

TECHNICAL SERVICE INSTRUCTIONS  
ISSUED BY  
KRIESLER AUSTRALASIA PTY. LTD.

## 11-4 RECEIVER A.C. MANTEL MODEL — COMPACT SERIES

**INSTALLATION INSTRUCTIONS.**—As recommended on "Label of Directions" that is to be found fastened externally on base of cabinet.

**MAINS SUPPLY.**—As indicated on "Label of Directions."

(Generally 240 volt A.C. 40-60 c.p.s.)

**WARNING.**—Before attempting to place the receiver in use, check the line voltage and frequency, and ascertain that the tapping of the transformer, located in the receiver, is set to correspond with the local voltage and frequency condition.

**FREQUENCY RANGES.**—Broadcast Band—540 K.C. to 1650 K.C.

### Shortwave Band—18 M.C. to 6 M.C.

The frequency ranges indicated above are common to every 11-4 receiver unless information to the contrary is given on the relevant instruction sheet.

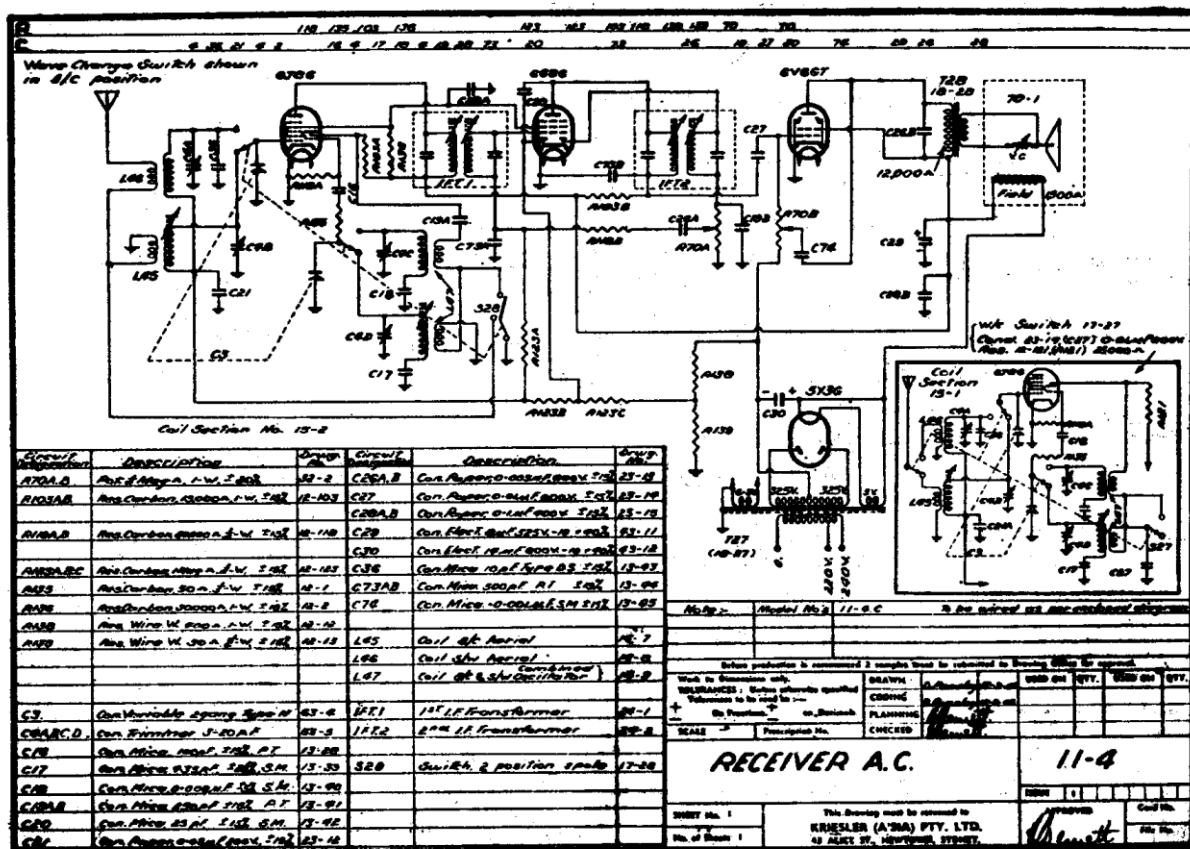
**CONTROLS** (left to right).—TONE, VOLUME, BAND SELECTOR, TUNING.

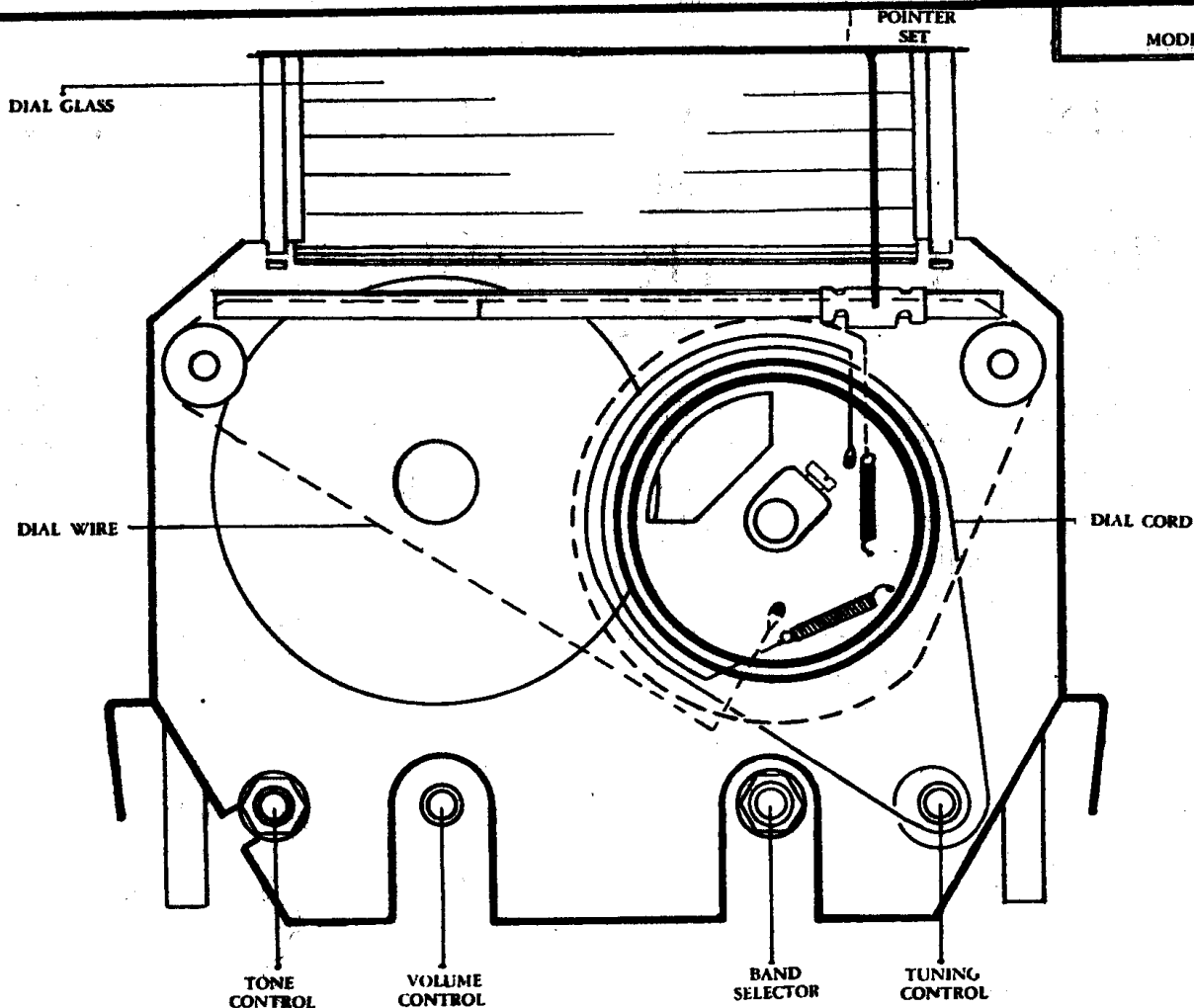
**CABINET.**—Standard moulded bakelite type comprising—

- 1—Top Part No. 20-3.  
1—Base Part No. 20-5.  
4—Louvres Part No. 20-4.

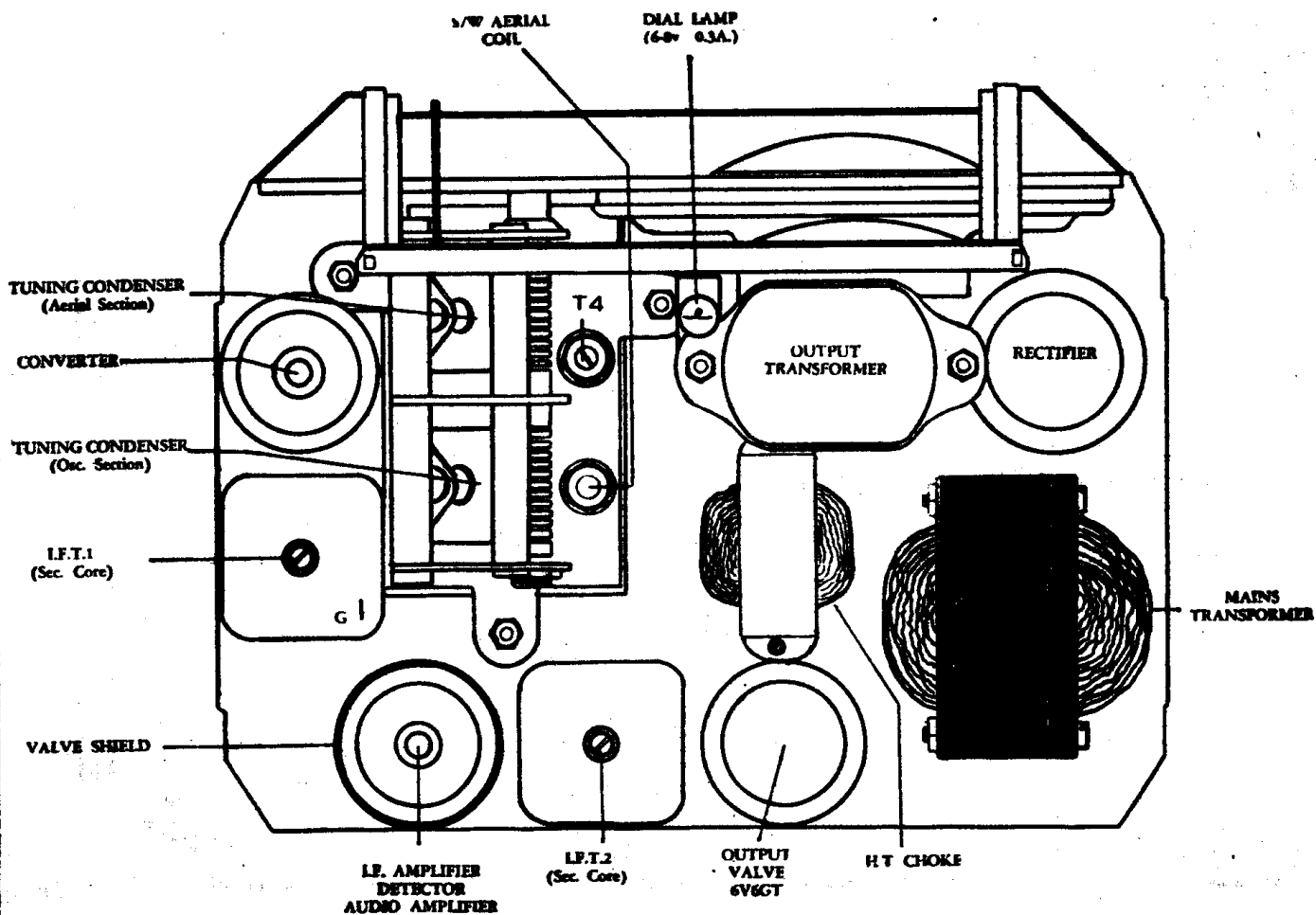
**IMPORTANT.**—When making enquiries concerning any particular receiver please quote full model number and serial number, e.g.,

**Model 11-4A Serial 1625.**

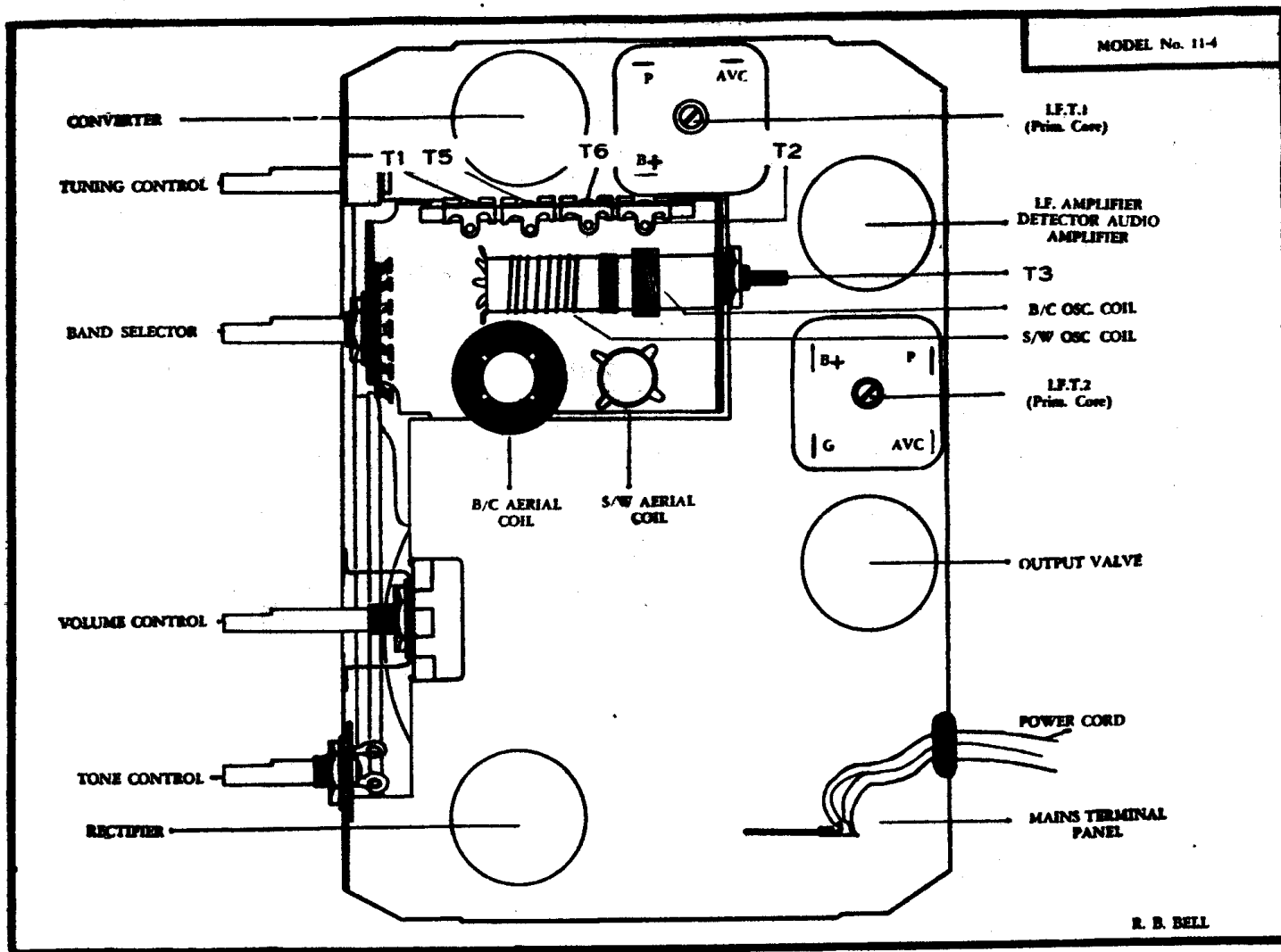




R. B. BELL



R. B. BELL



### MODEL 11-4A.

CIRCUIT: As on 11-4 circuit.

Diagram in lower right hand corner of sheet does not apply.

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-2 (Local stations). Part No. 50-1 (Country stations).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

### MODEL 11-4B.

CIRCUIT: As on 11-4 circuit, but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does apply).

(a) Tuning condenser changed from C3 to C95.

(b) Coil Kit changed from No. 15-1 to No. 15-4.

COIL KIT: Part No. 15-4 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-10 (Country stations). Part No. 50-11 (Local stations).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

#### MODEL 11-4C.

CIRCUIT: As on 11-4 circuit.

(Note: Enclosed diagram in lower right hand corner does apply).

COIL KIT: Part No. 15-1 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-1 (Country stations). Part No. 50-2 (Local stations).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

#### MODEL 11-4D.

CIRCUIT: As on 11-4 circuit, but with the following alterations:—

(Note: Enclosed diagram in right hand corner of sheet does not apply).

(a) Output transformer changed from 18-28 to 18-26.

(b) Tuning condenser changed from C3 to C95.

(c) Coil Kit Unit changed from 15-2 to 15-5.

(d) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard tone control lead to 6V6GT plate. Connect C27 between moving arm of tone control and chassis.

(e) H.T. Choke (28-3) to replace field of 70-1 speaker.

(f) Add R37 (B + series dropping resistor 1250 ohms 5 watt) in series with H.T. Choke.

(g) Speaker changed from 70-1 to 70-8.

COIL KIT: Part No. 15-5 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-10 (Country stations). Part No. 50-11 (Local stations).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

#### MODEL 11-4E.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner does apply).

(a) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard tone control lead to 6V6G plate; then connect C27 between moving arm of tone control and chassis.

COIL KIT: Part No. 15-1 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-1 (Country stations). Part No. 50-2 (Local stations).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

#### MODEL 11-4F.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does apply).

(a) Speaker changed from 70-1 to 70-8.

(b) Output transformer changes from 18-28 to 18-26.

(c) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard tone control lead going to 6V6G plate. Connect C27 between moving arm of tone control and chassis.

(d) Add R37 (B + series dropping resistor (1250 ohms, 5 watt) in series with H.T. choke.

(e) H.T. Choke (28-3) to replace field of 80-1 speaker.

COIL KIT: Part No. 15-1 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-1 (Country stations). Part No. 50-2 (Local stations).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

### MODEL 11-4G.

CIRCUIT: As on 11-4 circuit, but with the following alterations:—

(Note: Diagram in lower right hand corner of sheet does not apply).

- (a) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard lead going to 6V6G plate. Connect C27 between moving arm of tone control and chassis.

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-1 (Country stations). Part No. 50-2 (Local stations).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

### MODEL 11-4H.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

- (a) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard tone control lead going to 6V6GT plate. Connect C27 between moving arm of tone control and chassis.

- (b) Add R37 (B + series dropping resistor 1250 ohms, 5 watt) in series with H.T. choke.

- (c) Speaker changed from 70-1 to 70-8.

- (d) Output transformer changed from 18-28 to 18-26.

- (e) H.T. Choke (28-3) to replace field of 70-1 speaker.

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-1 (Country stations). Part No. 50-2 (Local stations).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

### MODEL 11-4J.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does apply).

- (a) Tuning condenser changed from C3 to C95.

- (b) Coil Kit Unit changed from 15-1 to 15-4.

- (c) Speaker changed from 70-1 to 70-8.

- (d) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard tone control lead to 6V6GT plate. Connect C27 between moving arm of tone control and chassis.

- (e) Add R37 (B + series dropping resistor 1250 ohms 5 watt) in series with H.T. choke.

- (f) Output transformer changed from 18-28 to 18-26.

- (g) H.T. choke (28-3) to replace field of 70-1 speaker.

COIL KIT: Part No. 15-4 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-10 (Country stations). Part No. 50-11 (Local stations).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

### MODEL 11-4K.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

- (a) Tuning condenser changed from C3 to C95.

- (b) Coil Kit Unit changed from 15-2 to 15-5.

- (c) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard tone control lead to 6V6GT plate. Connect C27 between moving arm of tone control and chassis.

COIL KIT: Part No. 15-5 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-10 (Country stations). Part No. 50-11 (Local stations).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

### MODEL 11-4L.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner does not apply).

- (a) Speaker changed from 70-1 to 70-8.
- (b) Output transformer changed from 18-28 to 18-26.
- (c) Coil Kit Unit changed from 15-2 to 15-5.
- (d) Tuning condenser changed from C3 to C95.
- (e) Power transformer changed from 18-27 to 18-1.
- (f) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard lead going to 6V6GT plate. Connect C27 between moving arm of tone control and chassis.
- (g) H.T. choke (28-3) to replace field of 70-1 speaker.

COIL KIT: Part No. 15-5 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-10 (Country stations). Part No. 50-11 (Local Stations).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

### MODEL 11-4M.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Diagram in lower right hand corner of sheet does not apply).

- (a) Speaker changed from 70-1 to 70-8.
- (b) Output transformer changed from 18-28 to 18-26.
- (c) Power transformer changed from 18-27 to 18-1.
- (d) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard lead to 6V6GT plate. Connect C27 between moving arm of tone control and chassis.
- (e) H.T. choke (28-3) to replace field of 70-1 speaker.

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-1 (Country stations). Part No. 50-2 (Local stations).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

### MODEL 11-4P.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) was replaced by a two position switch, 0.02 uF 600v. condenser (C94) and 0.5 Megohm  $\frac{1}{2}$  watt (R117).  
Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.
- (b) Output transformer changed from 18-28 to 18-26.
- (c) H.T. choke (28-3) to replace field of 70-1 speaker.
- (d) Speaker changed from 70-1 to 70-8.
- (e) Power transformer changed from 18-27 to 18-1.

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-1 (Country stations). Part No. 50-2 (Local stations).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

### MODEL 11-4Q.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) was replaced by a two position switch, 0.02 uF 600v. condenser (C94) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

- (b) Output Transformer changed from 18-28 to 18-26.  
(c) H.T. choke (28-3) to replace field of 70-1 speaker.  
(d) Speaker changed from 70-1 to 70-8.  
(e) Power transformer changed from 18-27 to 18-1.  
(f) Tuning condenser changed from C3 to C95.  
(g) Coil Kit changed from 15-2 to 15-5.

COIL KIT: Part No. 15-5 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-10 (Country stations). Part No. 50-11 (Local stations).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

### MODEL 11-4R.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) was replaced by 2 position switch, 0.02 uF 600v. condenser (C94) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-1 (Country stations). Part No. 50-2 (Local stations).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

### MODEL 11-4S.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) was replaced by 2 position switch, 0.02 uF 600v. condenser (C94) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

- (b) Tuning condenser changed from C3 to C95.

- (c) Coil Kit changed from 15-2 to 15-5.

COIL KIT: Part No. 15-5 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-10 (Country stations). Part No. 50-11 (Local stations).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

OUTPUT TRANSFORMER: Part No. 18-28.

### MODEL 11-4T.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. (C95) condenser and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

- (b) Output transformer changed from 18-28 to 18-26.
- (c) H.T. choke (28-3) to replace field of 70-1 speaker.
- (d) Speaker changed from 70-1 to 70-8.
- (e) Power transformer changed from 18-27 to 18-1.
- (f) Coil Kit changed from 15-2 to 15-10.
- (g) Tuning condenser changed from C3 to C79.

COIL KIT: Part No. 15-10 (R.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-25 (Rear glass). Part No. 50-26 (Principal section).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

#### MODEL 11-4U.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C94) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

- (b) H.T. choke (28-3) to replace field of 70-1 speaker.
- (c) Power transformer changed from 18-27 to 18-1.
- (d) 6J8G valve replaced by ECH35 converter.
- (e) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).
- (f) Speaker changed from 70-1 to 70-8.

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-12 (Principal section). Part No. 50-25 (Rear glass).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

#### MODEL 11-4V.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C95) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

- (b) Tuning condenser C3 changed to C95.
- (c) Coil Kit 15-2 changed to 15-5.
- (d) 6J8G Valve replaced by ECH35 converter.
- (e) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).

COIL KIT: Part No. 15-5 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-22 (Principal section). Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

#### MODEL 11-4W.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

- (a) Tuning condenser changed from C3 to C95.
- (b) H.T. choke (28-3) to replace field of 70-1 speaker.
- (c) Speaker 70-1 changed to 70-8.
- (d) Power transformer 18-27 changed to 18-1.



- (e) Coil Kit 15-2 changed to 15-5.
- (f) 6J8G valve replaced by ECH35 converter.
- (g) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).
- (h) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard tone control lead to 6V6GT plate. Connect C27 between moving arm of tone control and chassis.

COIL KIT: Part No. 15-5 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-22 (Principal section), Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

#### MODEL 11-4X.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in right hand corner of sheet does not apply).

- (a) Speaker 70-1 changed to 70-8.
- (b) H.T. choke (28-3) to replace field of 70-1 speaker.
- (c) Power transformer 18-27 changed to 18-1.
- (d) 6J8G valve replaced by ECH35 converter.
- (e) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).
- (f) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard tone control lead to 6V6GT plate. Connect C27 between moving arm of tone control and chassis.

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASS: Part No. 50-12 (Principal section).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

#### MODEL 11-4Y.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C95) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).  
Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.
- (b) Speaker 70-1 changed to 70-8.
- (c) H.T. choke (28-3) to replace field of 70-1 speaker.
- (d) Power transformer 18-27 changed to 18-1.
- (e) Coil Kit 15-2 changed to 15-5.
- (f) Tuning condenser changed from C3 to C95.
- (g) 6J8G valve replaced by ECH35 converter.
- (h) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).

COIL KIT: Part No. 15-5 (A.W.A. Tuning Condenser).

DIAL GLASSES: Part No. 50-22 (Principal section), Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

#### MODEL 11-4Z.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in right hand corner of sheet does not apply).

- (a) Coil Kit 15-2 changed to 15-5.
- (b) Tuning condenser C3 changed to C95.

- (c) 6J8G valve replaced by ECH35 converter.
  - (d) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).
  - (e) Tone control condenser changed from C74 (0.001 uF) to C27 (0.01 uF). Discard tone control lead to 6V6GT plate. Connect C27 between moving arm of tone control and chassis.
- COIL KIT: Part No. 15-5 (A.W.A. Tuning Condenser).  
 DIAL GLASSES: Part No. 50-22 (Principal section), Part No. 50-25 (Rear section).  
 SPEAKER: Part No. 70-1 (5" Electro dynamic).  
 OUTPUT TRANSFORMER: Part No. 18-28.  
 POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

#### MODEL 11-4AZ.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C94) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).  
 Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.
- (b) 6J8G valve replaced by ECH35 converter.
- (c) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-12 (Principal section), Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

#### MODEL 11-4BZ.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C95) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).  
 Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.
- (b) Coil Kit 15-2 changed to 15-10.
- (c) Tuning condenser C3 changed to C79.
- (d) 6J8G valve replaced by ECH35 converter.
- (e) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).

COIL KIT: Part No. 15-10 (R.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-26 (Principal section), Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

#### MODEL 11-4CZ.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

- (a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C95) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).  
 Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.
- (b) Speaker 70-1 changed to 70-8.
- (c) H.T. choke (28-3) to replace field of 70-1 speaker.
- (d) Power transformer 18-27 changed to 18-1.
- (e) Coil Kit 15-2 changed to 15-10.
- (f) Tuning condenser C3 changed to C79.

(g) 6J8G valve replaced by ECH35 converter.

(h) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).

COIL KIT: Part No. 15-10 (R.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-26 (Principal section), Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

#### MODEL 11-4DZ.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

(a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C95) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

(b) Coil Kit 15-2 changed to 15-10.

(c) Tuning condenser C3 changed to C79.

COIL KIT: Part No. 15-10 (R.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-26 (Principal section), Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-27 (H.T.: 325v. each side of centre tap).

#### MODEL 11-4EZ.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

(a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C95) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

(b) Power transformer changed from 18-27 to 18-1.

(c) 6J8G valve replaced by ECH35 converter.

(d) R103A (15,000 ohms) was replaced by R153 A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).

(e) R138 (400 ohms) was replaced by R102 (250 ohms), R139 (50 ohms) was replaced by R157 (20 ohms).

(f) 5Y3G valve replaced by 6X5GT rectifier, (6X5GT heater connected to 6.3v. winding on transformer).

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-12 (Principal section), Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-1 (H.T.: 275v. each side of centre tap).

#### MODEL 11-4FZ.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

(a) Tone control (0.5 Megohm Potentiometer) replaced by a 2 position switch, 0.02uF 600v. condenser (C95) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

(b) Power transformer changed from 18-27 to 18-32.

(c) 6J8G valve replaced by ECH35 converter.

(d) R103A (15,000 ohms) was replaced by R153A (40,000 ohms), R136 (30,000 ohms) was replaced by R153B (40,000 ohms).

(e) R139 (50 ohms) was replaced by R157 (20 ohms).

(f) 5Y3G valve was replaced by 6X5GT rectifier, (6X5GT heater connected to 6.3v. winding on transformer).

(g) Speaker 70-1 was replaced by speaker 70-8.

(h) H.T. choke (28-3) to replace field of 70-1 speaker.

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-12 (Principal section), Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-32 (H.T.: 250v. each side of centre tap).

NOTE: Power transformers 18-32 and 18-6 are interchangeable. When 18-32 is used a 400 ohms bias resistor is used. When 18-6 is used a 250 ohms bias resistor is used.

### MODEL 11-4GZ.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

(a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C95) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

(b) Speaker 70-1 changed to 70-8.

(c) H.T. choke (28-3) to replace field of 70-1 speaker.

(d) 6J8G valve replaced by EK32 converter.

(e) Remove lead connecting 6J8G screen to 6G8G, wire 0.05 uF 200v. (C21B) from EK32 screen (pin No. 4) to ground. Wire 0.05 Megohm (R14) from 6G8G screen to B+, replace 0.03 Megohm (R136) with 0.015 Megohm (R140).

(f) Power transformer 18-27 changed to 18-32.

(g) 5Y3G valve replaced by 6X5GT rectifier, (6X5GT heater connected to 6.3v. winding on transformer).

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-12 (Principal section, Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-8 (5" Permanent magnet type).

OUTPUT TRANSFORMER: Part No. 18-26.

POWER TRANSFORMER: Part No. 18-32 (H.T.: 250v. each side of centre tap). Part No. 18-6 (H.T.: 220v. each side of centre tap).

NOTE: Power transformers 18-32 and 18-6 are interchangeable. When 18-32 is used a 400 ohm bias resistor is used. When 18-6 is used a 250 ohms bias resistor is used.

### MODEL 11-4HZ.

CIRCUIT: As on 11-4 circuit but with the following alterations:—

(Note: Enclosed diagram in lower right hand corner of sheet does not apply).

(a) Tone control (0.5 Megohm Potentiometer) replaced by 2 position switch, 0.02 uF 600v. condenser (C95) and 0.5 Megohm  $\frac{1}{2}$  watt resistor (R117).

Disconnect lead from centre lug of potentiometer, and wire it to stationary contact of switch. Earth moving arm of switch. Replace potentiometer with fixed resistor.

(b) 6J8G valve replaced by EK32 converter.

(c) Remove lead connecting 6J8G screen to 6G8G. Wire 0.05 uF 200v. (C21B) from EK32 screen (pin No. 4) to ground. Wire 0.05 Megohm (R14) from 6G8G screen to B+. Replace 0.03 Megohm (R136) with 0.015 Megohm (R140).

(d) Power transformer 18-27 changed to 18-1.

(e) 5Y3G valve changed to 6X5GT rectifier, (6X5GT heater connected to 6.3v. winding on transformer).

(f) R138 (400 ohms) replaced by R102 (250 ohms).

COIL KIT: Part No. 15-2 (S.C. Tuning Condenser).

DIAL GLASSES: Part No. 50-12 (Principal section), Part No. 50-25 (Rear section).

SPEAKER: Part No. 70-1 (5" Electro dynamic).

OUTPUT TRANSFORMER: Part No. 18-28.

POWER TRANSFORMER: Part No. 18-1.