

Introduction

This application note shows how to assembly the A996 52 Pin HV cable connector designed to be used with the CAEN boards featuring the Multipin connector Radiall 691803004 type. The connector must be assembled by using the A995 Insertion/ Extraction Tool, which allows to either insert or remove the pin contacts from the connector.

Tools

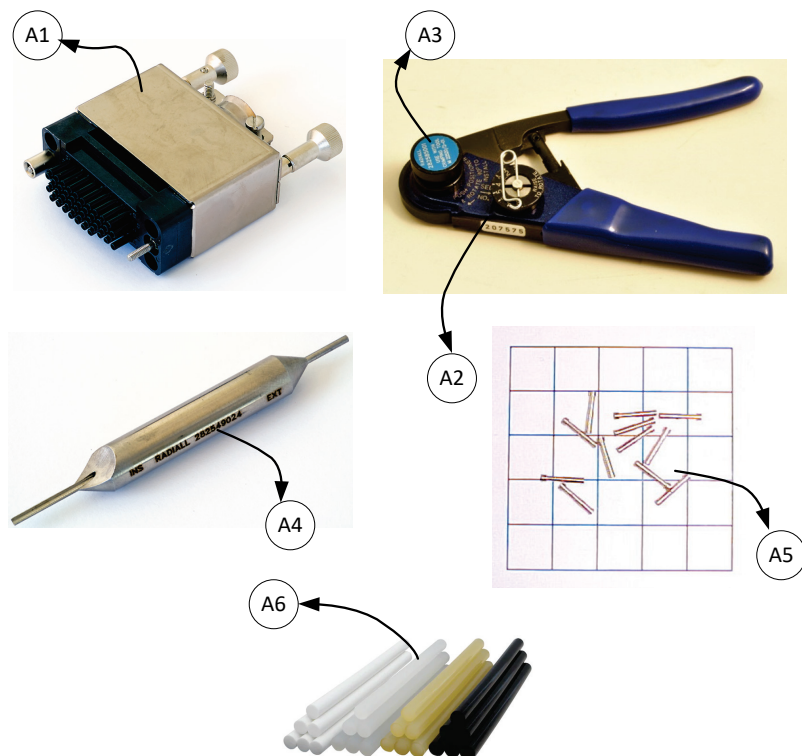


Fig. 1

Tool number	Description	Part Number
[A1]	Plug for cable and for 52 socket contacts (nr.1 contained in the CAEN product A996) see also Fig. 2 and Fig. 3.	CAEN: WA996XAAAAAA CERN: 09.41.34.700.2 RADIAL: 691 802 002
[A2]	Crimping Tool	RADIAL: 282 281 M22520/2-01
[A3]	Positioner:	RADIAL: 282 585 001
[A4]	Insertion/extraction tool (CAEN product A995)	CAEN: WA995XAAAAAA RADIAL: 282 549 024
[A5]	Size 23 socket contact for 0,12mm ² cross section cable (nr. 52 contained in the CAEN product A996)	CAEN: WA996XAAAAAA RADIAL: 691 804 300
[A6]	Hot-melt adhesive sticks (For use with electromechanical guns) - Chemical basis: Ethyl vinyl acetate - Viscosity conditions: at 180°C - Min./max. processing temperature: 180 to 210 °C	WURTH: 0890100151 WURTH: 0890100152 WURTH: 0890100153 WURTH: 0890100154

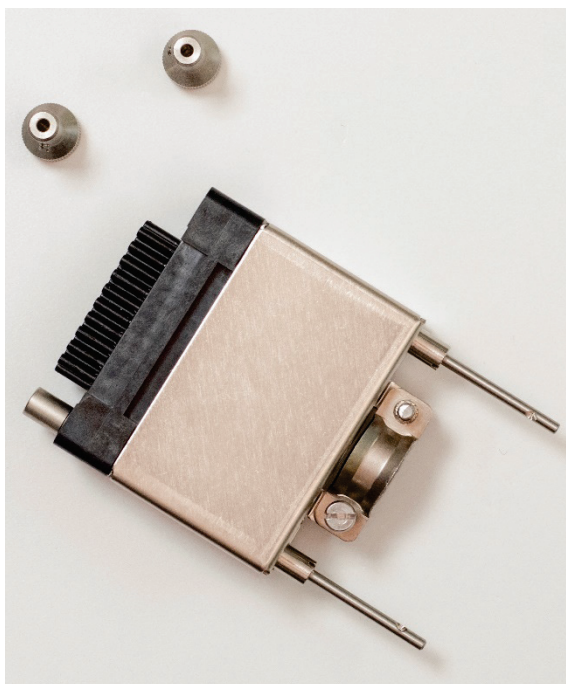


Fig. 2

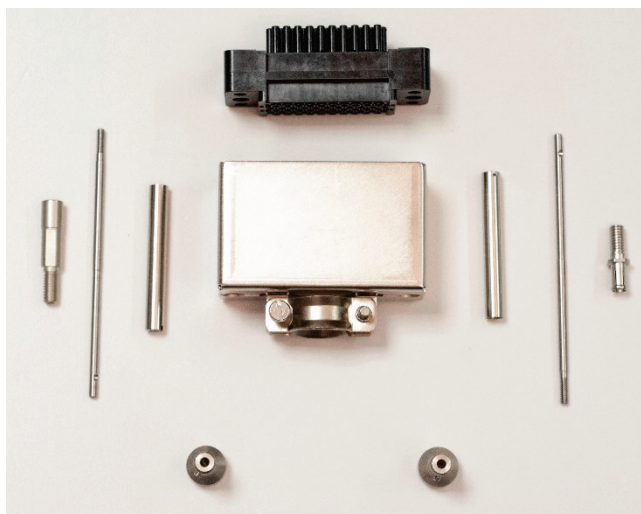
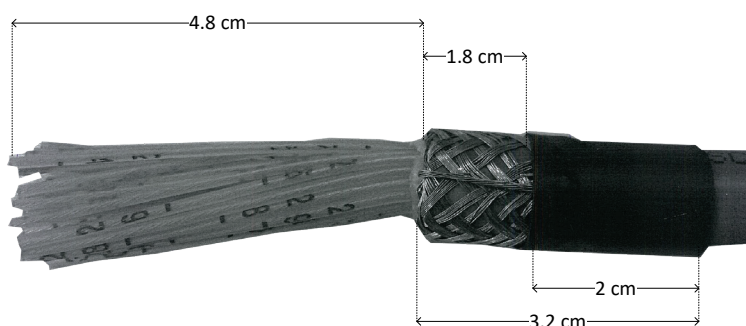


Fig. 3

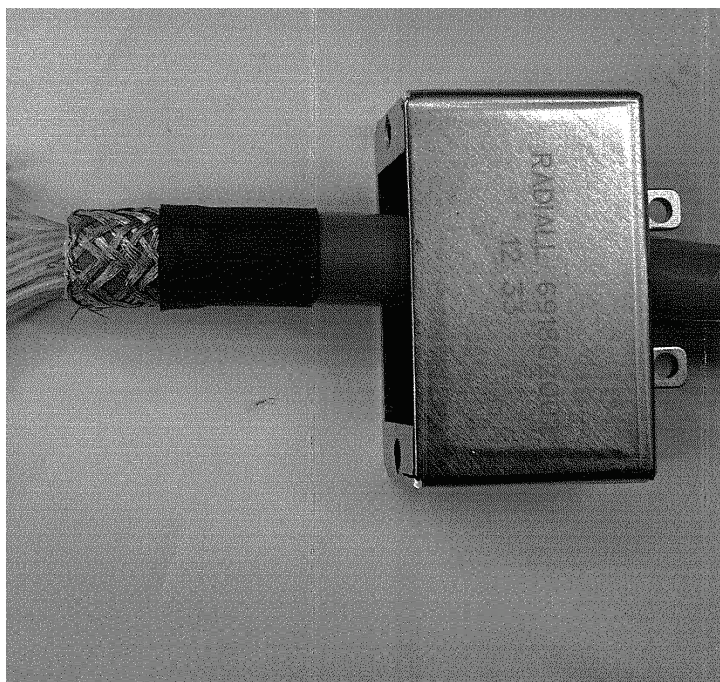
Step 1



Multiconductor high voltage cable (1)

If a multiconductor HV cable is used, the figure shows how to fit the end of the multiconductor high voltage cable before mounting the connector.

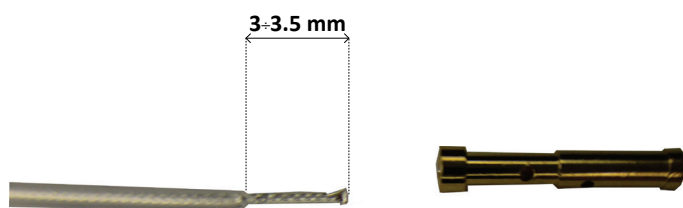
Step 2



Multiconductor high voltage cable (2)

Set the shroud of [A1]

Step 3



High Voltage cable stripped and socket contact (1)

The figure shows single high voltage cable stripped (depth= 3÷3,5 mm) and socket contact [A5].

Step 4



High Voltage cable stripped and socket contact (2)

Insert the single stripped high voltage cable into the socket contact [A5]

Step 5



Crimping Tool (1)

The figure show the crimping Tool (P/N: M22520/2-01) [A2] with Positioner [A3]

Step 6



Crimping Tool (2)

The figure show the Positioner [A3]

Step 7



Crimping Tool (3)

The figure shows Crimping Tool [A2] Setting.

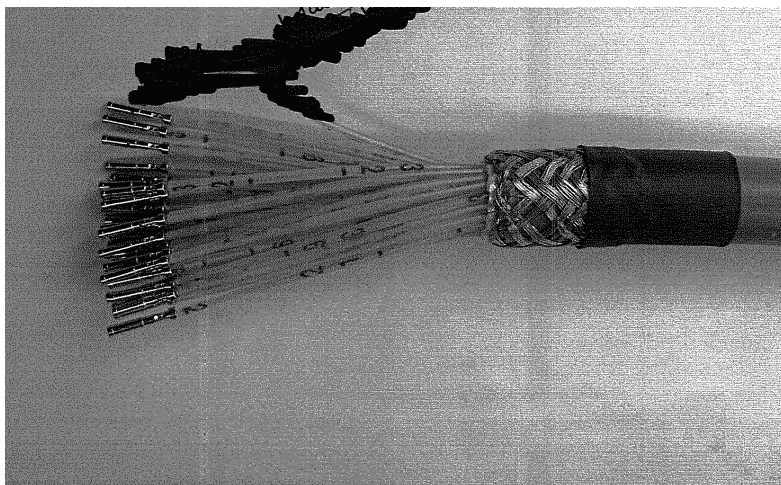
Step 8



Crimping Tool (4)

Crimping

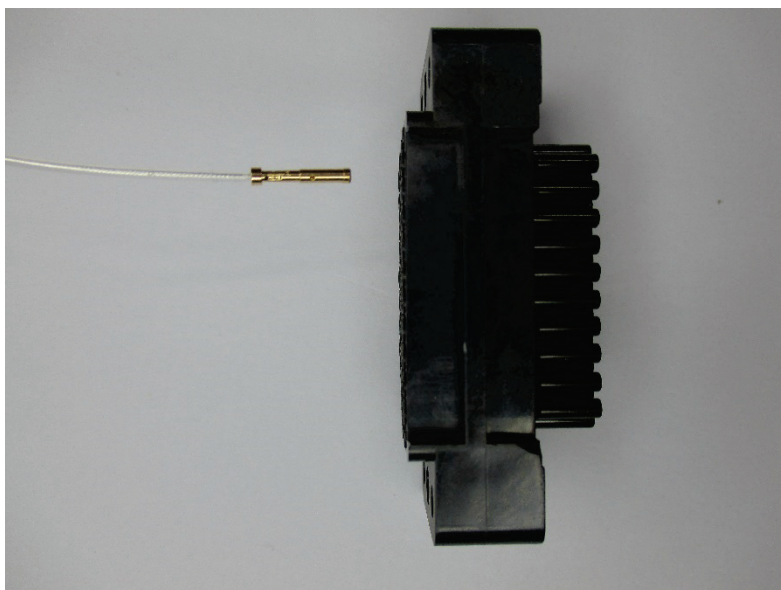
Step 9



Multiconductor high voltage cable

This figure shows a multiconductor high voltage cable with all socket contacts crimped

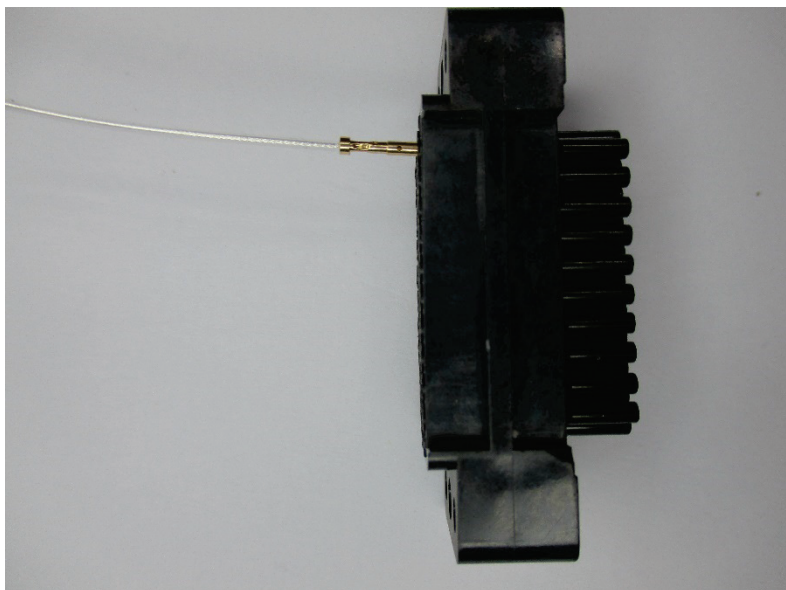
Step 10



Insert socket contact (1)

Insert crimped socket contact [A5] in the Plug connector of [A1]

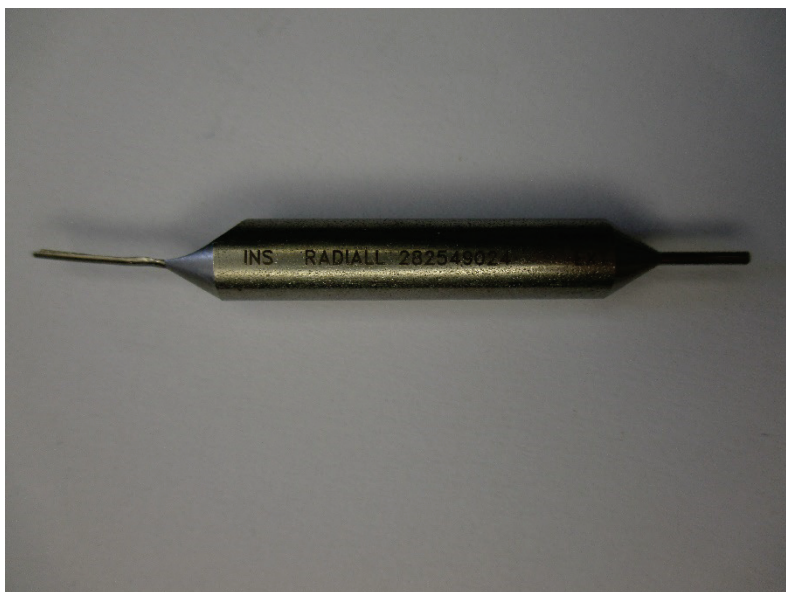
Step 11



Insert socket contact (2)

Insert crimped socket contact [A5] in the plug connector of [A1]

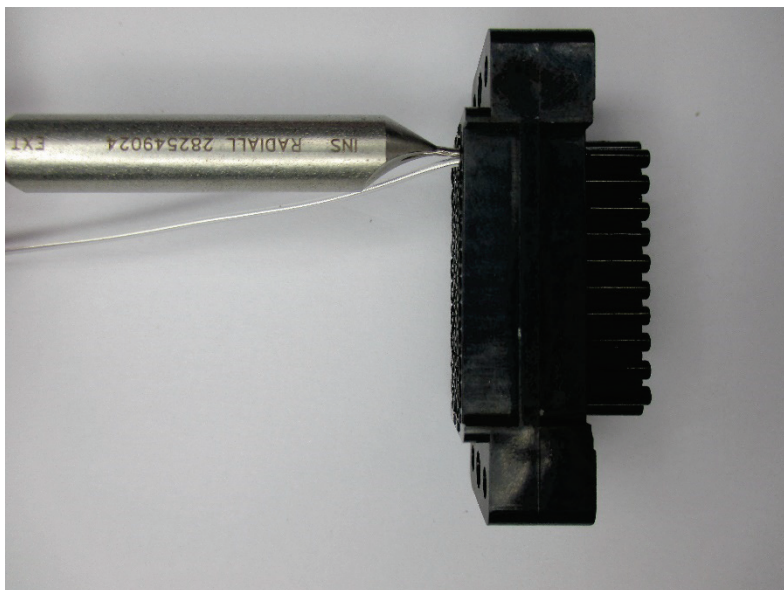
Step 12



Insert socket contact (3)

Take Insertion/extraction tool [A4]

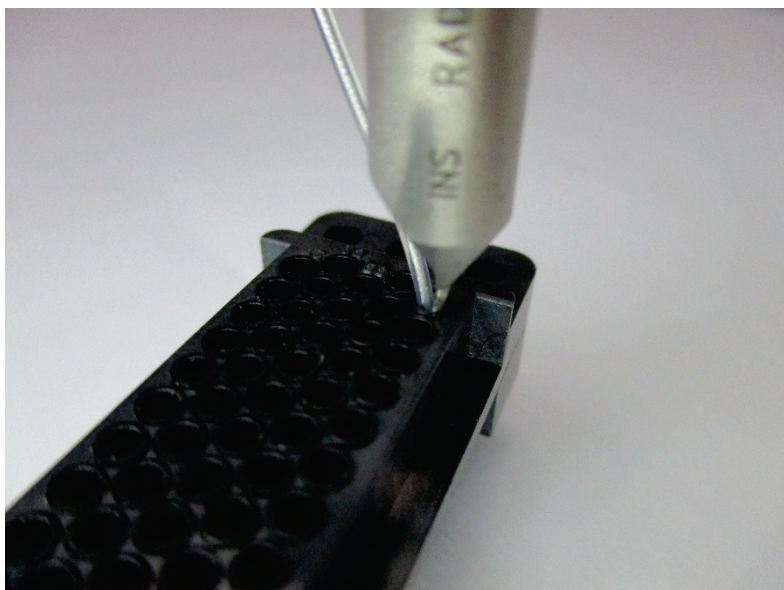
Step 13



Insert socket contact (4)

Use the Insertion/extraction tool [A4] to insert crimped socket contact [A5] in the plug connector of [A1] Until you hear "click"

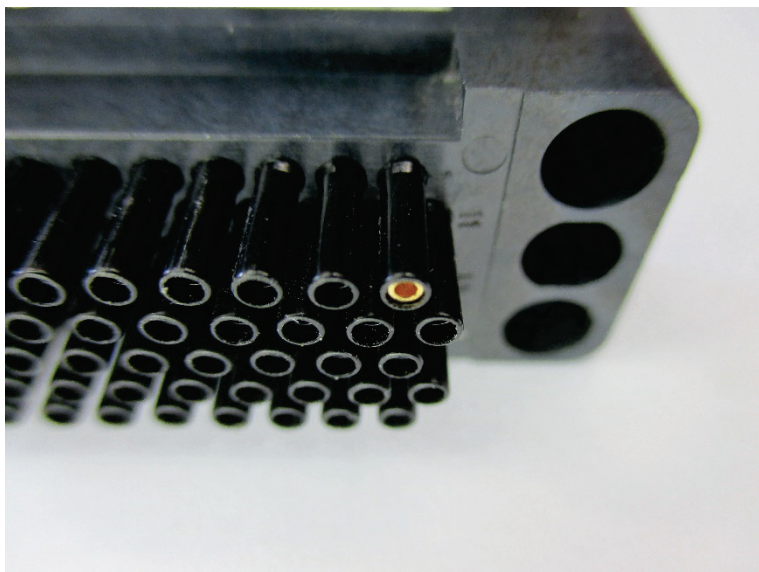
Step 14



Insert socket contact (5)

Use the Insertion/extraction tool [A4] to insert crimped socket contact [A5] in the plug connector of [A1] Until you hear "click"

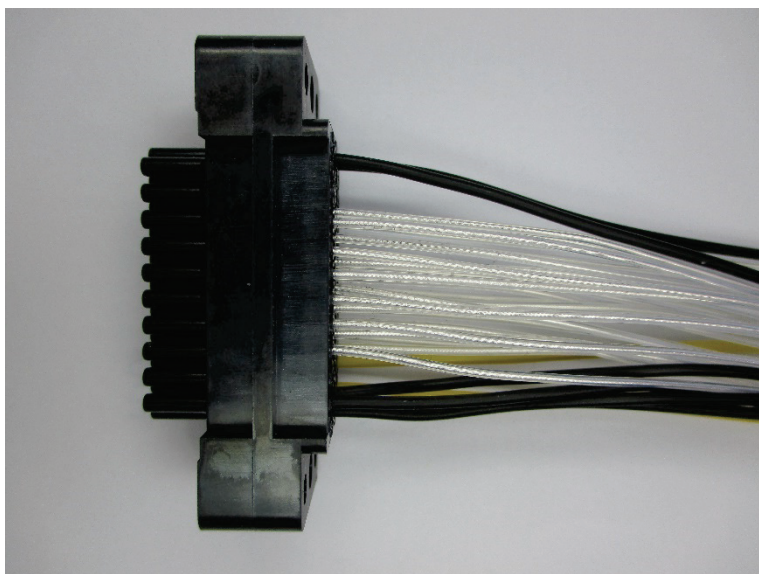
Step 15



Insert socket contact (6)

crimped socket contact [A5] correctly positioned in the plug connector of [A1]

Step 16



Fix Plug connector (1)

Step 17



Fix Plug connector (2)

The figure shows the plug connector [A1] with high voltage single cables glued (using [A6]) and blocked

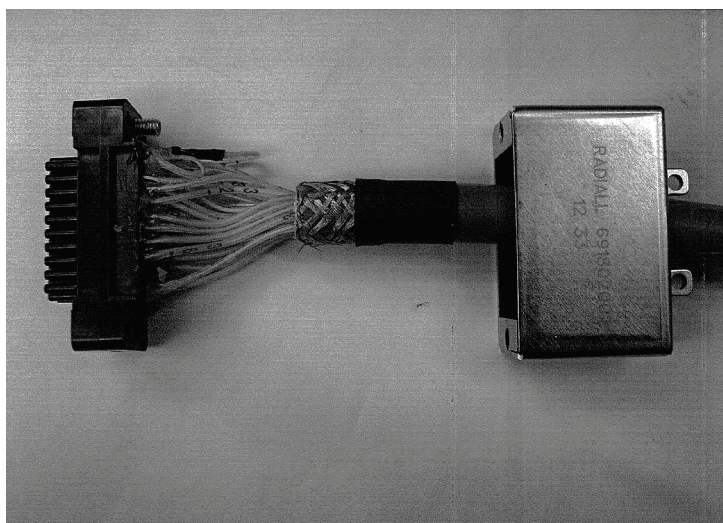
Step 18



Fix Plug connector (3)

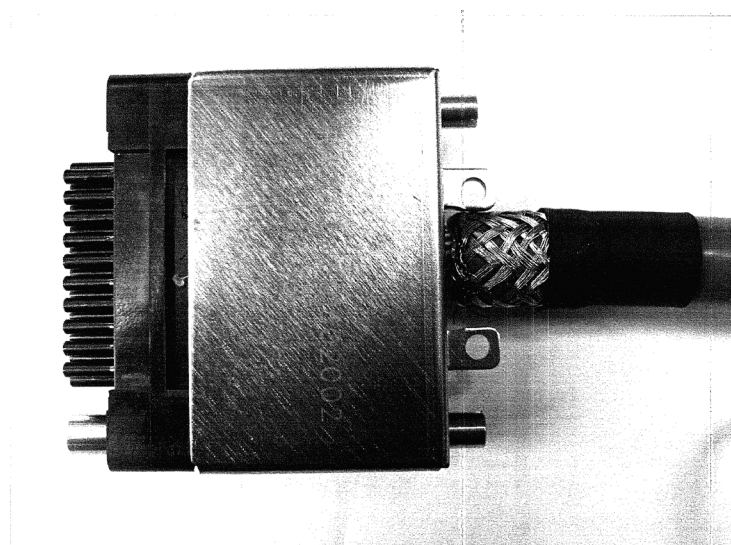
The figure shows the plug connector [A1] with high voltage single cables glued (using [A6]) and blocked

Step 19



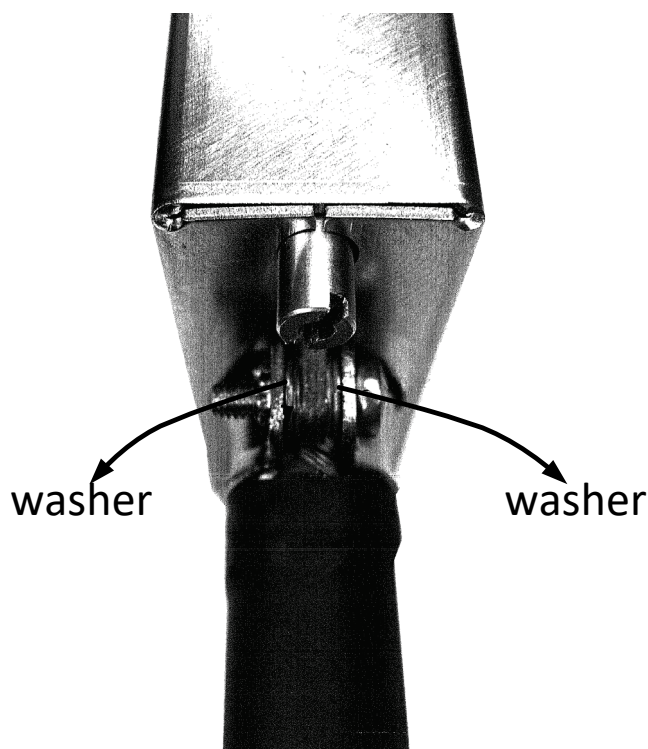
Insert shroud (1)

Step 20



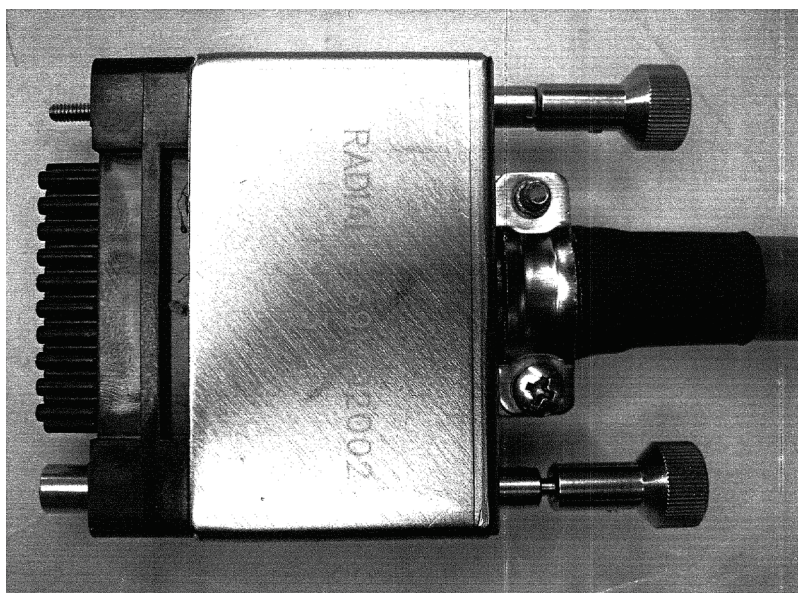
Insert shroud (2)

Step 21



Insert locking device (1)

Step 22



Insert locking device (2)

