RADIO-PHONOGRAPH

SPECIFICATIONS

Model 40-510 is a radio-phonograph combination assembled in a console cabinet consisting of a 12 tube, wireless remote control superheterodyne radio receiver and a Deluxe Inter-Mix Record Changer.

The specifications for this model are the same as those contained on page 70 for Model 40-205 with the exception of the power consumption, record changer, cabinet type. The wireless remote control circuit will automatically tune in seven broadcast stations and operate the automatic phonograph mechanism. The adjustment procedures for the R. F. and I. F. compensating condensers and wireless remote control circuits will be found on page 75 for Model 40-205. The adjustment procedure for reception of stations by wireless remote control is the same as that also covered on page 76 for Model 40-205 with the exception that No. 8 position is used for phonograph. This position is already connected and will not need adjustment

POWER CONSUMPTION: 220 Watts.

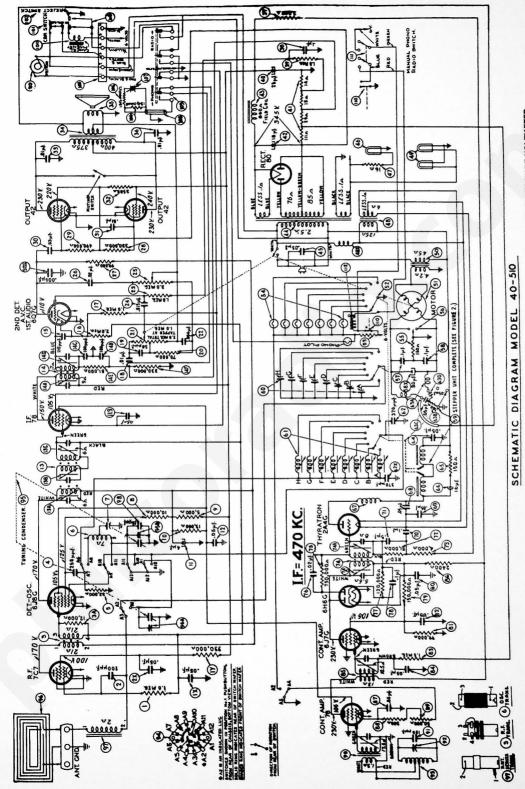
CABINET DIMENSIONS: 38 1/8" High; 40 1/2" Wide; 21" Deep.

The Deluxe Inter-Mix Record Changer plays fourteen 10" and 12" records intermixed, fifteen 10" or thirteen 12" records at one loading. The record changer can be operated manually or from the wireless remote control circuit of the radio receiver. When using the wireless remote control to operate the phonograph, the Inter-Mix Record Changer can be started and stopped, records rejected and volume adjusted, from the remote control unit. The automatic record changer is selected by dialing "PHONO" position. This operates relay (112) which pulls "Radio-Phono" switch (109) to the "PHONO" position. Records are also rejected by dialing the "PHONO" position on the wireless remote control unit. Phono relay (112) is connected to No. 8 contact of the pilot lamp section of rotary switch (52). The service information for the Inter-Mix Record Changer will be found on page 119. Operating instructions for the phonograph mechanism is covered in the instructions Part No. 39-6408 supplied with each set.

The replacement parts and schematic diagram for this model are listed herein.

Replacement Parts - Model 40-510

SCHE No.	DESCRIPTION	PART No.	SCHE.	DESCRIPTION	PART	SCHE.	PART
1 1×	Resistor (1.0 meg., 1/2 watt)	22.510220	60F	Compensator No. 6	No.	No.	DESCRIPTION No.
iŷ	Tubular Cond. (.05 mfd.) Resistor (330,000 ohms, ½ watt) Mica Cond. (200 mmfd.).	30-4519	606	900-1470 K.C., Part of 60 Compensator No. 7			MISCELLANEOUS PARTS
2 2X	Mica Cond. (200 mmfd.)	30-1078	60H	Compensator No. 8 1170-1600 K.C., Part of 60			Automatic Record Changer Complete 35-1176 Arm (Operating Auxiliary Switch) 56-1563
3	R. F. Trans	32-3282	61	Coil Assy. (Pushbuttons) Oscillator Coil No. 1			Bezel Gasket Assembly
4	Mica Cond. (250 mmfd.)	33-312339	61A	Oscillator Coil No. 2			Cable (Chassis to Changer) 41-3495
6	Resistor (32,000 ohms, 1/2 watt)	33-332339	610	540-1030 K.C.	32-3042		Cable and Plug (Power Supply) L-3196
7 7×	Compensator	31-6230	610	Oscillator Coil No. 3 Oscillator Coil No. 4			Drive Cord Tuning Condenser 31-3350
6	Resistor (10,000 ohms, 1/2 watt)	33-310339	61E	670-1160 K.C. Oscillator Coil No. 5 Oscillator Coil No. 6	32-3042		Seriel Gasket Assembly 56-1511 Cable (Chassis to Changer) 14-1495 Cable and Plug Assembly (Pilot Lamp) 41-3502 Cable and Plug Assembly (Pilot Lamp) 41-3502 Cable and Plug (Power Supply) 10-1419 Cable Cord Tuning Condenser 31-2350 Drive Cord Tuning Condenser 31-2350 Dist Cord Pointer 37-5337
10	Resistor (5,000 ohms, 2 watts) Resistor 13,000 ohms, 1 watt)	33-250539	61F	Oscillator Coil No. 6	32.3041		Disc (Tuning)
11	Tubular Cond. (.05 mfd.) Resistor (1,000 obms. /2 wait) Mica Cond. (250 mmfd.) Mica Cond. (250 mmfd.) Mica Cond. (250 mmfd.) Mica Cond. (15 mmfd.)	30-2334	61G	900-1470 K.C. Oscillator Coil No. 7 Oscillator Coil No. 8	32-30-1		Disc (Tuning) 27-5537 Disc (Tone Control) 27-4764 Disc (Volume Control) 27-4765 Disc (Ways Switch) 27-4765
13	1st I. F. Trans. Assy	32-3089		1170-1600 K.C	32-3041		Disc (Wave Switch)
15	Mica Cond. (110 mmfd.)	32-2645 30-1031	62 62X	1170-1600 K.C. Silver Mica Cond. (370 mmfd.) Silver Mica Cond. (370 mmfd.)	30-1110		Disc (Wave Switch) 27-476 Jewel Filot Light 20-20-20 Knob (Radio Phono) 27-507 Knob (Radio Phono Switch) 27-4627 Knob (Radio Phono Switch) 38-969 Filot Lamp Assembly (R. H. Bracket) 38-969 Filot Lamp Assembly (Station Lights) 38-9709 Socket Assembly Bull'scope Jewel 38-9222
16	Resistor (2.0 meg., 1/2 watt)	33-520339	63 63A	Spark Filter Assy	22 2276		Pilot Lamp Assembly (R. H. Bracket) 38-9694
18	Tubular Cond. (.01 mfd.)	30-4479	63B	Resistor (100 ohms, 1/2 watt)	33-110339		Pilot Lamp Assembly (L. H. Bracket) 38-9711 Pilot Lamp Assembly (Station Lights) 38-9709
20	Resistor (70,000 ohms, 1/2 watt)	30-1029	63C 63D	Tubular Cond. (.05 mfd.)	30-4444 30-4444		Socket Assembly Bull's-eye Jewel
21	Tubular Cond. (200 meg.)	33-5300	64	Bakelite Cond. (.05 mfd.)	3615-SG		Socket (6 prong, type 42 and 78 tubes) 27-6044
23	Resistor (1.0 meg., 1/2 watt)	33-510339	66	Electrolytic Cond. (16 mfd., 150 V.)	30-2387		Socket (6 prong, type 80 tube). 27-6044 Socket (6 prong, type 42 and 78 tubes). 27-6036 Socket (6 prong, Octal, 6J5Q, 6Q7Q tubes) 27-6086 Socket (7 prong, Octal, 6J7Q tube). 27-6057 Socket (7 prong, Octal, 6J8Q tube). 27-6059 Speaker.
25	Tone Control (3.0 meg.)	33-5287	67 68	Spark Filter Assy. Spark Filter Assy. Festion 100 Owns. 1, watt). Tubular Cond. (0.5 mfd.). Tubular Cond. (0.5 mfd.). Tubular Cond. (0.5 mfd.). Resisto (1.10 owns. mw. owns. Choke Coil Cond. (1.6 mfd. 1.50 V.). Tubular Cond. (0.5 mfd.).	32-1281 30-4123		Socket (7 prong, Octal, 6A8G tube) 27-6099
26 27	Resistor (99,000 phms, 1/2 watt)	30-4481	69 70	Tubular Cond. (.05 mfd.)	30-4123		Society prong, octal, sadu tube 27-8099 Speaker (7) prong, octal, sadu tube 27-8099 Spring (19-1450) S
28	Resistor (330,000 ohms, 1/2 watt)	33-433339	71	Tubular Cond. (.05 mfd.)	30-4551		Screw (Mtg. Chassis)
30	Tubular Cond. (.03 mfd.)	30-4517	73	Resistor (4,000 ohms, 1/2 watt)	33-351339 33-240339		Tone Arm Assy. Com. (Record Changer) 35-2067 Turntable Assy. (Record Changer) 35-3039
30X	Tubular Cond. (.006 mfd.)	30-4445	74	Resistor (750,000 phms, 1/2 watt)	32-3275		Tab Television 27-9447 Washer (Keyed Washer, Tuning Disc). 56-1029
32	Resistor (3500 ohms, 1/2 watt)	33-235339	76	Tubular Cond. (.02 mfd.)	30-4516		Washer (Spring Washer, Tuning Disc) 56-1029
34 35	January Cond. (cam mid.) Jand I. F. Trans. Assy. Michigan Cond. (cam mid.) Jubular Cond. (cam mid.) Michigan Cond. (cam mid.) Jubular Cond. (cam mid.) Michigan Cond. (cam mid.) Michigan Cond. (cam mid.) Michigan Cond. (cam mid.) Michigan Cond. (cam mid.) Jubular Cond. (cam mid.)	32-7997	78	Tubular Cond. (.01 mfd.)	30-4455		
38	Output Trans. Come and Voice Coil Assy. (Box. Part No. 38-1450-4). (Box. Part No. 38-1450-4). Tubular Cond. (O.I mid.). Resistor (3000 chms, V ₂ watt). Resistor (3000 chms, V ₂ watt). Resistor (3000 chms, V ₃ watt). Resistor (3000 chms, V ₃ watt). Resistor (3000 chms, V ₃ watt). Resistor (3100 chms, V ₃ watt). Resistor (12 mid.) (18 mid.)	36-4089	79 80	Tubular Cond. (.05 mfd.) Resistor (15.1000 ohms. 1/2 watt) Resistor (15.1000 ohms. 1/2 watt) No. 3 Control Amp. Co.) Tubular Cond. (.02 mfd.) Tubular Cond. (.02 mfd.) Tubular Cond. (.03 mfd.) Resistor (12.000 ohms. 1/2 watt) Tubular Cond. (.05 mfd.) Resistor (19.000 ohms. 1/2 watt) Tubular Cond. (.05 mfd.) Tubular Cond. (.05 mfd.) Tubular Cond. (.05 mfd.) Tubular Cond. (.05 mfd.)	33-415339 30-4123		STEPPER UNIT
36	Tubular Cond. (.01 mfd.)	36-4111 30-4501	81	Resistor (99,000 ohms, 1/2 watt)	33-399339	COPP	ER SLUS STEPPER MOTOR
37	Resistor (3000 ohms, 1/2 watt)	33-230339	83 84	Resistor (1.5 meg., 1/2 watt)	33-515339	1	SWITCH I SCHOOL
38 39 40	Resistor (1.0 meg., 1/2 watt)	33-510339	85	No. 2 Control Amp. Coil Resistor (2700 ohms, ½ watt) Tubular Cond. (.05 m/d.) Resistor (300 ohms, ½ watt) Sensitivity Control (50,000 ohms)	32-3087		SWITCH SLUE 36 03
41	Bias Resistor (Wirewound)	33-3361	86 87	Tubular Cond. (.05 mfd.)	33-227339	RELA	IG STEPPING
42 43 44	Field Coil (Replace Spkr. Part No. 36-1450)	30-2200	88	Resistor (300 ohms, 1/2 watt)	3-130339	COIL	
			90	No. 1 Control Amp. Coil	2-3086	1	
45	Condenser (.05 mfd., 115 V. Plug)	30-4576	92	Air Padder (Secondary Inductor)	1-6268	:	A
47	Pilot Lamp Resistor (16 ohms, 1 watt).	34-2210 33-016431	93	Secondary Inductor	0-6414	MUTI	
48	Filament Trans. (115 V., 50-60 cycles)	32-7993	95 95A	Tuning Cond	1-2311	E	기계 의 집 집 집 · (62)
48X	Choke Coll	32-1281	958	Air Padder (Secondary Inductor) Secondary Inductor Wave Switch Wave Switch Part of Tuning Condenser (95) Part of Tuning Condenser (95) Part of Tuning Condenser (95) Mica Condenser (15 mmfd.) Mica Condenser (15 mmfd.) Mica Condenser (15 mmfd.) Roject Magnet (18 cord Changer) Reject Magnet (Record Changer) Reject Magnet (Record Changer) Reject Magnet (Tone Arm Reject Switch) Terminal Panel Record Changer Resistor (150,000 oims) Crystal Picks (150,000 oims) Resistor (150,000 oims)		3	
50	Motor _rans. (115 V., 50-60 cycles)	32-7990	96	Loop Series Transformer	18-9882 12-3226		
51	Volume Control Motor Assy	32-8015 35-1151	98	Mica Condenser (15 mmfd.)	0-1139		63 SPARK FILTER
52 53	Bias Resistor (Wirewound, 10 ohms)	42-1468	100	Reject Magnet (Record Changer)	2-1552		ASSEMBLY ASSEMBLY
54 55 56 57	Pilot Lamps (Station Indicator)	34-2064	102	Adjust. Screw (Tone Arm Reject Switch)	W-2100	I	OUTPUT TUBES COIL (INSIDE OF STEPPER UNIT)
56	Volume Control Switch (Motor Control)	42-1469	103	Terminal Panel Record Changer	3-415339		1 OS ME
56	Tubular Cond. (.1 mfd.)	30-4499 30-4499	105	Contact Blade (Tone Arm Reject Switch) 5	6-1663		
58X	Electrolytic Cond. (30 mfd., 30 V.)	30-2361	107	Crystal Pick-up Cartridge	5-2030		66 65 64 MOTOR TRANS.
60 60A	Condenser Conden	31-6264	108	Resistor (150,000 ohms). 2 Crystal Pick-up Cartridge. 3 Pick-up Cable (Record Changer). 4 Pick-up Cable (Chassis). 4 Remote Phono Radio Switch (Operales Auxiliary Sw. Mark no Radio Chassis)	1-3504		(59) STEPPER UNIT COMPLETE
608	Compensator No. 2		109	Remote Phono Radio Switch (Operates	2.1826		SAN SIELLE ONLL COMPETE
60C	S40-1030 K.C., Part of 60 Compensator No. 3		110	Auxiliary Sw. (Mntd. on Range Sw. Cam) 4	2-1631	FIG	2. INTERNAL WIRING OF STEPPER
600	670-1160 K.C., Part of 60		112	Relay - Part of 109 (Operates Remote	2-1003	r IG.	UNIT. NUMBERS CORRESPOND
SOE	Compensator No. 5		113	Mus. Phono Radio Sw. (Mntd. on Range Sw. Cam) & Man. Phono Radio Sw. (Mntd. on Chngr.) 4 Relay — Part of 109 (Operates Remote Phono Radio Switch 109)	0-4519		TO SCHEMATIC.



VOLTAGES INDICATED AT TUBE ELEMENTS WERE MEASURED WITH A PHILCO MODEL 027 CIRCUIT TESTER AND VACUUM TUBE VOLTMETER. Line voltage is signal being for the voltage is volts a.C., no signal being received.