

MIXER ASSEMBLY
Catalog No. 4010087

Ref.	-01	-02	DESCRIPTION	LOCATION	Ampex Part No.
	X		Domestic Version		4010087-01
		X	International Version		4010087-02
	2	2	Mixer and Line Amplifier, printed circuit board		4050422-01
C1	6	6	Capacitor, tantalum; 0.68 mfd, ±5%, 25 vdcw		037-495
C2	X	X	Same as C1		
C3	X	X	Same as C1		
C4	X	X	Same as C1		
C5	X	X	Same as C1		
C6	2	2	Capacitor, tantalum; 3.9 mfd, ±20%, 25 vdcw		037-445
C7	X	X	Same as C6		
C8	X	X	Same as C1		
C9	1	1	Capacitor, tantalum; 15 mfd, ±20%, 15 vdcw		037-446
C10	1	1	Capacitor, tantalum; 68 mfd, ±20%, 20 vdcw		037-451
Q1	6	6	Transistor, silicon, npn; low noise		014-698
Q2	X	X	Same as Q1		
Q3	X	X	Same as Q1		
Q4	X	X	Same as Q1		
Q5	X	X	Same as Q1		
Q6	1	1	Transistor, silicon, pnp		014-652
Q7	X	X	Same as Q1		
Q8	1	1	Transistor, silicon, npn; 2N3706		014-585
Q9	1	1	Transistor, silicon, pnp; 300mw		014-611
R1	5	5	Resistor, fixed, comp; 470,000 ohms, ±10%, 1/2w; RC20GF474K		041-080
R2	10	10	Resistor, fixed, comp; 6,800 ohms, ±10%, 1/2w; RC20GF682K		041-058
R3	2	2	Resistor, fixed, comp; 33,000 ohms, ±10%, 1/2w; RC20GF333K		041-066
R4	2	2	Resistor, fixed, comp; 1,500 ohms, ±10%, 1/2w; RC20GF152K		041-050
R5	4	4	Resistor, fixed, comp; 1 meg ohm, ±10%, 1/2w; RC20GF105K		041-031
R6	X	X	Same as R2		
R7	X	X	Same as R1		
R8	X	X	Same as R2		
R9	X	X	Same as R5		
R10	X	X	Same as R2		
R11	X	X	Same as R1		
R12	X	X	Same as R2		
R13	X	X	Same as R5		
R14	X	X	Same as R2		
R15	X	X	Same as R1		
R16	X	X	Same as R2		
R17	X	X	Same as R5		
R18	X	X	Same as R2		
R19	X	X	Same as R1		
R20	X	X	Same as R4		
R21	X	X	Same as R2		
R22	1	1	Resistor, fixed, comp; 56,000 ohms, ±10%, 1/2w; RC20GF563K		041-069
R23	1	1	Resistor, fixed, comp; 220,000 ohms, ±10%, 1/2w; RC20GF224K		041-076
R24	X	X	Same as R3		
R25	X	X	Same as R2		
R26	1	1	Resistor, fixed, comp; 15,000 ohms, ±10%, 1/2w; RC20GF153K		014-062
R27	1	1	Resistor, fixed, comp; 4,700 ohms, ±10%, 1/2w; RC20GF472K		041-056
R28	2	2	Resistor, fixed, comp; 680 ohms, ±10%, 1/2w; RC20GF681K		041-046
R29	1	1	Resistor, fixed, comp; 2,200 ohms, ±10%, 1/2w; RC20GF222K		041-052
R30	X	X	Same as R28		
R31	1	1	Resistor, fixed, comp; 430 ohms, ±5%, 1/2w; RC20GF431J		041-379
R32	2	2	Resistor, fixed, comp; 10 ohms, ±10%, 1/2w; RC20GF100K		041-032
R33	X	X	Same as R32		
	1	1	Handle, snap-on, circuit board		52528-01
	6	6	Mounting Pad, transistor		280-130
	1	1	Mounting Pad, transistor		280-131
	4	4	Microphone Preamplifier, printed circuit board		4050423-01
C1	1	1	Capacitor, electrolytic; 100 mfd, -10+75%, 25 vdcw		031-880
C2	1	1	Capacitor, tantalum; 3.9 mfd, ±20%, 25 vdcw		037-445
C3	4	4	Capacitor, tantalum; 0.68 mfd, ±5%, 25 vdcw		037-495
C4	X	X	Same as C3		
C5	X	X	Same as C3		
C6	X	X	Same as C3		
Q1	3	3	Transistor, silicon, npn; low noise		014-698
Q2	X	X	Same as Q1		

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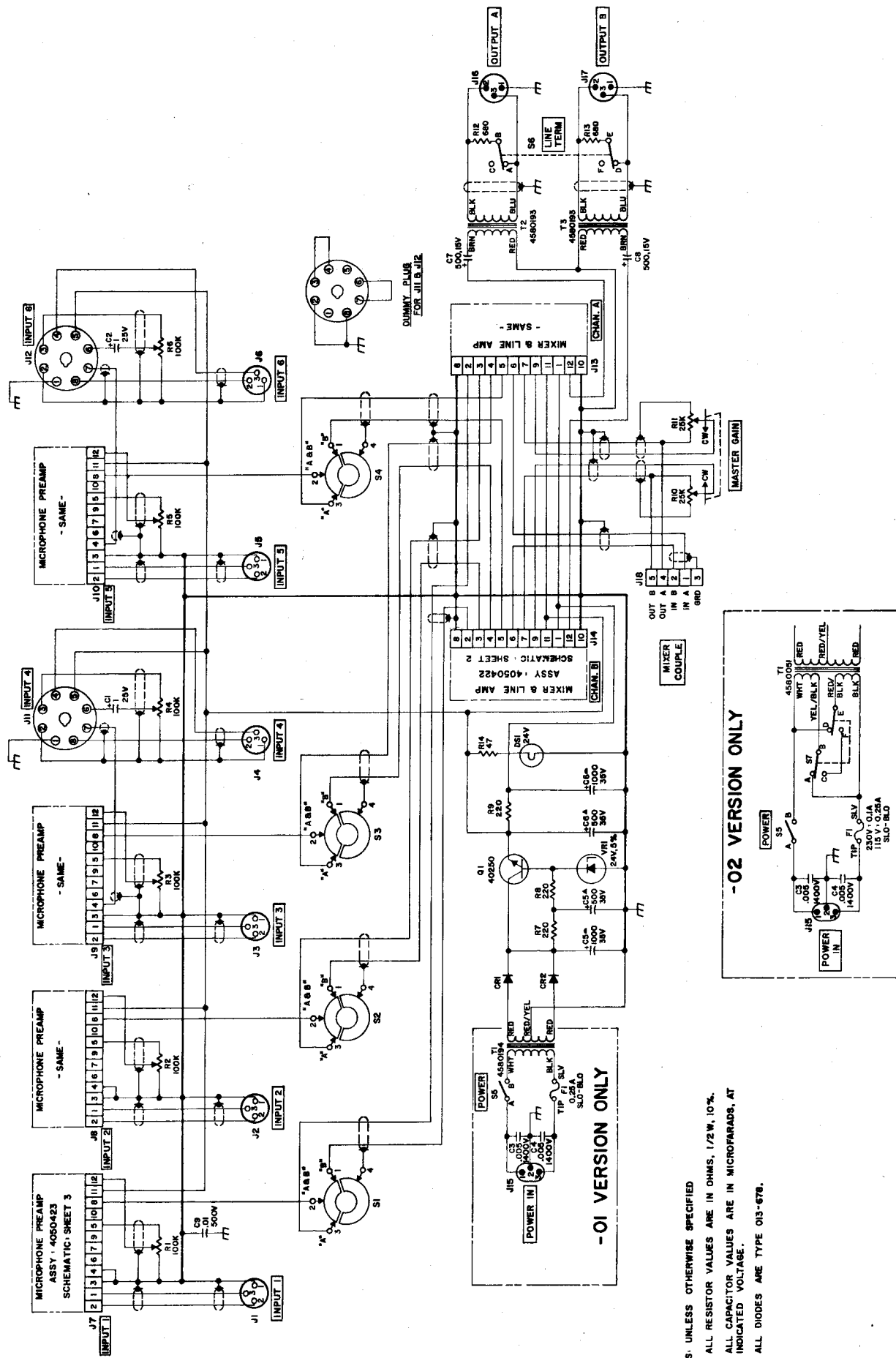
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MIXER ASSEMBLY (Cont.)
Catalog No. 4010087

Ref.	-01	-02	DESCRIPTION	LOCATION	Ampex Part No.
Q3	X	X	Same as Q1		
Q4	1	1	Transistor, silicon, npn, low noise, low level		014-862
Q5	1	1	Transistor, silicon, pnp		014-652
R1	1	1	Resistor, fixed, comp; 3,900 ohms, ±10%, 1/2w; RC20GF392K		041-055
R2	1	1	Resistor, fixed, comp; 120,000 ohms, ±10%, 1/2w; RC20GF124K		041-073
R3	4	4	Resistor, fixed, comp; 470,000 ohms, ±10%, 1/2w; RC20GF474K		041-080
R4	1	1	Resistor, fixed, comp 330,000 ohms, ±10%, 1/2w; RC20GF334K		041-078
R5	1	1	Resistor, fixed, comp; 1 meg ohm, ±10%, 1/2w; RC20GF105K		041-031
R6	1	1	Resistor, fixed, comp; 22,000 ohms, ±10%, 1/2w; RC20GF223K		041-064
R7	2	2	Resistor, fixed, comp; 4,700 ohms, ±10%, 1/2w		041-056
R8	X	X	Same as R3		
R9	X	X	Same as R3		
R10	1	1	Resistor, fixed, comp; 39,000 ohms, ±10%, 1/2w; RC20GF393K		041-067
R11	1	1	Resistor, fixed, comp; 3.9 meg ohms, ±10%, 1/2w; RC20GF395K		041-285
R12	X	X	Same as R3		
R13	X	X	Same as R7		
R14	1	1	Resistor, fixed, comp; 2,200 ohms, ±10%, 1/2w; RC20GF222K		041-052
R15	1	1	Resistor, fixed, comp; 56,000 ohms, ±10%, 1/2w; RC20GF563K		041-069
R16	1	1	Resistor, fixed, comp; 10,000 ohms, ±10%, 1/2w; RC20GF103K		041-060
R17	1	1	Resistor, fixed, comp; 100,000 ohms, ±10%, 1/2w; RC20GF104K		041-072
T1	1	1	Transformer, microphone		4580100-10
	1	1	Handle, snap-on, circuit board		52528-01
	4	4	Mounting Pad, transistor		280-130
ELECTRONIC COMPONENTS NOT ON BOARDS					
C1	2	2	Capacitor, electrolytic; 1 mfd, -10+75%, 25 vdcw	Octal Socket	031-294
C2	X	X	Same as C1	Octal Socket	
C3	2	2	Capacitor, ceramic; .005 mfd, -20+80%, 1400 vdcw	Rear Panel	030-465
C4	X	X	Same as C3	Rear Panel	
C5	2	2	Capacitor, electrolytic; 1000-500 mfd, 35 vdcw	P. S. Bracket	4550147-02
C6	X	X	Same as C5	P. S. Bracket	
C7	2	2	Capacitor, electrolytic; 500 mfd, -10+100%, 15 vdcw	Chassis	031-297
C8	X	X	Same as C7	Chassis	
C9	1	1	Capacitor, ceramic disk; .01 mfd, 500 vdcw	Back of J7	030-002
CR1	2	2	Diode, silicon, rectifier	P. S. Bracket	013-678
CR2	X	X	Same as CR1	P. S. Bracket	
F1	1	1	Fuse, sio-blo; 0.25 ampere (105-125 volt a-c power)	Rear Panel	070-005
F1	1	1	Fuse; 0.125 ampere (230 volt a-c power)	Rear Panel	070-028
J1	6	6	Connector, audio, 3 sockets, female; XL type	Rear Panel	146-998
J2	X	X	Same as J1	Rear Panel	
J3	X	X	Same as J1	Rear Panel	
J4	X	X	Same as J1	Rear Panel	
J5	X	X	Same as J1	Rear Panel	
J6	X	X	Same as J1	Rear Panel	
J7	6	6	Connector, printed wiring board; 12 double contacts	Rear Panel	143-308
J8	X	X	Same as J7	Rear Panel	
J9	X	X	Same as J7	Rear Panel	
J10	X	X	Same as J7	Rear Panel	
J11	2	2	Socket, octal	Rear Panel	150-023
J12	X	X	Same as J11	Rear Panel	
J13	X	X	Same as J7	Rear Panel	
J14	X	X	Same as J7	Rear Panel	
J15	1	1	Connector, ac, 3 pin, male	Rear Panel	147-396
J16	2	2	Connector, audio, 3 pins, male; XL type	Rear Panel	147-999
J17	X	X	Same as J16	Rear Panel	
J18	1	1	Barrier Strip, 5 terminals	Rear Panel	180-627
Q1	1	1	Transistor, silicon, npn; 40250	P. S. Bracket	014-587
R1	6	6	Potentiometer, carbon; 100,000 ohms, ±10%, 2w; audio taper (Input Levels)	Front Panel	044-015
R2	X	X	Same as R1	Front Panel	
R3	X	X	Same as R1	Front Panel	
R4	X	X	Same as R1	Front Panel	
R5	X	X	Same as R1	Front Panel	
R6	X	X	Same as R1	Front Panel	
R7	3	3	Resistor, fixed, comp; 220 ohms, ±10%, 1/2w; RC20GF221K	P. S. Bracket	041-040
R8	X	X	Same as R7	P. S. Bracket	
R9	X	X	Same as R7	P. S. Bracket	

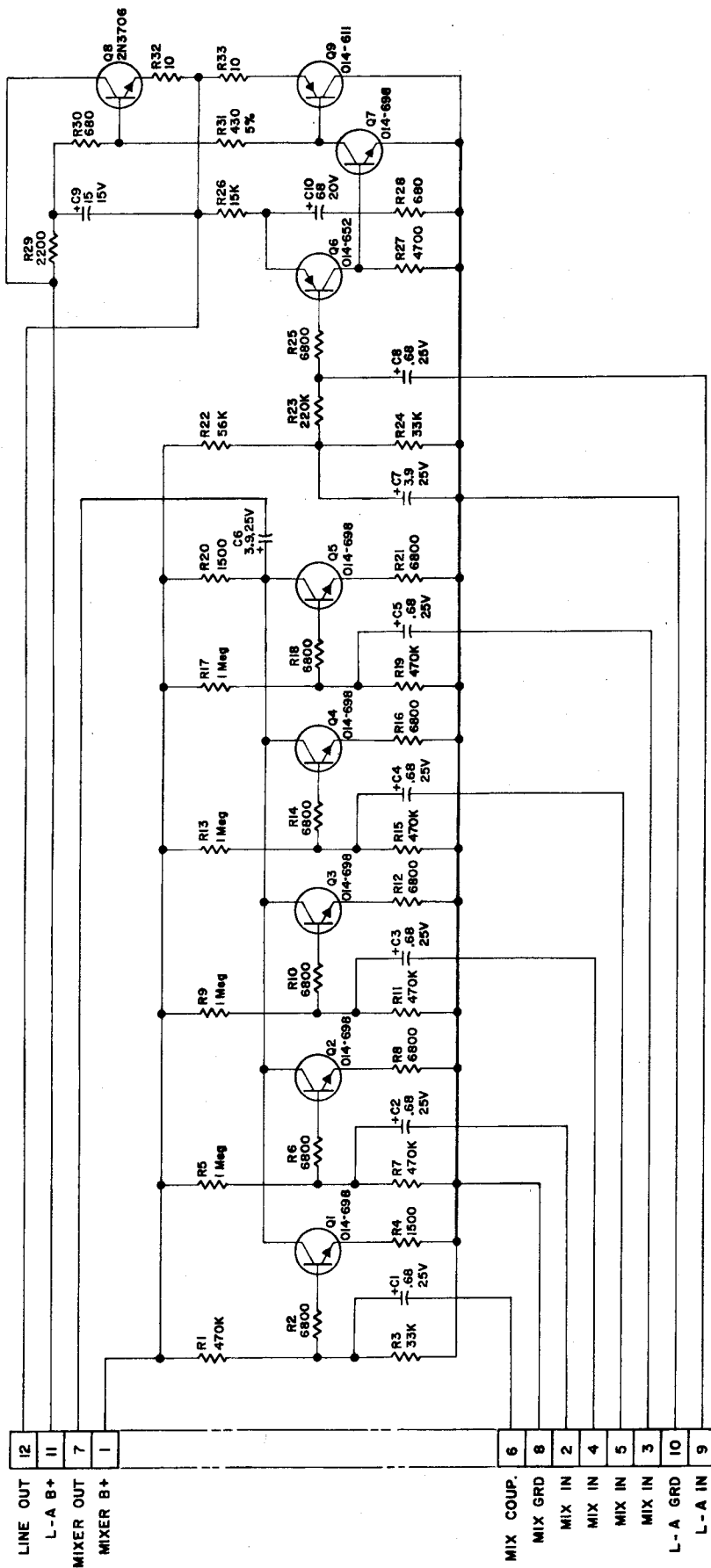
MIXER ASSEMBLY (Cont.)
Catalog No. 4010087

Ref.	-01	-02	DESCRIPTION	LOCATION	Ampex Part No.
R10	1	1	Potentiometer, dual ganged; 25,000 ohms/section, audio taper (Master Gain)	Front Panel	4520100-10
R11	1	1			
R12	2	2	Resistor, fixed, comp; 680 ohms, ±10%, 1/2w; RC20GF681K	Rear Panel	041-046
R13	X	X	Same as R12	Rear Panel	
R14	1	1	Resistor, fixed, comp; 47 ohms, ±10%, 1/2w; RC20GF470K	On Light	041-034
S1	4	4	Switch, lever (Input Switching)	Front Panel	4620070-01
S2	X	X	Same as S1	Front Panel	
S3	X	X	Same as S1	Front Panel	
S4	X	X	Same as S1	Front Panel	
S5	1	1	Switch, rocker (power off-On)	Front Panel	4620071-01
S6	1	1	Switch, slide, dpdt (line termination)	Rear Panel	120-139
S7	1	1	Switch, slide, dpdt (115-230 volts)	Rear Panel	120-510
T1	1	1	Transformer, power	P. S. Bracket	4580194-01
T2	1	1	Transformer, power	P. S. Bracket	4580051-01
T2	2	2	Transformer, output	Chassis	4580193-01
T3	X	X	Same as T2	Chassis	
VR1	1	1	Diode, Zener, 24v, ±5%	P. S. Bracket	013-712
			MISCELLANEOUS COMPONENTS		
	2	2	Dummy Plug Assembly		4030034-30
	7	7	Reset Indicators (beneath level knobs)		4040350-02
	4	4	Knob, Key Tab (for S1 through S4)		4100102-02
	1	1	Knob, grey, skirted (for R10/R11)		6000009-10
	6	6	Knob, black, skirted (for R1 through R6)		6000009-20
	1	1	Top Cover		4290665-01
	1	1	Cover, printed wiring boards		4290198-01
	1	1	Instruction Manual		4890178
	1	1	Cord Set, power, 8 feet		084-027
	1	1	Fuse Extractor Post		085-001
	2	2	Connector, plug, audio; 3 sockets, male (mate with J16, J17)		144-003
	12	12	Guide, printed wiring board		530-111
	1	1	Socket, light		132-098
	1	1	Light, indicator, clear		132-099
	1	1	Clip, light		435-069



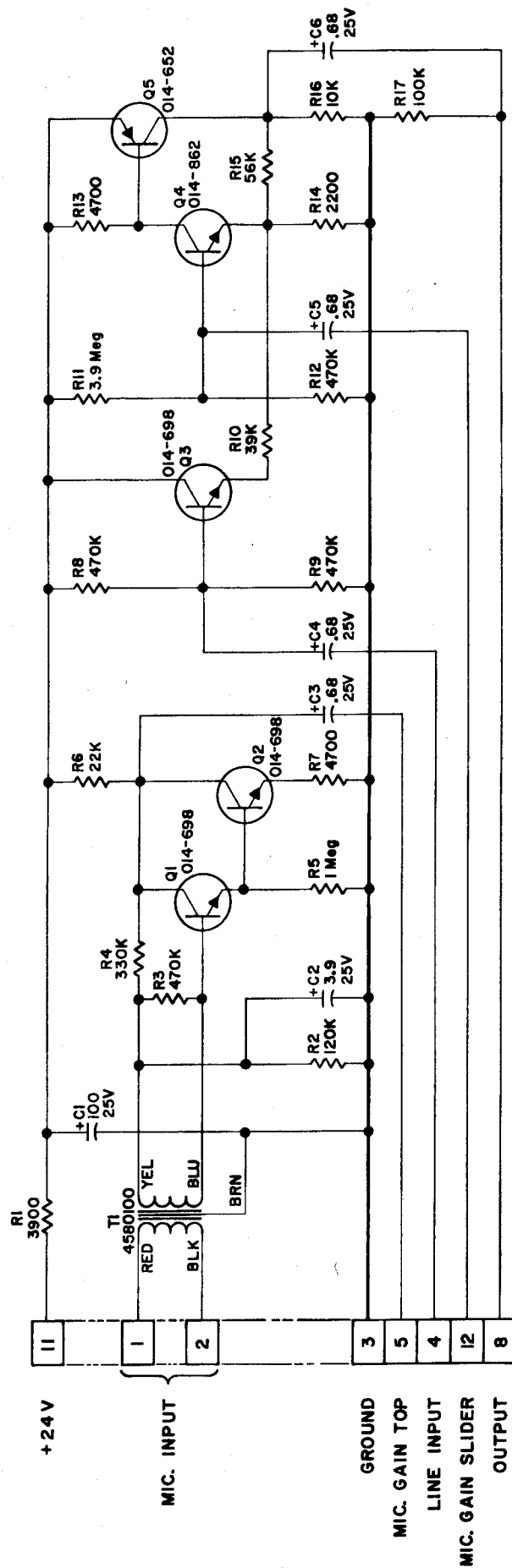
- NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL RESISTOR VALUES ARE IN OHMS, 1/2 W, 10%.
 2. ALL CAPACITOR VALUES ARE IN MICROFARADS, AT INDICATED VOLTAGE.
 3. ALL DIODES ARE TYPE 013-678.

Fig. 7. Schematic Diagram, Mixer, Sheet 1



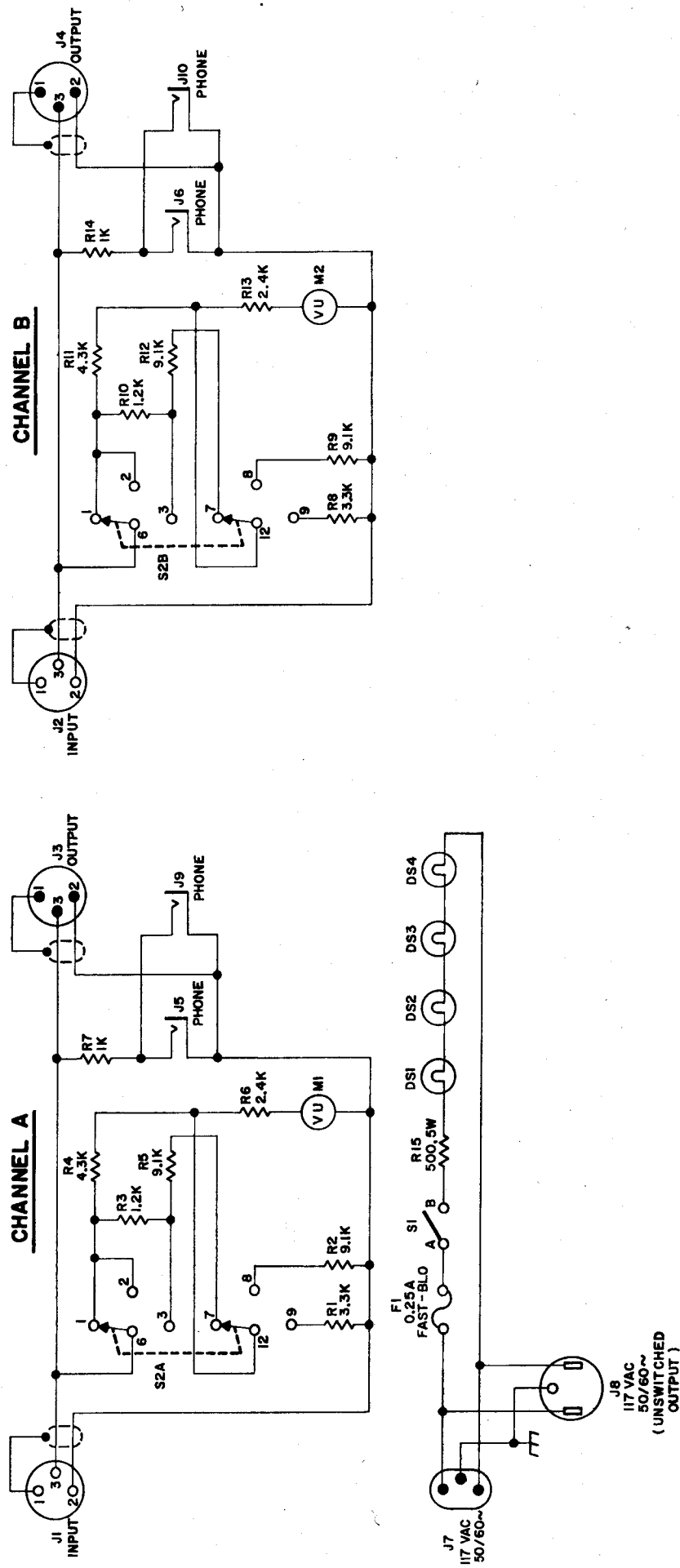
**MIXER & LINE AMP
 PRINTED WIRING BOARD**

Fig. 8. Schematic Diagram, Mixer, Sheet 2



MICROPHONE PREAMP PRINTED WIRING BOARD

Fig. 9. Schematic Diagram, Mixer, Sheet 3



NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL RESISTOR VALUES ARE IN OHMS, 1/2W, 5%.

Fig. 10. Schematic Diagram, Meter Panel