

MODIFICATION KIT L222

APPLICATION & DESCRIPTION

The following modification kit is for use with radio communications test set 2955. Its use is required because since the 2955 was introduced some three years ago, receiver designs in particular in the 800 to 900 MHz region have improved significantly. This, coupled with the increased use of unscreened plastic cases, has meant that the screening requirements for test equipment has become more critical. When these modifications are correctly applied, a very worthwhile product improvement is produced across the complete frequency band. RF leakage, as specified on Page 34 of the 1988 Instrument Catalogue, is reduced from 0.5 uV pd to 0.2 uV pd. In practice, the leakage could be far smaller than this figure.

The modification only applies to instruments below serial number 132127.

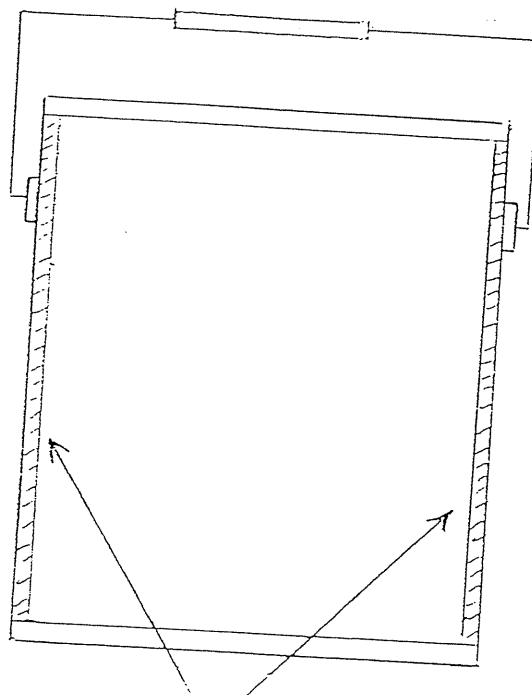
The kit comprises of the following:

<u>Description</u>	<u>M.I. Part No</u>
4 X GASKET BRAID 380mm IN LENGTH	11880-207
3 X M5 SINGLE ENDED TAG	23231-008
3 X 56pF FEEDTHROUGH CAPACITOR	26373-855
1 X 10pF FEEDTHROUGH CAPACITOR	26333-228
2 X 1uH INDUCTOR	23642-549
1 X 150 R RESISTOR	24772-053

Modification Procedure:

- 1) Remove bottom case.
- 2) Remove the larger of the two RF tray covers to give access to AA3/AA4 board filter box.
- 3) With reference to diagram 1 unplug connectors from PLE, PLF and PLG. Cut the connectors from the end of the cables. Prepare the cable ends to leave 12mm inner and braid ready for connection to tags.
- 4) Unsolder, unscrew and remove connectors PLE, PLF and PLG from the filter box along with associated washers and tags. Discard C40, C50 and C57. See diagram.
- 5) Withdraw cable connected to AA3 PLC through hole in filter box inner wall.
- 6) Solder the 10 pF feedthrough capacitor into hole in inner wall. See diagram 2.
- 7) Reconnect cable from AA3 PLC to the spill of 10pF feedthrough and solder braid to adjacent chassis wall. See diagram 2.
- 8) Reconnect cable from AA4 PLA to spill of 10pF feedthrough inside filter box and solder braid to adjacent point on inner wall of chassis.
- 9) Fit 56pF feedthrough into position of previous PLG (it will be necessary to shorten the spill of the 56pF feedthrough slightly) with M5 SE tag bent to fit under flange of feedthrough on the outside of the filter box. It may be easier to raise the RF tray slightly during this operation by removing the tray pivot screws to enable access for a box spanner.
- 10) Connect 150R resistor in parallel with a 1uH inductor and fit between new 10pF feedthrough and 56pF feedthrough. See diagram 2.
- 11) Reconnect cable (tracer sleeve 6) to 56pF feedthrough and tag.
- 12) Fit 56pF feedthrough in place of previous PLF with M5 tag on outside of box. Reconnect L23.

- 13) Reconnect cable (tracer sleeve 10) to 56pF feedthrough and tag.
- 14) Fit a 56pF feedthrough in place of the previous PLE with M5 tag on outside of box.
- 15) Change the value of L24 from 3.3 uH to 1.0 uH and resolder to new 56pF feedthrough.
- 16) Reconnect cable (tracer sleeve 20) to new 56pF feedthrough.
- 17) After visually checking all connections are made correctly as per diagram 2 refit the RF lid of AA0.
- 18) Fit a length of gasket braid into each slot of the side extrusions as shown. Ensure that they are not twisted and are bedded down properly.

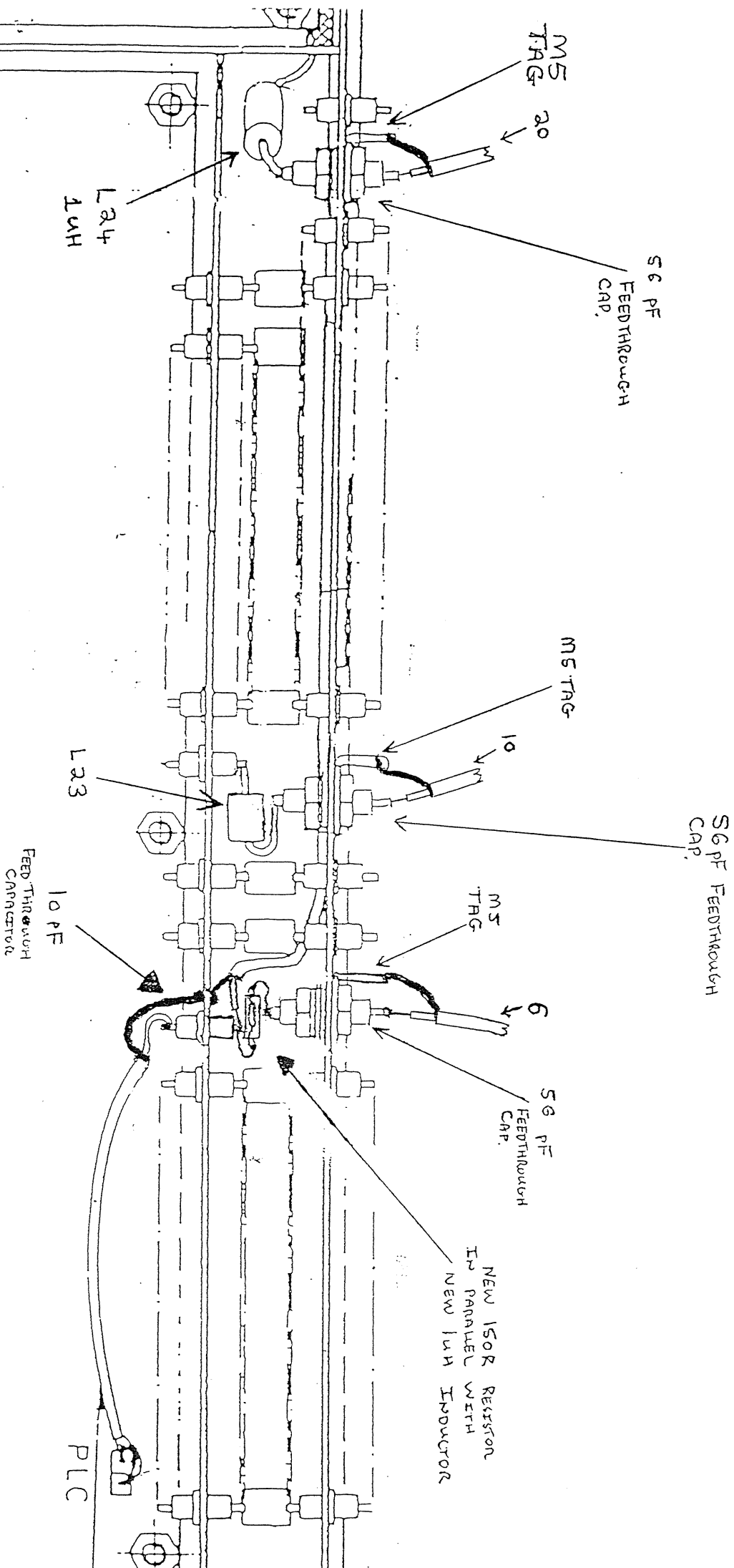


Gasket Braid

- 19) Refit case bottom and revert instrument to normal attitude.
- 20) Remove case top and fit a length of gasket braid into each slot of the side extrusions. See diagram. Ensure that they are not twisted and are bedded down properly.
- 21) Refit case top.
- 22) The RF leakage performance can be checked as per chapter 5.1 of the service manual.

Diagram 2

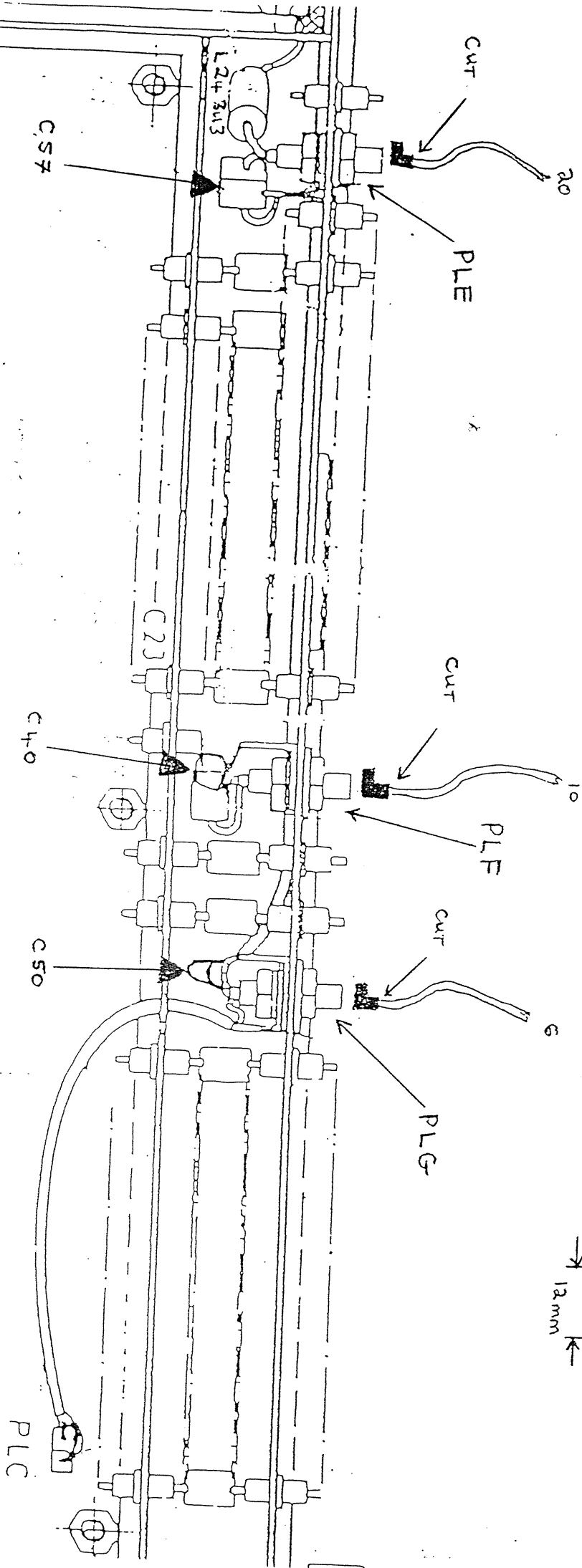
AFTER



AAA3

Diagram 1

BEFORE



PREPARE
CABLE
ENDS.
12mm

AA3