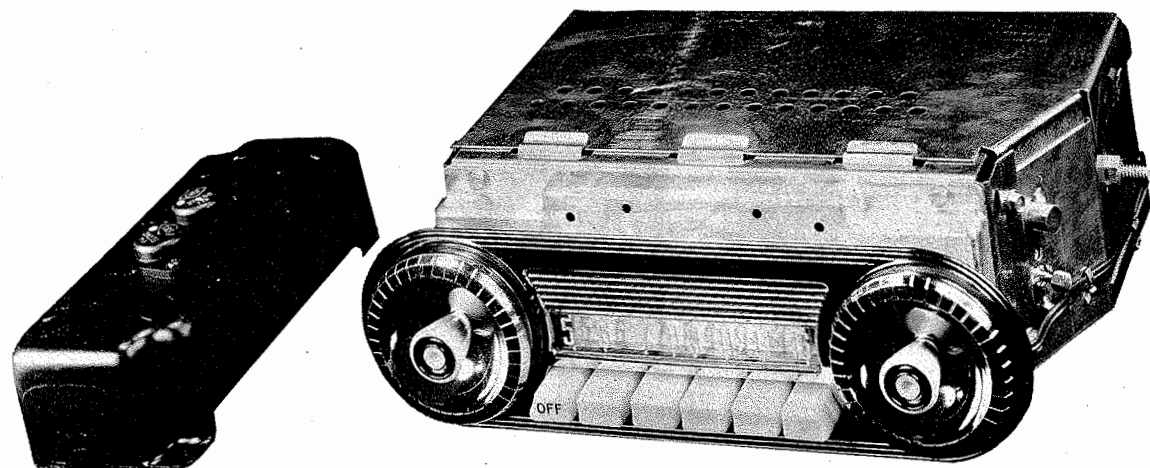




EDSEL
MODEL 85SE



EDSEL
MODEL 85SE

TRADE NAME Edsel Model 85SE (For 1958 Edsel Automobiles)
 MANUFACTURER Stromberg-Carlson, National Service Dept., 1400N. Goodman St., Rochester 3, N. Y.
 TYPE SET Battery Operated Custom Built AM Automobile Receiver with Transistorized Output
 TUBES (Five) Types 12AF6 RF Amplifier, 12AD6 Converter, 12AF6 IF Amplifier 12EL6 Det. -AVC-AF Amp., 12K5 Driver
 POWER SUPPLY 12 Volt Storage Battery RATING 1.6 Amp. @12.6 Volts DC
 TUNING RANGE-BROADCAST 540-1600KC

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Volume control should be at maximum position. Output of signal generator should be no higher than 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. .1mfd	High side to pin 7 (grid) of 12AD6 (V2) Low side to chassis.	262.5KC (400% Mod.)	High Freq. end.	Across Voice Coil	A1, A2, A3, A4	Adjust for maximum output.
2. Fig. 1	Thru dummy to antenna receptacle.	1605KC	"	"	A5, A6	" " " "

Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. If necessary, remove escutcheon, dial background and dial lamp to expose tuning cores (A7, A8, A9).

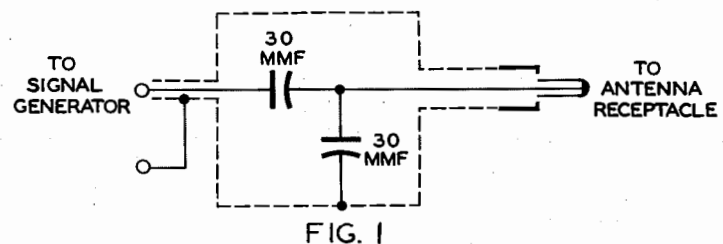
3. "	Thru dummy to antenna receptacle.	1200KC	Tuner carriage 9/32" from high freq. end stop.	Across Voice Coil	A7, A8, A9	Adjust for maximum output. Repeat steps 2 and 3 until no further improvement is obtained.
4. "	"	1400KC	1400KC	"	A10	"

SENSITIVITY ADJUSTMENT (R3)

Connect a signal generator thru dummy (Fig. 1) to antenna receptacle. Tune the generator to 1400KC, 400% modulation, 5 microvolts output. Replace speaker with a 4Ω 2W carbon resistor. Connect an output meter across the resistor and adjust R3 for a reading of 2 volts. This is equivalent to an output of 1 watt. R3 should be adjusted on the counterclock wise side of the peak to prevent overbiasing V1.

PUSHBUTTON ADJUSTMENT

1. Pull pushbutton out.
2. Tune manually to desired station.
3. Press pushbutton in firmly.
4. Repeat for remaining pushbuttons.



HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of H453

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SET 402 FOLDER 8

PARTS LIST AND DESCRIPTIONS

CHASSIS—TOP VIEW

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			CBS PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2N155	Output	CBS-2N155			Alternate type 2N157 Alternate type 2N157
X2	2N155	Output	CBS-2N155			

TRANSISTORS

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES	ITEM No.	USE	TYPE	NOTES
V2	IF Amplifier	12AF6		V5			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP. VOLT.	Stromberg-Carlson PART No.	AEROVOX PART No.	REPLACEMENT DATA			SPRAGUE PART No.
				CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	
C1A	250	111001-003	AFH2-02-05	BR500-5	TC605	TD-500-6	R2564*
C2	500	111001-004	FR85V00	BR500-6	TC605	TD-500-6	MTH-0650
C3	500	111001-004	FR85V00	BR500-6	TC605	TD-500-6	MTH-0650

*Non-Catalog Item

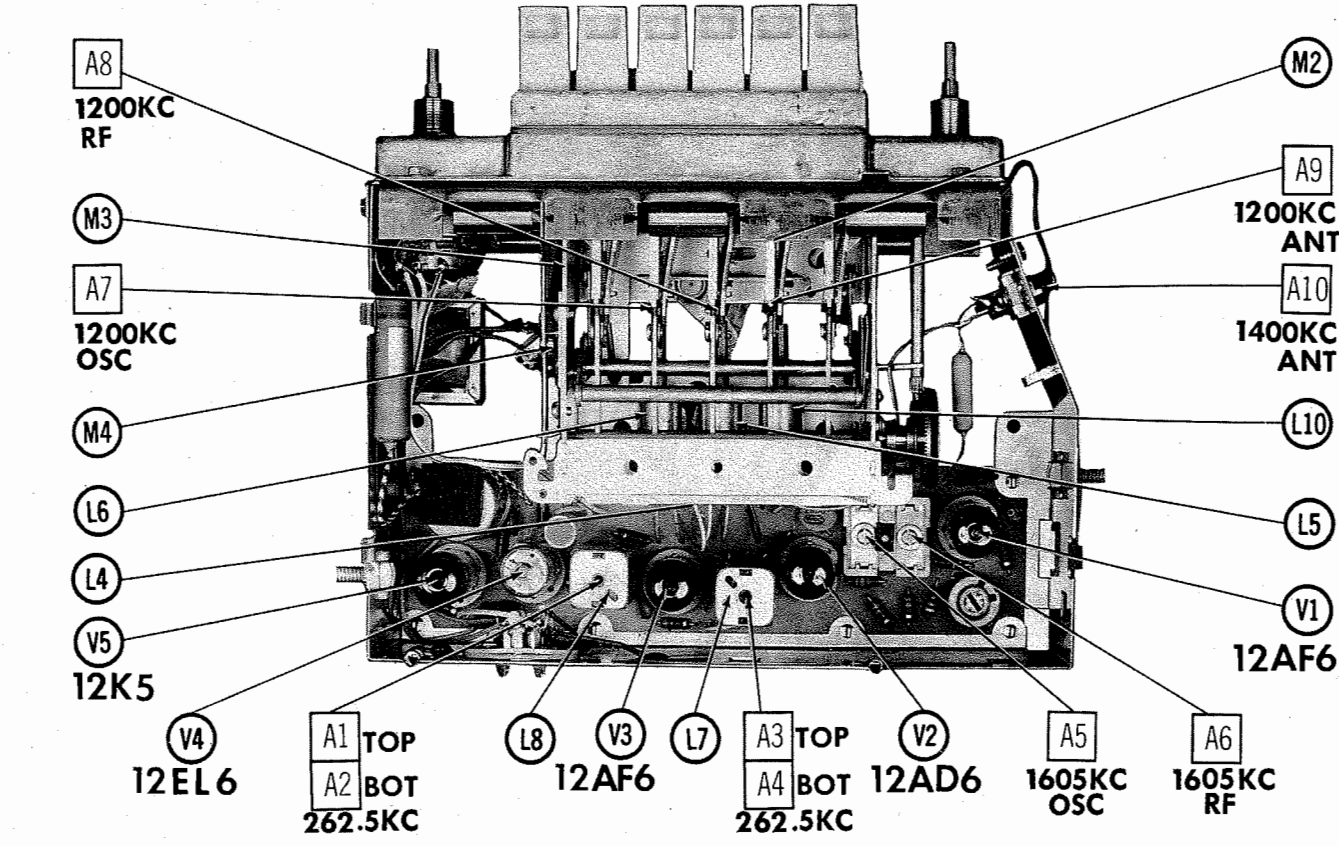
FIXED CAPACITORS

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

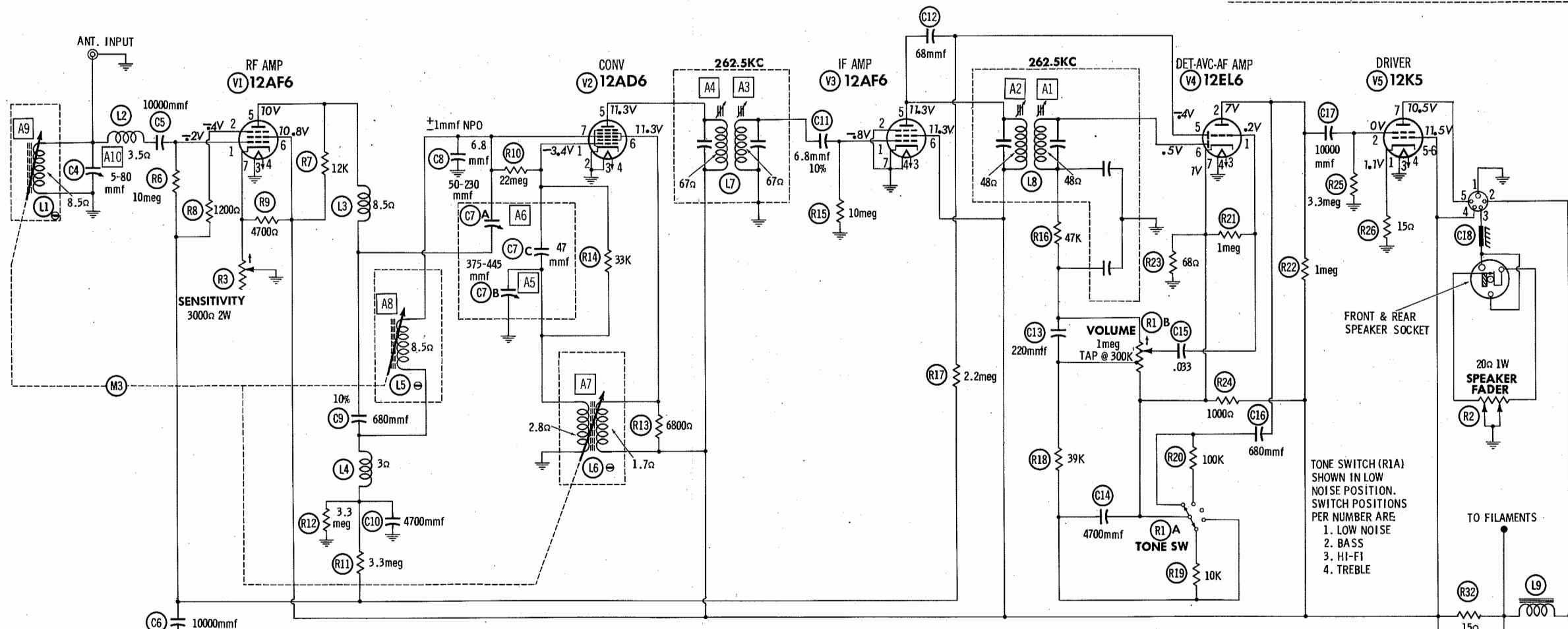
ITEM No.	RATING CAP. VOLT.	Stromberg-Carlson PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	REPLACEMENT DATA			NOTES
						CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C4	5-80	110000-001	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C5	10000	110002-028	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C6	10000	110000-001	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C7	50-445	110000-011	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C8	50	110000-011	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C9	50	110000-011	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C10	4700	110002-054	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C11	50	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C12	50	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C13	50	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C14	4700	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C15	4033	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C16	50	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C17	10000	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C18	50	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C19	50	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C20	50	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	
C21	5	110002-043	BFD-01	DD-103	BY1031	DC511	DC511	3HK-51	

CONTROLS

ITEM No.	RATING RESIST. ANCE	WATTS	Stromberg-Carlson PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	INSTALLATION NOTES
R2	200	1(WW)	145000-010					Volume, Tap@300K
R3	30000	2(WW)	145000-030					Speaker Fader
R4	2500	2(WW)	145000-020					Sensitivity
R5	2500	2(WW)	145000-020					Transistor Bias



- A8 1200KC RF
- M3
- A7 1200KC OSC
- M4
- L6
- L4
- V5 12K5
- V4 12EL6
- A1 TOP 262.5KC
- A2 BOT 262.5KC
- L8
- V3 12AF6
- L7
- A3 TOP 262.5KC
- A4 BOT 262.5KC
- V2 12AD6
- A5 1605KC OSC
- A6 1605KC RF
- M2
- A9 1200KC ANT
- A10 1400KC ANT
- L10
- L5
- V1 12AF6



SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

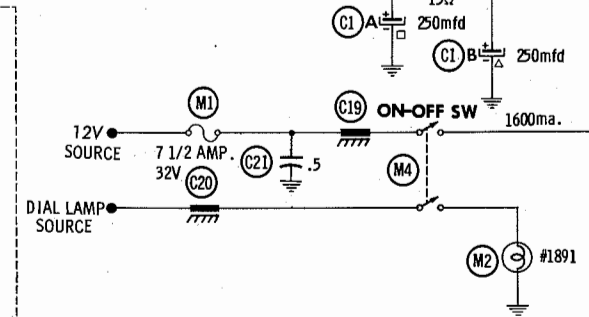
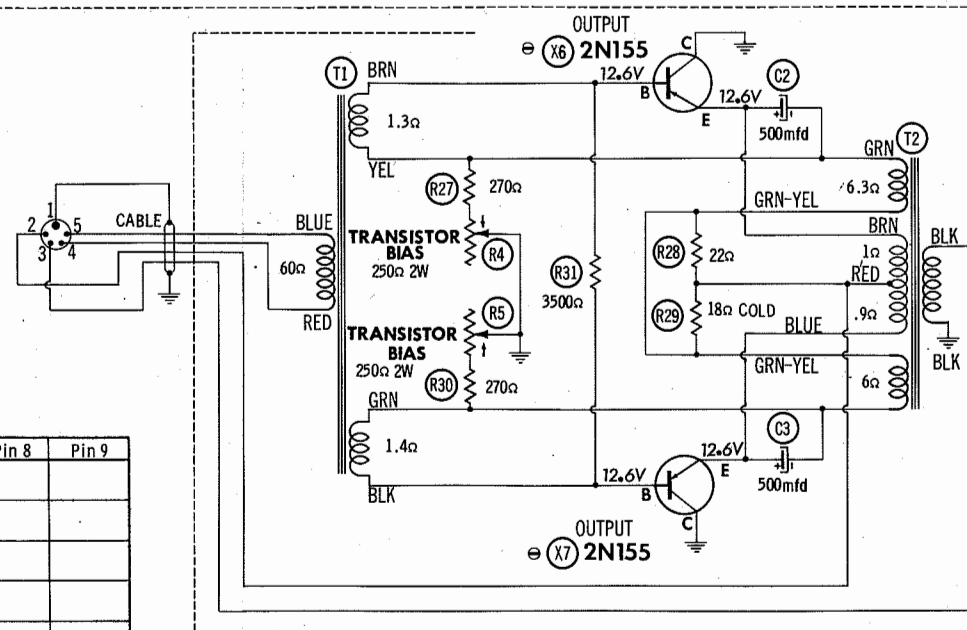
- DC voltage measurements taken with vacuum tube voltmeter.
- Socket connections shown as bottom views.
- Measured values are from socket pin to common negative.
- Battery voltage maintained at 12.6 volts for voltage readings.
- Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
- 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	Pin 8	Pin 9
V1	12AF6	16meg	6meg	0Ω	1.5Ω	†12K	†15Ω	270Ω		
V2	12AD6	33K	0Ω	0Ω	1.5Ω	†82Ω	†17Ω	22meg		
V3	12AF6	10meg	0Ω	1.5Ω	0Ω	†63Ω	†15Ω	0Ω		
V4	12EL6	1meg	†1meg	1.5Ω	0Ω	9meg	550K	68Ω		
V5	12K5	15Ω	3.3meg	0Ω	1.5Ω	†15Ω	†15Ω	†75Ω		

TRANSISTOR CIRCUIT RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE

† MEASURED FROM JUNCTION OF L9 AND ON-OFF SWITCH



EMITTER COLLECTOR
BASE TRANSISTOR TERMINAL GUIDE (REAR VIEW)

TRANSISTOR BIAS ADJUSTMENT (R4, R5)

The bias adjustment should be checked after a transistor is replaced. Connect a VTVM across the primary of the output transformer T2 (pin 9 of each transistor socket). Connect a power source of 14.4 volts DC in series with a DC ammeter to the junction of R28, R29 and the red lead of T2. Ground the power source to the audio chassis. Allow a three minute warm-up period. Adjust R4 and R5 for a zero reading on the VTVM and a 1 Amp reading on the ammeter. If the VTVM will not indicate zero volts with 1 Amp of current, the transistor associated with the fully clockwise control is weak. If the ammeter will not indicate 1 Amp, both transistors are weak.

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING		Stromberg-Carlson PART No.	NOTES
	OHMS	WATT		
R6	10meg		554002-106	
R7	12K		554001-123	
R8	1200Ω		554001-122	
R9	4700Ω		554002-472	
R10	22meg		554002-226	
R11	3.3meg		554001-335	
R12	3.3meg		554002-335	
R13	6800Ω		554002-682	
R14	33K		554002-333	
R15	10meg		554002-106	
R16	47K		554001-473	
R17	2.2meg		554001-226	
R18	39K		554001-393	
R19	10K		554002-103	

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO	REPLACEMENT DATA				NOTES
		Stromberg-Carlson PART No.	Hollidorsen PART No.	Meritt PART No.	Ram PART No.	
		Thordorson PART No.	Stancor PART No.	Thordorson PART No.	Triad PART No.	
T1	9:1	161000-010				

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	TURNS RATIO	REPLACEMENT DATA				NOTES
		Stromberg-Carlson PART No.	Hollidorsen PART No.	Meritt PART No.	Ram PART No.	
		Thordorson PART No.	Stancor PART No.	Thordorson PART No.	Triad PART No.	
T2	3-4Ω CT	161000-020				
	PRI: 2					
	3-4Ω :1 CT					

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		Stromberg-Carlson PART No.	GUAM PART No.	
SPT	8" x 9" PM	155000-001	69A2	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		Stromberg-Carlson PART No.	Messner PART No.	Meritt PART No.	Miller PART No.	
L1	Ant. Coil	114000-002	19-3036	TV-180	6176	Note 1
L2	Ant. Coil	114000-004	19-3160	TV-196	6120	36 Microhenries
L3	RF Choke	114000-003				166 Microhenries
L4	RF Choke					29 Microhenries
L5	RF Coil					Note 1
L6	Osc. Coil	114000-020		BC-844*		Note 1
L7	Input IF	114000-030		BC-846*	13-PH6*	
L8	Output IF					

Note 1 Part of tuner M3

* Drill hole in printed circuit for bottom slug adjustment.

PARTS LIST AND DESCRIPTIONS (Continued)

FILTER CHOKE

ITEM No.	RATINGS	INDUCTANCE (Measured)	REPLACEMENT DATA				
			Stromberg-Carlson PART No.	Hollidorsen PART No.	Meritt PART No.	Ram PART No.	
L9	1.5A	.7Ω	.008HY	161000-001			

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			Stromberg-Carlson PART No.	LITTELFUSE PART No.	BUSS PART No.	Holder		
M1	TAG	7½A 32V	128000-001	FUSE	30707.5 (TAG 7½A 32V)	155009	SEF7½ (7½A 32V)	HDH

MISCELLANEOUS

ITEM No.	PART NAME	Stromberg-Carlson PART No.	NOTES
M2	Dial Lamp	137000-002	#1891
M3	Tuner	164000-003	Tuner Ass'y.
M4	Switch	171000-168	DPST, On-Off

CABINETS & CABINET PARTS

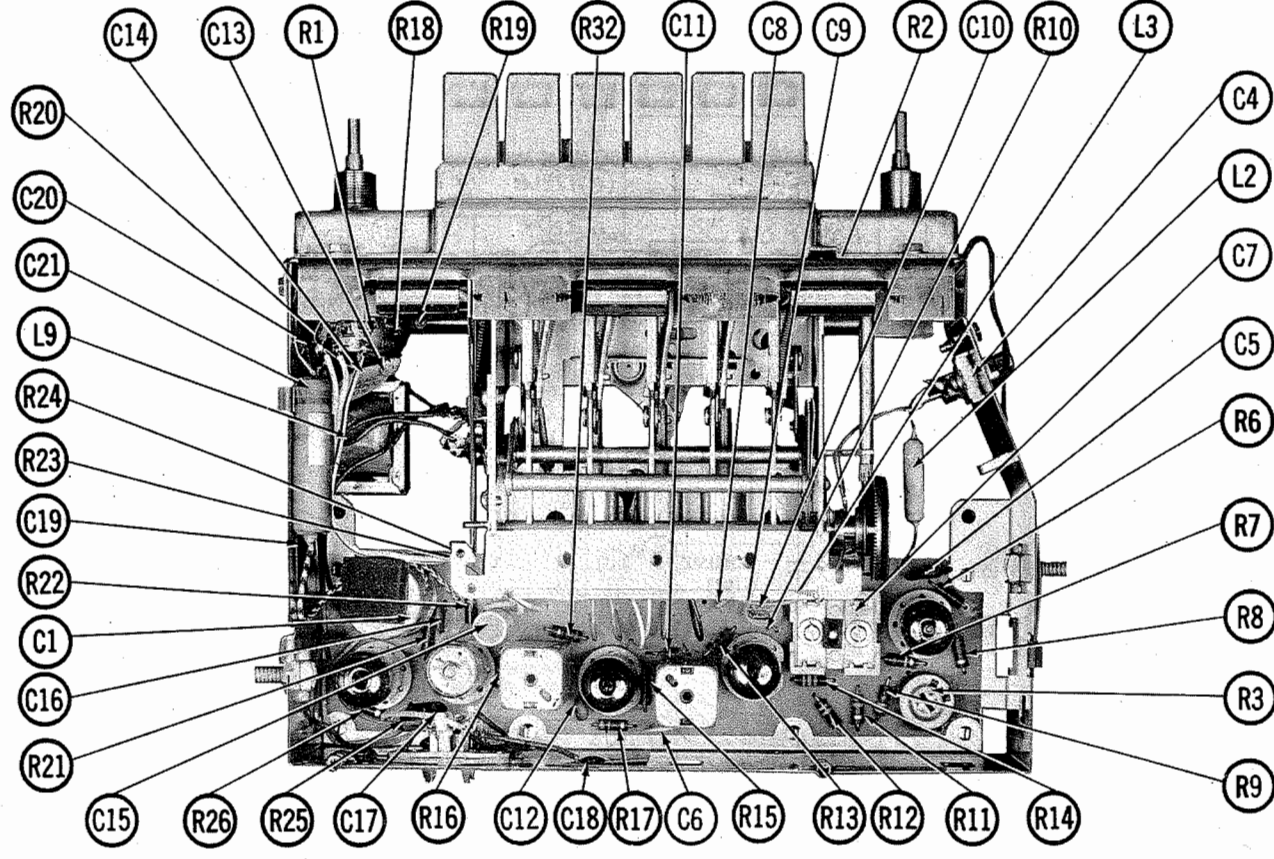
(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Pushbutton	107000-001	Left side (Off), Gray
Pushbutton	107000-005	Right side, Gray
Pushbutton	107000-009	4 Used
Pushbutton	107000-002	Left side (Off), White
Pushbutton	107000-006	Right side, White
Pushbutton	107000-010	4 Used
Dial	122000-001	

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in Ten Colors
Shielded Hook-up Wire	8524 (Stranded) Available in Ten Colors
Bonding Strap	Use BELDEN No. 8895
	Use BELDEN No. 8861

CHASSIS—TOP VIEW



POWER SUPPLY—BOT. VIEW

