

INTERNATIONAL
MODEL 94MIM

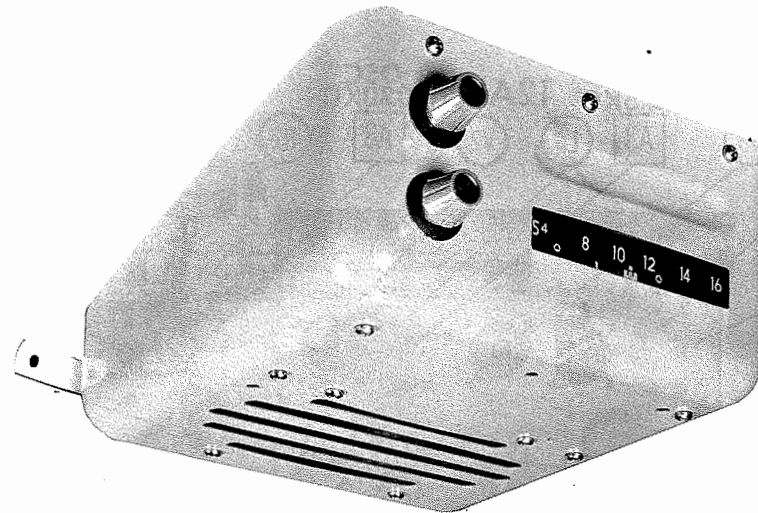
SEE LIST FOR ALTERNATE
VALUE OR APPLICATION
DC COIL RESISTANCE VALUES UNDER ONE OHM
NOT SHOWN ON SCHEMATIC DIAGRAM

FOLDER 12
SET 446

PHOTOFACT* Folder



INTERNATIONAL
MODEL 94MIM



TRADE NAME International Model 94MIM (For 1959 International "A" Line Trucks)
MANUFACTURER Motorola Inc., 4545 W. Augusta Blvd., Chicago 51, Illinois
TYPE SET Battery Operated 4 Tube Custom Built AM Automobile Receiver With Transistorized Output

POWER SUPPLY 12 Volt Storage Battery
TUNING RANGE—BROADCAST 540 - 1610KC

RATING 2 Amp. @ 12.6 Volts DC

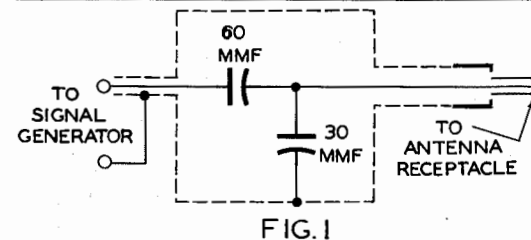
ALIGNMENT INSTRUCTIONS

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.

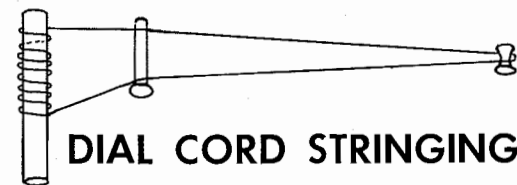
Suggested Alignment Tools: A1, A2, A3, A4..... GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8987
WALSCO #2531
A5, A6, A7..... GENERAL CEMENT #5000, 5003, 5014, 5015, 5016, 8276, 8290
WALSCO #2512, 2515, 2522, 2523, 2525, 2537
A8, A9, A10..... GENERAL CEMENT #9050L, 9150
WALSCO #2521

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .1mf	High side to antenna receptacle. Low side to chassis.	262.5KC (400v Mod.)	High frequency end stop	Across voice coil	A1, A2, A3, A4	Adjust for maximum output.
2. Fig. 1	Thru dummy antenna to antenna receptacle	1610KC	"	"	A5, A6, A7	"
Step 3 is not necessary unless the tuning coils have been replaced or tampered with. Back the tuning cores out of the coils as far as possible. Repeat step 2.						
3. Fig. 1	Thru dummy antenna to antenna receptacle	1020KC	Carriage 9/16" in from high end stop.	Across voice coil	A8, A9, A10	Adjust for maximum output. Repeat steps 2 and 3 until no further improvement is noted. Make step 2 the last step. Cement cores.
4.	With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A7 for maximum output.					



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

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INTERNATIONAL
MODEL 94MIM

SET 446 FOLDER 12

DATE 6-59

SET 446

FOLDER 12

PARTS LIST AND DESCRIPTIONS
 TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES	ITEM No.	USE	TYPE	NOTES
V1	RF Amplifier	12BL6		V3	IF Amplifier	12BL6	
V2	Converter	12AD6		V4	Det. - AVC - Driver	12DL8	

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			CBS PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2N176	Output	2N155	2N176	2N176	2N176	PXP Note 1

Note 1. When replacing, coat both sides of insulator with DC-4 grease (Part #1M490487) or equivalent. Tighten mounting screws securely.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	CAP.	VOLT.	REPLACEMENT DATA				NOTES
				MOTOROLA PART No.	AEROVOX PART No.	CORNEIL DUBIER PART No.	MALLORY PART No.	
C1A	500	18		23B559281	AFR2-02-10	B0045	WP200. 5	TVL-2175
C1B	100	16						

FIXED CAPACITORS

ITEM No.	RATING	CAP.	VOLT.	TOL	REPLACEMENT DATA				NOTES
					MOTOROLA PART No.	AEROVOX PART No.	CORNEIL- CENTRALAB PART No.	MALLORY PART No.	
C2	50-280	500			20A77538	BPD-00058	DD-561	L10T56	5GA-T58
C3	100	200			21R120936	N750-DJ100	DTN-100	CN7-310	5TCU-TIS 10%
C4	100	200			21R410036	P288N-05	DF-503	CUB2S5	2TM-S5
C5	100	200			8R121005				
C6A	50-280	220			20K562250				
C6B	100	100							
C7	100	100			21R482726	BPD-01	DD-103	BYA10S1	5HK-SI
C8	100	100			21R410036	N750-DJ100	DTN-100	L10T1U	5TCU-TIS 10%
C9	10000				21R482726	BPD-01	DD-103	BYA10S1	5HK-SI

CONTROLS

ITEM No.	RATING	RESISTANCE	WATTS	REPLACEMENT DATA				INSTALLATION NOTES
				MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	
R1A	1meg		1/2	13B562220		A47-1meg-Z	Q13-137	U53
R1B	1meg					RS-3/16	NQ	DS-37
R1C	Switch					SWE-13	76-1	US-26
R2	210Ω		1(WW)	18K540718		39-200		Volume Off-On Bias

RESISTORS

ITEM No.	RATING	OHMS	WATT	MOTOROLA PART No.	NOTES	ITEM No.	RATING	OHMS	WATT	MOTOROLA PART No.	NOTES
R3	15meg			6R476065	Note 1	R10	47K	1meg		6K121687	
R4	1meg			6K124494		R11	1meg	6.8meg		6K124494	
R5	2.7meg			6R488136		R12	5.6Ω	5.6Ω		6K121533	
R6	22meg			6K121259		R13	100 Cold	100 Cold		17K135223	
R7	47K			6K121259		R14	47Ω	47Ω		6K121533	
R8	10meg			6K125911		R15	100 Cold	100 Cold		6K121533	
R9	10meg			6K125911		R16	470Ω	470Ω		6K121533	

Note 1. Some versions may use 15meg in this application (Part #6R476065).

Note 2. Some versions may use 330Ω in this application (Part #6K127940).

PARTS LIST AND DESCRIPTIONS (cont)
 COILS (RF-IF)

ITEM No.	USE	MOTOROLA PART No.	REPLACEMENT DATA				NOTES
			Gramer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	
L1	AnL Tuning Coil	24B537932 †					
L2	RF Tuning Coil	24B537932 †					
L3	Osc. Tuning Coil	24K560418	16-6752	16-6752	BC-350	12-HI	RF-3
L4	Input IF	24K560418	16-6754	16-6754	BC-354	12-H6	
L5	Output IF	24K560418					

† Part of M2

FILTER CHOKE

ITEM No.	RATINGS	CURRENT (Measured)	DC RES.	REPLACEMENT DATA				Tried PART No.
				INDUCTANCE (1000 μ H)	MOTOROLA PART No.	Hallidison PART No.	Merit PART No.	
L6	2A		20%	.004 H _y	25K560034			

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO	MOTOROLA PART No.	Hallidison PART No.	Merit PART No.	Stancor PART No.	Thorderson PART No.	Tried PART No.	NOTES
T1	9.5 1	25C542378						

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	PRI.	T2 22Ω Tap @ 3-4Ω	REPLACEMENT DATA				NOTES
				MOTOROLA PART No.	Hallidison PART No.	Merit PART No.	Stancor PART No.	
				25K542338				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MOTOROLA PART No.	QUAM PART No.	
SP1	5" x 7" P.M.	50C562249 ①	57A21	① Replacement Part #50C542399

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA				NOTES
			MOTOROLA PART No.	LITTELFUSE PART No.	FUSE HOLDER	BUSS PART No.	
M1	SFE	75A 32V	68R122346	9C542395	30707.5 (7AG 75A 32V)	155009	SFE 75 $\frac{1}{2}$ HDH

MISCELLANEOUS

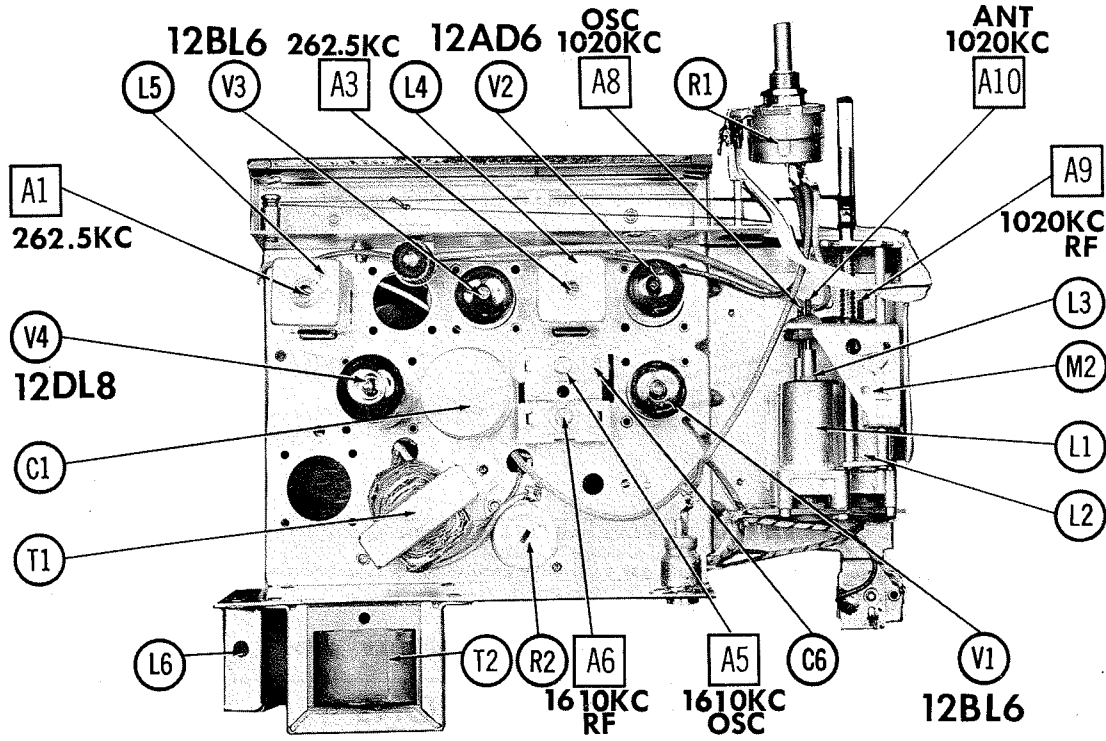
ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M2	Tuner Knob	77D562234	MT-272, Complete
M3	Pointer Spark Plate	48K539553	Selenium, Use #43A539564 Bushing, #44A542137 Washer, #5K124846 Eyelet for Mounting

CABINETS & CABINET PARTS

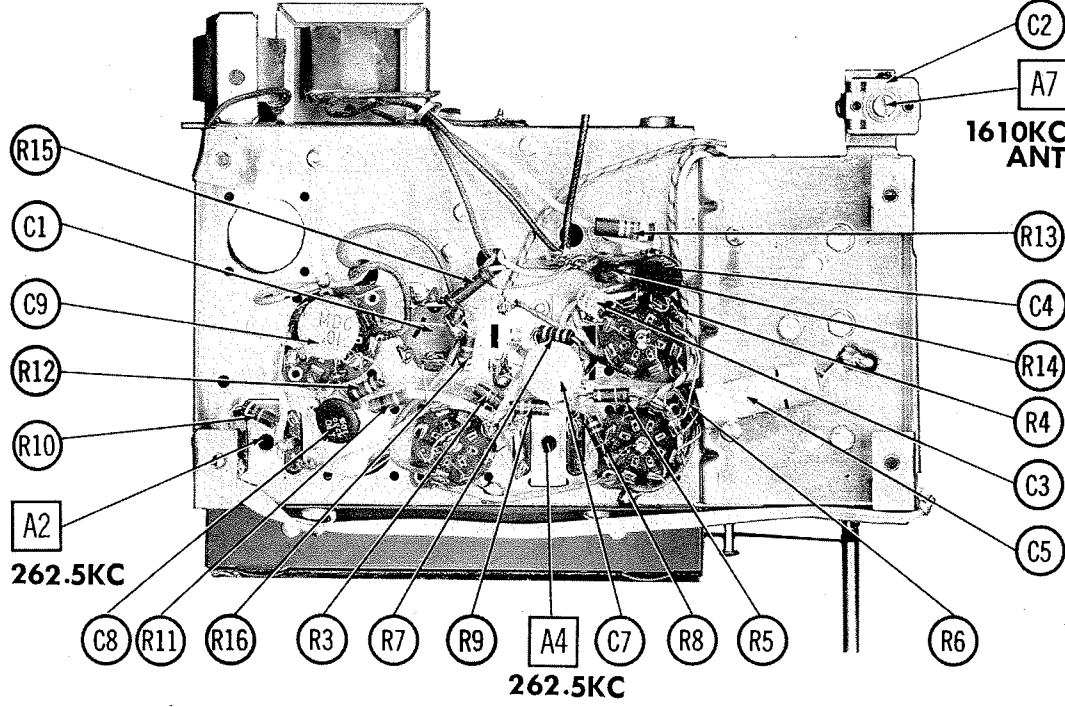
(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Knob	38K542332	
Pointer	52A542227	Tuning, Volume-On-Off
Dial Scale	34B542223	

CHASSIS—TOP VIEW



CHASSIS—BOTTOM VIEW



WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
 Shielded Hook-up Wire Use BELDEN No. 8824 (Stranded) Available in Ten Colors
 Bonding Strap Use BELDEN No. 8866