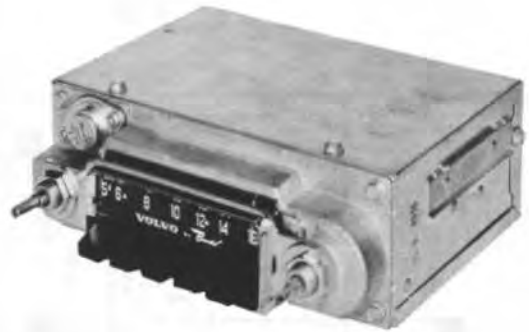




**TRADE NAME :** Volvo Model 4TBN (279958/959/960/961)  
**SUPPLIER :** For Current Address, See Master Index.  
**TYPE SET :** 6 Transistor AM Receiver  
**POWER SUPPLY :** 12 Volt Storage Battery  
**RATING :** .7 Amp. @ 12.6 Volts DC  
**TUNING RANGE :** BROADCAST 540-1605KC



## ALIGNMENT INSTRUCTIONS

Check for specified source voltage.  
 Use only enough generator output to provide a usable indication.  
 Suggested Alignment Tools:

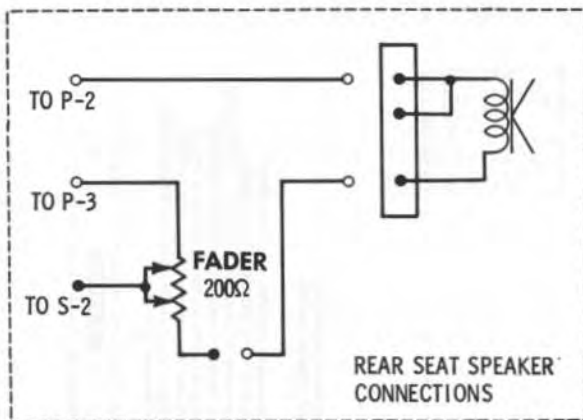
A1 thru A4.  
A5, A6, A7.

GENERAL CEMENT: 8606, 8606L, 8869  
 GENERAL CEMENT: 8290, 8868, 9087

WALSCO: 2543, 2544, 2588  
 WALSCO: 2525, 2528, 2587

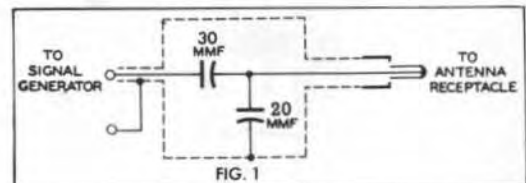
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mf to point $\Delta$ , low side to ground.	262.5KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coll.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1605KC	"	"	A5, A6, A7	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A8, A9, A10) out of coils but not out of forms. Repeat step 2.						
3.	Thru dummy (Fig. 1) to antenna receptacle.	1000KC	Tune to Signal.	Output Meter across voice coll.	A8, A9, A10	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.

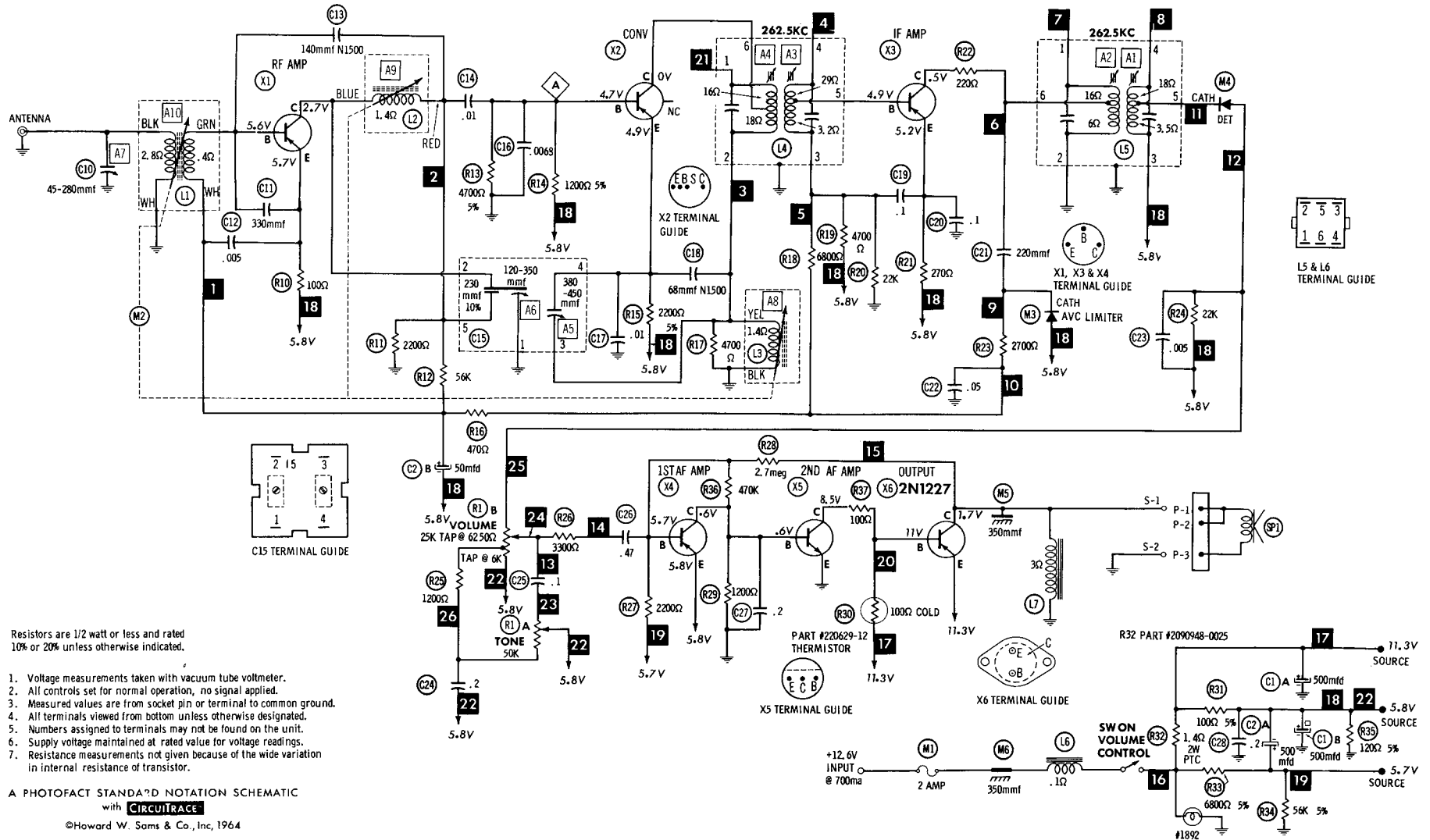
With radio installed in car and antenna fully extended, tune in a weak station near 1600KC and adjust A7 for maximum output.



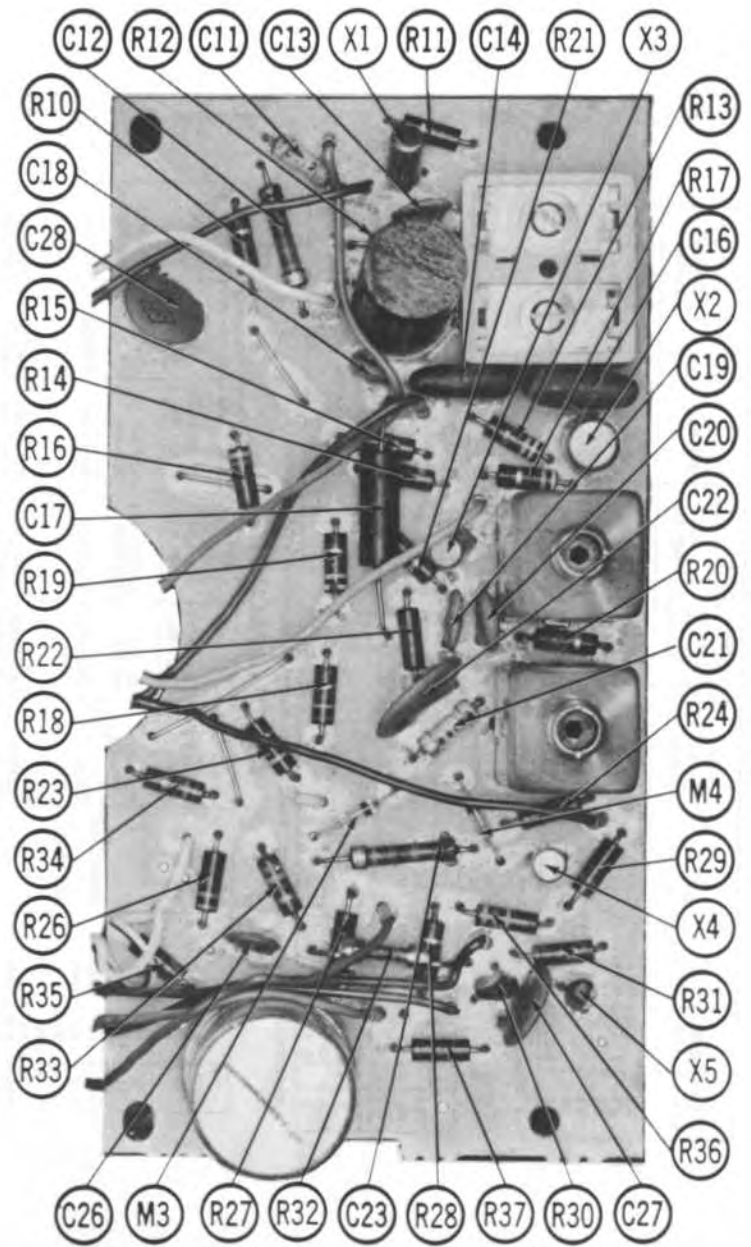
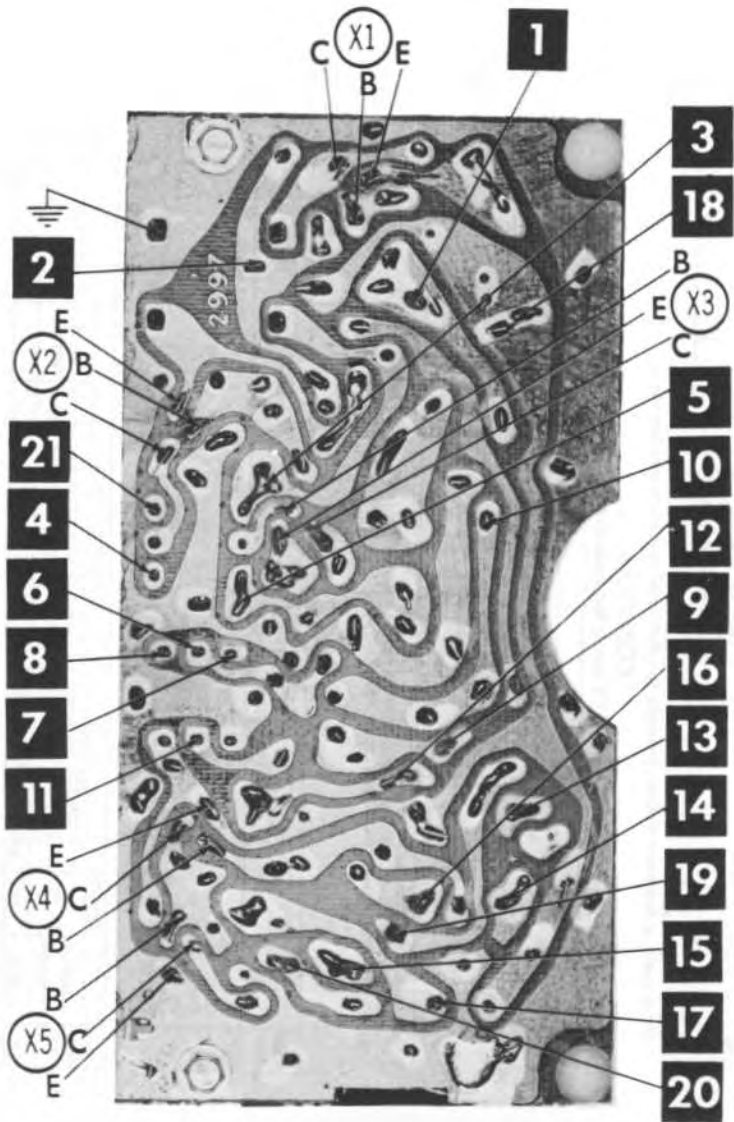
### PUSH-BUTTON ADJUSTMENT

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





**VOLVO MODEL 4TBN (279958/959/960/961)**



A Howard W. Sams **CIRCUITRACE** Photo

# PARTS LIST AND DESCRIPTION

Replacement parts shown may be superseded by the availability of newly introduced replacements.  
Have your local distributor check Sams COUNTER FACTS<sup>®</sup> for the most up-to-date replacement.

## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES	BENDIX Part No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.		
X1		RF Amp.	DS-25	GE-1	2N1637	PNP	2091241-0015
X2		Conv.	DS-25	GE-1	2N1639	PNP	2091241-0013
X3		IF Amp.	DS-25	GE-1	2N1638	PNP	2091241-0014
X4		1st AF Amp.	DS-26	GE-2	2N591	PNP	2090924-0008
X5		2nd AF Amp.	DS-46	GE-10	2N849	NPN	2092809-0002
X6	2N1227	Output	DS-520	GE-3	2N301	PNP*	2091859-0713

\* When replacing, apply silicon grease to both sides of insulator. Tighten mounting screws securely.

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		PART No.	REPLACEMENT DATA					MALLORY PART No.	SPRAGUE PART No.
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	GENERAL INSTRUMENT PART No.			
C1A	500	16	220353-30	PWH2-02-40					PFP200.65	PCLS-2161.5*
B	500	8								
C2A	500	3	2092246-0001	BCD3X50050					PET290	VLS-2116*
B	50	3								

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

## FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA						
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.	
C10	45-280	#2091221-0008							
C11	330		DL-330	DD-331	LA10T33-C4	CCD-331	GP333		10TS-T33
C12	.005		BPD-005	DD-5D2	BYA10D5	CCD-502	B250		5HK-D50
C13	140 N1500	#2093030-0037				*			
C14	.01 100V		BE2S1	CPR-10000J	WMF1S1	1DP-1-103	PVC211		4PS-S10
C15A	120-350	#219092-23							
B	230								
C	380-450								
C16	.0068 100V		BE6D68	CPR-6800J	WMF1D68	1DP-1-682	PVC4268		6PS-D68
C17	.01 100V		BE2S1	CPR-10000J	WMF1S1	1DP-1-103	PVC211		4PS-S10
C18	68 N1500	#2093030-0034		TCL-68		*			
C19	.01 10V		TTD-1	CK-104	H6		TA010		TG-P10
C20	.1 10V		TTD-1	CK-104	H6		TA010		TG-P10
C21	220		DL-220	DD-221	LA10T22-S3	CCD-221	GP322		10TS-T22
C22	.05		TTD-05	DDA-503	HO5S5		TA150		TH-S50
C23	.005		BPD-005	DD-502	BYA10D5	CCD-502	B250		5HK-D50
C24	.2 10V			UK20-204	HCC25224Z				HY-325
C25	.1 10V		TTD-1	CK-104	H6		TA010		TG-P10
C26	.47 3V			UK10-404	HCC10474Z				HY-330
C27	.2 10V			UK20-204	HCC25224Z				HY-325
C28	.2 10V			UK20-204	HCC25224Z				HY-325

# Bendix Part Number.

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

## CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA					
			BENDIX PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1A	Tone	50K	2091258-0004	F1-50K 1, R14-25K, FFS111, RFS203, KR4			† QJ-1752A	FA14L 1, RU253T53, OSI687, IS2187, US41
B	Volume/Switch	25K Tap @ 6250Ω						

① Use original Tab Mounting Plate.

† "CONCENTRIKIT" Equivalent: K8 Kit with Base Elements and Shafts: B11-123, P17-123 (Panel)

"SNAP-TROL" Equivalent: BU7, CF12, CR50T, SF13, SR49, GC.

B19-119X, R9-202 (Rear)

76-1 (Switch)

R5 (Retainer)

## COILS (RF-IF)

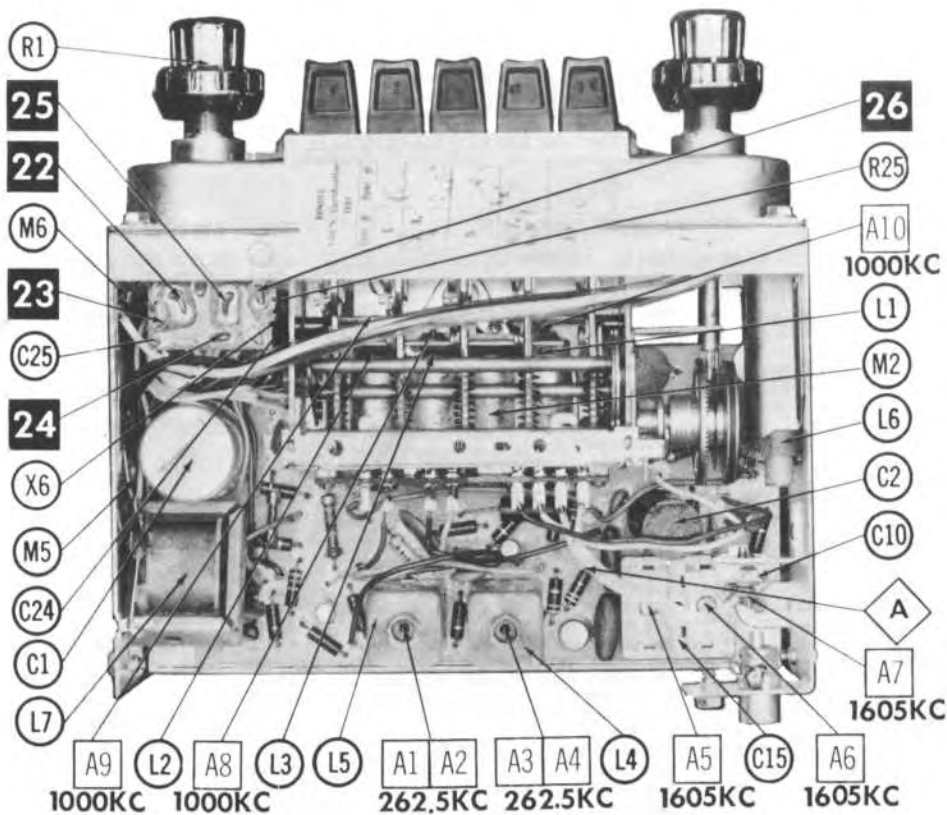
ITEM No.	USE	BENDIX PART No.	REPLACEMENT DATA				NOTES
			MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	Ant.	①					① Part of M2.
L2	RF	①					
L3	Osc.	①					
L4	Input IF	2093001-0701		6520			
L5	Output IF	2093002-0701		6521			

## FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES	INDUCTANCE (0 CURRENT 1000~)	BENDIX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L6	.7 Amp.	.1Ω	240uh	2092050-0014					

## CHOKE (AUDIO OUTPUT)

ITEM No.	INDUCTANCE	REPLACEMENT DATA					NOTES
		BENDIX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L7	50MH	2092245-0005					



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VOLVO MODEL 4TBN (279958/959/960/961)

## PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements. Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

### SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		BENDIX PART No.	QUAM PART No.	
SP1	5" x 7" PM	20Ω	2093212-0701	Volvo Model: P1800 Volvo Model: P1200, P1300
	5" PM	20Ω	2092480-0702	

### FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			BENDIX PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
M1	1AG	2A 32V	2091811-0007	2090932-0509	301002	15500	AGA2	BAF

### MISCELLANEOUS

ITEM No.	PART NAME	BENDIX PART No.	NOTES
M2	Tuner	2092544-0707	
	Coil Assembly	2090131-0072	
M3	AVC Limiter	2092055-0001	
M4	AF Det.	2092055-0001	
M5	Spark Plate	2092050-0001	(350mmf)
M6	Spark Plate	2093050-0001	(350mmf)

### CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Escutcheon Assembly	2092709-0502	Knob, Tone, Dummy	2092235-0001
Dial Glass	2092474-0005	Pushbutton	2092224-0002
Knob, Tuning, Volume	2091420-0001	Pointer Arm Assembly	2090129-0033

### WIRING DATA

General-use Unshielded Hook-up Wire .....	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire .....	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable .....	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap .....	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)