

CONDITIONS OF RELEASE	
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UK/PRC 349

TECHNICAL HANDBOOK - FIELD AND BASE REPAIRS

Errata

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Notes...

- (1) These Pages 0, Issue 2 and 01, Issue 1 supersede Page 0, Issue 1 dated Jun 81 and are to be filed immediately in front of Page 1, Issue 1 dated Jul 77.
 - (2) The amendments at Para 2 should have been made under previous errata issue but are included here as the information is still current.
- 1 The following amendments must be made to the regulation.
 - 2 Page 49, Para 94:
 - 2.1 Sub para b. (13), line 1:
Delete: 'Adjust 10aC1 (Rx)'
Insert: 'Adjust 10aC1 to its mid position and then adjust 10aL1 (Rx)'
 - 2.2 Sub para b. (19), line 1:
Delete: 'Adjust 10aC13 (Tx)'
Insert: 'Adjust 10aC13 to its mid position and then adjust 10aL6 (Tx)'

3 Page 8, Table 2, after item 13:

Insert: '14 6625-99- Probe Assembly
 622-5474

For access to test points on motherboard or synthesiser board 10A through the overlays, part of item 1 and item 8.

4 Page 42, Para 88, after line 13:

Insert: 'Assembly 4 must not be adjusted for optimum r.f. power output.'

CONDITIONS OF RELEASE	
1.	[REDACTED]
4.	[REDACTED]

UK/PRC-349

TECHNICAL HANDBOOK - FIELD AND BASE REPAIRS

This EMER must be read in conjunction with
Tels F 602 which contains figures and tables
to which references are made.

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Note: These Pages 3-9/10 supersede Pages 3-9/10 Issue 1 dated Jul 77.
Items marked thus ● have been amended.

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WARNING

1. In assembly 4 of this equipment, the r.f. transistor heatsink contains beryllium oxide. In certain circumstances it can constitute a hazard to health. Before working on the equipment, consult Gen K 050 - Beryllium Toxic Hazard in Electronic Equipments - which gives general information, handling and disposal instructions.

INTRODUCTION

SCOPE OF REPAIRS

2. This regulation gives repair information for use by Field and Base workshops. Field repair is confined to the replacement of faulty assemblies except for the box assembly and the synthesizer where repair is by replacement of faulty sub-assemblies, mechanical parts and certain discrete components. Base repair is not envisaged, but when equipments are presented to a Base workshop, the level of repair will be to the standard of that at Field level; hence Part 2 (Base repairs) is not published.

SPECIFICATION TESTING, ALIGNMENT AND REPAIR PROCEDURES

3. The procedures contained in Part 1 of this regulation involve the use of the test rig electronic (t.r.e.) and the RT-349 field repair test kit (f.r.t.k.). Specification testing of the RT-349 can be carried out with the equipment sealed (lid fitted) or unsealed (lid removed). With the exception of tests 9 and 11, all other specification tests can be carried out with the motherboard, fitted with all assemblies, mounted in the motherboard assembly test jig (item 1, Table 2). All RT-349 alignment procedures may be carried out with the equipment unsealed (lid removed) except the adjustments associated with assembly 10 as given in para 94; access to 3TP1 and 3TP2 is obtained by withdrawing assembly 8. All alignment procedures may also be carried out when the motherboard, fitted with all assemblies, is mounted in the motherboard assembly test jig. When the motherboard and all assemblies is refitted into the box assembly the SET SQU preset control may need to be rechecked.

USE OF AUTOMATIC TEST EQUIPMENT (A.T.E.)

4. Specification testing for inspection purposes will normally be carried out using the a.t.e. The test numbers on the a.t.e. are cross-referenced to the t.r.e. test numbers; details are included in Part 3 of this regulation.

FIELD REPAIR EQUIPMENT

5. The items of test equipment shown in Table 1 are required to carry out the procedures contained in Part 1 of this regulation.

Table 1 - Field repair equipment

Item	Cat No	Designation	Purpose and remarks
1a	Z4/6625-99-620-5350	Test rig electronic equipment test controller No 1	Specification and diagnostic testing of radios
or			
1b	Z4/6625-99-620-5078	Test rig electronic equipment test controller No 2	Either controller requires the peripheral test equipment listed in Tels M 382 para 6
2	Z4/6625-99-642-3437	Modulation meter 9008M	See para 10
3	Z4/6625-99-965-7922	RT-349 field repair test kit (f.r.t.k.)	Fault finding and alignment of RT-349 (open)
4	Z4/6625-99-105-7049	Multimeter set CT498A	Fault finding on RT-349 (open)
5	W3/4440-99-114-0440	Dehumidifier desiccant series 1, Mk 111	Drying
6	Z4/6625-99-200-2271	Leak locator CT509	Seal testing
7	F1/5180-99-120-3922	Tool kit telecom (technician)	General purpose
8	F1/5180-99-445-8208	Tool kit telecom (supplementary)	General purpose
9	F1/3439-99-136-7370	Desoldering set electrical	Removal of assembly 10 sub assembly inter-connecting leads

GENERAL REPAIR INFORMATION

INTERNAL IDENTIFICATION BY COLOUR CODING

6. a. White circles are used to identify test-points on the motherboard.
- b. Green circles or inscriptions are used to identify screws or controls, on assemblies, which may be removed or adjusted at field repair level.
- c. Red circles and inscriptions are used to identify preset controls which should never need to be adjusted.

FIXING OF LABELS

7. The nameplate label and the modification label (recessed) are both self-adhesive by removing the protective backing paper. The serial number should be suitably marked on the nameplate label before fixing to the box of the radio.

REPAINTING

8. At field workshop level, re-touching of damaged surfaces may be carried out, but not repainting. Only the following paints are to be used:
 - a. H1a/8010-99-224-2079 paint, priming, 1.5 litre pack.
 - b. H1a/8010-99-224-8663 paint, finishing polyurethane, matt finish, deep bronze green, 1.5 litre pack.

These are two-part paints which must be mixed in the proportions as printed on the package. Do not mix more than is necessary as its 'mixed' life is 8 hours at 20°C or 4 hours at 33°C. Do not apply the paint in conditions of low temperature or high humidity.

TEST RIG, ELECTRONIC (T.R.E.)

9. The t.r.e. is fully described in Tels M 382, and no attempt is made in this regulation to describe t.r.e. functions. Two types of t.r.e. exist, one containing a Schlumberger r.f. signal generator, the other a Racal r.f. signal generator; the differences between the two types are explained in Tels M 382.
10. The modulation meter CT409 is NOT suitable for use with the RT-349. Modulation meter 9008M (Z4/6625-99-642-3437) is a suitable item, and is being provisioned. The information in this regulation assumes the use of the 9008M.
11. When referring to the t.r.e., the following abbreviations are used throughout this document:

Note: These Pages 7 to 10, Issue 3 supersede Pages 7 to 10, Issue 2 dated Sept.78.
Item 4 NSN changed & Item 5 deleted in Table 2; ref. 5 deleted in Fig 1; para 20 amended
and para 21 deleted on page 9.

Control supply	CS		
Control test conditions	CTC	Audio frequency generator	a.f. gen
Clansman interface	IF(C)	Cathode ray oscilloscope	c.r.o.
Digital voltmeter	d.v.m.	Lower limit	LL
Frequency counter	counter	Upper limit	UL
Equipment-under-test	e.u.t.		
Radio frequency generator	r.f. gen.		
Modulation meter	mod. meter		

12. Controls and terminations (Fig 7) on CS, CTC and IF(C) are referred to by the numbers shown in Tels M 382, Table 2002, e.g. the push on – push off switch marked EUT on Control Test Conditions is referred to as CTC6. Instructions are given as 'Depress (or Release) CT6'. Instructions for rotary switches are given as 'Set CTC1 to CW TX'. Connections to terminations are given as 'Connect CT20 to'. .

13. This document details the t.r.e. switch settings required to carry out each specific function; for specification testing, each switch position is detailed at the commencement of each test to allow any particular specification test to be carried out in isolation.

14. Range settings of individual test equipment (counter, d.v.m. etc.) are not detailed unless specifically required. Instructions are given as 'd.v.m. shall indicate', and correct operation and range-selection is implied

FIELD REPAIR TEST KIT (F.R.T.K.)

15. When carrying out alignment, fault diagnosis or repairs, the RT349 motherboard, with all assemblies fitted, can be removed from the box assembly (para 36) and inserted into the test jig (item 1, Table 2); refer to para 33 for fitting instructions.

16. Table 2 gives a list of the items contained within the field repair test kit (Fig 1).

Table 2 – Items, f.r.t.k.

Item	Cat. No.	Designation	Purpose and remarks
1	6625-99-649-5580	Motherboard assembly test jig	To enable alignment, fault diagnosis and repair of radio
2	5120-99-649-5581	Assembly extractor tool	To facilitate removal of assemblies from RT349
3	6625-99-649-5582	Antenna adaptor (2off)	BNC antenna connection to RT349

Table 2 (cont'd)

Item	Cat. No.	Designation	Purpose and remarks
4	5935-99-215-7875	Power supply connector (2off)	For use with 8920C
5		Item deleted	
6	6625-99-649-5585	Power supply connector	For use with bench d.c. power supplies. Provides protection against transients, overvoltage (up to 32V) and reverse polarity
7	6625-99-649-5586	Dummy synthesizer cover	Screen cover providing access to preset adjusters
8	6625-99-649-5587	Synthesizer sub assy 10a Overlay	Provides safe access to test points
9	5120-99-622-5472	Trimming tools:- Metal tipped	Adjustment of preset capacitors and resistors
	7520-99-620-6308	Pencil clutch)) Adjustment of preset) inductor cores
	5120-99-649-5588	Plastic tips for pencil clutch)
10	6625-99-649-6593	Synthesizer-to-motherboard Mechanical alignment jig	Required when fitting an assembly 10 to a motherboard
11	5120-99-649-6594	Mandrel	For replacement of the insert, battery fixing
12	6625-99-649-8719	Motherboard test plug	For access to motherboard test sockets
13	6625-99-649-5605	Carrying case	

17. When the motherboard with all assemblies is fitted into the test jig (item 1, Table 2), the frequency setting switches (FSS) and the system switch (SSW) are controlled by knobs on the test jig, in the same manner as the knobs on the RT349 box assembly. The battery connections (1PL4/5), the audio socket (SK1) and the antenna socket (1SK2) directly replace those on the box assembly and as such are given the same designations.

18. The extractor tool (item 2, Table 2) is used to withdraw assemblies (4 to 9) when the motherboard assembly (3) is fitted into either the RT349 box or the test jig; refer to para 39 for fitting instructions.

19. The antenna adaptor (item 3, Table 2) screws into the antenna socket on either the RT349 radio or the motherboard test jig; it is used to provide the e.u.t. with a 50Ω BNC connection for test equipment.

20. The power lead (item 4 Table 2) is used to connect either an RT349 or motherboard test jig to the output of the 8920C.

21. Paragraph deleted

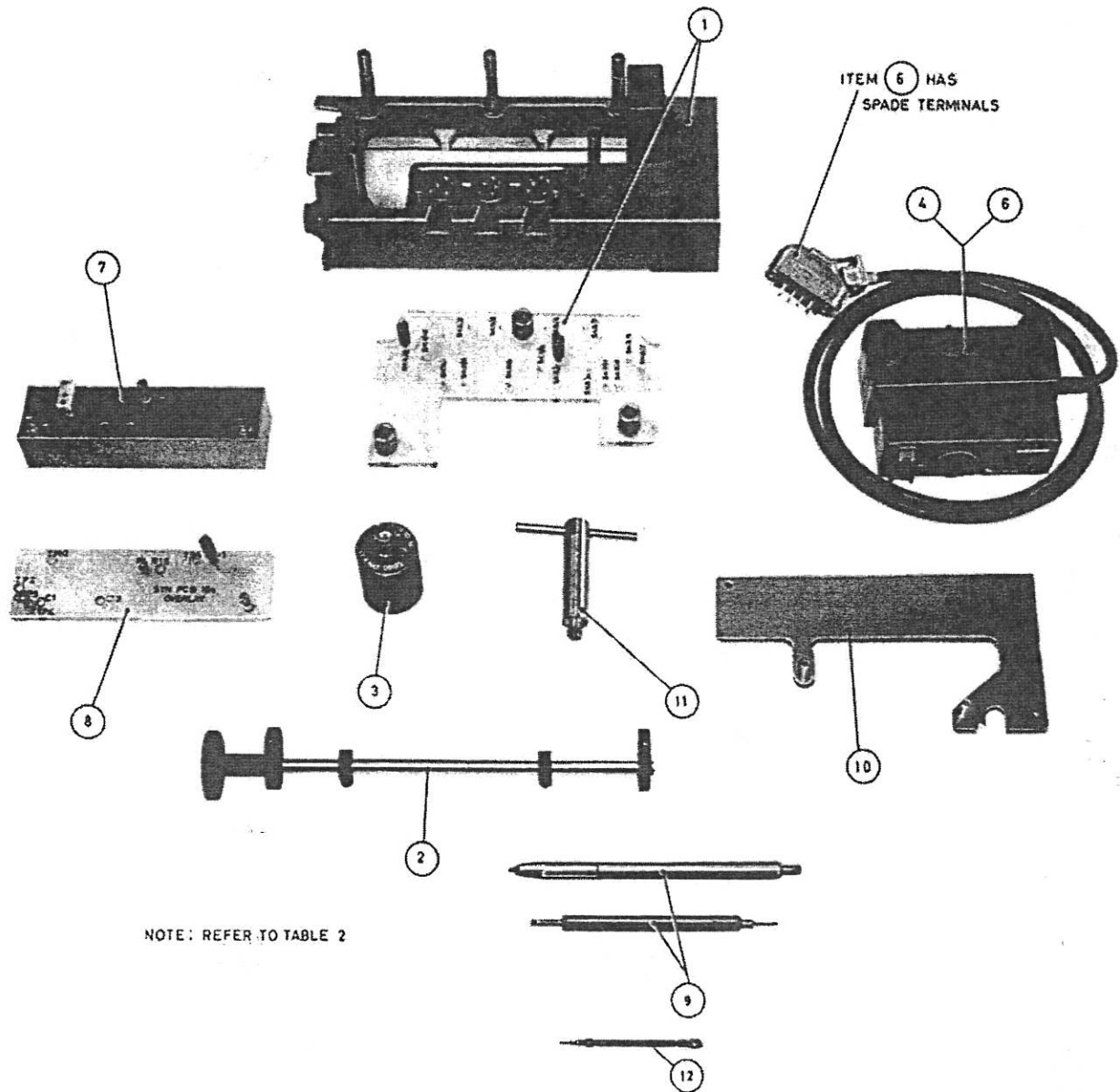


Fig 1 – RT349 field repair test kit



22. The power lead (item 6, Table 2) serves the same purpose as items 4 and 5 but connects to any permitted d.c. supply where protection is not provided against transients, overvoltage and reverse polarity.
23. The dummy synthesizer cover (item 7, Table 2) provides access to preset controls and a test point required for alignment purposes following repair. When alignment is completed, the dummy cover is removed and the normal cover is re-fitted.
24. The synthesizer sub assy 10a overlay (item 8, Table 2) is fitted over the track of board 10a, and provides access to test points in a manner such as to avoid the damaging effects of accidentally applying short-circuits between adjacent tracks etc.
25. The synthesizer/motherboard mechanical alignment jig (item 10, Table 2) is used when re-fitting a synthesizer (assembly 10) to the motherboard following repair.
26. The mandrel is used to replace the insert, battery fixing following removal of a damaged item.
27. The trimming tools consist of a metal-tipped double-ended screwdriver, and a clutch pencil with a 'stick' of plastic-tipped screwdriver inserts. The button at one end of the pencil is pressed in order to open the clutch jaws and fit an insert.

GENERAL REPAIR INSTRUCTIONS

PRELIMINARY TEST

28. A fault condition could exist in an RT-349 causing it to be in a permanent send condition; this may damage the t.r.e., or common purpose test equipment, and hence the preliminary test described in para 67 must be carried out prior to any specification tests or repairs. Also, for the same reason, a headset must not be connected to the radio when using the t.r.e.

DRYING AND SEALING

29. Upon receipt of an RT-349 for repair, proceed as follows:
- a. Pressurise the equipment to 5 lbf/in² using dry air.
 - b. Using a leak locator (item 5, Table 1), carry out a dip test in a water tank and, if necessary, replace the appropriate seals or gaskets. The addition of a wetting agent will assist in the detection of leaks.
 - c. Open the equipment, in the driest possible conditions, and carry out all obvious repairs and replacements.
 - d. Place the opened equipment in the de-humidifier (T&M N 352); dry out for at least one hour at 50°C with dry air, from the pump, passing through the oven.
 - e. Following a cooling period, carry out as necessary electrical tests, repairs and re-alignment.
 - f. As soon as possible, following re-alignment, place the equipment in the oven for 15 minutes at 50°C.
 - g. Fit a new silica-gel sachet (Z1/4440-99-013-9203).

- h. Fit, as required, new gaskets smeared with grease XG271; seal the equipment in its box.
- j. Using dry air from the de-humidifier, pressurise the radio to 5 lbf/in²; repeat the dip test, using the leak locator, and check that no air bubbles appear.

SOLDERING AND DESOLDERING

- 30. The physical size of the synthesizer (assembly 10) and the close proximity of the adjacent soldered connections requires that extreme care must be taken when desoldering or resoldering. Prolonged application of heat could cause damage to printed-circuit boards, particularly when desoldering.
- 31. The suction soldering tool must be used for dismantling and desoldering the synthesizer. Select the soldering head which is compatible with the size of joint required. In order to avoid the risk of shorting adjacent pins or track, the bit diameter should not be greater than the 'land' between the pins or track. The suction soldering tool must be carefully maintained. The hole in the bit must be kept clear, and the extracted-solder-sump emptied regularly.
- 32. In order to provide maximum protection for the l.s.i. module against electrostatic build-up, the soldering iron and suction soldering tool must be properly earthed.

FITTING THE MOTHERBOARD ASSEMBLY INTO THE TEST JIG (PART OF F.R.T.K.)

- 33. a. Carry out the instructions in para 35 and 36.
- b. Set the SSW on the test jig to 0 (off) and FSS knobs on the test jig to 37.00MHz.
- c. Gently ease the motherboard assembly into the test jig, observing the following precautions:
 - (1) Tilt the assembly, slightly, towards the antenna socket pin to ensure satisfactory contact with the spring-connector on assembly 4.
 - (2) Ensure that the switch shafts engage satisfactorily with the knobs.
 - (3) Ensure that all the motherboard assembly fixing screws are correctly located before tightening; if necessary, ease the motherboard assembly towards the antenna socket pin, thus compressing assembly 4 spring-connector, in order to allow the fixing bushes to line up with the screw holes in the test jig.
- d. Screw-up and tighten the four long screws (A of Fig 2) and two short knurled pillar screws (B of Fig 2).
- e. Fit the test jig overlay and tighten the three knurled rings (C of Fig 2).

Note: This Page 13/14 supersedes Page 13/14 Issue 1 dated Jul 77.
Fig 2 has been updated.

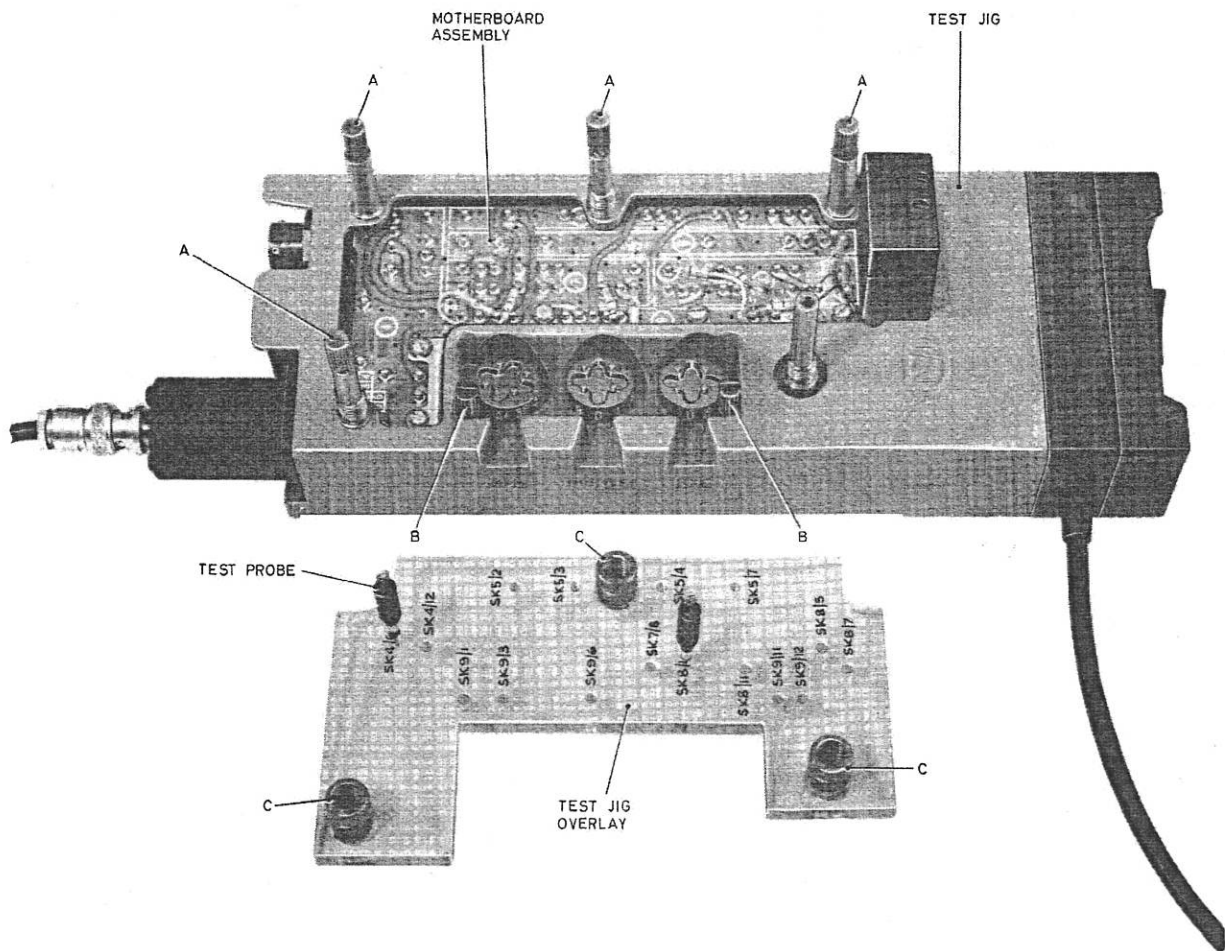


Fig 2 - Motherboard assembly fitted into test jig



DISMANTLING AND RE-ASSEMBLY

ORDER OF DISMANTLING

34. Following the preliminary test (para 67), before any fault-finding and repair work can be carried out on the RT-349, the motherboard with all assemblies should be removed and fitted into the motherboard test jig (item 1, Table 2) in accordance with the instructions in para 33. The order in which the remaining dismantling procedures are carried out will depend on where the fault exists; a guide to the order of dismantling is as follows:

- a. Fault in one of the assemblies 4 to 9; withdraw the faulty assembly from the test jig using the extractor tool (item 2, Table 2).
- b. Fault in synthesizer assembly 10; withdraw motherboard with all assemblies from the test jig and remove the assembly 10 from the motherboard.
- c. Fault on motherboard; using the extractor tool withdraw the assemblies 4 to 9 from the test jig. Remove motherboard and assembly 10. Remove assembly 10 from the motherboard.

DISMANTLING

Lid

35. Unscrew and remove the ten 2.5 mm pan-head screws with their crinkle washers that secure the lid to the box, and remove the lid and sealing gasket.

Motherboard with all assemblies

36. a. It is essential that the frequency setting switches are set to 37.000 before attempting to dismantle or re-assemble the radio.
- b. Holding the motherboard with all assemblies in the RT-349 box assembly, unscrew and remove the four 3.0 mm pan-head screws (that are recessed into the exterior of the box) and the four 3.0 mm socket-head screws (located in the four corners of the recess that accommodates the frequency setting switch knobs) complete with their Dowty sealing washers.
- c. Gently ease out the motherboard with all assemblies from the box; this will disengage the spring connector on assembly 4 from the antenna socket pin. The motherboard with all assemblies can now be completely withdrawn from the box, attached only by the cableform.
- d. Carefully remove the cableform plug from the motherboard assembly.

Motherboard

37. a. Using the extractor tool, withdraw assemblies 4 to 9 (para 38).
- b. Carry out the instructions in para 36.
- c. Remove assembly 10 from the motherboard (para 40).

Assemblies 4 to 9

(Fig 3)

38. Assemblies 4 to 9 have extraction key-hole slots in the screening covers; spigots on the extractor tool (item 2, Table 2) engage with these slots in order to withdraw the assemblies. The adjustable cam on the extractor tool is set to one of two positions as follows:

- a. For assemblies 5 to 9: to the extreme end-stop.
- b. For assembly 4: to the centre stop.

- 39.
- a. Turn the two cams on the extractor tool so that the white dot is uppermost.
 - b. Place the extractor tool above the assembly to be withdrawn and such that each cam is in contact (Fig 1) with the machined face on the box or the motherboard assembly test jig (item 1, Table 2).
 - c. Locate and lock the two spigots into the two key-hole slots.
 - d. Turn the knurled knob until the pins are withdrawn from the motherboard.

CAUTION: Attempted removal of assemblies without using the extractor tool can cause bending or damage to the assembly connecting pins.

Assembly 10 (synthesizer)

- 40.
- a. Carry out the instructions in para 36.
 - b. Prise off all the clips, terminating the flying leads, from the motherboard sockets (F 602, Fig 2005).
 - c. Unscrew and remove the five 2.5 mm pan-head screws and washers fixing assembly 10 to the motherboard.

Synthesizer sub assemblies 10a, 10b and 10c

41. Prior to dismantling assembly 10 (in order to provide maximum protection, for the l.s.i. module, against electrostatic build-up) the three frequency setting switches must be turned - using a suitable screwdriver - to the positions representing 45.975MHz; this must also be carried out prior to re-assembly if new switches are to be fitted.

42. Refer to F 602, Fig 2006. Locate the three frequency setting switches and note that the index marks, on the fixed and movable parts of each switch, are aligned; this setting of the switches represents 37.00MHz; hence, turn each switch in a clockwise direction, as follows:

- a. MHz switch: to the 8th position from the present setting.
- b. 100kHz switch: to the 9th position from the present setting.
- c. kHz switch: to the 3rd position from the present setting.

The soldering and desoldering tools must be properly earthed (see para 30).



Note: This Page 17/18 supersedes Page 17/18 Issue 1, dated Jul 77.
Fig 3 has been updated.

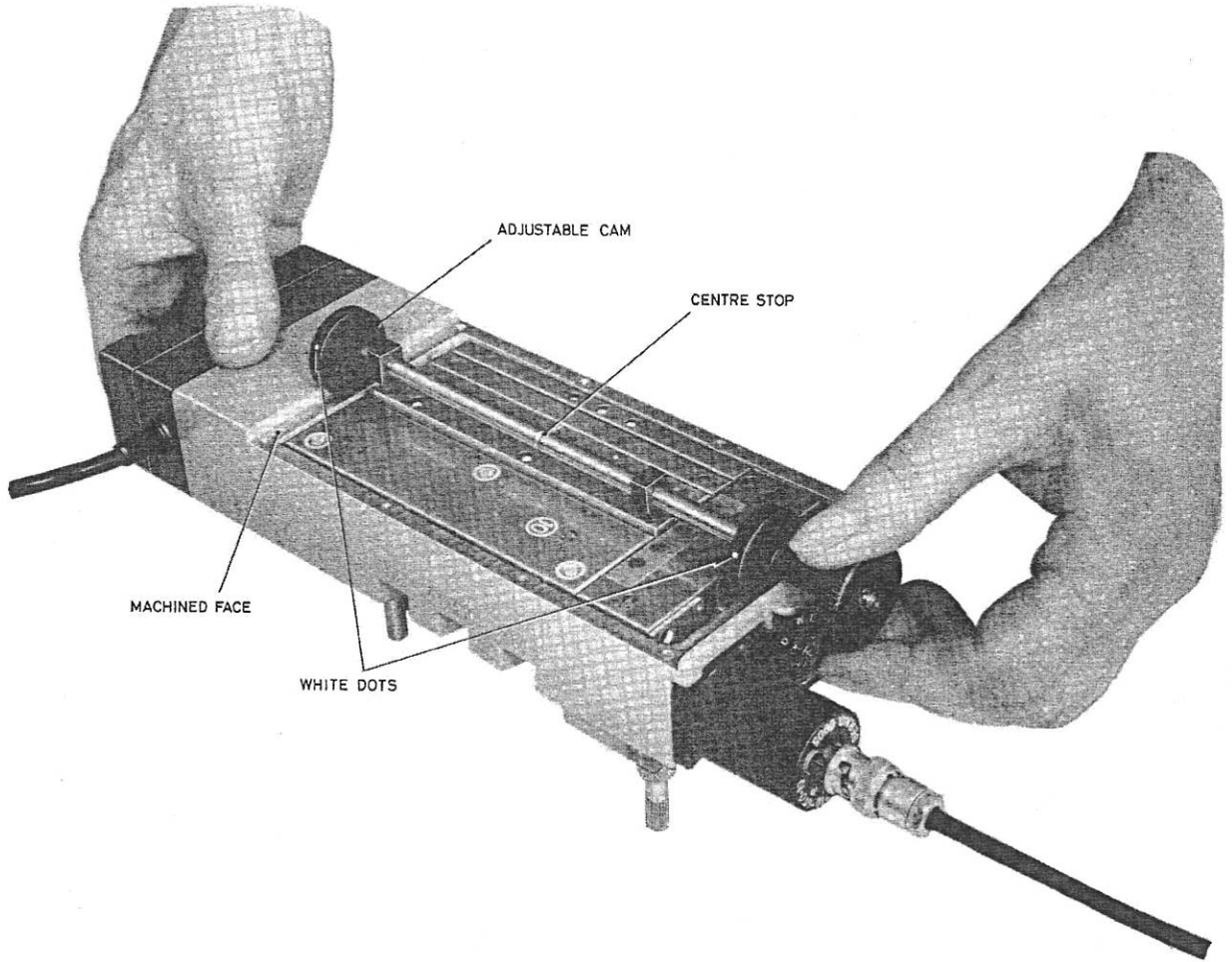


Fig 3 - Use of assembly extractor tool





Sub assembly 10a

43. a. Carry out the instructions in para 41 and 42.
- b. Remove the cover (three screws).
- c. Unsolder the flying leads numbered 3 and 13 from board 10a.
- d. Unsolder (or cut) the eight interconnecting leads between boards 10a and 10b.
- e. Remove the three screws and washers securing board 10a to board 10b, and remove board 10a.

Sub assembly 10b

44. a. Carry out the instructions in para 43.
- b. Unsolder the remaining six flying leads (numbered 1,6,9,8,10 and 11) from board 10b.
- c. Unsolder (or cut) the twelve interconnecting leads between board 10b and the FSS (sub assembly 10c).
- d. Unscrew and remove the six tapped spacers with their crinkle washers and remove board 10b.

Sub assembly 10c.

45. Carry out the instructions in para 43 and 44.

Antenna socket

46. Remove the four 3.0 mm pan-head screws and washers in order to release the antenna socket.

Escutcheon plate

47. Remove the two 2.0 mm pan-head screws and washers in order to release the escutcheon plate.

Audio socket, system switch and wiring harness

48. a. Set the system switch to '0', ie index marks on switch are aligned.
- b. Remove the motherboard with all assemblies in accordance with the instructions in para 36.
- c. Unsolder the red lead from that system switch pin which is connected to the positive battery terminal.
- d. Remove the escutcheon plate (para 47).
- e. Unscrew the two 3.0 mm socket-head screws and Dowty sealing washers securing the system switch.
- f. Unscrew the nut retaining the audio socket; withdraw the complete assembly from the inside of the box.

Knobs

49. a. Remove the motherboard with all assemblies in accordance with the instructions in para 36,
b. Each knob is held by an internal circlip which can be removed using suitable circlip pliers.

Insert, battery fixing

50. Using suitable pliers, unscrew the damaged insert.

RE-ASSEMBLY

51. In the main, re-assembly procedures are the reverse to dismantling, and are only given where considered necessary.

Insert, battery fixing

52. a. Ensure that the new insert and the casting boss are free of grease.
b. Apply adhesive Loctite Studlock grade 270 to the casting boss.
c. Fit the new insert to the mandrel (item 11, Table 2) and screw it into the casting boss.
d. Allow approximately three hours for the adhesive to set before removing the mandrel.

Knobs

53. Ensure that the knob shafts and holes in the casting are clean. Lubricate with grease MX 33.

Synthesizer sub assemblies 10a, 10b and 10c

Sub assemblies 10b and 10c

54. If the switch assembly 10c is being replaced, set the three frequency setting switches in accordance with paras 41 and 42. Re-assembly instructions are the reverse to those in para 44; however, the earth link which connects all three sub assemblies should be replaced as shown in F 602, Fig 2010, Note 2. If a new sub assembly 10b is being fitted, a protection clip will be fitted to the l.s.i. (ML1); remove this clip after fitting and soldering sub assembly 10b to sub assembly 10c, then cut the l.s.i. pins to within 0.8 mm.

Sub assembly 10a

55. Re-assembly instructions are the reverse to those of para 42. Finally, reset the three frequency setting switches to 37.000 ie the positions where the index marks on the fixed and movable parts of each switch are aligned (F 602, Fig 2010); use a suitable screwdriver to do this.

Note: These Pages 21-32 supersede Pages 21-32 Issue 1 dated Jul 77. They have been amended throughout.

Assembly 10 (synthesizer)

56. Re-assembly instructions are the reverse to those in para.40. However, the synthesizer should be positioned with respect to the motherboard by using the mechanical alignment jig (item 10, Table 2). Fit the synthesizer initially with the five 2.5 mm screws and washers not tightened. Fit the jig (Fig 5) ensuring that all four dowels are properly located in the relevant holes, then tighten the five screws. Ensure that the flying leads are clipped to the correct terminals on the motherboard (F 602, Fig 2005).

Audio socket, system switch and wiring harness

57. Re-assembly instructions are the reverse to those in para 48; when fitting the two securing screws, use new Dowty sealing washers if required (Tels F 602, item 9, Table 2002), lightly smeared with grease XG271. To ensure correct alignment of the system switch knob with the switch, proceed as follows:

- a. Set the system switch knob to the O (off) position.
- b. Using a suitable screwdriver, set the switch to the position where the fixed and movable index marks are aligned (F 602, Fig 2005).

Fitting assemblies to motherboard

58. a. Carry out the instructions in para.56.
- b. Carefully fit the remaining assemblies to the motherboard. The arrows on the top of the assembly screening covers point towards the front panel (antenna socket, audio socket and system switch).
 - c. If difficulty is experienced fitting assembly 4, first remove assembly 6.

Note: Contact finger on assembly 6 and mating area on side of assembly 4 must be kept clean using suitable degreasing agent eg. acetone to ensure good contact.

Motherboard with all assemblies

59. The motherboard with all assemblies is fitted into the box as follows:
- a. Fit the polarized cableform plug to the motherboard socket.
 - b. Gently ease the motherboard assembly into the box, observing the following precautions:
 - (1) Tilt the assembly, slightly, towards the antenna socket pin to ensure satisfactory contact with the spring-connector on assembly 4.
 - (2) Ensure that all switches engage satisfactorily with the knobs; refer to para 55.
 - (3) Fit a new Dowty sealing washer if required (Tels F 602, Table 2002, item 38), lightly smeared with grease XG271, to each of the eight motherboard securing screws.
 - (4) Ensure that all the motherboard assembly fixing screws are correctly located before tightening to 0.35-0.39 Nm (50-55 oz in); if necessary, ease the motherboard assembly towards the antenna socket pin, thus compressing assembly 4 spring-connector, in order to allow the fixing bushes to line up with the screw holes in the box.



(5) Ensure that the cableform is located along the side of the box and not pinched between the underside of the motherboard assembly and the casting bosses within the box.

Lid

60. Before re-fitting the lid, lightly smear the gasket with grease XG271. Tighten the ten securing screws to 0.35-0.39 Nm (50-55 oz in) in the sequence shown in Fig.4.

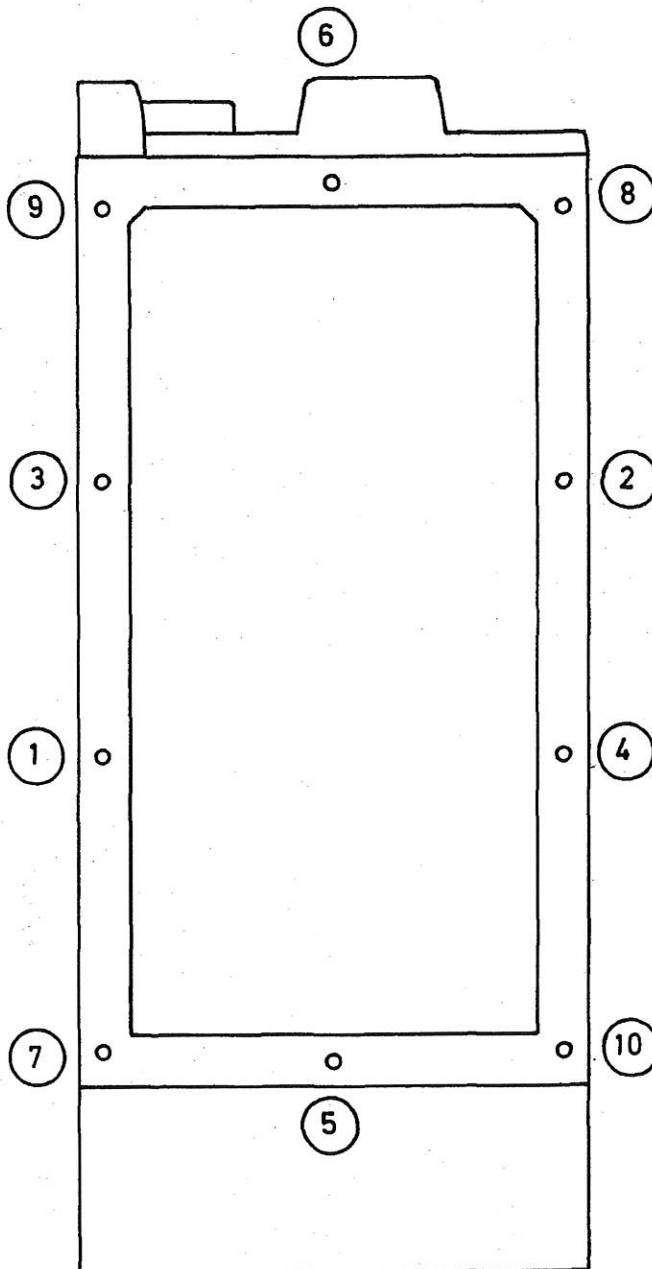


Fig.4 - Screw tightening sequence



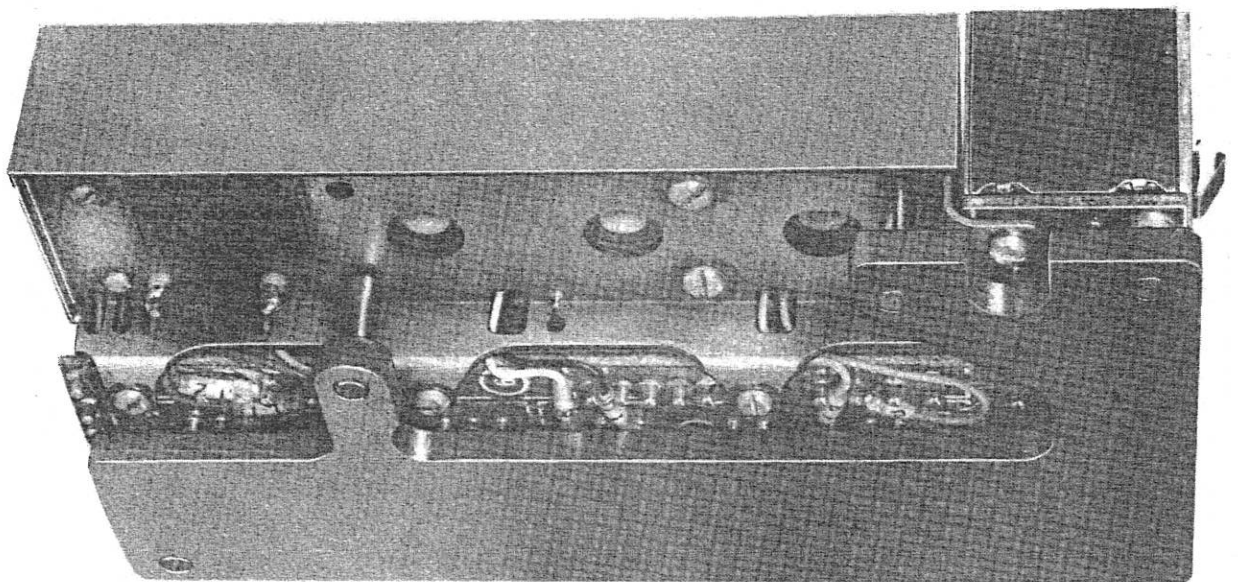
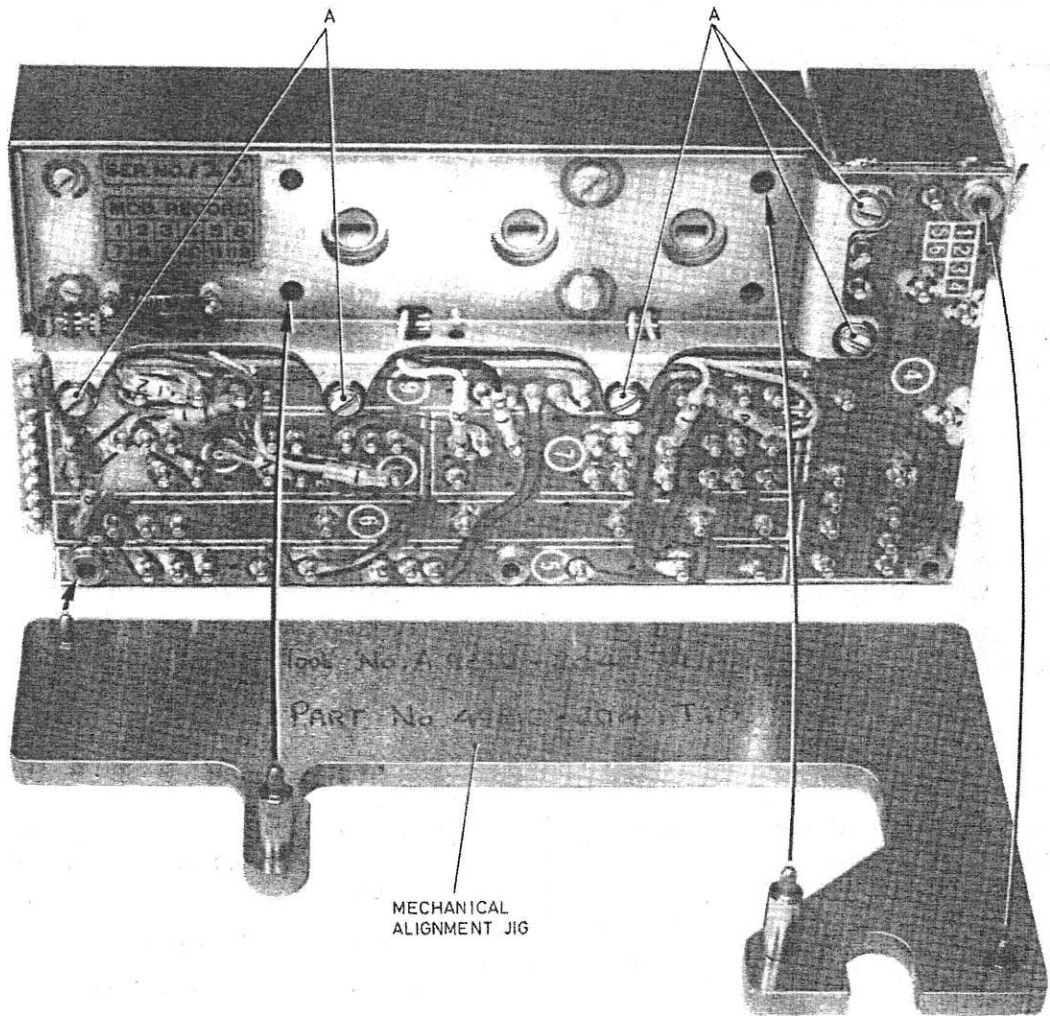


Fig 5 - Fitting synthesizer-to-motherboard mechanical alignment jig

