

## Majestic Radio & Telev. Corp.

**Model:** 50

**Chassis:**

**Year:** Pre October 1937

**Power:**

**Circuit:**

**IF:**

**Tubes:**

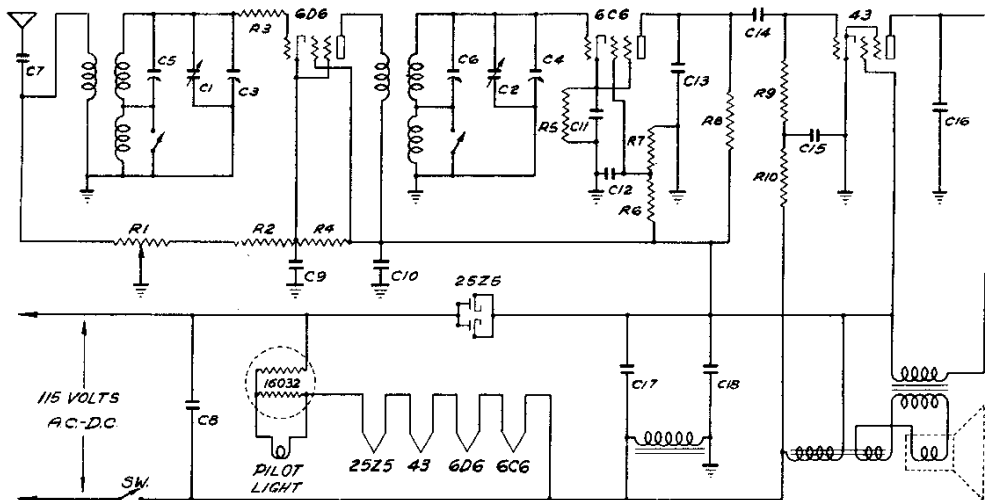
**Bands:**

Resources

**Riders Volume 8 - MAJESTIC 8-1**

MAJESTIC RADIO & TELEV. CO.

MODEL 50  
Schematic, Socket  
Trimmers, Voltage  
Alignment, Parts



**ALIGNMENT PROCEDURE**—Correct alignment is of extreme importance. Your receiver is properly aligned at the factory and realignment should not be attempted by the service technician until all other causes of faulty operation are corrected.

In order to properly realign the receiver, the following equipment is necessary.

1. A signal generator which will provide an accurately calibrated signal at any frequency from 540 to 4000 kilocycles. The generator should have a modulated and adjustable signal output.
2. An output audio voltmeter to be connected across the moving coil of the speaker. This meter should be capable of providing a readable deflection for output levels of 1/2 volt, to avoid the effects of overload.
3. One screw driver; one .25 Mfd. 600 volt condenser; one 100 Mmfd. mica condenser.

**BROADCAST BAND 540 TO 1550 KILOCYCLES**

1. Connect output meter across loud speaker voice coil.
2. Connect ground or low potential terminal of signal generator to receiver chassis through a .25 Mfd. 600 volt condenser.
3. Connect antenna or high potential terminal of signal generator through a 100 Mmfd mica condenser to antenna lead from the receiver.
4. Adjust signal generator to 1400 kilocycles and 5000 microvolts output.
5. Adjust receiver range indicator to broadcast or "B" band and pointer to 1400 kilocycles.
6. Adjust trimmers C3 and C4 until maximum output is obtained and reduce volume level with volume control to approximately 0.5 volt. Repeat until C3 and C4 cannot be adjusted to give greater output.
7. Turn volume control to clockwise or most sensitive position; reduce output from signal generator; retune receiver and check sensitivity.
8. Check sensitivity at 1000 kilocycles and 550 kilocycles.

**POLICE BAND 1550 to 4000 KILOCYCLES**

1. Adjust signal generator to 4000 kilocycles.
2. Adjust receiver range indicator to police or "P" band and pointer to 4000 kilocycles.
3. Turn receiver volume control to maximum or extreme clockwise position, and increase signal generator output until a signal is heard.
4. Adjust trimmers C5 and C6 until maximum output is obtained and reduce output from signal generator until receiver output is approximately 0.5 volt. Repeat until C5 and C6 cannot be adjusted to give greater output.
5. Check sensitivity at 2400 kilocycles and 1600 kilocycles.
6. Sensitivity at 1600 kilocycles may be adjusted by moving position of lead from wave switch to chassis.

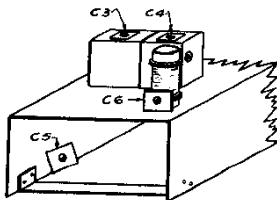


Fig. 2 Location of Trimmers

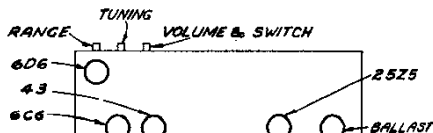


Fig. 1 Tuning Controls and Tube Position

Schematic Location	Part No.	Description
C1 C2	B-16986	Condenser Variable Gang
C3 C4		Condenser Trimmers, part of Variable Gang
C5 C6	A17003	Condenser Trimmer 3-25 Mmfd. bakelite base
C7	15767	Condenser Tubular .001 Mfd. 400 volts
C8	15757	Condenser Tubular .1 Mfd. 400 volts
C9 C12	15752	Condenser Tubular .06 Mfd. 200 volts
C10	15757	Condenser Tubular .1 Mfd. 400 volts
C11	15761	Condenser Tubular .25 Mfd. 200 volts
C13	15928	Condenser Mica 250 Mmfd. + -20% type O
C14 C16	15754	Condenser Tubular .01 Mfd. 400 volt
C15	15775	Condenser Tubular .5 Mfd. 200 volts
C17	B-16973	Condenser Wet Electrolytic 30 Mfd. 150 volts
C18	B-17042	Condenser Wet Electrolytic 25 Mfd. 150 volts
R1	B-16970	Control volume and line switch 50,000 ohms
R2	15569	Resistor Carbon 300 + -20% 1/4 watt
R3	15570	Resistor Carbon 2,000 + -20% 1/4 watt
R4	15515	Resistor Carbon 100,000 + -1/4 watt
R5	15531	Resistor Carbon 10,000 + -20% 1/4 watt
R6	15568	Resistor Carbon 35,000 + -10% 1/4 watt
R7	15567	Resistor Carbon 15,000 + -10% 1/4 watt
R8	15512	Resistor Carbon 250,000 + -20% 1/4 watt
R9	15528	Resistor Carbon 400,000 + -20% 1/4 watt
R10	15515	Resistor Carbon 100,000 + -20% 1/4 watt
	15089	Bulb Pilot Light, Mazda No. 44
	16032	Ballast Tube
	B-16969	Ballast Tube Socket
	17057	Antenna Coil Assembly
	17058	Interstage Coil Assembly
	16994	Antenna Hank
	A-16971	Wave Switch
	C-16972	Filter Choke
	C-16985	Speaker
	B-16471	Line Cord
	A-17020	Spring, part of Dial Drive Assembly
	6001	String, Dial Drive
	A-16983	Socket, Pilot Light
	A-16997	Dial Glass
	A-17040	Dial Pointer
	A-17027	Wood Spacer, Dial Assembly
	A-17002	Purple Dial Backing
	A-2100	Fiber Washer, Dial Assembly
	1145	Dial Pointer Screw
	A-16988	Fish Paper Insulation, Electrolytic Condenser
		Knob (volume, band switch and tune)
	A-1954	Washer, Felt (small)
	A-17137	Escutcheon

VOLTAGE CHART						
Position	Tube	Ef	Ek	Eg Screen	Ep Suppressor	Ep Pentode
R. F. Amplifier	6D6	6.3	3.2	103	3.2	103
Detector	6C6	6.3	1.8	28	1.8	36
Power Output	43	25	Note "C"	103	Note "D"	Note "C"
Rectifier	25Z5	25	Note "A"			96
Ballast	16032	Note "B"				103

All above voltages to chassis with 115 volt 60 cycle line. Cathode, screen, suppressor and pentode voltages when operating from 115 volt d.c. line will be 10 percent lower.  
Note "A"—Output pentode test should be measured across filter choke at 14 volts.  
Note "B"—Pins 3 to 7 should measure 80 volts a.c.  
Note "C"—Measured with 250,000 ohm voltmeter.  
Note "D"—Measured with 25,000 ohm voltmeter.