

## TABLE OF CONTENTS

1.	PRODUCT OVERVIEW-----	2
1.1	Component descriptions and parts numbers (overall view)-----	2
1.2	Number of Positions -----	3
1.3	Applicable Contacts and Wires -----	3
2.	HOW TO ASSEMBLE THE CONNECTOR -----	3
2.1	Crimping the contacts -----	3
2.2	Inserting the crimped contacts-----	4
2.3	Securing the retainer -----	5
2.4	Mating the connector-----	5
3.	HOW TO DISASSEMBLE THE CONNECTOR -----	5
3.1	Unmating the connector-----	5
3.2	Removing the retainer -----	5
3.3	How to extract the contacts -----	6
4.	SPECIAL NOTE-----	7
4.1	Special Care during handling of Assembled connectors and/or harnesses -----	7
4.2	Insertion of a foreign materials-----	7

1. PRODUCT OVERVIEW

1.1 Component descriptions and parts numbers (overall view)

The product is called the 040II/070II SERIES MULTI-LOCK CONNECTOR MK-II. This series has variation of positions listed in Fig. 2.

Overall view

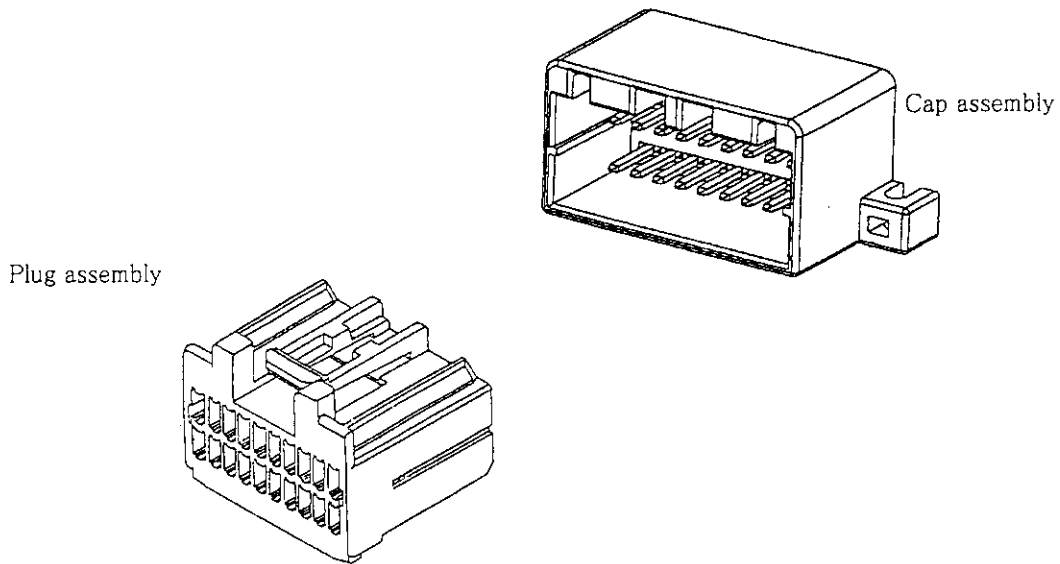


Fig. 1

Part description	AMP Part No.
.040 II 10-positions cap assembly	316991-6
.040 II 20- positions cap assembly	316993-6
.040 II 24- positions cap assembly	353105-2
.040 II 36- positions cap assembly	179059-6
.040 II / .070 II 36- pos. cap assembly (combination type)	179091-6
.040 II 48- positions cap assembly	316370-6
.040 II 10- positions plug assembly	316988-6
.040 II 16- positions plug assembly	179054-6
.070 II 16- positions plug assembly	179093-6
.040 II 20- positions plug assembly	179057-6
.040 II 24- positions plug assembly	316371-1
.040 II 24- positions plug assembly	316372-6
.040 II 24- positions plug assembly	353107-2

Fig. 2

1.2 Number of Positions

Number of pins	TK contact for minute current (.040 II)	TAS contact for low current (.070 II)
10- positions MLC	10 positions	None
20- positions MLC	20 positions	None
24- positions MLC	24 positions	None
36- positions MLC	16 + 20 positions	None
36- positions MLC (combination type)	20 positions	16 positions
48- positions MLC	24 + 24 positions	None

Fig. 3

1. 3 Applicable Contacts and Wires

Contact Type	Parts No. of Contact	Applicable Wire Type and Size(mm <sup>2</sup> )				
		Wire Type	0.3	0.5	0.85	1.25
. 040 II S	175265-1	CAVUS	○	○	○	×
		AVSS/CAVS	○	○	○	×
		AVS	○	○	×	×
. 070 II S	175268-1	CAVUS	○	○	○	×
		AVSS/CAVS	○	○	○	×
		AVS	○	×	×	×
. 070 II M	175269-1	CAVUS	×	×	×	○
		AVSS/CAVS	×	×	×	○
		AVS	×	○	○	○

○: Applicable  
 ×: Not-Applicable

Fig.4

2. HOW TO ASSEMBLE THE CONNECTOR

2.1 Crimping the Contacts

(1) How to crimp the Contacts

Refer to the following AMP Application Specification (114- series) to properly crimp the contacts. Use proper AMP Crimping Applicator described in the specification.

Note that the connector will fail to fulfill its proper functions and its retaining force will be substantially reduced if the contacts are improperly crimped.

**.040 II Contacts**

Application Specification 114-5159

**.070 II Contacts**

Application Specification 114-5160

**(2) Contact Bend Up/Down after Crimping**

Detail requirements for contact deformation after crimping is described in the Application Specification. Do not use or replace the crimping contacts if the deformation is over the specification.

Bend up



Bend down

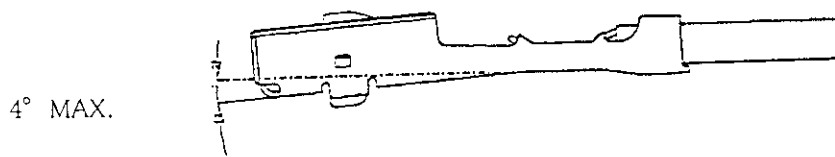


Fig. 5

**2.2 Inserting the Crimped Contacts**

Confirm the proper orientation and insert the contact into the retainer until a click sound is noted. Confirm that the contact is inserted fully into the retainer. Then, lightly pull the wire to confirm that it will not come off.

- Orientation of the contact

Orient the dimple provided on the contact so that it faces the retainer side of the housing.

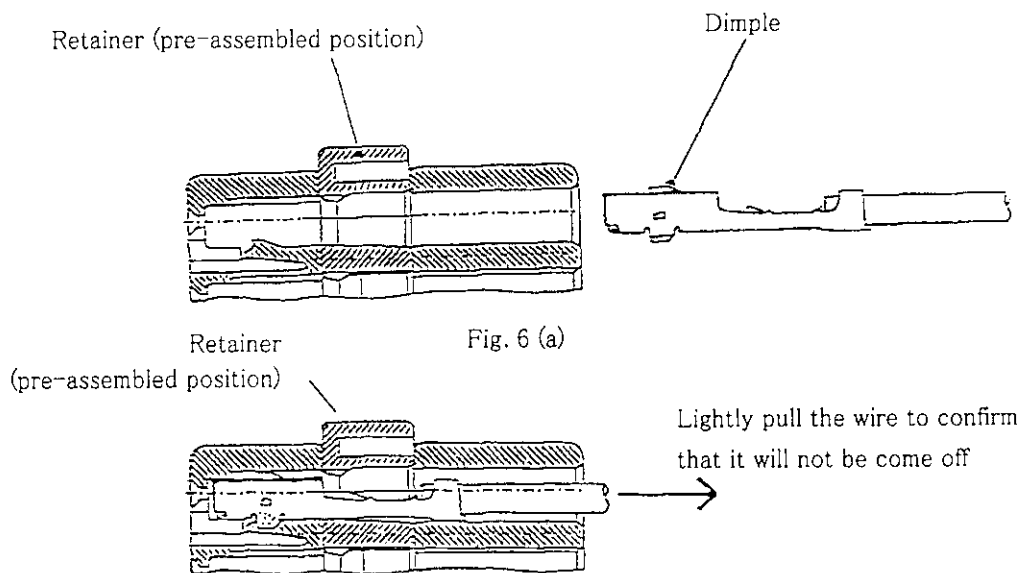


Fig. 6 (b)

### 2.3 Securing the retainer (From pre-assembled position to the finally assembled position)

Note that the retainers provided on the connector are pre-assembled. Thus, they need to be finally assembled as shown in the figure below after inserting the contacts into them. The retainers can not be pushed in if any one of the contacts is not completely inserted. Press both ends of the retainer to assemble it.

Plug housing

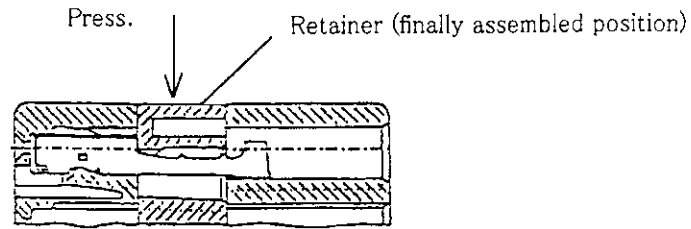


Fig. 7(a)

The retainer can not be pressed if the contact is incompletely inserted.

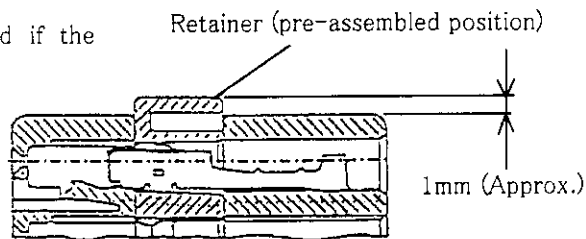


Fig. 7(b)

### 2.4 Mating the connector

Confirm that the plug and cap housings are properly oriented. The plug and cap housings are properly oriented if the rib grooves provided on them can be engaged each other. Then, insert the plug housing into the cap housing to fully engage them.

## 3. HOW TO DISASSEMBLE THE CONNECTOR

### 3.1 Unmating the connector

Pull out the plug housing from the cap housing while pressing the lock provided on the plug assembly.

### 3.2 Removing the retainer (From the finally assembled position to the pre-assembled position)

To remove the contacts from the housing the retainer must be at pre-assembled position. The contact can not be removed from the retainer if it is finally assembled position. Insert the end of Extraction Tool (AMP part No. 715131-1) into the retainer extraction hole and pull up the retainer. Set the retainer to the pre-assembled position by aligning the alignment marks if it is dislocated from the pre-assembled position.

### 3.3 How to extract the contacts

Set the retainer to the pre-assembled position. The contacts can not be removed with the retainer set to the finally assembled position.

Be sure to use the Extraction Tool (AMP part No. 715131-1) to remove the contact.

Insert the tool horizontally into the housing. Never allow the tool to face downward to interfere with the contact as shown in the improper example below. Refer to 411-5686 Instruction Sheet for the Extraction Tool.

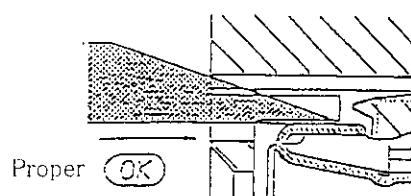


Fig. 8 (a)

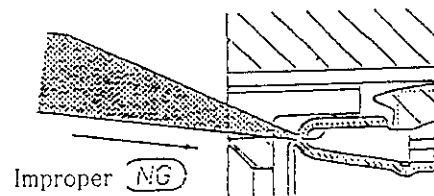
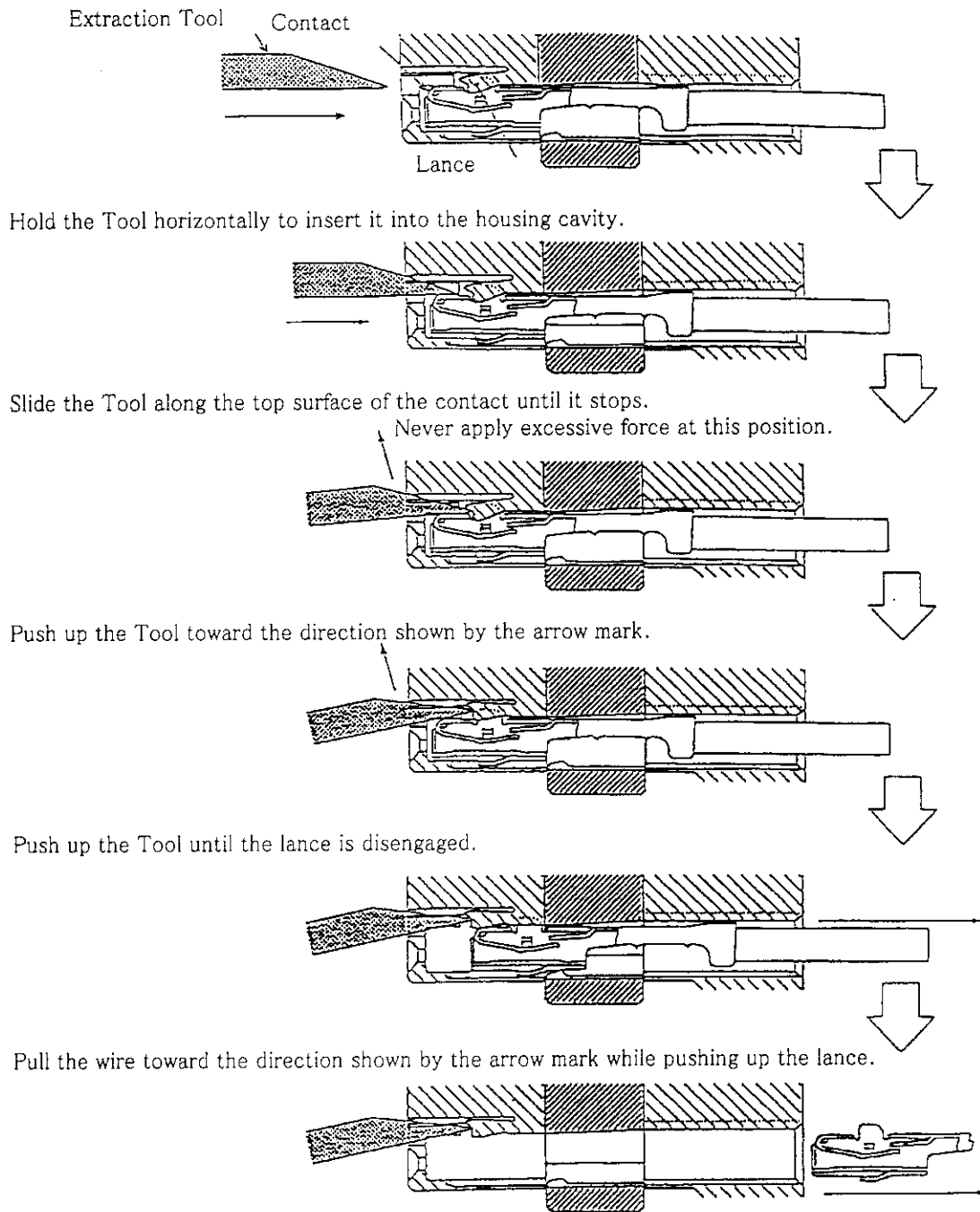


Fig. 8 (b)

Extract the contact in accordance with following procedure.



END

Fig. 9

4. SPECIAL NOTE

4.1 Special Care during Handling of Assembled Connectors and/or Harnesses

Operators are requested to handle the assembled connectors and/or electric wire harnesses with special care. Do not apply any excess force to the housings and wires. It may be cause of damage of the connector, contacts or wires.

4.2 Insertion of a foreign material

The tab contact in the cap housing will be left unprotected when it is not mated with the plug housing. Thus, it is recommended to pay proper attention not to allow the tab contacts from being deformed by a foreign material inserted into it or external pressure applied to it.