## SERVICE NOTES

## MODEL 1101

Model 1101 is a battery operated transistor portable of 300 mw output. Its features include an earphone and external aerial socket.

## DIMENSIONS AND WEIGHTS:

Dimensions
Unpacked: $\quad 9 \mathrm{in}$. wide $\times 4 \frac{3}{8} \mathrm{in}$. high $\times 2 \frac{1}{4}$ in. deep Weight: 1 lb .3 oz.

Packed: $\quad 9 \frac{1}{2}$ in. wide $\times 5 \frac{3}{4}$ in. high $\times 2 \frac{3}{4} \mathrm{in}$. deep Weight: 1 lb .6 oz.

## CHASSIS REMOVAL:

Undo the 2 handle securing screws and retain the 2 crinkled washers. Pull off the tuning dial knob. Remove the cabinet front by lifting the R.H. end clear of rear (L.H. end located in groove). The component side of printed board is now accessible.

The printed board is secured by lugs moulded in the cabinet top and bottom. To completely remove, gently lever out bottom of board from under bottom retaining lugs. The printed board may now be pulled out from under top retaining lugs and removed from cabinet.

## BATTERY REPLACEMENT:

When the battery is to be replaced, slide out the battery compartment door on the rear of the radio, remove the old battery, and replace with an Eveready 2362 battery or equivalent, ensuring that the battery connectors are correctly and securely attached to the battery. Slide the battery compartment door into place.

## CAUTION:

If the radio is not used for a long period of time, or when the battery is obviously exhausted, it is advisable to remove the battery from the receiver.


## SERVICE MANUAL <br> MODEL 1101



## SPECIFICATIONS:

| Tuning Range: | $520-1610 \mathrm{KHz}$ |
| :--- | ---: | ---: |
| I.F.: | 455 KHz |
| Power Source: | 9 v. Eveready 2362 or equivalent |
| Power Output. | 300 mw |
| Voice Coil Impedance: | 15 ohm |
| Sockets: | Car Aerial and Earphone Sockets |

## THORN ELECTRICAL INDUSTRIES (AUST.) PTY. LTD.

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## ALIGNMENT:

I.F.

Connect a signal generator to a coupling loop (approx. 10
turns on 6 inch diameter) placed in line with and about 2 turns on 6 inch diameter) place
feet from the ferrite rod antenna

With tuning gang fully closed and volume at maximum set the generator to 455 KHz and adjust the I.F. transforme
cores for maximum output. Repeat adjustments until no further improvement can be obtained. Reduce generato output as receiver output increases, use a signal level as low

## R.F.

Set the tuning dial to 600 KHz and adjust the oscillator
coil for max. output. Set the tuning dial to 1400 KHz and coil for max. output. Set the tuning dial to 1400 KHz and
adjust the oscillator trimmer. Repeat the above adjustments adjust the oscillator tri
until tracking is correct.
Adjust the aerial coil (by sliding along rod) for ma utput at 600 KHz .
Adjust the aerial trimmer for max. output at 1400 KHz .

## CIRCUIT NOTE

Some modifications have been made to the 1101 circuitry
C2 was .0015 mF
C4 was 8.2 pF or 12 pF
R12 was 5.6 K



ELECTRICAL PARTS LIST

## SEMICONDUCTOR KIT:

| T1, T2, T3. | Transistor, | BF194 |
| :--- | :---: | :---: |
|  | OR | BF184 |
| T4 | Transistor, | BC148 |
|  | OR | BC108 |
| T5 | Transistor, | BC158 |
|  | OR | BC178 |

Thorn
Part No. 918050 (918032)

918048
(918026)

918056
(918033)
*T6, T7.
D1
Transistor Pair, AC127/AC132
918059
Diode, OA90
378003
378020

## RESISTORS:

| R1 | 5.6 K ohm $\pm 10 \%$ composition |
| :--- | ---: | :--- |
| R2 | 1.5 K ohm $\pm 10 \%$ composition |
| R3 | 220 ohm $\pm 10 \%$ composition |
| R4, R6 | 1 K ohm $\pm 10 \%$ composition |
| R5 | 150 K ohm $\pm 10 \%$ composition |
| R7 | 12 K ohm $\pm 10 \%$ composition |
| R8, R11 | 10 K ohm $\pm 10 \%$ composition |
| R9 | 6.8 K ohm $\pm 10 \%$ composition |
| R10 | 1 K ohm $\pm 10 \%$ composition |
| R12 | 1.2 K ohm $\pm 10 \%$ composition |
| R13 | 12 K ohm $\pm 5 \%$ composition |
| R14 | 68 K ohm $\pm 5 \%$ composition |
| R15 | 470 ohm $\pm 10 \%$ composition |
| R16 | 1.5 K ohm $\pm 10 \%$ composition |
| R17 | 4.7 ohm $\pm 10 \%$ composition |
| R18 | 2.2 K ohm $\pm 10 \%$ composition |
| R19, R20 | 2.2 ohm $\pm 0.5 \%$ composition |
| R21 | 1 K ohm $\pm 10 \%$ composition |
| R22 | 100 ohm $\pm 10 \%$ composition |
| RV1 | 5 K ohm Switch Pot 686500 |
|  |  |

## CAPACITORS:

| C1, C1A | Tuning Gang | 274011 |
| :---: | :---: | :---: |
| *C3, C6 |  | *Part of Tuning Gang |
| C2 |  | 4700 pF 100 v poly |
| C4 |  | 6.8 pF 500 v cer. |
| C5 |  | $270 \mathrm{pF} \pm 5 \% 50 \mathrm{v}$ cer. |
| C7 |  | 12 pF 50 v cer. |
| C8 |  | 0.01 mF 50 v cer. |
| C9, C10, C11, C12 |  | 0.022 mF 50 v cer. |
| C13 |  | 10 mF 10 v |
| C14 |  | 100 mF 10 v |
| C15, C16 |  | 0.01 mF 50 v cer. |
| C17 |  | 0.1 mF 50 v cer. |
| C18, C20 |  | 100 mF 10 v . |
| C19 |  | 1000 pF 50 v cer. |
| C19A |  | 220 mF 16 v electro. |

## * NOTE:

The triad (T6, T7, D2) is a matched set. To preserve optimum performance these components should be replaced as a set.

## TRANSFORMERS:

| Oscillator Coil. Red Dot. | 917614 |
| :--- | :--- |
| I.F. Transformer. Yellow. | 917608 |
| I.F. Transformer. Black. | 917609 |
| I.F. Transformer. Orange. | 917615 |

NOTE: Always quote the model number and the part number when ordering replacement parts.

The manufacturers reserve the right to vary specifications and/or materials as may be deemed necessary or desirable at any time.

