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Despite the above, we will be making copies of essential technical information (circuit diagram, parts list, layout) freely available to all via our website from late 2004 onwards. This will be done to try and encourage and enable the maintenance of our remaining stock of vintage electronic equipment.

### Guidance on using this electronic document

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- 2. Select the correct printer if necessary.
- 3. Select the pages you want to print even if you want to print all of the document, you will probably not want to print this notice and help page, so start the printing at page 3.
- 4. In the "Page Handling" area, next to "Page Scaling", select "Fit to paper". The press "OK"

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Please get in touch with me at archivist@vmarsmanuals.co.uk.

Richard Hankins, VMARS Archivist, Summer 2004

ELECTRICAL AND MECHANICAL ENGINEERING REGULATIONS

(By Command of the Defence Council)

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### RECEIVER, RADIO, EDDYSTONE, 730/4

### TECHNICAL HANDBOOK - MISCELLANEOUS INSTRUCTION

SUB-TITLE: 750mA fuses

Note: This Issue 2, Page 1, supersedes Issue 1, Page 1, dated 6 Jun 58.

### SUMMARY

1. When this radio set (Z1/5820-99-420-7911) is initially switched on from cold, or switched on at any time up to one minute after being switched off, one or both of the fuses have been found to blow, although the eventual steady current consumption of the set is less than 750mA. This is due to momentary current surges in excess of the capacity of the fuse.

### ACTION

2. When a fuse failure occurs it should be replaced by Fuse, cartridge, 750mA, slow blow (X2/5920-99-940-2515).

T/60922/1 (TELS)

ELECTRICAL AND MECHANICAL ENGINEERING REGULATIONS
(By Command of the Army Council)

TELECOMMUNICATIONS E 749 Misc Instr No 2

RECEPTION SET, EDDYSTONE, 730/L, ZL/ZA 51262

TECHNICAL HAIDBOOK - MISCELLAMEOUS INSTRUCTION

Adjustment and lubrication of tuning drive

### SUMMARY

1. Cases have been reported of the tuning drive of the Reception set, Eddystone, 730/4 becoming very stiff to operate, with erratic movement of the dial pointer and jerking of the logging scale. This is partly due to the tuning knob spindle seizing in its bush, but it has also been found that the flywheel has a tendency to work loose and to foul the friction drive. This instruction details action to be taken on both these points.

Issue 1, 12 Dec 58

Distribution - Class 1235 Code No 4

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### RESTRICTED

TELECOMUNICATIONS E 749 Misc Instr No 2 ELECTRICAL AND MECHANICAL ENGINEERING REGULATIONS

### DETAIL

- 2. Remove the tuning knob from the spindle. Dismantle the front panel bush. Disengage the friction drive at the rear of the tuning spindle and either remove or manoeuvre the spindle so that the part which is normally within the front panel bush is accessible. Clean the spindle and bush with carbon tetrachloride and lubricate both with Oil, OM13. Reassemble the tuning drive, taking care, when replacing the knob that there is no lateral play in the spindle. Oil, OM13 only, will be used for any subsequent lubrication of the tuning spindle.
- 3. Check the position of the flywheel and ensure that it cannot foul any other components of the drive and can rotate freely. When this has been done, the grubscrew which secures it to its shaft will be firmly tightened and secured with Varnish, bakelite (HA 11018) or Dulux red. The checks given in this paragraph will be carried out periodically.

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ELECTRICAL AND MECHANICAL ENGINEERING REGULATIONS
(By Command of the Army Council)

TELECOMMUNICATIONS
E 749 Misc Instr No 3

RECEPTION SET, EDDYSTONE, 730/4 (Z4/ZA 51262)

### TECHNICAL HANDBOOK - MISCELLANEOUS INSTRUCTION

### Possible damage to cursor guide

### Summary

1. When the Reception set, Eddystone, 730/4 is being replaced in its cabinet, owing to the small clearance between the cabinet and the cursor slide rails, it is possible for the cursor guide to foul the edge of the cabinet and thus be damaged.

### Action

2. Before attempting to replace the reception set in its cabinet, first set the dial cursor to mid scale, the cursor guide is then protected by the cursor rail support bracket.

57/M/7557

END

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ELECTRICAL AND MECHANICAL ENGINEERING REGULATIONS (By Command of the Army Council)

TELECOMMUNICATIONS E 749 Misc Instr No 4

### RECEPTION SET, EDDYSTONE, 730/4 (Z1/Z1. 51262) TECHNICAL HANDBOOK - MISCELLANEOUS INSTRUCTION

### S-meter zero adjustment potentiometer

### Summery

The S-meter zero adjustment potentiometer R60 of the Reception set, Eddystone, 730/4 is secured to the front panel of the set by a single nut and shakeproof washer. If the nut should work loose and the body of the potentiometer turn the live tag is likely to touch adjacent earthed metal parts, with consequent severe damage to other components due to the passage of excessive current.

### Action

The fixing nut of potentiometer R60 will be inspected, and tightened if 2. necessary, at frequent intervals. If the nut is found to be loose at any time it will be ascertained after tightening that the tags are not too close to or touching earthed parts of the set.

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END

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ELECTRICAL AND MECHANICAL ENGINEERING REGULATIONS
(By Command of the Army Council)

TELECOMMUNICATIONS
E 749 Misc Instr No 5

## RECEPTION SET, EDDYSTONE, 730/4, Z4/ZA51262 TECHNICAL HANDBOOK - MISCELLAREOUS INSTRUCTION

### Distribution amendment

### SUMMARY

1. Regulations covering Reception set, Eddystone, 730/4 will in future be distributed under class 1190.

### DETAIL

2. The following Regulations will therefore be amended to read class 1190:-

Tels E 740 Issue 1, dated 23 Sep 58 Tels E 749 Misc Instr No 1 Issue 1, dated 6 Jun 58 Tels E 749 Misc Instr No 2 Issue 1, dated 12 Dec 58 Tels E 749 Misc Instr No 3 Issue 1, dated 23 Mar 59 Tels E 749 Misc Instr No 4 Issue 1, dated 23 Mar 59

3. Units not in possession of the above-mentioned Regulations should demand copies through the usual channels.

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EMD

Issue 1,29 Mar 60

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Distribution - Class 1190. Code No 4

ELECTRICAL AND MECHANICAL
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TELECOMMUNICATIONS
E 749 Misc Instr No 6

RECEPTION SET, EDDYSTONE, 730/4 (Z1/ZA 51262)

### TECHNICAL HANDBOOK - MISCELLANEOUS INSTRUCTION

### Summary

1. Extant regulations in the decade E 740-749 quote the wrong vocabulary section in Part No.

### Action

2. Delete 'Z4' and insert 'Z1' in the titles of the following EMERs.

Tels E 740
Tels E 742 Part 1
Tels E 742 Part 2
Tels E 743
Tels E 744 Errata
Tels E 744
Tels E 749 Misc Instr No 2
Tels E 749 Misc Instr No 3
Tels E 744 Errata
Tels E 749 Misc Instr No 4
Tels E 749 Misc Instr No 5
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ELECTRICAL AND MECHANICAL
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(By Command of the Defence Council)

TELECOMMUNICATIONS
E 749 Misc Instr No 7

### RECEPTION SET, EDDYSTONE, 730/4 (Z1/ZA 51262)

### TECHNICAL HANDBOOK - MISCELLANEOUS INSTRUCTION

SUB-TITLE: R64, resistor check

### SUMMARY

- 1. Valve, electronic CV4009 may be supplied in lieu of CV454 for use as V12. This may result in B.F.O. instability.
- 2. R64 (V12 screen resistor) was altered in value during production to preclude this possibility.

Issue 1, 8 May 67 Distribution - Class 335. Code No 3

Page 1

### RESTRICTED

TELECOMMUNICATIONS
E 749 Misc Instr No 7

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### ACTION

- 3. Check the value of resistor R64 when the opportunity arises.
- 4. If it is found to be 68k ohms, replace it by resistor 330k ohms,  $\pm 10\%$ , 1/2 watt, Z/5905-99-022-3102.

I/60922/13(TELS)

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### RECEPTION SET, EDDYSTONE 730/4 (Z1/ZA 51262)

### TECHNICAL HANDBOOK - MISCELLANEOUS INSTRUCTION

Note: These Fages 1-2, Issue 2, supersede Pages 1-2, Issue 1, dated Dec 70. Fig 1 has been amended.

SUB-TITLE: D.C. supply plug and socket and a.c. shorting plug - replacement

### 1. SUITMARY

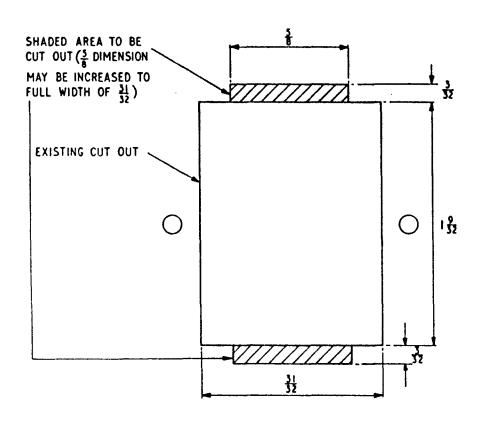
Socket free 12-pole 5935-99-949-3855 (formerly ZA 51508) is no longer obtainable. When present stocks are exhausted the replacement item will be 5935-99-913-3537. However this has a different retainer and necessitates modification to the chassis on which the mating fixed plug is fitted.

2. Plug fitted 12-pole 5935-99-949-3854 (formerly ZA 51509) is also no longer obtainable. The replacement item is 5935-99-972-8225 but this is fitted with a different type of retaining device.

### 2. ACTION

When either of the above two replacement items are issued in lieu of the original fittings on the above radio receiver, it will be necessary to increase the chassis cut-out as shown in Figure 1 to accept the retaining clip.

3. After chassis modification, the original fixed plug may still be utilized and will accept the replacement free socket but no adaptation can be made to permit the original free socket to be retained by the replacement fixed plug when fitted. If a replacement type fixed plug is fitted it will be necessary to fit also a replacement type free socket.



LOWER EDGE OF CHASSIS

60928/1

DIMENSIONS IN INCHES

Fig 1 - Chassis cut-out modification

T/60922/D & M (TELS)

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### RECEPTION SET, EDDYSTONE 730/4 (Z1/ZA 51262)

### TECHNICAL HANDBOOK - MISCELLANEOUS INSTRUCTION

Rear panel - protection of plugs

### INTRODUCTION

If the set is laid on its back the plugs on the rear panel can be damaged. To prevent this a spacer foot is to be fitted at each corner on the back of the case to ensure the plugs are clear of the surface on which the set is laid. The case securing screws have to be replaced by longer ones to accommodate the spacer feet.

### ACTION

2. The following items will be required:

COSA Sect	Part No	Designation	<u>Qty</u> per eqpt
В2	6920-99-962-1619	Foot	4
G1	5305-99-101-3725	Screw, steel, flat fillister head, slot drive, 2 BA x 1.1/4 in.	4

- (1) Referring to Tels E 742, Part 1, Fig 3 remove and discard the four existing case-securing screws.
  - Position one foot at each corner of the case and secure using the new longer screws.

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TR/40140