

## SECTION 7

## PARTS LISTS AND DRAWINGS

7.1 INTRODUCTION

7.2 All component parts lists are referenced to the applicable drawing(s).

7.3 When ordering replacement parts from the Ampex Professional Audio Distributor, always include the Ampex part number and the model and serial numbers. Distributors can often provide a convenient replacement parts service.

# AMPEX

MODEL AG-600B RECORDER/REPRODUCER  
Single-Channel, 3-3/4 - 7-1/2 IPS  
4010135 (Ref. E)

-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	DESCRIPTION	Ampex Part No.
X												NAB, Full-Track, Unmounted, 60 Hz	4010135-01
	X											NAB, Full-Track, Portable, 60 Hz	4010135-02
		X										NAB, Half-Track, Unmounted, 60 Hz	4010135-03
			X									NAB, Half-Track, Portable, 60 Hz	4010135-04
				X								NAB, Full-Track, Unmounted, 50 Hz	4010135-05
					X							NAB, Full-Track, Portable, 50 Hz	4010135-06
						X						NAB, Half-Track, Unmounted, 50 Hz	4010135-07
							X					NAB, Half-Track, Portable, 50 Hz	4010135-08
								X				CCIR, Full-Track, Unmounted, 50 Hz	4010135-09
									X			CCIR, Full-Track, Portable, 50 Hz	4010135-10
										X		CCIR, Half-Track, Unmounted, 50 Hz	4010135-11
											X	CCIR, Half-Track, Portable, 50 Hz	4010135-12
												Tape Transport, 60 Hz	4020302-01
												Tape Transport, 50 Hz	4020302-02
1	1	1	1		1	1	1	1	1	1	1	Head Assembly, Full-track	4020191-03
1	1				1	1			1	1		Head Assembly, Half-track	4020191-04
1	1	1	1									Electronics Assembly, NAB, Master	4020257-31
					1	1	1	1				Electronics Assembly, NAB, Int'l	4020257-33
									1	1	1	Electronics Assembly, CCIR, Int'l	4020257-35
1	1	1	1	1	1	1	1	1	1	1	1	Head Cover Assembly	4041023-01
2	2	2	2	2	2	2	2	2	2	2	2	Knob, Holddown, Black	4130028-20
												Case, Portable	4150233-01
1	1	1	1	1	1	1	1	1	1	1	1	Shield, Head-cover	4290430-10
1	1	1	1	1	1	1	1	1	1	1	1	Reel, Standard, 7-inch, Blank	4690069-10
1	1	1	1	1	1	1	1	1	1	1	1	Instruction Manual	4890302
1	1	1	1	1	1	1	1	1	1	1	1	Microphone Preamplifier	4010066-02
1	1	1	1	1	1	1	1	1	1	1	1	Cord Set, Power, 8-foot	084-027
1	1	1	1	1	1	1	1	1	1	1	1	Plug Kit	4050256-10
												Plug Kit	4050256-40
2	2	2	2	2	2	2	2	2	2	2	2	Connector, Audio, 3-socket, Female	145-009
												Fuse, 0.5-ampere, Slo-blo	070-026
1	1	1	1	1	1	1	1	1	1	1	1	Connector, Telephone-plug	149-004

# AMPEX

MODEL AG-600B RECORDER/REPRODUCER  
Dual-Channel, 3-3/4 - 7-1/2 IPS  
4010136 (Ref. F)

-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	DESCRIPTION	Ampex Part No.
X												NAB, Two-Track, Unmounted, 60 Hz	4010136-01
	X											NAB, Two-Track, Portable, 60 Hz	4010136-02
		X										NAB, Quarter-Track, Unmounted, 60 Hz	4010136-03
			X									NAB, Quarter-Track, Portable, 60 Hz	4010136-04
				X								NAB, Two-Track, Unmounted, 50 Hz	4010136-05
					X							NAB, Two-Track, Portable, 50 Hz	4010136-06
						X						NAB, Quarter-Track, Unmounted, 50 Hz	4010136-07
							X					NAB, Quarter-Track, Portable, 50 Hz	4010136-08
								X				CCIR, Two-Track, Unmounted, 50 Hz	4010136-09
									X			CCIR, Two-Track, Portable, 50 Hz	4010136-10
										X		CCIR, Quarter-Track, Unmounted, 50 Hz	4010136-11
											X	CCIR, Quarter-Track, Portable, 50 Hz	4010136-12
1	1	1	1		1	1	1	1	1	1	1	Tape Transport, 60 Hz	4020302-01
					1	1	1	1	1	1	1	Tape Transport, 50 Hz	4020302-02
1	1			1	1			1	1			Head Assembly, Two-track	4020192-02
		1	1			1	1					Head Assembly, Quarter-track	4020194-02
1	1	1	1									Electronics Assembly, NAB, Master	4020257-31
1	1	1	1	1	1	1	1	1	1	1	1	Electronics Assembly, NAB, Slave	4020257-32
				1	1	1	1					Electronics Assembly, NAB, Int'l	4020257-33
								1	1	1	1	Electronics Assembly, CCIR, Slave	4020257-34
								1	1	1	1	Electronics Assembly, CCIR, Int'l	4020257-35
1	1	1	1	1	1	1	1	1	1	1	1	Head Cover Assembly	4041023-01
1	1	1	1	1	1	1	1	1	1	1	1	Cable Assembly, Electronics Interconnect	4050098-04
2	2	2	2	2	2	2	2	2	2	2	2	Knob, Holddown, Black	4130028-20
		1	1		1	1	1		1		1	Case, Portable	4150232-01
1	1	1	1	1	1	1	1	1	1	1	1	Shield, Head-cover	4290430-10
1	1	1	1	1	1	1	1	1	1	1	1	Reel, Standard, 7-inch, Blank	4690069-10
1	1	1	1	1	1	1	1	1	1	1	1	Instruction Manual	4890302
1	1	1	1	1	1	1	1	1	1	1	1	Cord Set, Power, 8-foot	084-027
2	2	2	2	2	2	2	2	2	2	2	2	Microphone Preamplifier	4010066-02
1	1	1	1									Plug Kit	4050256-20
				1	1	1	1	1	1	1	1	Plug Kit	4050256-50
4	4	4	4	4	4	4	4	4	4	4	4	Connector, Audio, 3-socket, Female	145-009
2	2	2	2	2	2	2	2	2	2	2	2	Connector, Telephone-plug	149-004
				1	1	1	1	1	1	1	1	Fuse, 0.5-ampere, Slo-blo	070-026

# AMPEX

## ELECTRONICS ASSEMBLY

4020257 (Ref. P)

-31	-32	-33	-34	-35	DESCRIPTION	Ampex Part No.
X					Electronics Assembly, NAB Master (For Schematic, see Fig. 7-18)	4020257-31
	X				Electronics Assembly, NAB Slave (For Schematic, see Fig. 7-20)	4020257-32
		X			Electronics Assembly, NAB International (For Schematic, see Fig. 7-19)	4020257-33
			X		Electronics Assembly, CCIR Slave (For Schematic, see Fig. 7-20)	4020257-34
				X	Electronics Assembly, CCIR International (For Schematic, see Fig. 7-19)	4020257-35
2	2	2	2	2	Dummy Plug Assy	4030034-30
1					Panel Assy, Rear, Domestic. Details on Figure 7-16	4050251-13
	1				Panel Assy, Rear, Domestic. Details on Figure 7-16	4050251-11
			1		Panel Assy, Rear, Domestic. Details on Figure 7-16	4050251-12
				1	Panel Assy, Rear, Domestic. Details on Figure 7-16	4050251-14
1		1		1	Panel Assy, Front, Master. Details on Figure 7-15	4050400-09
	1		1		Panel Assy, Front, Slave. Details on Figure 7-15	4050400-10
1	1	1			Board Assy, Printed Wiring, Record, NAB	4050404-07
			1	1	Board Assy, Printed Wiring, Record, CCIR	4050404-08
		1			Panel Assy, Rear, International. Details on Figure 7-17	4050405-09
				1	Panel Assy, Rear, International. Details on Figure 7-17	4050405-10
1					Chassis, Electronics, Master	4290621-01
	1		1		Chassis, Electronics, Slave	4290621-02
		1		1	Chassis, Electronics, International	4290621-03
1	1	1	1	1	Cover, Chassis Top	4290624-01
1	1	1	1	1	Cover, Chassis Bottom	4290632-01
1	1	1	1	1	Cover Plate, Decorative	4290631-01
1	1	1	1	1	Transformer, Output (T2)	4580193-01
1	1	1	1	1	Phone Jack	4630041-10
1	1	1	1	1	Shield, Record Board	4600054-01
1	1	1	1	1	Shield, Input Ampl	4600057-01
1	1	1	1	1	Shield, Record Head	4600058-01
1	1	1	1	1	Board Assy, Printed Wiring, Reproduce	4050403-03
1	1	1	1	1	Capacitor, 36pF, 500V, ±5% (C35)	034-942
2		2		2	Capacitor, Ceramic, 0.005UF, 1400V (C31, C32)	030-465
1	1	1	1	1	Resistor, Composition, 680 ohm, ±10%, 1/2W (R53)	041-046
1		1		1	Fuse, 3/4A, Slo-blo (F1)	070-048
1		1		1	Fuse Post	085-001
2	2	2	2	2	Connector, Audio Receptacle, 3-socket (Input A & B)	146-998

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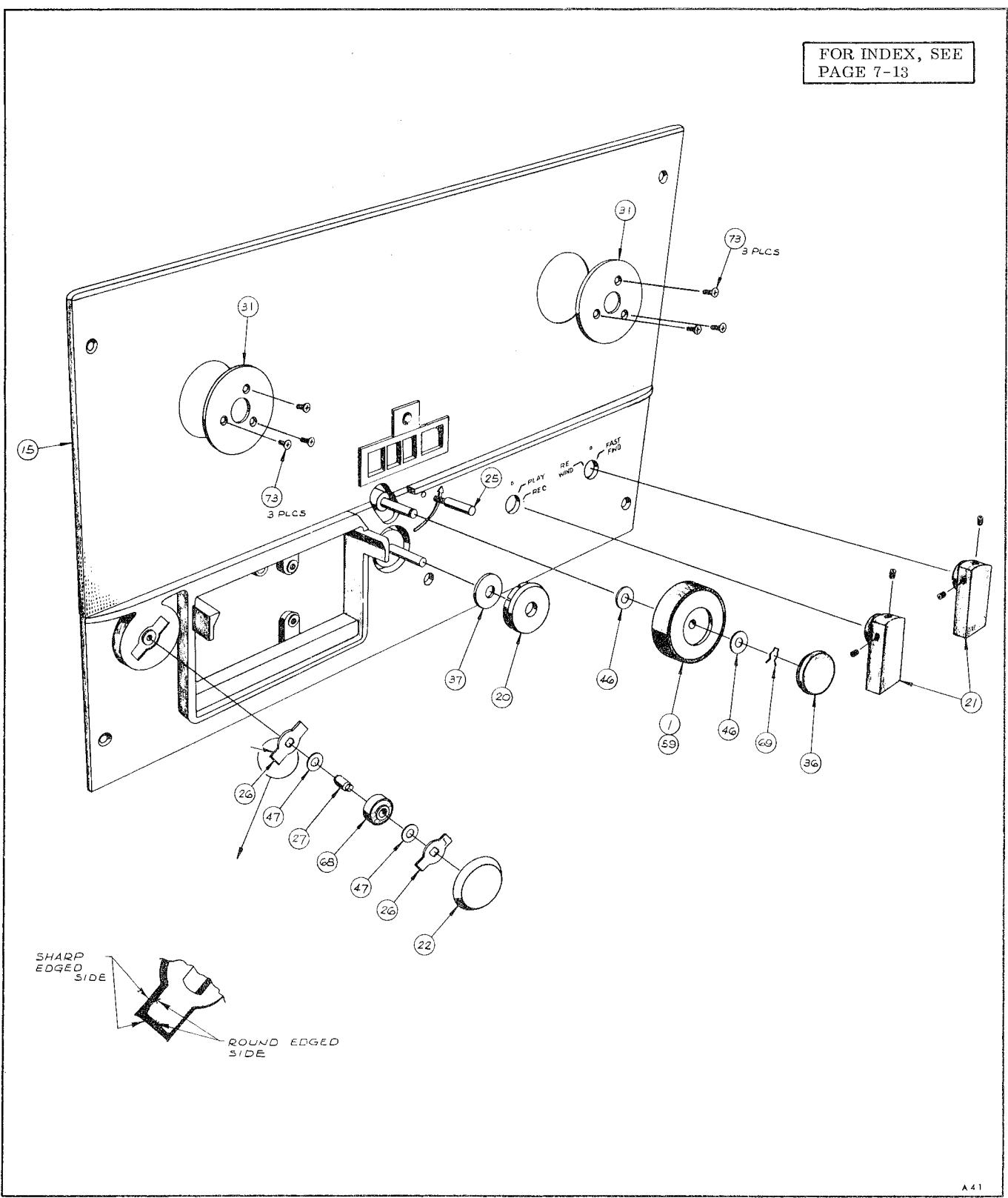
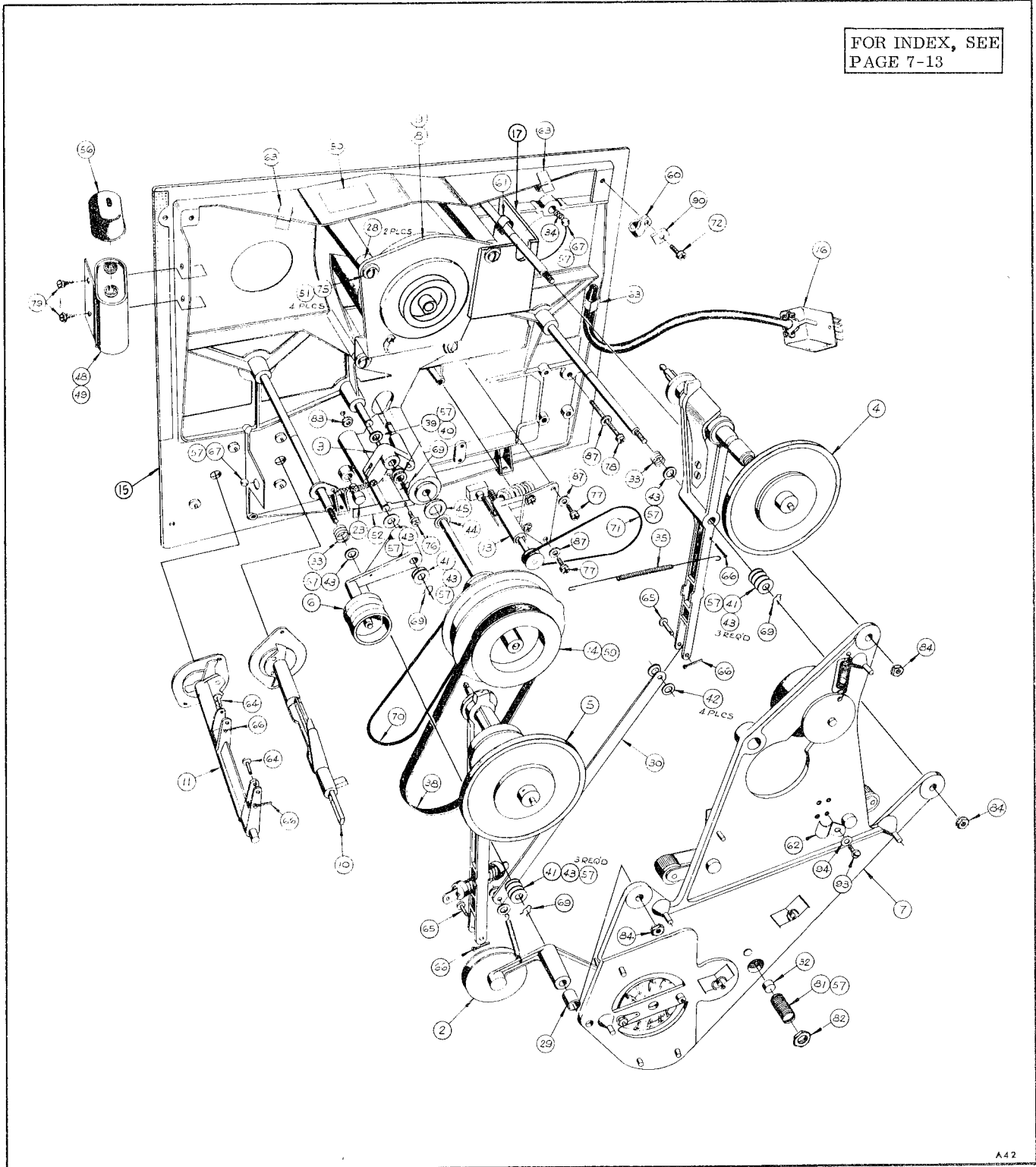


Figure 7-1. Tape Transport Assembly, Front

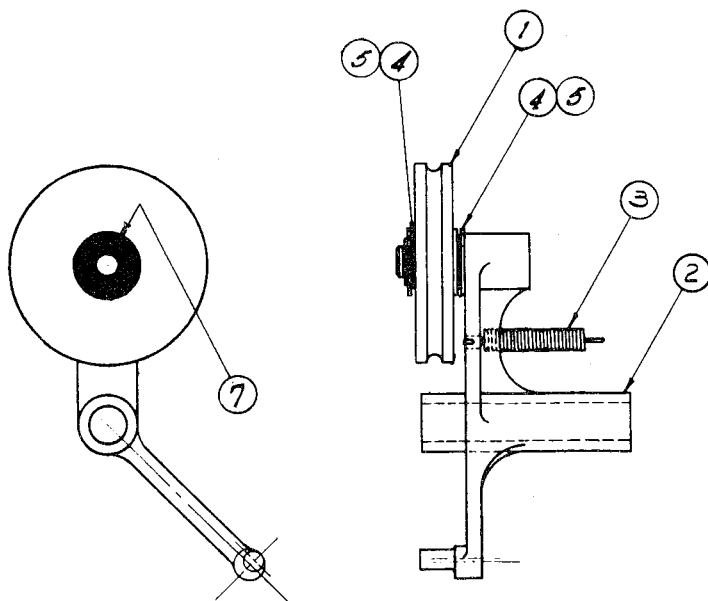
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Figure 7-2. Tape Transport Assembly, Back

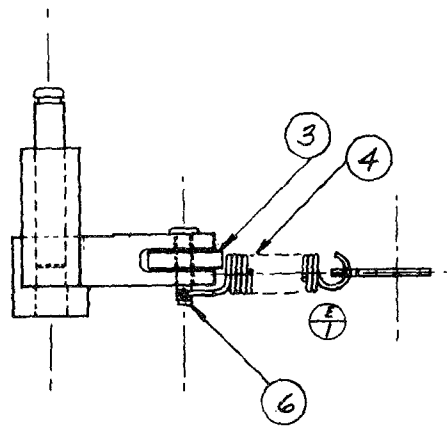
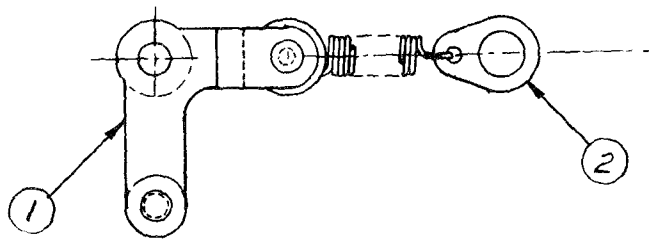
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Figure 7-3. Play Takeup Arm

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Figure 7-4. Capstan Idler Arm



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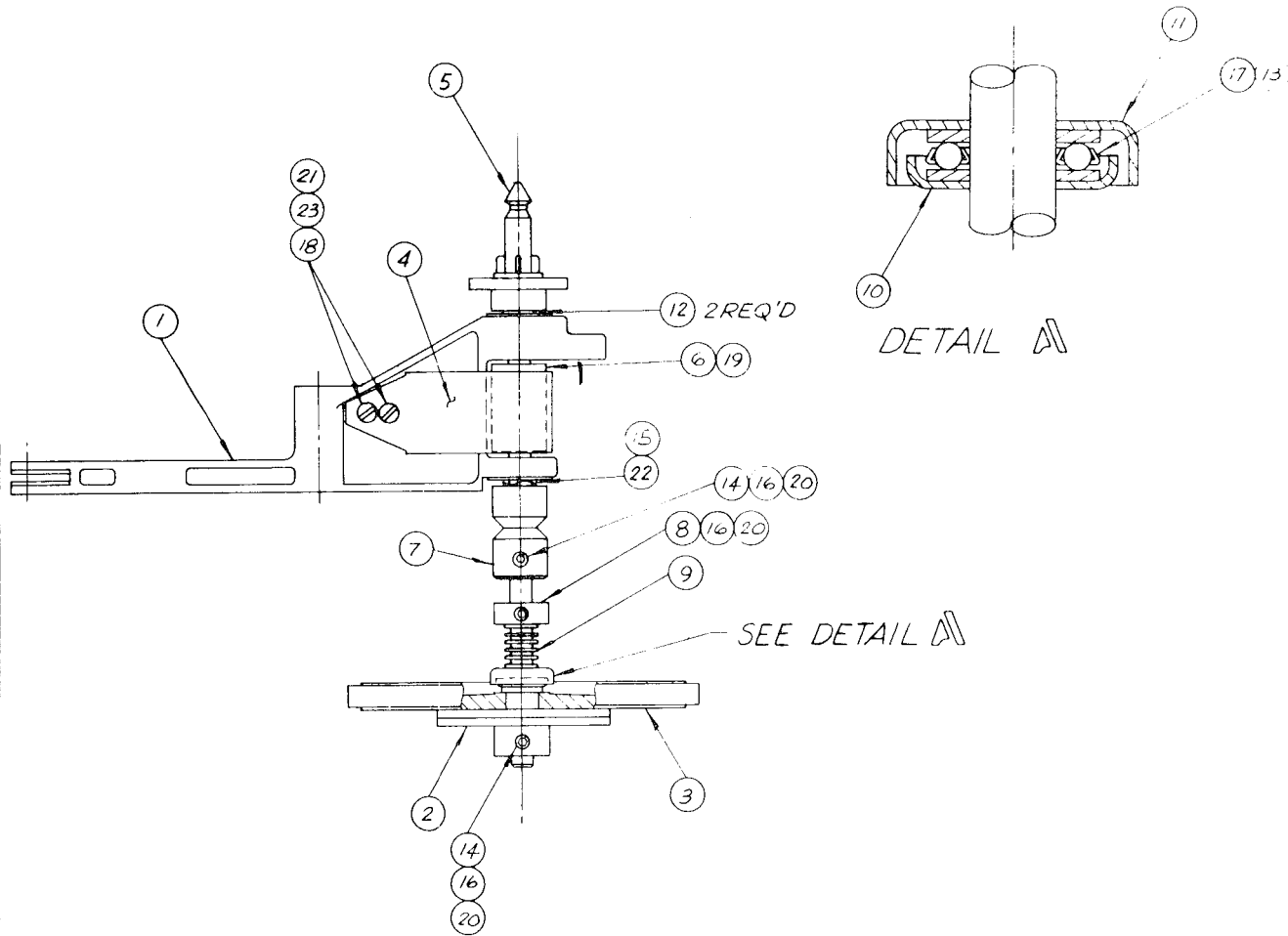


Figure 7-5. Rewind Arm

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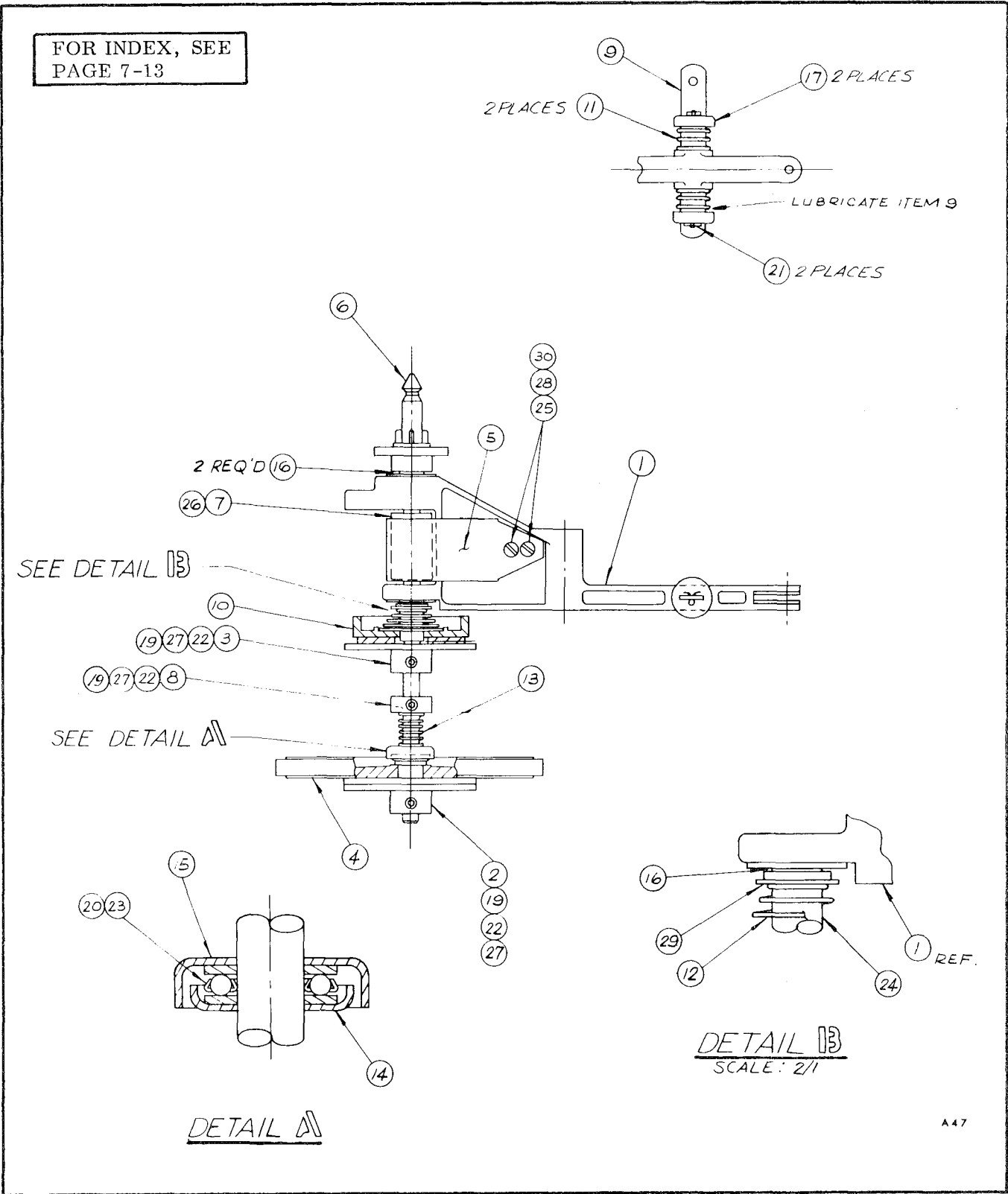
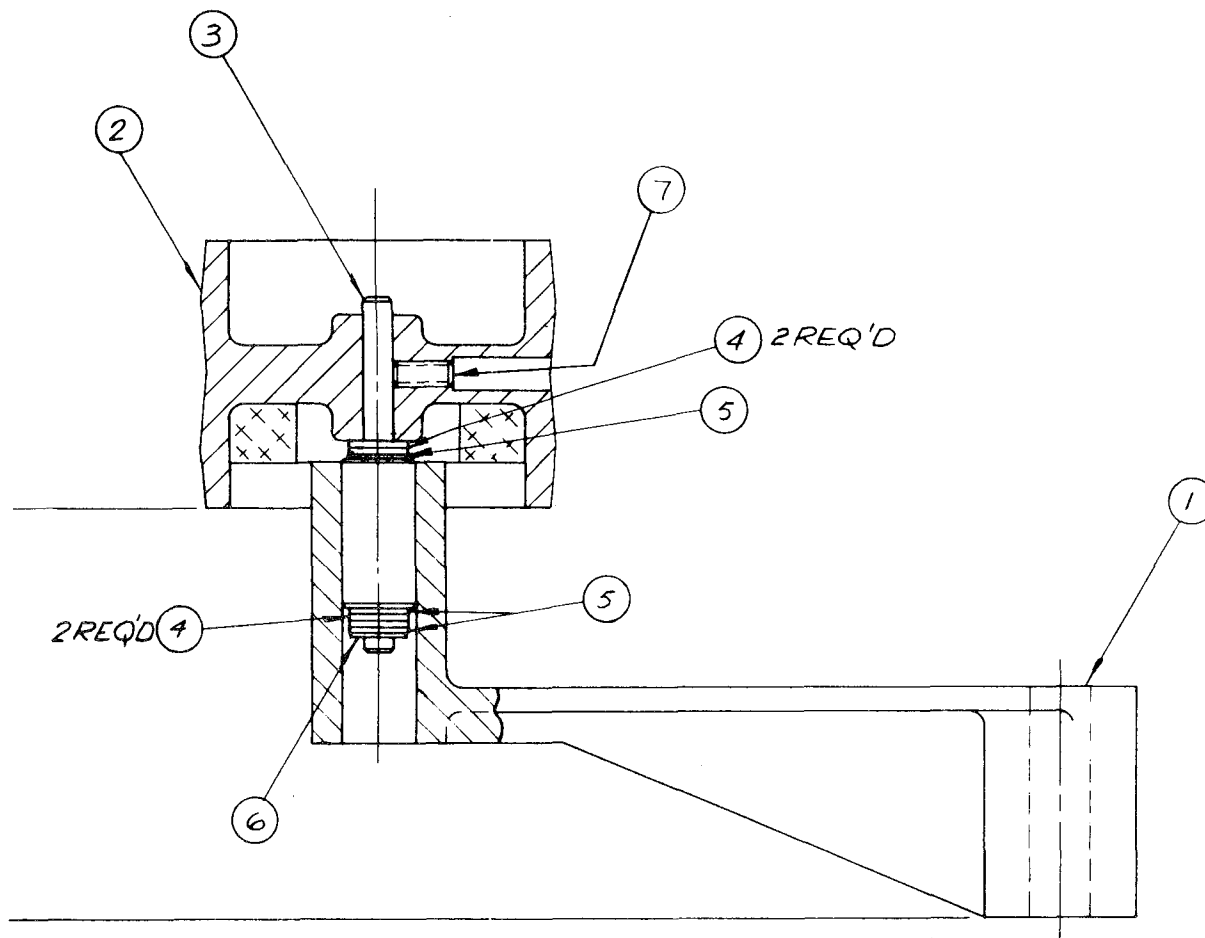


Figure 7-6. Takeup Arm

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Figure 7-7. Belt Idler Arm

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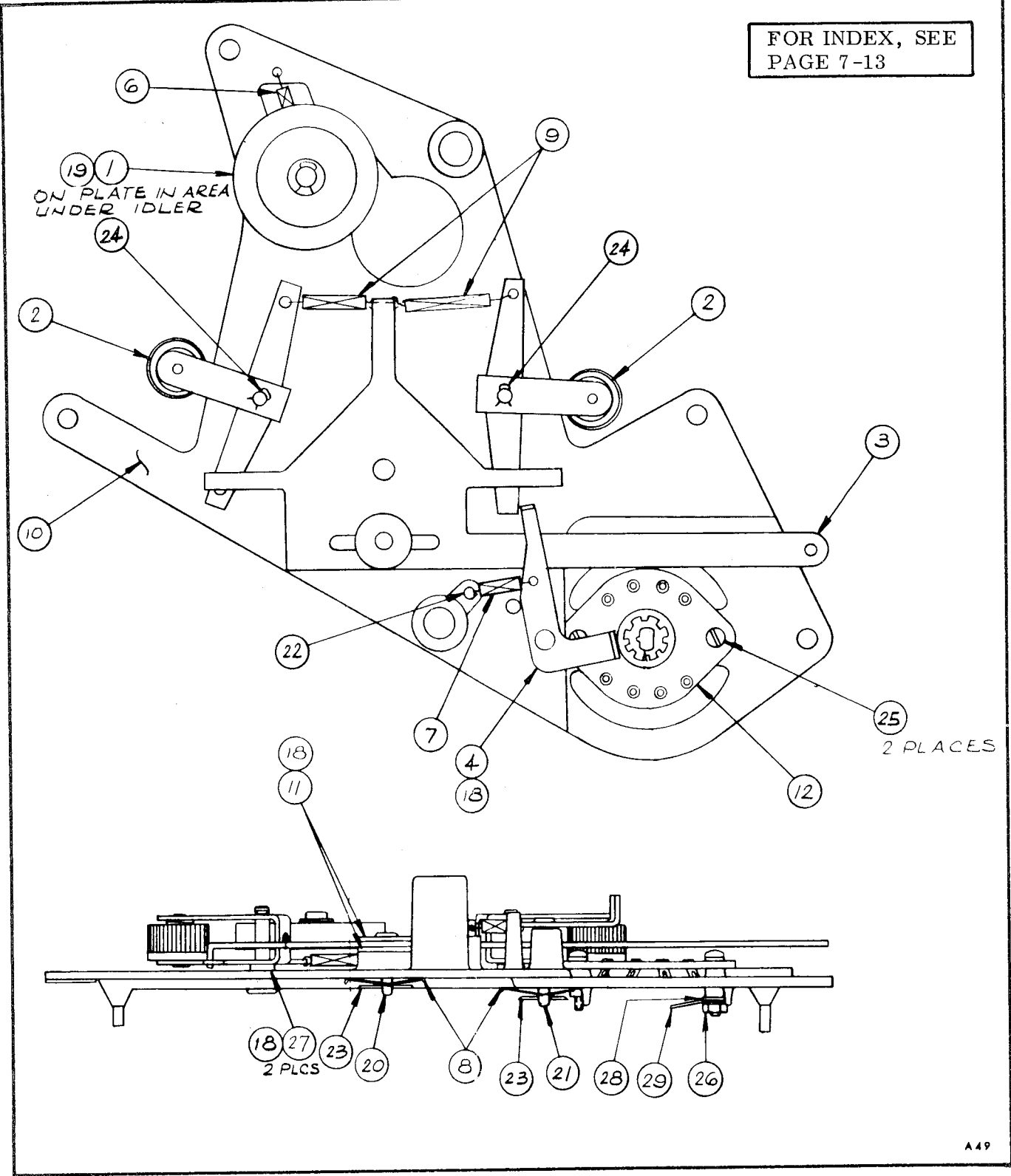


Figure 7-8. Plate

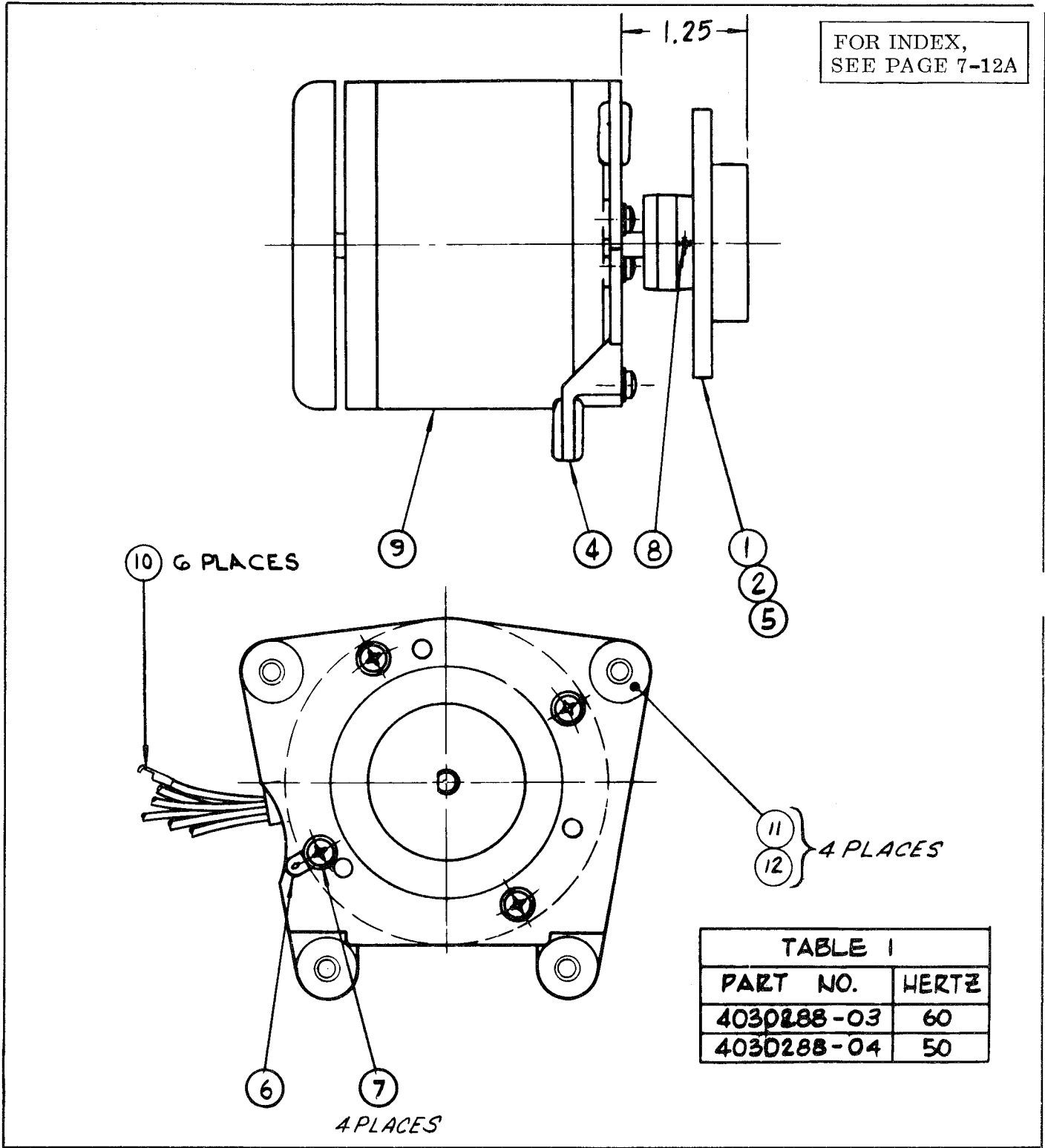


Figure 7-9. Drive Assembly

# AMPEX

DRIVE ASSEMBLY  
4030288  
Figure 7-9

Item	-03	-04	Description	Ampex Part No.
1	1		Pulley, Motor, 60 Hz	C-4250208-01
2		1	Pulley, Motor, 50 Hz	C-4250208-02
4	1	1	Plate, Motor Mounting	C-4980231-20
6	1	1	Lug, Solder, No. 8	172-001
7	4	4	Screw, No. 8-32 X 0.50 Lg, Pan Hd, Xrec, Sems	475-056
8	1	1	Screw, Set, No. 6-32 X 0.19 Lg	477-034
9	1	1	Motor	4590023-01
10	6	6	Connector, Knife Disconnect, Non-Insulated	171-008
11	4	4	Grommet 0.250 ID X 0.625 OD X 0.312 Thk	260-015
12	4	4	Spacer	4220089-01

# AMPEX

TAPE TRANSPORT ASSEMBLY (1 of 3)  
4020302 (Ref. G)

Figures 7-1 and 7-2

Item	Fig. No.			DESCRIPTION	Ampex Part No.
		-01	-02		
		X		Tape Transport, 60 Hz	4020302-01
			X	Tape Transport, 50 Hz	4020302-02
1	7-1	1	1	Pulley Assembly, Capstan-Idler (Ref. 4)	4030024-10
2	7-2	1	1	Arm Assembly, Play Takeup. Details on Fig. 7-3: (Ref. N)	4030025-10
		1	1	Pulley Assy, Takeup-Idler, Play (1)	4040174-10
		1	1	Arm (2)	4040598-10
		1	1	Spring, Takeup-Engage, Play (3)	4270070-10
		2	2	Washer, Lamicoid (4)	4440025-10
		2	2	Washer, Thrust (5)	4440027-10
		1	1	Retainer, Hairpin (7)	431-006
3	7-2	1	1	Arm Assembly, Capstan-Idler. Details on Fig. 7-4: (Ref. B)	4030027-10
		1	1	Arm Subassy (1)	4040158-10
		1	1	Anchor (2)	4230062-10
		1	1	Roller, Release, Capstan-Idler (3)	4250049-10
		1	1	Spring, Capstan-Idler (4)	4270074-10
4	7-2	1	1	Rewind Arm Assembly. Details on Fig. 7-5: (Ref. A)	4030083-01
		1	1	Arm and Bearing Assy (1)	4030194-10
		1	1	Disc Assy, Drive-Clutch (2)	4040165-20
		1	1	Plate Assy, Clutch (3)	4040166-10
		1	1	Brake Assy, Holdback (4)	4040167-10
		1	1	Shaft Assy, Turntable (5)	4041018-01
		1	1	Collar, Holdback, Brake (6)	4220054-30
		1	1	Collar (7)	4220055-20
		1	1	Collar, Clutch-Spring (8)	4220098-01
		1	1	Spring, Clutch (9)	4270111-01
		1	1	Shield, Clutch, Lower (10)	4290176-01
		1	1	Shield, Clutch, Upper (11)	4290177-01
		2	2	Washer, Thrust (12)	4440062-20
		3	3	Steel Ball, 0.094 Dia. (16)	420-028
		1	1	Ball Bearing, Thrust (17)	421-234
5	7-2	1	1	Takeup Arm Assembly. Details on Fig. 7-6: (Ref. B)	4030084-01
		1	1	Arm and Bearing Assy (1)	4030194-10
		1	1	Disc Assy, Drive-Clutch (2)	4040165-10
		1	1	Disc Assy, Drive-Clutch (3)	4040165-20
		1	1	Plate Assy, Clutch (4)	4040166-10
		1	1	Brake Assy, Holdback (5)	4040167-10
		1	1	Shaft Assy, Turntable (6)	4041018-01
		1	1	Collar, Holdback-Brake (7)	4220054-30
		1	1	Collar, Clutch-Spring (8)	4220098-01
		1	1	Link, Pivot-Control, Turntable (9)	4230068-10
		1	1	Disc, Takeup-Clutch, Play (10)	4250044-10
		2	2	Spring, Pivot, Turntable (11)	4270063-10
		1	1	Spring, Takeup-Clutch, Play (12)	4270069-10
		1	1	Spring, Clutch (13)	4270111-01
		1	1	Shield, Clutch, Lower (14)	4290176-01
		1	1	Shield, Clutch, Upper (15)	4290177-01
		3	3	Washer, Thrust (16)	4440062-20
		2	2	Washer, Pivot-Spring Retainer, Turntable (17)	4440072-10
		3	3	Ball, Steel, 0.094 Dia. (22)	420-028
		1	1	Ball Bearing, Thrust (23)	421-234
		1	1	Bushing, Porous (24)	422-004
6	7-2	1	1	Arm Assembly, Belt-Idler, Capstan. Details on Fig. 7-7: (Ref. B)	4030085-02
		1	1	Arm Subassy (1)	4040936-01
		1	1	Idler Assy, Capstan Belt (2)	4041022-02
		1	1	Shaft, Capstan Belt Idler (3)	4210305-01
		4	4	Washer (4)	4440300-01
		3	3	Washer (5)	4440301-01
		1	1	Retainer, "E" Ring (6)	430-067
		1	1	Socket Setscrew, 6-32 x 1/4 (7)	477-035
7	7-2	1	1	Plate Assembly. Details on Fig. 7-8: (Ref. A)	4030086-01
		1	1	Idler Assy, Rewind (1)	4030033-10
		2	2	Brake Assy, Shock-Relief (2)	4040160-10
		1	1	Lever, Brake-Actuator (3)	4230060-10
		1	1	Lever, Brake Relief, Play-Mode (4)	4230061-10
		1	1	Spring, Rewind Idler (6)	4270058-10
		1	1	Spring, Takeup-Brake Release, Play (7)	4270059-10
		2	2	Spring, Clevis-Pin (8)	4270060-10
		2	2	Spring, Shock-Relief, Brake (9)	4270061-10

TAPE TRANSPORT ASSEMBLY (3 of 3)

4020302 (Ref. G)  
 Figures 7-1 and 7-2

Item	Fig. No.	-01	-02	DESCRIPTION	Ampex Part No.
64	7-2	2	2	Pin, Clevis, 1/8 Dia. x 11/32	400-004
65	7-2	2	2	Pin, Clevis, 1/8 Dia. x 13/32	400-005
66	7-2	5	5	Pin, Cotter, 1/16 Dia. x 1/2	401-005
67	7-2	2	2	Ball, 5/16 Dia.	420-004
68	7-2	1	1	Ball Bearing	421-117
69	7-2	5	5	Retainer, Hairpin	431-006
71	7-2	1	1	"O" Ring	432-016

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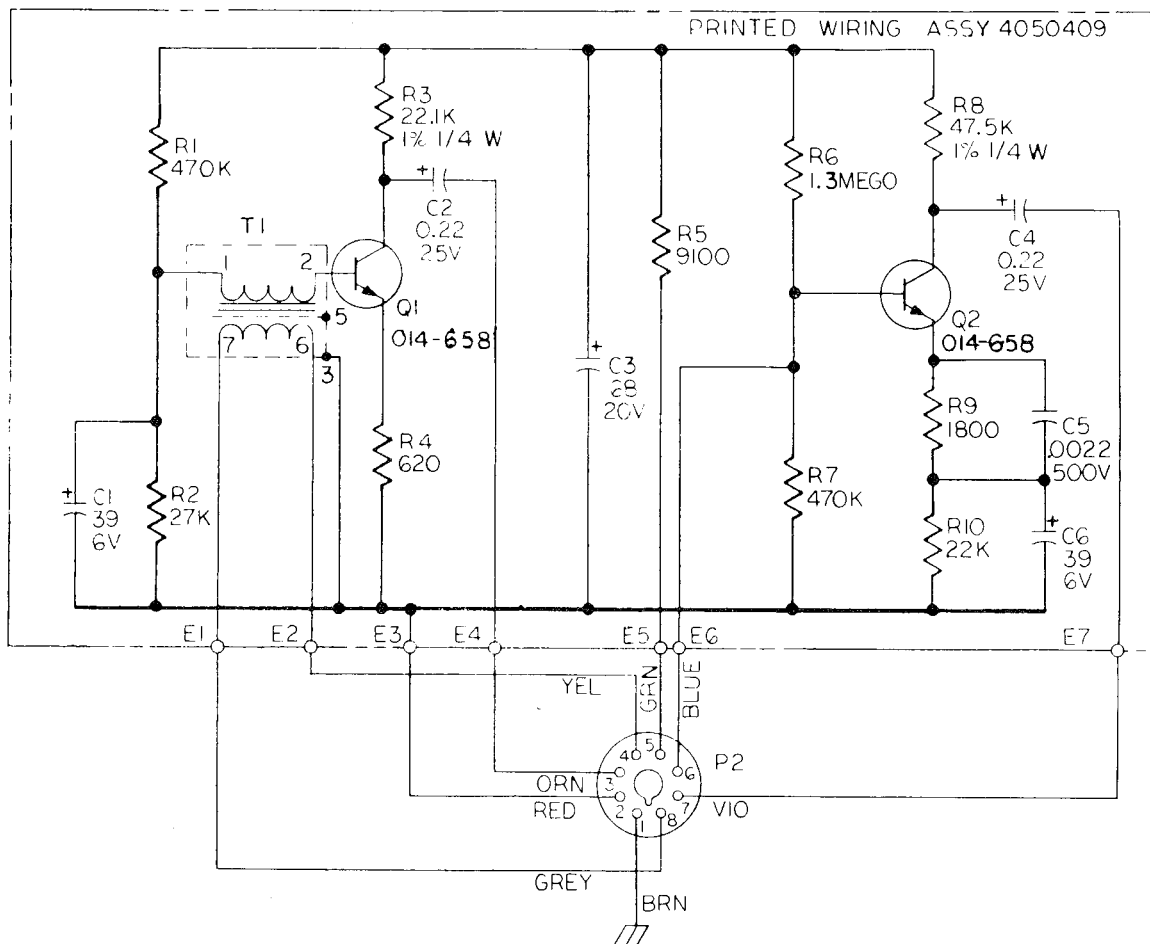


TAPE TRANSPORT ASSEMBLY (2 of 3)  
4020302 (Ref. C)

Figures 7-1 and 7-2

Item	Fig. No.	-		DESCRIPTION	Ampex Part No.
		-01	-02		
		1	1	Sub-Plate (10)	4330190-10
		2	2	Washer, Self-Actuator, Brake-Shock (11)	4440064-10
		1	1	Switch Deck, 3-Position (S6) (12)	4620197-01
		1	1	Pin, Straighthead, 0.125 Dia. x 0.469 (20)	400-007
		1	1	Pin, Straighthead, 0.124 Dia. x 0.953 (21)	400-016
		1	1	Pin, Straighthead, 0.125 Dia. x 0.563 (22)	400-030
		2	2	Pin, Cotter, 0.063 Dia. x 0.5 (23)	401-005
		2	2	Retainer, Hairpin (24)	431-002
8	7-2	1	1	Motor Assembly, 60 Hz. Details on Fig. 7-9; (Ref. A)	4030288-03
9	7-2	1	1	Motor Assembly, 50 Hz. Details on Fig. 7-9; (Ref. A)	4030288-04
		1	1	Pulley, Motor, 60 Hz (1)	4250208-01
		1	1	Pulley, Motor, 50 Hz (2)	4250208-02
		1	1	Motor, Drive (3)	4590023-01
		1	1	Plate, Motor-Mount (4)	4980231-20
10	7-2	1	1	Arm Assembly, Play Control (Ref. F)	4030176-30
		1	1	Play Actuator Arm	4040696-20
		1	1	Switch, Play-Record (S5)	4620035-10
11	7-2	1	1	Arm Assembly, Control, Rewind-and-Fast-Forward (Ref. E)	4030177-30
		1	1	Rewind Actuator Arm	4040697-20
		1	1	Detent, Switch	4620035-10
13	7-2	1	1	Counter Assembly (Ref. B)	4040695-10
		1	1	Button, Reset	4100158-10
		1	1	Counter	4140015-10
		1	1	Plate, Counter-Mounting	4330191-10
14	7-2	1	1	Flywheel Assembly, Capstan (Ref. B)	4041019-03
15	7-2	1	1	Top Plate Assembly (Ref. C)	4041021-04
16	7-2	1	1	Cable Assembly, Transport (Ref. E)	4050099-05
				Connector, Plug, Male; 15 contacts (P1)	143-823
17	7-2	1	1	Relay Box Assembly (Ref. P/R)	4050499-01
20	7-1	1	1	Cap, Capstan	4100061-01
21	7-1	2	2	Knob, Control	4100157-10
22	7-1	1	1	Cap, Tape-Guide	4100159-20
23	7-2	1	1	Button, Record-Safety	4100062-01
25	7-1	1	1	Guide, Tape	4210005-10
26	7-1	2	2	Bar, Tape-Guide	4210237-10
27	7-1	1	1	Pin, Tape-Guide	4210238-10
28	7-2	2	2	Spacer, Motor-Mount	4220115-01
		2	2	Spacer, Motor-Mount	4220115-02
29	7-2	1	1	Spacer, Play-Takeup-Arm	4220099-01
30	7-2	1	1	Link, Turntable-Pivot	4230066-10
31	7-1	2	2	Turntable, Reel	4250040-10
32	7-2	1	1	Disc, Capstan-Thrust	4250041-20
33	7-2	2	2	Spring, Turntable	4270062-10
34	7-2	1	1	Spring, Center-Detent, Turntable	4270071-10
35	7-2	1	1	Spring, Tension, Belt-Idler	4270113-01
36	7-1	1	1	Cap, Capstan-Idler	4290098-10
37	7-1	1	1	Seal, Dust, Capstan	4280024-10
38	7-2	1	1	Belt, Capstan-Drive	4310065-01
39	7-2	a/r	a/r	Washer, Lamicoid	4440025-10
40	7-2	a/r	a/r	Washer, Lamicoid	4440025-20
41	7-2	a/r	a/r	Washer, Lamicoid	4440025-30
42	7-2	4	4	Washer, Lamicoid	4440025-50
43	7-2	a/r	a/r	Washer, Lamicoid	4440025-80
44	7-2	1	1	Washer, Cambric	4440027-10
45	7-2	1	1	Washer, Flywheel, Capstan	4440068-01
46	7-1	2	2	Washer, Thrust	4440101-01
47	7-1	2	2	Washer, Spacer	4440287-10
48	7-2	1	1	Capacitor, 3 mF (C33)	4540308-10
49	7-2	1	1	Capacitor, 2.5 mF (C33)	4540309-10
51	7-2	4	4	Washer, Mounting Differential	4440069-10
52	7-2	1	1	Spring, Leaf, Record-Lock	4270056-20
56	7-2	1	1	Boot, Capacitor	032-082

Ref.	Qty	DESCRIPTION	Ampex Part No.
	1	Printed Circuit Board, assembly	4050409-01
C1	2	Capacitor, tantalum; 39 mfd, ±20%, 6 vdcw	037-452
C2	2	Capacitor, tantalum; 0.22 mfd, ±20%, 25 vdcw	037-450
C3	1	Capacitor, tantalum; 68 mfd, ±20%, 20 vdcw	037-451
C4	-	Same as C2	
C5	1	Capacitor, ceramic disc; .0022 mfd, ±10%, 500 vdcw	030-102
C6	-	Same as C1	
Q1	2	Transistor, silicon; low noise, low level	014-658
Q2	-	Same as Q1	
R1	2	Resistor, fixed, comp; 470,000 ohms, ±5%, 1/2w; RC20GF474J	041-029
R2	1	Resistor, fixed, comp; 27,000 ohms, ±5%, 1/2w; RC20GF273J	041-015
R3	1	Resistor, metal film; 22,100 ohms, ±1%, 1/4w	057-208
R4	1	Resistor, fixed, comp; 620 ohms, ±5%, 1/2w; RC20GF621J	041-006
R5	1	Resistor, fixed, comp; 9,100 ohms, ±5%, 1/2w; RC20GF912J	041-373
R6	1	Resistor, fixed, comp; 1.3 meg ohms, ±5%, 1/2w; RC20GF135J	041-377
R7	-	Same as R1	
R8	1	Resistor, metal film; 47,500 ohms, ±1%, 1/4w	042-482
R9	1	Resistor, fixed, comp; 1,800 ohms, ±5%, 1/2w; RC20GF182J	041-009
R10	1	Resistor, fixed, comp; 22,000 ohms, ±5%, 1/2w; RC20GF223J	041-016
T1	1	Transformer, microphone	4580197-01
	2	Sockets, transistors	150-103
	1	Can, plug-in	4290201-10



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Figure 7-10. Microphone Preamplifier

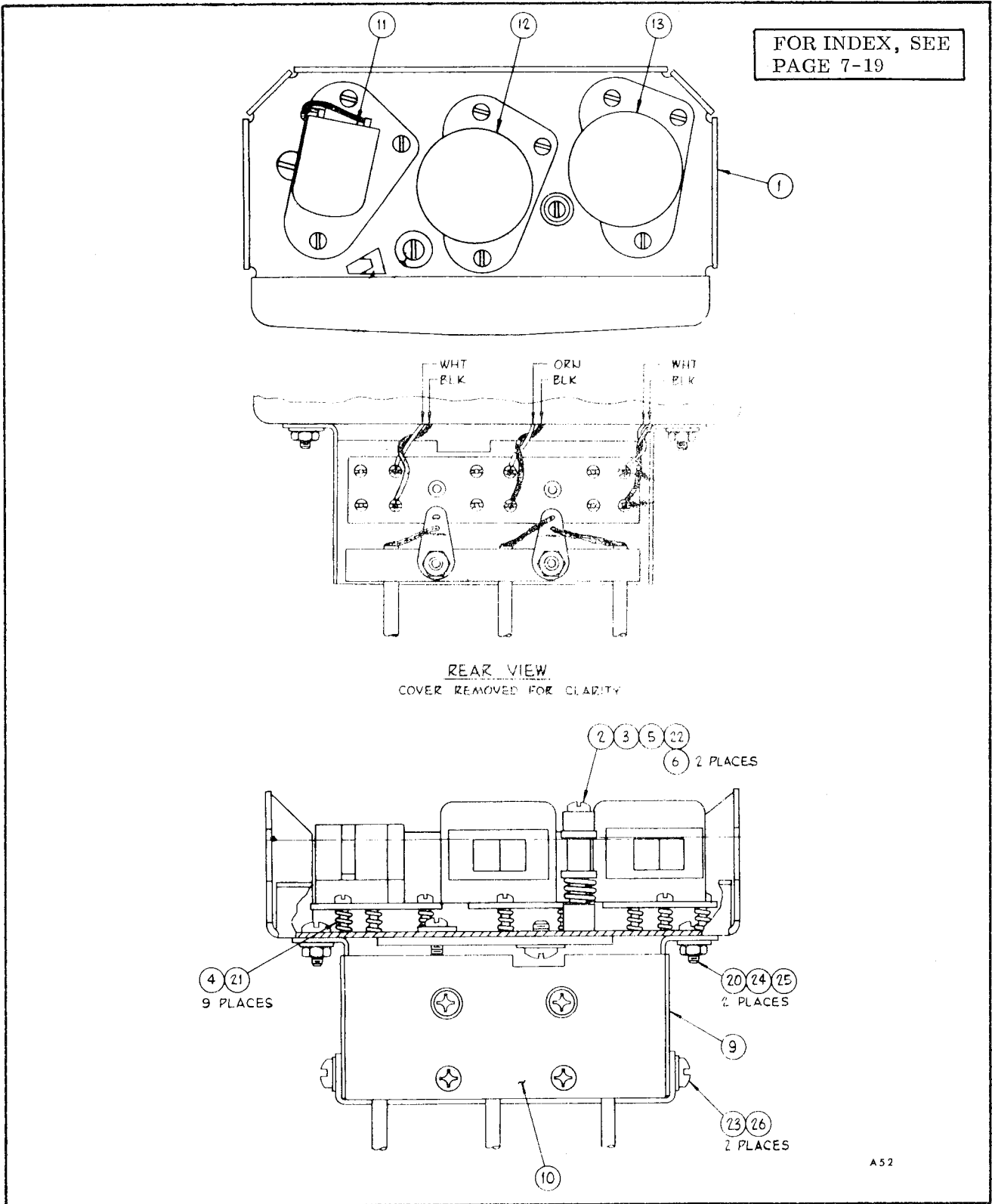
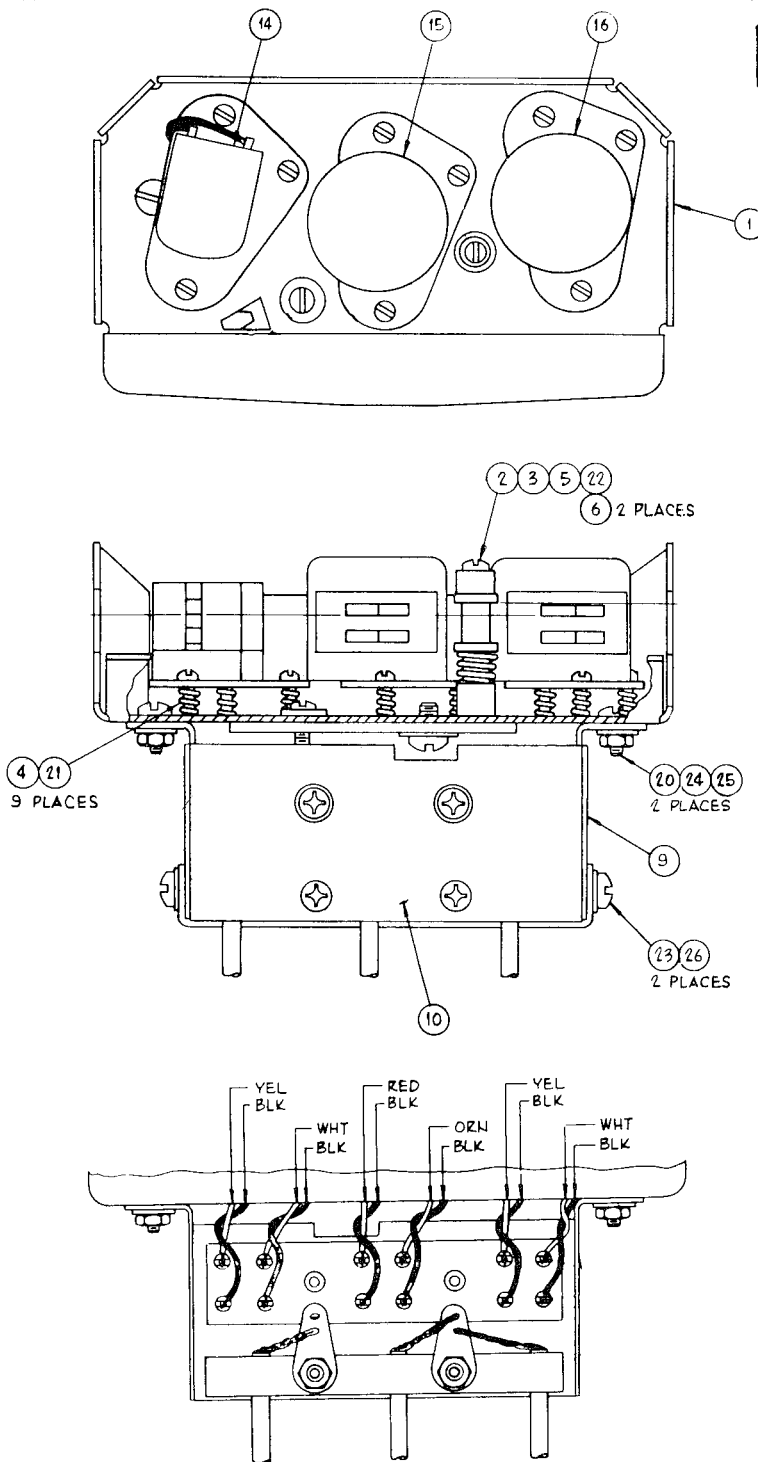


Figure 7-11. Head Assembly, Full-Track

FOR INDEX, SEE  
PAGE 7-19

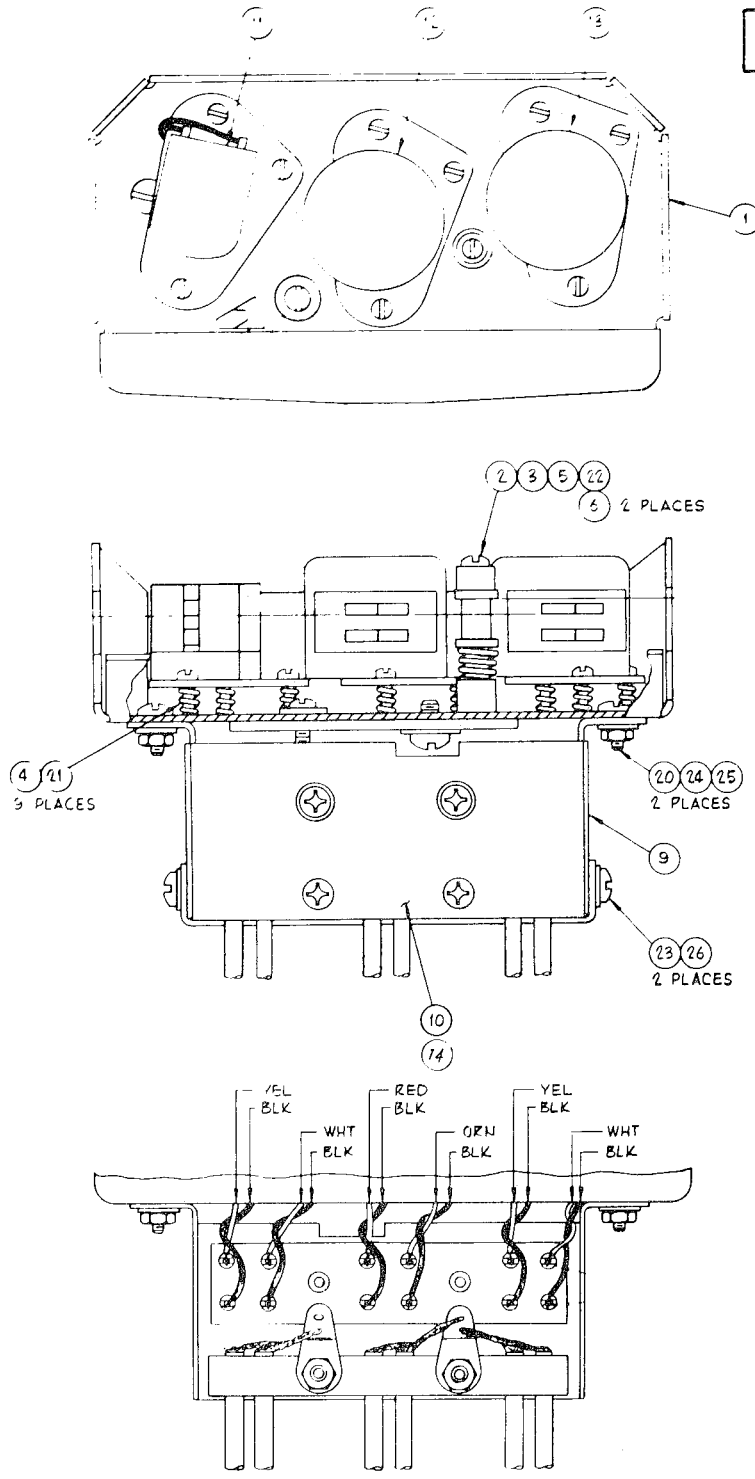


REAR VIEW  
COVER REMOVED FOR CLARITY

A 53

Figure 7-12. Head Assembly, Half-Track

FOR INDEX, SEE  
PAGE 7-19



REAR VIEW  
COVER REMOVED FOR CLARITY

A 54

Figure 7-13. Head Assembly, Two-Track

HEAD ASSEMBLIES  
 4020191 (Ref. B), 4020192 (Ref. B)  
 4020194 (Ref. B)

Item	Channels				DESCRIPTION	Ampex Part No.
	1 ch FT	2 ch HT	2 ch 2T	2 ch QT		
	X				Head Assembly, Single-channel, Full-track (see Fig. 7-11)	4020191-03
		X			Head Assembly, Single-channel, Full-track (see Fig. 7-12)	4020191-04
			X		Head Assembly, Dual-channel, Two-track (see Fig. 7-13)	4020192-02
				X	Head Assembly, Dual-channel, Quarter-track (see Fig. 7-14)	4020194-02
1	1	1	1	1	Base Assembly, Head-housing	4030088-01
2	1	1	1	1	Cap, Tape-guide	4100063-01
3	1	1	1	1	Sleeve, Tape-guide	4200055-01
4	9	9	9	9	Spring, Head-mounting	4270024-20
5	1	1	1	1	Spring, Tape-guide	4270114-01
6	2	2	2	2	Washer, Tape-guide	4440137-01
9	1	1	1	1	Cover, Cable-bracket	1232344-01
10	1	1			Bracket and Cable Assembly	1232346-01
10			1	1	Bracket and Cable Assembly	1232346-04
11	1				Head Stack, Erase, Full-track	1232357-01
11			1		Head Stack, Erase, Two-track	1232360-01
11				1	Head Stack, Reproduce, Quarter-track	1232363-01
12	1				Head Stack, Record, Full-track	1232358-01
12			1		Head Stack, Record, Two-track	1232361-01
12				1	Head Stack, Record, Quarter-track	1232363-02
13	1				Head Stack, Reproduce, Full-track	1232359-01
13			1		Head Stack, Reproduce, Two-track	1232362-01
13				1	Head Stack, Erase, Quarter-track	1232363-03
14		1			Head Stack, Erase, Half-track	1232360-01
15		1			Head Stack, Record, Half-track	1232361-01
16		1			Head Stack, Reproduce, Half-track	1232362-01

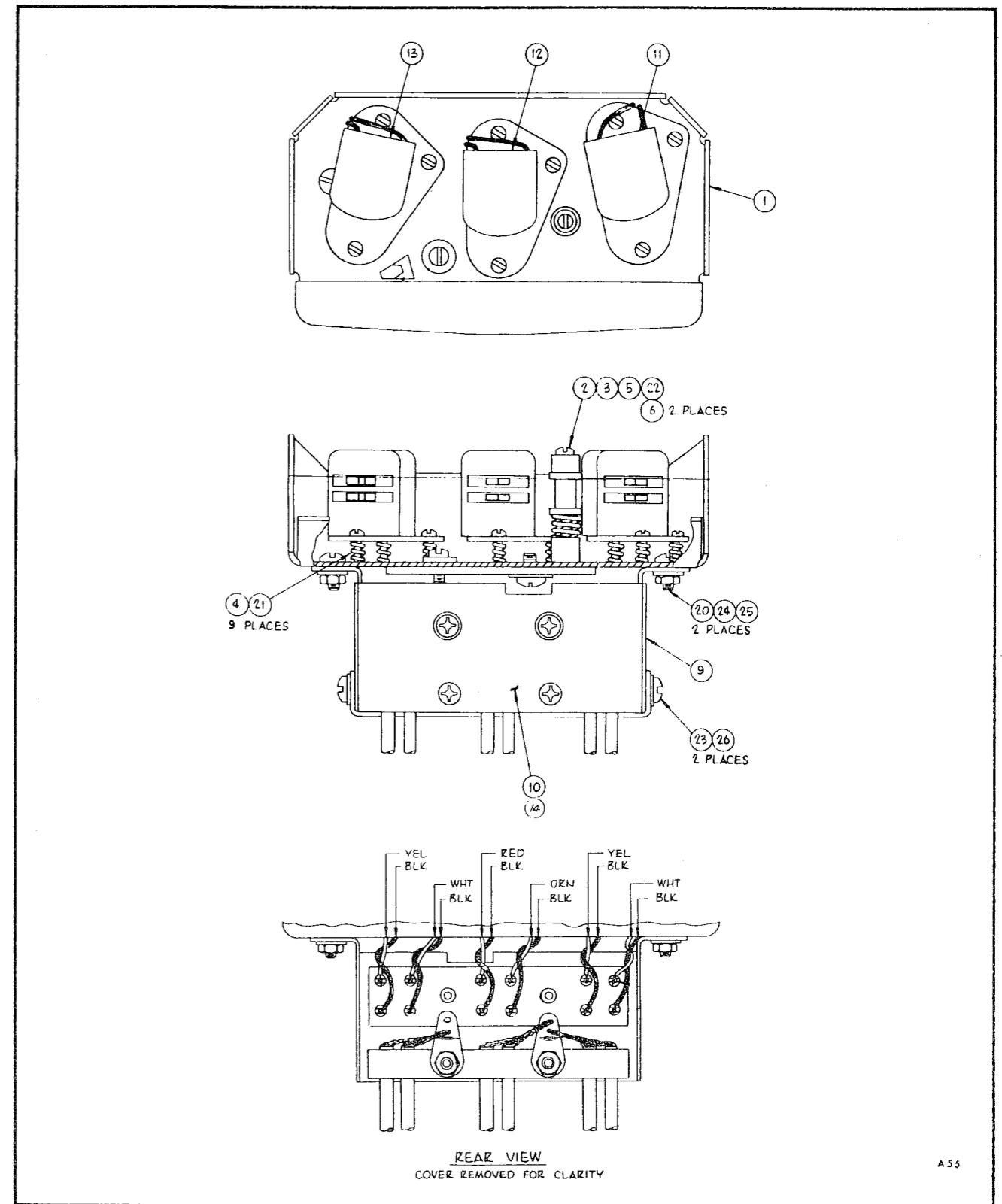
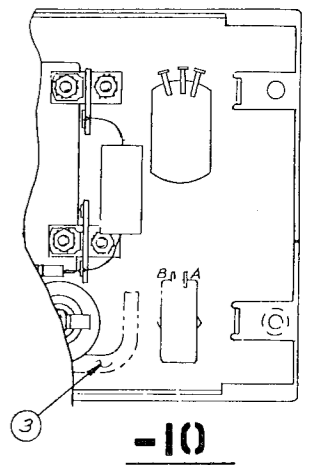
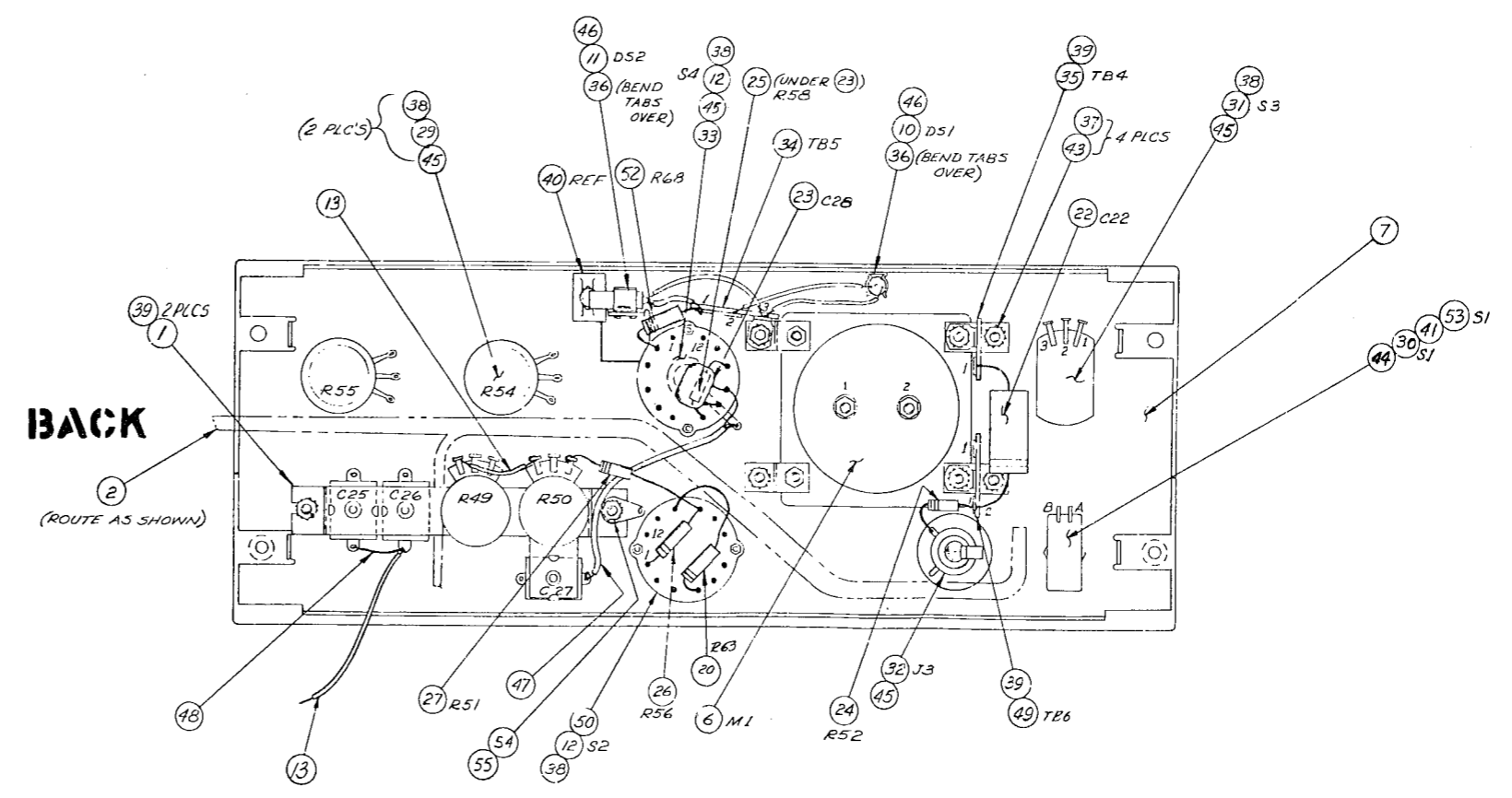
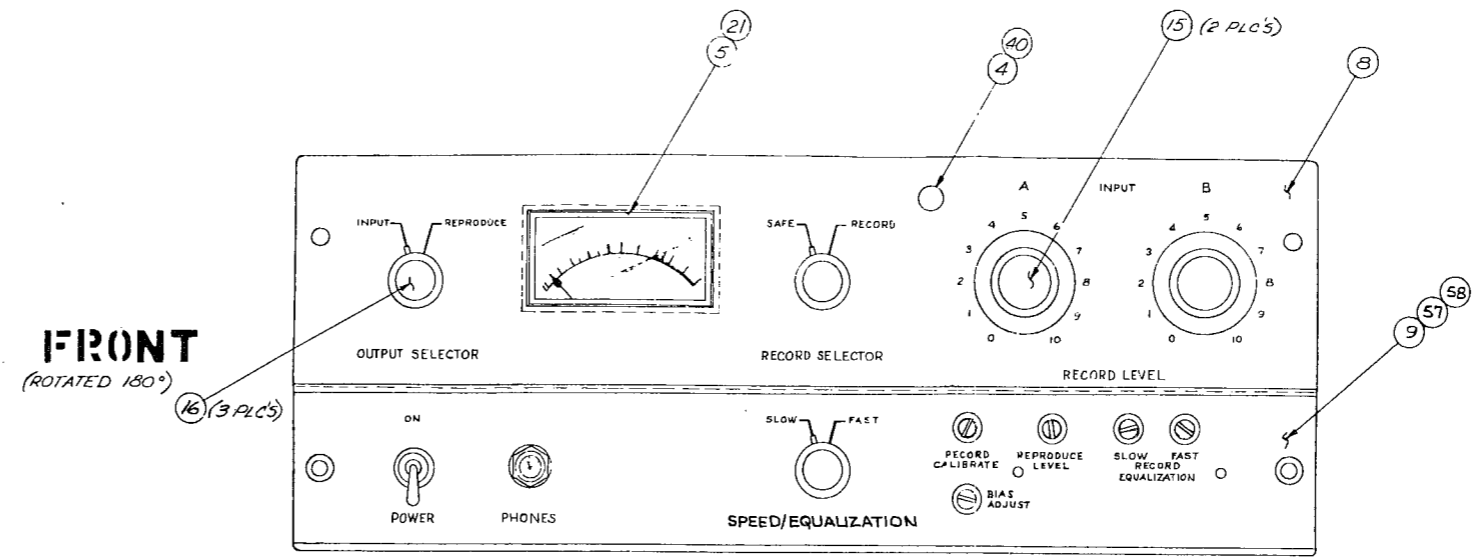


Figure 7-14. Head Assembly, Quarter-Track

PANEL ASSEMBLY, FRONT (DOMESTIC)  
4050400 (Ref. M)

See 4050400 LM and Front Panel Assembly, Ref. M

MST	SLV	DESCRIPTION	Ampex Part No.
1	1	Bracket Assembly, Equalization	4050402-01
1	-	Harness Assembly, Front Panel, Master	4050428-01
-	1	Harness Assembly, Front Panel, Slave	4050428-04
1	1	Jewel, Pilot Lamp, Red	4110258-02
1	1	Escutcheon, Meter Window	4110261-01
1	1	Meter, VU (M1)	4140019-01
1	1	Panel, Backing	4290623-01
1	1	Panel, Front Top	4290625-01
-	-	Panel Assembly, Front	4041038-01
1	1	Lamp, Meter (DS1)	4610081-01
1	1	Lamp, Record (DS2)	4610082-01
2	2	Switch, Selector (S2, S4)	4620196-02
2	2	Knob, Skirted, Pointer	6000009-20
3	3	Knob, Pointer	6000005-20
1	-	Resistor, Composition, 120 ohm, 1W, 10% (R63)	041-578
1	1	Capacitor, Electrolytic, 500UF, 15V (C22)	031-297
1	1	Capacitor, Mica, 0.0025UF, 5%, 500V (C28)	034-994
1	1	Resistor, Composition, 220 ohm, 10%, 1/2W (R52)	041-040
1	1	Resistor, Composition, 470 ohm, 10%, 1/2W (R58)	041-044
1	1	Resistor, Composition, 18k ohm, 10%, 1/2W (R56)	041-063
1	1	Resistor, Composition, 33k ohm, 10%, 1/2W (R51)	041-066
2	2	Resistor, Variable, 100k ohm, 2W, 10% (R54, 55)	044-015
-	-	Switch, Toggle (S1)	120-999
1	1	Switch, Selector (S3)	122-323
1	1	Jack, Phone (with mounting hardware) (J2)	148-015
1	1	Terminal Strip A1, A1, G (TB5)	180-024
1	1	Terminal Strip, D, A1 (TB4)	180-027
1	1	Terminal Strip, A1, D, A1 (TB6)	180-023
1	1	Resistor, Composition, 22 ohm, 1/2W, 10% (R68)	041-033
1	-	Switch, Toggle	119-217
1	-	Panel Assembly, Front	4041038-02
-	1	Panel Assembly, Front	4041038-03



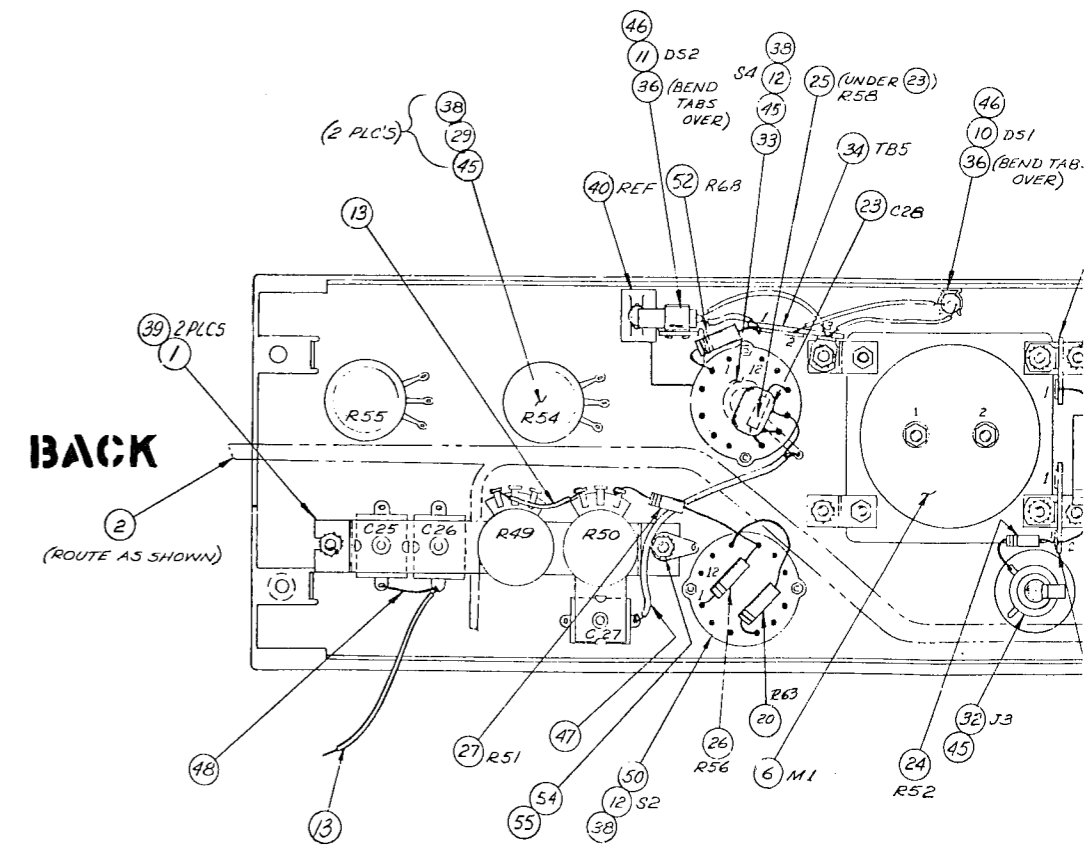
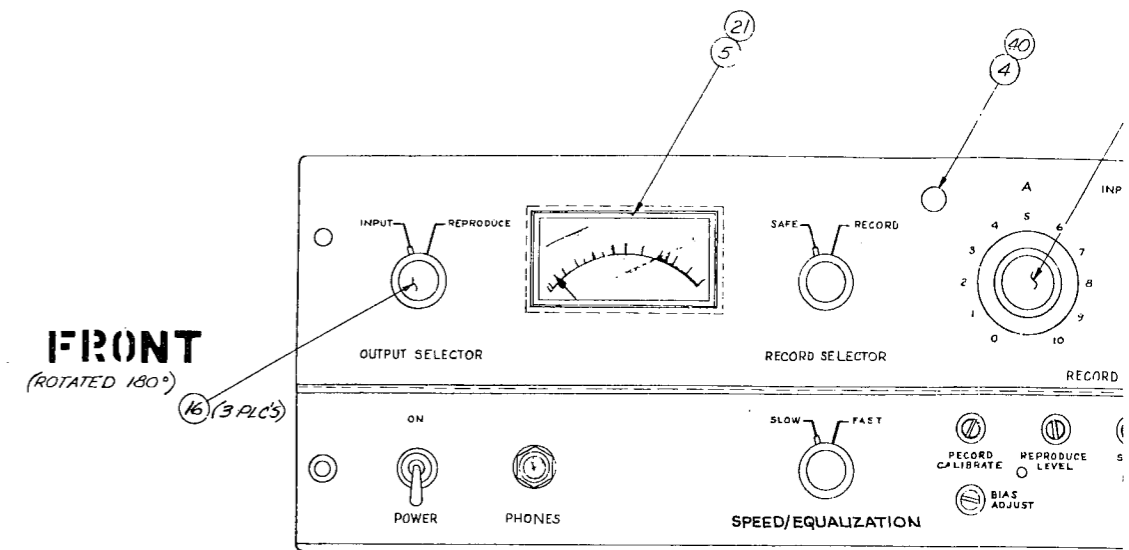
**-09**

Figure 7-15. Electronics, Front Panel Assy

PANEL ASSEMBLY, FRONT (DOMESTIC)  
4050400 (Ref. M)

See 4050400 LM and Front Panel Assembly, Ref. M

Item	MST -09	SLV -10	MST 11	SLV 12	DESCRIPTION	Ampex Part No.
1	1	1	1	1	Bracket Assembly, Equalization	40 50402-01
2	1	1	1	-	Harness Assembly, Front Panel, Master	4050428-01
3	1	1	-	1	Harness Assembly, Front Panel, Slave	4050428-04
4	1	1	1	1	Jewel, Pilot Lamp, Red	4110258-02
5	1	1	1	1	Escutcheon, Meter Window	4110261-01
6	1	1	1	1	Meter, VU (M1)	4140019-01
7	1	1	1	1	Panel, Backing	4290623-01
8	1	1	1	1	Panel, Front Top	4290625-01
9	1	1	-	-	Panel Assembly, Front	4041038-01
10	1	1	1	1	Lamp, Meter (DS1)	4610081-01
11	1	1	1	1	Lamp, Record (DS2)	4610082-01
12	2	2	2	2	Switch, Selector (S2, S4)	4620196-02
15	2	2	2	2	Knob, Skirted, Pointer	6000009-20
16	3	3	3	3	Knob, Pointer	6000005-20
20	1	1	1	-	Resistor, Composition, 120 ohm, 1W, 10% (R63)	041-578
22	1	1	1	1	Capacitor, Electrolytic, 500UF, 15V (C22)	031-297
23	1	1	1	1	Capacitor, Mica, 0.0025UF, 5%, 500V (C28)	034-994
24	1	1	1	1	Resistor, Composition, 220 ohm, 10%, 1/2W (R52)	041-040
25	1	1	1	1	Resistor, Composition, 470 ohm, 10%, 1/2W (R58)	041-044
26	1	1	1	1	Resistor, Composition, 18k ohm, 10%, 1/2W (R56)	041-063
27	1	1	1	1	Resistor, Composition, 33k ohm, 10%, 1/2W (R51)	041-066
29	2	2	2	2	Resistor, Variable, 100k ohm, 2W, 10% (R54, 55)	044-015
30	1	1	-	-	Switch, Toggle (S1)	120-999
31	1	1	1	1	Switch, Selector (S3)	122-323
32	1	1	1	1	Jack, Phone (with mounting hardware) (J2)	148-015
34	1	1	1	1	Terminal Strip A1, A1, G (TB5)	180-024
35	1	1	1	1	Terminal Strip, D, A1 (TB4)	180-027
49	1	1	1	1	Terminal Strip, A1, D, A1 (TB6)	180-023
52	1	1	1	1	Resistor, Composition, 22 ohm, 1/2W, 10% (R68)	041-033
53	-	-	1	-	Switch, Toggle	119-217
57	-	-	1	-	Panel Assembly, Front	4041038-02
58	-	-	-	1	Panel Assembly, Front	4041038-03





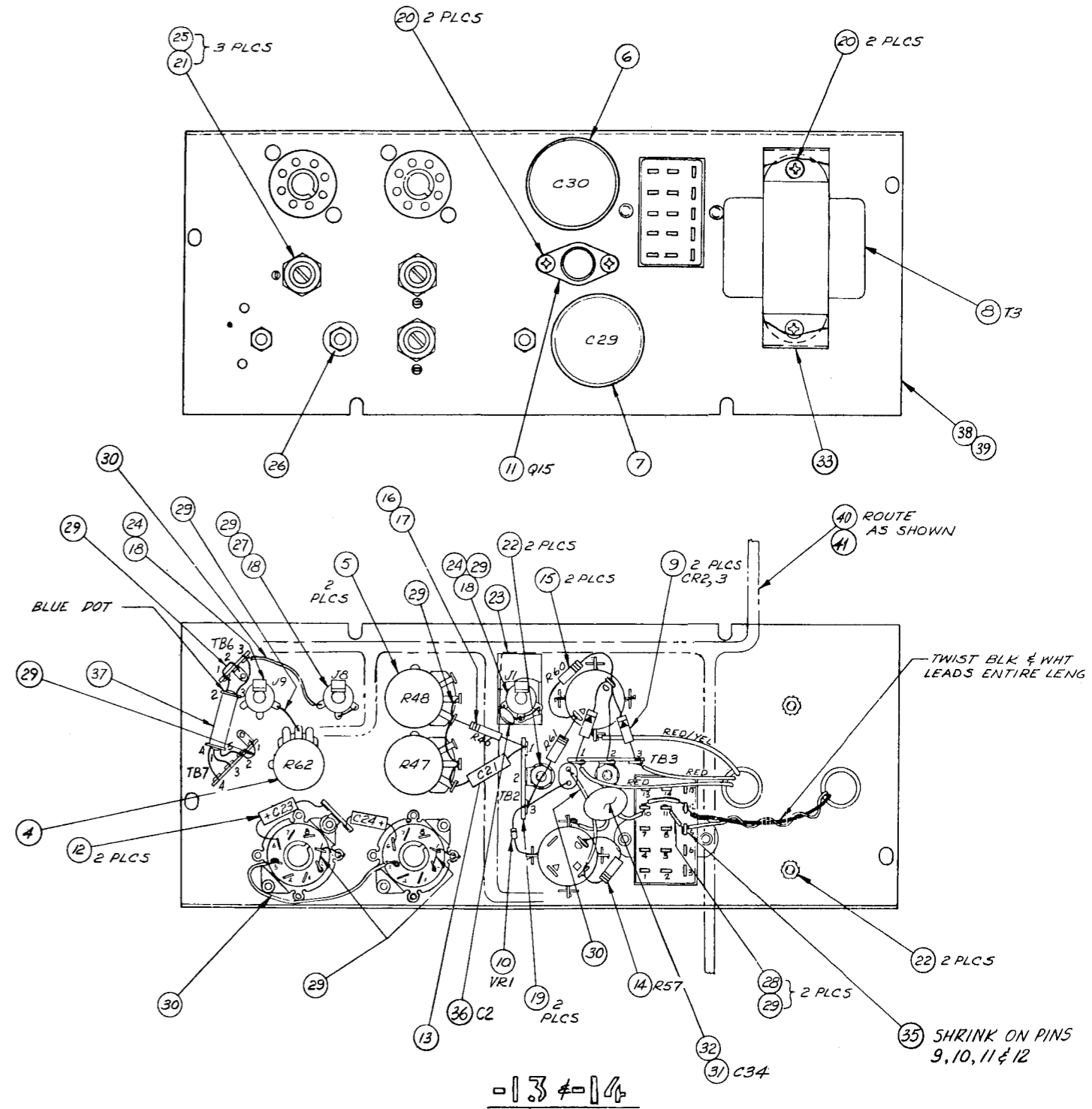
AG-600

AG-600B

PANEL ASSEMBLY, REAR (DOMESTIC)  
4050251 (Ref. J)

See Ref. J, 4050251 for Complete LM and Back Panel

Item	NAB		Slave		DESCRIPTION	Ampex Part No.		
	CCIR Slave	CCIR Master	NAB	CCIR				
1	-11	-12	-13	-14	-15	-16	Rear Panel Subassembly	4040933-05
2	1	1	-	-	1	1	Rear Panel Subassembly	4040933-04
3	1	1	-	-	-	-	Harness Assembly	4050427-03
4	1	1	1	1	1	1	Potentiometer, 25 ohm (R62)	4520149-10
5	2	2	2	2	1	1	Potentiometer, 50k ohm (R47, 48)	4520151-01
6	1	1	1	1	1	1	Capacitor, 500-500-200-200UF, 25V (C30)	4550147-01
7	1	1	1	1	1	1	Capacitor, 1000-500UF, 35V (C29)	4550147-02
8	1	1	1	1	1	1	Transformer, Power (T3)	4580194-02
9	2	2	2	2	1	1	Diode, Rectifier, CD451 (CR2, 3)	013-678
10	1	1	1	1	1	1	Diode, Zener, 24V, 5% (VR1)	013-712
11	1	1	1	1	1	1	Transistor, (with insulating hardware) (Q15)	014-587
12	2	2	2	2	1	1	Capacitor, Electrolytic, 1UF, 25V (C23, 24)	031-294
13	1	1	1	1	1	1	Capacitor, Mylar, 0.01UF, 5%, 100V (C21)	035-732
14	1	1	1	1	1	1	Resistor, Composition, 120 ohm, 10%, 1/2W (R57)	041-039
15	2	2	2	2	1	1	Resistor, Composition, 220 ohm, 10%, 1/2W (R60, 61)	041-040
16	1	1	1	1	1	1	Resistor, Composition, 360k ohm, 5%, 1/2W (R46)	041-590
17	-	1	-	1	1	1	Resistor, Composition, 2.2M ohm, 10%, 1/2W (R46)	041-086
18	3	3	3	3	1	1	Connector, Telephone-Jack(with mounting hardware) (J1, 8, 9)	148-142
23	1	1	1	1	1	1	Shield, Reproduce Head Jack	4600059-01
31	1	1	1	1	1	1	Capacitor, Ceramic, 0.005 UF, 1400V (C34)	030-465
33	1	1	1	1	1	1	Shield, Power Transformer	4600060-01
34	-	-	1	1	-	-	Harness Assembly	4050427-06
36	1	1	1	1	1	1	Capacitor, 390pF, 500V, 5%, Mica (C2)	034-288
37	1	1	1	1	1	1	Relay SPDT	020-642
42	-	-	-	-	1	1	Harness Assembly	4050427-07



ANEL ASSEMBLY, REAR (DOMESTIC)  
4050251 (Ref. J)  
Complete LM and Back Panel

	Ampex Part No.
	4040933-05
	4040933-04
	4050427-03
	4520149-10
162)	4520151-01
(R47, 48)	4550147-01
200UF, 25V (C30)	4550147-02
35V (C29)	4580194-02
)	013-678
(CR2, 3)	013-712
VR1)	014-587
ing hardware) (Q15)	031-294
1UF, 25V (C23, 24)	035-732
F, 5%, 100V (C21)	041-039
.20 ohm, 10%, 1/2W (R57)	041-040
.20 ohm, 10%, 1/2W (R60, 61)	041-590
100k ohm, 5%, 1/2W (R46)	041-086
1.2M ohm, 10%, 1/2W (R46)	148-142
ck(with mounting hardware) (J1, 8, 9)	4600059-01
ack	030-465
05 UF, 1400V (C34)	4600060-01
er	4050427-06
	034-288
	020-642
	4050427-07

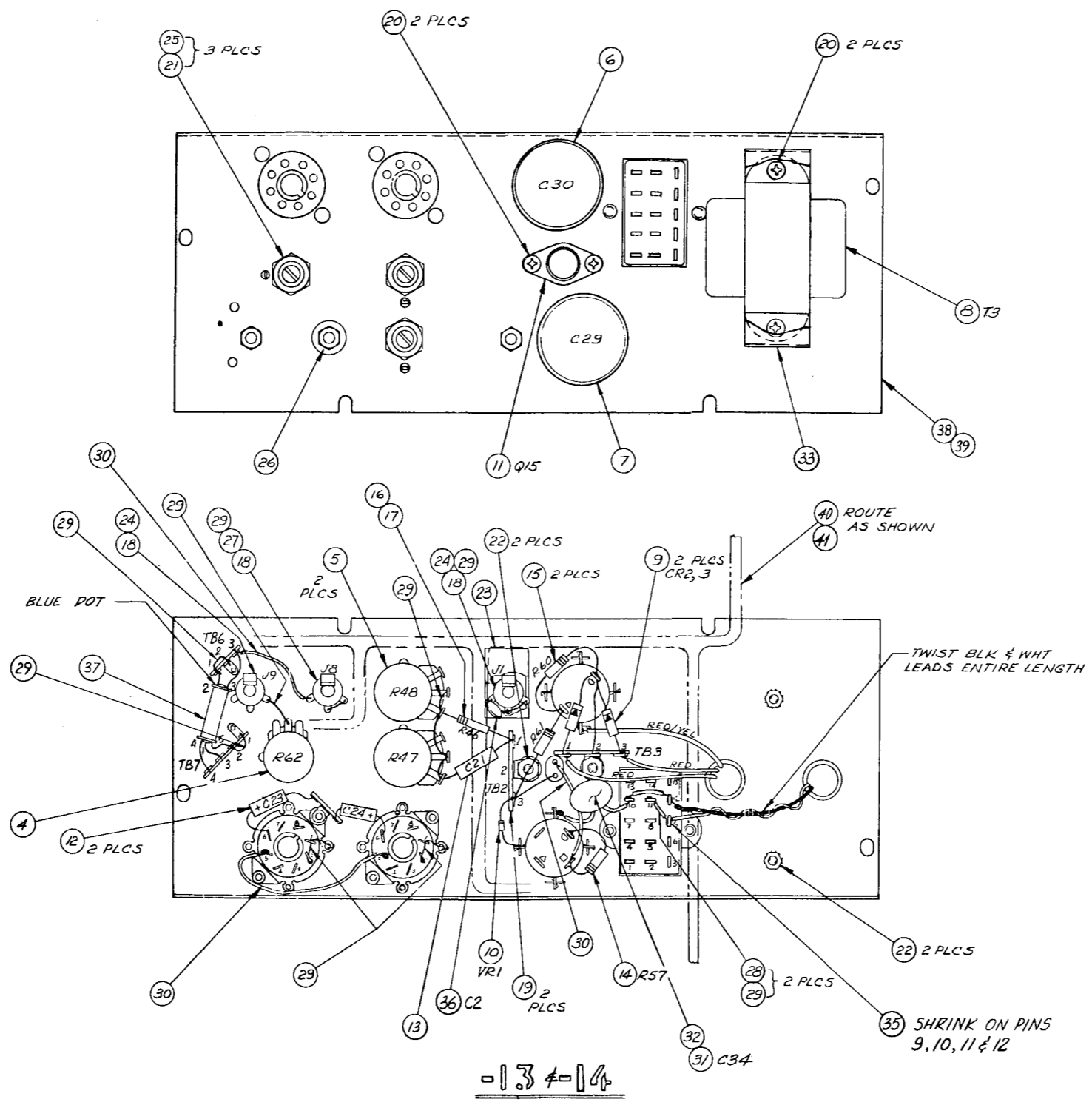


TABLE I

ASSY NO.	DESCRIPTION
4050251-13	MASTER NAB
4050251-11	SLAVE NAB
4050251-14	MASTER CCIR
4050251-12	SLAVE CCIR
4050251-15	SLAVE, NAB (600B)
4050251-16	SLAVE, CCIR (600B)

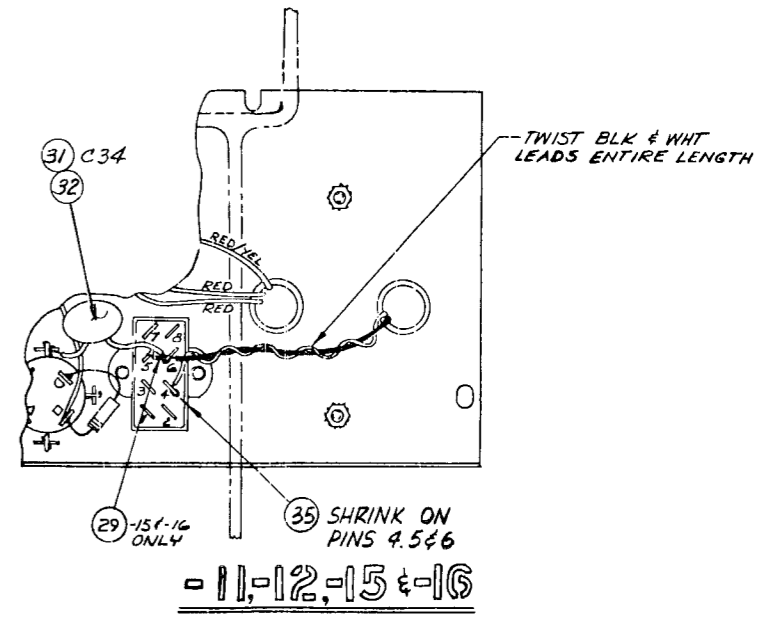
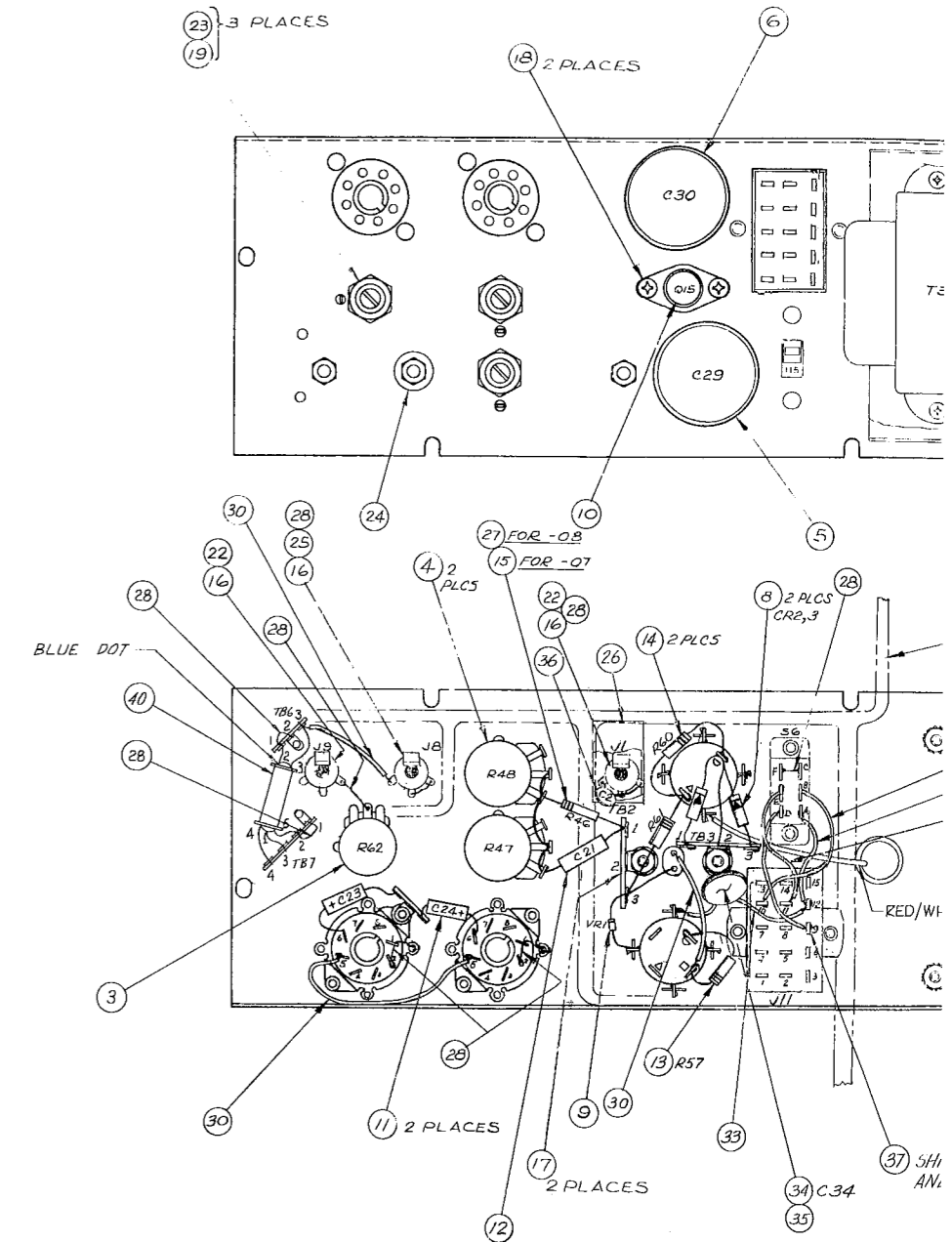


Figure 7-16. Electronics, Back Panel Assembly (Domestic)

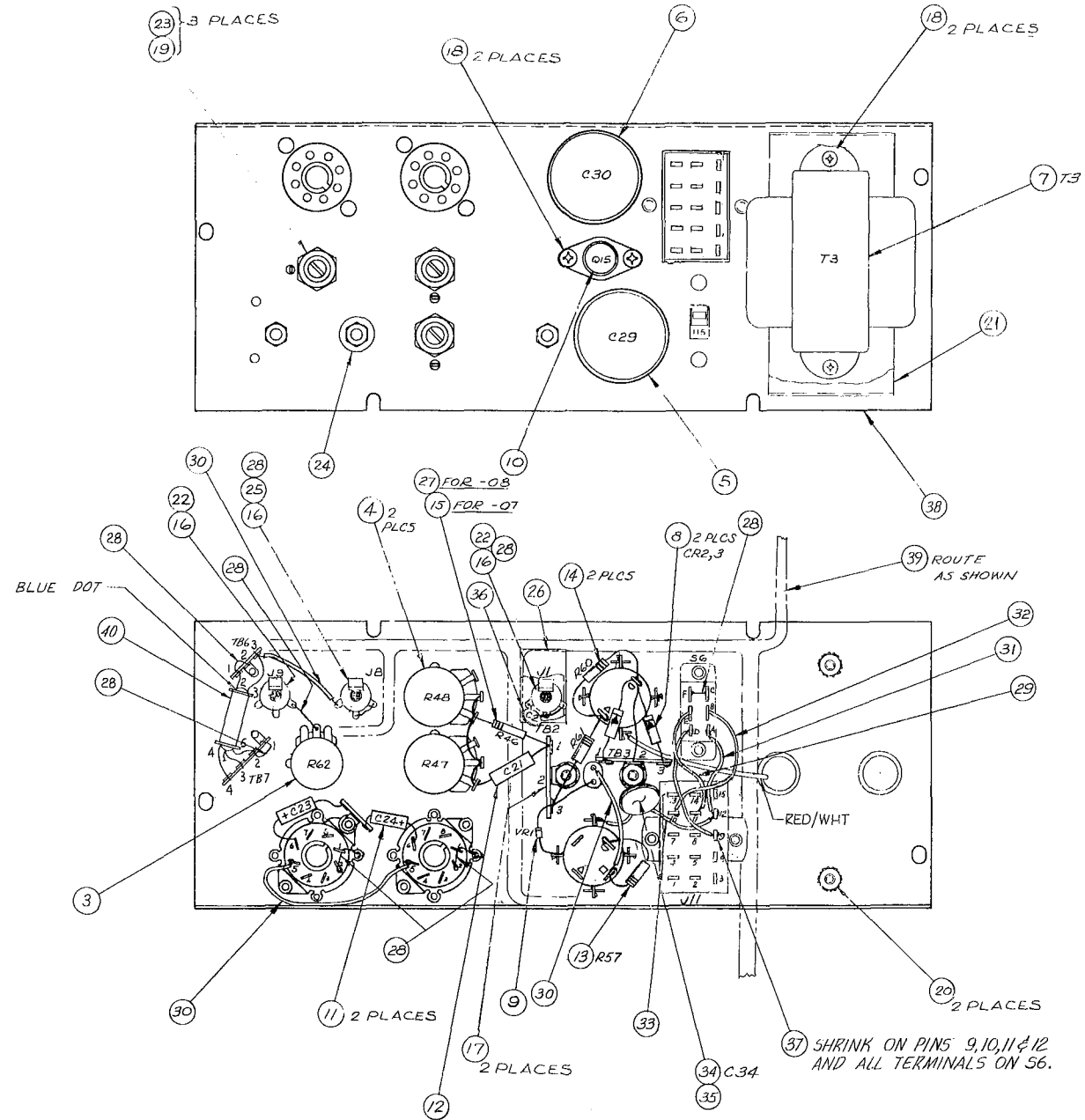
AG-600B  
 PANEL ASSEMBLY, REAR (INTERNATIONAL)  
 4050405(Ref.H)

Item	NAB -09	CCIR -10	DESCRIPTION	Ampex Part No.
3	1	1	Potentiometer, 25 ohm (R62)	4520149-10
4	2	2	Potentiometer, 50k (R47, 48)	4520151-01
5	1	1	Capacitor, 500-500-200-200UF, 25V (C30)	4550147-01
6	1	1	Capacitor, 1000-500UF, 35V (C29)	4550147-02
7	1	1	Transformer, Power (International) (T3)	4580195-01
8	2	2	Diode, Rectifier, CD451 (CR2, 3)	013-678
9	1	1	Diode, Zener, 24V, 5% (VR1)	013-712
10	1	1	Transistor (with mounting hardware) (Q15)	014-587
11	2	2	Capacitor, Electrolytic, 1UF, 25V (C23, 24)	031-294
12	1	1	Capacitor, Mylar, 0.01UF, 5%, 100V (C21)	035-732
13	1	1	Resistor, Composition, 120 ohm, 10%, 1/2W (R57)	041-039
14	2	2	Resistor, Composition, 220 ohm, 10%, 1/2W (R60, 61)	041-040
15	1	-	Resistor, Composition, 360k, 5%, 1/2W (R46)	041-590
16	3	3	Connector, Telephone-Jack (with mounting hardware) (J1, 8, 9)	148-142
21	1	1	Shield, Transformer	4600056-01
26	1	1	Shield, Head-Jack, Reproduce	4600059-01
27	-	1	Resistor, Composition, 2.2M ohm, 10%, 1/2W (R46)	041-086
34	1	1	Capacitor, Ceramic, 0.005UF, 1400V (C34)	030-465
36	1	1	Capacitor, Mica, 390pF, 500V, 5% (C2)	034-288
38	1	1	Rear Panel Subassembly (International)	4040934-03
39	1	1	Harness Assembly	4050427-06
40	1	1	Relay, Single-Pole, Double-Throw	020-642



AG-600B  
 PANEL ASSEMBLY, REAR (INTERNATIONAL)  
 4050405(Ref.H)

	Ampex Part No.
	4520149-10
	4520151-01
1) JF, 25V (C30)	4550147-01
(C29)	4550147-02
ational) (T3)	4580195-01
2, 3)	013-678
)	013-712
rdware) (Q15)	014-587
, 25V (C23, 24)	031-294
5%, 100V (C21)	035-732
ohm, 10%, 1/2W (R57)	041-039
ohm, 10%, 1/2W (R60, 61)	041-040
, 5%, 1/2W (R46)	041-590
with mounting hardware) (J1, 8, 9)	148-142
se	4600056-01
1 ohm, 10%, 1/2W (R46)	4600059-01
F, 1400V (C34)	041-086
V, 5% (C2)	030-465
arnational)	034-288
Throw	4040934-03
	4050427-06
	020-642



T3 CONNECTIONS	
COLOR	TERMINATION
RED	TB3-1
RED	TB3-3
RED/WHT	CHASSIS GND (AS SHOWN)
WHT	S6-A
GRN	S6-B
GRN/YEL	S6-D
BLK	S6-E

TABLE I	
ASSY NO.	DESCRIPTION
4050405-09	N A B
4050405-10	CCIR

Figure 7-17. Electronics, Back Panel Assembly (International)

# AMPEX

AG-600B SYSTEM  
ELECTRONIC COMPONENTS (1 of 3)  
(On Electronics Assembly unless noted otherwise)

Ref. No.	-31	-32	-33	-34	-35	DESCRIPTION	Location	Ampex Part No.
	X					Electronics Assembly, NAB Master		4020257-31
		X				Electronics Assembly, NAB Slave		4020257-32
			X			Electronics Assembly, NAB International		4020257-33
				X		Electronics Assembly, CCIR Slave		4020257-34
					X	Electronics Assembly, CCIR International		4020257-35
C1	2	2	2	2	2	Capacitor, Tantalum; 10 mF, ±20%, 6V	Repro. P.W.B	037-398
C2	1	1	1	1	1	Capacitor, Mica; 390pF, ±5%, 500V	Bk. Panel	034-288
C3	1	1	1	1	1	Capacitor, Electrolytic; 100mF, -10+75%, 12V	Repro. P.W.B.	031-191
C4	1	1	1	1	1	Capacitor, Mica; 100pF, ±5%, 500V	Repro. P.W.B.	034-177
C5	4	4	4	4	4	Capacitor, Tantalum; 15mF, ±20%, 15V	Repro. P.W.B.	037-446
C6	x	x	x	x	x	Same as C5	Repro. P.W.B.	
C7	3	3	3	3	3	Capacitor, Tantalum; 3.3mF, ±20%, 35V	Repro. P.W.B.	037-618
C8	x	x	x	x	x	Same as C5	Repro. P.W.B.	
C9	x	x	x	x	x	Same as C5	Repro. P.W.B.	
C10	x	x	x	x	x	Same as C7	Rec. P.W.B.	
C11	1	1	1	0	0	Capacitor, Mylar; 0.018mF, ±5%, 100V	Rec. P.W.B.	055-105
C12	1	1	1	1	1	Capacitor, Mylar; 0.1mF, ±10%, 100V	Rec. P.W.B.	055-106
C13	1	1	1	1	1	Capacitor, Mica; 20pF, ±5%, 500V	Rec. P.W.B.	034-944
C14	x	x	x	x	x	Same as C1	Rec. P.W.B.	
C15	1	1	1	1	1	Capacitor, Mica; 500pF, ±5%, 300V	Rec. P.W.B.	034-933
C16	x	x	x	x	x	Same as C7	Rec. P.W.B.	
C17	1	1	1	1	1	Capacitor, Mylar; 6800pF, ±5%, 100V	Rec. P.W.B.	055-103
C18	2	2	2	2	2	Capacitor, Mylar; 5600pF, ±5%, 100V	Rec. P.W.B.	055-102
C19	x	x	x	x	x	Same as C18	Rec. P.W.B.	
C20	1	1	1	1	1	Capacitor, Mylar; 7500pF, ±5%, 50V	Rec. P.W.B.	055-212
C21	1	1	1	1	1	Capacitor, Mylar; 0.01mF, ±5%, 100V	Bk. Panel	035-732
C22	1	1	1	1	1	Capacitor, Electrolytic; 500mF, -10+100%, 15V	Fr. Panel	031-297
C23	2	2	2	2	2	Capacitor, Electrolytic; 1mF, -10+75%, 25V	Bk. Panel	031-294
C24	x	x	x	x	x	Same as C23	Bk. Panel	
C25	1	1	1	1	1	Capacitor, Variable; 25pF to 250pF, 350V (Equalization)	Fr. Panel	4540314-01
C26	2	2	2	2	2	Capacitor, Variable, 50pF to 380pF, 350V (Equalization)	Fr. Panel	4540314-02
C27	x	x	x	x	x	Same as C26	Fr. Panel	
C28	1	1	1	1	1	Capacitor, Mica; 0.0025mF, ±5%, 500V	Fr. Panel	034-994
C29	1	1	1	1	1	Capacitor, 2-Section, Electrolytic; 100-500mF, 35V	Bk. Panel	4550147-02
C30	1	1	1	1	1	Capacitor, 4-Section, Electrolytic; 500-500-200-200mF, 25V	Bk. Panel	4550147-01
C31	3	-	3	-	3	Capacitor, Ceramic; 0.005 mF, -20+80%, 1400V	Pwr.Rec.	030-465
C32	x	-	x	-	x	Same as C31	Pwr.Rec.	
C33	-	-	-	-	-	(Tape Transport Assy items 48 and 49)	Motor Cap.	
C34	x	1	x	1	x	Same as C31	Bk. Panel	
C35	1	1	1	1	1	Capacitor, 36pF, ±5%, 500V (Tape Trans.)	Relay Box	034-942
C36	4	4	4	4	4	Capacitor, 0.1mF, -10+250%, 500V,	Relay Box	030-032
C37	x	x	x	x	x	Same as C36	Relay Box	
C38	x	x	x	x	x	Same as C36	Relay Box	
C39	x	x	x	x	x	Same as C36	Relay Box	
C40-42	3	3	3	3	3	Capacitor, 0.0047μF, 500V	Bk. Panel	030-008
CR1	1	1	1	1	1	Diode, Silicon; Small Signal, Switching, CD458	Rec. P.W.B.	013-599
CR2	2	2	2	2	2	Diode, Silicon; Large Signal Rectifier, CD451	Bk. Panel	013-678
CR3	x	x	x	x	x	Same as CR2	Bk. Panel	
CR4	-	-	-	-	-	Same as CR2 (Tape Transport)	Relay Box	
DS1	1	1	1	1	1	Lamp, Meter	Fr. Panel	4610081-01
DS2	1	1	1	1	1	Lamp, Record	Fr. Panel	4610082-01
F1	1	1	1	1	1	Fuse, Slo-blo; 0.75 Amperes(For 115 VAC operation, see Note 1)	Chassis	070-048
J1	3	3	3	3	3	Connector, Telephone-jack	Bk. Panel	148-142
J2	1	1	1	1	1	Connector, Telephone-jack	Fr. Panel	148-015
J3	1	1	1	1	1	Connector, Telephone-jack	Chassis	4630041-10
J4	2	2	2	2	2	Connector, Audio; 3-Socket, Female	Chassis	146-998
J5	2	2	2	2	2	Socket, Octal	Bk. Sub-panel	150-023
J6	x	x	x	x	x	Same as J4	Chassis	
J7	x	x	x	x	x	Same as J5	Bk. Panel	
J8	x	x	x	x	x	Same as J1	Bk. Panel	
J9	x	x	x	x	x	Same as J1	Bk. Panel	
J10	1	-	1	-	1	Connector, ac, 3-Pin, Male	Chassis	147-396
J11	1	1	1	1	1	Connector, Receptacle, 15-Socket, Female	Bk. Sub-Panel	146-002
J11	1	1	1	1	1	Connector, Receptacle, 8-Socket, Female	Bk. Sub-Panel	146-006

# AMPEX

## AG-600B SYSTEM ELECTRONIC COMPONENTS (2 of 3)

(On Electronics Assembly unless noted otherwise)

Ref. No.	-31	-32	-33	-34	-35	DESCRIPTION	Location	Ampex Part No.
K1	-	-	-	-	-	Relay, 4PDT (Tape Transport)	Relay Box	020-144
K2	1	1	1	1	1	Relay, SPDT	Bk. Panel	
L1	1	1	1	1	1	Inductor, Fixed; 5mH, $\pm 5\%$	Rec. P.W.B.	051-342
M1	1	1	1	1	1	Meter, VU	Fr. Panel	4140019-01
P1	-	-	-	-	-	Plug (On Tape Transport Captive Cable)		
Q1	4	4	4	4	4	Transistor, Silicon; npn, Low-noise, Low-level	Repro. P.W.B.	014-698
Q2	x	x	x	x	x	Same as Q1	Repro. P.W.B.	
Q3	4	4	4	4	4	Transistor, Silicon; npn, CD524	Repro. P.W.B.	014-652
Q4	x	x	x	x	x	Same as Q3	Repro. P.W.B.	
Q5	x	x	x	x	x	Same as Q1	Repro. P.W.B.	
Q6	1	1	1	1	1	Transistor, Silicon; npn, 800mW, CD38	Repro. P.W.B.	014-247
Q7	2	2	2	2	2	Transistor, Silicon, npn, 300mW, 2N3638	Repro. P.W.B.	014-611
Q8	x	x	x	x	x	Same as Q1	Rec. P.W.B.	
Q9	x	x	x	x	x	Same as Q3	Rec. P.W.B.	
Q10	x	x	x	x	x	Same as Q3	Rec. P.W.B.	
Q11	x	x	x	x	x	Same as Q7	Rec. P.W.B.	
Q12	1	1	1	1	1	Transistor, Silicon; npn, 800mW	Rec. P.W.B.	014-247
Q13	2	2	2	2	2	Transistor, Silicon; npn, 2N2102	Rec. P.W.B.	014-329
Q14	x	x	x	x	x	Same as Q13	Rec. P.W.B.	
Q15	1	1	1	1	1	Transistor, Silicon, npn; Power, 40250	Bk. Panel	014-587
R1	3	3	3	3	3	Resistor, Composition; 270,000 ohm, $\pm 10\%$ , 1/2W; RC20GF274K	Repro. P.W.B.	041-077
R2	3	3	3	3	3	Resistor, Composition; 82,000 ohm, $\pm 10\%$ , 1/2W; RC20GF823K	Repro. P.W.B.	041-071
R3	1	1	1	1	1	Resistor, Composition; 1,800 ohm, $\pm 10\%$ , 1/2W; RC20GF182K	Repro. P.W.B.	041-051
R4	4	4	4	4	4	Resistor, Composition; 100,000 ohm, $\pm 10\%$ , 1/2W; RC20GF104K	Repro. P.W.B.	041-072
R5	1	1	1	1	1	Resistor, Composition; 39,000 ohm, $\pm 10\%$ , 1/2W; RC20GF393K	Repro. P.W.B.	041-067
R6	4	4	4	4	4	Resistor, Composition; 220 ohm, $\pm 10\%$ , 1/2W; RC20GF221K	Repro. P.W.B.	041-040
R7	x	x	x	x	x	Same as R4	Repro. P.W.B.	
R8	2	2	2	2	2	Resistor, Composition; 2,200 ohm, $\pm 10\%$ , 1/2W; RC20GF222K	Repro. P.W.B.	041-052
R9	4	4	4	4	4	Resistor, Composition; 22,000 ohm, $\pm 10\%$ , 1/2W; RC20GF223K	Repro. P.W.B.	041-064
R10	3	3	3	3	3	Resistor, Composition; 10,000 ohm, $\pm 10\%$ , 1/2W; RC20GF103K	Repro. P.W.B.	041-060
R11	2	2	2	2	2	Resistor, Composition; 560,000 ohm, $\pm 10\%$ , 1/2W; RC20GF564K	Repro. P.W.B.	041-081
R12	x	x	x	x	x	Same as R11	Repro. P.W.B.	
R13	1	1	1	1	1	Resistor, Composition; 330,000 ohm, $\pm 10\%$ , 1/2W; RC20GF334K	Repro. P.W.B.	041-078
R14	2	2	2	2	2	Resistor, Composition; 1,000 ohm, $\pm 10\%$ , 1/2W; RC20GF102K	Repro. P.W.B.	041-048
R15	1	1	1	1	1	Resistor, Composition; 4,700 ohm, $\pm 10\%$ , 1/2W; RC20GF472K	Repro. P.W.B.	041-056
R16	2	2	2	2	2	Resistor, Composition; 15,000 ohm, $\pm 10\%$ , 1/2W; RC20GF153K	Repro. P.W.B.	041-062
R17	x	x	x	x	x	Same as R14	Repro. P.W.B.	
R18	x	x	x	x	x	Same as R8	Repro. P.W.B.	
R19	2	2	2	2	2	Resistor, Composition; 680 ohm, $\pm 10\%$ , 1/2W; RC20GF681K	Repro. P.W.B.	041-046
R20	1	1	1	1	1	Resistor, Composition; 360 ohm, $\pm 5\%$ , 1/2W; RC20GF361J	Repro. P.W.B.	041-362
R21	2	2	2	2	2	Resistor, Composition; 10 ohm, $\pm 10\%$ , 1/2W; RC20GF100K	Repro. P.W.B.	041-032
R22	x	x	x	x	x	Same as R21	Repro. P.W.B.	
R23	x	x	x	x	x	Same as R2	Rec. P.W.B.	
R24	x	x	x	x	x	Same as R2	Rec. P.W.B.	
R25	1	1	1	1	1	Resistor, Composition, 390,000 ohm, $\pm 10\%$ , 1/2W; RC20GF394K	Rec. P.W.B.	041-079
R26	3	3	3	3	3	Resistor, Composition; 33,000 ohm, $\pm 10\%$ , 1/2W; RC20GF333K	Rec. P.W.B.	041-066
R27	x	x	x	x	x	Same as R16	Rec. P.W.B.	
R28	1	1	1	1	1	Resistor, Composition; 330 ohm, 10%, 1/2W; RC20GF331K	Rec. P.W.B.	041-042
R29	x	x	x	x	x	Same as R1	Rec. P.W.B.	
R30	2	2	2	1	1	Resistor, Composition; 180,000 ohm, $\pm 5\%$ , 1/2W; RC20GF184J	Rec. P.W.B.	041-026
R31	x	x	x	-	-	Same As R30	Rec. P.W.B.	
R32	x	x	x	x	x	Same as R10	Rec. P.W.B.	
R33	x	x	x	x	x	Same as R9	Rec. P.W.B.	
R34	x	x	x	x	x	Same as R1	Rec. P.W.B.	
R35	x	x	x	x	x	Same as R26	Rec. P.W.B.	
R36	x	x	x	x	x	Same as R4	Rec. P.W.B.	
R37	x	x	x	x	x	Same as R4	Rec. P.W.B.	
R38	x	x	x	x	x	Same as R10	Rec. P.W.B.	
R39	1	1	1	1	1	Resistor, Composition; 62 ohm, $\pm 5\%$ , 1/2W; RC20GF620J	Rec. P.W.B.	041-534
R40	x	x	x	x	x	Resistor, Composition; 430 ohm, $\pm 5\%$ , 1/2W; RC20GF431J	Rec. P.W.B.	041-379
R41	x	x	x	x	x	Same as R40	Rec. P.W.B.	
R42	2	2	2	2	2	Resistor, Composition; 12 ohm, $\pm 5\%$ , 1/2W; RC20GF120J	Rec. P.W.B.	041-963
R43	x	x	x	x	x	Same as R42	Rec. P.W.B.	
R44	x	x	x	x	x	Same as R9	Rec. P.W.B.	
R45	x	x	x	x	x	Same as R9	Rec. P.W.B.	
R46	1	1	1	-	-	Resistor, Composition; 360,000 ohm, $\pm 5\%$ , 1/2W; RC20GF364J	Bk. Panel	041-590
R46	-	-	-	1	1	Resistor, Composition; 2.2 megohm, $\pm 10\%$ , 1W; RC32GF225K	Bk. Panel	041-086
R47	4	4	4	4	4	Resistor, Variable, Potentiometer, 50,000 ohm, $\pm 20\%$ , 1/4W	Bk. Panel	4520151-01
R48	x	x	x	x	x	Same as R47	Bk. Panel	

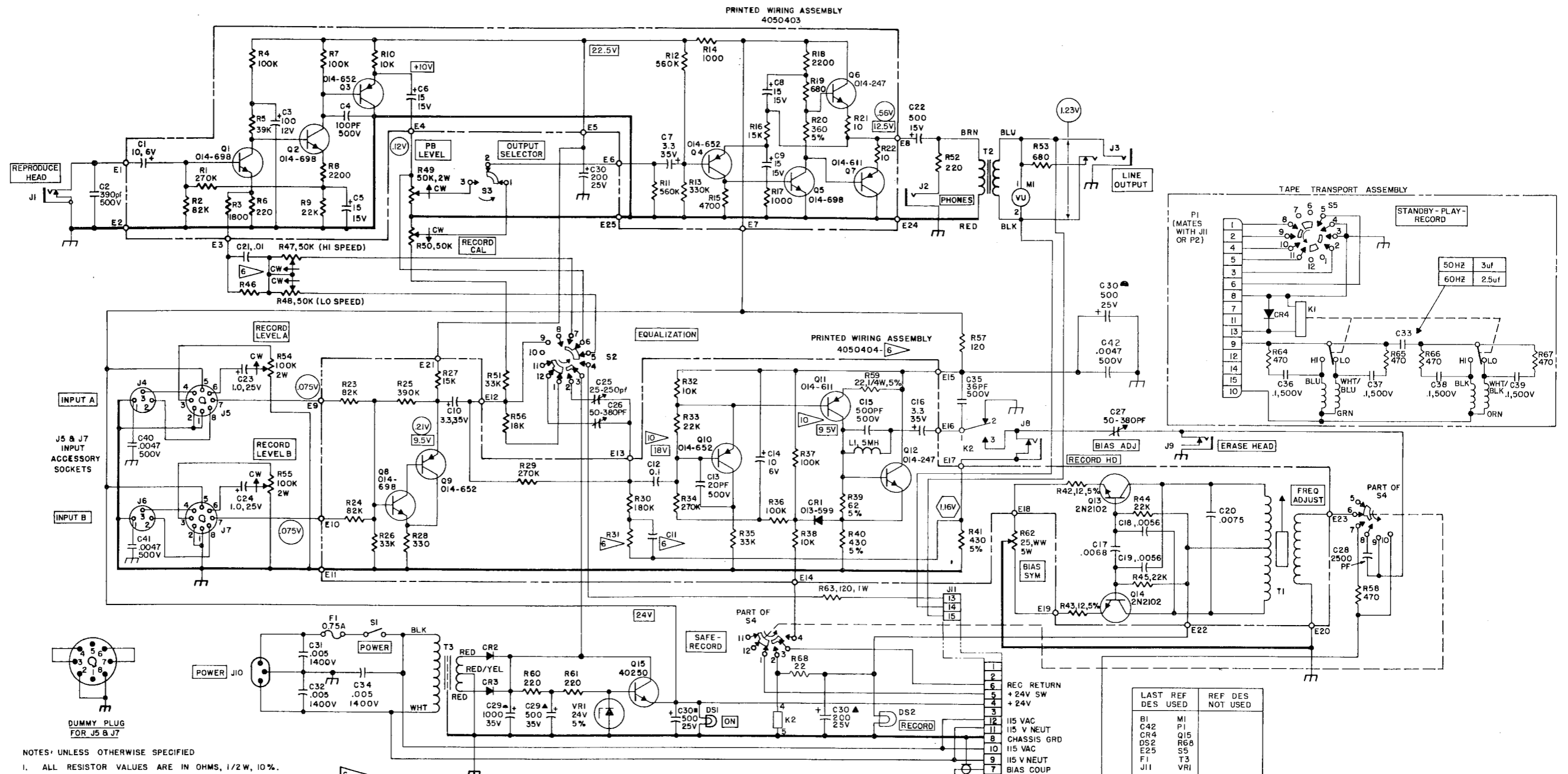
# AMPEX

AG-600B SYSTEM

ELECTRONIC COMPONENTS (3 of 3)

(On Electronics Assembly unless noted otherwise)

Ref. No.	-31	-32	-33	-34	-35	DESCRIPTION	Location	Ampex Part No.
R49	x	x	x	x	x	Same as R47	Fr. Panel	
R50	x	x	x	x	x	Same as R47	Fr. Panel	
R51	x	x	x	x	x	Same as R26	Fr. Panel	
R52	x	x	x	x	x	Same as R6	Fr. Panel	
R53	x	x	x	x	x	Same as R19	Side Panel	
R54	2	2	2	2	2	Resistor, Variable; 100,000 ohm, ±10%, 2W; AudioTaper	Fr. Panel	044-015
R55	x	x	x	x	x	Same as R54	Fr. Panel	
R56	1	1	1	1	1	Resistor, Fixed, Composition; 18,000 ohm, ±10%, 1/2W; RC20GF183K	Fr. Panel	041-063
R57	1	1	1	1	1	Resistor, Fixed, Composition; 120 ohm, ±10%, 1/2W; RC20GF121K	Bk. Panel	041-039
R58	1	1	1	1	1	Resistor, Fixed, Composition; 470 ohm, ±10%, 1/2W; RC20GF471K	Fr. Panel	041-044
R59	1	1	1	1	1	Resistor, Fixed, Composition, 22 ohm, ±5%, 1/4W	Rec. PWB	041-418
R60	x	x	x	x	x	Same as R6	Bk. Panel	
R61	x	x	x	x	x	Same as R6	Bk. Panel	
R62	1	1	1	1	1	Resistor, Variable, Potentiometer, Wirewound; 25 ohm, ±20%, 2W; Linear	Bk. Panel	4520149-10
R63	1	-	1	-	1	Resistor, Fixed, Composition; 120 ohm, ±10%, 1W	Fr. Panel	041-578
S1	1	1	1	1	1	Switch, Toggle	Fr. Panel	120-999
S2	2	2	2	2	2	Switch, Selector	Fr. Panel	4620196-02
S3	1	1	1	1	1	Switch, Selector	Fr. Panel	122-323
S4	x	x	x	x	x	Same as S2	Fr. Panel	
S5	-	-	-	-	-	Play-Record Switch (Tape Transport)	Fr. Panel	4620197-01
S6	-	-	1	-	1	Switch, Slide, DPDT	Bk. Panel	120-510
T1	1	1	1	1	1	Coil, Oscillator	Rec. P.W. B.	4580196-01
T2	1	1	1	1	1	Transformer, Output	Side Panel	4580193-01
T3	1	1	-	1	-	Transformer, Power	Bk. Panel	4580194-02
T3	-	-	1	-	1	Transformer, Power	Bk. Panel	4580195-01
R68	1	1	1	1	1	Resistor, Composition, 22 ohm, ±10%, 1/2W	Fr. Panel	041-033
VR1	1	1	1	1	1	Diode, Silicon, Zener; 24V, ±5%, 2W	Bk. Panel	013-712
<u>MISCELLANEOUS COMPONENTS OF ELECTRONICS ASSY</u>								
	14	14	14	14	14	Socket, Transistor	Gen. Use	150-103
	1		1		1	Fuse Post		085-001
	1	1	1	1	1	Shield, Record P. W. B.		4600054-01
	1	1	1	1	1	Shield, Input-Amplifier		4600057-01
	1	1	1	1	1	Shield, Record Head		4600058-01
	1	1	1	1	1	Shield, Head-Jack Reproduce		4600059-01
	-	-	1	-	1	Shield, Transformer		4600056-01
	1	1	1	1	1	Jewel, Pilot-Lamp, Red	Fr. Panel	4110258-02
	2	2	2	2	2	Knob, Skirted Pointer	Fr. Panel	6000005-20
	3	3	3	3	3	Knob, Pointer	Fr. Panel	6000009-20
	2	2	2	2	2	Dummy Plug	Fr. Panel	4030034-30
	1	1	1	1	1	Socket, Relay	Relay Box	150-992
<div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"> <p style="text-align: center; margin: 0;">NOTES</p> <p style="margin: 5px 0;">1) For 230 VAC operation, change F1 to 0.5 ampere fuse provided in polyethylene bag.</p> <p style="margin: 5px 0;">2) For location of components on the circuit boards, see Figures 7-22 and 7-23.</p> </div>								



- NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL RESISTOR VALUES ARE IN OHMS, 1/2W, 10%.
  2. ALL CAPACITOR VALUES ARE IN MICROFARADS, 100V.
  3. ALL DIODES ARE TYPE O13-67B.
  4. ALL SWITCHES ARE IN COW OR OFF POSITION.
  5. FOR FIELD SERVICE ONLY:
    - Q1, Q2, Q5, Q8 MAY BE 2N3565 OR 2N3117.
    - Q3, Q4, Q9, Q10 MAY BE 2N3906.
    - Q7, Q11 MAY BE 2N3638.
    - Q6 & Q12 MAY BE 2N2219.

FOR NAB EQUALIZATION		
REF DES	DESCRIPTION	ASSEMBLY
R31	180K	4050404
R46	360K, 5%	4050251
C11	.018	4050404

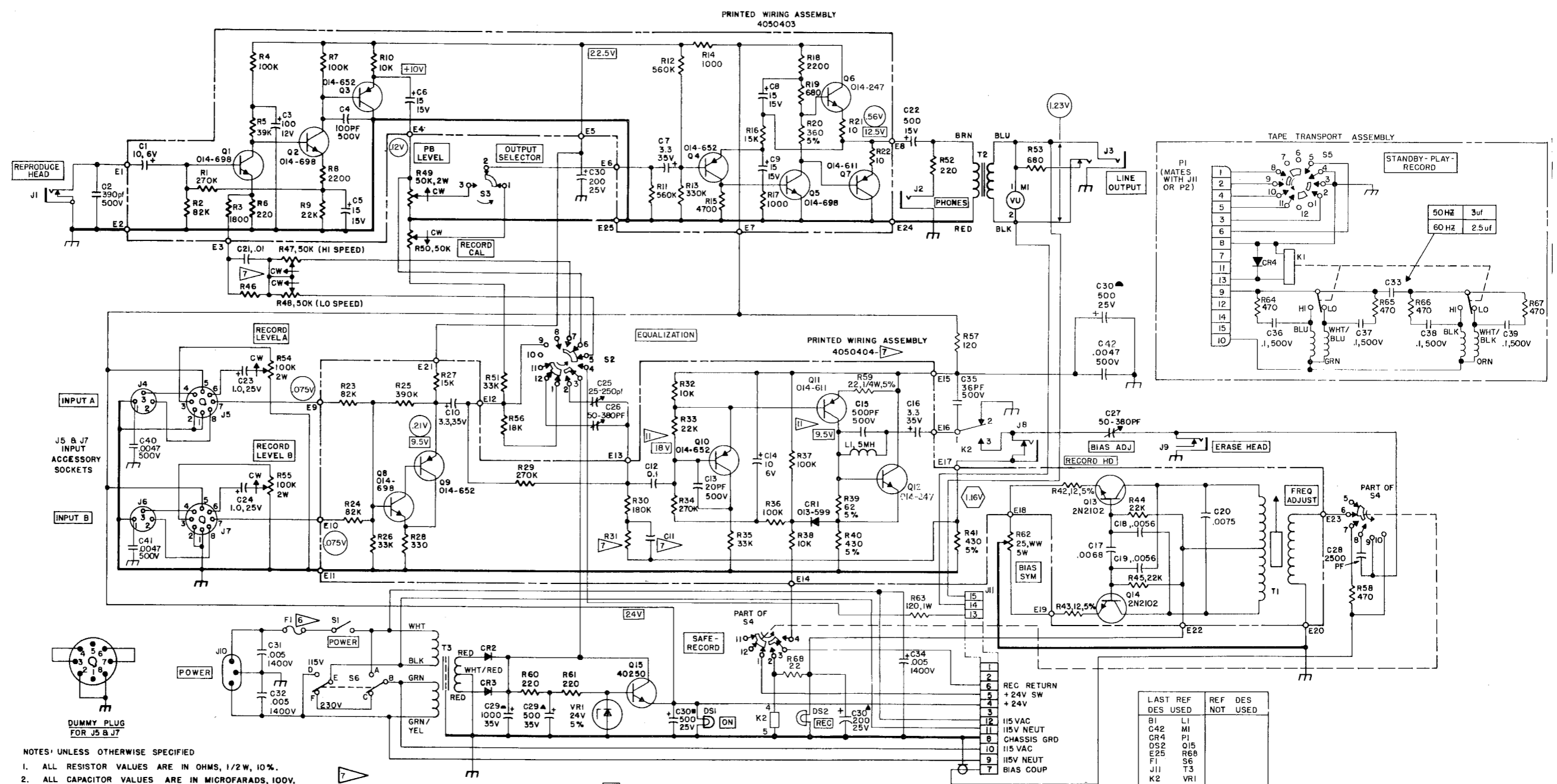
FOR CCIR EQUALIZATION		
REF DES	DESCRIPTION	ASSEMBLY
R31	0	4050404
R46	2.2meg	4050251
C11	OPEN	4050404

7.  $\square$  INDICATES VOLTS D.C. MEASURED WITH A 20,000 $\Omega$ /V METER.
  8.  $\otimes$  INDICATES VOLTS R.M.S. MEASURED WITH A HIGH IMPEDANCE VTVM AT OPERATING LEVEL OF 1000HZ.
  9.  $\otimes$  INDICATES VOLTS R.M.S. MEASURED WITH A HIGH IMPEDANCE VTVM AT BIAS FREQUENCY WITH ELECTRONICS IN RECORD MODE.
- $\triangle$  MEASURED WITH ELECTRONICS IN RECORD MODE.

LAST DES	REF USED	REF DES NOT USED
B1	M1	
C42	P1	
CR4	Q15	
DS2	R68	
E25	S5	
F1	T3	
J11	VRI	
L1	K2	

Figure 7-18. Schematic Diagram, Master Electronics (Domestic)





- NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL RESISTOR VALUES ARE IN OHMS, 1/2W, 10%.
  2. ALL CAPACITOR VALUES ARE IN MICROFARADS, 100V.
  3. ALL DIODES ARE TYPE Q13-678.
  4. ALL SWITCHES ARE IN CCW OR OFF POSITION.
  5. FOR FIELD SERVICE ONLY:  
 Q1, Q2, Q3, Q8 MAY BE 2N3565 OR 2N3117.  
 Q3, Q4, Q9, Q10 MAY BE 2N3906.  
 Q7, Q11 MAY BE 2N3638.  
 Q6 & Q12 MAY BE 2N2219.
6. FOR 115V LINE USE 0.75 AMP FUSE.  
 FOR 230V LINE USE 0.5 AMP FUSE.

FOR NAB EQUALIZATION		
REF DES	DESCRIPTION	ASSEMBLY
R31	180K	4050404
R46	360K, 5%	4050405
C11	.018	4050404

FOR CCIR EQUALIZATION		
REF DES	DESCRIPTION	ASSEMBLY
R31	0	4050404
R46	2.2 meg	4050405
C11	OPEN	4050404

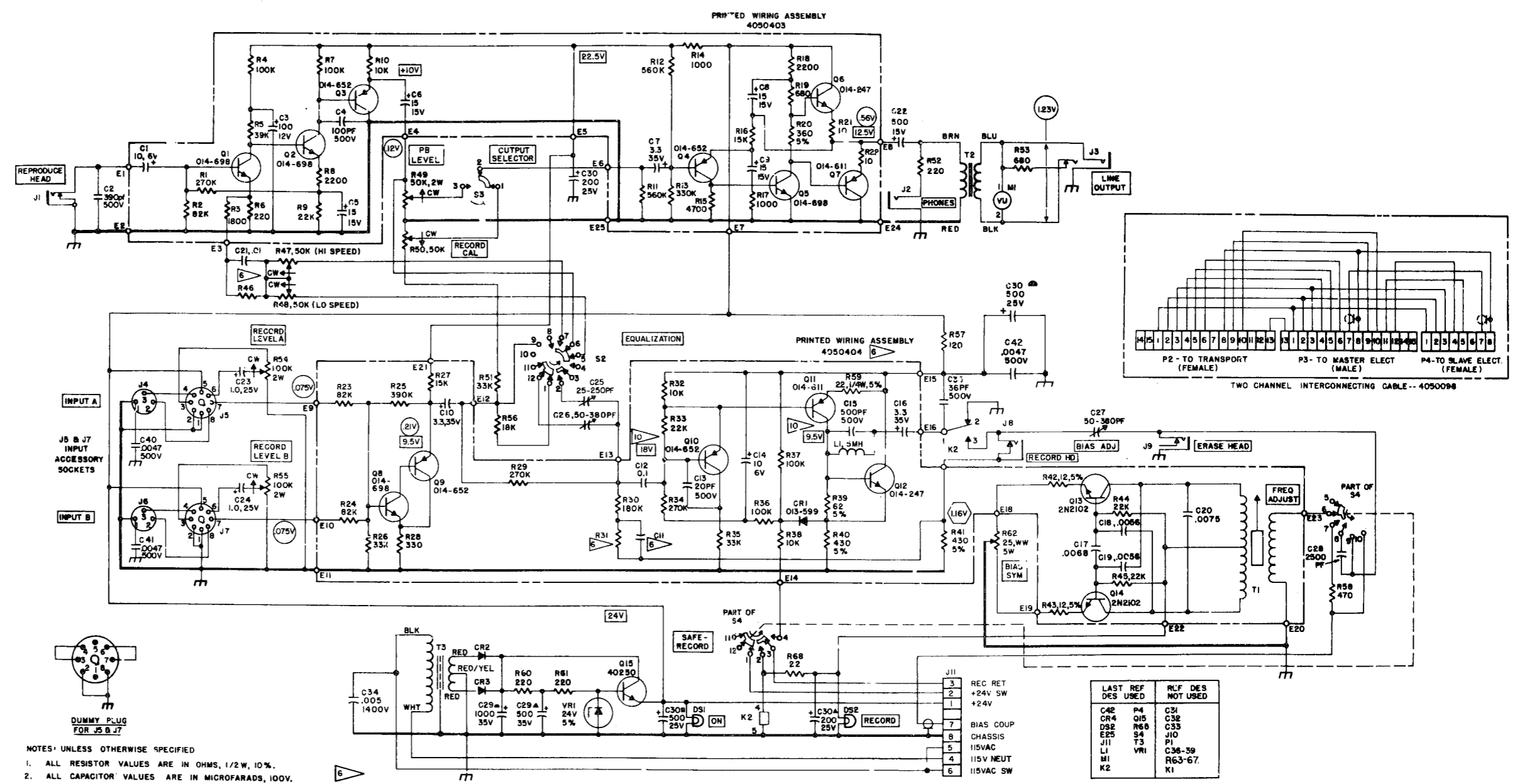
8.  $\otimes\otimes$  INDICATES VOLTS D.C. MEASURED WITH A 20,000Ω / V METER.
  9.  $\otimes$  INDICATES VOLTS R.M.S. MEASURED WITH A HIGH IMPEDANCE VTVM AT OPERATING LEVEL OF 1000 HZ.
  10.  $\otimes\otimes$  INDICATES VOLTS R.M.S. MEASURED WITH A HIGH IMPEDANCE VTVM AT BIAS FREQUENCY WITH ELECTRONICS IN RECORD MODE.
11. MEASURED WITH ELECTRONICS IN RECORD MODE.

LAST REF DES USED	REF DES NOT USED
B1 LI	
C42 MI	
CR4 PI	
DS2 Q15	
E25 R68	
F1 S6	
J11 T3	
K2 VRI	

Figure 7-19. Schematic Diagram, Master Electronics (International)

TERCONNECTING  
ent)

Ampex  
Part No.  
4050098-03  
144-008  
143-823  
145-446



- NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL RESISTOR VALUES ARE IN OHMS, 1/2W, 10%.
  2. ALL CAPACITOR VALUES ARE IN MICROFARADS, 100V.
  3. ALL DIODES ARE TYPE O13-67B.
  4. ALL SWITCHES ARE IN CCW OR OFF POSITION.
  5. FOR FIELD SERVICE ONLY:
    - Q1, Q2, Q5, Q8 MAY BE 2N3565 OR 2N3117.
    - Q3, Q4, Q9, Q10 MAY BE 2N3906.
    - Q7, Q11 MAY BE 2N3638.
    - Q6 & Q12 MAY BE 2N2219.

FOR NAB EQUALIZATION		
REF DES	DESCRIPTION	ASSEMBLY
R31	180K	4050404
R46	360K, 5%	4050251
C11	.01B	4050404

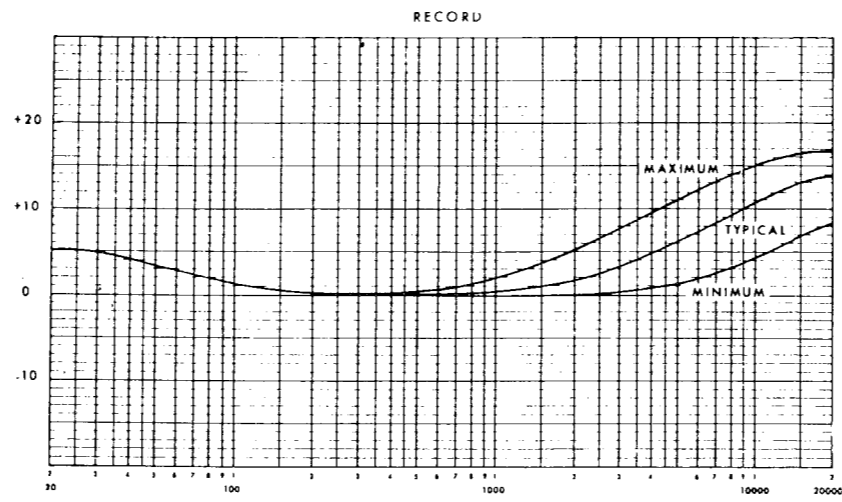
  

FOR CCR EQUALIZATION		
REF DES	DESCRIPTION	ASSEMBLY
R31	0	4050404
R46	2.2 meg	4050251
C11	OPEN	4050404

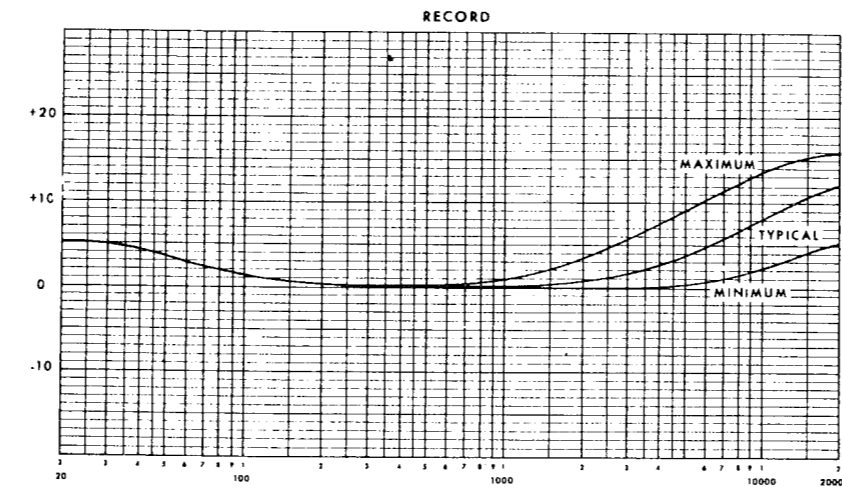
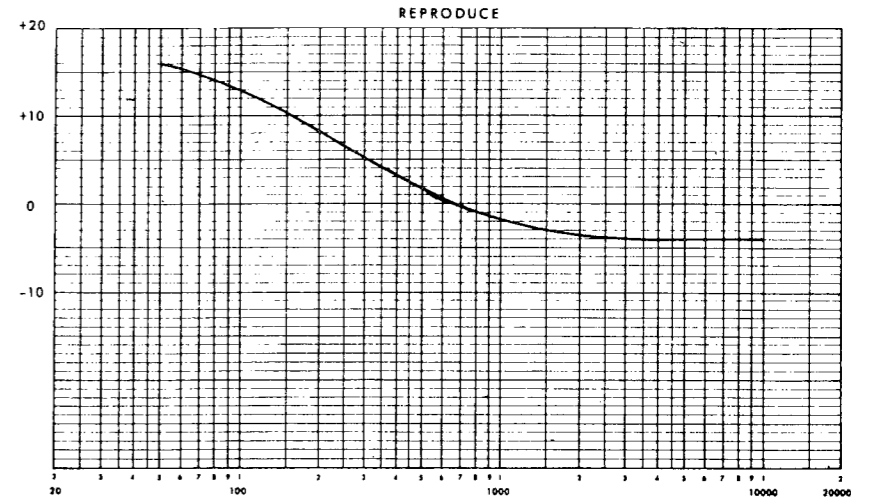
7. (XX) INDICATES VOLTS D.C. MEASURED WITH A 20,000Ω/V METER.
  8. (X) INDICATES VOLTS R.M.S. MEASURED WITH A HIGH IMPEDANCE VTVM AT OPERATING LEVEL OF 1 DO HZ.
  9. (X) INDICATES VOLTS R.M.S. MEASURED WITH A HIGH IMPEDANCE VTVM AT BIAS FREQUENCY WITH ELECTRONICS IN RECORD MODE.
10. MEASURED WITH ELECTRONICS IN RECORD MODE.

LAST DES USED	REF DES	LAST DES USED	REF DES
C42	P4	C31	
CR4	Q15	C32	
DS2	R66	C33	
E25	S4	J10	
J11	T3	P1	
L1	VR1	C36-39	
M1		R63-67	
K2		K1	

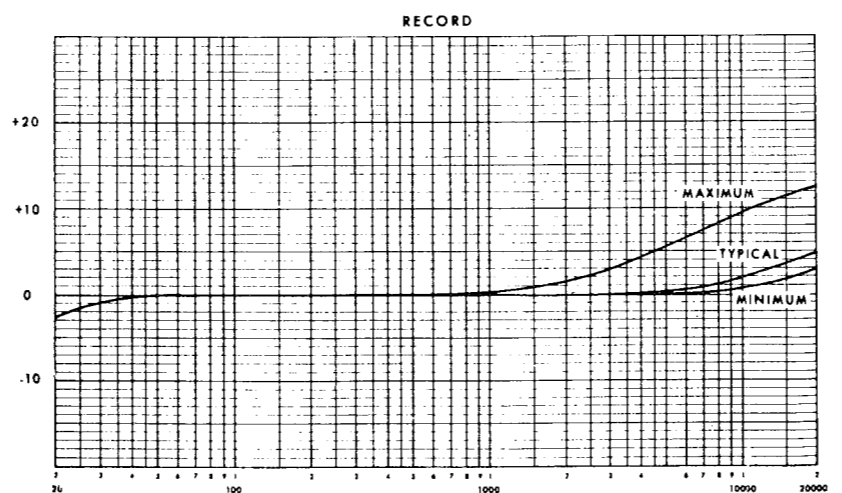
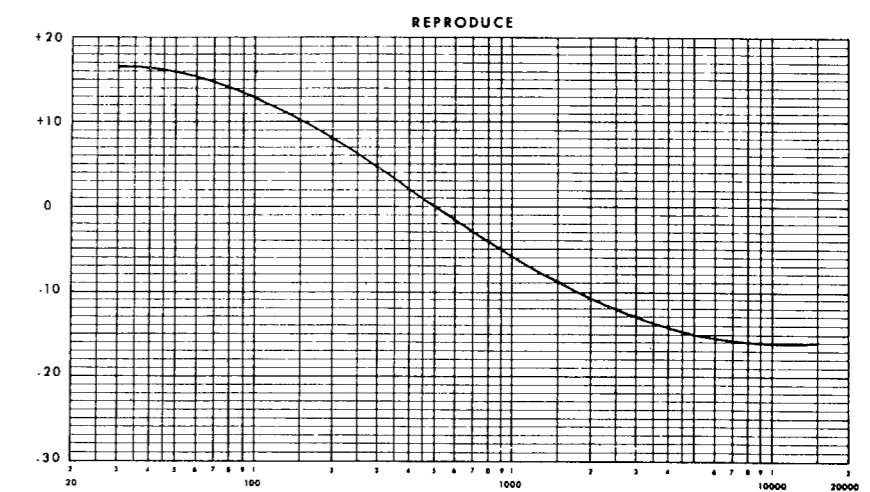
Figure 7-20. Schematic Diagram, Slave Electronics Dwg. No. 4840361



3 1/2 ips (200 usec)



7 1/2 ips NAB



7 1/2 ips CCIR

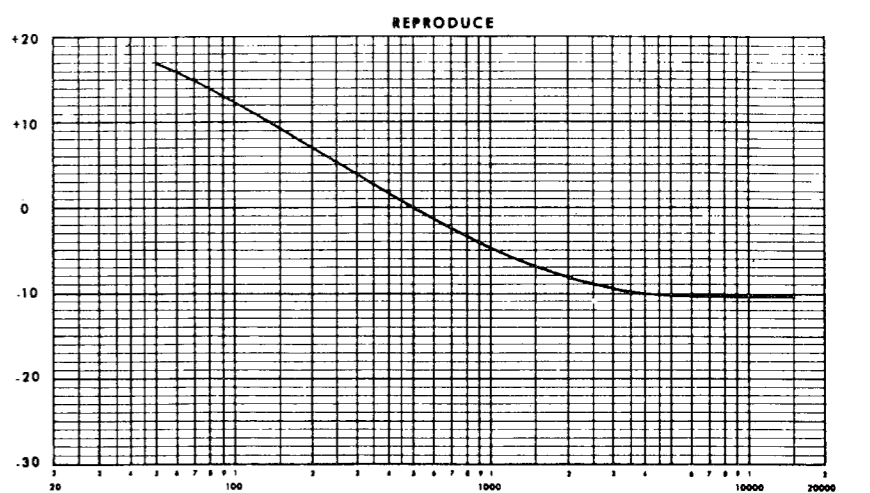


Figure 7-21. Response Curves

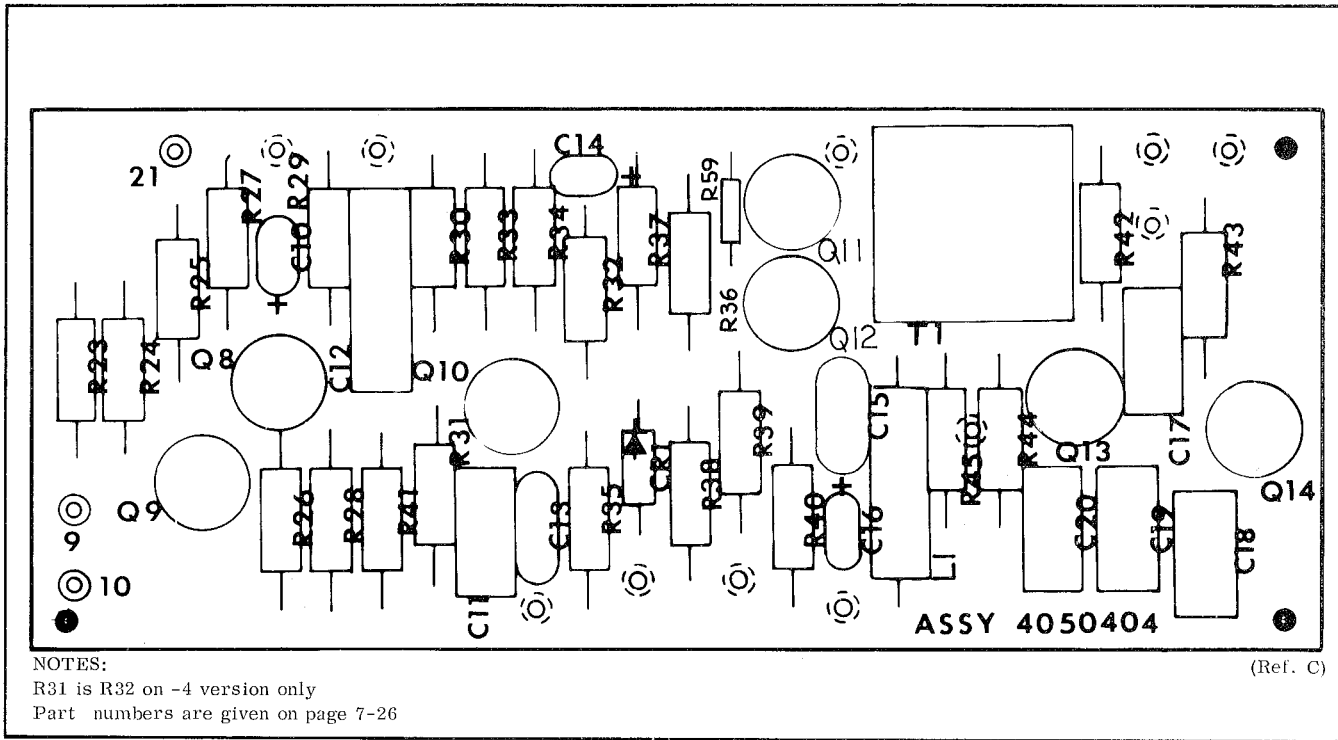


Figure 7-22. Record Printed Wiring Board

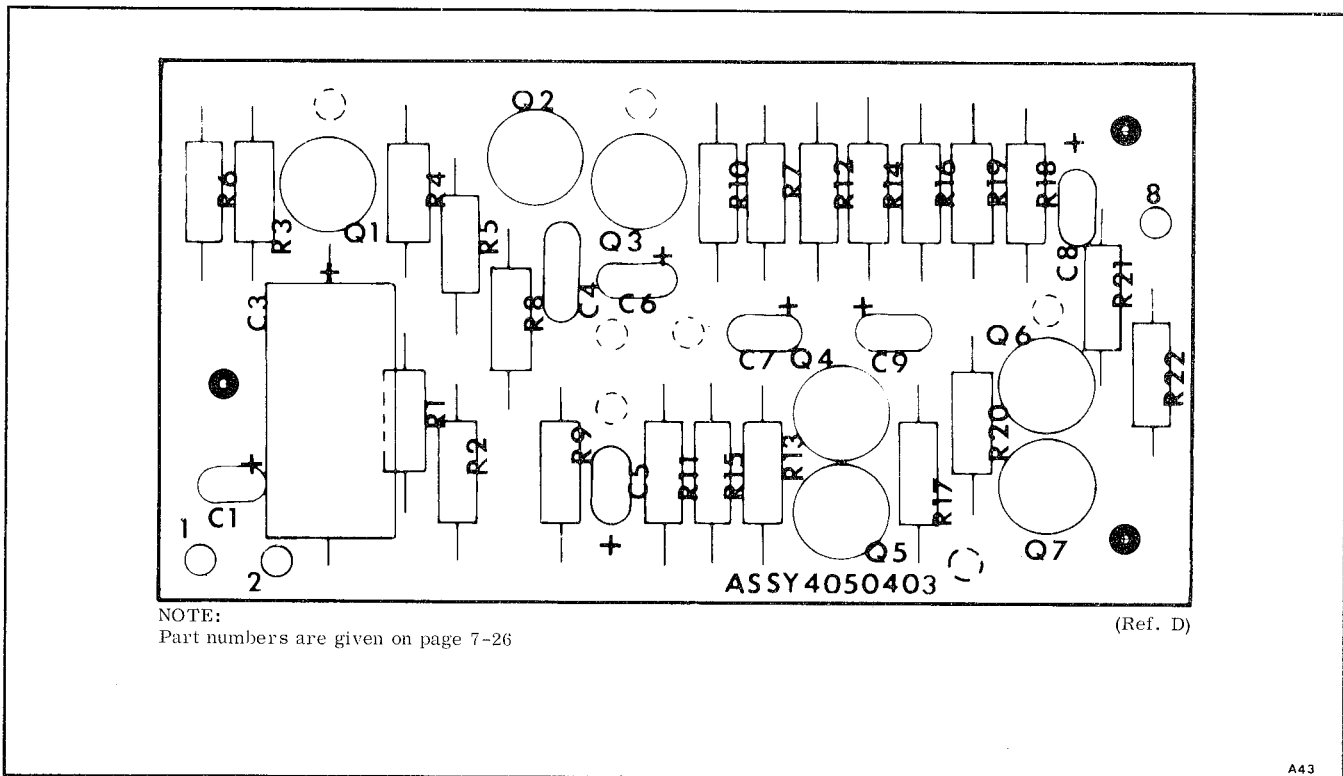


Figure 7-23. Reproduce Printed Wiring Board