



THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

$$IF=455\text{KC}$$

1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1,000 ohms per volt.
2. Socket connections are shown at bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of $\pm 10\%$ in the measured values.
6. Volume control at maximum; no signal applied for voltage measurements.

The stage gain measured values listed above are approximate values for an average operative stage, rather than an absolute value. It should be borne in mind that it is possible to introduce so many variables into the measurement operation, such as, type of equipment used for measuring, handling and placement of probes, the accuracy of alignment, etc., that an absolute reading is impractical. AVC is made inoperative and 3-volt battery bias substituted for measurement.



**EMERSON
MODELS 525, 552**

EMERSON MODEL 552

TRADE NAME		Emerson, Model 528, 552				
MANUFACTURER		Emerson Radio & Phone Corp., 111 Eighth Ave., New York, N.Y.				
TYPE SET		AC Operated Phono-Radio Combination Superheterodyne with Loop Antenna				
TUBES (FIVE)		Types, 12SA7 Converter, 12SK7 IF Amp., 12SQ7 Det.-AVC-AF, 50L6GT Power Output, 35Z5GT Rectifier.				
POWER SUPPLY		110-120 Volts AC				
TUNING RANGE—BROADCAST		540-1620KC	RATING		.250 Amp. @ 117 Volts AC	
ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
To set pointer turn tuning cap. fully closed and set pointer to last reference mark at low freq. end of dial. Use isolation transformer if available. If not, connect a capacitor in series with low side of signal generator and B-. Volume control should be at maximum position, output of signal generator should be no higher than is necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1 MFD.	High side to rear stator of tuning cap. Low side to B-.	455KC	Tuning cap. open.	Across voice coil	A1, A2, A3, A4.	Adjust for maximum output. If isolation transformer is not used reduce dummy ant. to .001 MFD. to reduce hum modulation.
200MMFD.	High side to ext. ant. lead. Low side to ext. grd. lead.	1500KC	1500KC	"	A5	Adjust for maximum output.
200MMFD.	"	1400KC	Tune for maximum output.	"	A6	" " " "

DISASSEMBLY INSTRUCTIONS

1. Remove four push-on type control knobs.
2. Remove four Phillips head screws holding chassis mounting board to bottom of cabinet.
Remove mounting board.
3. Disconnect phono-motor plug.
4. Remove phono-pickup plug from chassis.
5. Remove three Phillips head screws holding chassis to mounting board.
6. Unsolder line cord from chassis.

HOWARD W. SAMS & CO., INC.

Indianapolis Indiana

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PARTS LIST AND DESCRIPTIONS
 TUBES (SYLVANIA or Equivalent)

EMERSON MODELS
 625, 652

ITEM No.	USE	REPLACEMENT DATA			RMA BASE TYPE	INSTALLATION NOTES
		EMERSON PART No.	STANDARD REPLACEMENT			
1	Converter	128K7	128K7	8R		
2	1F Amp.	128K7	128K7	8R		
3	Det.-AFC-AF	128K7	128K7	8Q		
4	Power Output	50L60T	50L60T	7AC		or 50A5 Alternate
5	Rectifier	35Z50T	35Z50T	6AD		

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING	REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES
		EMERSON PART No.	AEROVOX PART No.	CORNUELL DUBILIER PART No.	MALLORY PART No.	SOLAR PART No.	
6A	CAP. 150	925110	PRSA150-50	ER02515	2W520	N-6030-150	TA-530 Filter - Red
7	50		150				
8	.05	920030	494-05	ET455	TP426	S-4-05	TC-15 Line Filter
9	.02	920020	494-02	ET452	TP423	S-4-02	TC-12 Output Plate Bypass
10	.0005	920020	494-02	ET452	TP423	S-4-02	TC-12 Audio Coupling
11	.0005	920040	1449-0005	ET075	TP403	S-6-0005	TC-25 Audio Plate Bypass
12	.002	920015	494-002	ET012	TP406	S-6-002	TC-22 Tone Compensation
13	.05	920010	494-05	ET455	TP405	S-6-002	TC-22 Audio Coupling
14	.1	920040	494-1	ET471	TP428	S-4-05	TC-15 Phone Isolation
15	.2	920050	494-2	ET472	TP428	S-4-2	TC-2 Line Isolation Trap
16	.05	920030	494-05	ET455	TP426	S-4-05	TC-15 Motor Isolation
17	500	910000	468-0002	5W572	2C237	MD-5-322	Diode Filter

*Early models may use Part # 925267 Filter Capacitor.
 †All models after Serial No. 9550551 item (16) will become Part #922101.
 ‡The choke on the isolation trap is not used on models when the 1st & 2nd IF Trans. are Part Nos. 720525 and 720528.

CONTROLS

ITEM No.	RATING	REPLACEMENT DATA				INSTALLATION NOTES
		EMERSON PART No.	MALLORY PART No.	IRC PART No.	CLAROSTAT PART No.	
18A	500W 2 B Switch	390010	100156	D11-133	AM-58-8	Volume Control
	C Switch	1825	8825	41	SW-A	Attach to 1/4" per instructions

RESISTORS

ITEM No.	RATING	REPLACEMENT DATA			IDENTIFICATION CODES
		EMERSON PART No.	EMERSON PART No.	IRC PART No.	
19	22KΩ		310310	RTS-22KΩ	Red-Red-Gr. Oscillator Grid
20	220KΩ		321050	RTS-220K	Red-Red-Vi. Line Isolation
21	15 Meg.		397000	RTS-15 Meg.	Gr.-Orn.-Blue AVC Network
22	3.3 Meg.		321330	RTS-3.3 Meg.	Gr.-Orn.-Grn. AVC Network
23	15 Meg.		397000	RTS-15 Meg.	Gr.-Orn.-Blue AF Grid
24	470KΩ		321130	RTS-470K	Yl.-Vi.-Yl. AF Plate Load
25	470KΩ		321130	RTS-470K	Yl.-Vi.-Yl. Output Grid
26	150Ω		340280	SW-8-150	Gr.-Orn.-Gr. Tone Compensation
27	2.2 Meg.		321280	RTS-2.2 Meg.	Red-Red-Grn. Cathode
28	1000Ω		370490	ETA-1000	Gr.-Blk.-Red Filter
29	100Ω		321210	SW-8-10	Gr.-Blk.-Grn. Series Phone
30	10Ω		340013	PA-8-15	Gr.-Blk.-Blk. Series Pilot Light
31	15Ω		340050	PA-8-15	Gr.-Orn.-Blk. Rectifier Ballast

TRANSFORMER (OUTPUT)

ITEM No.	RATING	REPLACEMENT DATA				INSTALLATION NOTES
		EMERSON PART No.	EMERSON PART No.	STANCOR PART No.	THORDARN PART No.	
32	IMPEDANCE 8.2Ω	20502	1820	774200	A-5976	ADD extra filter to reduce hum level.

PARTS LIST AND DESCRIPTIONS (Continued)
 SPEAKER

ITEM No.	RATINGS	REPLACEMENT DATA			INSTALLATION NOTES
		EMERSON PART No.	EMERSON PART No.	JENSEN PART No.	
33	FIELD	180000	180000	ST-107	3 Fabricate new mounting bracket.
34	VOICE DIA.	180000	180000	ST-107	

R F COILS

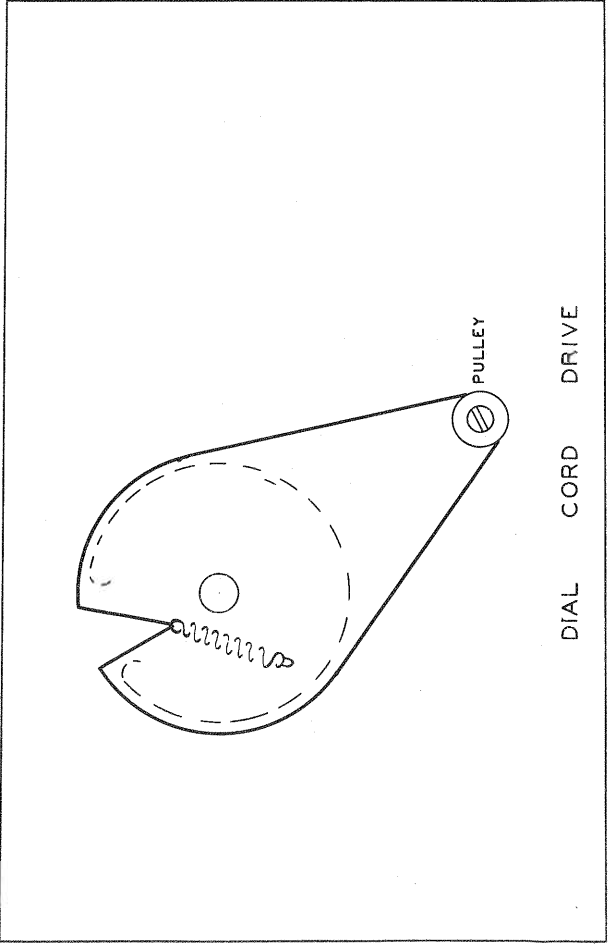
ITEM No.	USE	REPLACEMENT DATA			INSTALLATION NOTES
		DC RES.	EMERSON PART No.	MEISSNER PART No.	
35	Loop Ant.	PHI .10	700000	14-1040	Add 50 MFD from grid to high side tuning cap.
36	Osc. Coil	2.5Ω	710010	16-8668	
37	Input IF	25Ω	720000	16-8667	
38	Output IF	25Ω	720100		

DIAL LIGHT

ITEM No.	BASE TYPE	VOLTS	AMPS.	REPLACEMENT DATA		INSTALLATION NOTES
				BEAD COLOR	EMERSON PART No.	
39	Bayonet	8-9	0.15	Brown	807000	Type 47

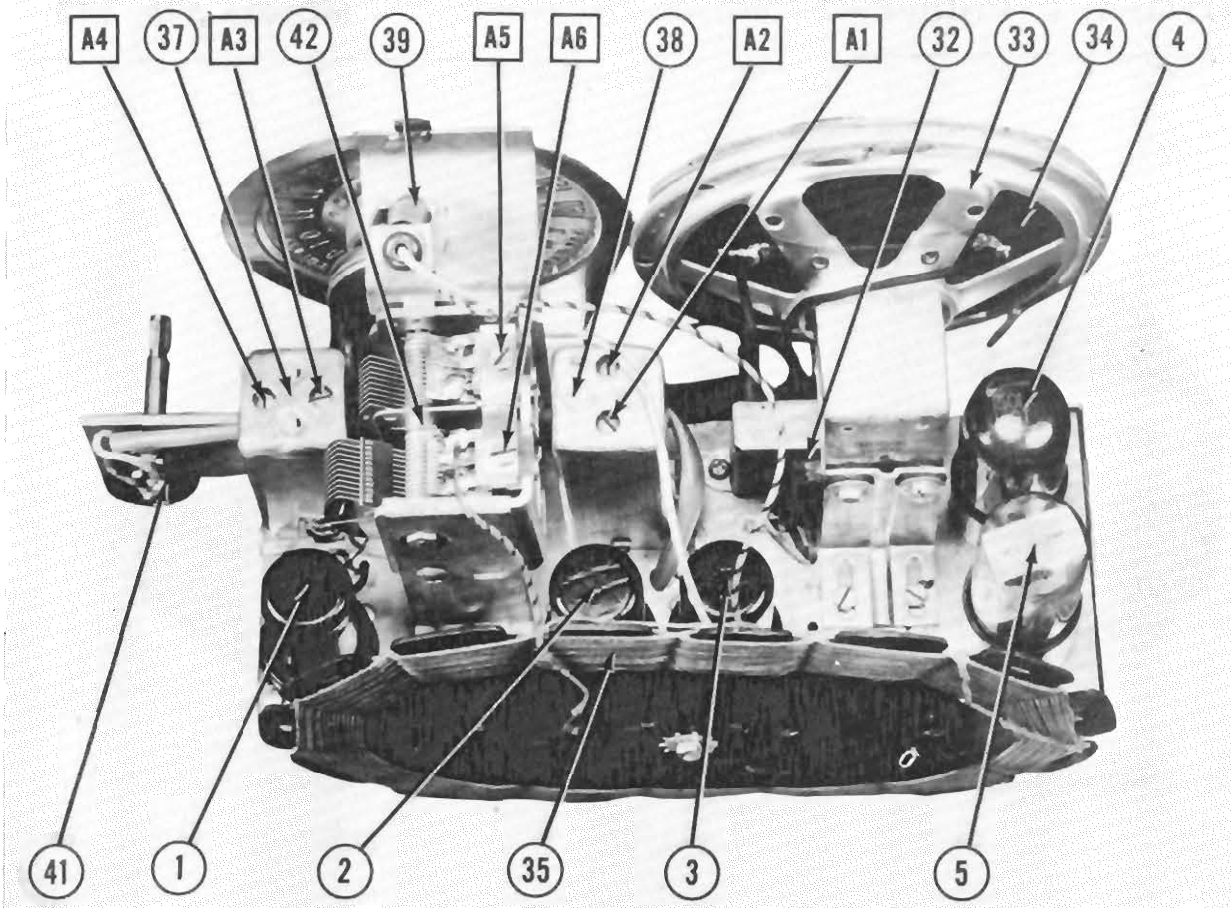
MISCELLANEOUS

ITEM No.	PART NAME	EMERSON PART No.	NOTES
40	Switch	510050	Radio-Phone
41	2 Gang Var. Cap	900290	Tone
42	Record Changer	819019	25-380 MCF, 25-188 MCF
	Original Cartridge		Astatic L-70-8

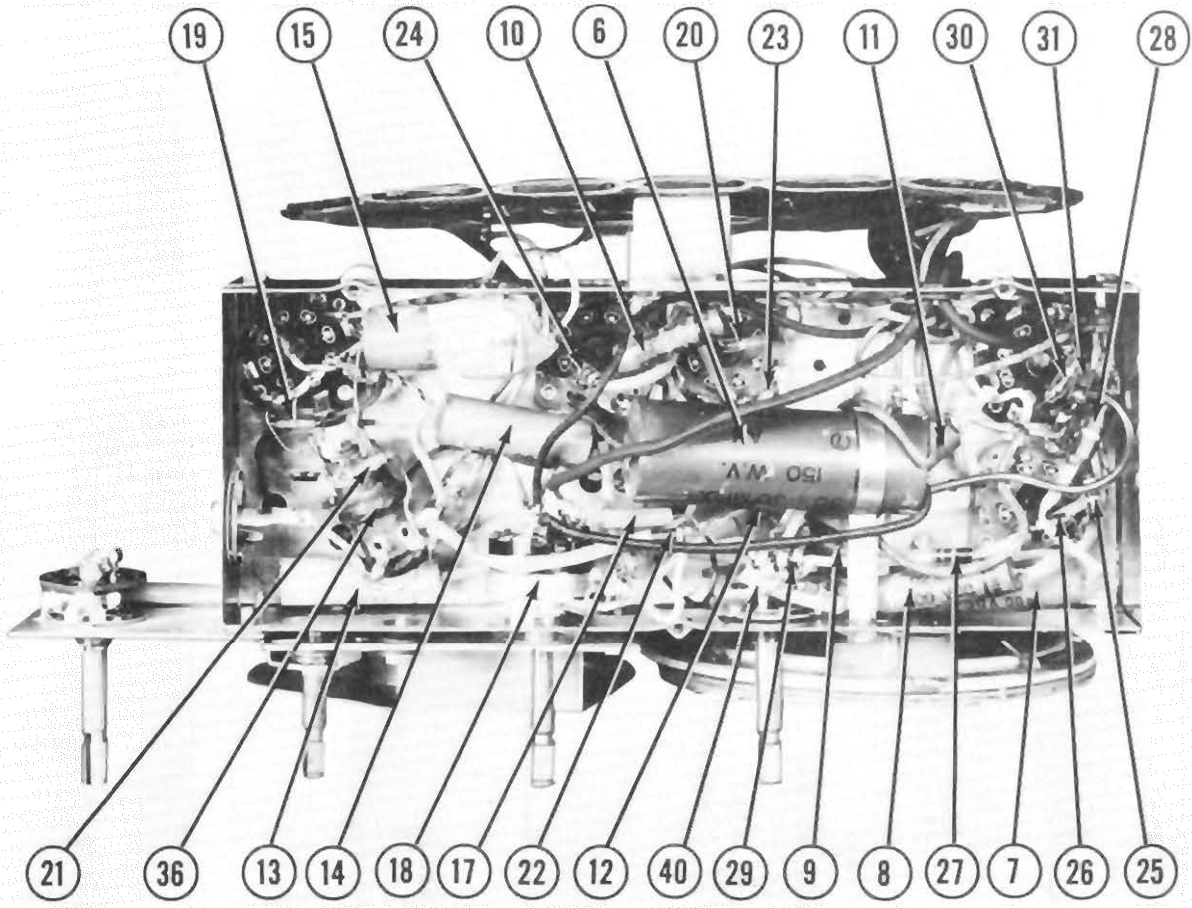


EMERSON MODELS
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CHASSIS—TOP VIEW



CHASSIS—BOTTOM VIEW



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