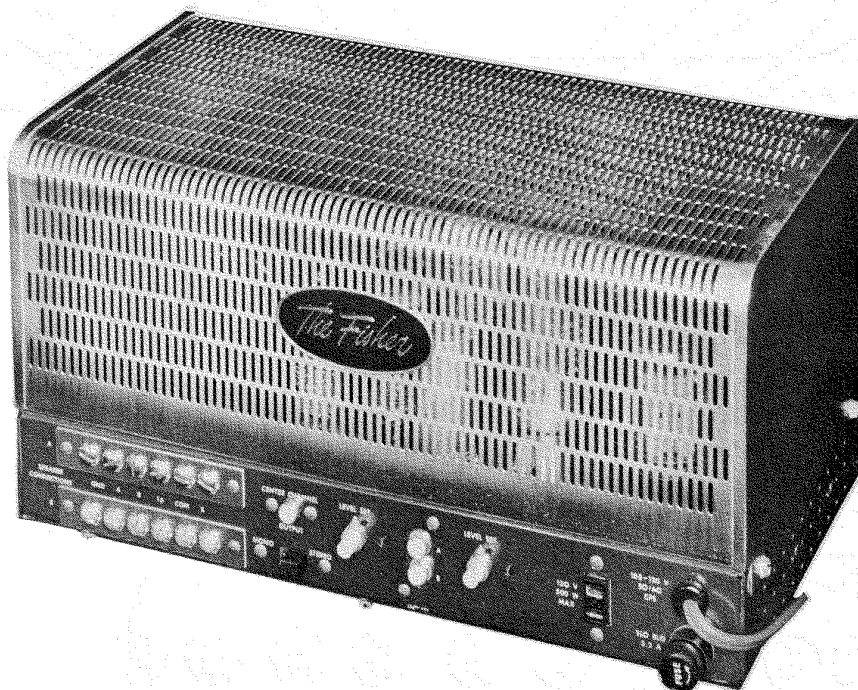
FISHER
MODEL SA-100FISHER
MODEL SA-100

TRADE NAME	Fisher Model SA-100 (Serial #10001-19999)
MANUFACTURER	Fisher Radio Corp., 21-21 44th Drive, Long Island City 1, N. Y.
TYPE SET	AC Operated 7 Tube Stereo Amplifier
POWER SUPPLY	105-120 Volts AC, 50-60 Cycles RATING 155 Watts, 1.5 Amp @ 117 Volts AC (Measured with - 11V output tube grid bias)

ADJUSTMENTS

BIAS ADJUSTMENT

Connect speakers (or equivalent load resistors) to speaker terminals strip for each channel.
Remove the link from test point terminals on the front panel. Connect the DC probe of VTVM to channel "A" test terminal. Turn the channel "A" Bias Adjustment located on top of chassis for a meter reading of .6 volts. Repeat the procedure for channel "B". Reconnect links to test terminal strip.

DC BALANCE ADJUSTMENT

Connect the AC probe of a sensitive VTVM across the 16 ohm terminals of the Channel "A" speaker terminal strip. Adjust the Channel "A" DC Balance control for MINIMUM deflection of the VTVM. This reading should be .4 volts or less. Repeat this procedure for Channel "B".

AC BALANCE ADJUSTMENT

This adjustment should be performed using an Intermodulation or Harmonic Distortion Analyzer. In this case, use normal adjustment procedure. If these instruments are not available, a close approximation may be made by setting the controls at center of rotation.

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



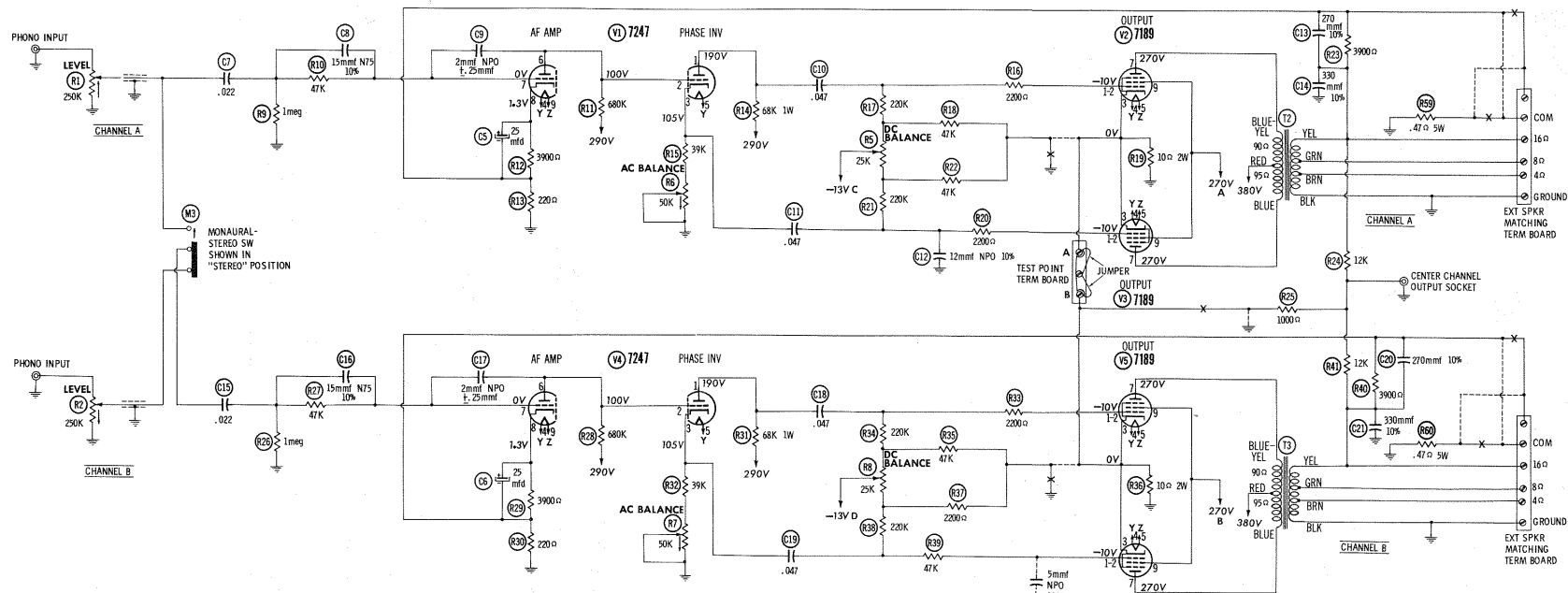
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of JV977

the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1960 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America

DATE 6 - 60

SET 490

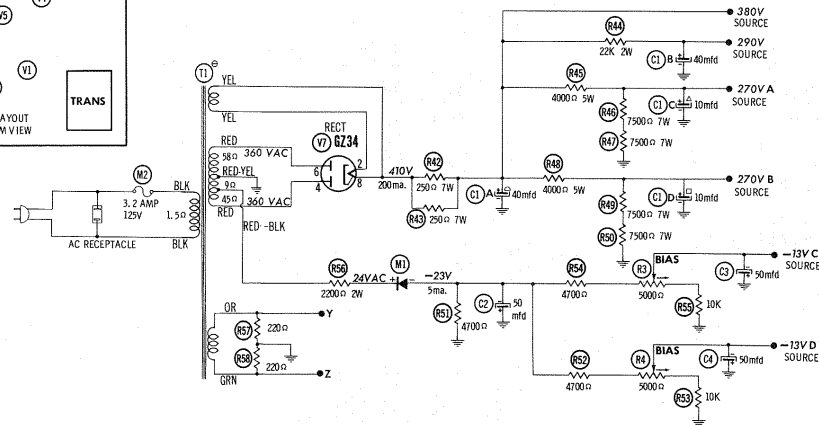
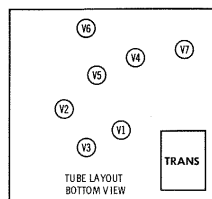
FOLDER 6



RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	7247	† 88K	† 700K	60K	110Ω	110Ω	† 700K	1meg	4100Ω	110Ω
V2	7189	250K	250K	10Ω	110Ω	110Ω	NC	† 215Ω	NC	† 3600Ω
V3	7189	250K	250K	10Ω	110Ω	110Ω	NC	† 220Ω	NC	† 3600Ω
V4	7247	† 88K	† 700K	60K	110Ω	110Ω	† 700K	1meg	4100Ω	110Ω
V5	7189	250K	250K	10Ω	110Ω	110Ω	NC	† 215Ω	NC	† 3600Ω
V6	7189	250K	250K	10Ω	110Ω	110Ω	NC	† 220Ω	NC	† 3600Ω
V7	6Z34 5AR4	NC	†	NC	54Ω	NC	58Ω	NC	†	

† THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
 † MEASURED FROM PIN 8 OF V7. NC NO CONNECTION



● SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION
 DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM
 ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

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

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R9	1meg		R27	47K	
R10	47K		R28	680K	
R11	680K		R29	3900Ω	
R12	3900Ω		R30	220Ω	
R13	220Ω		R31	68K 1W	
R14	68K 1W		R32	39K	
R15	39K		R33	2200Ω	
R16	2200Ω		R34	220K	
R17	220K		R35	47K	
R18	47K		R36	10Ω	
R19	10Ω		R37	2200Ω	
R20	2200Ω		R38	220K	
R21	220K		R39	47K	
R22	47K		R40	3900Ω	
R23	3900Ω		R41	12K	
R24	12K		R42	250Ω 7W	
R25	1000Ω		R43	250Ω 7W	
R26	100Ω		R44	22K 2W	

TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA			
			FISHER PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.
T1	117V @ 1.5A	720VCT @ 5V @ 200A tap @ 65V @ .005A	T782-115B ①			
	SEC. 3	SEC. 4	SEC. 5			
	6.3V @ 4.1A					

① Alternate Part #T782-115

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			
			FISHER PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.
T2	6500Ω CT @ 80, 40	160 tap	T782-116-1	22568		22568
T3	6500Ω CT @ 80, 40	160 tap	T782-116-2	22568		22568

RECTIFIERS

ITEM No.	CURRENT (Measured)	REPLACEMENT DATA		
		FISHER PART No.	INTERNATIONAL PART No.	ITT PART No.
M1	.005A	SR782-117 ①	2E4 ①	HA154 ①

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA		
			FISHER PART No.	LITTELFUSE PART No.	BUSS PART No.
M2	3AG	3.2A 125V S/B	F3319	31303.2 (3.2A 125V S/B)	MDX3 2/10 HKP

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
Power Cord Use BELDEN No. 1765-B (6 Ft. Length)
1725-K (7½ Ft. Length)

PARTS LIST AND DESCRIPTIONS TUBES

ITEM No.	CBS		GENERAL ELECTRIC		RAYTHEON		SYLVANIA	
	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	Channel A. AF Amp - Phase Inverter	7247	V4	Channel B. AF Amp	7247			
V2	Channel A. Output	7189	V5	Channel B. Output	7189			
V3	Channel A. Output	7189	V6	Channel B. Output	7189			
			V7	Rectifier	GZ34/5AR4			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOLT.	REPLACEMENT DATA					NOTES
			FISHER PART No.	AEROVOX PART No.	CORNELL-DUBILER PART No.	MALLORY PART No.	PYRAMID PART No.	
C1A	40	450	C50180-10	AFH4-18-10	DO171	FP446	TMQ-18	TVL-4840
C1B	40	450						
C1C	40	450						
C1D	40	450						
C2	50	50	C782-119	PR31350	BR505	TC39	TD-50-50	TE-1307
C3	50	50	C782-119	PR31350	BR505	TC39	TD-50-50	TE-1307
C4	50	50	C782-119	PR31350	BR505	TC39	TD-50-50	TE-1307
C5	25	6	C639-114	XP-P-6025	ML30-6	ML30-6	ML30-6	TE-1091
C6	25	6	C639-114	XP-P-6025	ML30-6	ML30-6	ML30-6	TE-1091

FIXED CAPACITORS

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

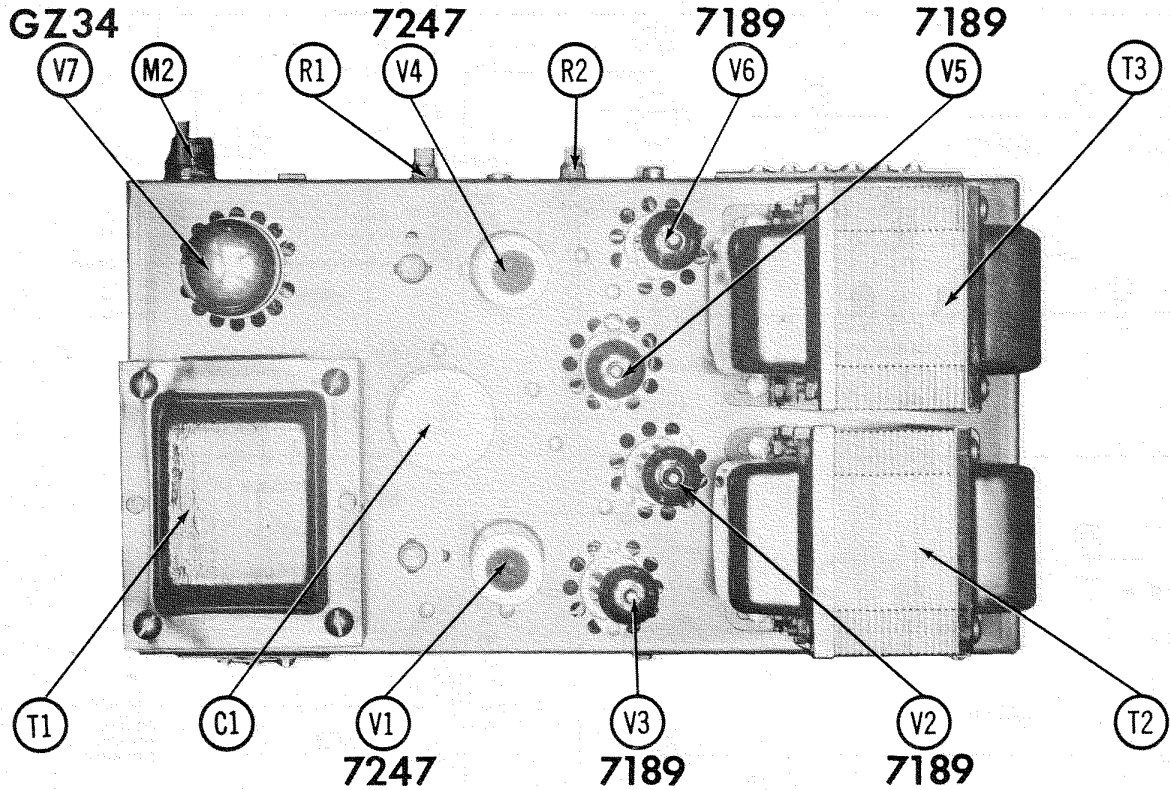
ITEM No.	RATING	REMARKS	REPLACEMENT DATA					SPRAGUE PART No.
			AEROVOX PART No.	CORNELL-DUBILER PART No.	ELMOCO PART No.	MALLORY PART No.		
C7	.022	250V	P488N-022	DD-203	CUB4522	4DP-2-223	GEM-4122	4TM-522
C8	15	N75 10%	NPO-D12.2	DD-503	CUB4547	4DP-3-473	GEM-4147	4TM-547
C9	2	NPO ±.25mmf	P488N-047	DD-503	CUB4547	4DP-3-473	GEM-4147	4TM-547
C10	.047	400V	P488N-047	DD-503	CUB4547	4DP-3-473	GEM-4147	4TM-547
C11	.047	400V	P488N-047	DD-503	CUB4547	4DP-3-473	GEM-4147	4TM-547
C12	12	NPO .05%	DI-270	DD-271	L10727	CCD-271	GP327	10TS-T27
C13	330	10%	DI-270	DD-271	L10727	CCD-271	GP327	10TS-T27
C14	330	10%	DI-270	DD-271	L10727	CCD-271	GP327	10TS-T27
C15	330	10%	DI-270	DD-271	L10727	CCD-271	GP327	10TS-T27
C16	15	N75 10%	P488N-022	DD-203	CUB4547	4DD-2-223	GEM-4122	4TM-522
C17	2	NPO ±.25mmf	NPO-D12.2	DD-503	CUB4547	4DP-3-473	GEM-4147	4TM-547
C18	.047	400V	P488N-047	DD-503	CUB4547	4DP-3-473	GEM-4147	4TM-547
C19	.047	400V	DI-270	DD-271	L10727	CCD-271	GP327	10TS-T27
C20	270	10%	DI-270	DD-271	L10727	CCD-271	GP327	10TS-T27
C21	330	10%	DI-330	DD-331	L10733	CCD-331	GP333	10TS-T33

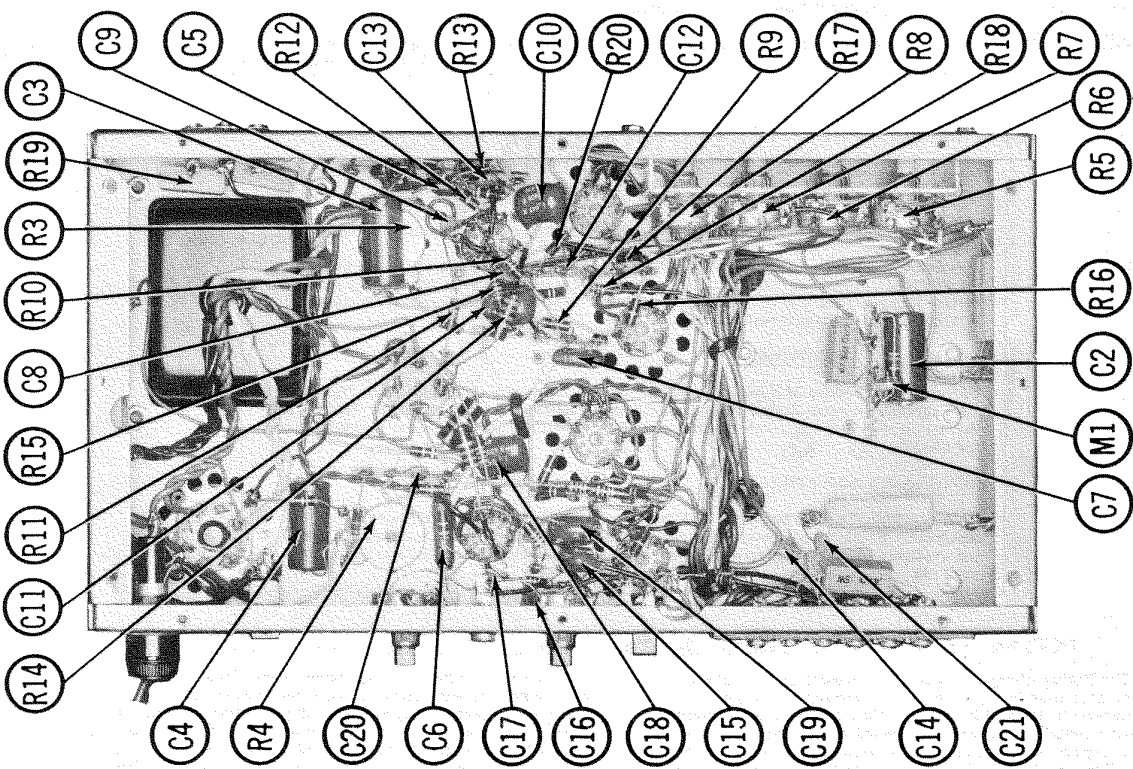
#Fisher Part Number

CONTROLS

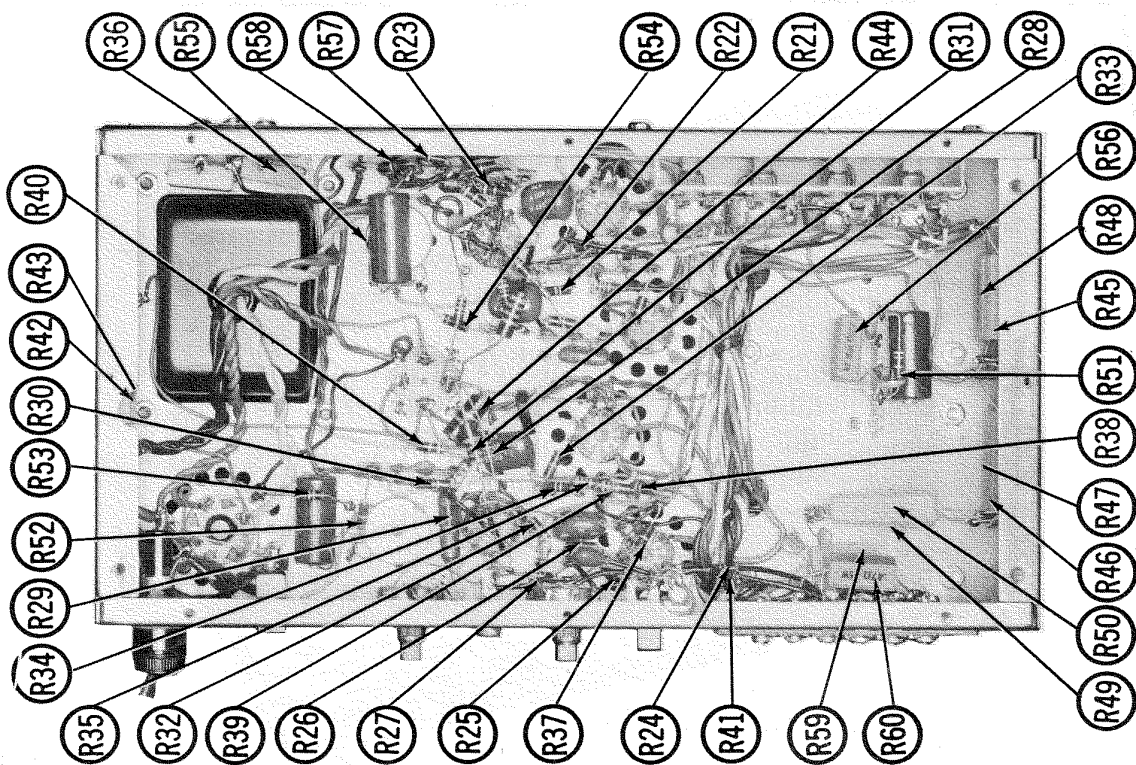
ITEM No.	RATING	RESISTANCE	REPLACEMENT DATA					INSTALLATION NOTES
			FISHER PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1A	250K	1/2	R50103-1	AB-50	A47-250K-S	Q11-130	SU-46	Level, Channel A
R1B	250K	1/2	R50103-1	AB-50	AK-1	Q11-130	SU-46	Level, Channel B
R2A	250K	1/2	R50103-1	AB-50	AK-1	Q11-130	SU-46	Level, Channel B
R2B	250K	1/2	R50103-1	AB-50	AK-1	Q11-130	SU-46	Level, Channel B
R3A	5000Q	1/2	R50103-4	AX-10	AK-1	Q11-114	U14	Bias, Channel A
R3B	5000Q	1/2	R50103-4	AX-10	AK-1	Q11-114	U14	Bias, Channel A
R4A	5000Q	1/2	R50103-4	AX-10	AK-1	Q11-114	U14	Bias, Channel B
R4B	5000Q	1/2	R50103-4	AX-10	AK-1	Q11-114	U14	Bias, Channel B
R5A	25K	1/2	R50103-2	AB-26	AK-1	Q11-120	SU-29	DC Balance, Channel A
R5B	25K	1/2	R50103-2	AB-26	AK-1	Q11-120	SU-29	DC Balance, Channel A
R6A	50K	1/2	R50103-3	AX-31	AK-1	Q11-123	SU-35	AC Balance, Channel A
R6B	50K	1/2	R50103-3	AX-31	AK-1	Q11-123	SU-35	AC Balance, Channel A
R7A	50K	1/2	R50103-3	AX-31	AK-1	Q11-123	SU-35	AC Balance, Channel B
R7B	50K	1/2	R50103-3	AX-31	AK-1	Q11-123	SU-35	AC Balance, Channel B
R8A	25K	1/2	R50103-2	AB-26	AK-1	Q11-120	SU-29	DC Balance, Channel B
R8B	25K	1/2	R50103-2	AB-26	AK-1	Q11-120	SU-29	DC Balance, Channel B

CHASSIS—TOP VIEW





CHASSIS BOTTOM VIEW



CHASSIS BOTTOM VIEW