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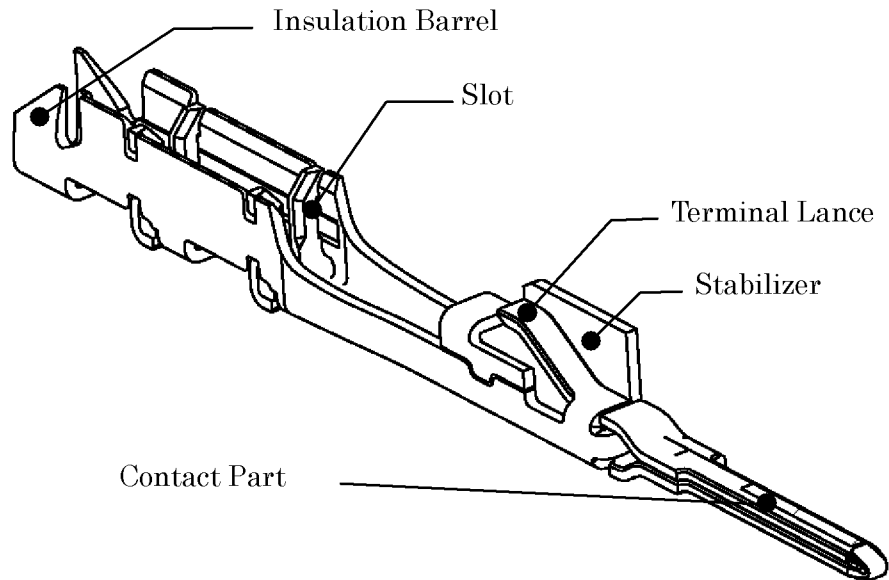
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**< Caution >**

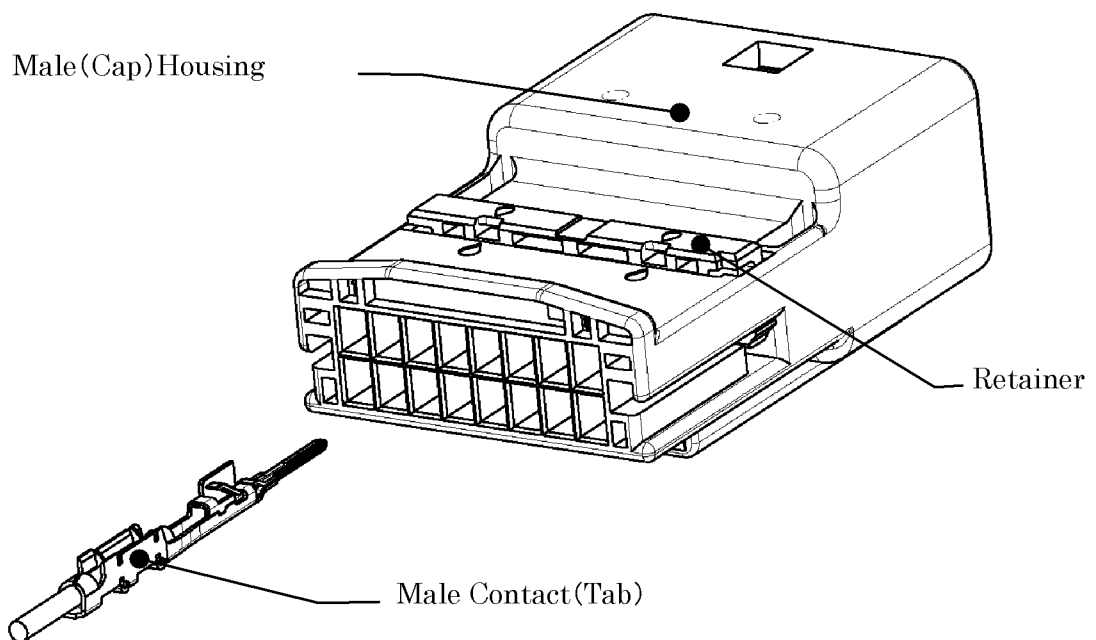
1. Storage
  - a) Parts should be stored in a relatively dry, clean room indoors, place where they will not be exposed to direct sunlight, and maintained at normal temperature and humidity.(5 to 35°Cand 45 to 85% relative humidity.)  
Avoid carrying unpacked products. Carry and store in the containers.
  - b) Stacking large amounts of leads can entangle the part and or cause deformation by the weight. These will cause defective connectors.
  - c) Be careful that the connectors do not become intertwined when separating units from the bundle.
2. Products handling and Transportation
  - a) Do not handle the harnesses roughly such as throwing them around.
  - b) Do not draw the harness bundle dragging on the floor.
  - c) Do not carry harnesses by the connectors. Carry them by holding the wires.
  - d) Do not handle them in such as way that pulls on the wire and puts unnecessary force on the connectors.
  - e) Use appropriate packaging cartons to avoid dust or moisture, and handle the cartons with care.

## 1. Product Names and Part numbers

### 1.1 Contact



### 1.2 Housing



1.3 Product Part Numbers

1.3.1 Contact

Names	Product Part Numbers*	Applicable Wire
025 IDC Male Contact (Tab)	1473818 For 0.08 mm <sup>2</sup> S Contact	Insulation Diameter; 1.1~ 1.4mm
	1565406 For 0.22mm <sup>2</sup> M Contact	Insulation Diameter; 0.8~ 1.4mm Or Drain Wire (With no Covered Wire)
025 Crimp Male Contact (Tab)	1376109 For 0.3~0.5mm <sup>2</sup>	CAVS/CAVUS AVSS/AVSSH

1.3.2 Housing

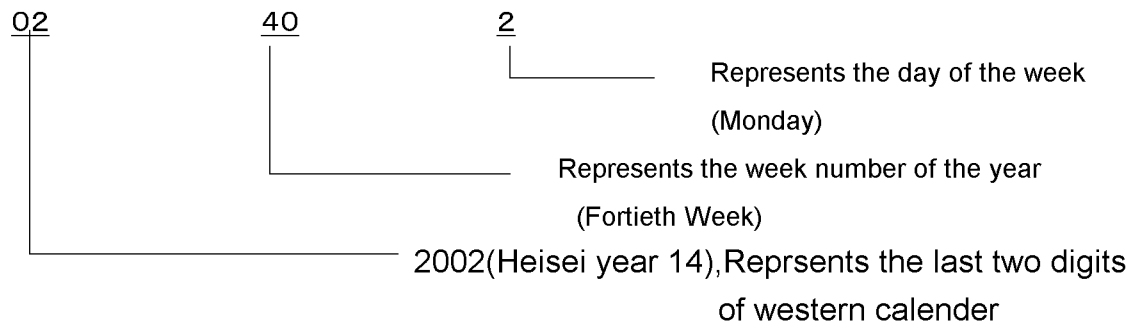
	Description Product Part*		
4POS	Crimp& IDC Common use Male Housing Assembly 1473790	20POS	Crimp& IDC Common use Male Housing Assembly 1473750
8POS	Crimp& IDC Common use Male Housing Assembly 1473793	28POS	Crimp& IDC Common use Male Housing Assembly 1565377
12POS	Crimp& IDC Common use Male Housing Assembly 1565894	32POS	Crimp& IDC Common use Male Housing Assembly 1473799
16POS	Crimp& IDC Common use Male Housing Assembly 1473796		

\*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.

**2. Contact and Housing Inspection**

2.1 AMP Product Sipping Inspection

We conduct inspections referring to specific standards, under strict statistical management, and according to our quality control regulations, to maintain an overall lot control. In principle, each package is marked with manufacturing date to facilitate tracing production history using inspection, manufacturing, and machinery adjustment records. Manufacturing date code(denoted as date code)is as follows:



2.2 Customer Receiving Inspection

In addition,the customers should conduct at least the following receiving inspections based on the specific customer drawings.

<Housing>

Item	Inspection Description and Methods	Measuring Methods
Visual Inspection	1) Burrs, discoloring, and deformation defective shape	Visual Inspection
	2) Cracks, fissure, or chipping	Visual Inspection
Functional Inspection	1) Assembly Corresponding Housing fit into assembly each other to allow them to lock.	By Hand

Each package is classified by date code and inspected for appearance for AQL 4% based on Level II (MIL-STD-105) standards, and then inspected for the functions 5 pieces in each package. The lot May be accepted if all of them successfully pass the inspection.

<Contact>

Item	Inspection Description and Methods	Measuring Methods
Appearance Inspection	1) Shape	Visual Inspection
	2) Plated condition	Visual Inspection

### 3. Harness Assembly Operation

#### 3.1 Applicable Wire

Wire Size	No of conductors/ Diameter of a Conductor	Calculated Cross-sectional Area (mm <sup>2</sup> )	Insulation Diameter(mm)	
			Nominal	Max
0.08mm <sup>2</sup> Signal Wire	7/0.127	0.08	1.3	1.4
0.22mm <sup>2</sup> Drain Wire (Tin coat)	7/0.203	0.22	/	/
0.22mm <sup>2</sup> Discrete Wire	7/ Compression Conductor	0.22	0.95	1.05
0.22mm <sup>2</sup> Signal Wire	7/ Compression Conductor	0.22	1.3	1.4
AVSSH/AVSS/CAVS 0.3	7/0.26	0.3716	1.4	1.5
AVSSH/AVSS/CAVS 0.3f	19/0.16	0.3821	1.4	1.5
CAVUS 0.3	7/ Compression Conductor	0.3716	1.1	1.2
AVSSH/AVSS/CAVS 0.5	7/0.32	0.5629	1.6	1.7
AVSSH/AVSS/CAVS 0.5f	19/0.19	0.5387	1.6	1.7
CAVUS 0.5	7/ Compression Conductor	0.5629	1.3	1.4

#### 3.2 Requirement and Standard Criteria for Acceptance

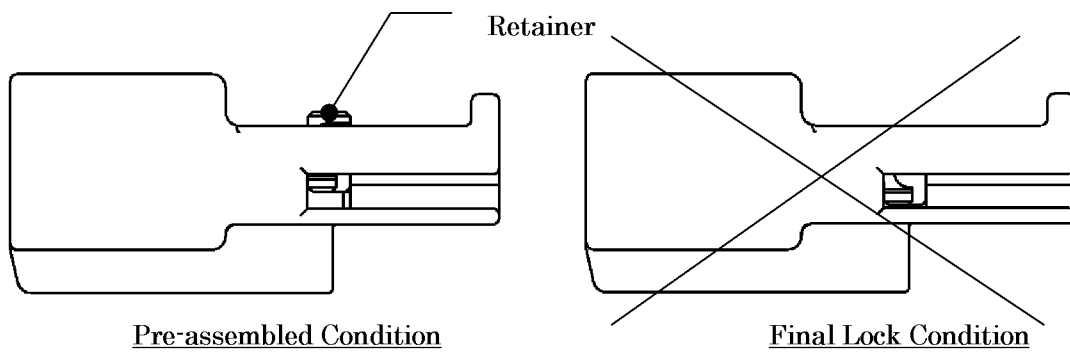
See 114-5276(IDC), 114-5921(Crimp) Requirement and Standard Criteria for Acceptance

**\*NOTE :**Part number is consisted from listed base number and 1 digit numeric prefix and suffix with dash. Ask our company the details of a standard number with a dash.

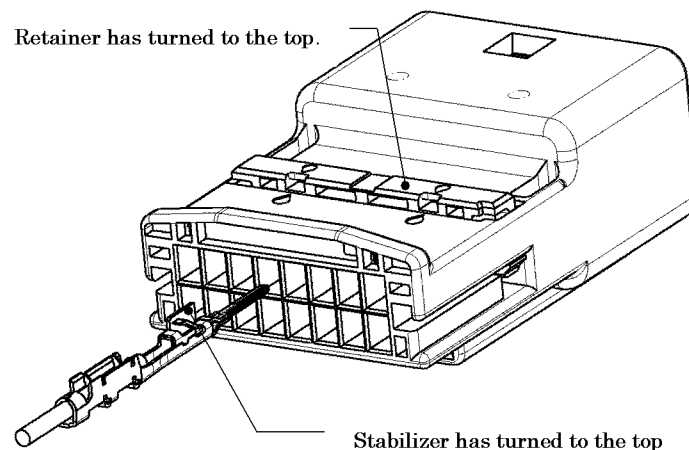
### 3.3 Connector Assembly Method

1) Contact Insertion

① Confirm the retainer is in pre-assembled condition. The contact can not be inserted in final lock condition.



② The passage of the following figure, Before loading the contact onto housing cavity, make sure the orientation of the contact to be inserted into the housing cavity. Then, insert the contact into the cavity as far as it goes until it stops at the bottom of the housing cavity. When the contact is set engaged in position, a small clicking sound is heard at the moment of contact locking. When inserted, just pull back the wire lightly to see if the contact is locked in position. If the contact does not come out, it shows that the contact is locked. And pulling the contact lightly (MAX 20N)

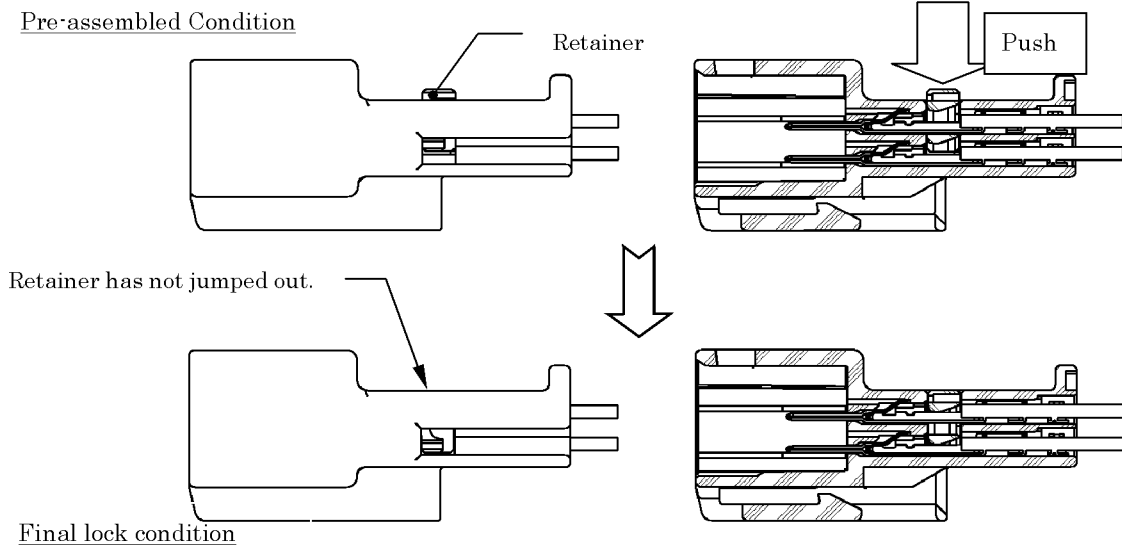


NOTE: After electric wire attachment for contact, don't keep in the condition of being just as it is and put a contact in the housing promptly.

When lance is not fixed height the retention force sometimes declines remarkably, be careful.

2) Retainer Final lock Method (Pre-assembled → Final lock)

- ① After insertion of all the contacts, press the retainer for final lock condition.  
After pushing should check that retainer has not jumped out.

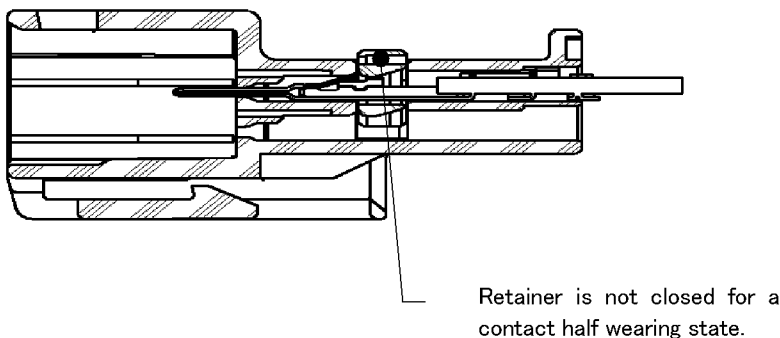


**NOTE:** In the case of contact half wearing state, do not press the retainer for final lock.

If it pushes in by force, it will become the cause of retainer and contact, housing, breakage

Once again, Confirm the contact is in contact half wearing state. After working with reference to 1)-② in the case of contact half wearing state, please retainer final lock work again.

Contact half wearing state



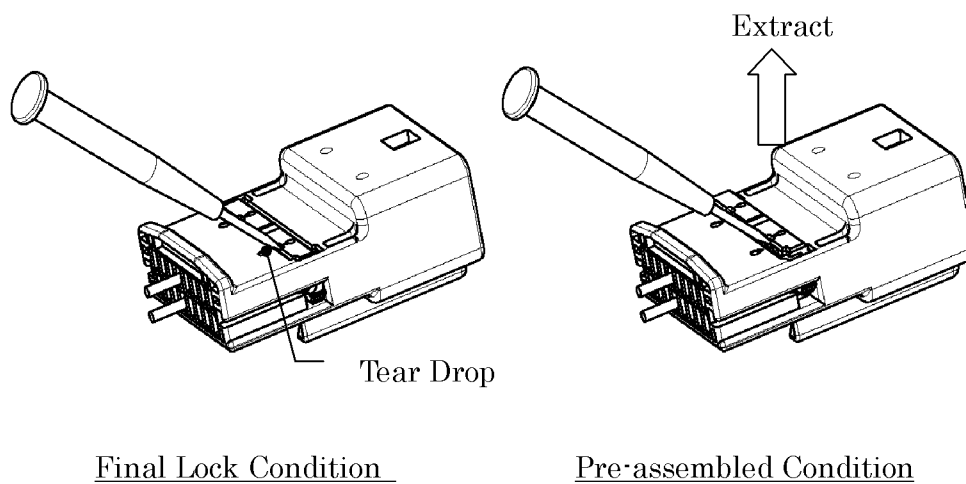
3) How to Unlock Retainer from Final Lock Condition (Pre-assembled→Final lock)

Drawing out of a contact works, after canceling retainer.

The insertion or extraction can not be done in final lock condition.

- ① Insert the 1mm~2mm precision screwdriver into the window of the retainer pointed by the tear drop mark.
- ② Draw out the retainer ,about 1mm, to pre-assembled condition.

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

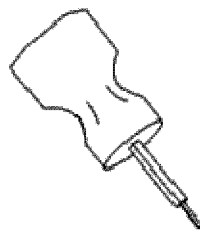




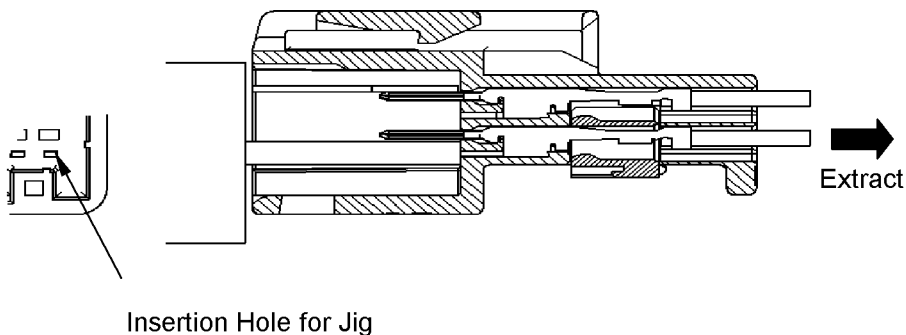
4) Extracting Contact

Confirm the retainer is in Pre-assembled condition.

- ① Insert the special extractive jig(Part number:1366865-1)into the proper hole to the end.( Don't pry a jig at this time. It becomes the cause of breakage of a jig, and modification.)
  - ② Remove the loaded contact from housing while the crimped wire.
- Only by inserting a jig horizontally, a contact can be drawn out easily.



The part number of Special Extractive Jig for 025 Male Contact:1366865-1



NOTE If you can't extract the contact, pull out the jig, and then push contact with having wire, insert the jig again.

Don't extract the contact more than 10 times.

Do not extract the retainer by this extractive jig.

Attend to the crack and break of contact and housing, when you insert the extractive jig.

#### 4. Conduction Inspection

- ① Corresponding connector or its equivalent should be used as a probe to check the entire circuit within the connector.
- ② Don't apply unnecessary force or shock to the product.

#### 5. Mounting On Vehicles

##### 5.1 Acceptance Inspection

A minimum of the following points must be checked.

- a) Acceptability of contact mounting to the housing.
- b) Contact cracks, defects, discoloring, and deformation, etc.
- c) Housing cracks, defects and discoloring, etc.

##### 5.2 Fixation of a connector

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

**Note:** About the recommendable form and direction, see the drawing of applicable product.

##### 5.3 Mating Connector

- a) Mating action should made straight along the mating axis. Then, confirm that the locking mechanism works correctly, a small clicking sound is heard. Pull the connector outward lightly after making fittings to make sure they are locked.

**Note:** Do not repeat mating/ unmating connectors if not necessary.

##### 5.4 Unmating Connector

Hold the housing locking lever and press downward. While pressing downward, pull the connector straight out.

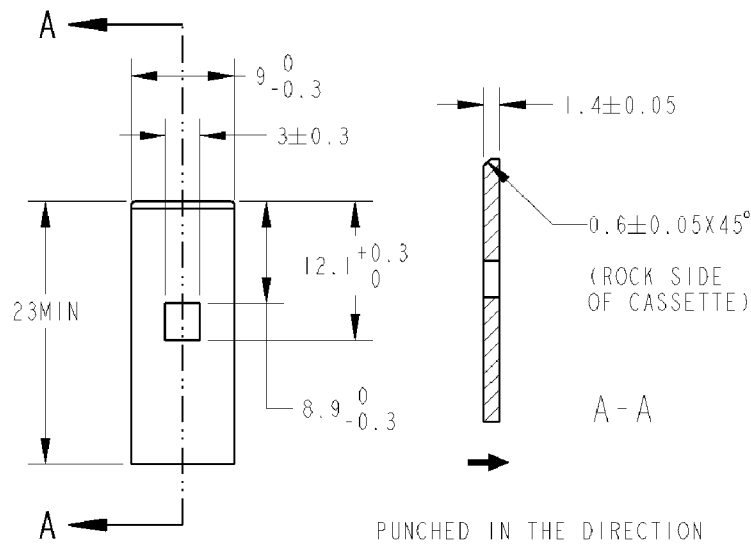
**Note:** Do not pull the connector by the wire. pull the connector straight.

**6. General Attention Matters**

- (a) Don't mate and unmate the connector unnecessarily.
- (b) Don't insert any objects except the proper connector.
- (c) Don't apply unnecessary force or shock to the wire and connector at mating and unmating operation.

**Engagement partner recommendable form**

1) For 4,8,12,16 pos



2) For 20,28,32 pos

