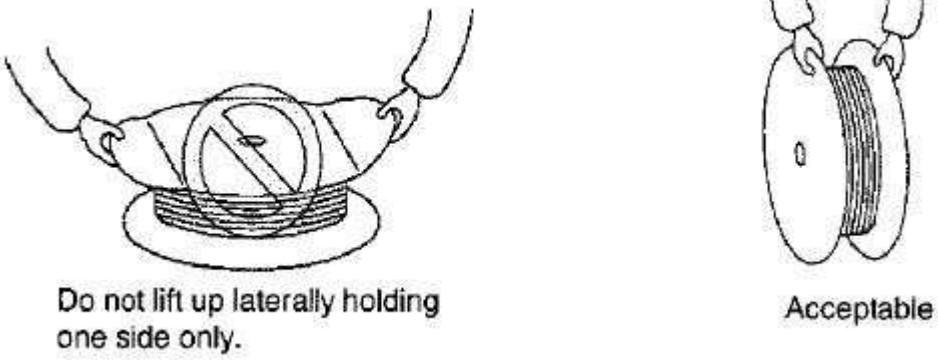


Fig. 5

(3) Avoid storing the TML reel in a moist or dusty place. TML should keep dry and clean place(5~34 °C, 45~85%RH) away from direct sunlight
(4)When removing the TML reel from the machine, fasten the end of the TML strip onto the edge for the reel with use of proper string or wire.(Fig. 6)

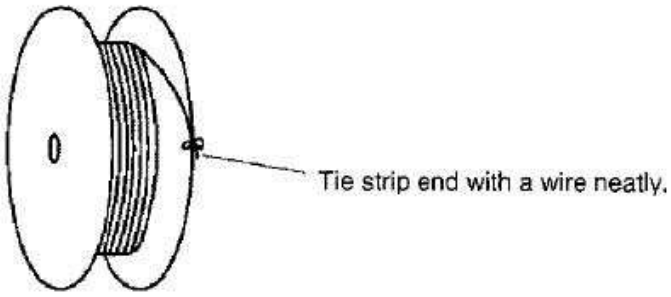


Fig. 6

3.2 Housing

(1) Avoid leaving or carrying the housing in an open area without wrapping it in proper material.
(2) Do not drop or shock the housing when carrying it.

4. CRIMPING OPERATION

4.1 Wire

4.1.1 Applicable Wire
See Fig.2.

4.1.2 Notes for end of Stripping Wire
Wire end must be stripped without cut or damage of wire strands

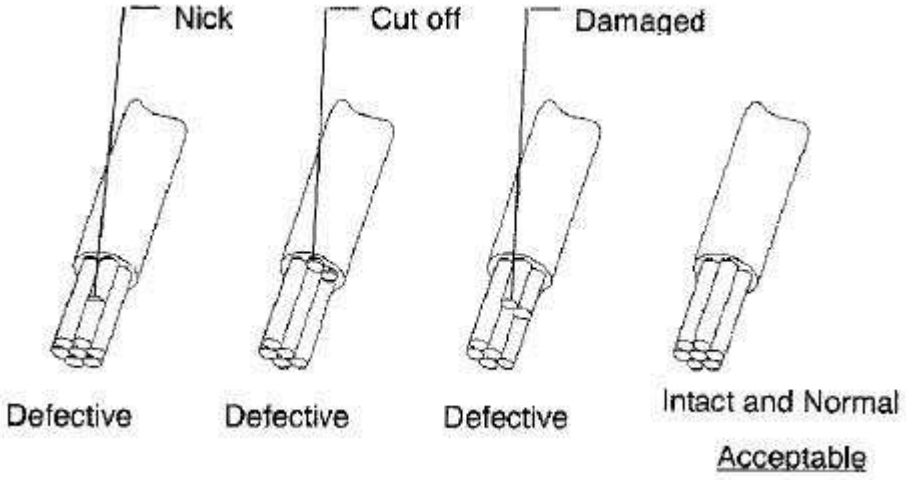


Fig. 7

4.2 Crimping Specification
See following application specification for the TML.

GET FEMALE CONTACT	114-13060

4.3 Storage and Handling of Crimping Products
(1) Store the products in a clean, dry area cover with proper sheet or paper when placed in an open area until next day.
(2) Care should be taken for tangle and deform of TML in case of the leads should be in bands.
(3) Do not stack the products so many layers, It makes electrical connection defective and low contact retention force by catch together or by deform causing the weight of themselves.
(4) Must no hit tip of the TML to coordinate the bundle, It makes mating or electrical defective..

5. HARNESS 조립

5.1 Instruction of assembly Female TML to Plug Assembly
(1) TPA should be Pre-lock status. If TPA is Final lock status, the TML can't be inserted (See Fig.8)

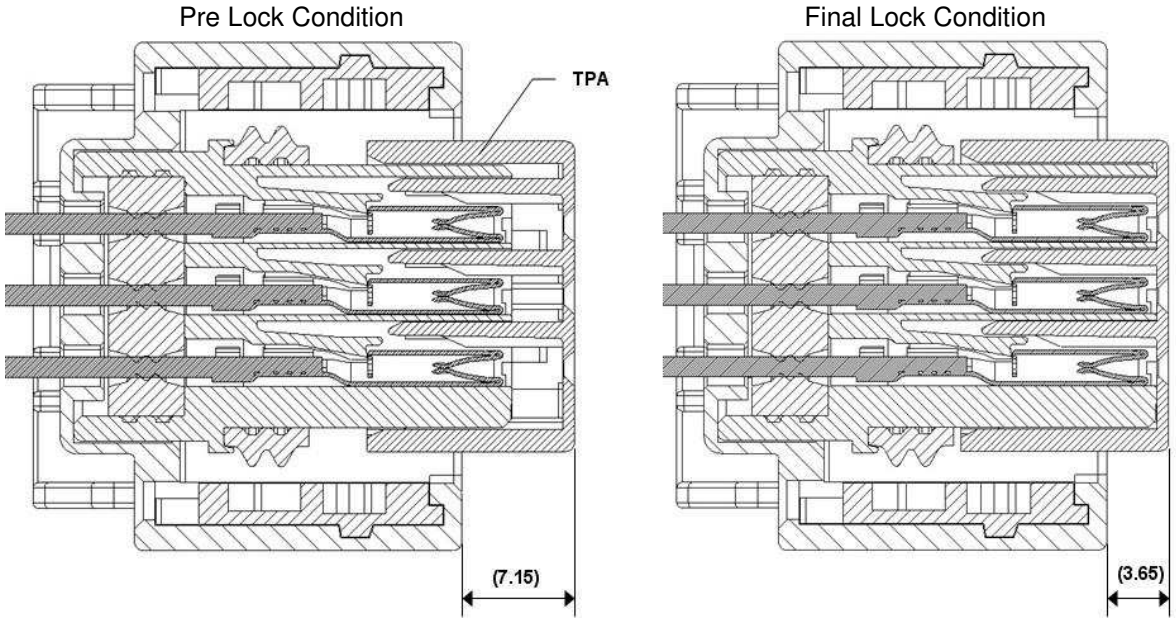


Fig. 8

(2) Insert TML into the each cavity with proper TML direction (See Fig. 9).
Operation is completed when TML is latched and the insertion is stopped.

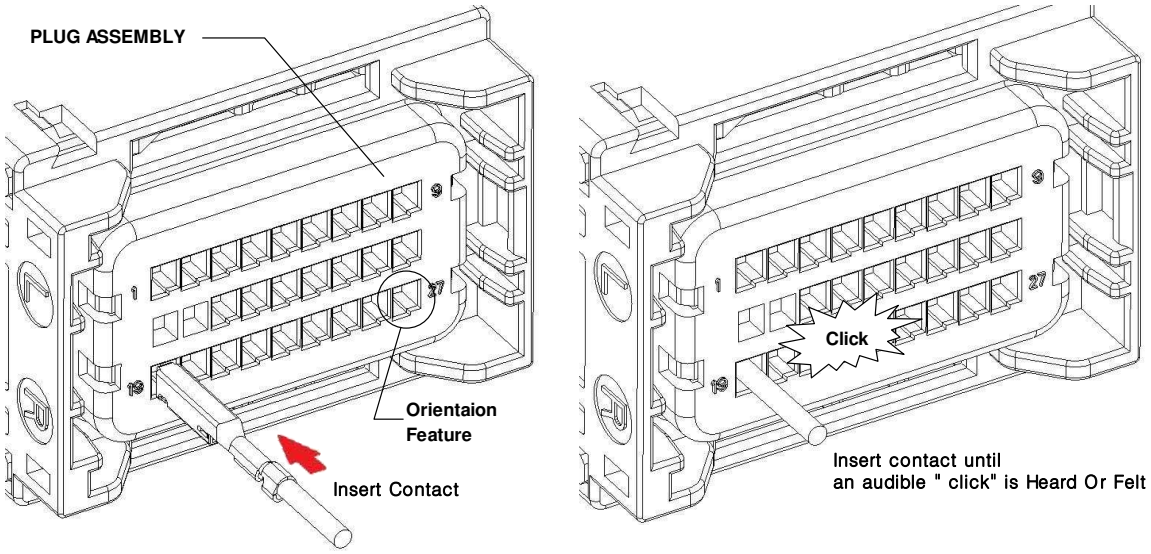


Fig. 9

NOTE: GET TML is using Family Seal Device, need higher insertion force then Non Sealed Type.

5.2 Instruction assembly Cavity Plug to the Plug Assembly

Need Cavity Plug insertion for Sealing function on empty cavity.

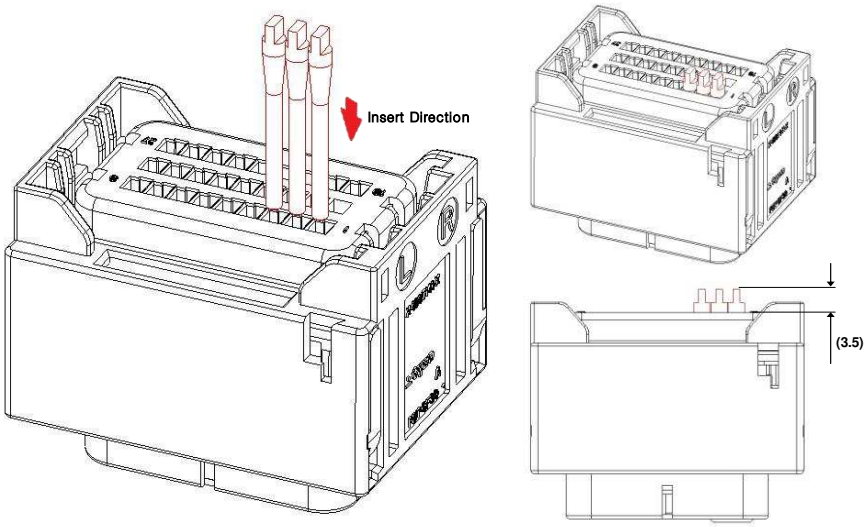


Fig. 10

Cavity Plug should be inserted until stopped. (See fig 10).
NOTE: Do not insert strongly, It causes deformation and breakage of the housing

5.3 TPA Final Lock (Secondary Lock)

(1) Check Final lock status of the TPA, after inserting TML or Cavity Plug on each proper Cavity (See Fig.8)
(2) If TPA can be final lock status, check the TML which is not inserted completely. Do not operate by force.

5.4 TPA unlock

TPA must be Pre-Lock status before Female TML extraction (See Fig.8)
Instruction of TPA unlock, refer Fig.11

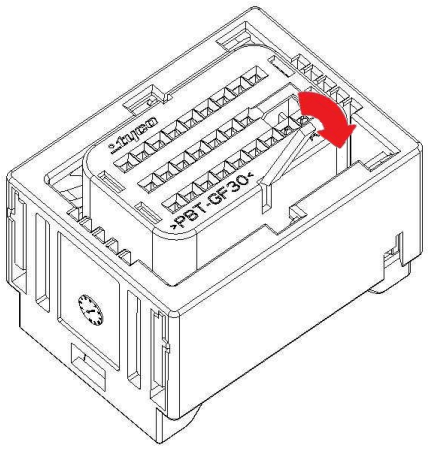
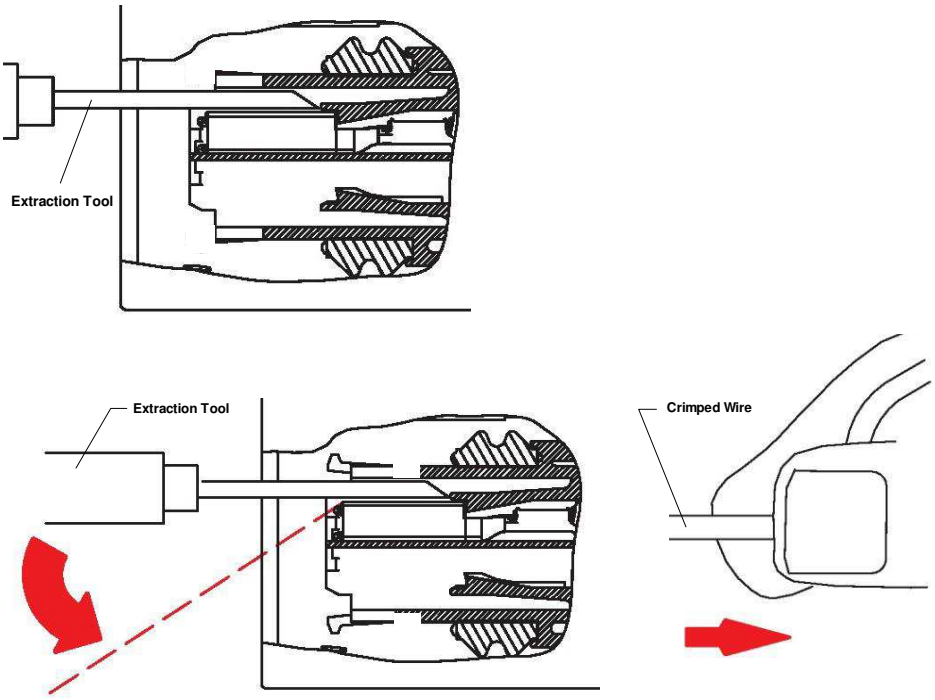


Fig. 11

5.5 Instruction of the Female Contact extraction

(1) Check the TPA status(Pre-Lock). If TPA is Final Lock status, It should be Pre-Lock status(See Par.5.4.). The contact can't be extracted in Final Lock status.

(2) Extract the TML with pulling the crimped wire whild pressing latch slightly using GET TML Extraction Tool. (It makes easier the operation that push the TML to bottom end of the cavities once before the operation above-mentioned.) see Fig.12 .



Extraction Tool No: 3-1579007-6

Fig. 12

Note: If seal devise is damaged during the operation, Plug assembly must be replaced.

Note: Do not insert other tool or screw driver into inside of rthe female TML. In case of the insertion, no resue is allowed and must be replaced to new female TML.

5.6 Instruction of assembly Cover Assembly

(1) Insert Rear locking latch to the hole(1) on Plug Assembly (See Fig.13)

(2) Insert front locking latch to the hole(2) on Plug Assembly (See Fig.13)

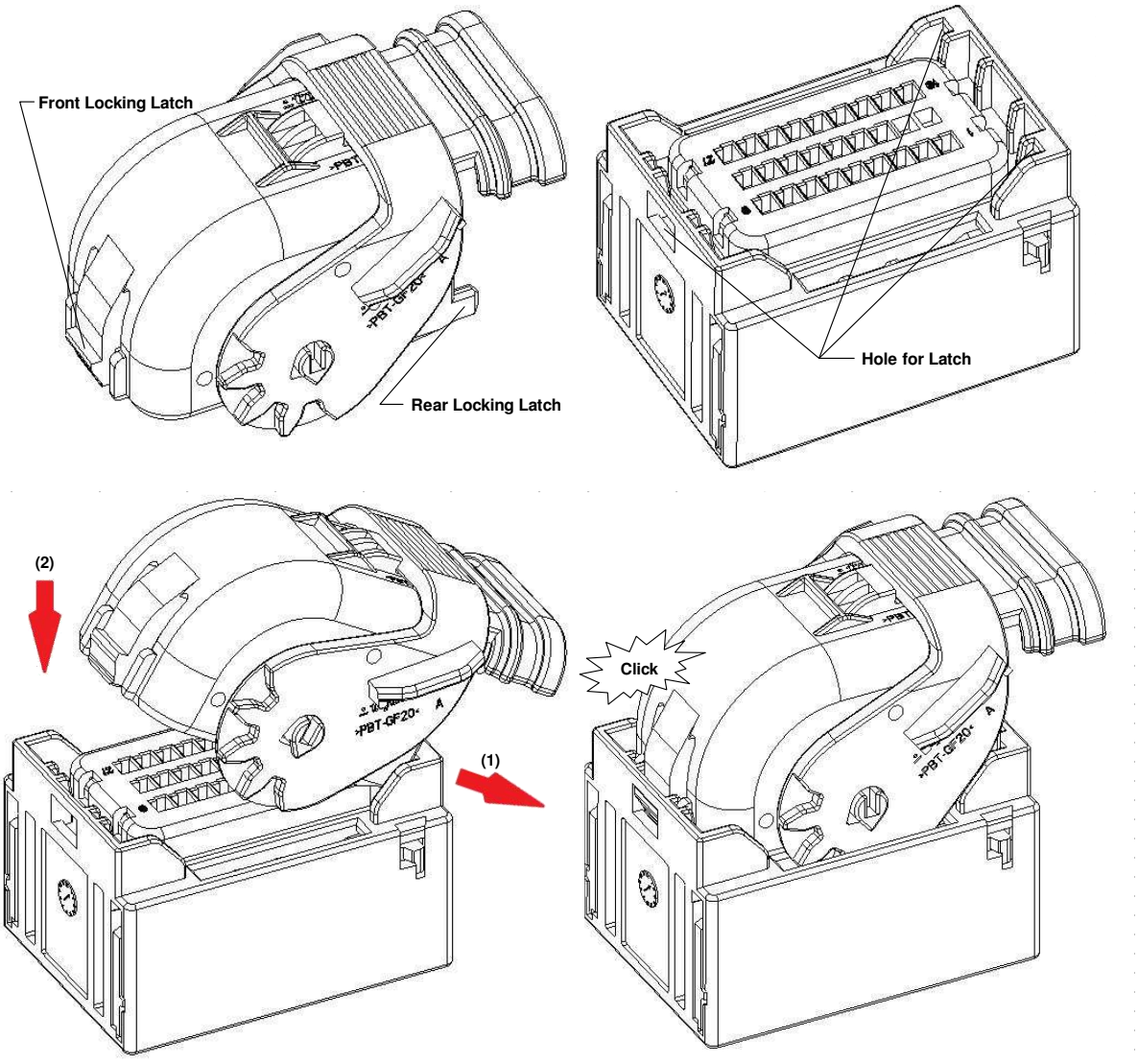


Fig. 13

NOTE: Must be assembled according to the instruction. Wire must be inside of the cover assembly.

NOTE: Check Lever position of the cover assembly. It must be same as shipping condition. (See Fig. 14.)

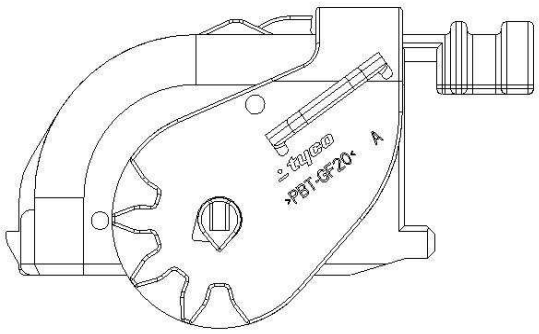


Fig. 14

NOTE: Check Slide position. The operation should be made with same slide position as shipping condition. See Fig 15.

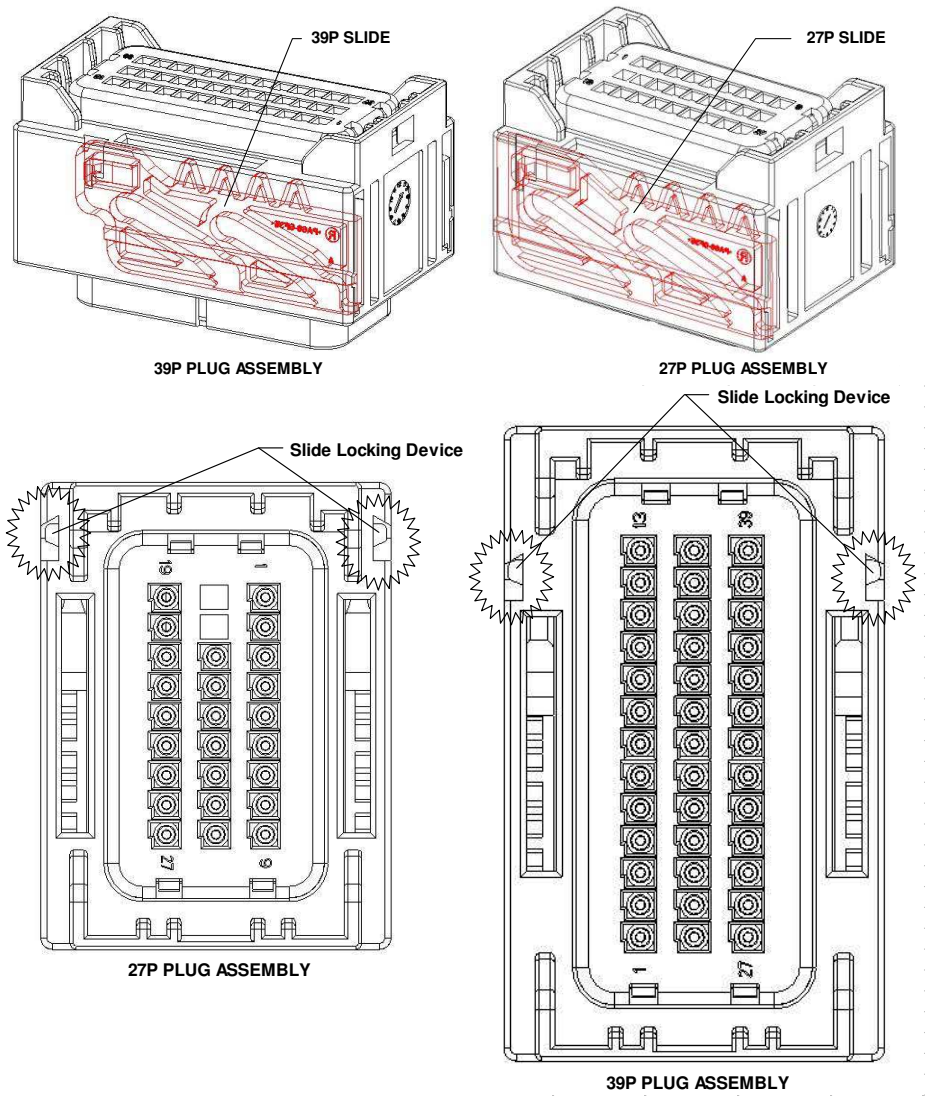


Fig. 15

5.7 Cover Assembly (Harness Cover) Release Operation

(1) Confirm the Lever is Final lock. (See Fig. 14)
(2) Push by hand or proper tool in (1) direction and pull the cover in (2) direction. (See Fig.16)

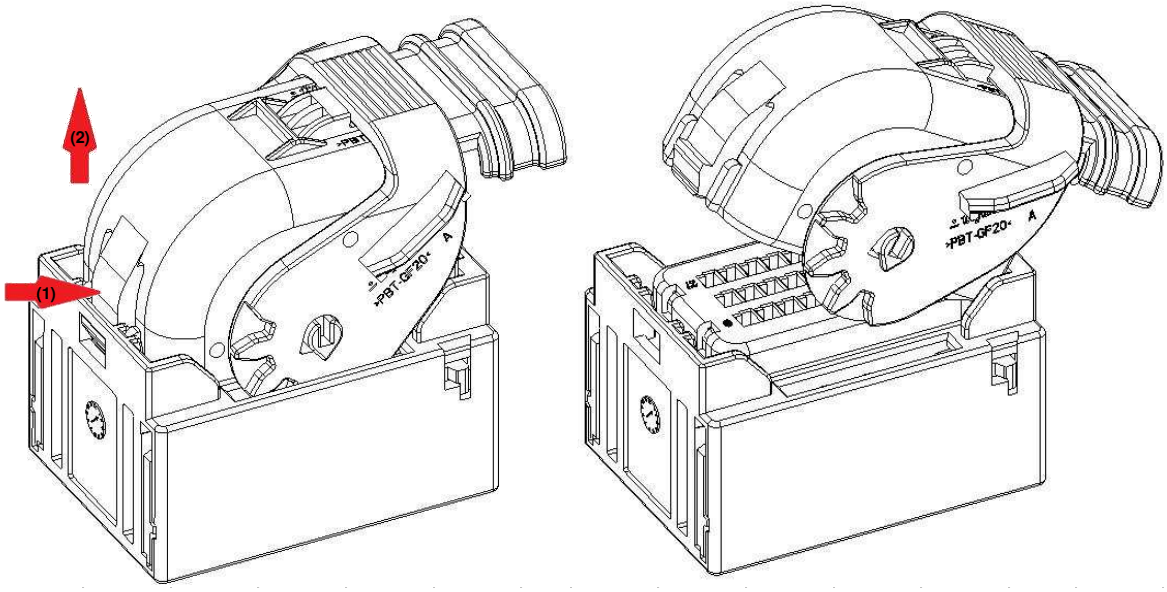


Fig. 16

5.8 Wire Harness Control

5.8.1 Handling

Do not apply too much force or shock against connector or harness.

5.8.2 Wire tie up and taping

Wires are tied up at apart from 30mm more from the end of connector. The operation be conducted carefully so the too much force is app

5.8.3 Conductive Check

(1) Use applicable mating connector or equivalent for conductivity checking Jig.
(2) Check probe Pin must not be inserted inside of female TML
NOTE: TML must be replaced in case of the probe pin insertion

5.8.4 Storage

Store the product dry and clean area. In addition, do not leave the product with exposed condition.

5.8.5 Shipping and Carrying

Use proper package which can prevent product from dust, rain and etc. And handle carefully.

6. CONNECTOR mating and unmating operation

6.1 Connector mating

(1) Checking TML latching condition, proper wire tie up position and TPA status(Final lock). If TPA is Pre-lock status, must be adjusted to final lock status. (See Par. 5.3)

(2) Checking No contact has deformation, discolor, damage, rust and housing has no deformation, crack, breakage and discolor.

NOTE: In case of any troble is found, replace it as new one.

(3) Lever position confirmation
Checking Lever position. It should be Initial lock.
Tyco is shipping it in Final Lock status.
Change it to initial position as shown Fig 17.

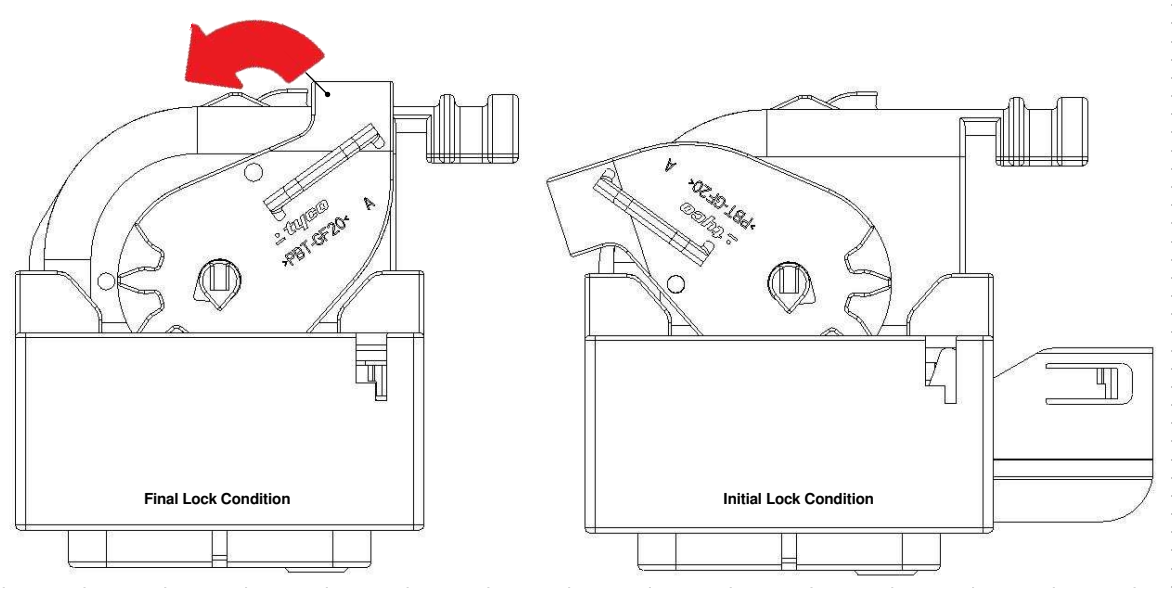


Fig. 17

(4) Connector Pre-lock operation
Inserting femail housing straight in male housing with specified direction. It is pre-lock status when the female housing can not be inserted further more.

NOTE: Must not too much force against harness or female housing.
NOTE: Normal mating operation may not be made, if the operation is started under incomplete pre-lock operation. The operation must be returned to (3)

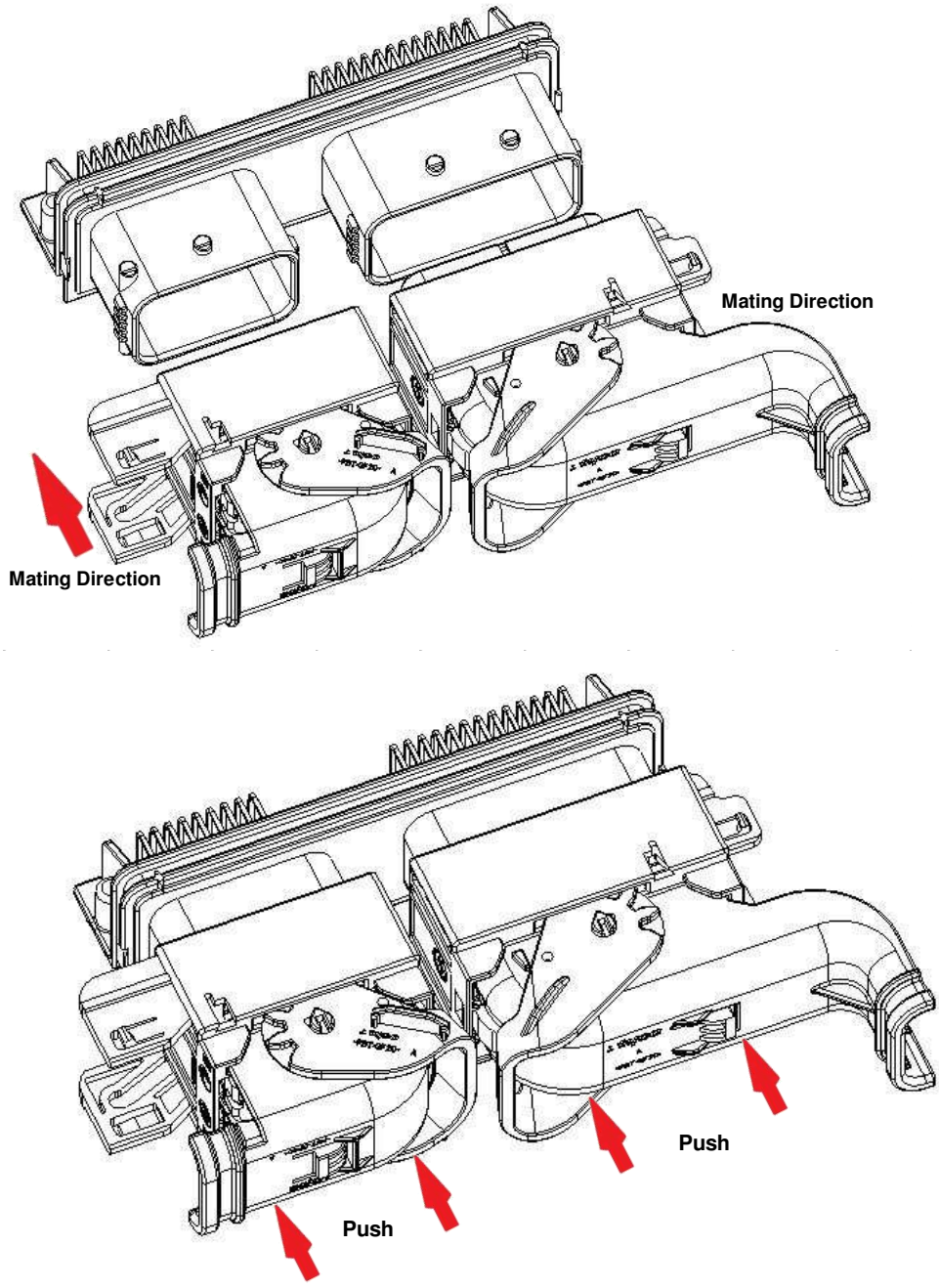


Fig. 18

(5) Connector mating completion
Move Lever to final lock position with pushing connector to the unit.

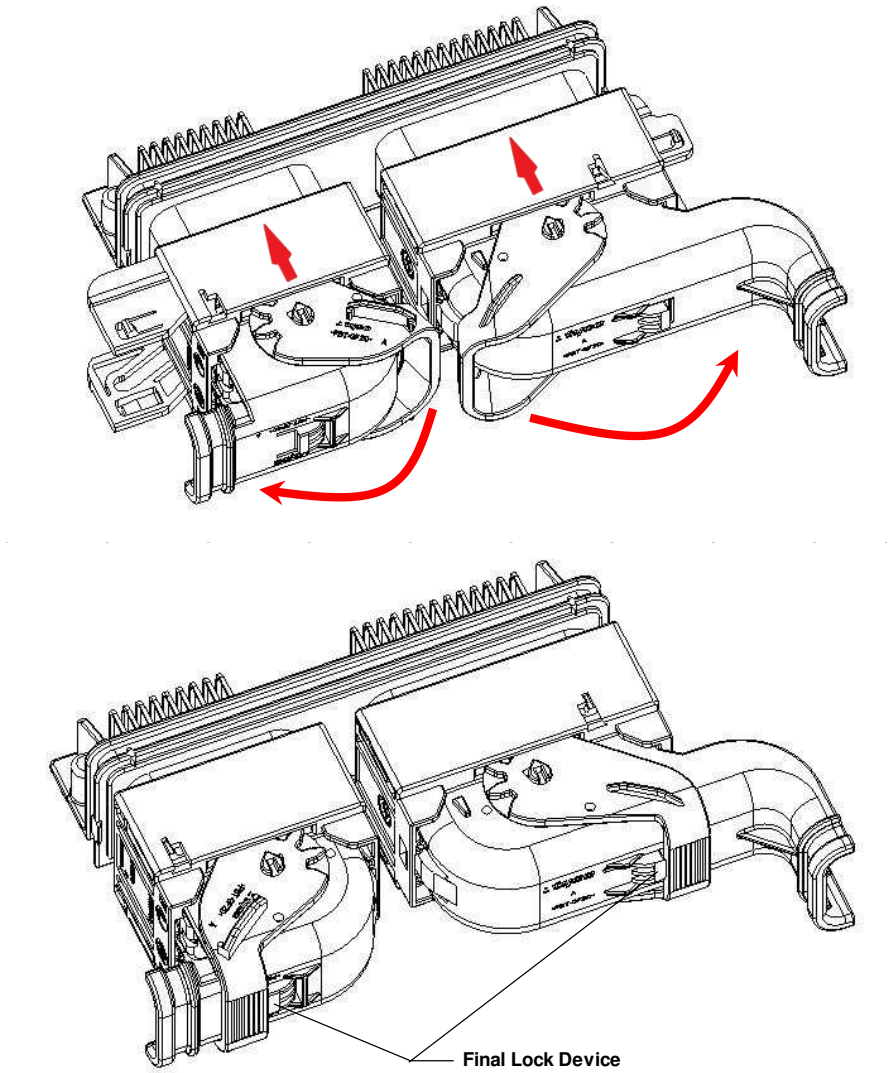


Fig. 20.

NOTE: If it is not operate smoothly(double action, and etc.) during Mating operation, The operation must be returned to (4), and operate again.
NOTE: Connector keep sealing function during mating operation.

6.2 Connector unmating

(1) Release lever lock by pressing down final lock status.
(2) Lock lever at initial lock Initial lock status by operating(rotating) it.
(3) Release female housing from male housing.