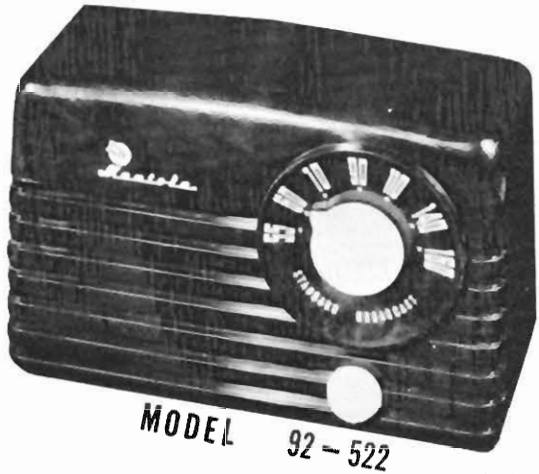


MANTOLA MODELS
92-520, 92-521, 92-522



MANTOLA MODELS
92-520, 92-521, 92-522

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

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V 1	12BE6	18K	.5K	25K	12K	12.2K	12.2K	6 Meg.
V 2	12AT6	10 Meg.	0	0	12K	6 Meg.	1.6 Meg	120K
V 3	50B5	250K	0	25K	70K	120K	12.2K	250K
V 4	35W4	Inf.	Inf.	117K	150K	150K	145K	60K

Measured From Pin 7 of V4.

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V 1	12BE6	1.5-7 VDC	0V	25VAC	12VAC	100VDC	100VDC	0V
V 2	12AT6	-1.7VDC	0V	0V	12VAC	-1.7VDC	-6VDC	85VDC
V 3	50B5	-1.3VDC	0V	25VAC	75VAC	117VDC	100VDC	-1.3VDC
V 4	35W4	0V	0V	80VAC	117VAC	115VAC	105VAC	127VDC

TAKEN WITH VACUUM TUBE VOLTMETER.

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

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

CHASSIS—TOP VIEW

MANTOLA
MODEL 92-521

ITEM No.	USE	REPLACEMENT DATA		BWA BASE TYPE	INSTALLATION NOTES
		MANTOLA PART No.	STANDARD REPLACEMENT		
V1	Converter	12B86	12B86	7CH	
V2	DET-AVC-AF	12AT6	12AT6	7ET	
V3	Power Output	50B5	50B5	7B2	
V4	Rectifier	55M4	55M4	5BQ	

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 CAP. VOLT	REPLACEMENT DATA				IDENTIFICATION CODES AND INSTALLATION NOTES
		MANTOLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	SPRAGUE PART No.	
C1A	40	62-15	FRSA150/40	EDL	15B-2x40	TA-440 Filter Red
C2	40	150	40	4415	15B-2x40	TA-440 Filter Green
C3	510	500	1468-0005	5W575	15B-2x40	TA-440 Filter Green
C4	10	500	1468-0001	5W575	15B-2x40	TA-440 Filter Green
C5	100	500	1468-0001	5W575	15B-2x40	TA-440 Filter Green
C6	100	500	1468-0001	5W575	15B-2x40	TA-440 Filter Green
C7	100	500	1468-0001	5W575	15B-2x40	TA-440 Filter Green
C8	100	500	1468-0001	5W575	15B-2x40	TA-440 Filter Green
C9	100	500	1468-0001	5W575	15B-2x40	TA-440 Filter Green
C10	100	500	1468-0001	5W575	15B-2x40	TA-440 Filter Green

Note. Not Used In All Models.

CONTROLS

ITEM No.	RATING RESISTANCE WATTS	REPLACEMENT DATA		INSTALLATION NOTES
		MANTOLA PART No.	IRC PART No.	
R1A	2 Meg. 1/2 W.	VC-11	Q13-130P	Volume control
R1B	Switch	Not Req.	76-1	SM-A Attach to R1A per instructions

Install a 100K Resistor in Series With The Right Hand Terminal Of The Control And The Lead Connecting To The Same Terminal Of The Original Control. (Controls Viewed From Shaft End, Terminals Down).

RESISTORS

ITEM No.	RATING RESISTANCE WATTS	REPLACEMENT DATA		IDENTIFICATION CODES
		MANTOLA PART No.	IRC PART No.	
R2	18K	RC182-2	18K-182	Conv. Grid
R3	18K	RC182-2	18K-182	Conv. Grid
R4	18K	RC182-2	18K-182	Conv. Grid
R5	10 Meg.	RC105-1	10M-105	AVC Network
R6	10 Meg.	RC105-1	10M-105	AVC Network
R7	220K	RC224-1	220K-224	AF Grid
R8	220K	RC224-1	220K-224	AF Grid
R9	220K	RC224-1	220K-224	AF Grid
R10	220K	RC224-1	220K-224	AF Grid
R11	220K	RC224-1	220K-224	AF Grid

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (OUTPUT)

ITEM No.	RATING IMPEDANCE PRI. SEC.	DC RES. PRI. SEC.	REPLACEMENT DATA		INSTALLATION NOTES
			MANTOLA PART No.	STANCOR PART No.	
T1	3000 3.2Q	2302	SP-47-10A	A-36774	Mount in chassis.

SPEAKER

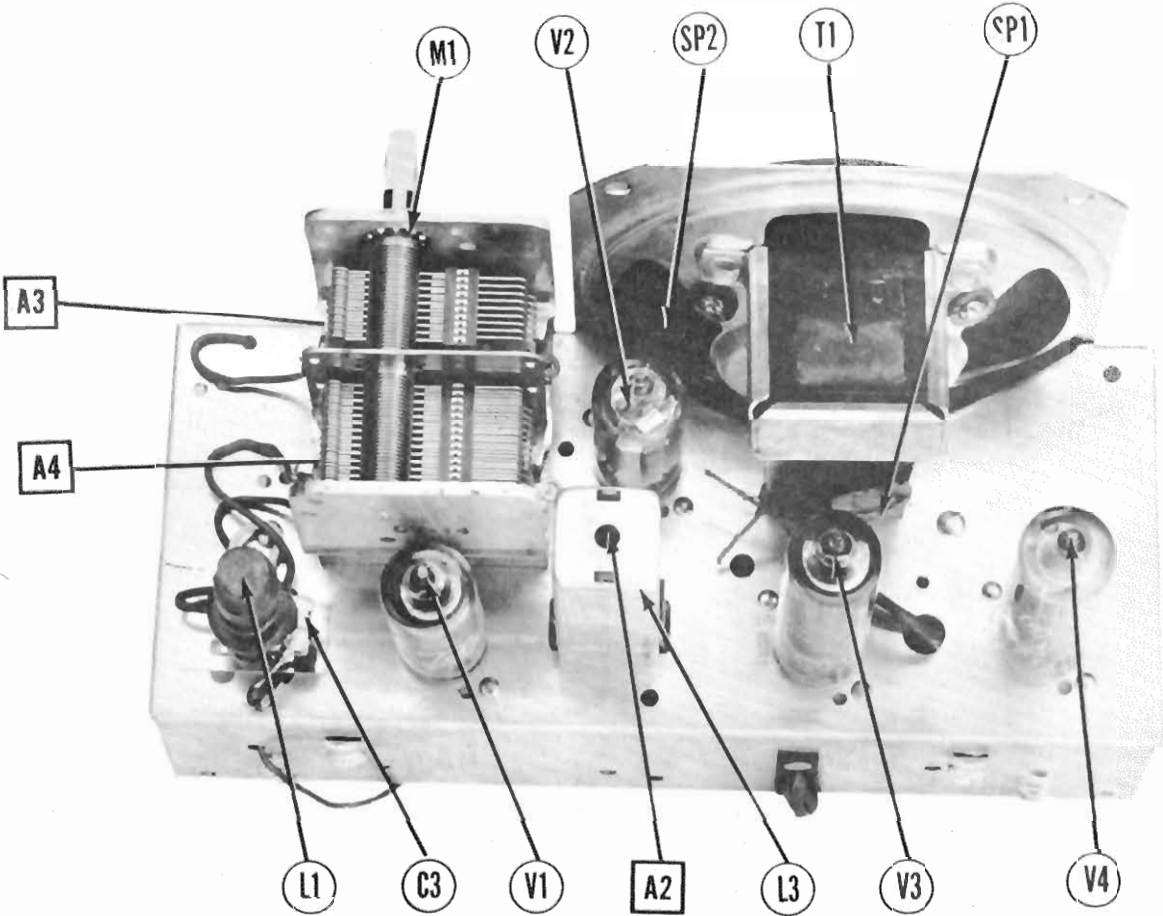
ITEM No.	RATINGS V.C. IMP. V.C. D.C.	REPLACEMENT DATA		INSTALLATION NOTES
		MANTOLA PART No.	JENSEN PART No.	
SP1	16-16 16-16 16-16	SP-47-10A	ST-1131	Mount in chassis to fit speaker magnet frame.
SP2	16-16 16-16 16-16	SP-47-10A	MOD. 4A-X	Mount output transformer.

R F COILS

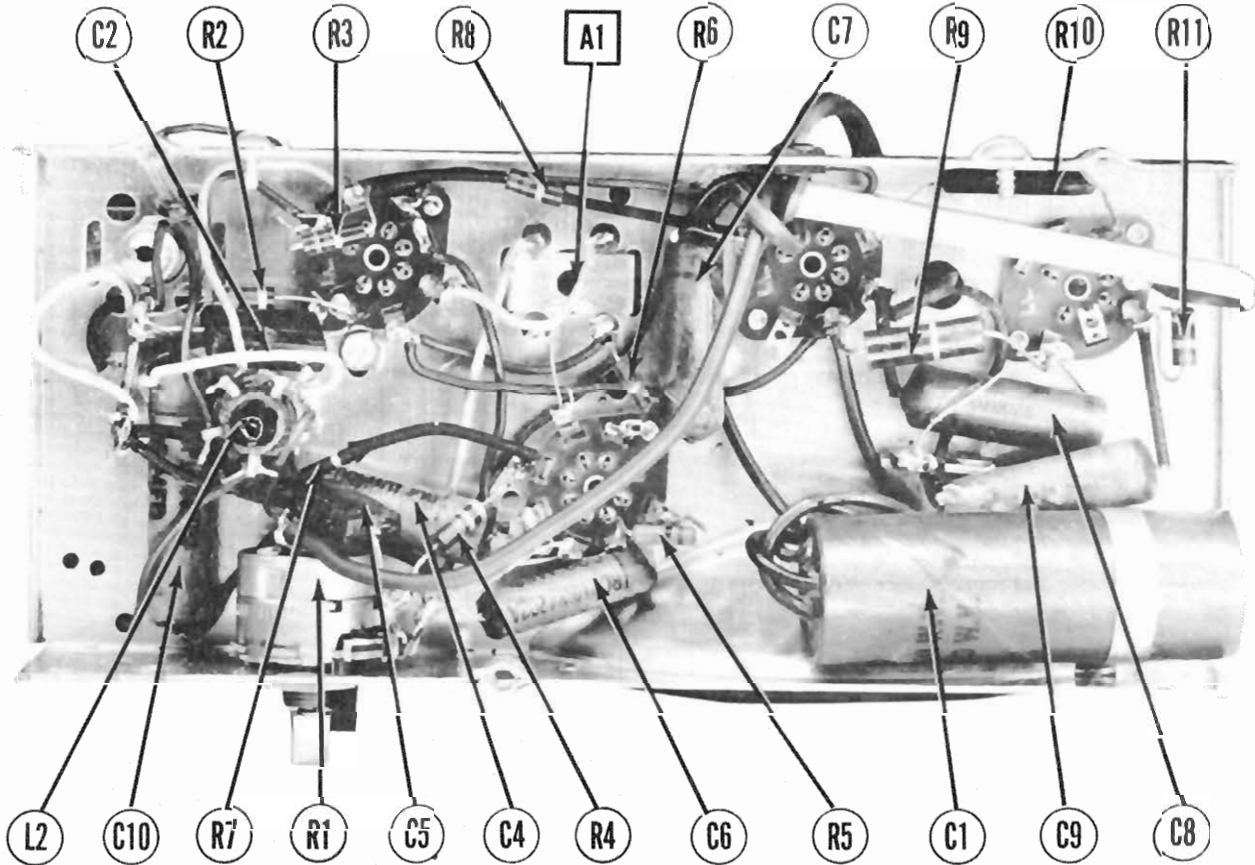
ITEM No.	USE	DC RES. PRI. SEC.	REPLACEMENT DATA	
			MANTOLA PART No.	MEISSNER PART No.
L1	4pt. coil	18.5Q	LA-8	18-5Q
L2	4pt. coil	18.5Q	LA-8	18-5Q
L3	4pt. coil	18.5Q	LA-8	18-5Q

MISCELLANEOUS

ITEM No.	PART NAME	MANTOLA PART No.	NOTES
M1	2 Gang Var. Cap. Knob	CV-14	(27-44002, 24-18500)
	Pointer Knob	KN-20-2	
	Cabinet	CB-106	(Specify Model And Color)



CHASSIS—BOTTOM VIEW



MANTOLA
MODEL 92-521