P:182 Procedure Of Soldering Lemo Connector to Heater

Document Revision Record

Rev	Date	ECO #	Pages Affected	Description
-	7/6/98	NA	NA	new procedure

Note: This part is not ESD sensitive.

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This procedure gives the information required to assemble the chip resistor heater assembly (P/N 23529-101)

Materials & Supplies

1. Plug Connector 65113-1C34317-117.
2. Kester,60/40 solder Lead/Tin.
3. Teflon sleeving #1933.
4. Heat Shrink Tubing # 022075cst
5. Heat Shrink Tubing # 032100cst
6. Alcohol #2 Propanol.
7. Texwipe small foam swab #TX751B
8. Stycast epoxy #1266
9. Chip resistor heater 25559-101

1. Preparation

1.1 Check Sub-assembly (per drawing #25559 101). Record serial numbers for heater #1_____ & heater #2 _____. Record final wire length for heater #1_____ and heater #2_____. Heater #1 is to be used with Lemo connector pins (1,2) and heater #2 is to be used with Lemo connector pins (3,4). Record Probe C connector name_____.

___ ____
RE date

1.2 Visually inspect the wire carefully. Use the microscope to look for any deep scratches, breaks or kinks in the insulation.

1.3 Cut twisted pair wires to specified length.

1.4 Untwist the pair of wires, strip and tin the ends.

_____ ____
Operator date

2. Plug connector adapter installation

2.1 Slide the connector adapter over the two pairs of twisted wire. The small end of the adapter should face the heaters.

_____ ____
Operator date

3. Cut Heat Shrink Tubing

3.1 Cut Polyester shrink tubing #022075cst to 2" long. Slide the tubing over the wire.

3.2 Cut Polyester shrink tubing #032100cst to 1" long. Slide the tubing over the wire.

_____ ____
Operator date

4. Solder tinning of 4 pin Lemo connector

4.1 Tin the connector pin solder cups using solder 60/40.

4.2 Cut the ends of the wire as requested to solder.

4.3 Slide teflon sleeving #1933 over the wires.

4.4 Solder one pair of the twisted wires to pin # 1 & #2 solder cups. Solder the second pair of the twisted wire to pin #3 & #4 solder cups.

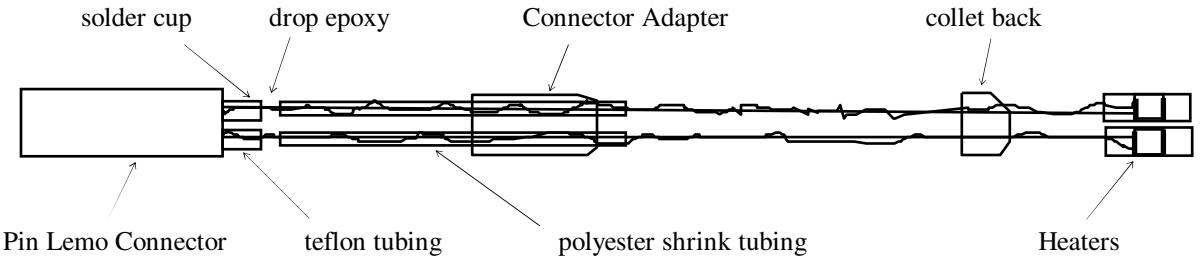
_____ ____ _____ _____
Operator date QA date

5. Wire and Sleeving

5.1 Slide the 2" Polyester shrink tubing back down to the end of the solder cups until it is against the teflon tubing. Use the heat gun and shrink it down to size.

5.2 Slide the 1" Polyester shrink tubing back over the 2" shrink tubing and shrink it down to size.

5.3 Use a drop of Stycast 1266 epoxy at the end of the solder cups where the teflon tubing and the two polyester shrink tubing meet. (Refer to procedure P0157 "Use of Stycast epoxy of 1266")



5.4 Slide the connector adapter back down over the sleeving locate the position by threading collet back nut onto latch sleeve. Put a drop of stycast 1266 epoxy at the end of the adapter to bond the wires and adapter in place. Be careful not to epoxy the collet back to the adapter. (Refer to procedure P0157 "Use of Stycast epoxy of 1266")

_____ ____
Operator date

6. Assemble connector outershell

6.1 Slide the latch sleeve over insert and connector adapter until the key engages in latch sleeve. Verify that the key in the 4 pin plastic insert is lined up with the key in the connector's keyed insert.

6.2 Slide outer shell over latch sleeve.

6.3 Secure latch sleeve by threading collate nut onto latch sleeve (finger tight).

6.4 Scribe Probe C connector name onto outershell.

_____ ____
Operator date

_____ ____
QA date