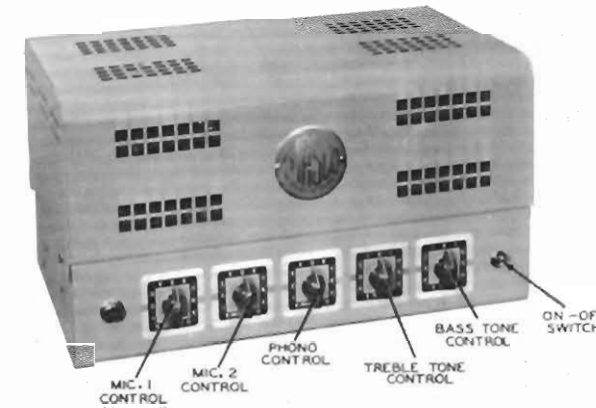


PHOTOFACT* Folder

MASCO MODEL MA-50



TRADE NAME Masco, Model MA-50
MANUFACTURER Mark Simpson Mfg. Co., Inc., 32-28 49th St., Long Island City 3, N.Y.
TYPE SET AC Operated 3 Channel 10 Tube Amplifier
TUBES (T1E1) Types, (2) 7C7 Mic. Amp., 7F7 AF-Amp., 7N7 AF Amp. Phase Inv., (4) 6L6GA Power Output, (2) 5U4G Rectifier.
POWER SUPPLY 110-120 Volts AC RATING 1.8 Amp. @ 117V AC

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	7C7	24VDC*	20VDC	34VDC	0V.	0V.	-.5VDC	0V.	24VDC*
2	7C7	24VDC*	20VDC	32VDC	0V.	0V.	-.55VDC	0V.	24VDC*
3	7F7	24VDC*	2.3VDC	200VDC	0V.	0V.	200VDC	2.3VDC	24VDC*
4	7N7	24VDC*	5VDC	125VDC	0V.	0V.	135VDC	5VDC	24VDC*
5	6L6GA	0V.	24VDC*	410VDC	310VDC	0V.	125VDC	24VDC*	24VDC
6	6L6GA	0V.	24VDC*	410VDC	310VDC	0V.	0V.	24VDC*	24VDC
7	6L6GA	0V.	24VDC*	410VDC	310VDC	0V.	0V.	24VDC*	24VDC
8	6L6GA	0V.	24VDC*	410VDC	310VDC	0V.	0V.	24VDC*	24VDC
9	5U4G	0V.	420VDC	0V.	350VAC	0V.	350VAC	0V.	420VDC
10	5U4G	0V.	420VDC	0V.	350VAC	0V.	350VAC	0V.	420VDC

*6.2V AC BETWEEN FILAMENT PINS.

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	7C7	100Ω	420KΩ	1.1 Meg.	0Ω	0Ω	15 Meg.	0Ω	100Ω
2	7C7	100Ω	420KΩ	1.1 Meg.	0Ω	0Ω	15 Meg.	0Ω	100Ω
3	7F7	100Ω	1KΩ	160KΩ	250KΩ	0Ω	160KΩ	1KΩ	100Ω
4	7N7	100Ω	920Ω	160KΩ	11KΩ	25KΩ	160KΩ	920Ω	100Ω
5	6L6GA	INF.	100Ω	100KΩ	100KΩ	110KΩ	160KΩ	100Ω	100Ω
6	6L6GA	INF.	100Ω	100KΩ	100KΩ	110KΩ	INF.	100Ω	100Ω
7	6L6GA	INF.	100Ω	100KΩ	100KΩ	100KΩ	INF.	100Ω	100Ω
8	6L6GA	INF.	100Ω	100KΩ	100KΩ	100KΩ	INF.	100Ω	100Ω
9	5U4G	INF.	100KΩ	INF.	30Ω	INF.	30Ω	INF.	100KΩ
10	5U4G	INF.	100KΩ	INF.	30Ω	INF.	30Ω	INF.	100KΩ

- 1 - μ C Voltage measurements are at 20,000 ohms per volt; AC voltages measured at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Line voltage maintained at 117 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
- 6 - Set volume controls at minimum and connect proper output load.

HOWARD W. SAMS & CO., INC.

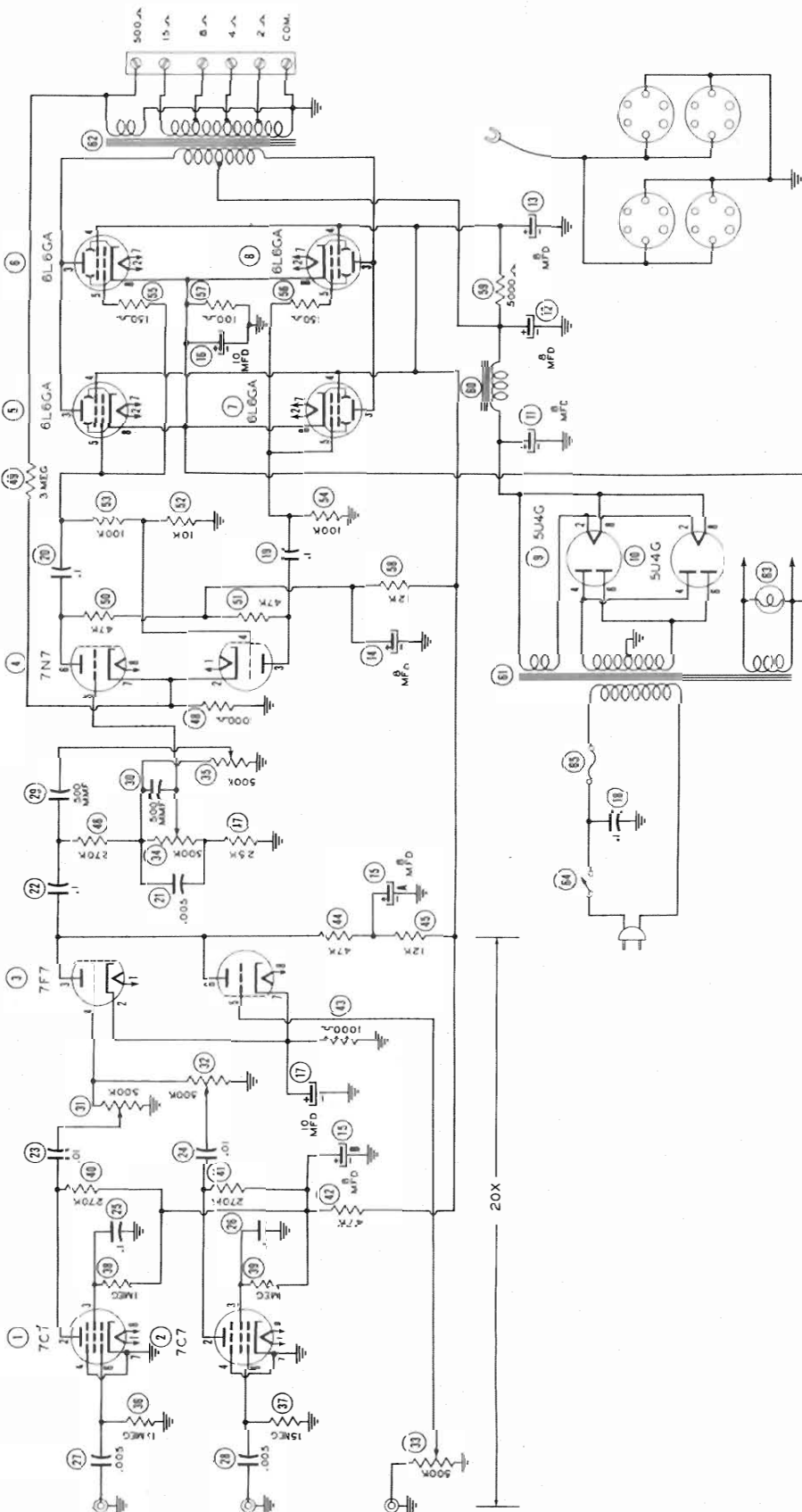
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DATE 12/47 SET #30 FOLDER #4720-16

MASCO MODEL MA-50



4720-16

THE COOPERATION OF THE MANUFACTURER OF THIS
RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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CHASSIS—TOP VIEW

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
		MASCO PART No.	STANDARD REPLACEMENT		
1	Mic. Amp.	7C7	7C7	8V	
2	Mic. Amp.	7C7	7C7	8V	
3	AF Amp.	7F7	7F7	8AC	
4	AF Amp. Phase Inv.	7N7	7N7	8AC	
5	Power Output	6L6GA	6L6GA	7AC	
6	"	6L6GA	6L6GA	7AC	
7	"	6L6GA	6L6GA	7AC	
8	"	6L6GA	6L6GA	7AC	
9	Rectifier	5U4G	5U4G	5T	
10		5U4G	5U4G	5T	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA				CORNELL DUBLIER		IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT.	MILROO PART No.	MALLORY PART No.	SOLAR PART No.	SPRAGUE PART No.	AEROVOX PART No.	CORNELL DUBLIER PART No.	
11	8	600		H8663	D-8-600	A7-86	QL600-8	K7609	Filter " " " " Red
12	8	600		H3663	D-8-600	A7-86	QL600-8	K7609	
13	8	600		H3663	D-8-600	A7-86	QL600-8	K7609	
14	8	450		T071	M-8-450	U7-8	PR3450-8	BR345	
15A	8	450		2N518	M-238-450	U7-89	PR3450-8-8	BR18945	
16	10	50		TC32	M-10-50	T4-510	FR350-10	BR105	Cathode Bypass
17	10	50		TC32	M-10-50	T4-510	FR350-10	BR105	
18	1	600		TF418	TF4-600	TC-1	884-1	U7671	Line Filter Audio Coupling
19	1	600		TF418	S-6-1	TC-1	884-1	U7671	
20	1	600		TF418	S-6-1	TC-1	884-1	U7671	Tone Compensation Audio Coupling
21	1	600		TF418	S-6-1	TC-1	884-1	U7671	
22	1	600		TF418	S-6-1	TC-1	884-1	U7671	Screen Bypass
23	1	600		TF421	S-6-1	TC-1	884-1	U7671	
24	1	600		TF418	S-6-1	TC-1	884-1	U7671	Mic. Coupling
25	1	600		TF418	S-6-1	TC-1	884-1	U7671	
26	1	600		TF418	S-6-1	TC-1	884-1	U7671	Tone Compensation
27	1	600		TF418	S-6-1	TC-1	884-1	U7671	
28	1	600		TF418	S-6-1	TC-1	884-1	U7671	Tone Compensation
29	1	600		TF418	S-6-1	TC-1	884-1	U7671	
30	1	600		TF418	S-6-1	TC-1	884-1	U7671	

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA			CLAROSTAT PART No.	INSTALLATION NOTES
	RESIST- ANCE	WATTS	MASCO PART No.	MALLORY PART No.	IRC PART No.		
314	500Ω	½	Not Req.	W249	D13-133	N-60-Z	1st Mic. Amp. Volume Control Attach to 31A
321	500Ω	½	Not Req.	W248	D13-133	N-60-Z	1st Mic. Amp. Volume Control Attach to 32A
333	500Ω	½	Not Req.	W249	D13-133	N-60-Z	Phono Volume Control Attach 33A per instructions
344	500Ω	½	Not Req.	W248	D13-133	N-60-Z	Treble Control Attach to 34A per instructions
354	500Ω	½	Not Req.	W248	D13-133	N-60-Z	Bass Control Attach to 35A per instructions

RESISTORS

ITEM	RATING	REPLACEMENT DATA		IDENTIFICATION CODES
		MASCO	IRC	
ITEM	RESISTANCE	WATTS	PART No.	PART No.
36	15 Meg.	1	ERS-15 Meg.	Br.-Grn.-Blue 1st Mic. Amp. Grid
37	15 Meg.	1	ERS-15 Meg.	Br.-Grn.-Blue 2nd Mic. Amp. Grid
38	1 Meg.	1	ERS-1 Meg.	Br.-Grn.-Grn. 1st Mic. Amp. Screen Dropping
39	1 Meg.	1	ERS-1 Meg.	Br.-Blk.-Grn. 2nd Mic. Amp. Screen Dropping
40	270K Ω	4	ERS-270K	Red-V1-Y1. 1st Mic. Amp. Plate Load
41	270K Ω	4	ERS-270K	Red-V1-Y1. 2nd Mic. Amp.
42	47K Ω	4	ERS-47K	V1-V1-Or. Voltage Dropping
43	100K Ω	1	ERS-100K	Br.-Blk.-Red AF Cathode

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	MASCO PART No.	IRC PART No.	
44	47KQ	10	ETS-47K	Y1-V1-Or. AF Plate Load	
45	12KQ	10	ETS-12K	Br.-Red-Or. Filter	
46	270KQ	10	ETS-270K	Red-V1-Y1. Tone Compensation	
47	22KQ	10	ETS-27K	Red-Grn.-Or. AF Grid	
48	1000Q	10	ETS-1000	Br.-Bik.-Red AF-Phase Inverter Cathode	
49	3 Meg.	10	ETS-3.3 Meg.	Or.-Bik.-Grn. Feedback	
50	47KQ	10	ETS-47K	Y1-V1-Or. AF Plate Load	
51	47KQ	10	ETS-47K	Y1-V1-Or. Phase Inverter Plate Load	
52	10KQ	10	ETS-10K	Br.-Bik.-Or. Phase Inverter Grid	
53	100KQ	10	ETS-100K	Br.-Bik.-Y1. Output Grid	
54	100KQ	10	ETS-100K	Br.-Bik.-Y1. Output Grid	
55	150Q	10	BK-B-150	Gr.-Grn.-Br. Parasitic Suppressor	
56	150Q	10	BK-B-150	Gr.-Grn.-Br. Parasitic Suppressor	
57	100Q	20	DG-100	Output Cathode-See Note	
58	12KQ	10	ETS-12K	Voltage Dropping	
59	500Q	10	AB-5000	Filter	

Note-Some models use 2-2002 10W resistor in parallel.

FILTER CHOKE

ITEM NO.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ)	MAGCO	STANCO PART NO.	THORDARSON PART NO.	MERIT PART No.	
60	235A	680	5 henries	C-575	C-1703*	T2005-6*	*C-3100*	

*Drill new mounting holes.

Abstract

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	M&S CO PART No.	STANCOR PART No.	THORDARSON PART No.	MERT PART No.
61	117V AC	700V CT	4.0V AC	6.2V AC	A-50		T22R34*	
	① 1.8A	② 225A	③ 6.0A	④ 5.0A				

•Drill new mounting holes.

TRANSFORMER (OUTPUT)

[illegible]

DATE 12/47

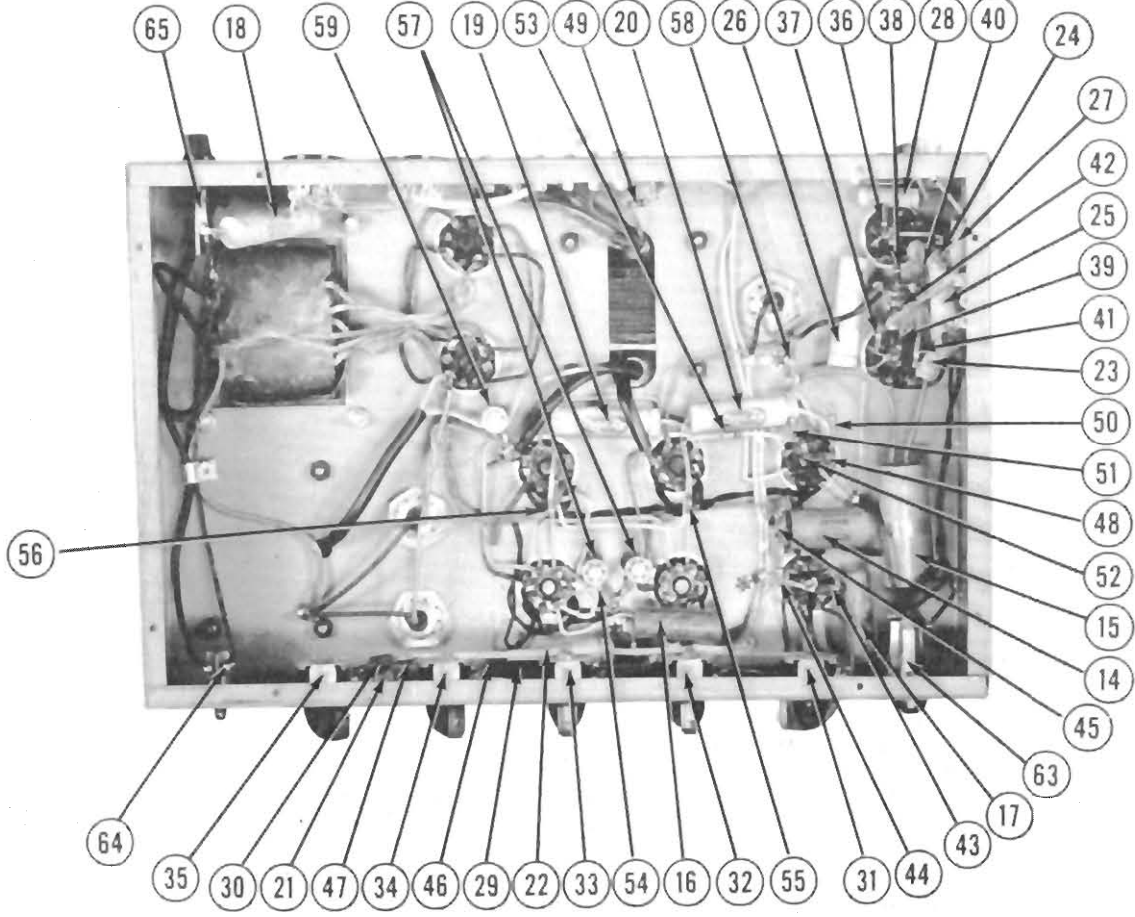
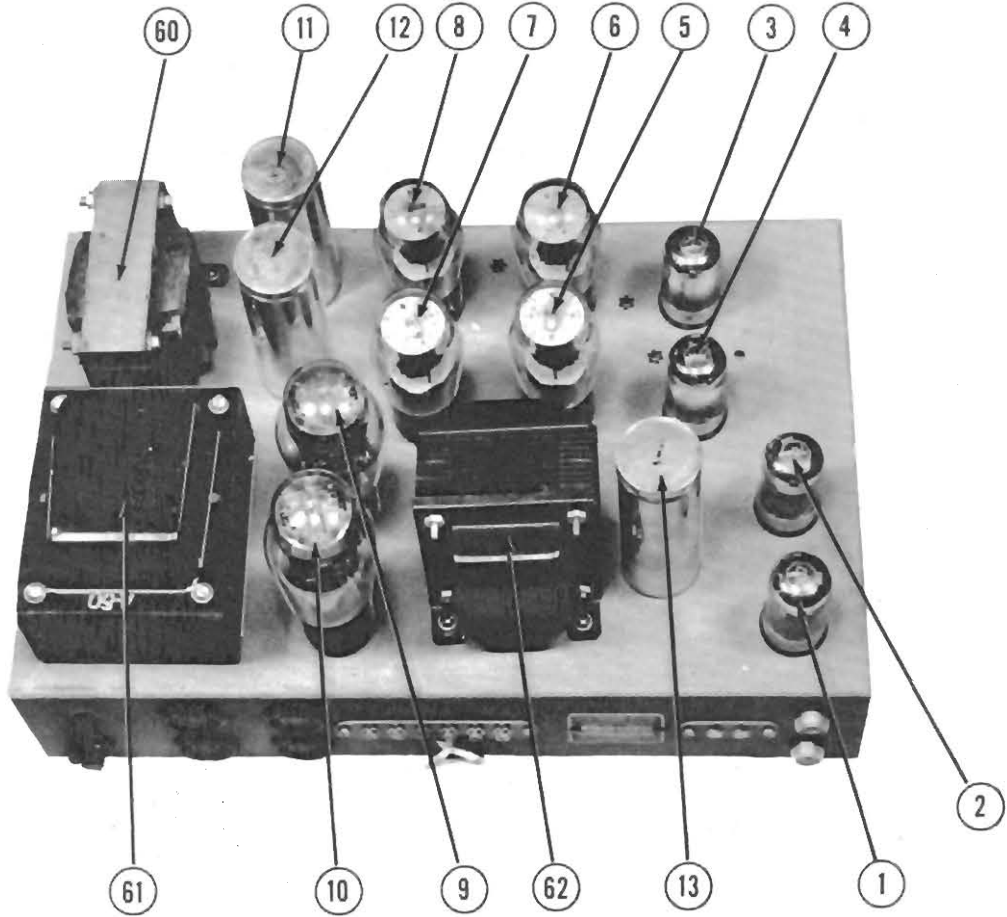
DIAL LIGHT

ITEM No.	BASE TYPE	VOLTS	AMPS.	REPLACEMENT DATA		INSTALLATION NOTES
				BEAD COLOR	MASCO	
					PART No.	
63	Bayonet	6-8	0.15	Brown		Type 47

MISCELLANEOUS

ITEM No.	PART NAME	MASCO PART No.	NOTES
64	Switch		On-Off
65	Fuse		3 Amp.

MASCO
MODEL MA-50



MASCO
MODEL MA-50