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411-5828
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1.INTRODUCTION

The .040 II/.070 II Series, HD HYBRID Connectors consist of the following component parts listed Fig.1b.

Housings:

| Product Descriptions | Part Numbers |
|--------------------------------|--------------|
| 96-Pos. Cap Assembly | 353220-6 |
| 126-Pos. Cap Assembly | 353222-6 |
| 30-Pos. Plug Assembly | 353217-4 |
| 32-Pos. Plug Assembly · A Type | 353212-5 |
| 32-Pos. Plug Assembly · B Type | 353213-6 |
| 32-Pos. Plug Assembly · C Type | 353214-2 |

Fig. 1a

Contacts:

| Product Descriptions | Part Numbers | Applicable Wire Size | | | |
|--|--------------|----------------------|-----|-----|------|
| .040 II "S" Receptacle Contact (Tin-Plated) | 175265-1 | Wire Type | 0.3 | 0.5 | 0.85 |
| | | CAVUS | ○ | ○ | ○ |
| | | CAVS/AVSS | ○ | ○ | ○ |
| | | AVS | ○ | ○ | × |
| .070 II "S" Receptacle Contact (Tin-Plated) | 175268-1 | Wire Type | 0.3 | 0.5 | 0.85 |
| | | CAVUS | ○ | ○ | ○ |
| | | CAVS/AVSS | ○ | ○ | ○ |
| | | AVS | ○ | × | × |
| .070 II "M" Receptacle Contact (Tin-Plated) | 175269-1 | Wire Type | 0.5 | 0.8 | 1.25 |
| | | CAVUS | × | × | ○ |
| | | CAVS/AVSS | × | ○ | ○ |
| | | AVS | ○ | ○ | ○ |

Fig. 1b

○: denotes applications

×: denotes not applicable

10/23/97

2.PRODUCT CONFIGURATIONS :

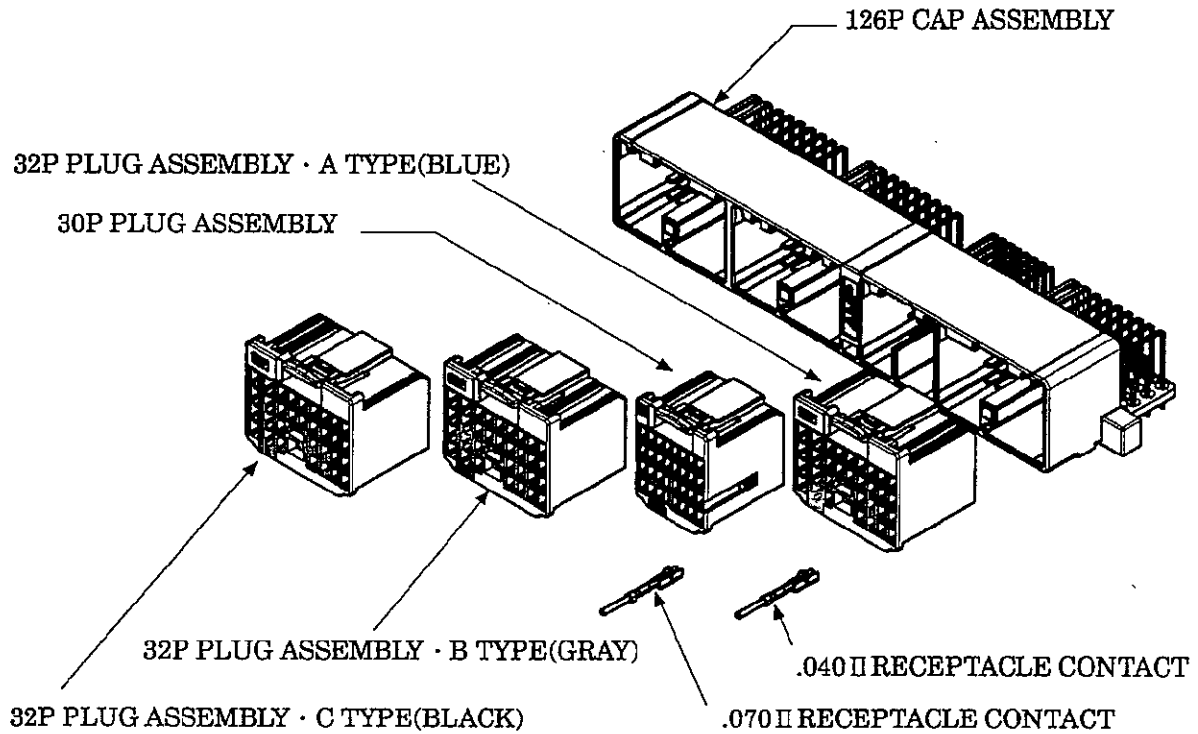


Fig.2a

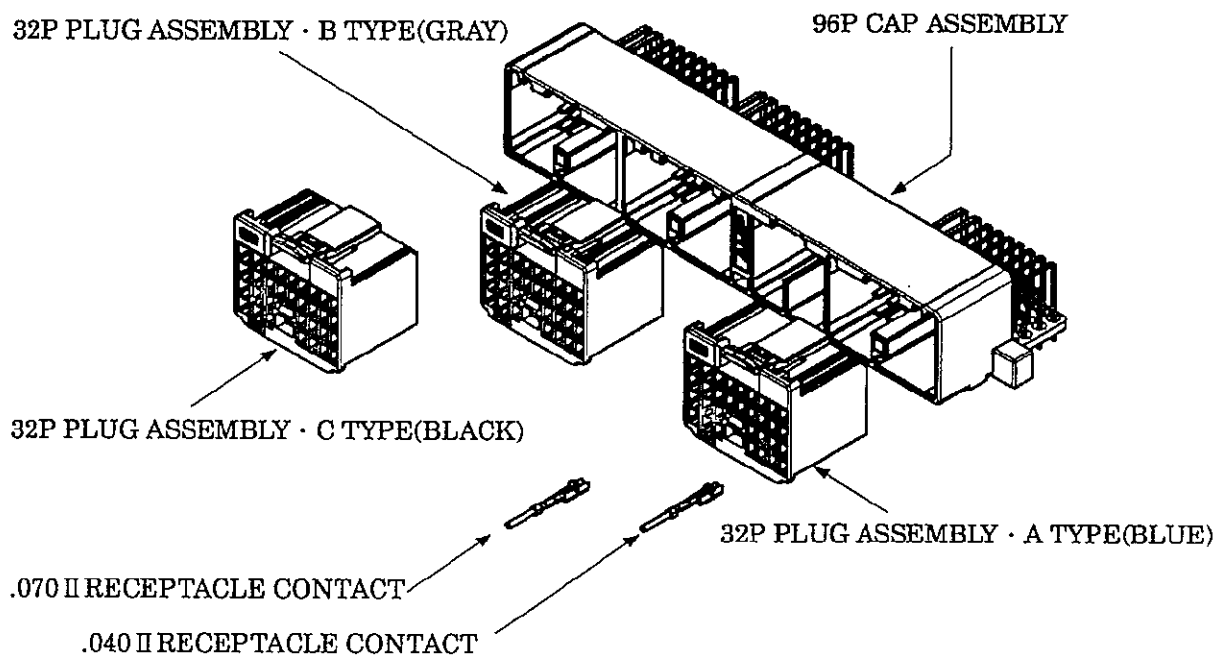


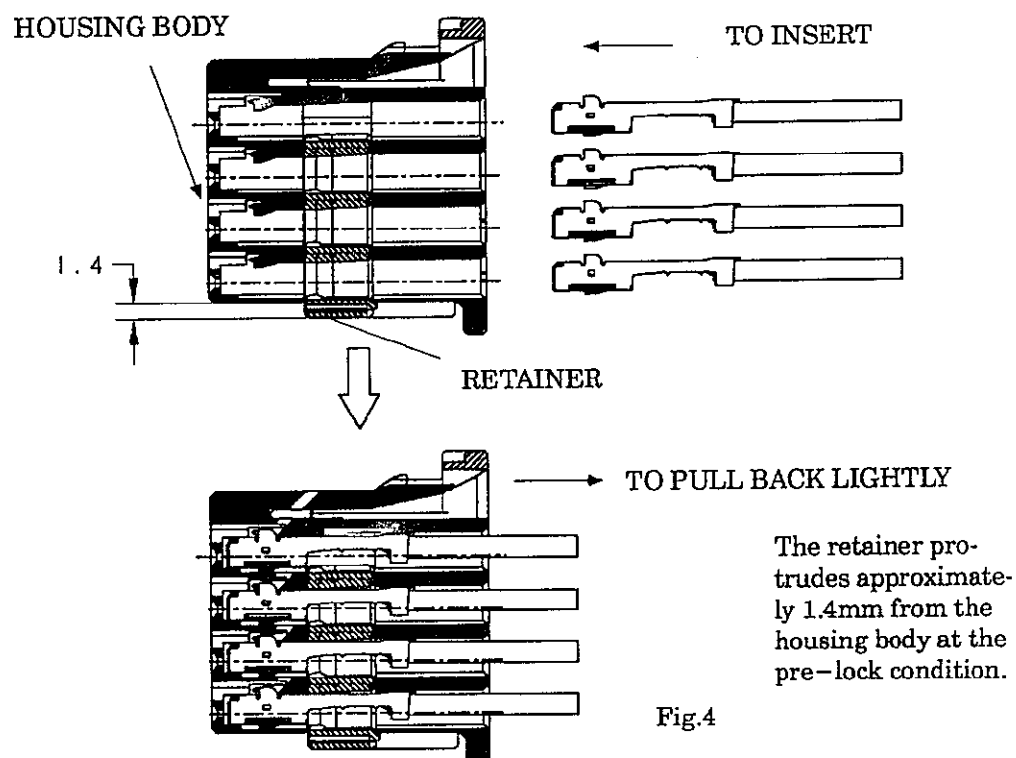
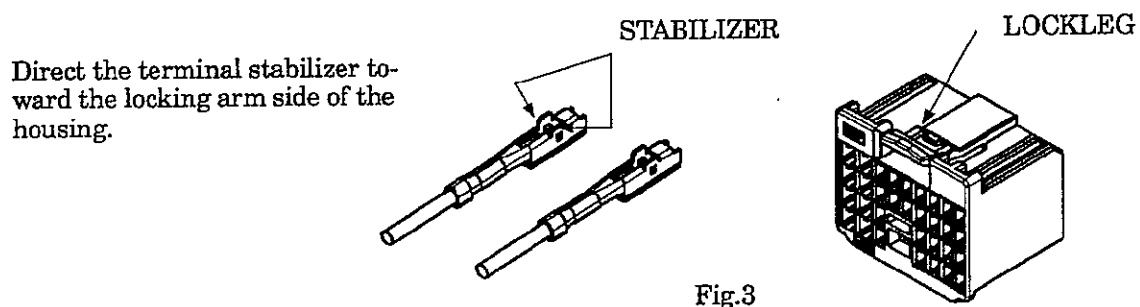
Fig.2b

3.CONTACT LOADING INTO CONNECTOR HOUSING :

3.1 Contact Loading (Commonly applied to both .040 II and .070 II Types) :

Make sure that a retainer is in the pre-lock condition when contacts are inserted into housings. The contact insertion should always be made under the pre-lock condition of the retainer and not in its final lock condition. (refer to Paragraph 3.1 "Releasing The Retainer")

After checking the direction of contacts, insert them into the designated contact cavity of the housing as far as it goes until—it stops against the stop when a small clicking sound is heard. As it stops, make sure if it is engaged firmly by pulling back slightly to see that contact is not pulled out. (See Figs.3 & 4.)



3.2 Retainer Locking Method (Pre-Locking → Final locking)

As illustrated hereunder, attain a final—locking of the retainer from its pre—lock condition after completion of inserting all the contacts. With the contacts inserted incompletely, the retainer cannot be engaged for final locking. Make sure if any of the contacts are in incompletely inserted condition in the cavities. (See Figs. 5.&6.)

As a result of checking, if any incompletely inserted contacts are found, repeat insertion of the contact according to the procedure described in Para.2.1.

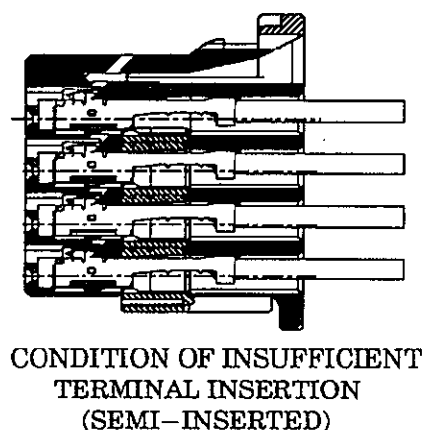
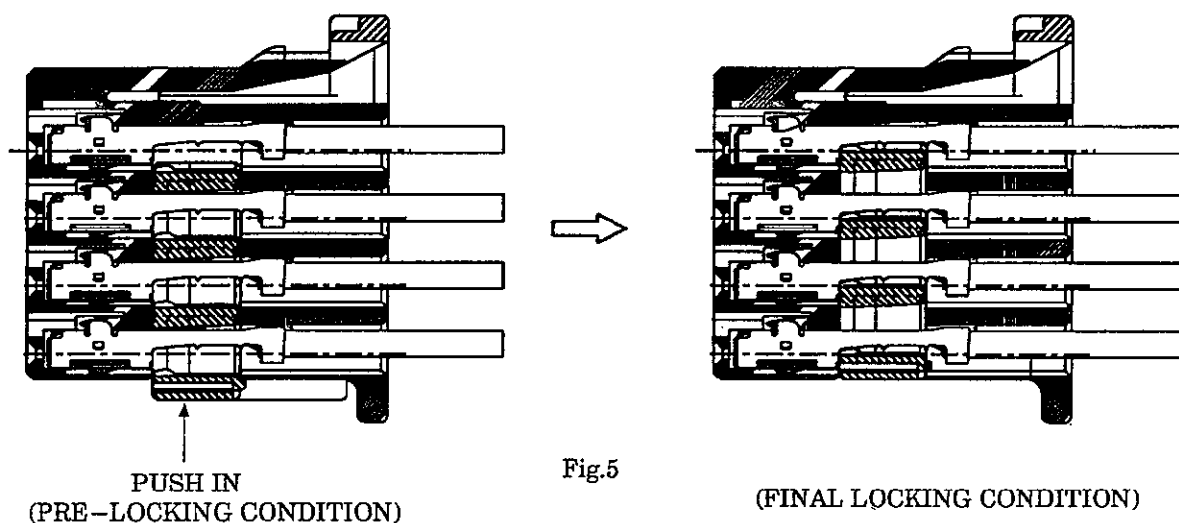


Fig.6

If any of the connector housing being defective with omission of retainer, is found, discard it and replace with the complete connector housing with the retainer normally assembled on it.

This completes description of the procedure for connector assembly mounting.

4.EXTRACTION METHOD OF TERMINALS

4.1 Releasing The Retainer (Final locking →Pre-locking)

The terminal extraction is only allowed in the pre-locking condition of the retainer. Therefore, the final locking of the retainer should be returned to its pre-locking condition when terminals are needed to extract from the housings.

Insert a 1.2mm width watch screwdriver into the screwdriver's insertion mouth(2 places with the mark) on the retainer as shown below and then shift the locking condition from final to pre-locking state. (※)

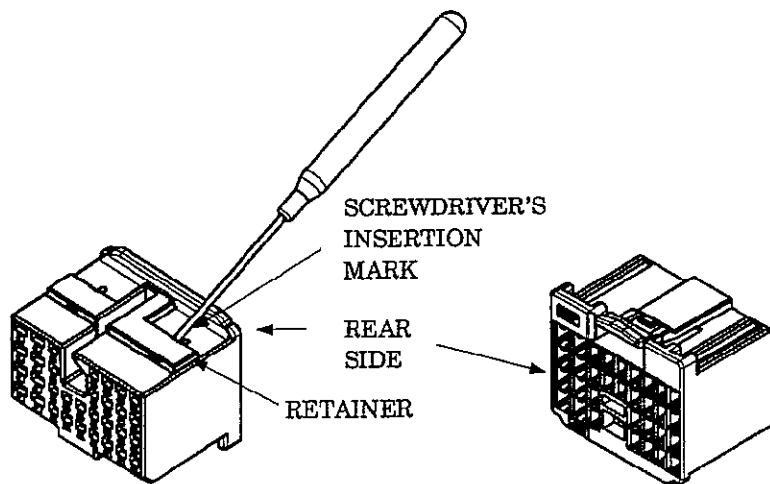


Fig.7

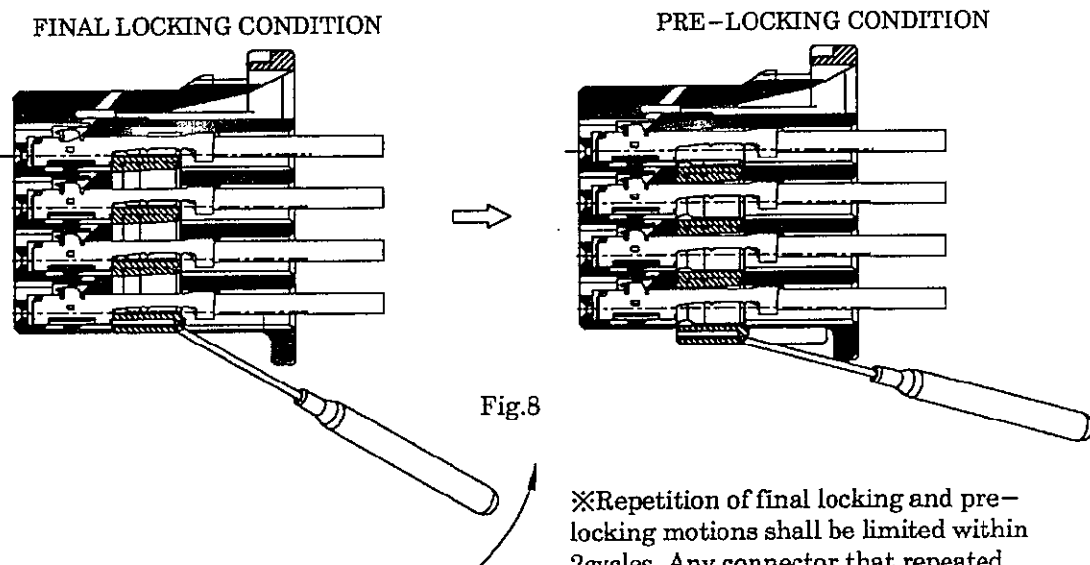
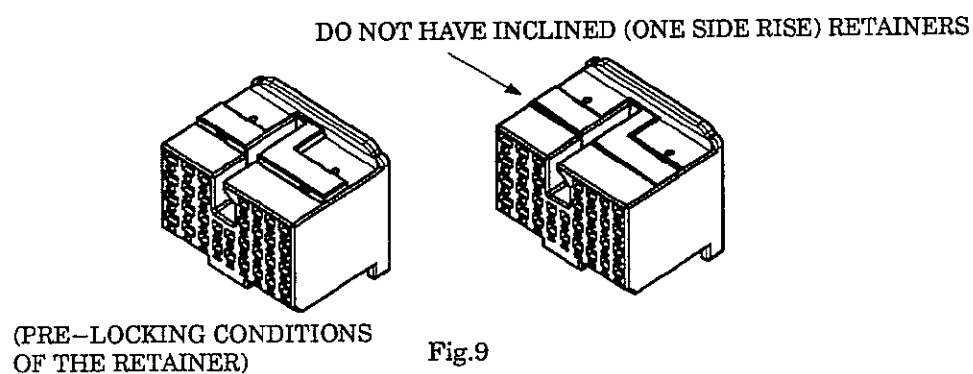


Fig.8

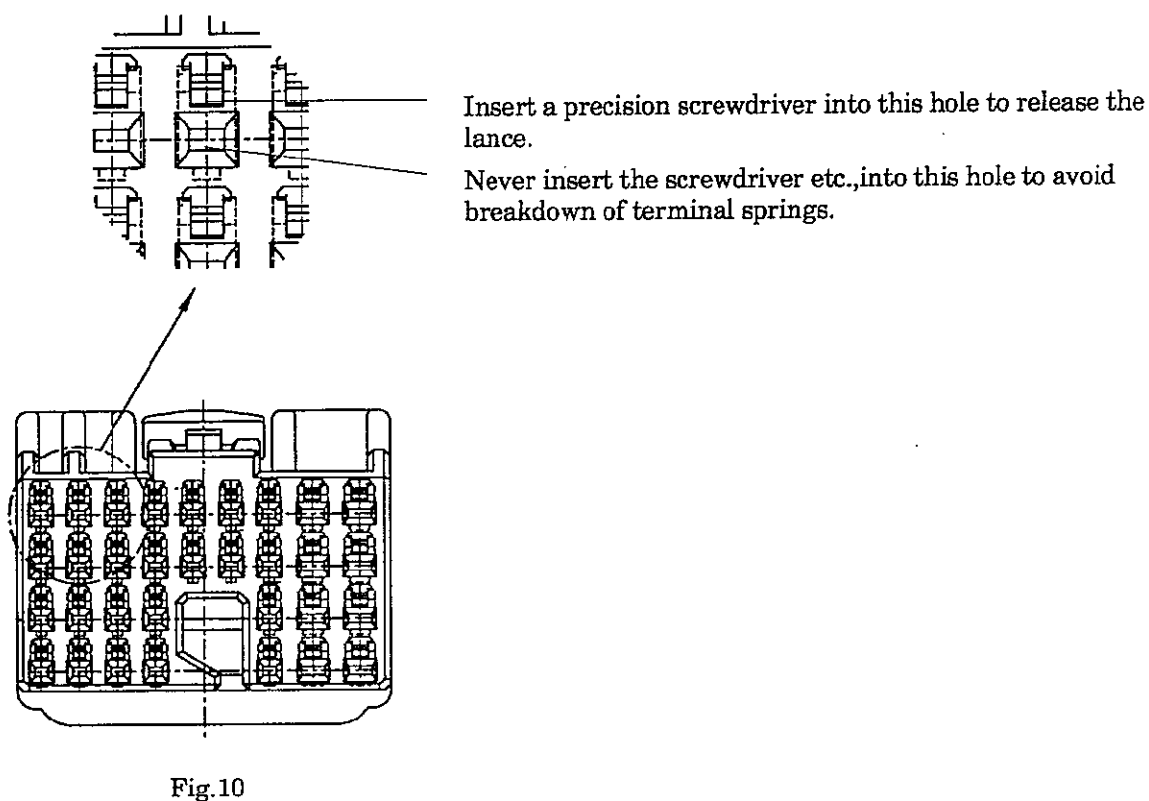
※Repetition of final locking and pre-locking motions shall be limited within 2cycles. Any connector that repeated more than 2 cycles shall be discarded and replaced with new connector.

The retainer protrude an additional about 1.4mm out of the housing body at its pre--locking condition. Surely release two lockings of retainers without having any inclination (one side rise) of them. (See Fig.9.)



4.2 Extracting The Terminals

Pull wires and extract terminals from the housing, pushing up the lance with a 1.2mm width watch screwdriver as shown below : (See Fig. 18. EXTRACTION TOOL LIST)



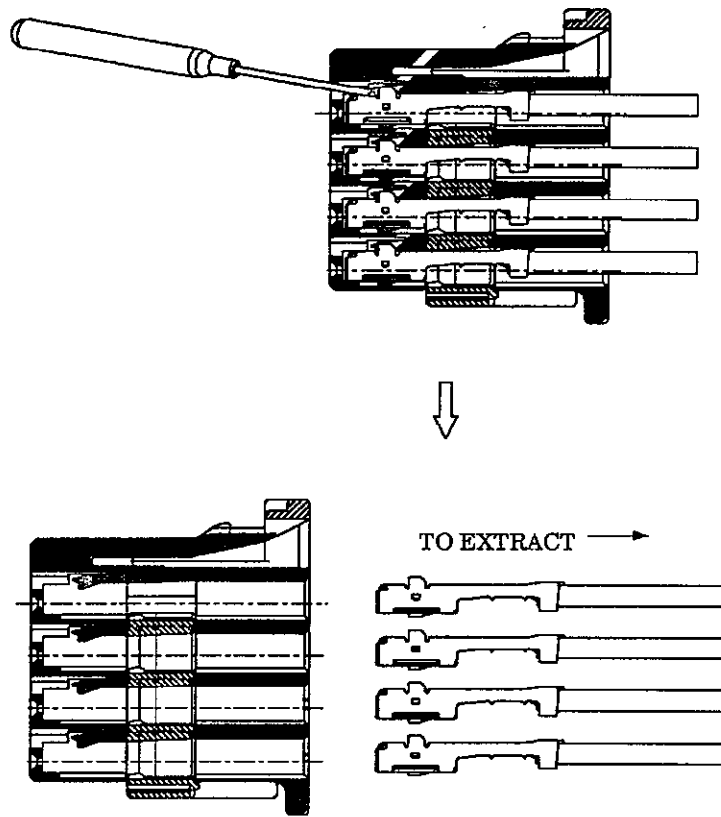


Fig.11

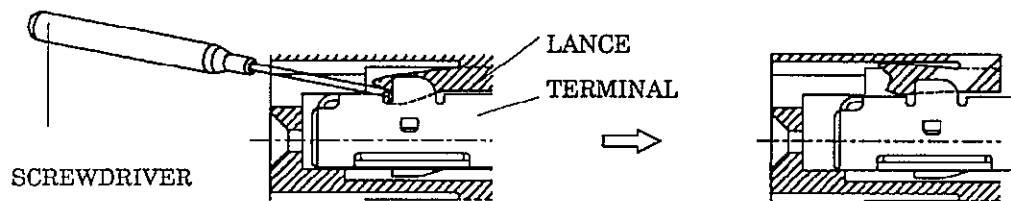


Fig.12

Extract terminals after surely releasing them from the lance. The forced terminal extraction from the housing may cause a lance breakdown. When erroneously inserted the 1.2mm width watch screwdriver into terminals in the housing, replace them always by new ones/ (See Fig. 12.)

5. OTHER ATTENTION

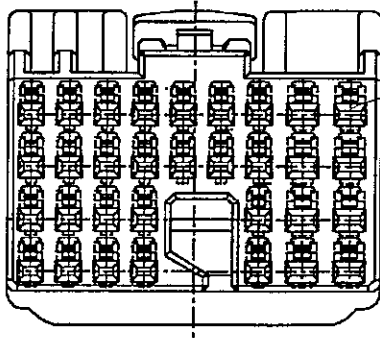
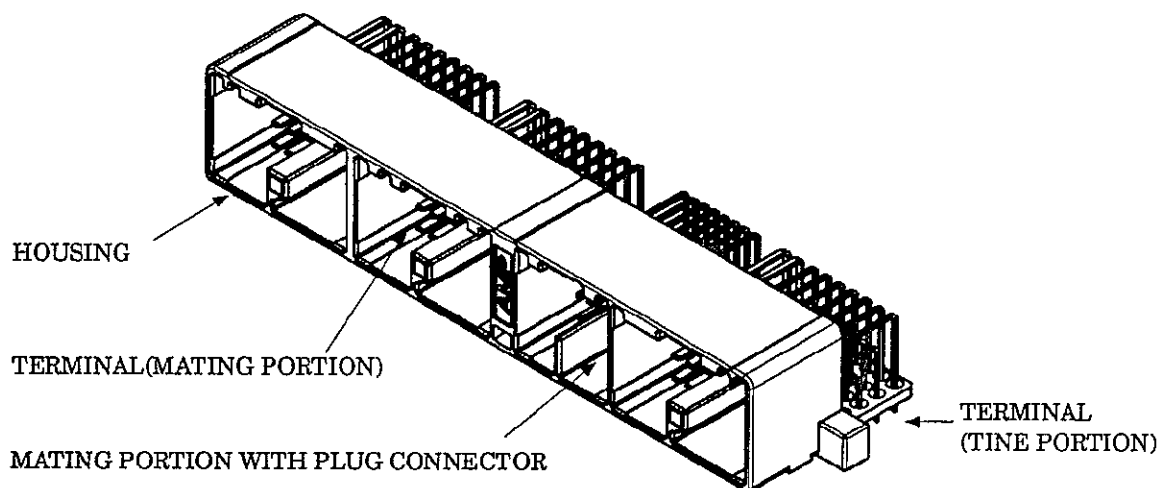


Fig.13

Female terminals are accommodated in this square space. Therefore, the space should be protected from an instruction foreign matter. When found existence of foreign matter, female terminals in the said space should always be replaced by new ones, complying with Paragraph 4.1-4.2 procedures.

6. CARE REQUIRED UP TO BOARD MOUNTING STAGE



6.1 Never deform terminals (both mating and tine portions).

6.2 Do not hurt / damage terminals.

6.3 Never break and / or deform housings.

6.4 Exclude foreign matter from the mating portion.

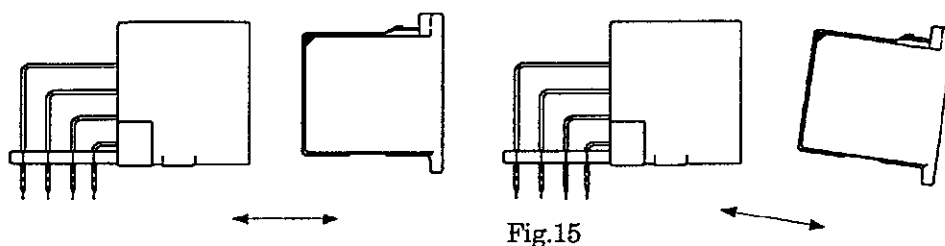
6.5 Mount male connectors onto the boards with appropriate screws and clamping torque.

Recommended screw . . JIS B1115, B1122, Tapping Screw, Pan head-2 types,
Nominal diameter 3mm, Length 6mm maximum,
[Clamping torque . . 0.4N-m(4Kgf-cm)maximum]

6.6 No discoloration and deformation should be incurred on both terminals and housing with the soldering(heat).

7. CARE AT INSERTING / EXTRACTING MALE CONNECTORS

7.1 Never exercise a forced insertion / extraction of connectors to and from housings. (Perform the connector insertion straightly without giving "KOJIRI" motions on it.



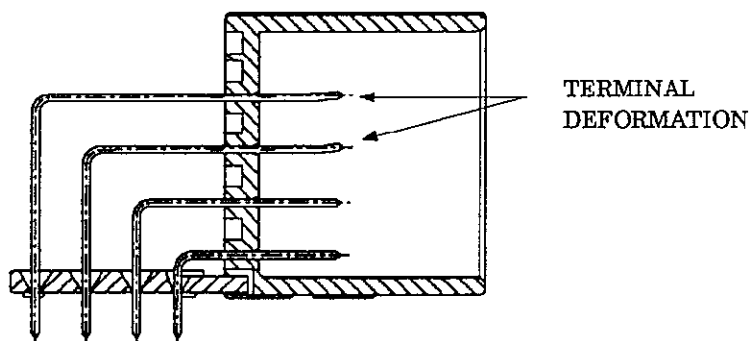
○ ACCEPTABLE
(BEING HELD EACH OTHER'S
VERTICAL AND HORIZONTAL
ALIGNMENTS)

× N.G.

7.2 insert specified female connectors only into the mating portions with plug connectors.
(Do not insert other things such as the screwdriver and fixture etc.)

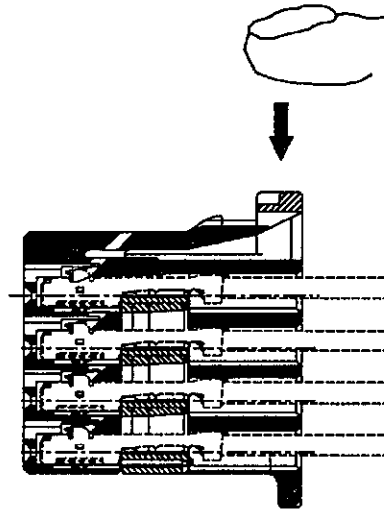
7.3 When found terminals deformed and / or damaged in the male connector, no such connectors are used. (No terminal rework of the male connectors is made. Replace them by new ones accordingly. (See Fig 16.)

Fig.16



- 7.4 Extract female connectors from male connectors after pushing a locking lever perfectly.
(See Fig. 17.)

Fig.17



8.CONNECTOR REPLACEMENT

- 8.1 Deformed terminals (Both mating and tine portions)
- 8.2 Damaged terminals
- 8.3 Discolored terminals
- 8.4 Broken or deformed housings
- 8.5 Discolored housings
- 8.6 Intrusion of foreign matter into the mating portion

9.EXTRACTION TOOL LIST OF RECEPTACLE CONTACT (.040 II & .070 II)

| PRODUCT NAME | TOOL NO. | INSTRUCTION SHEET |
|----------------------------|----------|-------------------|
| .040 II RECEPTACLE CONTACT | 755430-1 | IS 288J |
| .070 II RECEPTACLE CONTACT | 755430-2 | IS 287J |

Fig.18