NUMBER: 114-5166

SECURITY CLASSIFICATION: Customer Release

Application Specification

114-5166

Termination and Assembly of CHAMP* 0.50 Series (II) Shield Case Connector, Standard Type

1. Scope :

This specification covers the requirements for termination and assembly of CHAMP* .050 series (II) shield case connectors, standard type (Wire-to-board type).

2. Reference Specification :

2.1 AMP Specification

108-5288 : Product specification

114-5124 : Application Specification (applicable wires and terminating conditions)

3. Component Nomenclature

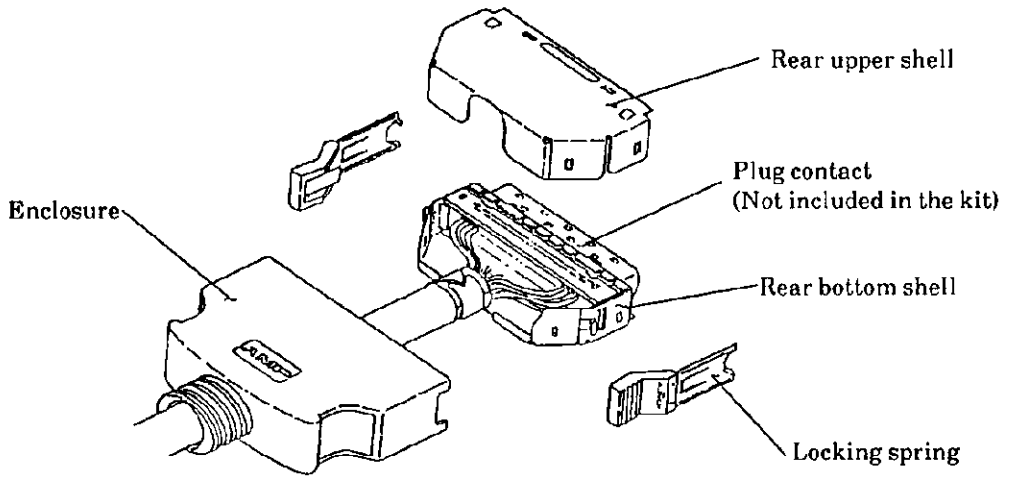

Fig. 1

					DR. 19 Dec. '91 H. Komada	SHEET 1 OF 7	AMP (Japan), Ltd. Kawasaki, Japan		
					CHK. 17 Jan. '92 T. Niwa		LOC J	LOC A	NO. 114-5166	REV. A
A	Revised FJ00-2661-95	T.K			APP. 17 Jan. '92 Y. Fujiura		NAME Termination and Assembly of CHAMP 0.50 Series (II) Shield Case Connector Standard Type			
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08-12-95

4. Product Components

Product Name	Component Name	Qnt'y
Connector	Rear bottom shell (with barrel)	1
	Rear upper shell	1
	Enclosure	1
	Locking spring	2

Table 1

5. Preparation of Wires

5.1 Removal of Outer Sheath from Cable End :

Slide the enclosure onto the cable prior to removal of outer sheath from cable end, Carefully trim the cable braid to the length specified in Fig. 2, so as not to damage the wire insulation.

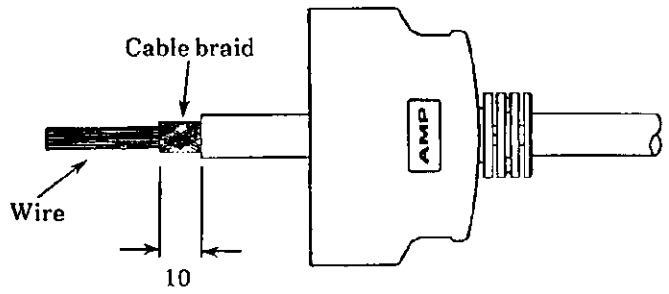


Fig. 2

5.2 Braid fold back

As shown in Fig. 3, fold back the braid on the outer jacket and wrap adhesive conductive tape twice around the jacket end. Tape width : 12 mm.

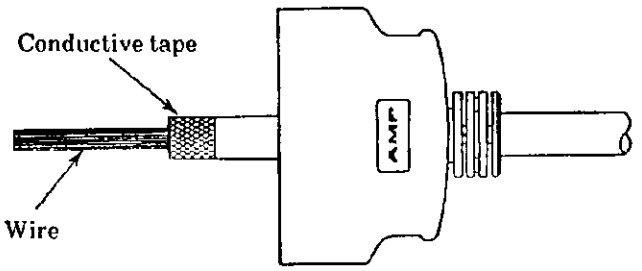
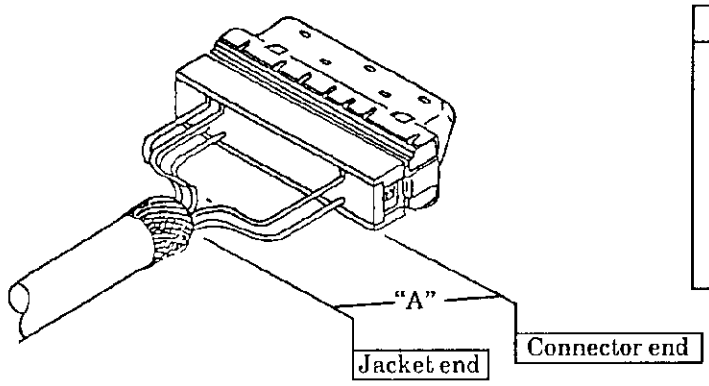


Fig. 3

6. Wire Termination

See Application Specification 114-5124, for the termination tools required and the quality control items. The length A, shown in Fig. 4, from the connector end to the outer jacket should be controlled as given in Table 2.



No. of contacts	Dim. "A" (mm)
14	10
20	10
26	10
38	10
50	10
68	10
80	13
100	15

Fig. 4

7. Cable Termination

As shown in Fig. 5, first attach the plug connector onto the rear bottom shell stopper and latch the projections on the rear bottom shell into the matching holes on the plug connector. Then crimp the barrel by using the appropriate tool (915697-□). Crimp height and crimp width are shown in Table 3. The tensile strength of the crimped ferrule should be 10 kgf or more.

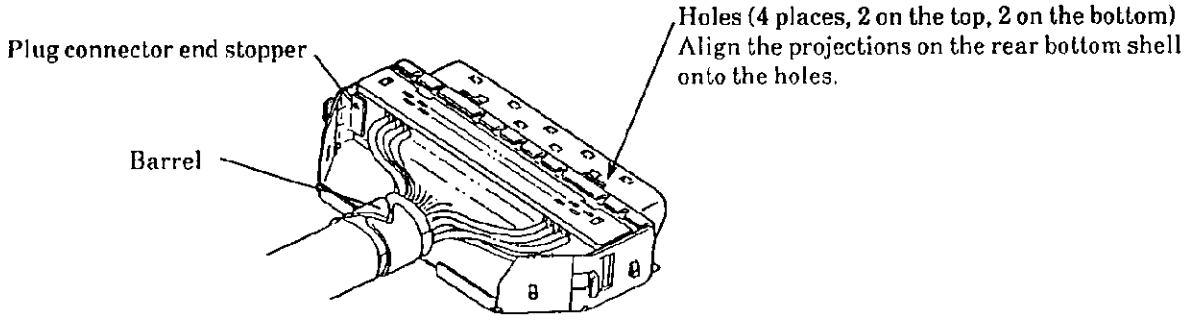


Fig. 5

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8. Assembly of the Rear Upper Shell

As shown in Fig. 6, first align the projections of the upper shell with the matching holes on the plug connector. Then engage the four projections on the bottom shell into the four connecting holes on the upper shell walls. Make sure the plug connector is not slanted as shown in Fig. 7. When the upper and rear shells are connected, there should be a clicking sound. Also make sure that the connected shell shall not bulge raized or that the upper shell side walls shall not be open as shown in Fig. 8.

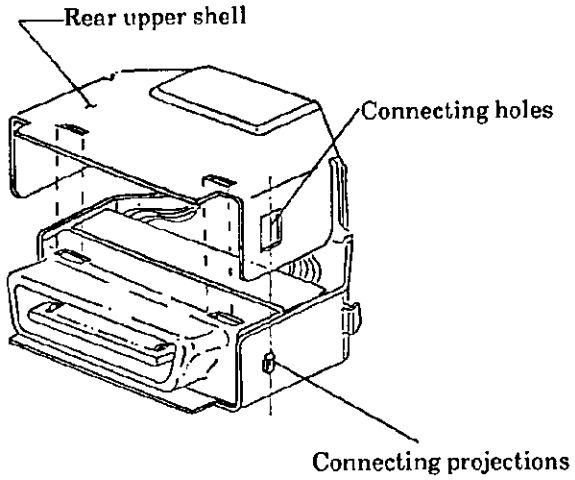

Fig. 6

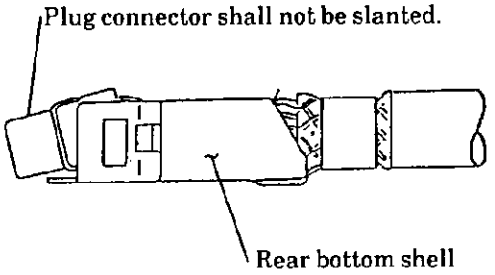

Fig. 7

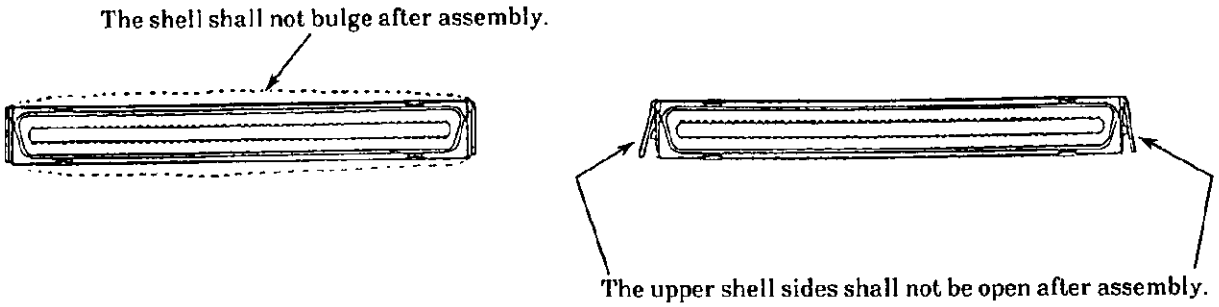

Fig. 8

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9 Installing the Looking Spring

As shown in Fig. 9. first place spring 2 of the locking leg onto the hook on the rear upper shell. Then, as shown in Fig. 10, push the locking log on direction A to make bend the springs 1 and 2. Next, push the leg in direction B to connect the log with the shell. Make sure that the legs work properly after they are connected to both sides.

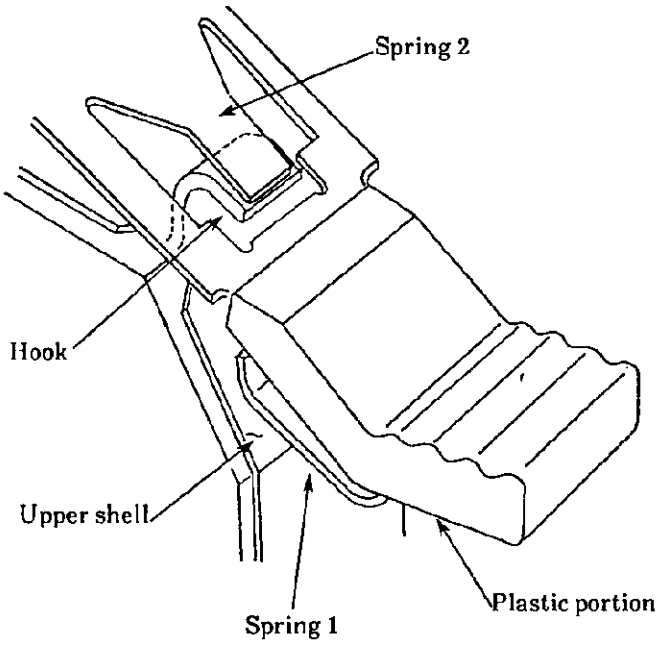

Fig. 9

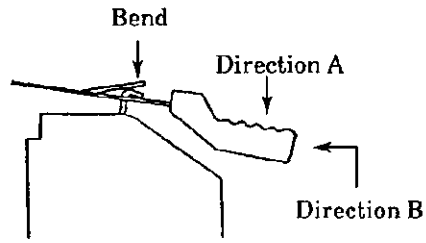

Fig. 10

10 Enclosure Assembly

Fasten the enclosure onto the shell and lock it on it, as shown in Fig. 11. Make sure it locks with a clicking sound of the engagement of the shell projections and the enclosure slots.

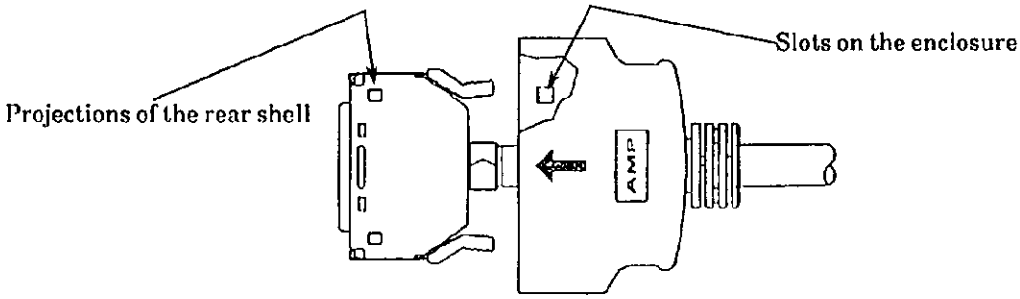

Fig. 11

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11 Crimp Data :

Connctor Positions	Applicable Cable Outer Diameter (mm)	Crimp Height (C/H) (mm)	Crimp Width (C/W) (mm)	Barrel Crimping Tool (Arbor Press)
14	4.3–5.2	$5.8^{+0.2}_{-0.1}$	6.8±0.1	915697-1
	5.2–6.1	$6.1^{+0.2}_{-0.1}$	6.8±0.1	915697-1
20	5.4–6.0	$6.3^{+0.2}_{-0.1}$	6.8±0.1	915697-1
	6.0–6.5	$6.6^{+0.2}_{-0.1}$	6.8±0.1	915697-1
26	5.9–6.4	$6.7^{+0.2}_{-0.1}$	6.8±0.1	915697-1
	6.4–6.9	$7.1^{+0.2}_{-0.1}$	6.8±0.1	915697-1
36	6.4–7.1	$6.6^{+0.2}_{-0.1}$	8.6±0.1	915697-2
	7.1–7.9	$7.1^{+0.2}_{-0.1}$	8.6±0.1	915697-2
50	7.2–7.8	$7.5^{+0.2}_{-0.1}$	8.6±0.1	915697-2
	7.8–8.5	$8.1^{+0.2}_{-0.1}$	8.6±0.1	915697-2
	8.8–9.4 (SCSI Cable)	$8.1^{+0.2}_{-0.1}$	8.6±0.1	915697-2
68	8.1–8.8	$8.5^{+0.2}_{-0.1}$	8.6±0.1	915697-2
	8.8–9.6	$8.9^{+0.2}_{-0.1}$	8.6±0.1	915697-2
80	8.5–9.4	$8.5^{+0.2}_{-0.1}$	10.2±0.1	915697-3
	9.4–10.2	$8.8^{+0.2}_{-0.1}$	10.2±0.1	915697-3
100	9.6–10.3	$9.5^{+0.2}_{-0.1}$	10.2±0.1	915697-3
	10.3–11.0	$9.9^{+0.2}_{-0.1}$	10.2±0.1	915697-3

Table 3

Note 1 : Crimp width is reference data.

Note 2 : Crimp height is subject to adjustment to meet the required tensile strength of 10 kgf.

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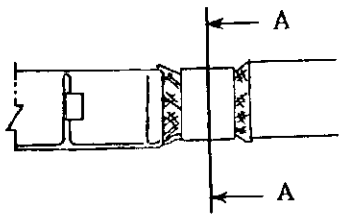
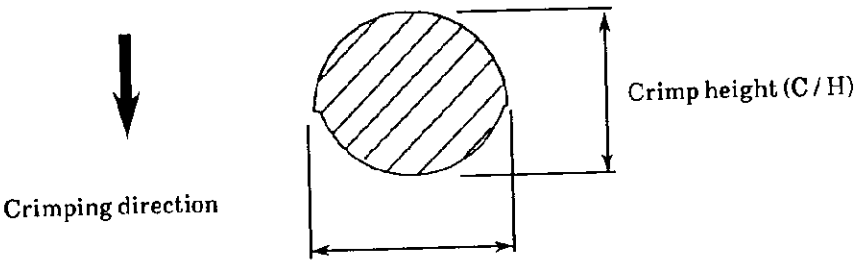


Fig. 12



Cross section A - A

A/T REMARKS

0	T. OSAKA	Y. IKEDA	5/JUL/91
REV	CHK	APP.	DATE

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