AMPLIFIER, R.F., No. 2
MODIFICATIONS
MODIFICATION INSTRUCTION No. 1
(Amplifier, R.F., No. 2, Mk. I)

SUMMARY
This instruction covers the conversion of Amplifier, R.F., No. 2, Mk. I to Amplifier, R.F., No. 2, Mk. II.

Item affected:
Amplifier, R.F., No. 2, Mk. I (ZA.10395)

Action required by R.E.M.E. personnel concerned.

Stores required:

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>No. off per equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZA.20732/1</td>
<td>Amplifier, R.F., No. 2, Mk. I; fan modification kit.</td>
<td>1</td>
</tr>
</tbody>
</table>

Units in U.K. will demand the above stores from the Commandant, C.O.D., Donnington. Authority for demand (to be quoted on all indents), T/W.114. These stores will be issued to overseas theatres without demand.

DETAIL
1. Amplifier, R.F., No. 2, Mk. I is not capable of continuous operation on send due to overheating. Existing amplifiers of this type will therefore be converted to conform with Mk. II design, which possesses a cooling fan fitted to the rotary transformer. The detailed instructions for fitting cooling fan are included in the modification kit.

2. For all accounting purposes this modification will be known as T/W.114.

END

Issue 1, 10 Apr. 1944

Distribution—Code No. 3
AMPLIFIER, R.F., NO. 2
MODIFICATION INSTRUCTION NO. 2
(Amplifier, R.F., No. 2, Mks. I and II)

SUMMARY
1. This instruction covers the modifications necessary when replacing condensers Y24A (C6A-D) by condensers Y24B, as used in the Amplifier, R.F., No. 2, Mk. II.

2. Items affected:
   Condenser Y24A (ZA 16704)


4. Stores required:
   Cat. No.   Description   No. off per equipment
   ZA 21522  Condenser Y24B   1
The above stores will be issued as normal maintenance spares.

DETAIL
5. (a) Condenser Y24B has been fitted to Amplifier, R.F., No. 2, Mk. II, as the previous type of condenser (condenser Y24A) was not capable of withstanding the high R.F. voltage and temperatures encountered. Consequently it has been decided to provide the new type of condenser for the maintenance of Amplifier, R.F., No. 2, Mks. I and II. The following modifications will be necessary when replacing condenser Y24A by condenser Y24B.

(b) C6A-D is located on top of the chassis immediately behind the set-flick mechanism.

(c) Remove condensers Y24A (four condensers complete with bracket).

(d) Remove the input coil L1A, to avoid damaging it in the subsequent drilling operation.

(e) Drill one hole 3/8 in. dia. (22 drill) as shown in Fig. 1.

(f) Mount the new condenser and connect up (normally the horizontal condenser tag is connected to the chassis end of the P.A. coil and the vertical one to the top end).

(g) Replace L1A.

(h) Test the amplifier.

Encl. 2 to 57/Mtce./776

END
AMPLIFIER, R.F., NO. 2, MTS. I AND II

Note. This replaces and cancels Tels. K 317 Mod. Inst. No. 2, Issue 1.

Information


Action


3. Equipments already modified will not be restored to their previous condition, but no other equipments will be modified.

4. If stores have already been received they will be returned to the nearest Ordnance depot holding similar stores and used for maintenance purposes.

5. For all accounting purposes this modification will be known as - T/7/B0/1.

D.M.E. Encl. No. 2 to 57/Maint./776.

ED

Issue 2, 20 Jun. 1945

Distribution - Class 870. Code No. 3
AMPLIFIER, R.F., No. 2

(Aerial tuning inductance No. 17)

Note: This replaces and cancels Tels. K 317 Mod. Inst. No. 3, Issue 3. This issue is identical with Issue 2.

SUMMARY

1. The wire on the present aerial tuning inductance becomes sufficiently dirty to produce an intermittent contact with the contact wheel. New sets are being fitted with a contact wiper, and existing sets will be modified accordingly.

Time required to perform modification - 2 man-hours.

2. Items affected:

Aerial tuning inductance, No. 17 (ZA 15372)

3. Action required by R.E.M.E. personnel concerned at the request of the unit holding the equipment. Priority 'B'.

4. Stores required:

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>No. off per equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ZA 22272</td>
<td>Springs, clamping, No. 2</td>
<td>2</td>
</tr>
<tr>
<td>2 ZA 21201</td>
<td>Wiper, contact No. 1</td>
<td>1</td>
</tr>
<tr>
<td>3 CA 1879</td>
<td>W.D. Grease No. 0</td>
<td>as required</td>
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</table>

Units in the U.K. and overseas theatres will demand items (1) and (2) from the Commandant, C.O.D., Donnington. Item (3) will be obtained from R.A.S.C. stores through the normal channels. Authority for demand (to be quoted on all indents) - T/W 140.

5. Stores returned: Nil.

DETAIL

6. Examine the equipment concerned and if the Aerial tuning inductance No. 17 does not possess a contact wiper, proceed as follows:-

7. Rotate the AERIAL TUNING INDUCTANCE knob until the contact wheel is brought to the stop nearest the front panel, and lock the knob with the locking device.

8. The spindle carrying the contact wheel is held at each end by flat springs, and these have to be reinforced. To do this proceed as follows:-

   (a) Remove the securing screws from one spring at a time, and between it and the insulated tie-bar, holding the ends of the complete assembly together, insert the new strengthening spring (Spring, clamping, No. 2, ZA 22272). One of these will be needed for each of the two springs concerned.

   (b) When replacing the securing screws, engage, for the time being, the first threads only, leaving the pressure on the contact wheel as slack as possible.
9. Insert the contact wiper (Wiper, contact, No. 1, ZA 21201) under the contact wheel, so that the wheel is located in the central slot in the contact wiper, and the wheel boss rides in the radiused form in the middle of the wiper. Ensure that supporting springs at either end of the spindle are not strained. Again see that the wheel is engaged with correct turn - the one from which it was originally removed and that the ends of the contact wiper also make contact with this same turn.

10. Tighten the screws at each end of the tie-bar, thus applying the necessary tension to the wheel and the wiper.

11. Unlock the AERIAL TUNING INDUCTANCE knob, lubricate the wheel boss with a little anti-freeze grease (W.D. Grease 0) and run the wheel up and down the coil a few times.

12. Record completion of modification on modification recording card (if fitted) against number - T/W 140.

END
Table 1 - Comparison of schematic reference numbers

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<th>New</th>
<th>Old</th>
<th>New</th>
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</thead>
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<td>C7</td>
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<tr>
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END