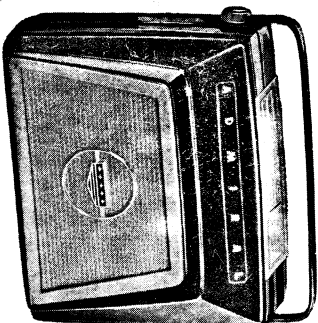


Admiral

SERVICE DOCUMENT

Model 4AZS



Colour Range: Burgundy, Beige, Forest Green, Light Grey, Tan. All with gold trim.

SPECIFICATIONS

Circuit: Superheterodyne receiver with 4 miniature valves.

Frequency Range: 535 Kc/s to 1620 Kc/s covering broadcast band.

Intermediate Frequency: 455 Kc/s.

Power Supply: This receiver operates on one 90 Volt "B" Battery and one $7\frac{1}{2}$ Volt "A" Battery.

Power Consumption: Approximately 20 watts.

Antenna: Built in Ferroscopie antenna.

Speaker: $4\frac{1}{2}$ " P.M. Voice Coil impedance 6.5 ohms, Transformer primary 10,000 ohms.

BATTERY REPLACEMENT

Run-down batteries should be removed from the set. Corrosive material may leak from a run-down battery and parts of the chassis or the cabinet are likely to be damaged.

In normal use batteries for this set should furnish about 40 operating hours. Batteries listed below, or an equivalent substitute may be used in this set.

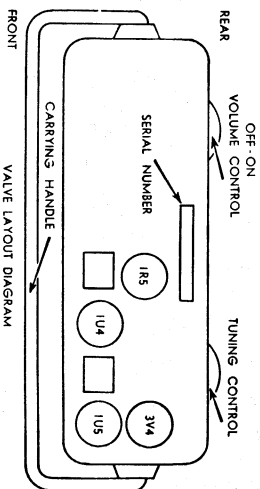
"A" Battery ($7\frac{1}{2}$ Volts): Eveready 717 or equivalent.

"B" Battery (90 Volts): Eveready 490-P or equivalent.

REPLACING VALVES

All valves may be inspected by opening the cabinet. The case is opened by applying a gentle pressure either side of the dial scale at the top and swinging the rear section back.

No attempt should be made to replace the valves with the chassis attached to the cabinet.



REMOVING THE CHASSIS

The chassis should be removed from the cabinet on all occasions of servicing other than for battery replacement or visual inspection.

The high gloss surface of the cabinet can be scratched very easily when in contact with a roughened service bench. It is important that all operations be conducted on a grit-free felt pad to avoid this.

To remove the chassis proceed as follows:—

1. Open the cabinet and lie it face down on the pad.

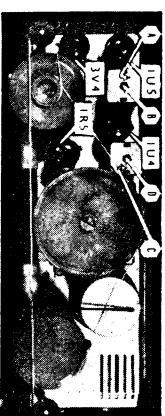
ALIGNMENT PROCEDURE

- Battery Power is preferable for alignment. Use FRESH batteries for this operation. If the set is to be aligned when power is supplied via the mains, an isolating transformer is advised to limit external interference.
- The chassis cover must be removed to reach adjustment points A and C.
- Set volume control full on.

STEP	CONNECTION OF SIGNAL GEN.	SIGNAL GEN. FREQUENCY	RECEIVER GANG	ADJUSTMENT & REMARKS
1	Stator of antenna tuning capacitor	455 Kc/s	Gang fully open	A*, B, C*, D, in this order for maximum output
2	Stator of antenna tuning capacitor	1700 Kc/s	Gang fully open	E Oscillator trimmer on gang for maximum output
3	Place signal lead of generator close to aerial rod	1400 Kc/s	Tune in generator signal	F Aerial trimmer on gang for maximum output

* Adjustments A and C are made from underside of chassis

Location of Valves and Adjustment Positions

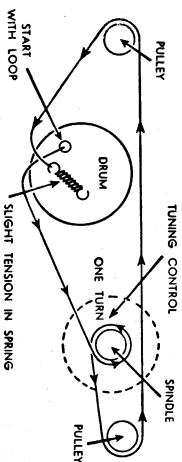


Adjustments A and C are made from underside of chassis.

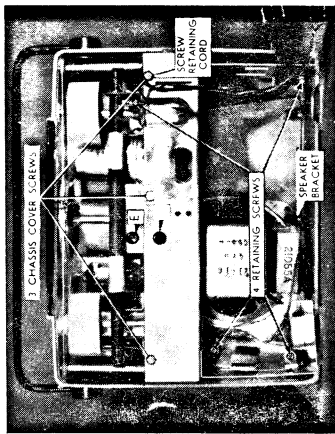
Voltage Data:

Voltages are shown at relevant points on circuit diagram. All voltages are taken between valve socket terminals and B minus, which is chassis connection. Dial set at low frequency end (gang fully meshed) volume control at minimum.

TO REPLACE DIAL CORD



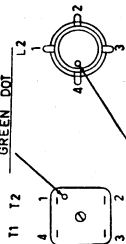
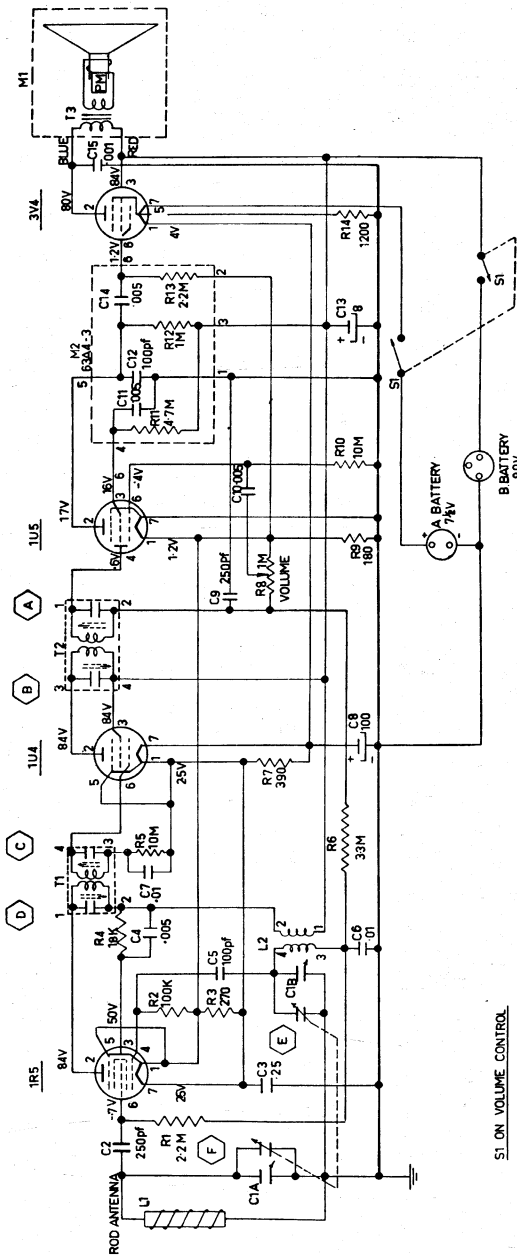
- Remove the screw retaining the cord which is fastened to the cabinet cover.
- Disconnect and remove the "A" and "B" batteries.
- Remove the FOUR retaining screws indicated (X) on the following diagram. Loosen the screw securing the speaker bracket.



The complete chassis may now be lifted clear of the cabinet.

The chassis cover must be removed to align the receiver or check voltages. Remove the remaining two screws which hold the cover on the chassis.

When replacing the chassis cover, ensure that the three tabs fit into slots along the edge of the chassis at either side of the speaker. Make sure the lead wires from the output transformer fitted to the speaker are not caught between the chassis and the cover.



RESISTORS

Symbol	Description	Part No.
R1	2.2 megohms 1/2 watt	A60A10-225-4
R2	100,000 ohms 1/2 watt	A60A10-104-4
R3	270 ohms 1/2 watt	A60A10-271-4
R4	18,000 ohms 1 watt	A60A12-189-4
R5	10 megohms 1/2 watt	A60A10-106-4
R6	390 ohms 1/2 watt	A60A10-391-4
R7	3.3 megohms 1/2 watt	A60A10-335-4
R8	1 meg. Vol. Control with on-off switch	A75-03
R9	180 ohms 1/2 watt	A60A10-181-4
R10	10 megohms 1/2 watt	A60A10-106-4
R11	Part of Couplate	A63A4-3
R12		
R13		
R14	1200 ohms 1 watt	A60A12-122-4

CAPACITORS

Symbol	Description	Part No.
C1A	Twin Gang Condenser	68B57-2
C1B		
C2	250 ufd AEE	A64A24-77-3
C3	.25 ufd 100V Miniseal	A64A25-177-3
C4	.005 ufd 200V AEE	A64A22-122-4
C5	100 ufd 10% Simplex	A65A10-67-4
C6	.01 ufd 200V AEE	A64A22-134-4
C7	.01 ufd 200V AEE	A64A22-134-4
C8	Electrolytic 100 ufd 12V	

MISCELLANEOUS PARTS

Symbol	Description	Part No.
C9	.005 ufd 200V AEE	A64A22-122-4
C10	Part of Couplate	A63A4-3
C11	250 ufd 10% Simplex	A65A10-77-4
C12	Part of Couplate	A63A4-3
C13		
C14	.001 ufd 400V AEE	A63A23-101-4
C15	25 ufd 40V ETI	
L1	Aerial Rod Assembly	A71-04
L2	Coil, Oscillator	A89-03
T1	Transformer, 1st I.F.	A72-02
T2	Transformer, 2nd I.F.	A72-02
M1	Speaker M.S.P. 4" No. 6	A78-05
S1	Switch ON-OFF—Part of RB. Couplate (includes R11, 12, 13, C10, 12, 13)	A63A4-3

COILS, TRANSFORMERS, ETC.

Symbol	Description	Part No.
15A932	Bracket Antenna Support	15A932
32A195	Insulator Antenna Support	32A195
A14B05	Chassis Cover	A14B05
15B08	Bracket for "B" Battery	15B08
A28A01	Shaft, Tuning	A28A01
A18-05	I.F. Clips	A18-05
A25-03	Pointer Assembly	A25-03
A19-07	Spring—Dial Cord	A19-07

VALVES

Symbol	Description	Part No.
1B5	Converter	1B5
1U4	I.F. Amplifier	1U4
1U5	2nd Detector, A.V.C. Driver	1U5
3V4	Power Output	3V4

CABINET PARTS

Symbol	Description	Part No.
A43-B01	Baffle Board, Speaker	A43-B01
20A1S	Button, Handle Ornament	20A1S
A34-16-8	Cabinet Front	A34-16-8
A34-16-9		
A34-16-11	Burgundy	A34-16-9
A34-16-12	Beige	A34-16-11
A34-16-13	Tan	A34-16-12
A34-16-13	Green	A34-16-13
A34-17-8	Cabinet Rear:	A34-17-8
A34-17-9		
A34-17-9	Grey	A34-17-9
A34-17-11	Burgundy	A34-17-9
A34-17-11	Beige	A34-17-11

Symbol	Description	Part No.
A34-17-12	Tan	A34-17-12
A34-17-13	Green	A34-17-13
33A106-5-8	Handles:	33A106-5-8
33A106-5-9		
33A106-5-11	Grey	33A106-5-9
33A106-5-12	Burgundy	33A106-5-11
33A106-5-13	Beige	33A106-5-12
23B173	Tan	33A106-5-13
23B167	Green	23B173
23C147-2	Metal Grille	23B167
A21A02	Medallion	23C147-2
A21A06	Metal Bezel	A21A02
A33B03-8	Back Plate—Dial	A21A06
A33B03-9	Dial Scale	A33B03-8
A33B03-11	Knob Tuning Type 2:	A33B03-9
A33B03-12		
A33B03-13	Grey	A33B03-11
A33B15-8	Burgundy	A33B03-12
A33B15-9	Beige	A33B03-13
A33B15-11	Tan	A33B15-8
A33B15-12	Green	A33B15-9
A33B15-13	Grey	A33B15-11
	Burgundy	A33B15-12
	Tan	A33B15-13
	Green	