

**MODELS AR-96-23,
AIRBOY**

MOTOROLA INC.

ALIGNMENT PROCEDURE

1. Remove chassis from housing.
2. Volume set at maximum for all operations.
3. The adjusting screwdriver or alignment tool should be of the insulated type, such as Motorola Part No. 66A71008.
4. Connect output meter with 600 ohm resistor in parallel across phone jack.

OPERATIONS IN ORDER	BAND CAPACITOR SET AT	DUMMY ANTENNA CONNECTED TO	GENERATOR ANTENNA	ADJUST TRIMMER AT NO.	SET GENERATOR AT	AVERAGE INPUT FOR 5.35V OUTPUT
1	Min.	.1 mf	Osc-Mod Grid	1-2-3	465 Kc	
2	200 Kc	200 mmf	Ant.Recpt.	4	200 Kc	
3	220 Kc	200 mmf	Ant.Recpt.	5	220 Kc	25 uv.
4	400 Kc *	200 mmf	Ant.Recpt.	6	400 Kc	
5	380 Kc	200 mmf	Ant.Recpt.	7	380 Kc	
6	400 Kc *	200 mmf	Ant.Recpt.	6	400 Kc	

Repeat above steps for maximum accuracy.

* Rock gang capacitor until greatest output is obtained.

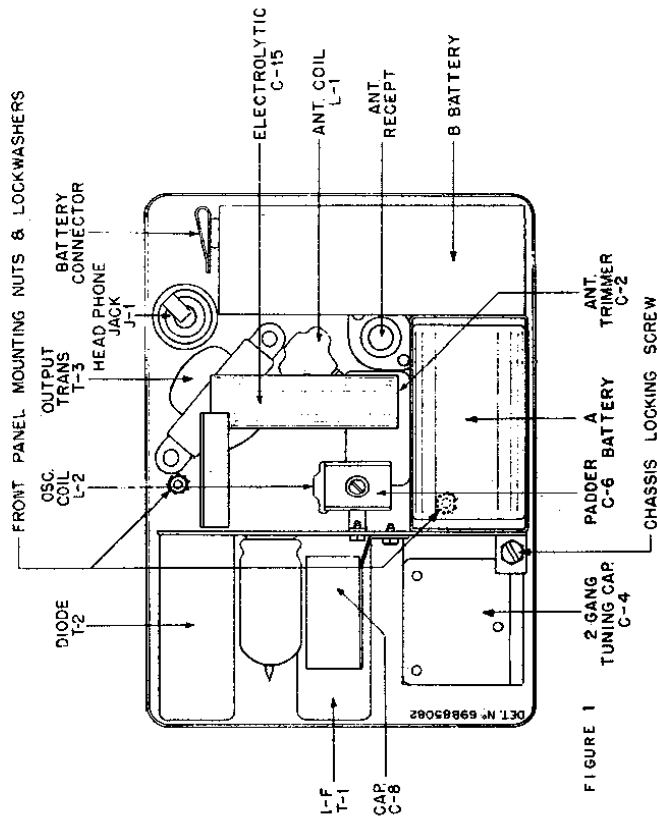


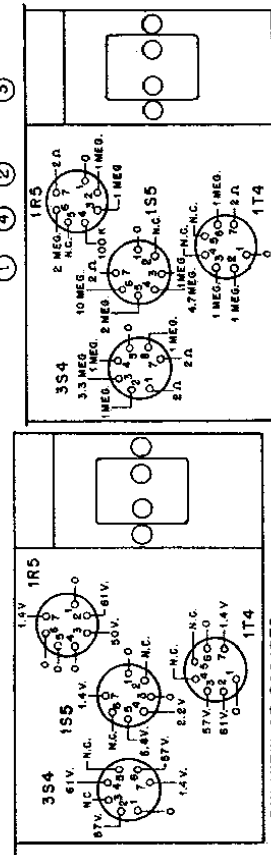
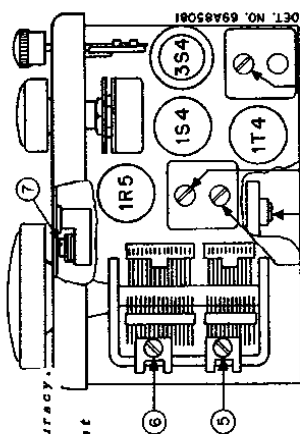
FIGURE 1

REMOVING CHASSIS FROM HOUSING:

1. Unlatch back cover and remove.
 2. Remove 'A' and 'B' batteries.
 3. Remove the three Phillips head screws which fastens the front panel.
 4. Remove chassis locking screw (See figure 1.)
 5. The front panel and chassis may now be removed from the wrap-around housing.
- NOTE:**
1. When replacing chassis be sure to place the tube retainer and cardboard packing in reverse.
 2. Do not remove tape from housing, as it serves as insulation.
- REMOVING CHASSIS FROM FRONT PANEL:**
1. Remove tuning and volume control knobs; don't lose the two cork washers and spring washer under tuning knob. When replacing, the spring washer is between the cork washers.
- REMOVING CHASSIS FROM ON-OFF SWITCH:**
2. Remove knob from ON-OFF switch. This knob is threaded. Remove by turning to the left.
 3. Remove the following wires:
 - a. The red and blue leads of the output transformer from the 354 tube socket.
 - b. The three leads to the ON-OFF switch.
 - c. The white lead from the ant. trimmer to the 1R5 tube socket; also the bare antenna coil and the 1 megohm resistor lead.
 - d. The white lead from the antenna mounting nuts and lockwashers. (See figure 1.)
 - e. Remove the front panel from the chassis.
 - f. The front panel is now free from the chassis.

NOTE:

1. The removal of the front panel will ease the replacement of components which are wired to tube sockets.
2. Be sure to make the proper connections when replacing. Refer to the schematic diagram.



PIN VIEW OF SOCKETS

NOTE: RESISTANCE MEASUREMENTS MADE UNDER THE FOLLOWING CONDITIONS:

- 1- BATTERIES DISCONNECTED.
- 2- C-15 ELECTROLYTIC DISCONNECTED.
- 3- VOLUME CONTROL ON FULL.
- 4- SWITCH ON.
- 5- USING WESTON, MODEL 772, ANALYZER.
- 6- ANTENNA DISCONNECTED.

PIN VIEW OF SOCKETS

NOTE: VOLTAGE MEASUREMENTS MADE UNDER THE FOLLOWING CONDITIONS:

- 1- 67-1/2 V. 'B' BATTERY CONNECTED.
- 2- 2-1/2 V. 'A' BATTERIES CONNECTED.
- 3- VOLUME CONTROL ON FULL.
- 4- SWITCH ON.
- 5- ANTENNA DISCONNECTED.
- 6- USING WESTON, MODEL 772, ANALYZER 20,000 OHMS PER VOLT VOLTMETER.