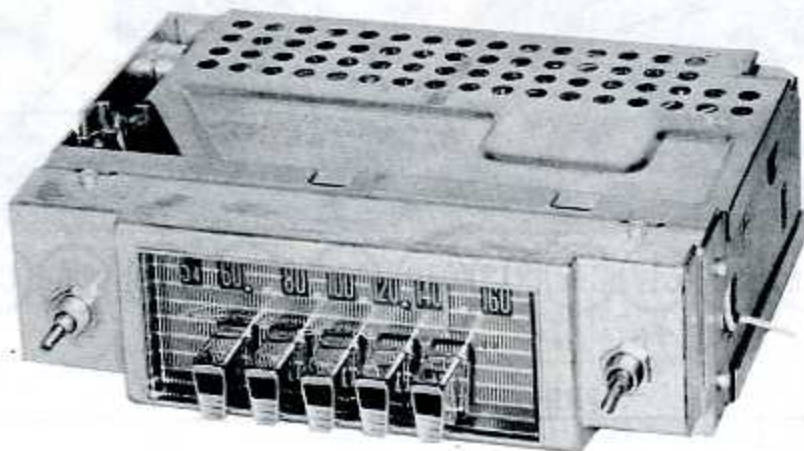




MOPAR MODEL
317



MOPAR MODEL
317

TRADE NAME Mopar Model 317 (13BC) For 1961 Chrysler
 MANUFACTURER The Bendix Corp., Bendix Radio Div., Baltimore 4, Maryland
 TYPE SET Battery Operated 3 Tube-3 Transistor Custom Built Automobile AM Receiver
 POWER SUPPLY 12 Volt Storage Battery RATING .8 Amp. @12.6 Volts DC
 TUNING RANGE—BROADCAST 530 — 1605KC

ALIGNMENT INSTRUCTIONS

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.

Suggested Alignment Tools: A1 thru A4... GENERAL CEMENT #3282, 8606, 8606-L, 9295, 9440
 WALSCO #2526, 2543, 2544, 2545
 A5, A6..... GENERAL CEMENT #5000, 5003, 8276, 8290
 WALSCO #2512, 2515, 2522, 2523, 2525, 2537

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. High side thru .1mf to pin 9 (grid) of Converter. Low side to chassis.	262.5KC (400% Mod.)	High end stop.	Across voice coil.	A1, A2, A3, A4	Adjust for maximum output.
2. To antenna terminal thru dummy (Fig. 1).	1605KC	"	"	A5, A6, A7	"
Step 3 is not necessary unless tuner has been tampered with or components replaced. If necessary, back tuning cores (A8, A9, and A10) out of coils. Repeat Step 2.					
3. To antenna terminal thru dummy (Fig. 1).	1000KC	Tuner carriage 1/2" from high end stop.	Across voice coil.	A8, A9, A10	Adjust for maximum output. Repeat Steps 2 and 3.
4.	With radio installed in car and antenna fully extended, tune in a weak station near 1600KC and adjust A7 for maximum output.				

PUSHBUTTON ADJUSTMENT

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

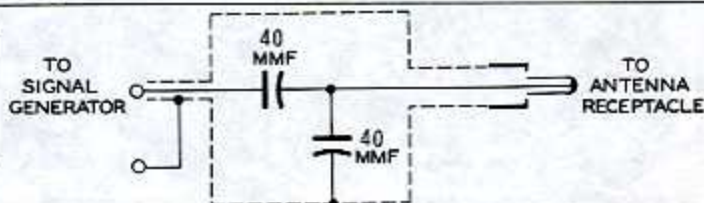


FIG. 1

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

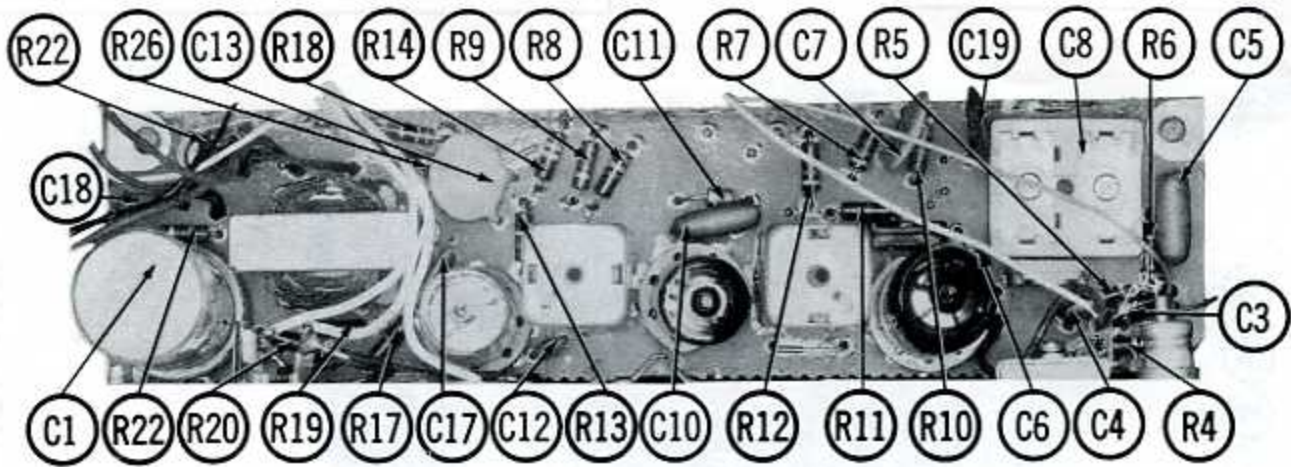
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of KD811

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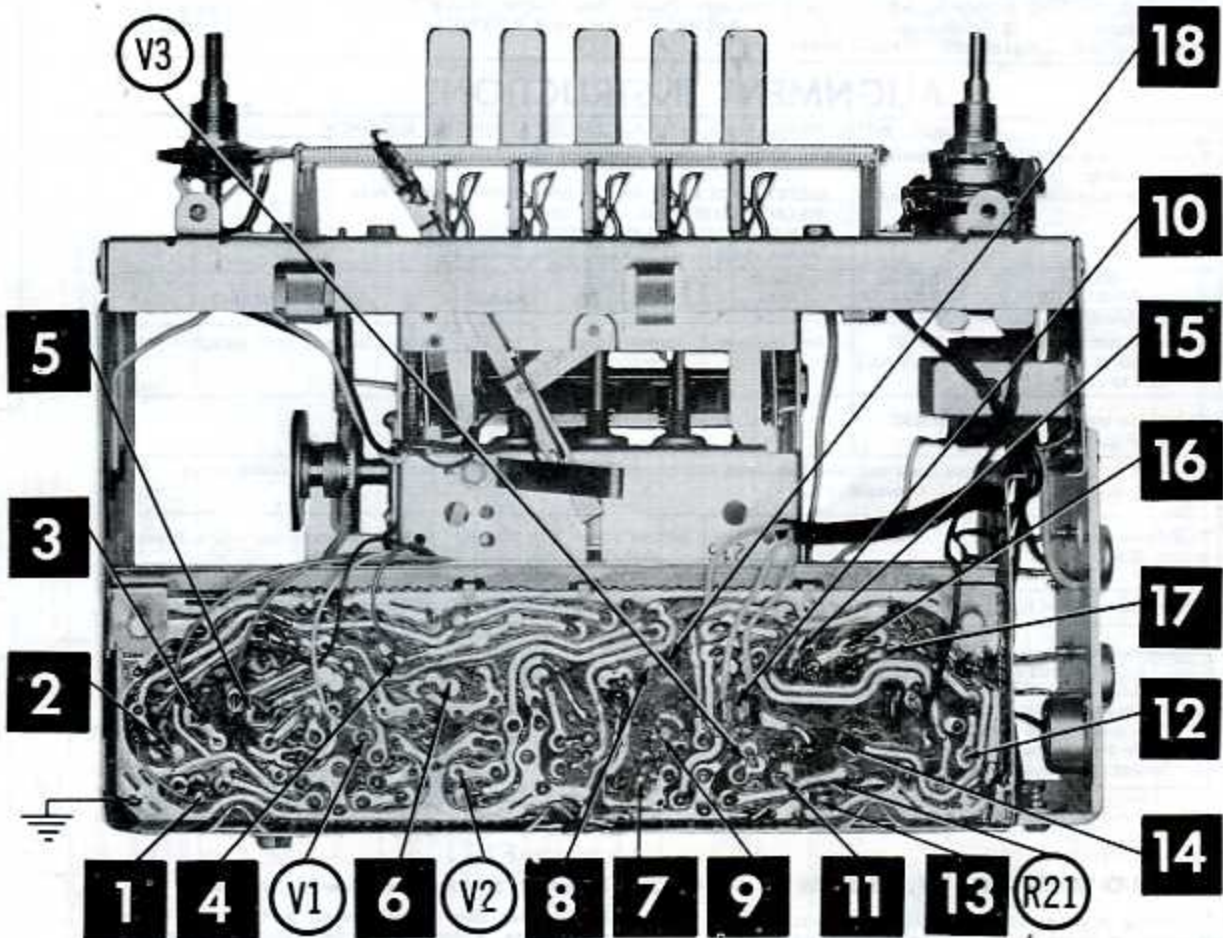


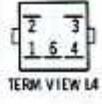
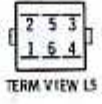
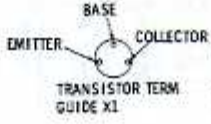
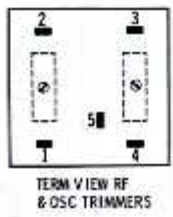
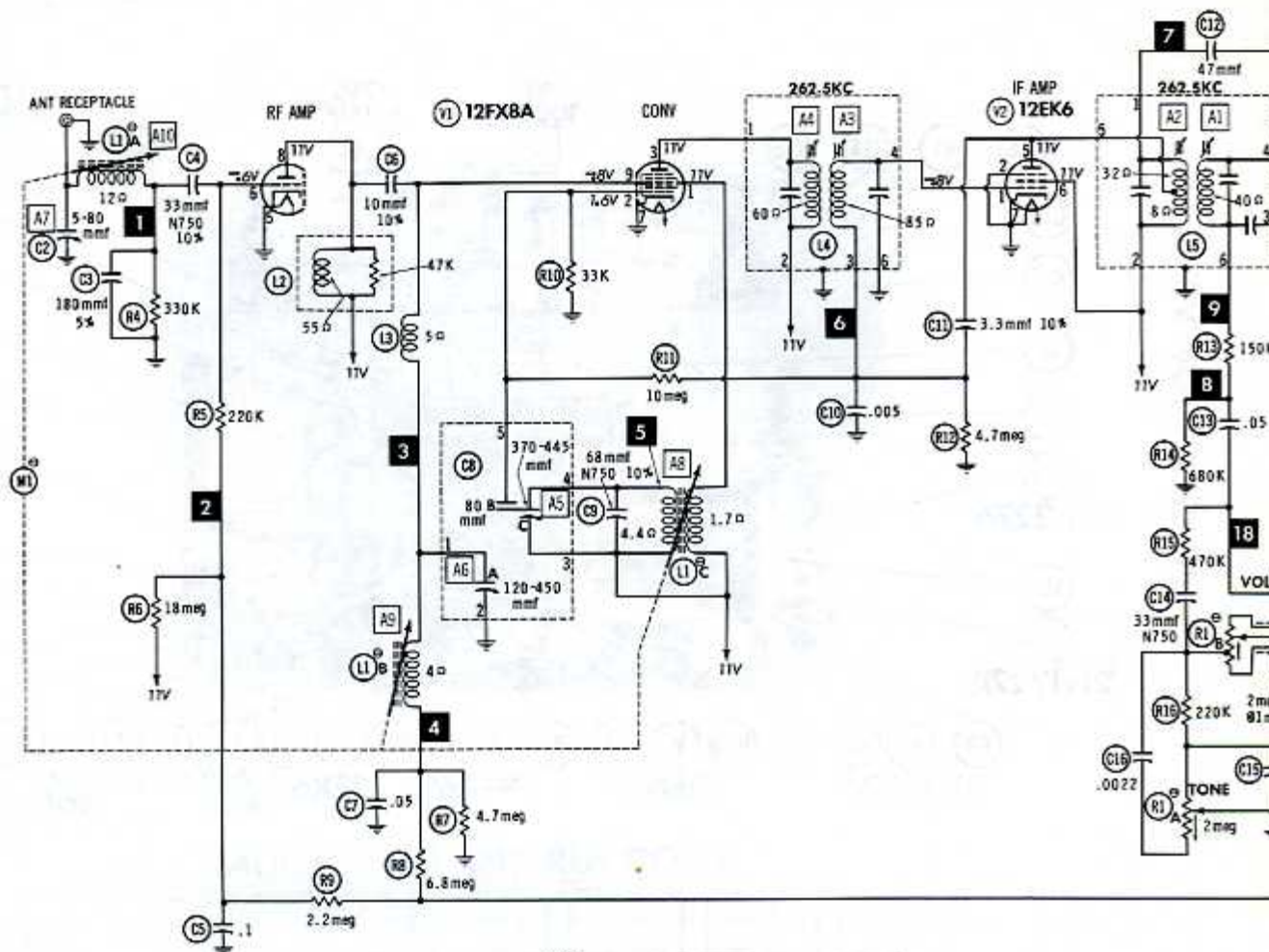
547

SET 547
FOLDER 7



PRINTED BOARD





RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V1	12FX8	225 Ω	33K	280 Ω	3 Ω	0 Ω	8 meg	0 Ω
V2	12EK6	3.2 meg	0 Ω	3 Ω	0 Ω	230 Ω	220 Ω	0 Ω
V3	12FM6	10 meg	8 Ω	0 Ω	3 Ω	7.5 meg	820K	0 Ω

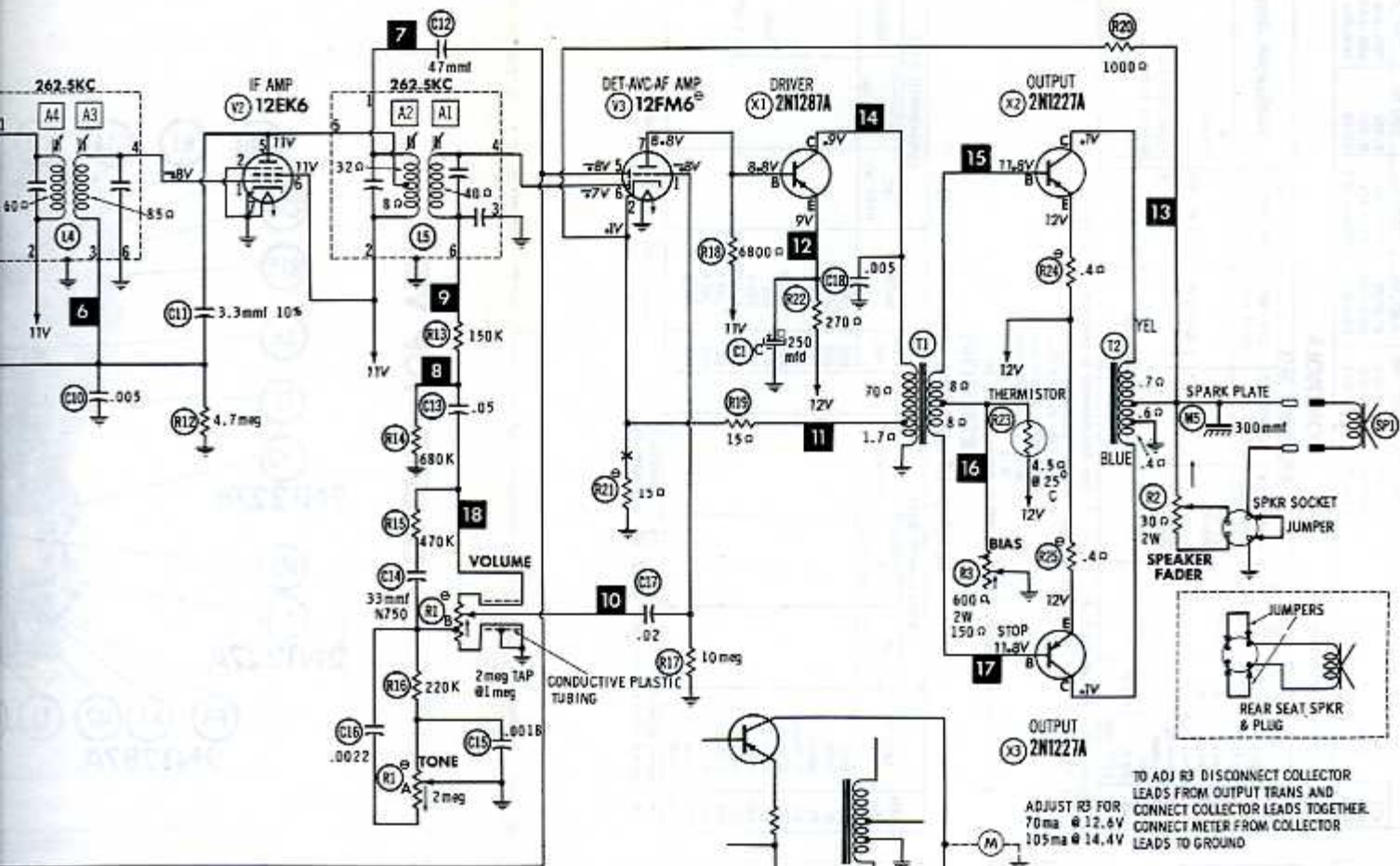
TRANSISTOR CIRCUIT RESISTANCE FOR X1, X2 AND X3 NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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 ground.
- 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.

A PHOTOFAC STANDARD NOTATION SCHEMATIC with **CIRCUITRACE**



TERM VIEW L4

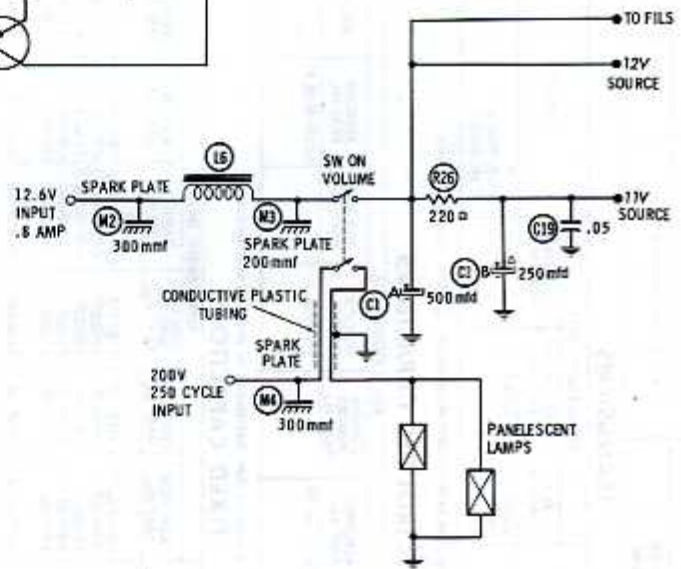


TRANSISTOR TERM GUIDE X2 & X3

RESISTANCE READINGS

WAVE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
FXB	225 Ω	33K	280 Ω	3 Ω	0 Ω	8 meg	0 Ω	270 Ω	4 meg
EKb	3.2 meg	0 Ω	3 Ω	0 Ω	230 Ω	220 Ω	0 Ω		
FMa	10 meg	8 Ω	0 Ω	3 Ω	7.5 meg	820K			

TRANSISTOR CIRCUIT RESISTANCE FOR X1, X2 AND X3 NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.



PARTS LIST AND DESCRIPTIONS

TUBES

GENERAL ELECTRIC		RAYTHEON		SYLVANIA	
ITEM No.	USE	ITEM No.	USE	ITEM No.	TYPE
V1	RF Amp.-Converter	12EX6A			
V2	IF Amplifier	12BE6			
V3	Det.-AVC-AF Amp.	12F6B	(2F6B) *		

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA		NOTES
			ICA PART No.	SYLVANIA PART No.	
X1	2N3207A	Driver	2N352		
X2	2N3221A	Output	2N330		PNP Note 1
X3	2N3227A	Output	2N330		PNP Note 1

Note 1. When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely. Check bias adjustment.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOLT.	REPLACEMENT DATA			NOTES
			AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLOY PART No.	
C1A	500	16	PWH3-00-104			
B	250	16		PWP300, 4		
C	250	16				PCL5-3096, 5*

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CORNELL-DUBILIER PART No.	ELIMENCO PART No.	MALLOY PART No.	
C2	5-10	#219002-3	1469-00016	2R80T18	463	MS-311	
C3	100 5%		TC2-180	CM-101-181J	CNO-318		
C4	33 N750 10%		DTN-23	CUQ330	CN7-333	10TCU-Q33	
C5	1 100V		DF-104	CUH211	GEM-201	2TM-P1	
C6	10 10%		TC2-10	CUQC	CNO-410	10TCC-Q10	
C7	05		DO-503	CU285	GPL50	5HK-830	
C8A	120-450		#219002-10	TC2-182	CUQ48C	CNO-482	10TCC-Q182
B	100			TC2-182	CUQ48C	CNO-482	
C9	370-445		#219002-10	N750-DH 08	CUQ48H	CCTN-680	10TCU-Q68
C10	005 100V			DM-502	CUB0D5	GRM-025	07M-100
C11	3.3 10%	TC2-383		CUV33C	CNO-533	10TCC-V33	
C12	10	DL-47		L493AT	G949T	10TCC-Q47	
C13	05	DD-470		CU385	G9150	5HK-850	
C14	33 N750	DF2-33		CUQ33U	CCTN-330	10TCU-Q33	
C15	0001	LD-182		L10718	CCTN-182	10TCC-182	
C16	0022	DD-222		DYAU022	CCD-222	5HK-122	

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			
			AEROVOX PART No.	CORNELL-DUBILIER PART No.	ELIMENCO PART No.	MALLOY PART No.
C17	02		10P-02	DYDK52	CCD-303	5HK-520
C18	005		BPD-005	DYAI10D6	CCD-502	5HK-D60
C19	05		BPD-05	CU1285	BDP-2-503	5HK-300

* Bendix Part Number

CONTROLS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			INSTALLATION NOTES
			BENDIX PART No.	CLEARSTAT PART No.	MALLOY PART No.	
RIA	2meg		30008RT-7(1)			Tune Volume Power Off-On Speaker Fader Bias
B	2meg		12-15			
G	1meg Tap		AK-28			
C	Switch		KR-7			
R1	2(WW) 200027-3			39-100-200	112-500	
R2	300					
R3	6000					
R5	15002 Stop					

(1) Alternate Part #2000007-6.

* Use 1500 Resistor in series with terminal.

1 "CONCENTRIKT" Equivalent: K-8 Kit with Base Elements and Shutter:

BU-139, P14-019 (Panel)

BU-130X, 10-100 (Rear)

835 (Dishing)

16-2 (Switch)

* "STA-LOC" Equivalent: PF26-L, RU20TU, C6025, BU123, L842

RESISTORS

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA		
			IRC PART No.	WORKMAN T.V. PART No.	REMARKS
R4	330K				
R5	200K				
R6	1meg				
R7	4.7meg				
R8	5.2meg				
R9	2.2meg				
R10	33K				
R11	10meg				
R12	4.7meg				
R13	150K				
R14	600K				
R15	470K				
R16	220K				
R17	10meg				
R18	6.8K				
R19	150				
R20	10000				
R21	150				
R22	2700				
R23	4.5K(2)2500				
R24	40*				
R25	40*				
R26	2200				

Note 1. Not used in some versions.

* Cupren Wire (Approx. 4.8" Long). (Part #2091295-2).

† Cupren Wire (Approx. 4.9" Long). (Part #2011295-4).

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		BENDIX PART No.	Meritt PART No.	Miller PART No.	Stencor PART No.	
L1A	Ant. RF Choke	2090031-25 (1)	TV-103	6L10	RTC-8573	(1) Part of M1 (2) Includes 47K
L2	RF Choke (2MHz)	2090088-12 (2)				
L3	RF Choke (650uh)	2090089-11				
L4	Input IF	2090076-5				
L5	Output IF	2090077-6				

FILTER CHOKE

ITEM No.	CURRENT (Measured)	DC RES. (Measured)	INDUCTANCE (1000 μ H)	REPLACEMENT DATA				NOTES
				BENDIX PART No.	Meritt PART No.	Stencor PART No.	Thordarson PART No.	
L6	.8A	.5 Ω	3mH	2090520-8				

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO	REPLACEMENT DATA				NOTES
		BENDIX PART No.	Meritt PART No.	Stencor PART No.	Thordarson PART No.	
T1	2.5 : 1	2090433-8				

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA				NOTES
		BENDIX PART No.	Meritt PART No.	Stencor PART No.	Thordarson PART No.	
T2	25 Ω Tap @ 3-4 Ω	2090200-8				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA				NOTES
		BENDIX PART No.	Meritt PART No.	Stencor PART No.	Thordarson PART No.	
SPI	6" x 8" PM	2091260-2	0953			

MISCELLANEOUS

ITEM No.	PART NAME	BENDIX PART No.	NOTES
M1	Tuner	2090377-2	Includes Pushbuttons, Lens Pointer
M2	Spark Plate	220287-12	100mmf
M3	Spark Plate	220287-17	200mmf
M4	Spark Plate	220287-12	300mmf
M5	Spark Plate	220287-12	300mmf

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Lens	2090129-2	Clear, Dia
Pointer	2090085-1	Dial, Fluorescent
Pushbutton	2090189-1	Tuning, Volume
Knob	2090142-1	Tone, Fader or Dial
Knob	2090143-1	

WIRING DATA

General-use Unshielded Hook-up Wire	Use BFLDEN No. 0530 (Both) Available in Ten Colors
Shielded Hook-up Wire	Use BFLDEN No. 8524 (Stranded) Available in Ten Colors
Bonding Strap	Use BFLDEN No. 0085
	Use BFLDEN No. 0081

CHASSIS—TOP VIEW

