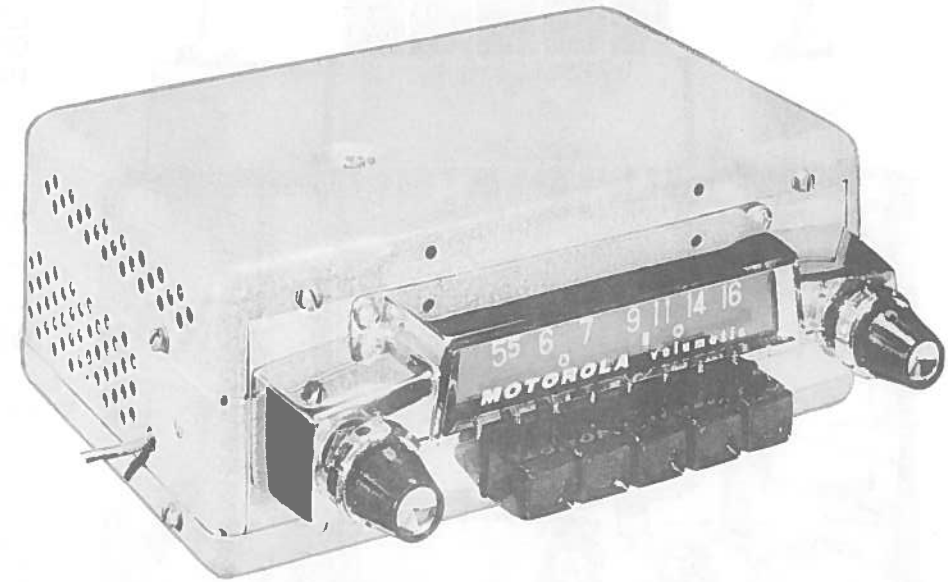




MOTOROLA  
MODELS 556, 596, 596-12



TRADE NAME	Motorola Models 556, 596, 596-12		
MANUFACTURER	Motorola Inc., 4545 W. Augusta Blvd., Chicago 51, Ill.		
TYPE SET	Battery Operated Universal Type AM Superheterodyne Automobile Receiver		
TUBES (Six)	Types 6BD6 RF Amplifier, 6BE6 Converter, 6BD6 IF Amplifier, 6CR6 Det-AVC-AF Amp., 6AQ5 Output, 6X4 Rectifier (12 Volt Types Used In Model 596-12)		
POWER SUPPLY	6 Volt Storage Battery (Models 556, 596)	RATING	5.2 Amp. @ 6.3 Volts DC
	12 Volt Storage Battery (Model 596-12)		2.6 Amp. @ 12.6 Volts DC
TUNING RANGE—BROADCAST	540KC - 1800KC		

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. IMFD	High side to pin 7 (grid) of 6BE6 (V2). Low side to chassis.	455KC (400% Mod)	High frequency end stop.	Across voice coil.	A1, A2, A3, A4	Adjust for maximum output.
2. Fig. 1	Thru dummy to antenna receptacle.	1810KC	"	"	A5, A6, A7	"
*3.	"	"	"	"	A5, A6, A7	Back A8, A9, A10 (tuning cores) out of coils but not out of coil forms. Adjust A5, A6, A7 for maximum output.
*4.	"	1180KC	Adjust carriage 19/64" from high frequency end stop.	"	A8, A9, A10	Adjust for maximum output.
*5.	"	1810KC	High frequency end stop.	"	A5, A6, A7	Retouch for maximum output.
6.	With radio installed in car and antenna fully extended, tune in a weak station near 1400KC, and adjust A7 for maximum volume.					

\* Not necessary, except in case of tampering or replacement of tuning coils or components.

PUSHBUTTON ADJUSTMENT

Pull pushbutton out. Tune manually to desired station. Press pushbutton in firmly. Repeat on remaining pushbuttons.

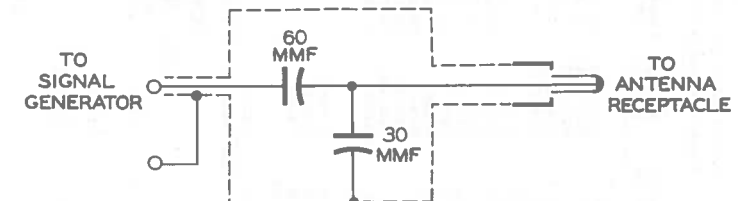


FIG. 1  
HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

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PARTS LIST AND DESCRIPTIONS  
TUBES (GENERAL ELECTRIC, SYLVANIA)

MOTOROLA  
MODEL 556

ITEM No.	USE	TYPE	NOTES
V1	RF Amplifier	6BD6	Note 1
V2	IF Amplifier	6BD6	Note 1
V3	IF Amplifier	6BD6	Note 1

Note 1: Equivalent 12 volt tube type used in model 596-12.  
Note 2: Tube used in model 596-12.

ELECTROLYTIC CAPACITORS

ITEM No.	BATING	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	15	350	23A486677	AFB3-104	C077	FP328
C1B	10	350				
C1C	20	25				

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.	BATING	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBIER PART No.	MALLORY PART No.	SPRAGUE PART No.	NOTES
C2	90	21A501682	BPD-00015	DD-181	G046	81L-151	5GA-T15
C3	150	21R40112	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C4	680	21R40112	NPD-00018	TC2-4R7	TC2-4R7	NP0A-4R7	5GA-T15
C5	4.7	21R115655	NPD-00018	TCN-500	TCN-500	NT-5547	5GA-T15
C6	100	21R120576	NPD-00018	TCN-500	TCN-500	NT-5547	5GA-T15
C7	47	21R115653	NPD-00018	TCN-500	TCN-500	NT-5547	5GA-T15
C8	400	21A71872	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C9	100	21R40112	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C10	10000	21A482728	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C11	10000	21R115655	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C12	100	21R115655	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C13	100	21R115655	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C14	100	21R115655	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C15	10000	21R115655	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C16	470	21R115655	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C17	470	21R115655	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C18	400	21R115655	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C19	300	21A522033	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C20	300	21A522033	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C21	100	21A522033	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C22	100	21A522033	BPD-00018	DD-181	TP50	81L-151	5GA-T15
C23	100	21A522033	BPD-00018	DD-181	TP50	81L-151	5GA-T15

Note 1: Model 596-12 uses .04MFD (part #8A121649) in this application.

Note 2: Used in model 596-12 only.

CONTROLS

ITEM No.	BATING	MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	INSTALLATION NOTES
R1A	1M $\Omega$	18B531559	F1-55	R4-37	*QJ-720A	UD16548	Tone (Panel) Volume-Tapped@125K (Rear) Attach to R1A
R1B	250K						
R1C	50K						

\* Concentric Equivalent: K-6 KIL, Base Elements & Shaft; R13-130X & R1-207 (Rear) 78-1 Switch

RESISTORS

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

ITEM No.	BATING	MOTOROLA PART No.	IRC PART No.	NOTES
R2	100K	6R8075	BTS-100K	
R3	100K	6R8075	BTS-100K	
R4	100K	6R8075	BTS-100K	
R5	100K	6R8075	BTS-100K	
R6	100K	6R8075	BTS-100K	
R7	100K	6R8075	BTS-100K	
R8	100K	6R8075	BTS-100K	
R9	100K	6R8075	BTS-100K	
R10	100K	6R8075	BTS-100K	

Note 1: Not used in 12 volt models.

PARTS LIST AND DESCRIPTIONS (Continued)  
TRANSFORMER (VIBRATOR)

ITEM No.	RATING	MOTOROLA PART No.	REPLACEMENT DATA	NOTES
T1	SEC. 1 SEC. 2 SEC. 3			
T1	6.3VCT @ 3A	25C503303-J	V3801 Q	P-2970Q
T1		25C538446		
T1		25C538446		

Note 1: Drill new mounting holes.  
Note 2: Used in model 556 and alternate part for model 596.  
Note 3: Used in model 596-12.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	MOTOROLA PART No.	REPLACEMENT DATA	NOTES
T2	5.2K	25B70171-P	Z1107	A-2930
T2				
T2				

SPEAKER

ITEM No.	RATINGS	MOTOROLA PART No.	REPLACEMENT DATA	NOTES
SPI	SIZE FIELD V. C. IMP.			
SPI	8" X 8" PM	50C534268	69A3	23881
SPI	6" X 9" PM	50C533088	69A3	23881
SPI	6" X 7" PM	50C532085		

COILS (RF-IF)

ITEM No.	USE	DC RES.	MOTOROLA PART No.	REPLACEMENT DATA	NOTES
L1	Ant. Coil	140	1K538712		
L2	RF Coil	140	1K538712		
L3	FL Choke	00	24A522284		
L4	FL Choke	00	24A522284		
L5	Input IF	200	24C485563		
L6	Output IF	200	24C485563		
L7	FL Choke	00	24A522081		
L8	Vib. Hash Choke	00	24A522083		

Note 1: Alternate part #24K52272 used in tuner #77D522054.

Note 2: Alternate part #24B52272 used in tuner #77D522054.

Note 3: Alternate part #24B52270 used in tuner #77D522054.

Note 4: Part #24A538447 used in model 596-12.

Note 5: Part #24A538447 used in model 596-12.

VIBRATOR

ITEM No.	TYPE	INPUT VOLTS/FREQUENCY	MOTOROLA PART No.	REPLACEMENT DATA	NOTES
M1	Interrupter	6.3V	48B3333	5342	903M
M1	Interrupter	12.6V	48B522000	6301	G859

FUSES

ITEM No.	TYPE	RATING	MOTOROLA PART No.	REPLACEMENT DATA	NOTES
M2	SFE	9A *	65R18248	95536817	307009
M2	SFE	5A	65R122345	9C536545	155009

\* Used in 6 volt models

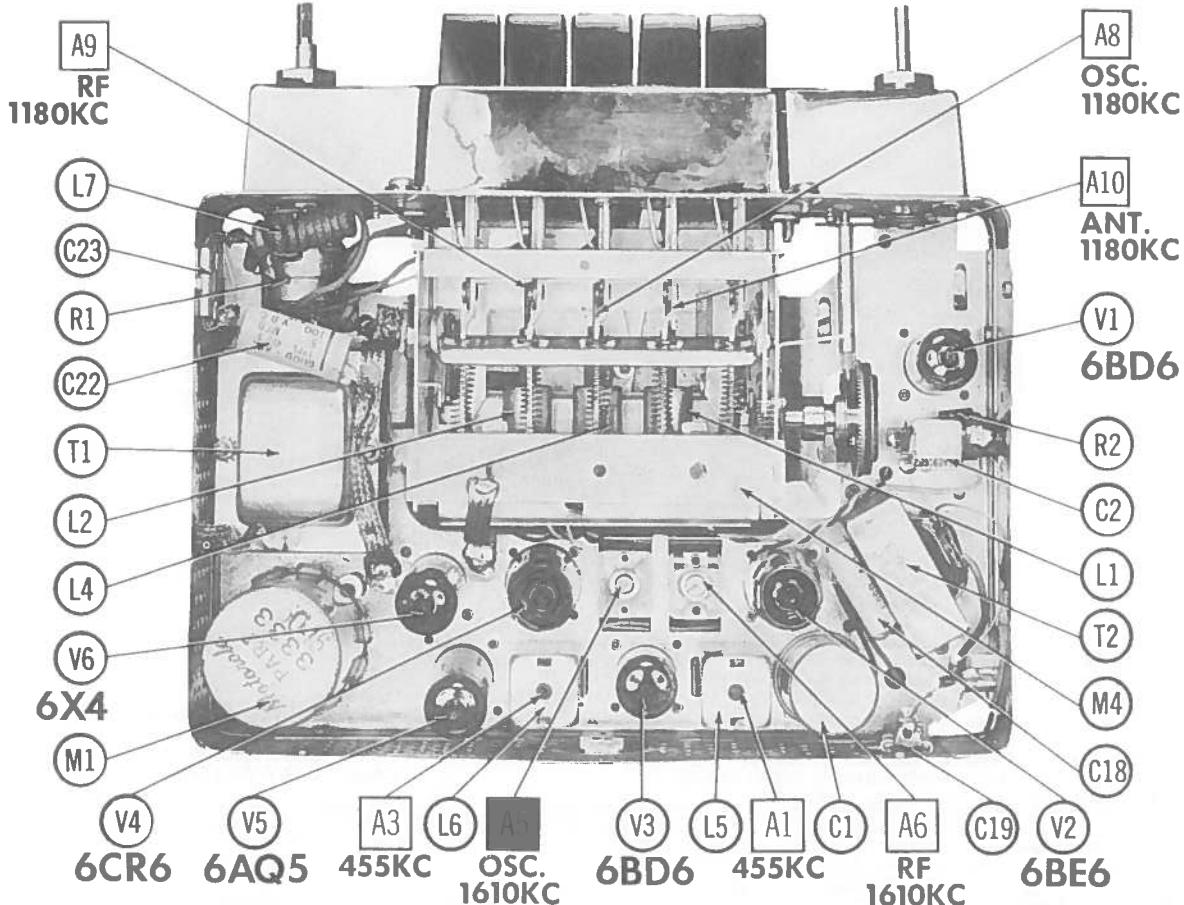
MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M3	Dial Light	65X10887	#44, Models 596, 556.
M4	Dial Light	65T535821	#1891, Model 596-12.
M5	Tuner	77D535874*	(AT-169) Permeability (Complete). Includes L1, L2 & L4.
M6	Trimmer Cap.	20A476537	Osc. (5-80MMF)
M7	Trimmer Cap.	20A481526	RF (20-180MMF)
M8	Trimmer Cap.	20A513232	Ant. (20-180MMF)

\* Alternate tuner part #77D522054 (AT-117)

MOTOROLA  
MODEL 556

CHASSIS—TOP VIEW



CHASSIS—BOTTOM VIEW

