



Australian Military Forces

MECHANICAL MAINTENANCE PAMPHLET WIRELESS No. 1 (AUST.)

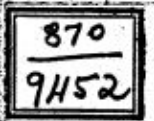
REPAIR INSTRUCTIONS FOR A. A. O. C. WORKSHOPS

WAVEMETER CLASS "C" No. 1 (AUST.) AND UNITS H.T. VIBRATORY No. 1 (AUST.)

1942

Prepared by the Director
of Mechanical Maintenance
L.H.O. (Aust.)

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MECHANICAL MAINTENANCE PAMPHLET
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REPAIR INSTRUCTIONS FOR
A. A. O. C. WORKSHOPS
WAVEMETER, CLASS "C," No. 1 (AUST.)
AND
UNITS H.T. VIBRATORY No. 1 (AUST.)

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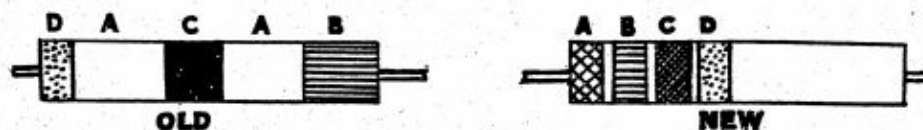
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RESISTOR COLOR CODING

Two systems of marking may be in use in the service.
The differences are as indicated below:—



- A. Color for 1st Significant Figure.
- B. Color for 2nd Significant Figure.
- C. Color for Multiplier.
- D. Tolerance, when applied.

Color	Significant Figure	Multiplying Value
Black	0	1
Brown	1	10
Red	2	100
Orange	3	1,000
Yellow	4	10,000
Green ...	5	100,000
Blue	6	1,000,000
Violet	7	10,000,000
Grey	8	100,000,000
White	9	1,000,000,000
Gold	± 5% Tolerance	0.1
Silver	± 10% Tolerance	0.01
No Color	± 20% Tolerance	—

WAVEMETER, CLASS "C," No. 1 (AUST.) (A.W.A. TYPE R.7647)

Frequency Coverage	Range 1	1470 - 2870 K.C.
	Range 2	2800 - 5520 K.C.
	Range 3	5280 - 10260 K.C.
H.T. Supply	Units H.T. Vibratory No. 1 (Aust.).	
Alternative H.T. Supply	Batteries, dry, signal, 45 Volt, H.T. (Two connected in series Wavemeter.)	
L.T. Supply	Batteries, secondary, portable, 6 Volt, 25 Ampere-hour.	
Valves	1 x 6J8G (in Wavemeter), 1 x 6J8G (boxed, spare).	
Weight	Less Units H.T. Vibratory No. 1 (Aust.), 21½ lbs.	
Dimensions	15½in. x 10½in. x 9in. over-all.	

WAVEMETERS, CLASS "C," No. 1 (AUST.) (COMPLETE STATIONS)

Vocab. No.	Designation	Essential for Work	Essential Spares	Total
Section Z1.				
Z A 5624	Plugs, Single, No. 9	1		1 (d)
	Receivers, headgear, double, L.R. (Aust.)	1		1 (a)
Z A 6292	Satchels, Signals	1		1
	Units, H.T. Vibratory, No. 1 (Aust.)	1		1 (b) (e)
	Valves, W. T. Type 6J8G	1	1	2 (f)
Z A A 950	Vibrators, 6 Volt, V5211	1	1	1
	Wavemeters, Class "C," No. 1 (Aust.)	1		1
	Charts, correction	1		1 (b)
	Wireless Set, No. 101—Connectors, twin, No. 11A	1		1
Section Z2.				
Z A A 077	Batteries, Secy., port., 6 V., 25 A.H., Boxes	1		1
	Cells, Secy., port., 2 V., 25 A.H.	3		3 (c)

- (a) Carried in Satchels, Signals.
 (b) Fitted in Wavemeter.
 (c) Fitted in box.
 (d) Fitted on Receiver headgear.
 (e) Pending availability of Units H.T. Vibratory No. 1 (Aust.), two Batteries, dry, signal, 45 Volt, H.T. (Section W2), will be issued in lieu.
 (f) Matched and marked with Serial No. of Wavemeter.

GENERAL DESCRIPTION

Wavemeter, Class "C," No. 1 (Aust.) is housed in a pressed aluminium case, and operates on the heterodyne principle, performing two prime functions:—

- (a) Emits an unmodulated Radio Frequency signal within the frequency ranges set out below, which can be received in any service type receiver placed at a distance not exceeding 6 feet from the Wavemeter.
 (b) Will receive an emitted signal from any service type transmitter, within the frequency ranges set out below. The received signal will be heard as a heterodyne note in the Receiver's Headgear L.R. (Aust.) of the Wavemeter, if the received signal differs from the present frequency of the Wavemeter, Class "C," No. 1 (Aust.) by any frequency in the audible range.

The effect known as "Zero beat" is used to determine the frequency to be read on the dial of the Wavemeter, Class "C," No. 1 (Aust.), and the accuracy of any such reading is dependent on the "correction" to be applied to any dial reading of the Wavemeter. This "correction" is obtained from the correction chart, which is contained in the accessories compartment of the instrument.

Frequency Ranges—

Range 1	1470 - 2870 K.C.	2 K.C. each division of the dial.
Range 2	2800 - 5520 K.C.	5 K.C. each division of the dial.
Range 3	5280 - 10260 K.C.	10 K.C. each division of the dial.

NOTE.—Attention is drawn to the fact that Wavemeters, Class "C," No. 1 (Aust.), are precision instruments, made and calibrated to small tolerance limits, and should be treated as laboratory instruments.

Repairs and recalibration adjustments will normally be carried out by the following A.A.O.C. Units:—

- Army Ordnance Workshops.
- Advanced Ordnance Workshops.
- L. of C. Area Ordnance Workshops.
- Base Ordnance Workshops.

WORKING INSTRUCTIONS

1. Preliminary.

- (a) Unscrew the circular cover plate on the base of the case and see that a valve type 6J8G is plugged in its holder and that the valve cap connection is in place. Screw the cover back in place tightly.
- (b) Unfasten and open the wavemeter lid.
- (c) Unfasten and lift the flap on the left-hand side of the top panel, and make sure that the 4-pin plug is inserted into the socket on the Units H.T. Vibratory No. 1 (Aust.).
- (d) Plug the L.T. lead in the socket above the L.T. "ON-OFF" switch and connect it to a 6-volt accumulator, the red and black leads being connected to the +ve and -ve terminals respectively of this battery.
- (e) Plug into the jack marked "Phones" a pair of L.R. headphones (Receivers, headgear, double, L.R., Aust.).
- (f) Set the L.T. Switch to "ON."

2. To Set the Wavemeter to a Given Frequency.

- (a) Adjust the range switch to Position 1, 2 or 3, according to the frequency required.
- (b) Inspect the correction chart and note whether at the given frequency, the curve lies above or below the datum line.
- (c) Observe the correction in kc/s.
- (d) If the curve at the given frequency lies above the datum line, subtract the correction in kc/s from the given frequency; if below, add to the given frequency.
- (e) Set the wavemeter scale to the value obtained in (d). The wavemeter frequency will now be the given frequency within 0.1 per cent.

3. To Set a Sender to a Given Frequency.

- (a) Place the wavemeter about 6 feet from the sender.
- (b) Set the wavemeter to the given frequency according to Paragraph 2.
- (c) While listening in the wavemeter headphones, adjust the sender to the silent point of the heterodyne frequency.

NOTE.—If the wavemeter is placed too near to the sender, it will be found that the "silent space" of the heterodyne frequency becomes wide, and accurate setting of the sender to the given frequency difficult. A little experience will make this point clear.

For incoming signals into the Wavemeter, Class "C," No. 1 (Aust.), and curve above the datum line, ADD.

4. To Set a Receiver to a Given Frequency.

- (a) Set the wavemeter to the given frequency as described in Paragraph 2.
- (b) Place the wavemeter about 6 feet from the receiver.
- (c) Adjust the receiver for C.W. reception, and while listening in the receiver headphones, tune in the receiver to the silent point of the heterodyne frequency produced by the wavemeter.

NOTE.—Care must be taken that the receiver is tuned to the fundamental frequency of the wavemeter, and not to a harmonic.

For emitted signals from the Wavemeter, Class "C," No. 1 (Aust.), and curve above the datum line, SUBTRACT.

5. To Determine the Frequency of a Received Signal.

- (a) Tune in the signal accurately on the receiver.
- (b) While listening on the receiver, adjust the wavemeter (taking care to use its fundamental frequency) to the silent point of the heterodyne frequency.
- (c) Note the wavemeter reading, and correct this to true frequency by the use of the calibration chart.

6. Use of 90 Volt H.T. Battery in place of the H.T. Unit (Units H.T. Vibratory No. 1 (Aust.)).

If it is desired to use an H.T. battery in order to economise in L.T. current, or if the H.T. unit breaks down, the plug which normally connects to the Unit H.T. Vibratory No. 1 (Aust.) should be plugged into the adapter socket, which must first be removed from its clip in the lid of the wavemeter.

The two leads attached to this adapter are to be connected to the positive and negative terminals of the H.T. battery, comprising two batteries, dry, signal, 45 V., H.T., connected in series to give 90 volts.

of the White Tablet on the Front Panel.

Where a number of frequencies are continually being used, it will be found convenient to write a column of the white tablet on the front panel, these frequencies. This avoids loss of time and need reference to the correction chart.

Warning.—Some knowledge is necessary as to the frequency to which a sender or receiver is tuned, when checking by the wavemeter, to avoid the taking of a wavemeter reading on a harmonic of a sender, or the setting of the receiver to a harmonic of the wavemeter.

MAINTENANCE OF THE WAVEMETER.

The Correction Chart.

An accurate correction chart must be maintained. Each wavemeter is provided with a double chart, on one side of which the correction curve is drawn, prior to issue, for each of the three frequency ranges.

The chart requires checking at intervals by comparing the wavemeter with a sub-standard, such as the Calibrator Wavemeter, Class "C," and if the calibration has changed appreciably, a new series of correction curves should be drawn on the blank side of the chart.

This checking is necessary when the wavemeter is to be used in a temperature different from that at which the original correction curves were drawn; since, although the temperature coefficient of frequency is small, the calibration, and in particular that of Range 3, will vary with the temperature.

If the wavemeter is normally used at a temperature very different from that at which the original correction curves are drawn, then a new set of correction curves should be drawn at the mean temperature at which the wavemeter is being used.

In drawing a new curve, the wavemeter readings should be taken every 100 kc/s for Range 1; 50 kc/s for Range 2; and 400 kc/s for Range 3.

The differences between the scale plate readings and the sub-standard wavemeter frequencies should be plotted on the appropriate section of the blank chart.

If the frequency indicated by the wavemeter is higher than the true frequency given by the sub-standard wavemeter, then the difference is plotted above the datum line.

When all the required points for each range have been plotted, these points should be joined by a straight line to complete the curves. The temperature at which the curves were taken should be entered in appropriate space at the head of the correction chart. If the differences in frequency from the true frequencies as given by the sub-standard wavemeter are too great to be accommodated by the correction chart, the trimmer condensers must be readjusted as below.

Resetting the Trimming Condensers.

If the calibration of the wavemeter has altered beyond the scope of the correction chart, the trimming condensers, C3E (Range 3), C2E (Range 2), C1E (Range 1) and C1F (Range 1) should be reset. This should not be attempted unless a sub-standard is available for frequency comparison. If this is available, resetting of the trimmer condensers should be carried out as follows:—

- (i) Break the seals on the screws retaining the small rectangular cover plate at the back of the wavemeter. Removing this plate exposes three holes (marked 1, 2 and 3, which correspond to the three ranges of the wavemeter), located opposite the spindles of the trimming condensers.

Note.—Having removed the seals and the three screws holding the cover plate, some difficulty may be experienced in removing the cover plate, as this may have adhered to the gasket. If this occurs, the cover plate can be easily removed by inserting a screwdriver in the groove of the plate, when it may be forced off.

Note.—Adjustment of the condensers may be made by means of a suitable box spanner or screwdriver. For further instructions, see Plate 4.

- (ii) Set the range switch to Range 1.
- (iii) Set the tuning dial to 2170 kc/s or thereabouts. This ensures that the wavemeter will be checked in a central position of the scale on all ranges.
- (iv) Check the calibration at this frequency and adjust the Range 1 trimming condenser until the frequency calibration is correct at this frequency.
- (v) Set the range switch to Range 2 and the frequency to 4160 kc/s or thereabouts, and adjust Range 2 trimming condenser until the frequency calibration is correct at this frequency.
- (vi) Set the range switch to Range 3 and the frequency to 7800 kc/s or thereabouts, and adjust Range 3 trimming condenser until the frequency calibration is correct at this frequency.

Having set the trimmers initially so that the frequency is correct at the centre of each range, the errors at the ends of each range and at four intermediate points should be observed and a rough correction chart drawn.

In resetting the calibration, the aim of the operator should be to arrange that, over the greater part of the range, the correction applicable is as small as possible. At the same time, the maximum errors which occur at the ends of the ranges should not be too large to be accommodated by the correction chart.

If the requirements given in the preceding paragraph are met by this initial setting, then the final correction chart should be plotted as in (a) above—"The Correction Chart."

If, however, the requirements are not met, a slight readjustment of the trimmer condensers should be made before the final correction curve is drawn.

The trimming condensers should now be sealed with lacquer C100 (ZAA101).

The cover plate should then be placed together with its rubber gasket and resealed.

2. REPAIRS TO THE WAVEMETER.

Repairs to this instrument are only to be carried out by Ordnance Workshops. If the wavemeter is dismantled to remedy a fault or to correct the calibration, it must be checked against a sub-standard before being reissued.

(a) To Remove the Wavemeter from the Case.

- (i) Break the seals on the two screws on the top panel and remove the screws. Then remove the 10 other cheese-headed "ringed" screws on the top panel.
- (ii) Remove the 4-pin plug from the Unit H.T. Vibratory No. 1 (Aust.).
- (iii) Lift out the wavemeter, at the same time easing the lead through the hole in the partition.

NOTE.—Care should be taken, in withdrawing the wavemeter, that it does not foul the fixing bracket in the box.

(b) To Remove the Front Panel.

- (i) Remove the tuning handle and the range switch handle by unscrewing their respective grub-screws.
- (ii) Disconnect the lead from the telephone jack, which is connected to a stud on the sub-panel.
- (iii) Disconnect the lead from the L.T. switch, which is connected to a stud on the sub-panel.
- (iv) Disconnect the lead from the aerial, which is connected to a stud on the sub-panel.
- (v) Remove the four screws holding the jack face and name plate in position.
- (vi) Remove the L.T. switch escutcheon plate, which is held in position by two screws. These screws also fix the L.T. switch to the front panel.
- (vii) Remove the fourteen 4 B.A. screws in the front panel. Three screws at each corner hold the panel to brackets; the other two screws hold the panel to the round supporting pillars. The panel can then be removed.

(c) Assembly.

In the event of the apparatus being dismantled, the gears and associated apparatus should be assembled as follows:—

"Turn dial past '1470' to 'stop.' Lift spring-loaded idler assembly, after removing stop washer. Set coil brush to mark on end turn of coil. Holding dial at 'stop,' re-engage gears. Check and repeat if necessary."

3. UNITS, H.T., VIBRATORY, No. 1 (AUST.).

(a) To Remove the Unit from its Case.

Remove the two countersunk screws in the sides of the case and withdraw the unit. Any faulty component may now be replaced.

(b) To Change the Vibrator.

- (i) Before changing the vibrator, it should be ascertained that the 0.01 mfd. condenser in shunt with the secondary of the vibrator transformer (C2A in circuit diagram on side of unit) has not broken down. The condenser should be disconnected and checked. If this procedure is not carried out and a new vibrator is inserted, the vibrator may be seriously damaged. If the condenser has broken down, then it should be immediately replaced by a new one of the same voltage rating.
- (ii) The vibrator should be removed by withdrawing it from its socket. Care should be taken to see that the thick pins of the vibrator are inserted in the corresponding large holes in the socket; otherwise it will be impossible to replace the vibrator.

(c) Testing Components.

A continuity test may be applied to chokes where failure is suspected, and H.T. smoothing condensers tested with a megger, carefully observing their polarity.

CAUTION.—L.T. filter condenser (low voltage) must on no account be tested with a megger.

UNITS H. T. VIBRATORY No. 1 (AUST.) AND WAVEMETER CLASS "C" No. 1 (AUST.)

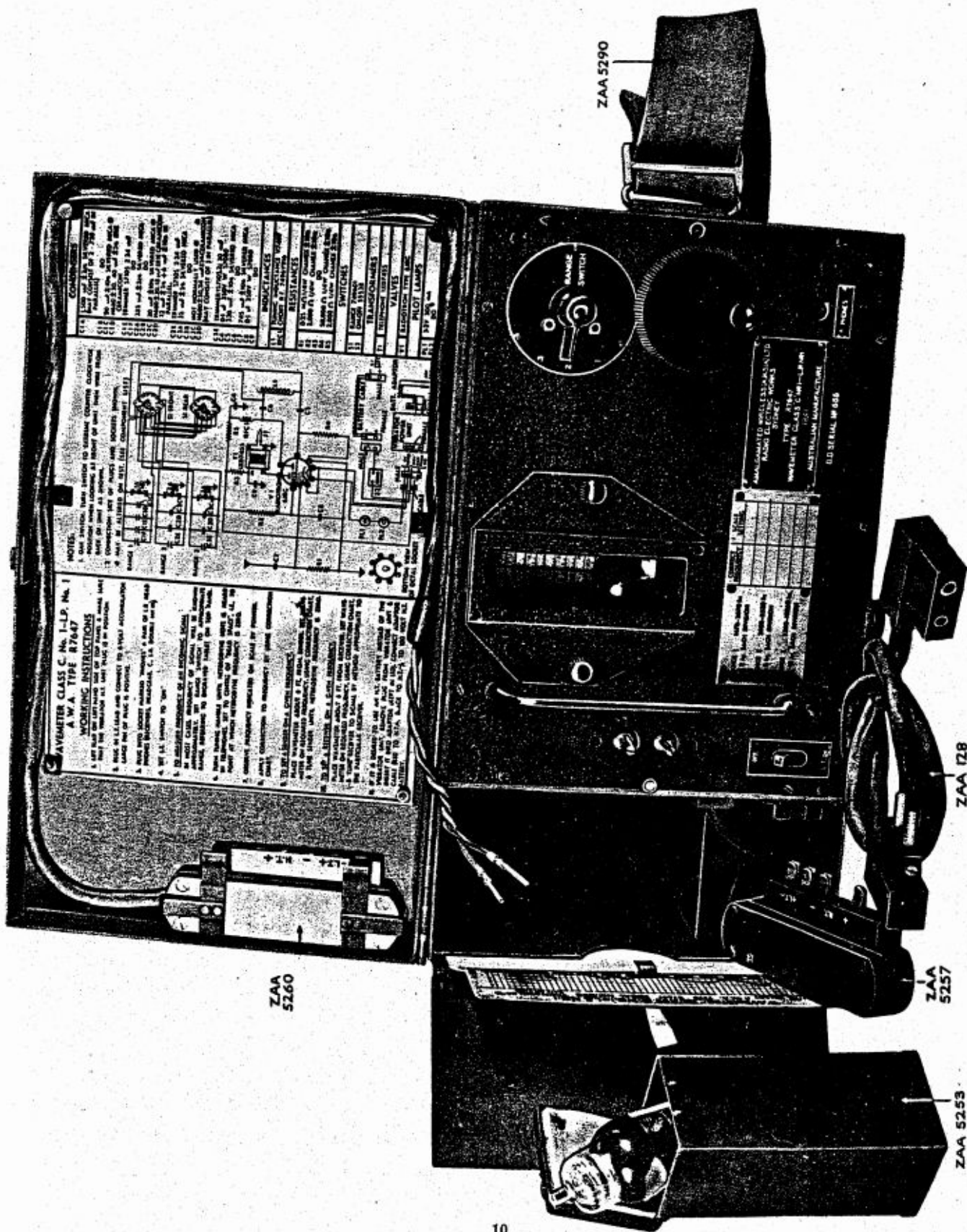
VOCAB. CAT. NO.	DESIGNATION	CIRCUIT SYMBOL	DESCRIPTION	ASSO- CIATED WITH VALVE	TYPE, RATING, ETC.
	Wavemeter Class "C" No. 1. (Aust.) SECTION W.2. Bulbs, 3.5 Volt P. .. SECTION Z.1. Chokes, R.F. R.F. No. 14	PL1 PL2	A. Circuit Components Dial Lamp	—	3.5 Volts 0.3 Amps.
ZAA 199	Condensers: Fixed, R.15	RFC1	Oscillator Anode R.F. choke	V1	Multilayer, H.T.
ZAA 239	" " R.15	C1A	Tuned circuit splitting condenser (Range 1)	V1	1500mmfd. Silvered Mica plus or minus 2.5%
ZAA 2701	" " Y.2	C1B	" " padding	V1	" " " " " " 2.5%
ZAA 2907	" " Y.4	C1C	" " " " " "	V1	" " " " " " 10%
ZAA 307	Semi-fixed, No. 8	C1D	" " trimming	V1	40mmfd. N680 Erie Ceramicon " " 5%
ZAA 307	" " " " " "	C1E	" " " " " "	V1	2-24mmfd, Type S7105.
ZAA 2708	Fixed, X.325	C1F	" " " " " "	V1	325mmfd. Silvered "Mica plus or minus 2.5%
ZAA 2708	" " X.325	C2A	" " " " " "	V1	" " " " " " 2.5%
ZAA 2701	" " Y.12	C2B	" " " " " "	V1	20mmfd. " " " " " " 2.5%
ZAA 2900	" " Y.12	C2C	" " " " " "	V1	18mmfd. " " " " " " 10%
ZAA 307	Semi-fixed, No. 8	C2D	" " " " " "	V1	{ Erie Ceramicon Type.
ZAA 2700	Fixed, Y.35	C3A	Consists of 1-12mmfd. in parallel with 1-6mmfd. Tuned circuit trimming condenser (Range 2)	V1	2-24mmfd. Type S7105.
ZAA 2700	" " Y.35	C3B	" " " " " "	V1	35mmfd. Silvered Mica plus or minus 5%
ZAA 2901	Fixed, Y.12	C3C	" " " " " "	V1	" " " " " " 5%
ZAA 2900	" " Z.6	C3D	Not used	V1	18mmfd. " " " " " " 5%
ZAA 308	Semi-fixed, No. 9	C3E	Tuned circuit padding condenser (Range 3)	V1	{ Erie Ceramicon Type.
ZAA 223	Fixed, P.1.C.	C4	Consists of 1-12 mmfd in parallel with 1-6mmfd. Tuned circuit trimming condenser	V1	2-24mmfd.
ZAA 2705	" " X.33	C5	Oscillator Anode Supply Bypass	V1	0.1mmfd. 350 Volt Working. Type S7080.
ZAA 2707	" " X.33	C6	Tuned circuit coupling capacity	V1	330mmfd. 1000 Volt Test plus or minus 10%
ZAA 223	" " X.745	C7	" " " " " "	V1	745mmfd. " " " " " " 10%
ZAA 223	" " P.1.C.	C8	Antenna Series capacity	V1	0.1mmfd. 350 "Volt "Working" Type S7080.
ZAA 223	" " P.1.C.	C9	Amplifier Screen Bypass	V1	" " " " " " " "
ZAA 455	Inductances: No. 31	L1	Amplifier Anode Supply Bypass	V1	Type V 7497.
ZAA 702	Resistors: 1/4 Watt, No. 3 or 4— 250,000 ohms	R1	Variable Oscillator Tuning Inductance	V1	Chanex or IRC Fixed metallized.
ZAA 688	" " 2,000 ohms	R2	Amplifier Grid Leak	V1	" " " " " " "
ZAA 688	" " 2,000 ohms	R3	" " Screen Grid Decoupler	V1	" " " " " " "
ZAA 688	" " 50,000 ohms	R4	" " Anode Decoupler	V1	" " " " " " "
ZAA 688	" " 2,000 ohms	R5	Oscillator Grid Leak	V1	" " " " " " "
ZAA 7431	Switches: 2 pole, 3 way wafers Single pole on-off	S1	" " Anode Decoupling Resistor	V1	" " " " " " "
ZAA 744	Transformers: Telephone K	S2	Range Switch	V1	Type 7496D.
ZAA 824	Valves: W.T. 6J8G	T1	Low Tension Supply Switch	V1	Type S5538.
ZAA 913		V1	Output Coupling Transformer	V1	To couple from 6J8G to receivers headgear.
			Amplifier and Oscillator Valve	—	Radiotron 6J8G Triode Pentode Mixer Valve

UNITS H.T. VIBRATORY, No. 1 (AUST.) AND WAVEMETER CLASS "C" No. 1 (AUST.) (B. CASE AND CHASSIS PARTS)

VOCAB. CAT. NO.	DESIGNATION	CIRCUIT SYMBOL	DESCRIPTION	ASSOCIATED WITH VALVE	TYPE, RATING, ETC.
SECTION Z.1.					
ZAA5294	Units H.T., Vibratory, No. 1 (Aust.):				
ZAA5295	Socket Assembly	—	H.T. and L.T. output socket assembly		
ZAA5296	Blocks	—			
ZAA5297	Contacts	—			
	Dummy Contacts	—			
	Wavemeters, Class "C" No. 1. (Aust.):				
ZAA5250	Aerial Rods	—	Aerial Rod on Front Panel		
ZAA5251	Bushes	—	Aerial Rod Bushes		
ZAA5252	Collars	—	Aerial Rod Collars		
ZAA5201	Charts, correction	—			
ZAA5253	Cases, Spare Valve	—			
ZAA5256	Packers, valve	—			
ZAA5257	Connectors, 4 point	—	Housed in Accessories Compartment		
ZAA5258	Blocks	—	{ Connects to Socket Assembly of Units		
ZAA5259	Cables	—	{ H.T. Vibratory No. 1 (Aust.)		
ZAA5260	Connectors, adapter	—			
ZAA5261	Cursor Assemblies	—			
ZAA5262	Lenses	—	For Alternative Battery H.T. Supply		
ZAA5263	Springs, tension, locating arm	—	Dial Assembly		
ZAA5264	Windows	—	Dial Assembly		
ZAA5265	Cursor Wires	—	Dial Drive Assembly		
ZAA5266	Brackets	—	Dial Assembly		
ZAA5267	Dial Plates	—	Dial Assembly		
ZAA5268	Collars	—	Dial Assembly		
ZAA5269	Discs, driving	—	Dial Assembly		
ZAA5270	Collars	—	Dial Assembly		
ZAA5271	Escutcheons	—	Dial Assembly		
ZAA5272	Forms, calibrations	—	Dial Assembly		
	Gearing Inductance:				
ZAA5273	Driving	—			
ZAA5274	Idling	—			
ZAA5275	Grommets, square	—	Used with Connectors, 4 point ..		
ZAA5276	Holders, Pilot	—	Dial Assembly		
ZAA5277	Insulators	—	Dial Assembly, Lamps		
	Knob:				
ZAA5278	Inductance	—			
ZAA5279	Range Switch	—			
ZAA5280	Washers, felt	—			
ZAA5281	Panels, front	—	For use with Knobs		
ZAA5282	Collars	—			
ZAA5283	Bushings, inductance	—			
ZAA5284	Bushings, range switch	—			
ZAA5285	Sockets, 2 pin, male	—			
ZAA5286	Sockets, phone	—	L.T. Input to Wavemeter		
ZAA5287	Sockets, valve	—			
ZAA5288	Springs, jockey, Assembly	—			

VOCAB. CAT. NO.	DESIGNATION	CIRCUIT SYMBOL	DESCRIPTION	ASSOCIATED WITH VALVE	TYPE, RATING, ETC.
SECTION Z.1. (Contd.)					
ZAA 5290	Straps, carrying	—	Wavemeter Class "C" No. 1 (Aust.)		
ZAA 5291	Thermometers	—			
ZAA 5292	Trimmers, tool adjusting	—			
ZAA 5293	Wax, Sealing Sticks	—			
Wireless Set No. 101:					
ZAA 050	Catches, ball	—	Accessories Compartment, Lid ..		
ZAA 128	Connectors, twin No. 11A	—			
ZAA 139	Cable	—			
ZAA 129	Plug Assembly	—			
ZAA 135	Socket Assembly	—			
	Connectors, 6 point	—			
ZAA 144	Contacts	—			
ZAA 147	Plug contacts	—			
ZAA 063	Grommets	—			
SECTION Z.2.					
Apparatus, Loudspeaking (Aust.) No. 2—					
ZAA 5153	Sockets, Vibrator	—			

VOCAB. CAT. NO.	DESIGNATION	CIRCUIT SYMBOL	DESCRIPTION	TYPE, RATING, ETC.
Unit H.T. Vibratory No. 1. (Aust.)				
Chokes:				
ZAA5158	R.F. No. 10	L1A	Low Tension R.F. Choke	Type QP, No. 3149/0 Single Layer L.T.
ZAA5157	R.F. No. 15	L2A	High Tension R.F. Choke	Type QP, No. 3036/0 Multilayer H.T.
ZAA5156	A.F. No. 6	L3A	High Tension Filter Choke	
Condensers:				
ZAA 240	Fixed X3	C1A	Vibrator Primary R.F. Bypass	300mmfd. 750 V Working plus or minus 10%; Type S.6772.
ZAA 243	Fixed Q1H	C2A	Vibrator Secondary R.F. Bypass	.01mmfd. 700 V Working. Type S.7080.
ZAA 243	Fixed Q1H	C2B	Vibrator Secondary R.F. Bypass	.01mmfd. 700 V Working. Type S.7080.
ZAA 243	Fixed Q1H	C2C	Vibrator Secondary R.F. Bypass	.01mmfd. 700 V Working. Type S.7080.
ZAA 242	Fixed P5F	C3A	Vibrator Primary R.F. Bypass	0.5mmfd. 350 V Working. Type S.7080.
ZAA 246	Fixed 8C	C4A	Vibrator Supply Filter Condenser	8mmfd. 525 V Working. Ducon EG.1080.
Resistors:				
ZAA 684	1/2-Watt No. 3 or 4, 350 ohms	R1A	Primary Suppressor Resistor	Chanex or IRC Fixed Metallized.
ZAA 609	1-Watt No. 3 or 4, 30,000 ohms	R2A	Vibrator Supply Load Resistor	Chanex or IRC Fixed Metallized.
ZAA 831	Transformers: Vibrator F	T1A	Vibrator Power Converter	6 V/Primary to work with V5211 Vibrator.
ZAA 950	Vibrators: 6 Volt, V5211	VB1A	Converter Unit, Vibratory	Type V5211, 6 Volt.



PLAT PLATE 1. WAVEMETER. CLASS "C." No. 1 (AUST.) :—FRONT VIEW

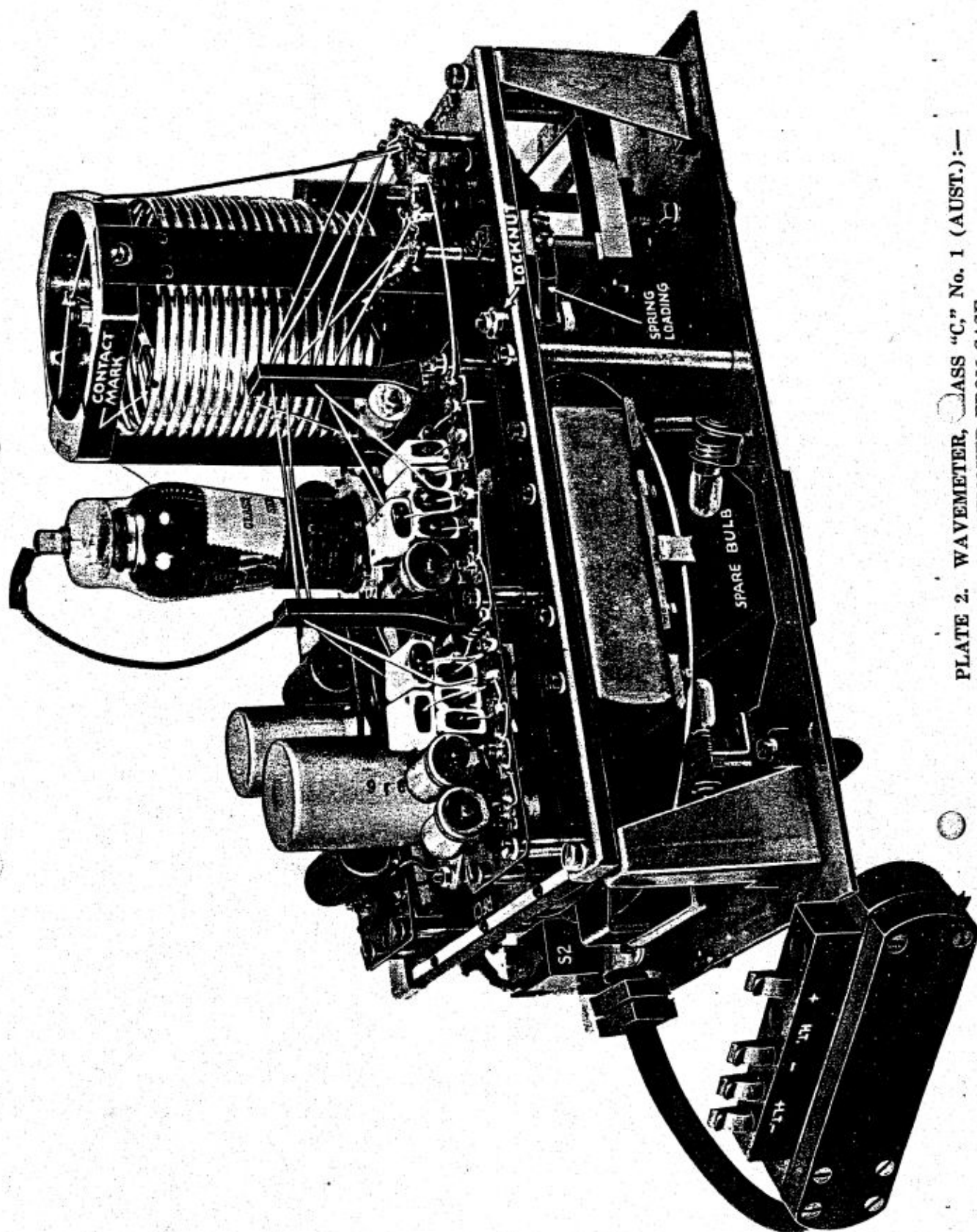


PLATE 2. WAVEMETER, CLASS "C," No. 1 (AUST.):—
REMOVED FROM CASE.

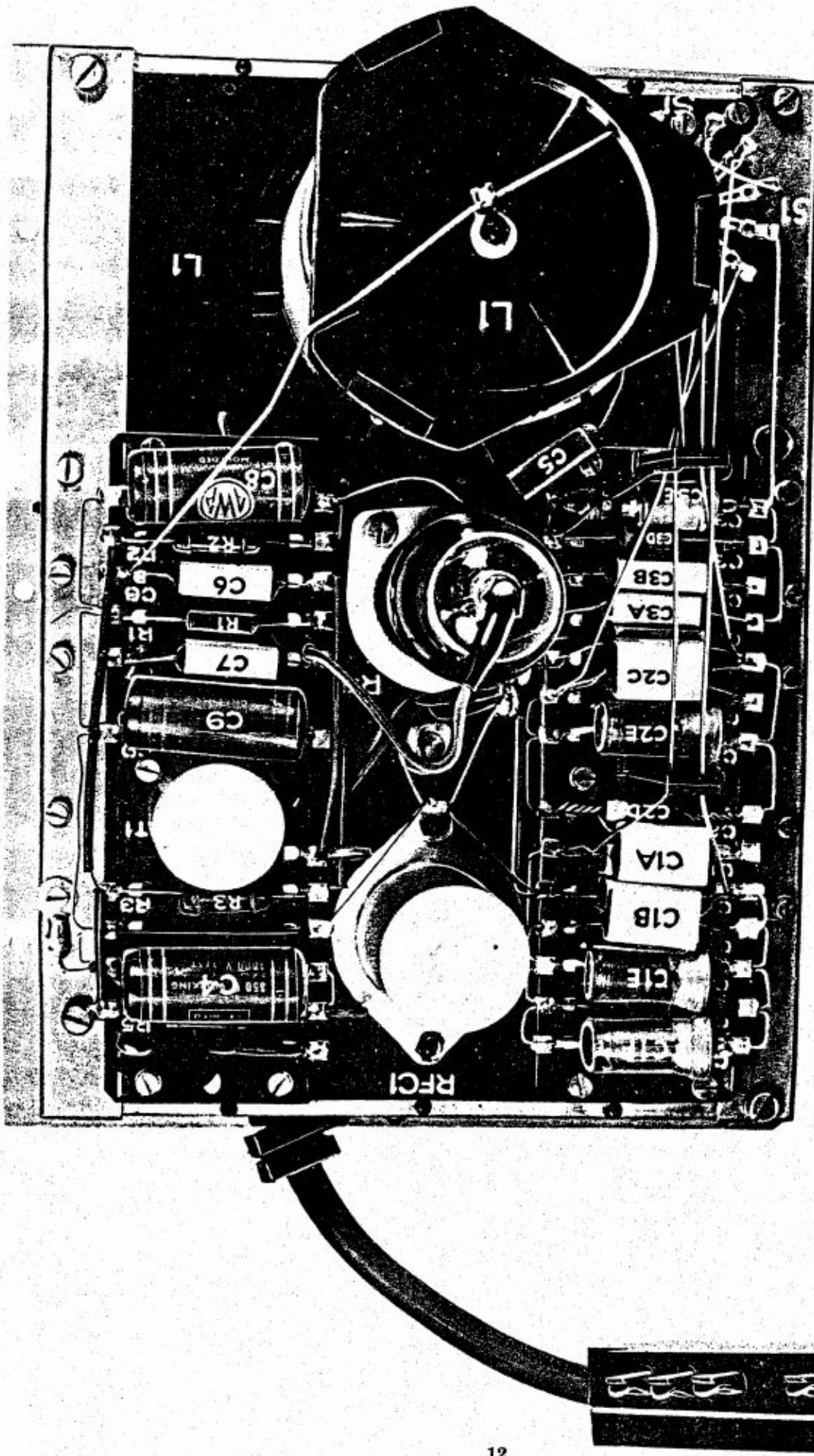


PLATE 3. WAVEMETER, CLASS "C," No. 1 (AUST.):—
UNDERNEATH VIEW OF CHASSIS.

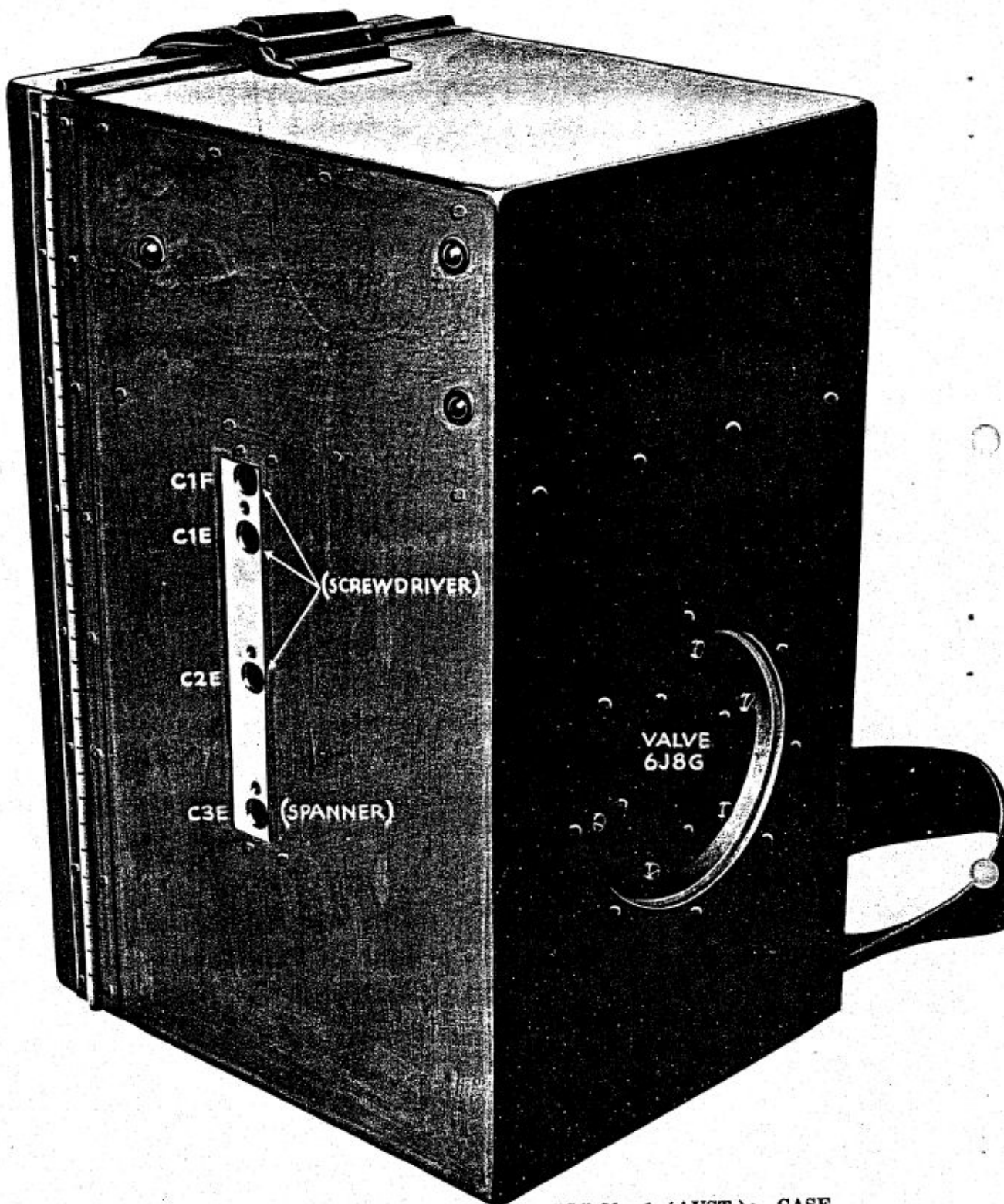


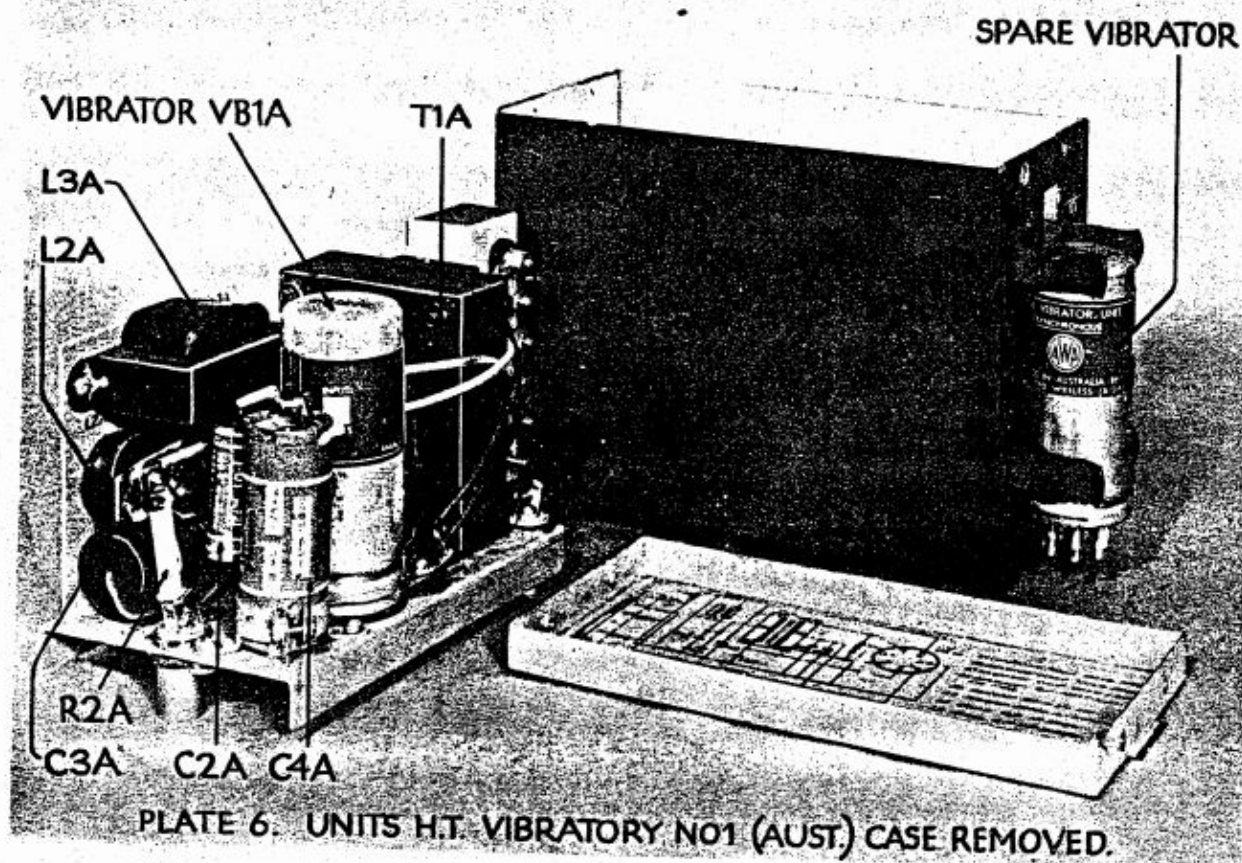
PLATE 4. WAVEMETER; CLASS "C," No. 1 (AUST.):—CASE.

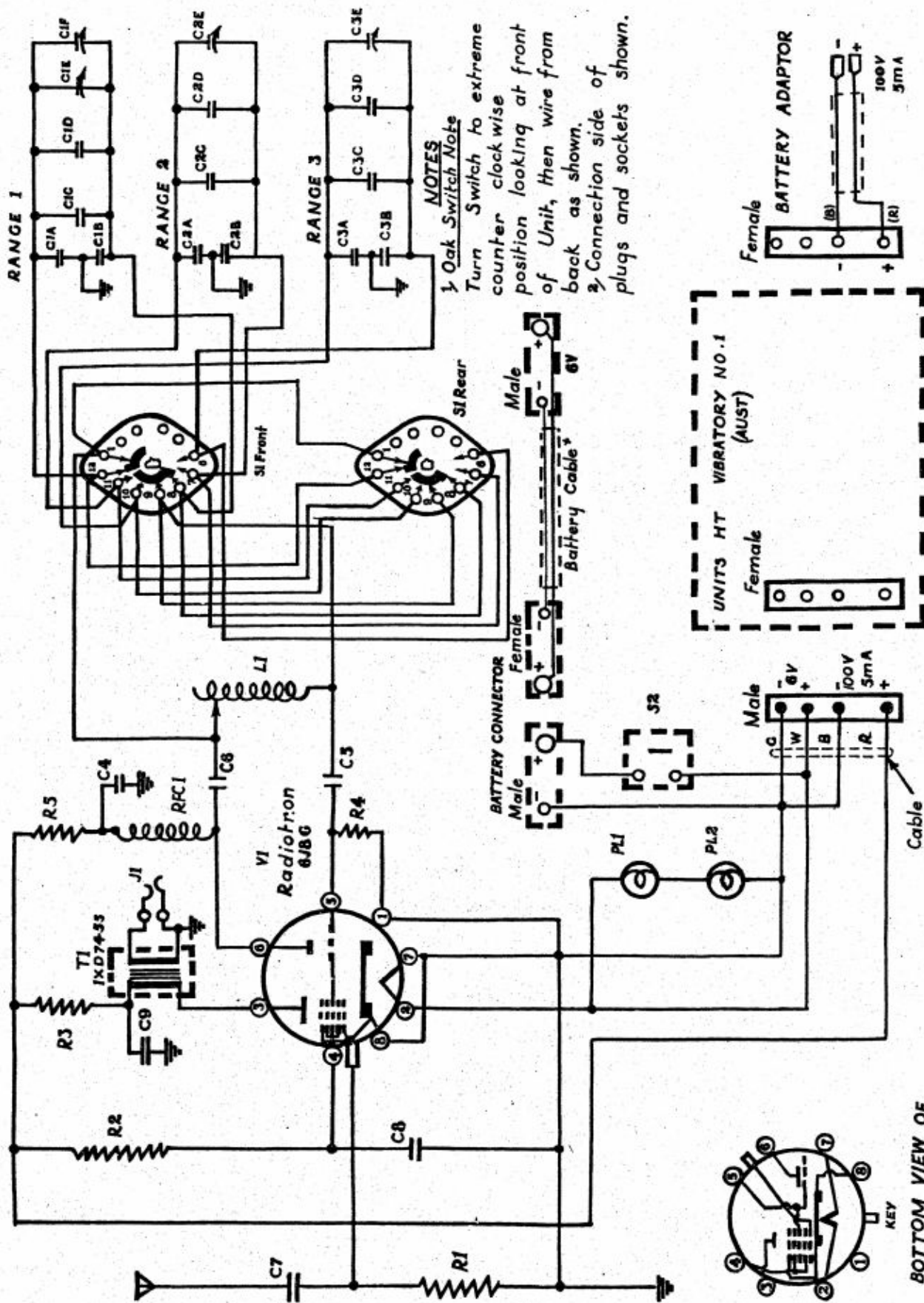
Condensers C1F - C1E - C2E should be adjusted with a suitable screwdriver, for all Wavemeters, Class "C," No. 1 (Aust.), excluding the following serial numbers:—1070, 1080, 1083, 1093, 1132 and all subsequent numbers.

All Wavemeters, Class "C," No. 1 (Aust.) with serial numbers listed above will have condensers C1F - C1E - C2E adjusted by means of a suitable box spanner.

Condenser C3E will in all cases require adjustment with a suitable box spanner.

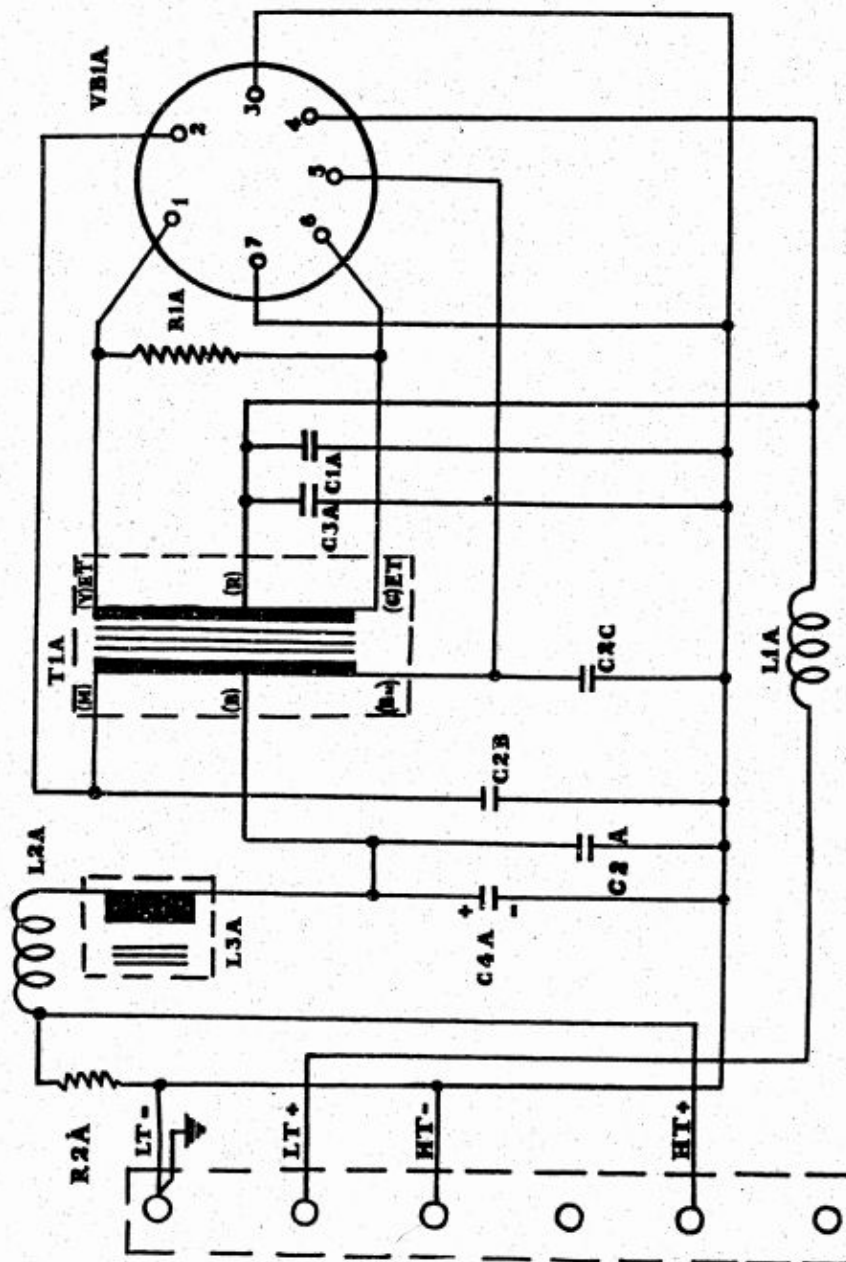
PLATE 5. UNITS H.T. VIBRATORY NO.1 (AUST.)





WAVEMETER CLASS "C" N° 1 (AUST)

Fig.1



Connection side of sockets shown.

SCHEMATIC DIAGRAM
UNIT H.T. VIBRATORY N°1 (AUST)

Fig.2