

MASCO MODEL MAP-18

**TRADE NAME** Masco, Model MAP-18  
**MANUFACTURER** Mark Simpson Mfg. Co., Inc., 32-28 49th St., Long Island City 3, New York.  
**TYPE SET** AC Operated 3 Channel Musical Instrument Amplifier.  
**TUBES (EIGHT)** Types 6SF5 Input 1 Amp., 6SF5 Input 2 Amp., 6SF5 Input 3 Amp., 6SJ7 1st AF Amp., 6SL7GT 2nd AF-Phase Inv., (2) 6L6G Power Output, 5V4G Rectifier.  
**POWER SUPPLY** 105-125 Volts AC  
**RATING** .80 Amp. @ 117 Volts AC

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	6SF5	0V	1VDC	0V	0V	80VDC	135VDC	*16.5VDC	*16.5VDC
2	6SF5	0V	1VDC	0V	0V	80VDC	135VDC	*16.5VDC	*16.5VDC
3	6SF5	0V	1VDC	0V	0V	80VDC	135VDC	*16.5VDC	*16.5VDC
4	6SJ7	0V	*16.5VDC	1.3VDC	0V	1.3VDC	36VDC	*16.5VDC	60VDC
5	6SL7GT	0V	140VDC	1.2VDC	0V	130VDC	1.3VDC	*16.5VDC	*16.5VDC
6	6L6G	0V	*16.5VDC	300VDC	260VDC	0V	140VDC	*16.5VDC	16.5VDC
7	6L6G	0V	*16.5VDC	300VDC	260VDC	0V	0V	*16.5VDC	16.5VDC
8	5V4G	0V	280VDC	0V	240VAC	0V	240VAC	*16.5VDC	280VDC

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	6SF5	0Ω	4.7KΩ	0Ω	Inf.	*340KΩ	135KΩ	130Ω	130Ω
2	6SF5	0Ω	4.5KΩ	0Ω	Inf.	*340KΩ	135KΩ	130Ω	130Ω
3	6SF5	0Ω	5KΩ	100KΩ	Inf.	*340KΩ	135KΩ	130Ω	130Ω
4	6SJ7	0Ω	130Ω	1KΩ	270KΩ	1KΩ	*500KΩ	130Ω	*140KΩ
5	6SL7GT	15KΩ	*100KΩ	1.5KΩ	5 Meg.	*100KΩ	1.5KΩ	130Ω	130Ω
6	6L6G	0Ω	130Ω	*50.5Ω	*2.5KΩ	250KΩ	200KΩ	130Ω	125Ω
7	6L6G	0Ω	130Ω	*50.5Ω	*2.5KΩ	200KΩ	Inf.	130Ω	125Ω
8	5V4G	Inf.	90KΩ	Inf.	40Ω	Inf.	40Ω	Inf.	90KΩ

\* 6.3VAC measured between filaments.

- 1 - DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1000 ohms per volts.
- 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 + 15% in voltage and resistance readings.
- 6 - All controls at minimum, no signal applied for voltage measurements.

HOWARD W. SAMS & CO., INC. • Indianapolis 7, Indiana

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 DATE 4/49 497-12 SET #59 FOLDER 12

MASCO  
 MODEL MAP-18

# PARTS LIST AND DESCRIPTIONS

## TUBES (SYLVANIA or Equivalent)

MASCO  
MODEL MAP-18

# CHASSIS—TOP VIEW

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
		MASCO PART No.	STANDARD REPLACEMENT		
1	Input #1 Pre-Amp	6SF5	6SF5	6AB	
2	Input #2 Pre-Amp	6SF5	6SF5	6AB	
3	Input #3 Pre-Amp	6SF5	6SF5	6AB	
4	1st AF Amp.	6SJ7	6SJ7	8N	
5	2nd AF-Phase Inv	6SL7GT	6SL7GT	8BD	
6	Power Output.	6L6G	6L6G	7AC	
7	Power Output	6L6G	6L6G	7AC	
8	Rectifier	5V4G	5V4G	5L	

## 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					IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT	MASCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	SOLAR PART No.	SPRAGUE PART No.	
9	16	450		PRS450/16	BR1645	M-16-450	UT-16	Filter.
10	16	450		PRS450/16	BR1645	M-16-450	UT-16	"
11A	10	450		AF22J	UP1145	DY-2X10-450	EL-210	"
11B	10	450						"
12	50	50		PRS50/50	BR505	M-50-50	TA-550	Output Cath. Bypass.
13	8	450		PRS450/8	BR845	M-8-450	UT-8	Decoupling.
14	50	50		PRS50/50	BR505	M-50-50	TA-550	1st AF Cath. Bypass.
15	10	50		PRS50/10	BR105	M-10-50	TA-510	1st Input Cath. Bypass.
16	10	50		PRS50/10	BR105	M-10-50	TA-510	2nd " " "
17	10	50		PRS50/10	BR105	M-10-50	TA-510	3rd " " "
18	.1	600		630T-.1	DYRT6010	XDMR6-.1	TM-1	Line Filter.
19	.1	600		684-1	GT6P1	ST-6-1	TC-1	Audio Coupling.
20	.1	600		684-1	GT6P1	ST-6-1	TC-1	"
21	.01	400		484-01	GT4S1	ST-4-01	TC-11	2nd AF Cathode Bypass Note.
22	.1	600		684-1	GT6P1	ST-6-1	TC-1	Audio Coupling.
23	.005	600		684-005	GT6D5	ST-6-005	TC-25	Tone Compensation.
24	.1	600		684-1	GT6P1	ST-6-1	TC-1	1st AF Screen Bypass.
25	.01	400		484-01	GT4S1	ST-4-01	TC-11	Audio Coupling.
26	.01	400		484-01	GT4S1	ST-4-01	TC-11	"
27	.01	400		484-01	GT4S1	ST-4-01	TC-11	"
28	500	500		1468-0005	5W5T5	MO.5-35	1FM-35	Tone Compensation.
29	100	500		1468-0001	5W5T1	MO.5-31	1FM-31	"
30	500	500		1468-0005	5W5T5	MO.5-35	1FM-35	"
31	500	500		1468-0005	5W5T5	MO.5-35	1FM-35	"

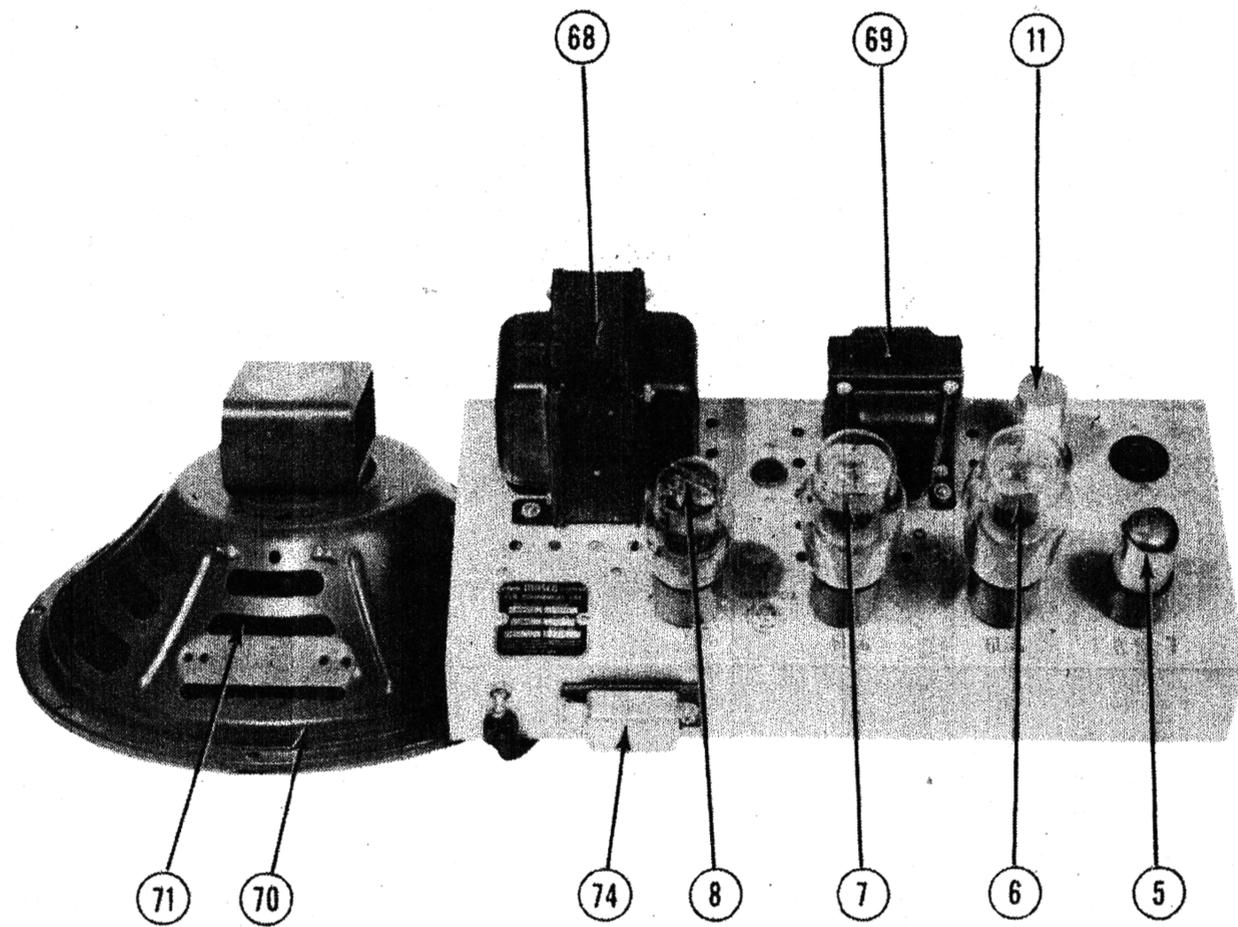
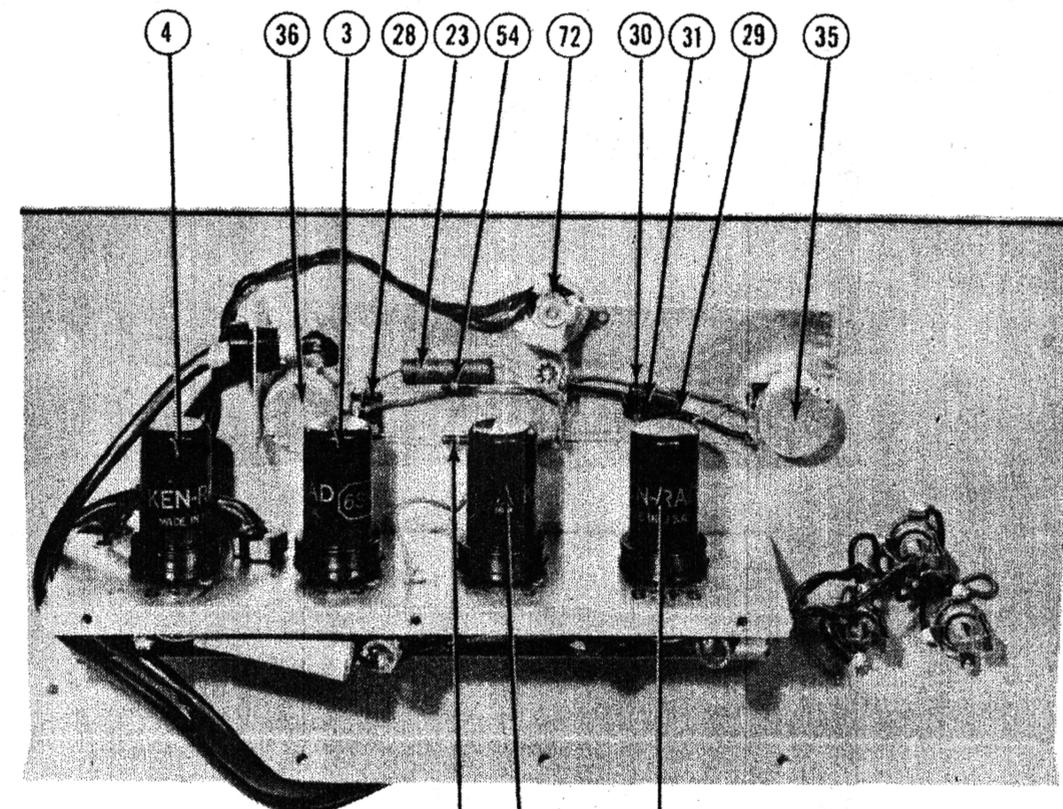
Note: Not used in all models.

## CONTROLS

ITEM No.	RATING		REPLACEMENT DATA			INSTALLATION NOTES
	RESISTANCE	WATTS	MASCO PART No.	IRC PART No.	CLAROSTAT PART No.	
32A	500KΩ	½		D13-133	M-60-Z	Volume 1 Control.
32B	Shaft			A	Not Req.	Attach to 32A per instructions.
33A	500KΩ	½		D13-133	M-60-Z	Volume 2 Control.
33B	Shaft			A	Not Req.	Attach to 33A per instructions.
34A	500KΩ	½		D13-133	M-60-Z	Volume 3 Control.
34B	Shaft			A	Not Req.	Attach to 34A per instructions.
35	5 Meg.	½			M-69-Z	Treble Control.
36	5 Meg.	½			M-69-Z	Bass Control.
37	50Ω	1		W-50	43-50	Hum Balance Control.

## RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES	
	RESISTANCE	WATTS	MASCO PART No.	IRC PART No.		
38	100KΩ	½		BTS-100K	Br.-Blk.-Yl.	1st Pre Amp. Grid.
39	100KΩ	½		BTS-100K	Br.-Blk.-Yl.	2nd " " "
40	100KΩ	½		BTS-100K	Br.-Blk.-Yl.	3rd " " "
41	4700Ω	½		BTS-4700	Yl.-Vi.-Red.	1st " " Cathode.
42	4700Ω	½		BTS-4700	Yl.-Vi.-Red.	2nd " " "
43	4700Ω	½		BTS-4700	Yl.-Vi.-Red.	3rd " " "
44	2700Ω	½		BTS-2700	Red-Vi.-Red.	1st " " Plate Load.
45	2700Ω	½		BTS-2700	Red-Vi.-Red.	2nd " " "



# PARTS LIST AND DESCRIPTIONS (Continued)

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	MASCO PART No.	IRC PART No.	
46	2700Ω	1/2		BTS-2700	Red-Vl.-Red. 3rd Pre Amp Plate Load
47	270KΩ	1/2		BTS-270K	Red-Vl.-Yl. Isolation.
48	270KΩ	1/2		BTS-270K	Red-Vl.-Yl. "
49	270KΩ	1/2		BTS-270K	Red-Vl.-Yl. "
50	1000Ω	1/2		BTS-1000	Br.-Blk.-Red. 1st AF Cathode.
51	100KΩ	1/2		BTS-100K	Br.-Blk.-Yl. " " Plate Load.
52	470KΩ	1/2		BTS-470K	Yl.-Vl.-Yl. " " Screen. See Note.
53	47KΩ	1/2		BTS-47K	Yl.-Vl.-Or. Decoupling.
54	100KΩ	1/2		BTS-100K	Br.-Blk.-Yl. Tone Compensation.
55	1 Meg.	1/2		BTS-1 Meg.	Br.-Blk.-Grn. " "
56	100KΩ	1/2		BTS-100K	Br.-Blk.-Yl. 2nd AF Plate Load.
57	1500Ω	1/2		BTS-1500	Br.-Grn.-Red. " " Cathode.
58	100KΩ	1/2		BTS-100K	Br.-Blk.-Yl. Phase Inverter Plate Load.
59	1500Ω	1/2		BTS-1500	Br.-Grn.-Red. " " Cathode.
60	15KΩ	1/2		BTS-15K	Br.-Grn.-Or. " " Grid.
61	270KΩ	1/2		BTS-270K	Red-Vl.-Yl. Output Grid.
62	270KΩ	1/2		BTS-270K	Red-Vl.-Yl. " "
63	125Ω	10		AB-125	" Cathode.
64	2500Ω	10		AB-2500	Filter.
65	10KΩ	1/2		BTS-10K	Br.-Blk.-Or. " See Note. 1
66	27KΩ	1/2		BTS-27K	Red-Vl.-Or. " "
67	10KΩ	1/2		BTS-10K	Br.-Blk.-Or. Feedback.

Note: Some models use 270KΩ resistor in this application.  
 Note 1: Some models use 27KΩ resistor in this application.

## TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	MASCO PART No.	STANCOR PART No.	THORDARSON PART No.	MERIT PART No.
68	125 VAC Tap @ 117 VAC. @ .80A	500 VAC CT 134 ADC	5 VAC @ 2A	5.9 VAC @ 3.4A	P-17B			

## TRANSFORMER (OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		MASCO PART No.	STANCOR PART No.	THORDAR'N PART No.	MERIT PART No.	
	PRI.	SEC.	PRI.	SEC.					
69	5000Ω CT	8Ω	110Ω CT	.6Ω	T-17A	A-3800 *	T22S70	A-3131 *	*Drill new mounting holes.

## SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			INSTALLATION NOTES
	FIELD	V.C. IMP.	MASCO PART No.	JENSEN PART No.	QUAM PART No.	
70	FM	8Ω	P12R	ST-103 Mod. P12-R	12A6	
71	CONE DIA. 11 3/8"	V.C. DIA. 1"				

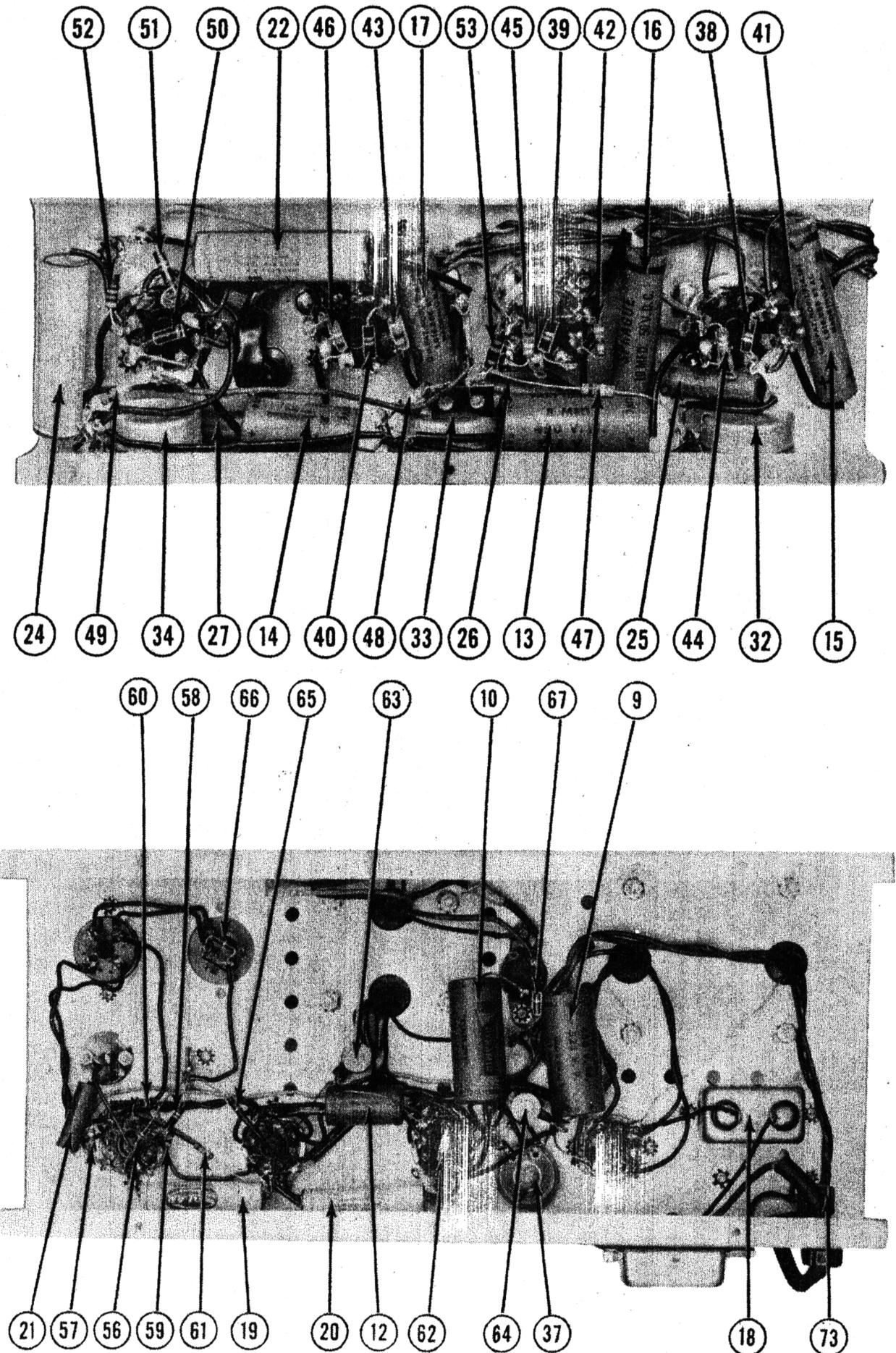
## DIAL LIGHT

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

## MISCELLANEOUS

ITEM No.	PART NAME	MASCO PART No.	NOTES
73	Switch		Power
74	Fuse		1.5 Amp.

# CHASSIS—BOTTOM VIEW



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DATE 4/49 497-12 SET #59 FOLDER 12

