

# Tasma

## SERVICE DATA

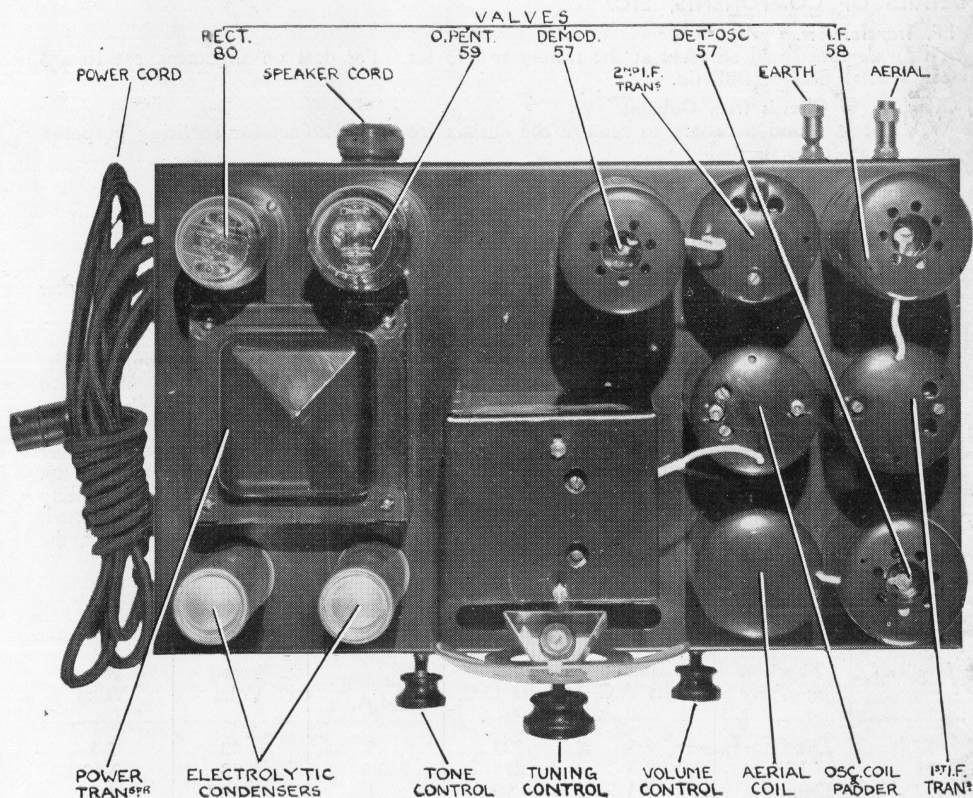
for

## MODEL 175 SUPERHETERODYNE

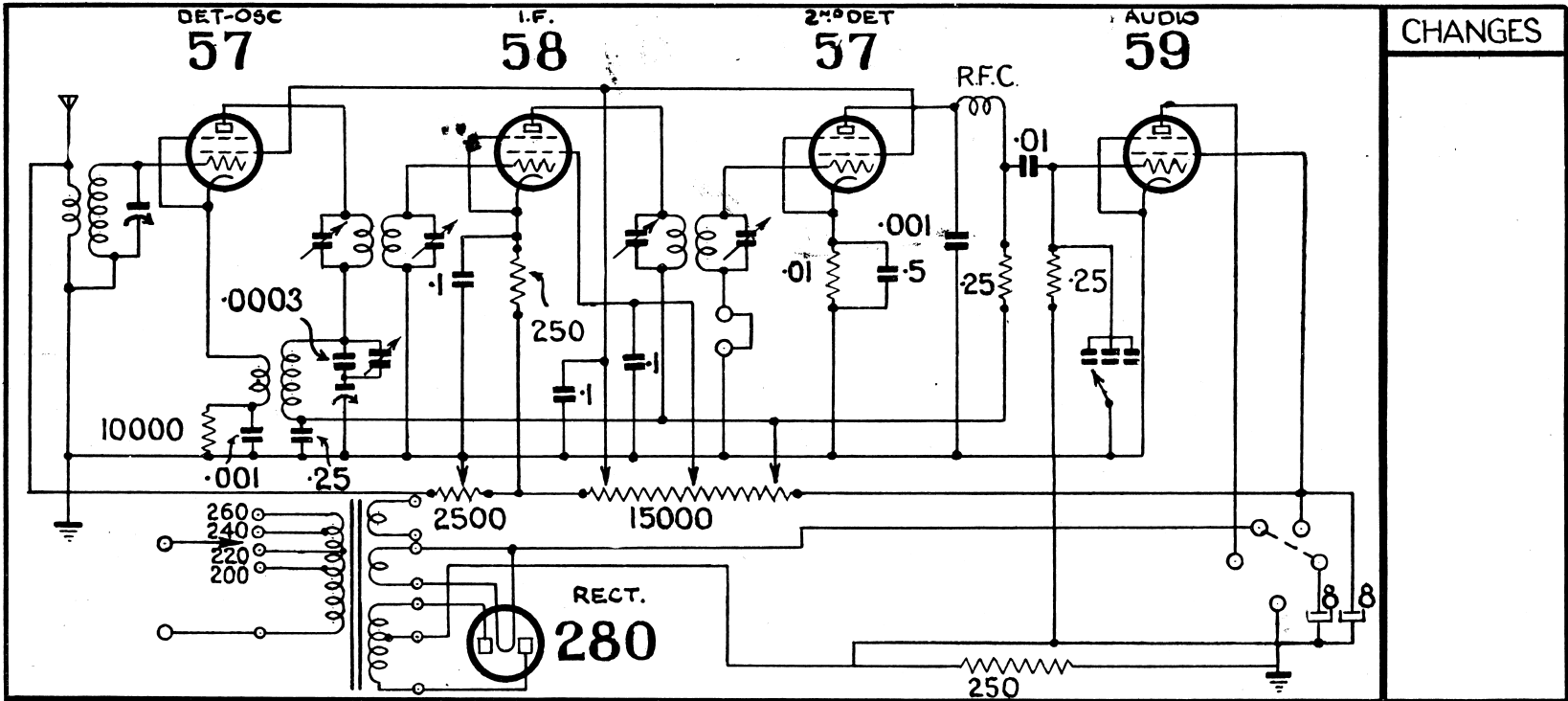
(for A.C. Operation)

### I. GENERAL CHARACTERISTICS.

The TASMA Model 175 is an all-electric radio receiver, designed on the Superheterodyne principle, and comprises four valves and rectifier. It has ample selectivity and sufficient sensitivity to give interstate reception in the City and daylight reception in the Country.



Layout of Top of Chassis



CHANGES

**THOM & SMITH LTD**  
 55-57 DOWLING STREET  
 SYDNEY, N.S.W.

*Tasma* SUPERHETERODYNE M175  
 ALL ELECTRIC 4 VALVES AND RECTIFIER

DR'N BY *W. Hamilton* 16-10-33  
 CH'D BY *C. Buchanan* 10-11-33  
 AP'D BY *F. Jander* 10-11-33

DRAWING  
 N°  
**77**

# TASMA RADIO RECEIVER MODEL 175 SUPERHETERODYNE

## 2. INSTALLATION HINTS AND PRECAUTIONS.

In addition to the hints contained in Item 1 of the General Service Bulletin, the following special hint is applicable to this Model:—

### (i) Line Voltage Panel.

Normally, this receiver leaves the factory with the voltage panel set for the locality. This panel is situated on the right hand back of chassis, and it may be adjusted by turning the red screw with a screwdriver until the slot corresponds with the setting required. Always adjust to voltage which is nearest, but higher than actual line voltage.

## 3. OPERATION OF RECEIVER.

Having closely followed the Installation Instructions given in the General Service Bulletin, plug the power adapter from the receiver into the house power socket and turn on the switch. The valves and the dial light should glow and the instrument is ready for operation. The location and function of the two controls are as follows:—

### (i) Volume Control (right hand knob).

Turn in clockwise direction to its maximum position.

### (ii) Tuning Control (centre knob).

Adjust to right or left until the signals from the desired broadcast station begin to come in, then adjust the Volume Control by turning gradually to the left until the volume is reduced to such a level that comfortable reception may be obtained by everyone in the room. Then, readjust the Tuning Control until the maximum signal is obtained from the station to which the receiver is tuned and also readjust the Volume Control if necessary.

### (iii) Tone Control (left hand knob).

May be used effectively to cut out background noises though the higher frequencies are simultaneously cut off.

It is only natural that a certain amount of extraneous noise such as "background" and hiss will be obtained when tuning in very distant or weak signals. This condition should be carefully explained to the customer. In all other respects, of course, the receiver will give excellent interstate reception at ample volume without distortion or noise.

## 4. DETAILS OF COMPONENTS, ETC.

### (i) I.F. Transformers.

These are tuned and adjusted at the factory to 445 k.c. For data on alignment, see Item 3 of General Service Bulletin.

### (ii) Removal of Chassis from Cabinet.

Where it is found necessary to remove the chassis from the cabinet for servicing purposes, proceed as follows:—

(a) Remove power-plug from the house socket.

(b) Remove the three knobs from the controls on the front of the Cabinet.

(c) Remove the speaker plug from jack.

(d) Loosen and remove the four bolts which affix the chassis to the shelf.

(e) Slide the chassis slowly off the supporting shelf.

(f) If it is now desired to test the chassis, re-connect aerial and earth leads, speaker plug, and power plug. Then switch on the current.

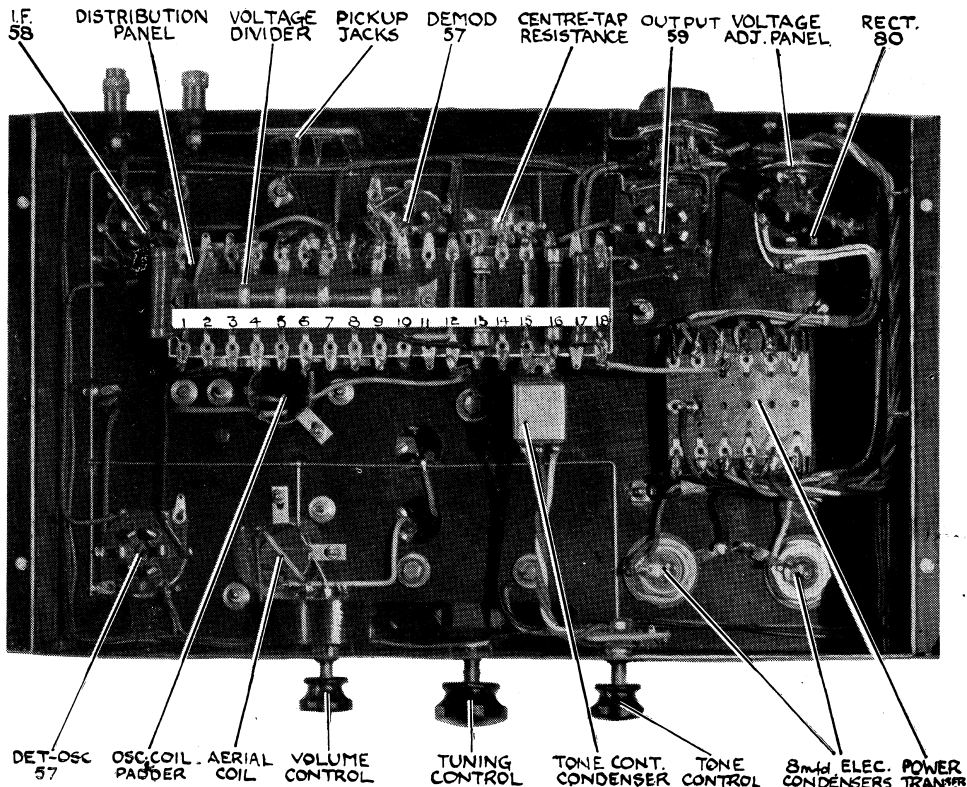
### (iii) Pick-up Jacks.

At the rear of the chassis, two jacks are provided for the attachment of a Pick-up for the reproduction of phonograph music. During the reception of broadcast stations, these two jacks are shorted by a U-shaped piece of bare copper wire. To attach phonograph pick-up, remove the shorting bar and place the plugs of the pick-up in the jacks provided, rotate Tuning Control until the dial indicates "O," turn back the Volume Control on the receiver to the extreme left position, and, thereafter, use the Volume Control supplied with the pick-up. Do not leave the pick-up permanently connected unless an additional switch is furnished to short-circuit this piece of apparatus during radio reception. If the pick-up is disconnected, be sure that the shorting bar is replaced in the jacks. To prevent electrical interference, the pick-up leads should be of the shielded type.

## 5. TABLE OF VOLTAGE AND CURRENT READINGS.

Type of Valve	Function of Valve	Filament Volts A.C.	Plate Volts D.C.	Plate Current M.A.	Screen Volts	Bias Volts
57	Det-Osc	2.5	225	.5	40	2.5
58	I.F.	2.5	225	0.8	80	2.40
57	Demod	2.5	90	.1	40	1.8
59	Power	2.5	200	.35	225	15
80	Rect	4.8	—	32/32	—	—

# TASMA RADIO RECEIVER MODEL 175 SUPERHETERODYNE



*Sub-Panel View of Chassis*

## 6. FAULT LOCATION.

Reference should be made under this heading to Item 2 of the General Service Bulletin. In addition, the following faults can occur:—

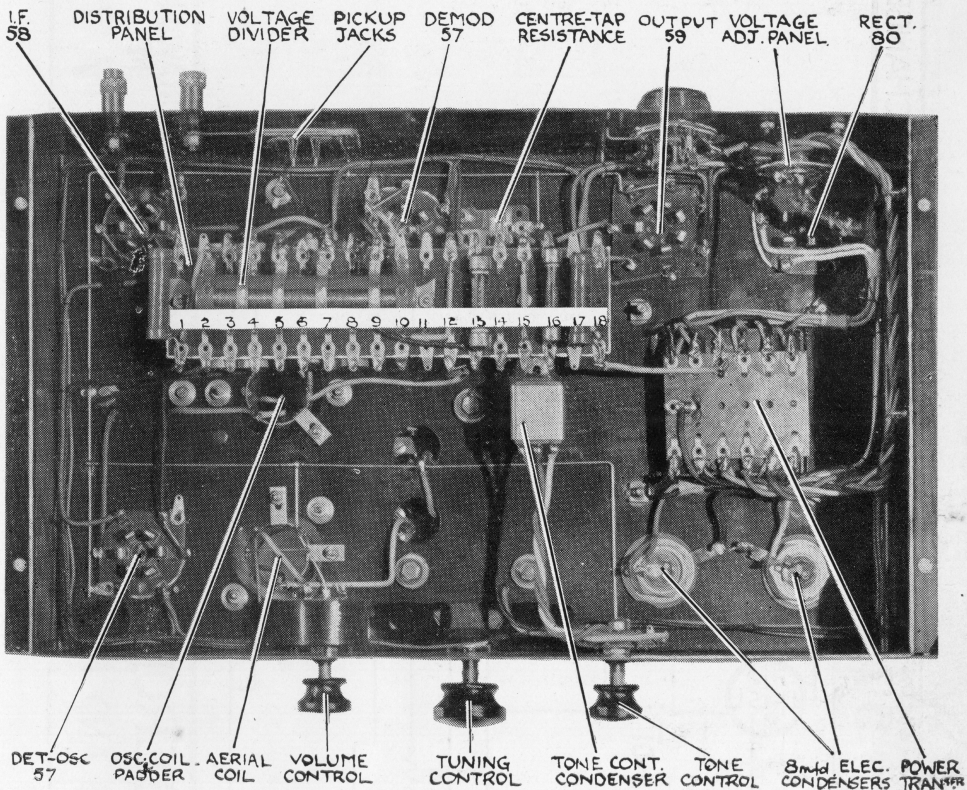
- (1) No Reception—look for disconnection in the Voltage Divider, using meter as a check for continuity.
- (2) Audio Howl—Pick-up shorting bar either missing or making bad contact.

For the convenience of Dealers in locating the various components wired to the Distribution Panel underneath the chassis, the key given below will prove useful if used in conjunction with the numbers shown on the "Sub-panel View of Chassis" photograph.

- |                                      |  |
|--------------------------------------|--|
| 1. Resistance, 250-ohm., wire-wound. | 10. Resistor, 10,000-ohms.             |
| 2. Spare.                            | 11. Condenser, .5 mfd.                 |
| 3. Resistor, 250,000-ohms.           | 12. Condenser, .1 mfd.                 |
| 4. Spare.                            | 13. Resistor, 10,000 ohms.             |
| 5. Condenser, .01 mfd.               | 14. Condenser, .001 mfd.               |
| 6. Resistor, 250,000-ohms.           | 15. Condenser, .1 mfd.                 |
| 7. Condenser, .25 mfd.               | 16. Condenser, .1 mfd.                 |
| 8. R.F. Choke.                       | 17. Spare.                             |
| 9. Condenser, .001 mfd.              | 18. Resistance, 250-ohms., wire-wound. |

NOTE.—IF IT IS FOUND NECESSARY TO REMOVE THE CHASSIS FROM THE CABINET, DO NOT MAKE ANY TEST WITHOUT FIRST CONNECTING THE LOUD SPEAKER AND ENSURING THAT THE POWER VALVE IS FIRMLY IN ITS SOCKET.

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*Sub-Panel View of Chassis*