27AUG09 Rev C3

# 1. Parts Name and Parts Number

### 1.1 Contact

Davida Niewaa	ANAD Dorde	Wire Type (O:Applicable, X;Not Applicable)						
Parts Name	AMP Parts Number	Туре	0.3	0.5	0.85	1.25	2	3
.060 Receptacle	900293	AVSS/CAVUS	0	0	0	Х	Х	Х
(Female Contact)		or AVSSX/AESSX						
.187 Receptacle	175090		Х	Х	0	0	Х	Х
(Female Contact)	175091		Х	Х	Х	Х	0	0

Fig. 1

# 1.2 Rubber Plug

Parts Name	Applicable Wire	AMP Parts Number
	Size	
Rubber Plug for 060 Receptacle	0. 3~0. 5SQ	316867
Rubber Plug for 060 Receptacle	0. 85SQ	967067
Cap for 060 Receptacle		1473234
Rubber Plug for 187 Receptacle		None

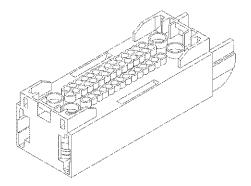
Fig. 2

### 1.3 Housing

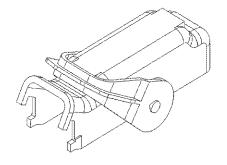
110 110001119				
Positions	Parts Name	AMP Parts Number		
47	Plug Housing Assemble	1376600		
47	Lever Assemble	1376601		
26	PLUG ASSY	1612683		
	LEVER ASSY	1612684		
	LEVER ASSY (STRAIGHT TYPE)	1674719		

Fig. 3

# 1.4 ;Components View



Plug Housing Assemble



Lever Assemble

Fig. 4



# 2. Customer Receiving Inspection

We conduct inspections according to our quality control regulations to maintain an over all lot control. In addition, the customers should conduct receiving inspections based on the specific customer drawings.

# 3.Storage and Carrying

#### 3.1 Contact

- (1) Avoid leaving or carrying the contact reel in an open area without wrapping it in proper material.
- (2) Do not lift up and carry the contact reel by gripping one the side of reel, this may result in damage to the reel, and contacts before use. (See Fig. 4)

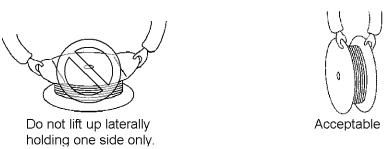


Fig.5

- (3) Avoid storing the contact reel in a moist or dusty place. Stock the reel in a comparatively dry and clean place (5~35°C, 45~85%RH) away from direct sunlight.
- (4) When removing the contact reel from the machine, fasten the end of contact strip onto the edge of the reel with use of proper string or wire. (See Fig.5)

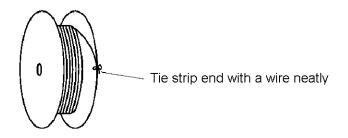


Fig.6

### 3.2 Housing

- (1) Avoid storing the contact reel in a moist or dusty place. Stock the reel in a comparatively dry and clean place (5~35°C, 45~85%RH) away from direct sunlight.
- (2) Avoid leaving or carrying the contact 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

Any crimping of contacts must be performed by using appropriate AMP tools according to the applicable Instruction Sheet and Specification.

### 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.

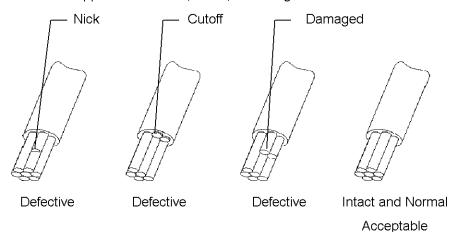


Fig.7

# 4.2 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 of less than 100 pieces.
    Take care of the tangle and damage (Specially the lance of 060 Receptacle) on the products.
  - (3) Avoid stacking and piling up the in-process products in large volume.
    Contact failure and fall of retention force occur by deformation of the contact and specially 025 receptacle's lance.

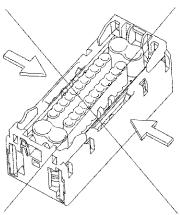
# 4.3 Crimping Specification

See the following application specification.

060 Receptacle contact	114-5216
187 Receptacle contact	114-5126

# 5. Harness Making

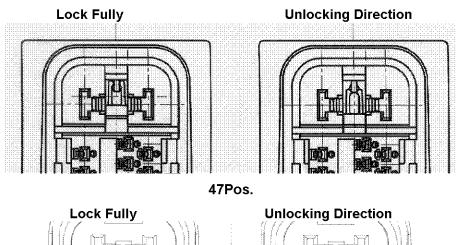
NOTE In all work with the housing unit before lever assembly is installed, strong power should not be added to the center part of the housing (marked with red circle), such as squeeze or cramp by machine.



# 5.1 Contact Loading in Housing

When loading the contact into the connector housing, special care must be taken, because the primary locking device is initially set when the connector housing is first delivered. Proceed per the following instructions:

(1) Look at the housing to confirm that the double lock plate (white) is in the primary set condition. Insert the contact straight into the connector cavity in the same manner as you do for the conventional type connector.



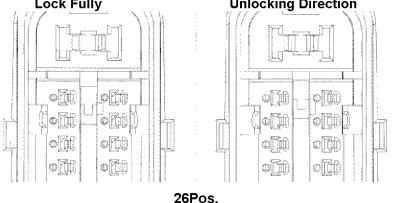


Fig. 8



- (2) Note that the contact cannot be inserted into the housing cavity when the double lock plate is fully engaged. Avoid forcing the contact into the cavity, because it could deform the contact and/or damage the connector housing.
- (3) If the double lock plate is fully engaged and disengagement is required, please review section 5.3'Unlocking Double Lock Plate'.
- (4) When the inserted contact is seated properly into the housing cavity, a clicking sound is heard which is made by the action of the lance. This clicking sound indicates proper seating of the double lock plate.
- (5) By pulling the contact by 20N MAX, check to make sure that the contact can not be withdrawn.

**NOTE** When you insert contacts, you should have wire and take care the breakage of contact point.

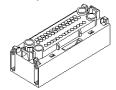


Fig. 9

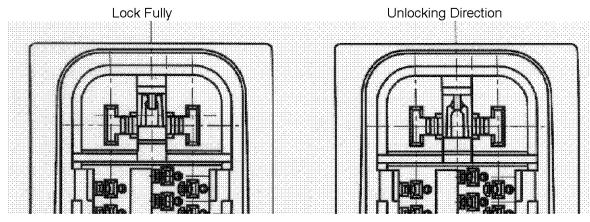
# 5. 2 How to Set Full Engagement of Double Lock Plate.

After all the contacts are correctly inserted into the connector cavities, the double lock plate is ready to be engaged per the following procedure:

(1) Insert the watchmaker's screw driver of 1.2mm into the hole of the double lock plate. See Fig.10.

# Moving Distance is 0.9mm.(47Pos.), 1.1mm(26Pos.)

- (2) Draw out the double lock plate, about 1.2mm, to engage the double lock plate. See Fig.10.
- (3) When the double lock plate is fully locked, a small clicking sound is heard which indicates engagement is correct and completed.
- (4) When double lock plate can not set full engagement, please stop to your operation.
  And find the half inserted contact, and insert it to seated properly into the housing cavity,



47Pos.

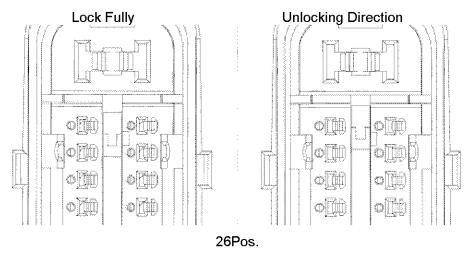


Fig. 10

# 5. 3 Unlocking Double Lock Plate (How to return double lock plate to primary set position):

During the assembly operation, you may wish to remove the inserted contact after the double lock plate was fully engaged or the double lock plate was engaged before contacts were inserted. In such cases, you need to know how to return the double lock plate to it's primary set condition.

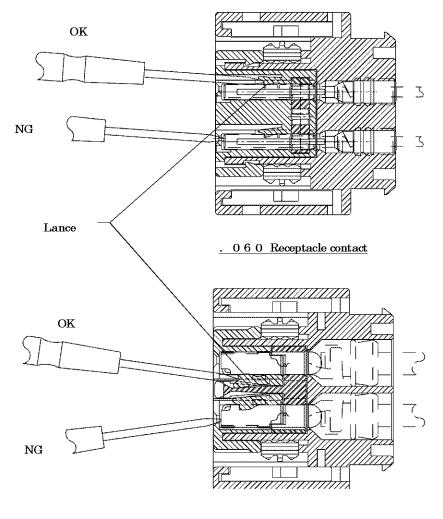
For contact removal, use a watchmaker's screw driver of 1.2mm flat width.

Insert the tip of the watchmaker's screw driver into the hole of double lock plate and move the double lock plate until it reaches the primary set condition.

### 5. 4 Remove of Contact from Housing:

- (1) Set the double lock plate in the primary set condition, per the procedure described in section 5.3 'Unlocking Double Lock Plate'.
- (2) Push back the wire lead of the contact you wish to remove from the housing to relax the engagement, and hole it in position.

- (3) Keeping the wire lead in the push-in position, insert the tip end of watchmaker's screw driver between the locking lance end and contact while raising the locking lance in the direction of the arrow as indicated below. Avoid levering up the lance on the contact. This will cause deformation or bending of the contact. Raise the tool gently, just enough to unlock the lance.
- (4) At this point, pull back the crimping wire lead and the contact can be removed.



. 187 Receptacle contact

Fig. 11



### 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.

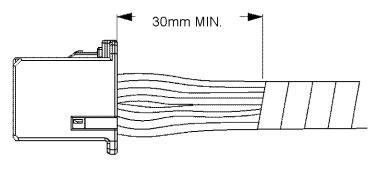


Fig. 12

# 5.5.3 Inspection of Electric Circuit

(1) For inspection of electric circuit, use the hole by the probe pin.

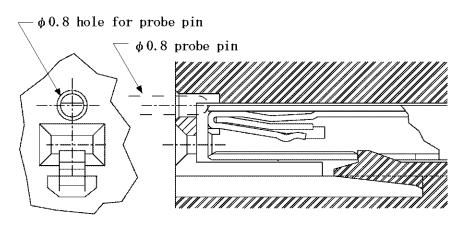


Fig. 13

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

# 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.



# 5.5.6 Insertion Lever assemble to Plug housing

When Lever assemble insertion to plug housing, one side lock of cover to plug housing and lock the other side. See Fig14.

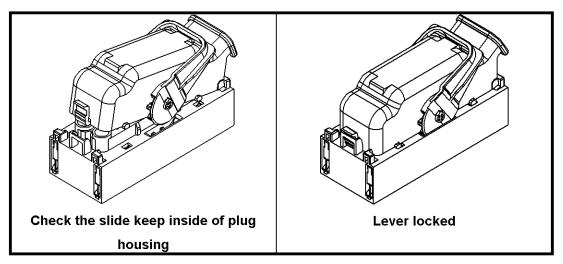


Fig. 14

This product can be set 4 type combinations between slide and lever assembly.

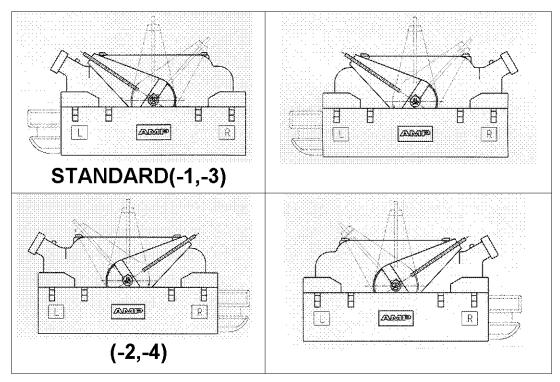


Fig. 15



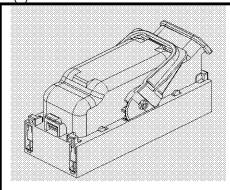
# 6. Mating and Unmating of connector

### 6.1 Mating of connector

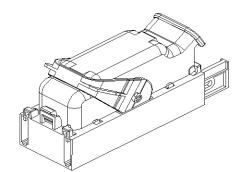
- (1) Check the condition of contact inserted into housing, the position of taping up wire, and the
- lock of double lock. If the double lock plate is primary set position, move the double lock to full lock position.
- (2) Check the defects, deformation, discoloration, damage, rust, crack, deficit, etc. of housing and contact.

NOTE Exchange the connector, if any defects are found.

(3) Lever rotate to before lock to cover. Slides appear from plug housing.



**Harness** 



Rotate lever to before lock to cover.

Slides appear from plug housing

Fig. 16

(4)Insert the plug housing straight into the cap housing. And rotate lever to lock of cover. If the operation is finished, you can hear the lock sound and can not rotate further. Don't apply excess force, if you can't insert into the male housing, and check the items of (1)(2).

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

### 6.2 Unmating connector

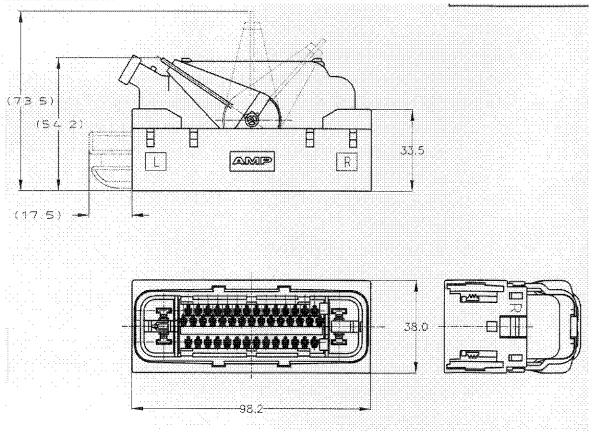
After lock off of cover, Lever rotate from lock position to before lock position.

If do not rotate lever, you check cover lock. (free position)

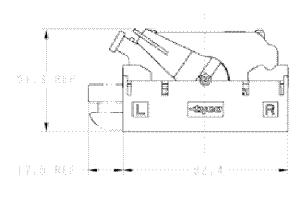
### **6.3 General Attention Matters**

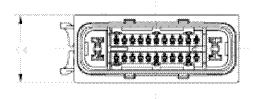
- (1) Don't mate and unmate the connector unnecessarily.
- (2) Don't insert any objects except the proper connector.
- (3) Don't apply unnecessary force or shock to the wire and connector at mating and unmating operation.

# **6.4 Outside Dimension**



47Pos.





26Pos.

Fig.17