

PARTS LISTS AND DRAWINGS

6.1 INTRODUCTION

The AG-440B/445B parts lists and drawings in this section are in the following order, with tab pages for easy reference:

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- b. Heads

- c. Transport
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- e. Electronics
- f. Accessories and Miscellaneous

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TYPE AND DASH NUMBER												MODEL AG-440B													
-01	7 1/2-15, 60 Hz, UFT	-02	7 1/2-15, 50 Hz, UFT	-03	7 1/2-15, 60 Hz, CFT	-04	7 1/2-15, 50 Hz, CFT	-05	7 1/2-15, 60 Hz, PFT	-06	7 1/2-15, 50 Hz, PFT	-07	7 1/2-15, 60 Hz, UHT	-08	7 1/2-15, 50 Hz, UHT	-09	7 1/2-15, 60 Hz, CHT	-10	7 1/2-15, 50 Hz, CHT	-11	7 1/2-15, 60 Hz, PHT	-12	7 1/2-15, 50 Hz, PHT	TAPE RECORDER/REPRODUCER 7-1/2 - 15 ips, Single Channel Amplex 4010131-01/12 (Ref. E)	
Qty Req'd Per Dash Number												DESCRIPTION		Ampex Part No.											
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Console Assy	4020084-06					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Electronics Assy (without equalizers)	4020260-10					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Equalizer Assy, record, 7 1/2-15 NAB	4020269-01					
																			Equalizer Assy, record, 3 3/4-7 1/2 NAB	4020269-02					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Equalizer Assy, reproduce NAB	4020270-01					
1		1		1		1		1		1		1		1		1		1	Transport Assy, 7 1/2-15, 60 Hz	4020271-13					
	1		1		1		1		1		1		1		1		1		Transport Assy, 7 1/2-15, 50 Hz	4020271-14					
1	1	1	1	1	1	1													Head Assy, full track	4020272-01					
											1	1	1	1	1	1	1	1	Head Assy, 2-track	4020272-02					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Power Supply Assy	4020274-03					
			2	2													2	2	Knob Assy, editing	4030145-10					
2	2																		Knob Assy, reel	4040492-10					
				1	1													1	1	Panel Assy, backing	4040945-01				
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Idler Assy, scrape-flutter	4040955-01					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cable Assy, power	4050416-02					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cable Assy, electronics interconnect	4050442-01					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Mounting Box Assy, head cable	4050447-06					
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	Knob, reel holddown	4100137-10					
				1	1													1	1	Case Assy, transport	4150329-01				
				1	1													1	1	Case Assy, single & dual elect. 7"	4150339-02				
				1	1													1	1	Panel, front facing (blank)	4290620-01				
		1	1														1	1	Shield, resistor (control box)	4290643-01					
1	1			1	1	1	1										1	1	Shield, resistor (control box)	4290659-01					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Transformer, input bridging	4580200-01					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Shield, P/Bhead connector	4600008-10					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reel Assy, tape	4690003-10					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Manual, instruction	4890301					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Nutdriver, modified	4930504-01					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Connector, plug, female, 3-pin	144-003					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Connector, plug, male, 3-pin	145-009					

TYPE* AND DASH NUMBER												MODEL AG-440B	
-13	-14	-15	-16	-17	-18	-19	-20	-21	-22	-23	-24	TAPE RECORDER/REPRODUCER 3-3/4 - 7-1/2 ips, Single Channel Amplex 4010131-13/24 (Ref. E)	
3 3/4-7 1/2, 60 Hz UFT	3 3/4-7 1/2, 50 Hz UFT	3 3/4-7 1/2, 60 Hz CFT	3 3/4-7 1/2, 50 Hz CFT	3 3/4-7 1/2, 60 Hz PFT	3 3/4-7 1/2, 50 Hz PFT	3 3/4-7 1/2, 60 Hz UHT	3 3/4-7 1/2, 50 Hz UHT	3 3/4-7 1/2, 60 Hz CHT	3 3/4-7 1/2, 50 Hz CHT	3 3/4-7 1/2, 60 Hz PHT	3 3/4-7 1/2, 50 Hz PHT	*CODE: C-Cased FT-Full Track HT-Half Track P-Portable U-Uncased	
Qty Req'd Per Dash Number												DESCRIPTION	Amplex Part No.
1	1	1	1	1	1	1	1	1	1	1	1	Console Assy	4020084-06
1	1	1	1	1	1	1	1	1	1	1	1	Electronics Assy (without equalizers)	4020260-10
												Equalizer Assy, record, 7 1/2-15 NAB	4020269-01
1	1	1	1	1	1	1	1	1	1	1	1	Equalizer Assy, record, 3 3/4-7 1/2 NAB	4020269-02
1	1	1	1	1	1	1	1	1	1	1	1	Equalizer Assy, reproduce NAB	4020270-01
1		1	1	1	1	1	1	1	1	1	1	Transport Assy, 3 3/4-7 1/2, 60 Hz	4020271-15
	1	1	1	1	1	1	1	1	1	1	1	Transport Assy, 3 3/4-7 1/2, 50 Hz	4020271-16
1	1	1	1	1	1							Head Assy, full track	4020272-01
						1	1	1	1	1	1	Head Assy, 2-track	4020272-02
1	1	1	1	1	1	1	1	1	1	1	1	Power Supply Assy	4020274-03
		2	2					2	2			Knob Assy, editing	4030145-10
2	2			2	2	2	2			2	2	Knob Assy, reel	4040492-10
				1	1					1	1	Panel Assy, backing	4040945-01
1	1	1	1	1	1	1	1	1	1	1	1	Idler Assy, scrape-flutter	4040955-01
1	1	1	1	1	1	1	1	1	1	1	1	Cable Assy, power	4050416-02
1	1	1	1	1	1	1	1	1	1	1	1	Cable Assy, electronics interconnect	4050442-01
1	1	1	1	1	1	1	1	1	1	1	1	Mounting Box Assy, head cable	4050447-06
2	2	2	2	2	2	2	2	2	2	2	2	Knob, reel holddown	4100137-10
				1	1					1	1	Case Assy, transport	4150329-01
				1	1					1	1	Case Assy, single & dual elect. 7"	4150330-02
				1	1					1	1	Panel, front facing (blank)	4290620-01
		1	1					1	1			Shield, resistor (control box)	4290643-01
1	1			1	1	1	1			1	1	Shield, resistor (control box)	4290659-01
1	1	1	1	1	1	1	1	1	1	1	1	Transformer, input bridging	4580200-01
1	1	1	1	1	1	1	1	1	1	1	1	Shield, P/B head connector	4600008-10
1	1	1	1	1	1	1	1	1	1	1	1	Reel Assy, tape	4690003-10
1	1	1	1	1	1	1	1	1	1	1	1	Manual, instruction	4890301
1	1	1	1	1	1	1	1	1	1	1	1	Nutdriver, modified	4930504-01
1	1	1	1	1	1	1	1	1	1	1	1	Connector, plug, female, 3-pin	144-003
1	1	1	1	1	1	1	1	1	1	1	1	Connector, plug, male, 3-pin	145-009

MODEL AG-440B, DUAL-CHANNEL
TAPE RECORDER/REPRODUCER

Ampex 4010132 (Ref. D)

(Page 2 of 2)

CODE: C-Cased
P-Portable
U-Uncased

TYPE* AND DASH NUMBER Four-Position Heads													
-13	-14	-15	-16	-17	-18	-19	-20	-21	-22	-23	-24		
7½-15 60 Hz U	7½-15 50 Hz U	7½-15 60 Hz C	7½-15 50 Hz C	7½-15 60 Hz P	7½-15 50 Hz P	3 3/4-7½ 60 Hz U	3 3/4-7½ 50 Hz U	3 3/4-7½ 60 Hz C	3 3/4-7½ 50 Hz C	3 3/4-7½ 60 Hz P	3 3/4-7½ 50 Hz P		
Quantity Required Per Dash Number											DESCRIPTION	Ampex Part No.	
		1	1					1	1			Console Assy	4020084-07
2	2	2	2	2	2	2	2	2	2	2	2	Electronics Assy, without Equalizers	4020260-10
2	2	2	2	2	2							Equalizer Assy, Record 7½-15 NAB	4020269-01
						2	2	2	2	2	2	Equalizer Assy, Record 3 3/4-7½ NAB	4020269-02
2	2	2	2	2	2	2	2	2	2	2	2	Equalizer Assy, Reproduce NAB	4020270-01
1		1	1	1								Transport Assy, 7½-15 60 Hz	4020271-09
	1		1		1			1		1		Transport Assy, 7½-15 50 Hz	4020271-10
						1		1		1		Transport Assy, 3 3/4-7½ 60 Hz	4020271-11
							1		1		1	Transport Assy, 3 3/4-7½, 50 Hz	4020271-12
1	1	1	1	1	1	1	1	1	1	1	1	Head Assembly, 4-Position	4020272-03
1	1	1	1	1	1	1	1	1	1	1	1	Power Supply Assy	4020274-03
		2	2					2	2			Knob Assy, Editing	4030145-10
2	2			2	2	2	2			2	2	Knob Assy, Reel	4040492-10
1	1	1	1	1	1	1	1	1	1	1	1	Scrape Flutter Idler Assy	4040955-01
1	1	1	1	1	1	1	1	1	1	1	1	Cable Assy, Power	4050416-02
2	2	2	2	2	2	2	2	2	2	2	2	Cable Assy, Electronics Interconnect	4050442-01
1	1	1	1	1	1	1	1	1	1	1	1	Box Assy, Head Cable Mounting	4050447-10
2	2	2	2	2	2	2	2	2	2	2	2	Knob, Reel Holddown	4100137-10
				1	1					1	1	Case Assy, Transport	4150329-01
				1	1					1	1	Case Assy, Single & Dual Elect. 7"	4150330-02
		1	1					1	1			Shield, Resistor (Control Box)	4290643-01
1	1			1	1	1	1			1	1	Shield, Resistor (Control Box, Uncased & Portable)	4290659-01
2	2	2	2	2	2	2	2	2	2	2	2	Transformer, Input Bridging	4580200-01
2	2	2	2	2	2	2	2	2	2	2	2	Shield, P/B Head Connector	4600008-10
1	1	1	1	1	1	1	1	1	1	1	1	Reel Assy	4690003-10
1	1	1	1	1	1	1	1	1	1	1	1	Instruction Manual	4890301
1	1	1	1	1	1	1	1	1	1	1	1	Nutdriver, Modified	4930504-01
2	2	2	2	2	2	2	2	2	2	2	2	Connector, Plug, female, 3-pin	144-003
2	2	2	2	2	2	2	2	2	2	2	2	Connector, Plug, male, 3-pin	145-009

TYPE* AND DASH NO.						MODEL AG-440B FOUR-CHANNEL TAPE RECORDER/REPRODUCER Ampex 4010134 (Ref. E)	
-01	7½-15 60 Hz, U					*CODE: C-Cased	
-02	7½-15 50 Hz, U					P-Portable	
-03	7½-15 60 Hz, C					U-Uncased	
-04	7½-15 50 Hz, C						
-05	7½-15 60 Hz, P						
-06	7½-15 50 Hz, P						
Qty Req'd Per Dash Number						DESCRIPTION	Ampex Part No.
		1	1			Console Assy	4020084-09
4	4	4	4	4	4	Electronics Assy, without Equalizers	4020260-11
4	4	4	4	4	4	Equalizer Assy, Record 7½-15 NAB	4020269-01
4	4	4	4	4	4	Equalizer Assy, Reproduce NAB	4020270-01
1	1	1	1	1	1	Transport Assy, 7½-15 60 Hz	4020271-09
1	1	1	1	1	1	Transport Assy, 7½-15 50 Hz	4020271-10
1	1	1	1	1	1	Head Assembly, 4-Track	4020273-05
1	1	1	1	1	1	Power Supply Assy	4020274-03
		2	2			Knob Assy, Editing	4030145-10
2	2			2	2	Knob Assy, Reel	4040492-10
1	1	1	1	1	1	Scrape Flutter Idler Assy	4040955-01
1	1	1	1	1	1	Cable Assy, Power	4050416-02
4	4	4	4	4	4	Cable Assy, Electronics Interconnect	4050442-01
1	1	1	1	1	1	Box Assy, Head Cable Mounting	4050447-09
						Case Assy, Transport	4150329-01
						Case Assy, 3 & 4 Electronics (14")	4150331-01
		1	1			Shield, Resistor (Control box)	4290643-01
1	1			1	1	Shield, Resistor (Control box, uncased and portable)	4290659-01
4	4	4	4	4	4	Transformer, Input Bridging	4580200-01
4	4	4	4	4	4	Shield, P/B Head, Connector	4600008-10
4	4	4	4	4	4	Connector, Plug, female, 3-soc.	144-003
4	4	4	4	4	4	Connector, Plug, male, 3-pin	145-009
1	1	1	1	1	1	Nutdriver, Modified	4930504-01

TYPE* AND DASH NUMBER															
-01	7-1/2-15	60 Hz	UFT												
-02	7-1/2-15	50 Hz	UFT												
-03	7-1/2-15	60 Hz	CFT												
-04	7-1/2-15	50 Hz	CFT												
-07	7-1/2-15	60 Hz	UHT												
-08	7-1/2-15	50 Hz	UHT												
-09	7-1/2-15	60 Hz	CHT												
-10	7-1/2-15	50 Hz	CHT												
-13	3-3/4-7-1/2	60 Hz	UFT												
-14	3-3/4-7-1/2	50 Hz	UFT												
-15	3-3/4-7-1/2	60 Hz	CFT												
-16	3-3/4-7-1/2	50 Hz	CFT												
-19	3-3/4-7-1/2	60 Hz	UHT												
-20	3-3/4-7-1/2	50 Hz	UHT												
-21	3-3/4-7-1/2	60 Hz	CHT												
-22	3-3/4-7-1/2	50 Hz	CHT												

MODEL AG-445B
TAPE REPRODUCER, ONE-CHANNEL
Ampex 4010141 (Ref. D)

*CODE: C-Cased
FT-Full Track
HT-Half Track
P-Portable
U-Uncased

Qty Req'd Per Dash Number															DESCRIPTION	Ampex Part No.	
		1		1												Console Assy	4020084-06
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reproduce Module	4020150-03
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Equalizer Assy, reproduce NAB	4020270-01
1		1		1												Transport Assy, 7 1/2-15, 60 Hz	4020271-13
		1		1												Transport Assy, 7 1/2-15, 50 Hz	4020271-14
								1		1						Transport Assy, 3 3/4-7 1/2, 60 Hz	4020271-15
									1							Transport Assy, 3 3/4-7 1/2, 50 Hz	4020271-16
1	1	1	1					1	1	1						Head Assy, full track	4020272-04
				1	1	1	1						1	1	1	Head Assy, 2-track	4020272-05
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Power Supply Assy	4020274-04
		2		2						2	2					Knob Assy, editing	4030145-10
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Tray Assy, reproducer	4040346-02
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Panel Assy, facing	4040347-01
2	2			2	2					2	2					Knob Assy, reel	4040492-10
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Idler Assy, scrape-flutter	4040955-01
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cable Assy, power	4050416-02
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Box Assy, head cable mounting	4050448-06
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	Knob, reel holddown	4100137-10
		1		1						1	1					Shield, resistor (control box)	4290643-01
1	1			1	1			1	1			1	1			Shield, resistor (control box)	4290659-01
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Reel Assy, tape	4690003-10
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Manual, Instruction	4890301
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Shield, P/B head connector	4600008-10
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Nutdriver, modified	4930504-01
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Connector, plug, female, 3-pin	144-003

TYPE* AND DASH NUMBER										AG-445B, TWO-CHANNEL (Two and Four Track) TAPE REPRODUCER Ampex 4010142 (Ref. C)																													
-01	7 1/2	-15	60 Hz	U	-02	7 1/2	-15	50 Hz	U	-03	7 1/2	-15	60 Hz	C	-04	7 1/2	-15	50 Hz	C	-07	3 3/4	-7 1/2	60 Hz		-08	3 3/4	-7 1/2	50 Hz		-09	3 3/4	-7 1/2	60 Hz		-10	3 3/4	-7 1/2	50 Hz	
* CODE: C-Cased U-Uncased																																							
Qty Req'd Per Dash Number										DESCRIPTION	Ampex Part No.																												
2	2	2	2	2	2	2	2	2	2	Console Assy	4020084-06																												
2	2	2	2	2	2	2	2	2	2	Reproduce Module	4020150-03																												
1	1	1	1	1	1	1	1	1	1	Equalizer Assy, Reproduce NAB	4020270-01																												
	1									Transport Assy, 7 1/2-15, 60 Hz	4020271-09																												
		1								Transport Assy, 7 1/2-15, 50 Hz	4020271-10																												
			1							Transport Assy, 3 3/4-7 1/2, 60 Hz	4020271-11																												
				1						Transport Assy, 3 3/4-7 1/2, 50 Hz	4020271-12																												
1	1	1	1	1	1	1	1	1	1	Head Assy, 2-Ch., 2 & 4 Track	4020272-06																												
1	1	1	1	1	1	1	1	1	1	Power Supply Assy	4020274-04																												
		2	2	2	2	2	2	2	2	Knob Assy, Editing	4030145-10																												
1	1	1	1	1	1	1	1	1	1	Tray Assy, Reproducer	4040346-02																												
1	1	1	1	1	1	1	1	1	1	Facing Panel Assy	4040347-01																												
2	2	2	2	2	2	2	2	2	2	Knob Assy, Reel	4040492-10																												
1	1	1	1	1	1	1	1	1	1	Scrape Flutter Idler Assy	4040955-01																												
1	1	1	1	1	1	1	1	1	1	Cable Assy, Power	4050416-02																												
1	1	1	1	1	1	1	1	1	1	Box Assy, Head Cable Mounting	4050448-07																												
2	2	2	2	2	2	2	2	2	2	Knob Reel Holddown	4100137-10																												
1	1	1	1	1	1	1	1	1	1	Instruction Manual	4890301																												
		1								Shield, Resistor (Control Box)	4290643-01																												
1	1	1	1	1	1	1	1	1	1	Shield, Resistor (Control Box, Uncased)	4290659-01																												
2	2	2	2	2	2	2	2	2	2	Shield, P/B Head Connector	4600008-10																												
2	2	2	2	2	2	2	2	2	2	Connector Plug, female, 3-pin	144-003																												
1	1	1	1	1	1	1	1	1	1	Nutdriver, Modified	493-504-01																												

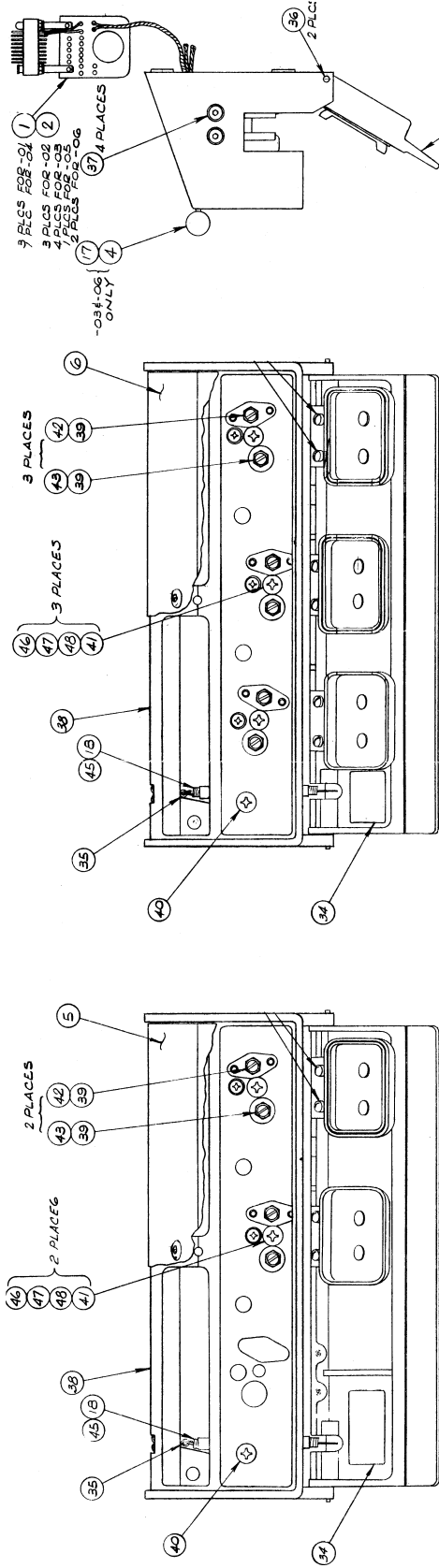
TYPE* AND DASH NUMBER										AG-445B, FOUR-CHANNEL TAPE REPRODUCER Ampex 4010144 (Ref. C)									
-01	7 1/2	-15	60 Hz	U	-02	7 1/2	-15	50 Hz	U	-03	7 1/2	-15	60 Hz	P	-04	7 1/2	-15	50 Hz	P
* CODE: P-Portable U-Uncased																			
Qty Req'd Per Dash Number										DESCRIPTION	Ampex Part No.								
		1								Console Assy	4020084-06								
4	4	4	4	4	4	4	4	4	4	Reproduce Module	4020150-03								
4	4	4	4	4	4	4	4	4	4	Equalizer Assy, Reproduce NAB	4020270-01								
1	1	1	1	1	1	1	1	1	1	Transport Assy, 7 1/2-15, 60 Hz	4020271-09								
		1								Transport Assy, 7 1/2-15, 50 Hz	4020271-10								
1	1	1	1	1	1	1	1	1	1	Head Assy, 4-Track	4020273-04								
1	1	1	1	1	1	1	1	1	1	Power Supply Assy	4020274-04								
		2	2	2	2	2	2	2	2	Knob Assy, Editing	4030145-10								
1	1	1	1	1	1	1	1	1	1	Tray Assy, Reproducer	4040346-02								
1	1	1	1	1	1	1	1	1	1	Facing Panel Assy	4040347-01								
2	2	2	2	2	2	2	2	2	2	Knob Assy, Reel	4040492-10								
1	1	1	1	1	1	1	1	1	1	Scrape Flutter Idler Assy	4040955-01								
1	1	1	1	1	1	1	1	1	1	Cable Assy, Power	4050416-02								
1	1	1	1	1	1	1	1	1	1	Box Assy, Head Cable Mounting	4050448-09								
1	1	1	1	1	1	1	1	1	1	Reel Assy, 1/2-Tape	4690003-20								
1	1	1	1	1	1	1	1	1	1	Instruction Manual	4890301								
		1								Shield, Resistor (Control Box)	4290643-01								
1	1	1	1	1	1	1	1	1	1	Shield, Resistor (Control Box, Uncased & Portable)	4290659-01								
4	4	4	4	4	4	4	4	4	4	Connector, Plug, female, 3-pin	144-003								
4	4	4	4	4	4	4	4	4	4	Shield, P/B Head Connector	4600008-10								
1	1	1	1	1	1	1	1	1	1	Nutdriver, Modified	4930504-01								

MODEL AG-440B, TAPE TRANSPORT
 Ampex 4010128 (Ref. D)

4890301

TYPE* AND DASH NO.				DESCRIPTION	Ampex Part No.
Qty	Reqd	Per	Dash Number		
1	1	1	-03 7-1/2 - 15 60 Hz	Idler Assembly, Scrape Flutter	4040955-01
1	1	1	-04 7-1/2 - 15 50 Hz	Shield, Resistor, Control Box	4290659-01
1	1	1	-05 3-3/4 - 7-1/2 60 Hz	Screw, #8-32 x 1, Pan Head, Cross-Recessed	471-084
1	1	1	-06 3-3/4 - 7-1/2 50 Hz	Washer, #8, Flat	501-010
1	1	1		Lockwasher, #8, Spring	502-004
2	2	2		Nut, #8-32, "Keps"	496-006
1	1	1		Jiffy Bag, #7, 14 x 20	718-022
1	1	1		Cable Assembly, Power	4050416-02
1	1	1		Packaging Assembly	1206811-01
1	1	1		Tape Transport Assembly, 7-1/2 - 15 60 Hz	4020271-13
1	1	1		Tape Transport Assembly, 7-1/2 - 15 50 Hz	4020271-14
1	1	1		Tape Transport Assembly, 3-3/4 - 7-1/2 60 Hz	4020271-15
1	1	1		Tape Transport Assembly, 3-3/4 - 7-1/2 50 Hz	4020271-16

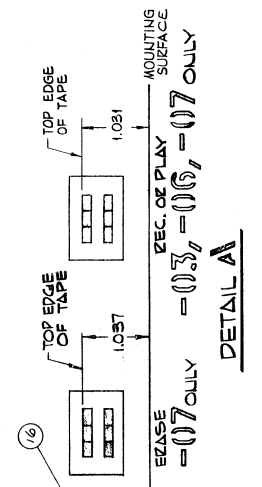
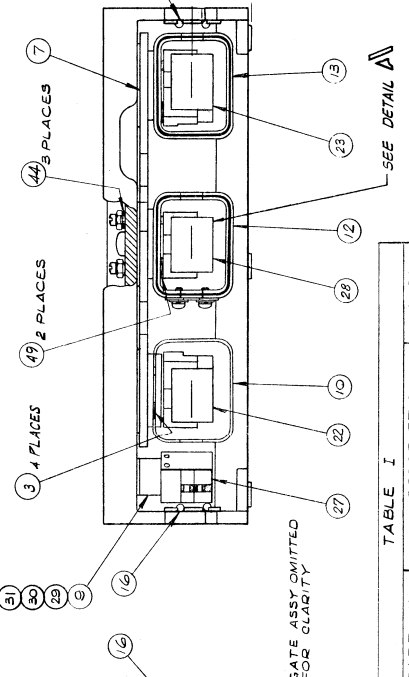
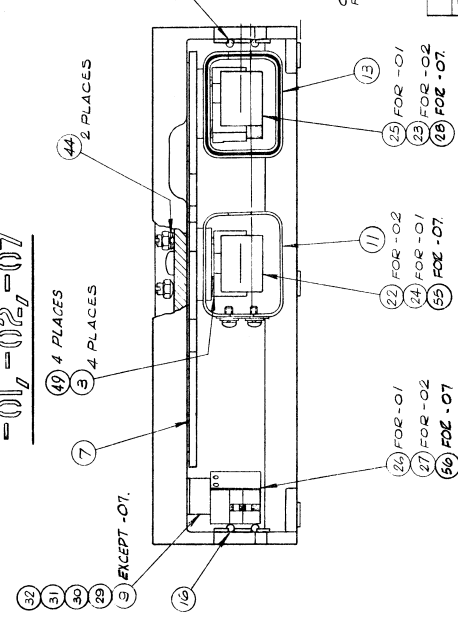
4890301-01



FOR -01, -02 (14)
FOR -03 (15)
FOR -04, -05 (18)
FOR -06 (20)

= 03

= 01, -02, -07



DETAIL A

SEE DETAIL A

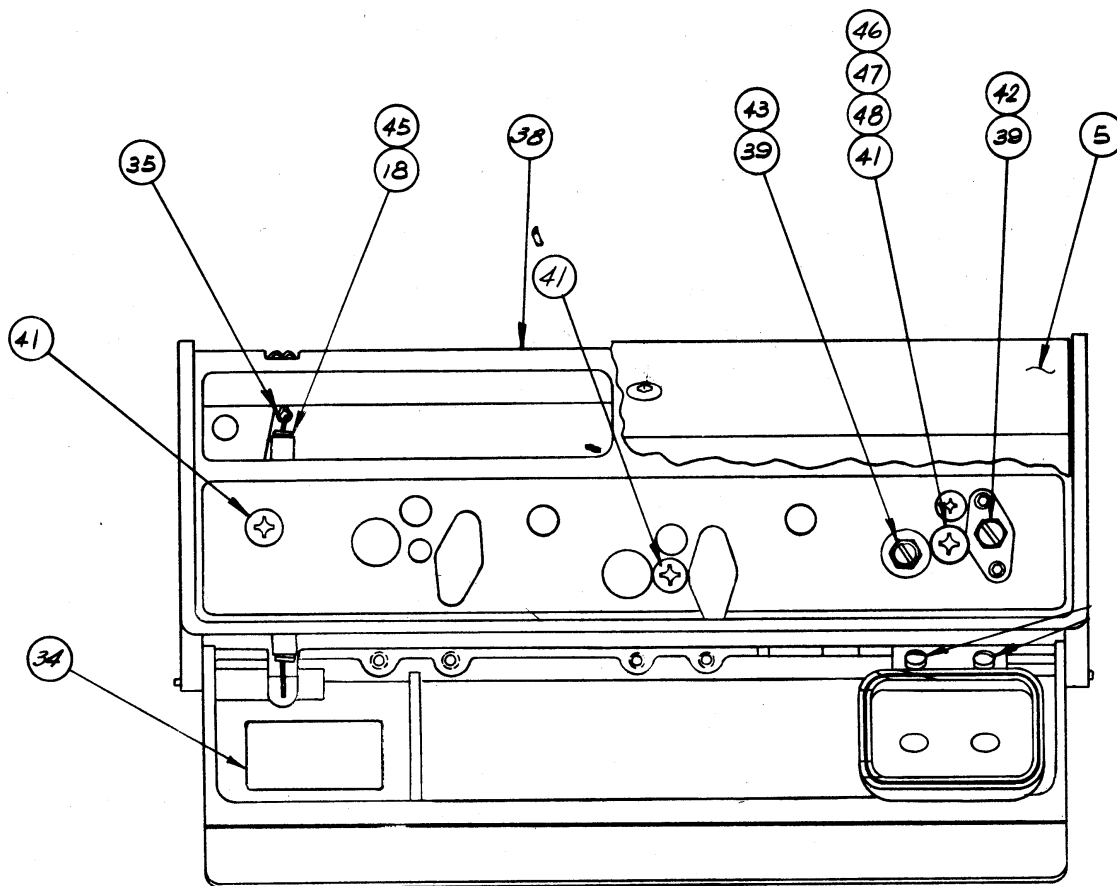
TABLE I

PART NO.	DESCRIPTION	MODEL
4020272-01	FULL TRACK	AG 440
4020272-02	TWO TRACK	AG 440
4020272-03	TWO - FOUR TRACK	AG 440
4020272-04	FULL TRACK	AG 445
4020272-05	TWO TRACK	AG 445
4020272-06	TWO - FOUR TRACK	AG 445
4020272-07	1/4 TC E-E-P	AG 440

Fig. 6-1. Head Assembly, Record/Reproduce, 1/4-inch Tape

HEAD ASSEMBLY 1/4" TAPE				CATALOG NO. 4020272	SHEET 1 OF 1							
				NHA 4010071, 4010072								
ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION							
					-01	-02	-03	-04	-05	-06	-07	
1	4050446-01			HEAD CONNECTOR ASSEMBLY	3			1				
2	4050446-02			HEAD CONNECTOR ASSEMBLY		3	4		1	2	3	
3	4270167-10			SPRING, Head	4	4	4	2	2	2		
4	4350011-01			KNOB			1			1		
5	4350038-01			OVERLAY ASSEMBLY, Head Housing	1	1		1	1		1	
6	4350038-02			OVERLAY ASSEMBLY, Head Housing			1			1		
7	4350016-01			SPACER, Head, 1/4" tape	1	1	1	1	1	1	1	
9	4350019-01			SPACER, Erase Head	1	1	1					
10	4350021-01			SHIELD CAN ASSEMBLY, Record Position #2			1					
11	4350022-01			SHIELD CAN ASSEMBLY, Record Position #3	1	1					1	
12	4350023-01			SHIELD CAN ASSEMBLY, Playback Position, #3			1			1		
13	4350024-01			SHIELD CAN ASSEMBLY, Playback Position, #4	1	1	1	1	1	1	1	
14	4350029-05			GATE ASSEMBLY, Head	1	1					1	
15	4350029-06			GATE ASSEMBLY, Head			1					
16	4350030-01			TAPE GUIDE ASSEMBLY, 1/4"	2	2	2	2	2	2	2	
17	4210313-01			SHAFT, Switch			1			1		
18	4350035-01			SPRING, Head Gate	1	1	1	1	1	1	1	
19	4350029-07			GATE ASSEMBLY, Head				1	1			
20	4350029-08			GATE ASSEMBLY, Head							1	
21	4210136-01			POST, Dummy Head				1	1	1		
22	4040437-05			HEAD UNIT, Record, 2 track		1	1					
23	4040437-06			HEAD UNIT, Playback		1	1		1	1		
24	4040438-67			HEAD STACK ASSEMBLY, Record Full Track	1							
25	4040438-68			HEAD STACK ASSEMBLY, Playback, full track	1			1				
26	4040829-02			HEAD STACK ASSEMBLY, Erase, single channel, 1/4"	1							
27	4040831-02			HEAD STACK ASSEMBLY, Erase, 2 channel, 1/4"		1	1					
28	4350068-01			HEAD STACK ASSEMBLY, 1/4 Track Stereo, playback				1		1	1	
29	4350025-01			SHIM, Erase Head, .010 thick	A/R	A/R	A/R					A/R
30	4350025-02			SHIM, Erase Head, .002 thick	A/R	A/R	A/R					A/R
31	4350025-03			SHIM, Erase Head, .003 thick	A/R	A/R	A/R					A/R
32	4350025-04			SHIM, Erase Head, .005 thick	A/R	A/R	A/R					A/R
33	4210193-30			TAPE GUIDE				1	1			
38	4350017-03			BASE, Head Mounting	1	1	1	1	1	1	1	
49	4270167-30			SPRING, Head			2			2	4	
55	4350068-02			HEAD STACK ASSEMBLY, 1/4 Track, record								1
56	4350117-01			HEAD STACK ASSEMBLY, 1/4 Track, erase								1

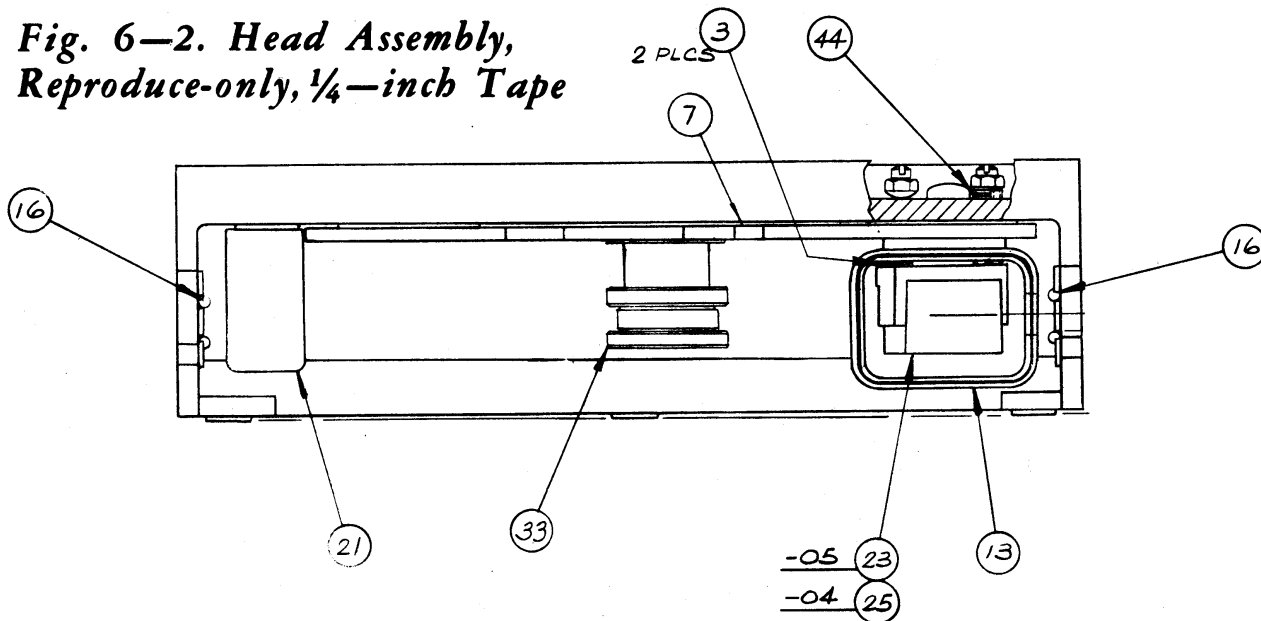
4020272P



GATE ASSY OMITTED
FOR DWG CLARITY

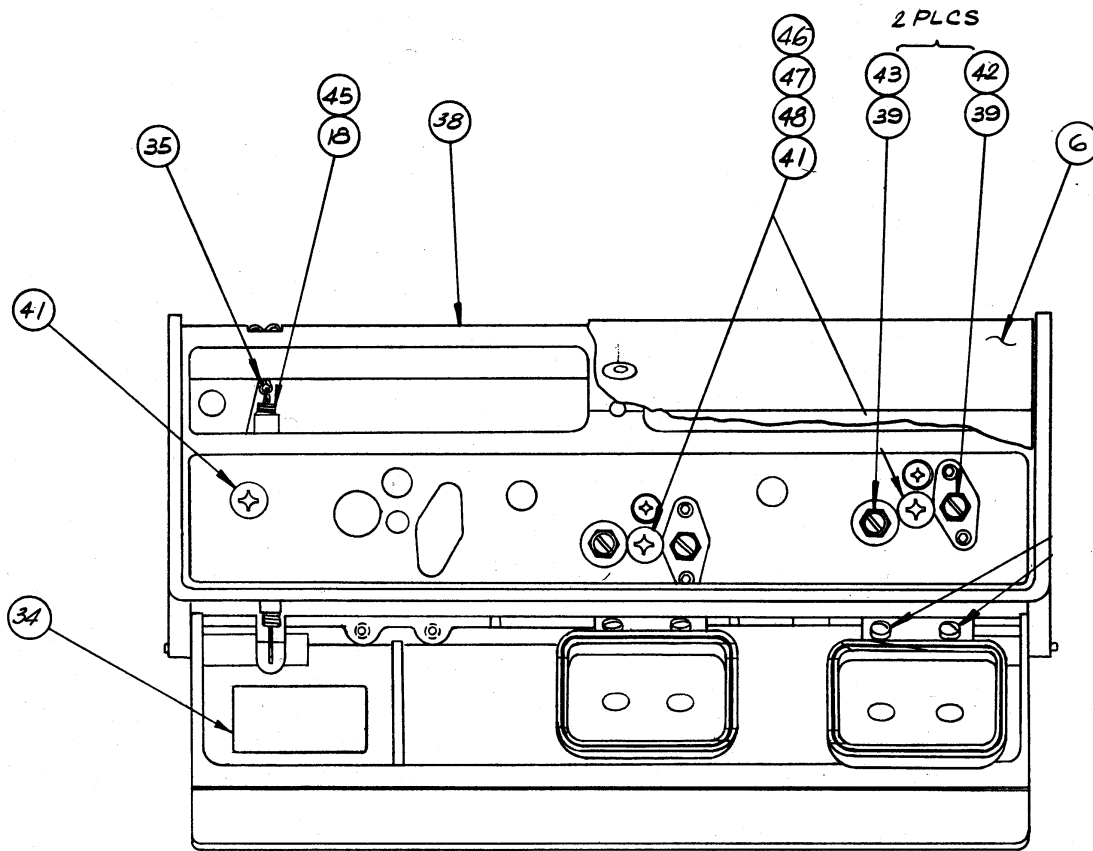
- (1)4 AND - (1)5

**Fig. 6-2. Head Assembly,
Reproduce-only, 1/4-inch Tape**



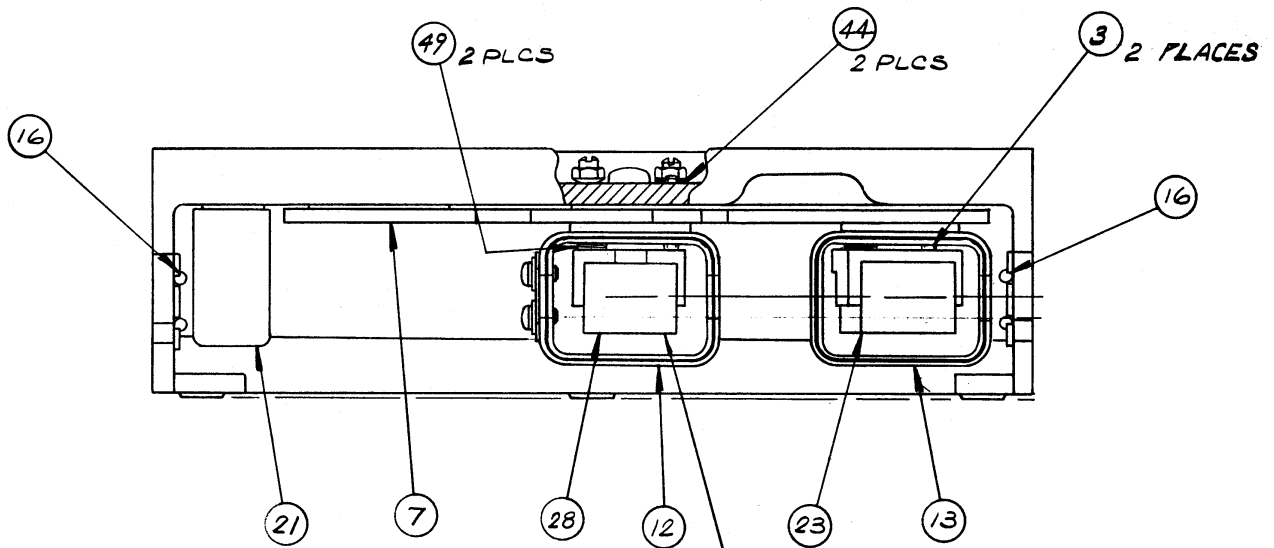
2 PLCS

-05 23
-04 25



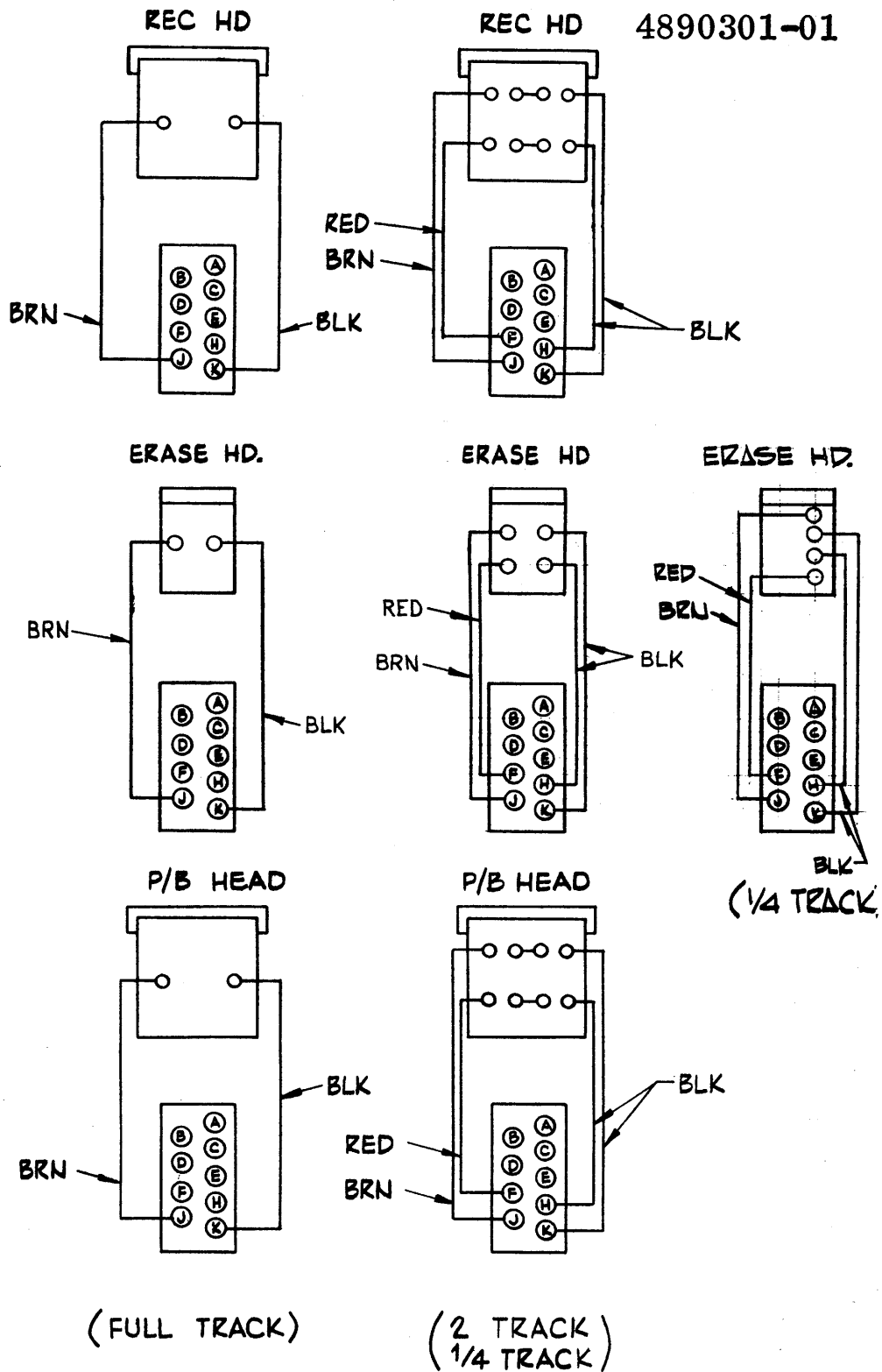
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GATE ASSY OMITTED
FOR DWG CLARITY

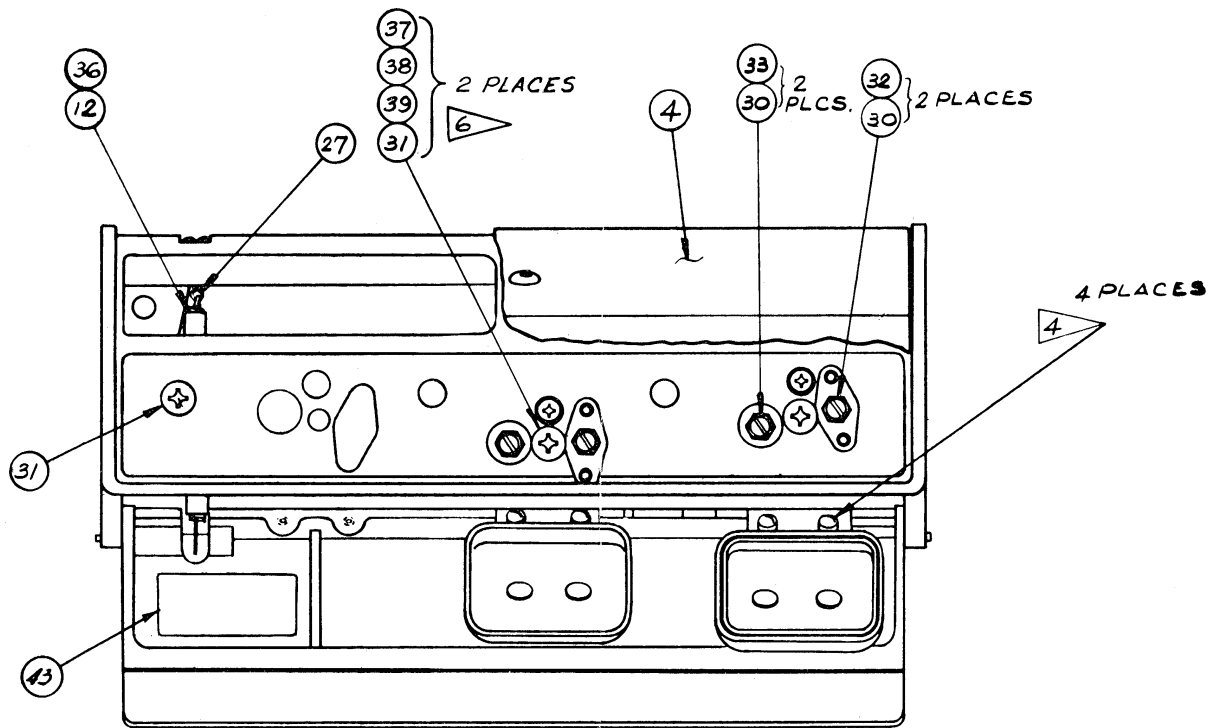


**Fig. 6-2. Head Assembly,
Reproduce-only, 1/4-inch Tape**

SEE DETAIL "A".



**Fig. 6-2. Head Assembly,
Reproduce-only, 1/4-inch Tape 6-6**



- (1) 1/2 - (1) 5 SHOWN
 GATE ASSY (ITEM 9) OMITTED FOR DRAWING CLARITY

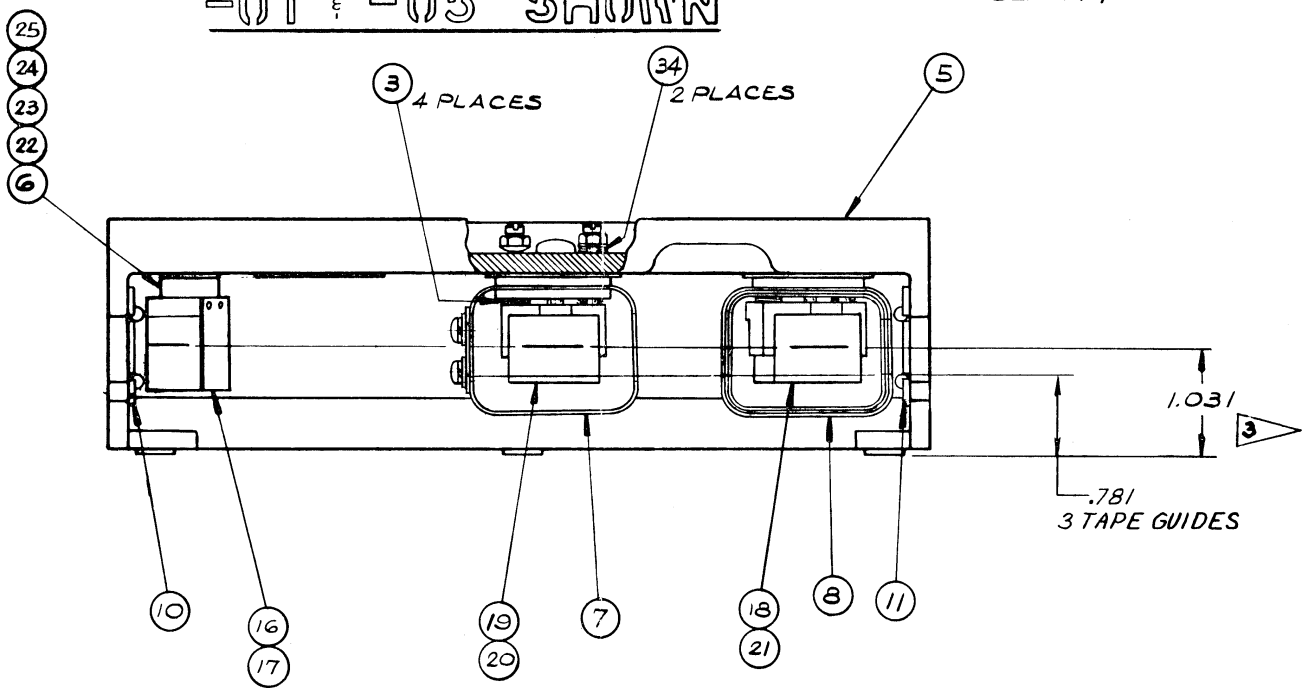
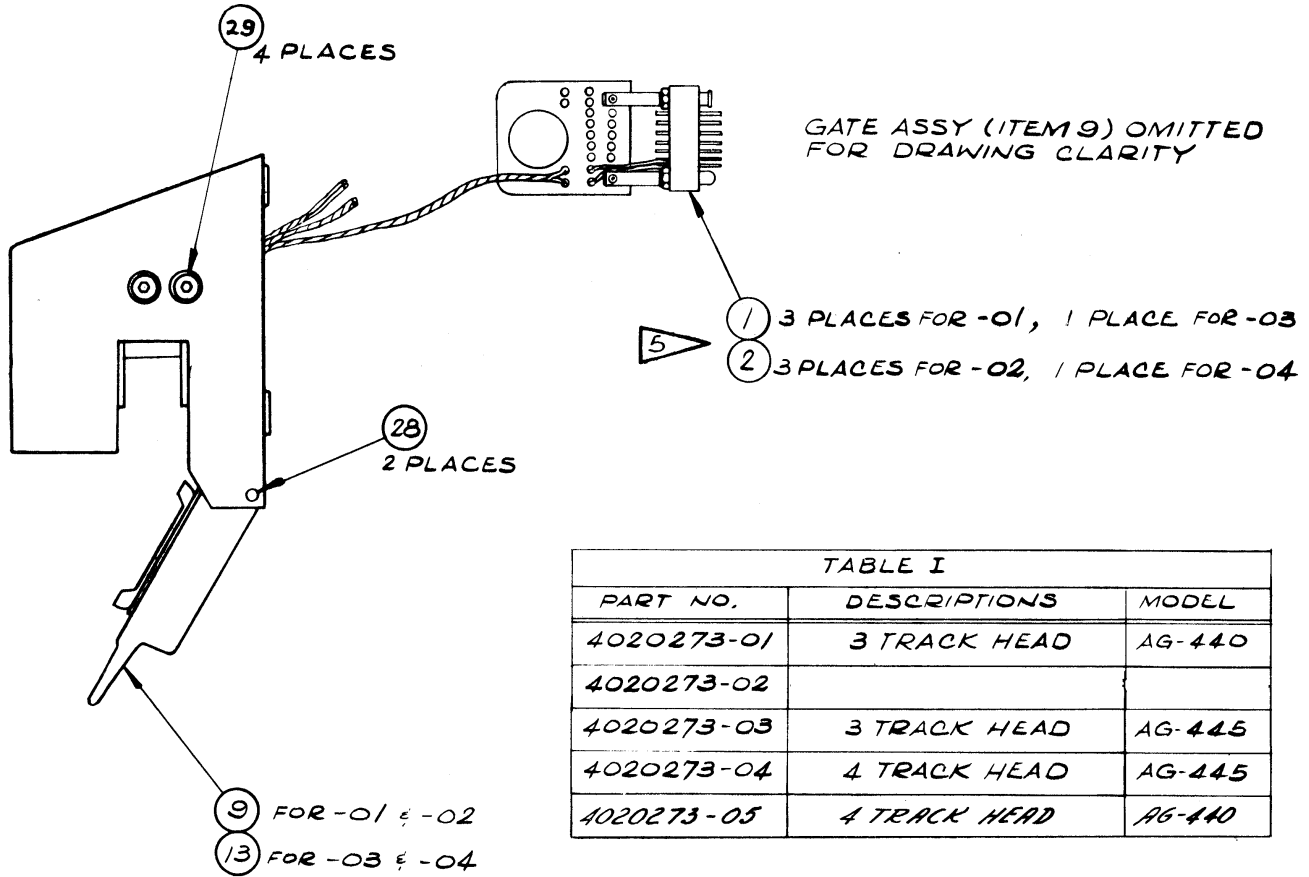


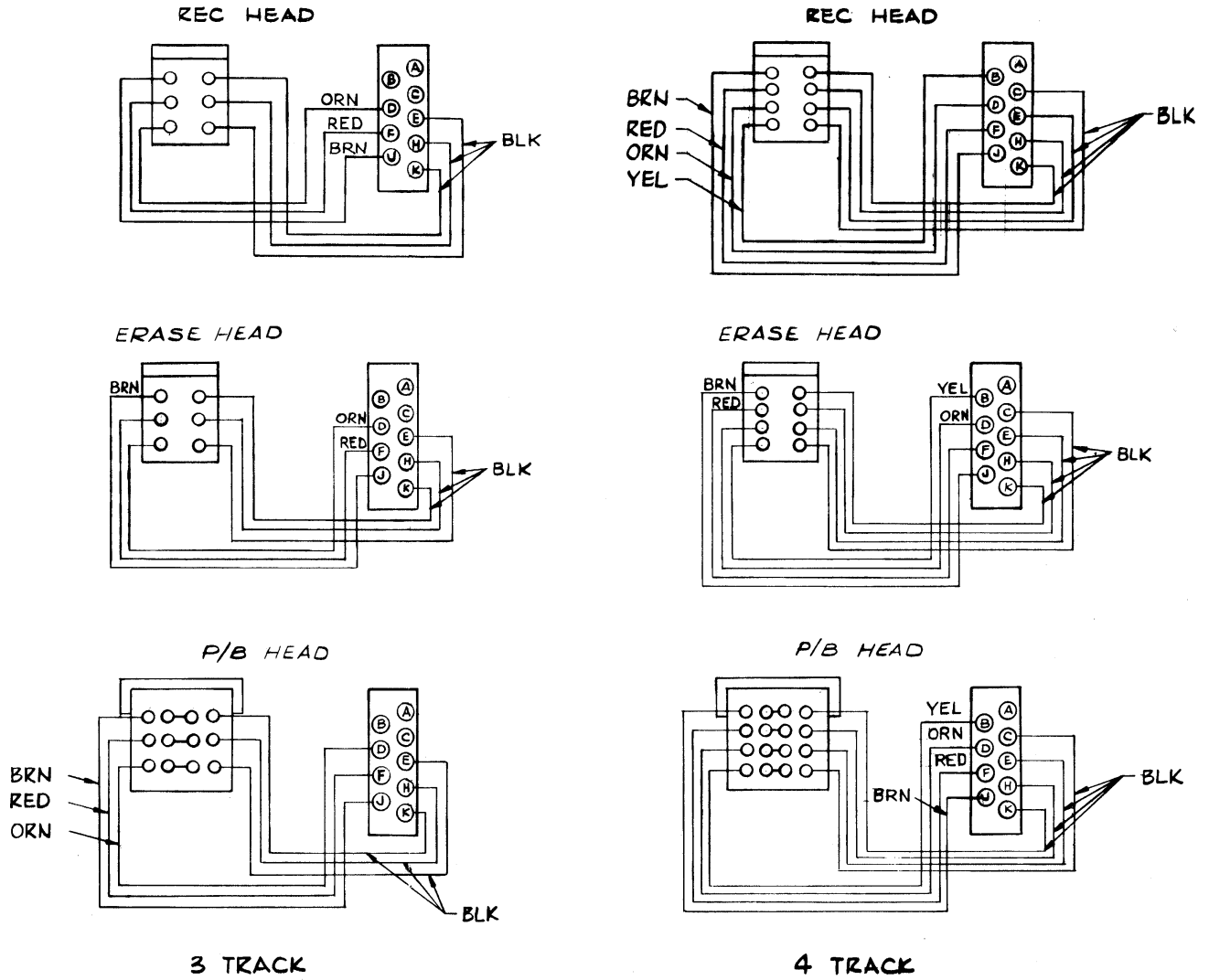
Fig. 6-3. Head Assembly, Record/Reproduce, 1/2-Inch Tape



NOTES:

1. PART NO. TO BE ASSY 4020273-XX.
2. THE GAP BETWEEN THE TOP OF THE HEAD GATE AND THE FRONT OF THE HEAD HOUSING SHOULD NOT EXCEED .031.
3. CENTER LINE BETWEEN TRACKS SHALL BE ADJUSTED TO 1.031 FROM BOTTOM OF BASE HEAD MTG. PADS.
4. ADJUST SHIELD COVERS TO LINE UP FLUSH WITH SHIELD CANS.
5. ALL LEAD PAIRS FROM HEADS TO CONNECTORS TO BE TWISTED e.g. (J.K.) (F,H) etc.
6. SHIM ITEM 31 AS REQ'D. SO THAT SCREW IS FLUSH TO .010 MAX PROTRUSION INTO CAN.

Fig. 6-3. Head Assembly, Record/Reproduce, 1/2-Inch Tape



WIRING DIAGRAM

GATE ASSY (ITEM 9) OMITTED
FOR DRAWING CLARITY

Fig. 6-3. Head Assembly, Record/Reproduce, 1/2-Inch Tape

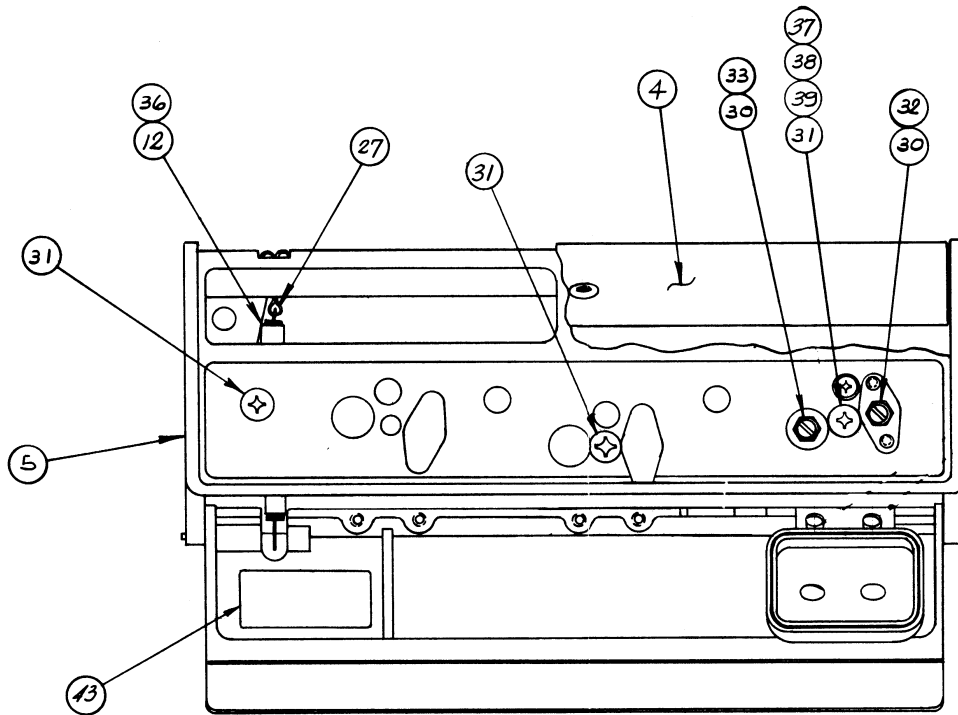
HEAD ASSEMBLY 1/2-INCH TAPE

4020273

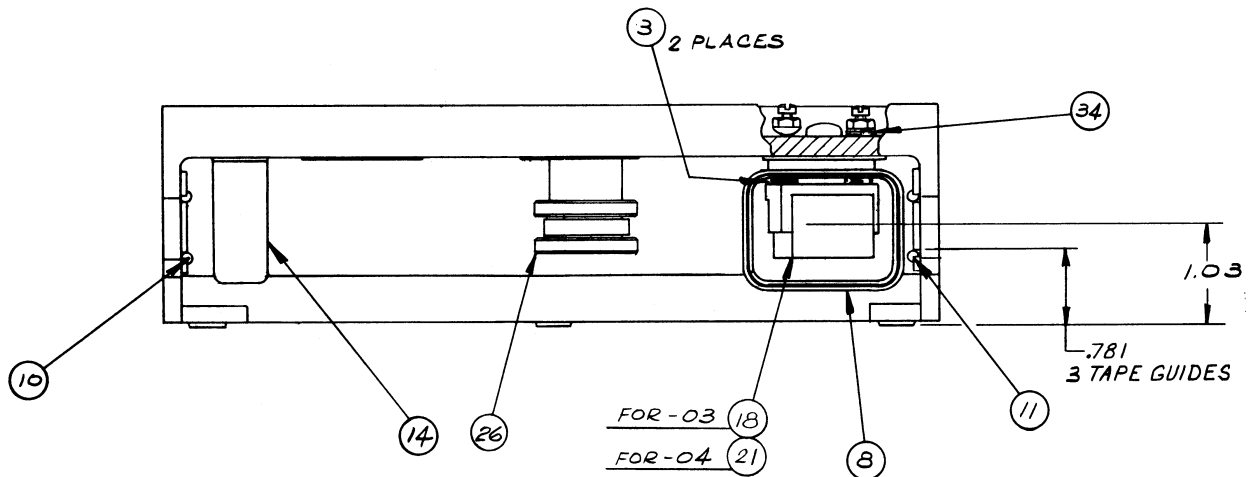
(Revision N)

Ref.	-04	-05	Description	Ampex Part No.
1	3		Head Connector Assembly	4050446-04
2	4		Spring, head adjuts	4270167-10
1	1		Overlay Assembly Head Housing	4350038-01
1	1		Base, head mounting	4350017-03
1	1		Spacer, erase head	4350019-20
1	1		Shield Can Assembly, record position #3	4350022-02
1	1		Shield Can Assembly, pushbutton position #4	4350024-02
1	1		Gate Assembly Head	4350029-09
1	1		Tape Guide Assembly, left hand	4350033-01
1	1		Tape Guide Assembly, right hand	4350033-02
1	1		Spring, extension head gate	4350035-01
1	1		Gate Assembly, head	4350029-10
1	1		Post, dummy head	4210136-01
1	1		Erase Head Assembly, 1/2", 4 track	1231888-03
1	1		Head Stack Assembly, 4 channel, rec., 4 track	4040558-06
1	1		Head Stack Assembly, 4 channel, pushbutton 4 track	4040558-05
	a/r		Shim, erase head, .010 thick	4350025-01
	a/r		Shim, erase head, .002 thick	4350025-02
	a/r		Shim, erase head, .003 thick	4350025-03
	a/r		Shim, erase head, .005 thick	4350025-04
1	1		Tape Guide	4210193-40
1	1		Pin, cotter, 1/16 diameter x 3/4 long	401-008
2	2		Pin, "drive-lok", type C 3/32 diameter	403-006
4	4		Screw, cap, hex, socket, 4-40 x 1/4	470-425
2	4		Screw, fill, head, slot, 4-40 x 5/8	471-481
3	3		Screw, pan head, cross-recessed, 10-32 x 7/16	473-098
1	2		Nut, hex, 4-40	492-008
1	2		Nut, self-locking, hex, 4-40	493-001
1	2		Washer, lock, #4	502-062
1	1		Sleeving, .186 ID, black	600-001

4020273N



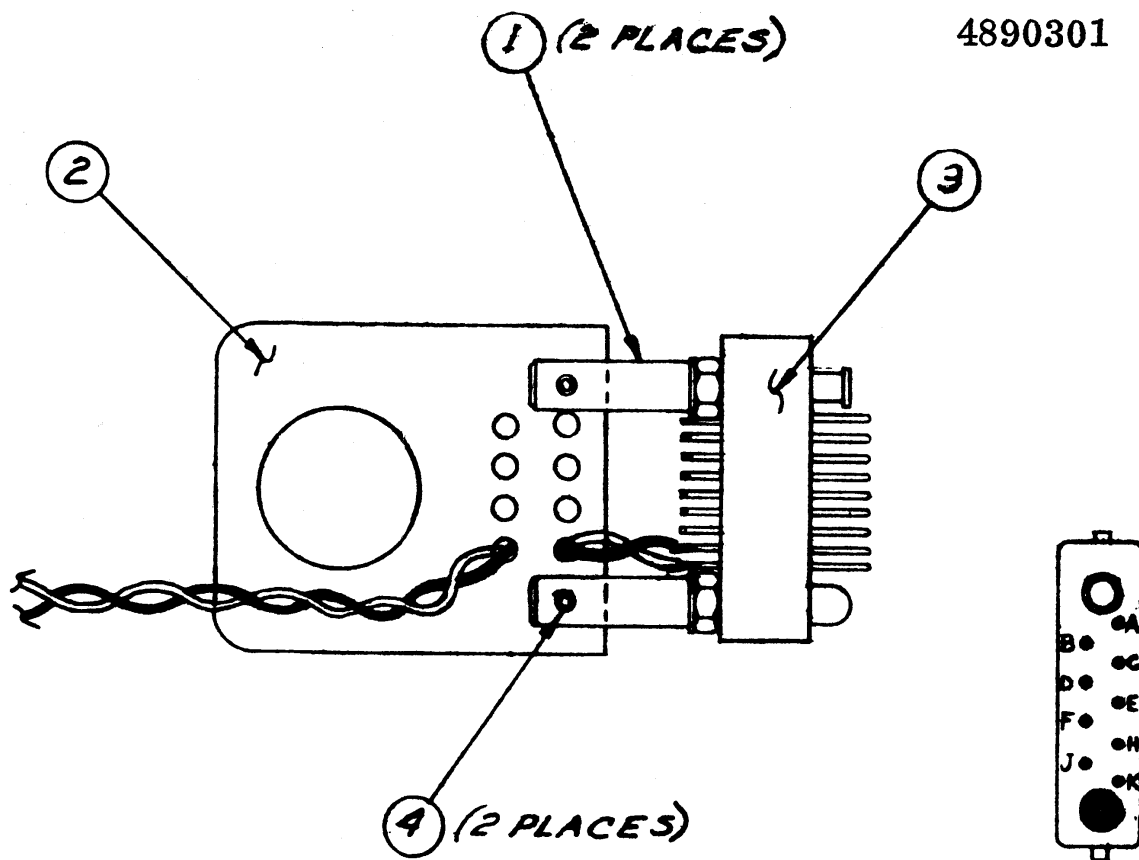
-03 & -04 SHOWN



GATE ASSY (ITEM 13) OMITTED FOR DWG. CLARITY.

Fig. 6-4. Head Assembly, Reproduce-Only, 1/2-Inch Tape

4890301



-01 SHOWN

ASSY NO.	TERMINAL LETTER								
	A	B	C	D	E	F	H	J	K
4050446-01	-	-	-	-	-	-	-	BRN	BLK
4050446-02	-	-	-	-	-	RED	BLK	BRN	BLK
4050446-03	-	-	-	ORN	BLK	RED	BLK	BRN	BLK
4050446-04	-	YEL	BLK	ORN	BLK	RED	BLK	BRN	BLK
4050446-05	-	YEL	BLK	ORN	BLK	RED	BLK	BRN	BLK

Fig.6-5. Head Connector Assembly

HEAD CONNECTOR ASSEMBLY
 CATALOG NO. 4050446C
 (See Fig. 6-5)

ITEM					DESCRIPTION	Ampex Part No.
-01	-02	-03	-04			
	X				Head Connector, assembly, 1 track head	4050446-01
		X			Head Connector, assembly, 2 track head	4050446-02
			X		Head Connector, assembly, 3 track head	4050446-03
				X	Head Connector, assembly, 4 track head	4050446-04
1	2	2	2	2	Standoff, head connector	4220243-01
2	1	1	1	1	Handle, head connector	4350031-02
3	1	1	1	1	Connector, male, rect., 9 pin	143-300
4	2	2	2	2	Rollpin, .062 dia. x .187 lg.	406-272

ARRANGEMENT OF CLAMPS, CABLES & MARKING				
	POSITION 1	POSITION 2	POSITION 3	POSITION 4
-06 OR -07			—	
-08 OR -09			—	
-10				—

CONN A			
ITEM NO.	MARKER NO.	WIRE COLOR	PIN LETTER
④ (ERASE)	1	WHT	J
		BLK	K
	2	WHT	F
		BLK	H
	3	WHT	D
		BLK	E
	4	WHT	B
		BLK	C

CONN D			
ITEM NO.	MARKER NO.	WIRE COLOR	PIN LETTER
⑥ (REP)	1	RED	J
		BLK	K
	2	RED	F
		BLK	H
	3	RED	D
		BLK	E
	4	RED	B
		BLK	C

CONN B			
ITEM NO.	MARKER NO.	WIRE COLOR	PIN LETTER
⑤ (REC)	1	WHT	J
		BLK	K
	2	WHT	F
		BLK	H
	3	WHT	D
		BLK	E
	4	WHT	B
		BLK	C

-10 ONLY
FOR HOOKUP TO
CONNECTORS C & D,
SEE SCHEMATIC

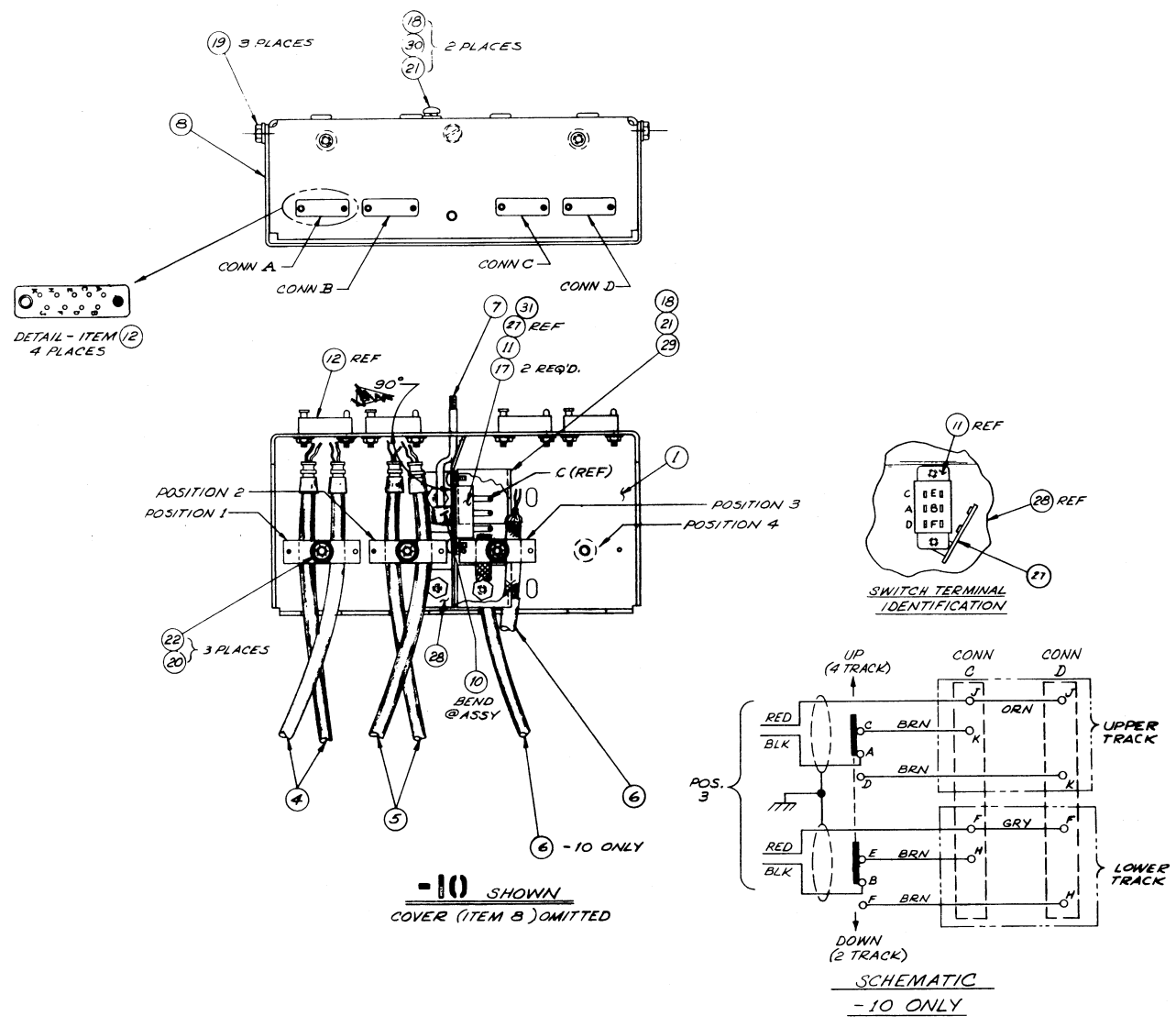


Fig. 6-6 . Head Cable Box Assembly
6-10

HEAD CABLE BOX ASSEMBLY
 CATALOG NO. 4050447F
 (See Fig. 6-6)

ITEM	-06	-07	-08	-09	-10	DESCRIPTION	Ampex Part No.
	X					Head Cable Box, assembly, 1 channel, 3 position	4050447-06
		X				Head Cable Box, assembly, 2 channel, 3 position	4050447-07
			X			Head Cable Box, assembly, 3 channel, 3 position	4050447-08
				X		Head Cable Box, assembly, 4 channel, 3 position	4050447-09
					X	Head Cable Box, assembly, 2 channel, 4 position	4050447-10
1	1	1	1	1	1	Bracket, head cable mounting	4040947-02
2	5	5	10	10	5	Clamp, assembly, cable	4040951-01
3	1	1	1	1	1	Clamp, assembly, playback cable	4040952-01
4	1	2	3	4	2	Head Cable, assembly, erase	4050143-60
5	1	2	3	4	2	Head Cable, assembly, record	4050144-70
6	1	2	3	4	2	Head Cable, assembly, reproduce	4050445-01
7					1	Rod, switch	4350034-01
8	1	1	1	1	1	Cover, head cable bracket	4290644-01
10					1	Wire, retaining	4320115-10
11					1	Switch, slide	4620124-20
12	4	4	4	4	4	Connector, receptacle, female, 9 socket	143-301
13	3	3	3	3	3	Marker Strip, No. 1	202-006
14		3	3	3	3	Marker Strip, No. 2	202-007
15			3	3		Marker Strip, No. 3	202-008
16				3		Marker Strip, No. 4	202-009
27					1	Terminal Strip, A1, A1, D	180-983
28	1	1	1	1	1	Bracket, head switch	4260110-01
29					1	Shield, head switch	4600055-01
Items of standard hardware, wire, etc., not listed							

HEAD CABLE BOX
 CATALOG NO. 4050448D

ITEM	-06	-07	-08	-09	-10	DESCRIPTION	Ampex Part No.
	X					Head Cable Box Assembly, 1 channel, reproduce-only	4050448-06
		X				Head Cable Box Assembly, 2 channel, 2 position, reproduce-only	4050448-07
			X			Head Cable Box Assembly, 3 channel, reproduce-only	4050448-08
				X		Head Cable Box Assembly, 4 channel, reproduce-only	4050448-09
					X	Head Cable Box Assembly, 2 channel, reproduce-only	4050448-10
1	1	1	1	1	1	Bracket, head cable mounting	4040947-02
2	1	1	2	2	1	Clamp Assembly, cable	4040951-01
3	1	1	1	1	1	Clamp Assembly, reproduce cable	4040952-01
6	1	2	3	4	2	Head Cable Assembly, reproduce	4050445-01
7		1				Rod, Switch	4350034-01
8	1	1	1	1	1	Cover, head cable bracket	4290644-01
10		1				Wire, retaining	4320115-10
11		1				Switch, slide	4620124-20
12	2	2	2	2	2	Connector, receptacle, female, 9 socket	143-301
13	1	1	1	1	1	Marker Strip, No. 1	202-006
14		1	1	1	1	Marker Strip, No. 2	202-007
15			1	1		Marker Strip, No. 3	202-008
16				1		Marker Strip, No. 4	202-009
27		1				Terminal Strip, A1, A1, D	180-983
28	1	1	1	1	1	Bracket, head switch	4260110-01
29		1				Shield, head switch	4600055-01

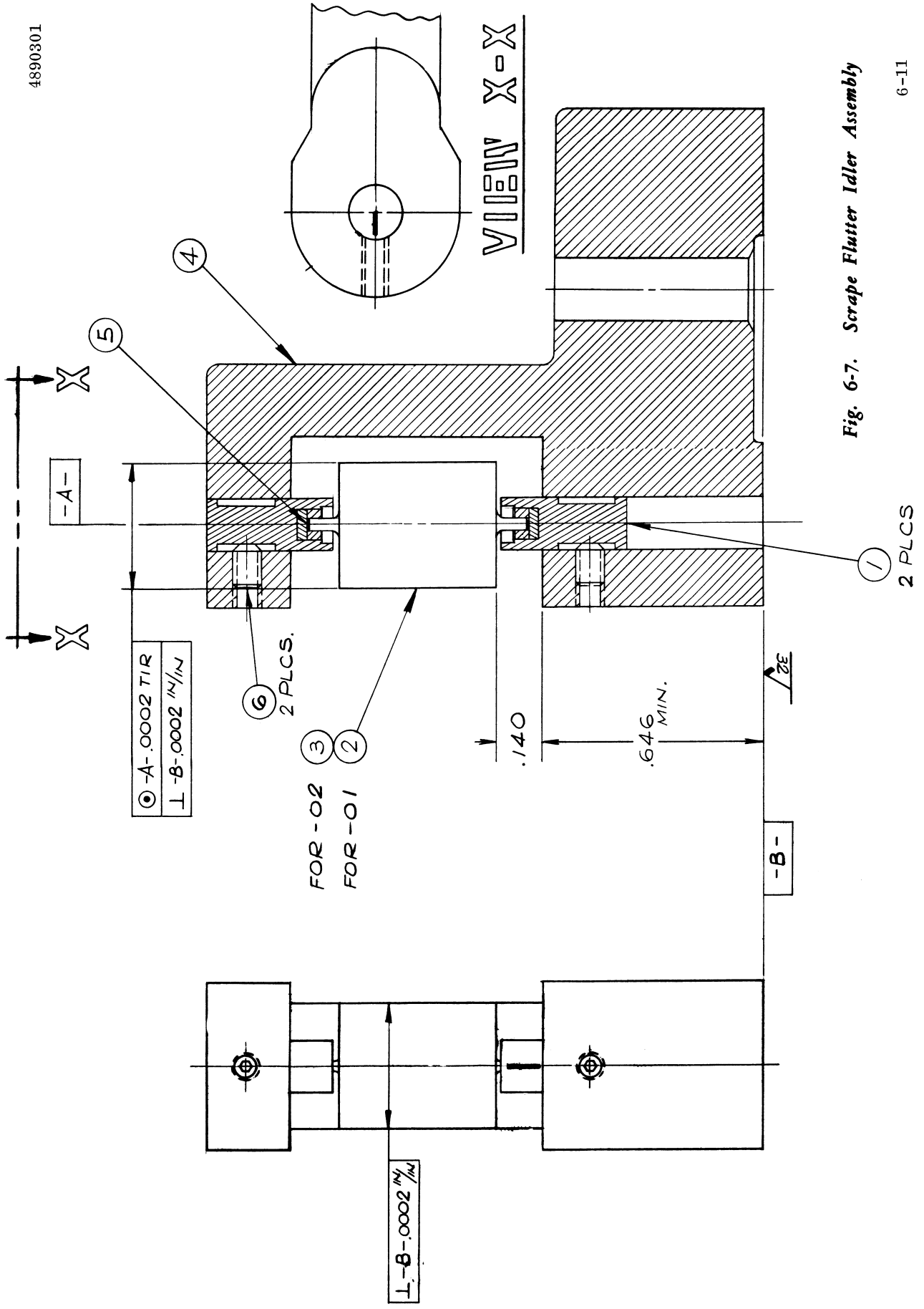


Fig. 6-7. Scrape Flutter Idler Assembly

SCRAPE FLUTTER IDLER ASSEMBLY

4040955 (Rev. C)

Item	-01	-02	Description	Ampex Part No.
1	2	2	Holder Assembly	4040953-01
2	1		Idler, Scrape Flutter	4250207-01
3		1	Idler, Scrape Flutter	4250207-02
4	1	1	Yoke	4230239-02
6	2	2	Screw, Set, cup point, 2-56 x 1/8	477-215

TAPE TRANSPORT ASSEMBLY

4020271

(Revision AF)

(See Figs. 6-8 and 6-9)

(Electronic component designation list is given with Fig. 6-20)

ITEM	-13	-14	-15	-16	Description *	Ampex Part No.
	X				Tape Transport, assembly, 7-1/2 and 15 ips, 60 Hz	4020271-13
		X			Tape Transport, assembly, 7-1/2 and 15 ips, 50 Hz	4020271-14
			X		Tape Transport, assembly 3-3/4 and 7-1/2 ips, 60 Hz	4020271-15
				X	Tape Transport, assembly, 3-3/4 and 7-1/2 ips, 50 Hz	4020271-16
1	1	1	1	1	Oil Kit, motor	4010825-02
5	1	1	1	1	Control Box, assembly (see Figs. 6-17, 6-18)	4020293-07
6	1	1	1	1	Tape Lifter, assembly (see Fig. 6-11)	4030259-03
7	1	1	1	1	Takeup, assembly (see Fig. 6-12)	4030297-01, -02, -03
8	1	1	1	1	Rewind, assembly (see Fig. 6-13)	4030298-01, -02, -03
9	1	1	1	1	Solenoid, assembly, capstan	4030272-02
		1	1	1	Stop, solenoid	4220139-20
		1	1	1	Spring, solenoid return	4270161-10
		1	1	1	Spring, capstan idler adjustment	4270162-10
		1	1	1	Shield, solenoid	4290642-01
		1	1	1	Bolt, eye	4400604-20
		1	1	1	Solenoid	4590022-01
		2	2	2	Solderless connectors	171-008
		1	1	1	Washer, felt	503-015
10	1	1	1	1	Solenoid, assembly, tape lifter	4030273-02
		1	1	1	Link	4230242-01
		1	1	1	Stop, solenoid	4260184-10
		1	1	1	Solenoid	4590118-01
		2	2	2	Solderless connectors	171-008
51				1	Dust Cap, assembly, capstan	4041143-02
50	1	1			Dust Cap, assembly, capstan	4041143-01
13	1	1	1	1	Capacitor, assembly, drive motor (C601)	4040591-02
14	1	1	1	1	Reel Idler, assembly (see Fig. 6-15)	4040970-02
15	1	1	1	1	Takeup Tension Arm, assembly	4040974-05
		1	1	1	Tape Guide	4210310-01
		1	1	1	Hook	4230158-20
		1	1	1	Cap	4250193-01
		1	1	1	Spring, tension	4270158-10
		1	1	1	Screw, tape guide and hook mounting	4400593-01
16	1	1	1	1	Top Plate, assembly (no replaceable parts)	4040990-01
17	1	1	1	1	Escutcheon, assembly, left	4040991-02
18	1				Drive Motor, assembly 7-1/2 and 15 ips, 60 Hz (see Fig. 6-18)	4040993-07
19			1		Drive Motor, assembly 3-3/4 and 7-1/2 ips, 60 Hz (see Fig. 6-16)	4040993-08
20		1			Drive Motor, assembly 7-1/2 and 15 ips, 50 Hz (see Fig. 6-16)	4040993-09
21				1	Drive Motor, assembly 3-3/4 and 7-1/2 ips, 50 Hz (see Fig. 6-16)	4040993-10
22	2	2	2	2	Capacitor, assembly, takeup and rewind motors (C617, C618)	4050361-10
23	1	1	1	1	Safety Switch, assembly	4050436-01
24	3	3	3	3	Pushbutton, white	4100182-01
25	1	1	1	1	Pushbutton, yellow	4100182-02
26	1	1	1	1	Pushbutton, red	4100182-03
27	1	1	1	1	Escutcheon, pushbutton, right	4110266-02
28	2	2	2	2	Guard reel	4110267-02
29	4	4	4	4	Pad, toggle switch	4130103-01
30	1	1	1	1	Shield, safety switch	4170184-01
34	1	1	1	1	Flywheel, reel idler	4250202-01
36	1	1	1	1	Spring, tape lifter solenoid	4270117-01
37	1	1	1	1	Shield, drive motor	4290641-01
38	1	1	1	1	Spring, tape lifter return	4270252-02
41	1	1	1	1	Plate, tape lifter solenoid mounting	4330255-01
42	2	2	2	2	Plate, motor capacitor mounting	4330256-01
43	1	1	1	1	Plate, capstan solenoid mounting	4330257-01
44	2	2	2	2	Screw, tape lifter mounting	4400594-01
45	a/r	a/r	a/r	a/r	Washer, 0.315 x .005 thick	4440113-10
46	a/r	a/r	a/r	a/r	Washer, 0.315 x .010 thick	4440113-20
47	a/r	a/r	a/r	a/r	Washer, 0.315 x .003 thick	4440113-50
48	1	1	1	1	Pushbutton, green	4100182-04
49	1	1	1	1	Washer, lamicoicd, .015 thick	4440025-30
87	1	1	1	1	Fan, 5-inch diameter	591-001
90	1	1			Capstan Idler, assembly, 7-1/2 and 15 ips	4030279-15
91			1	1	Capstan Idler, assembly, 3-3/4 and 7-1/2 ips	4030279-16
		1	1		Wheel, assembly	4040404-10
			1	1	Wheel, assembly	4040404-50
		1	1		Cap, capstan idler	4100166-10
					(No other parts replaceable)	---

4020271AF

*Non-replaceable parts, standard hardware, wire, etc., not listed

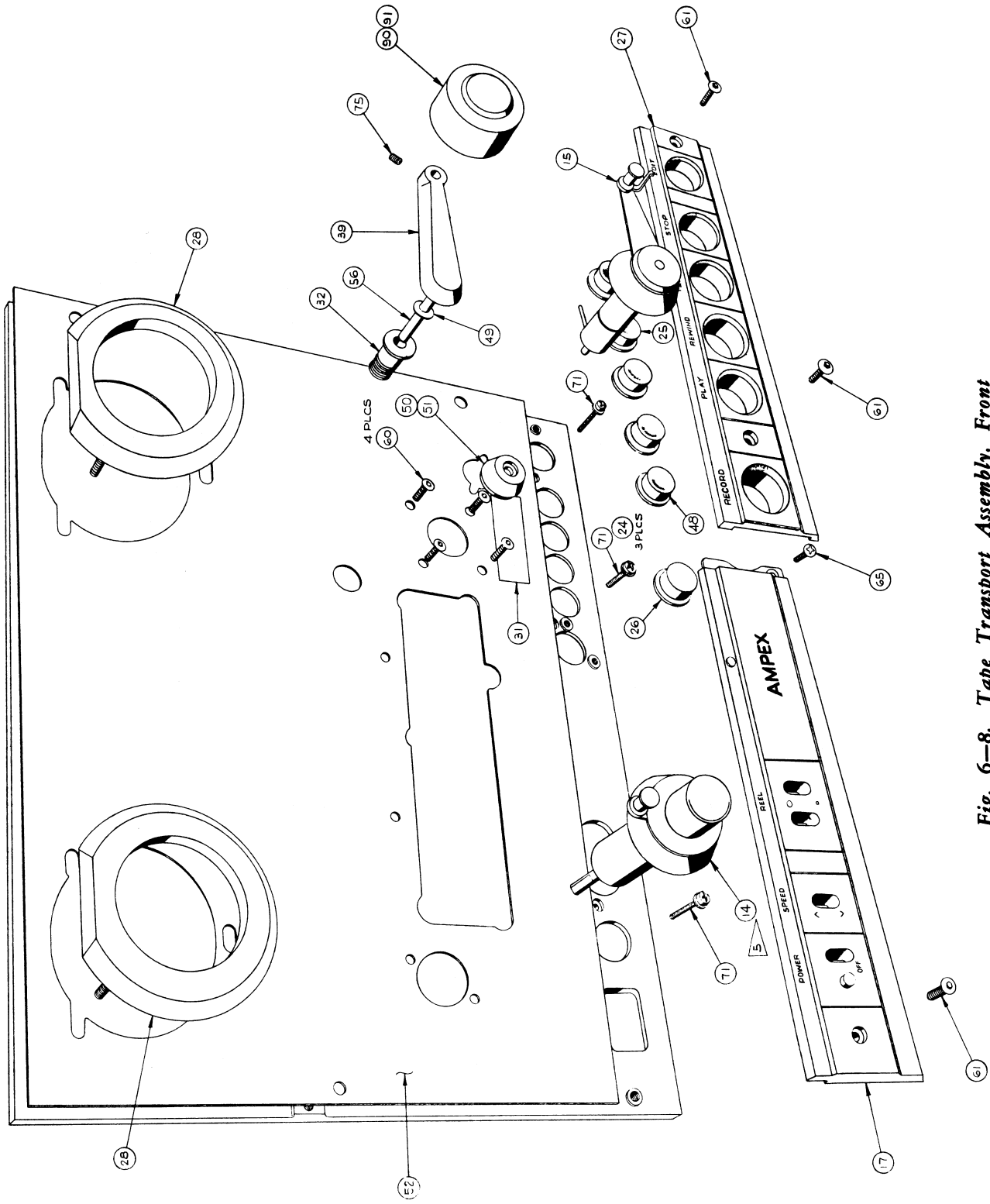


Fig. 6-8. Tape Transport Assembly, Front

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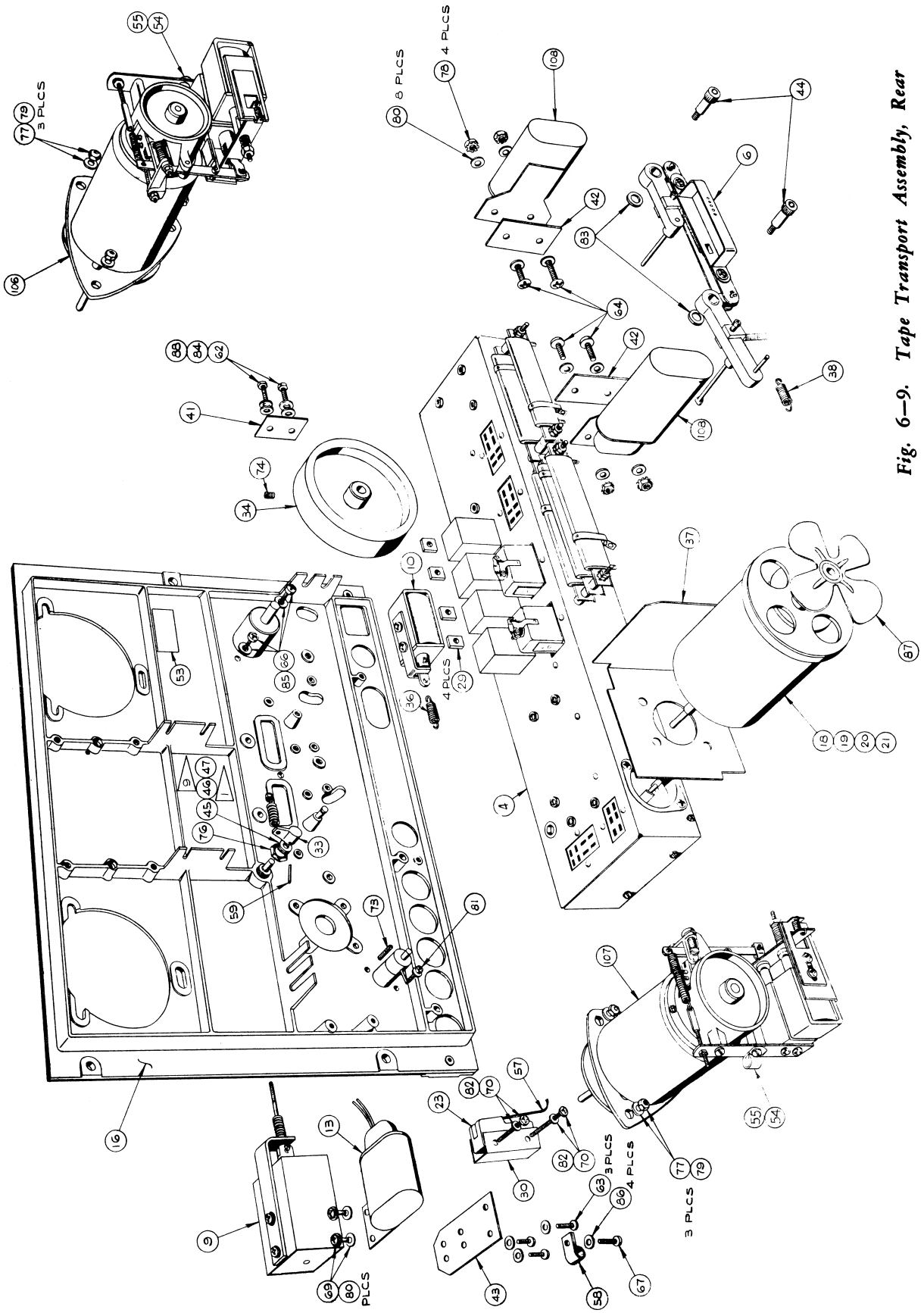


Fig. 6-9. Tape Transport Assembly, Rear

CONTROL BOX KNIFE DISCONNECT
CONNECTION INFORMATION

HARNESS WIRE COLOR	PART DESCRIPTION	TERM. COLOR
BRN	K609 SOLENOID, TAPE LIFTER	BLK
WHT/VIO	K609 SOLENOID, TAPE LIFTER	BLK
BLU	K610 SOLENOID, CAPSTAN	BLK
WHT/YEL	K610 SOLENOID, CAPSTAN	BLK
YEL	C601 CAPACITOR, CAPSTAN MOTOR	BRN
WHT/VIO	C601 CAPACITOR, CAPSTAN MOTOR	BRN
WHT/RED	S603 SWITCH, SAFETY	WHT/RED
VIO	S603 SWITCH, SAFETY	VIO

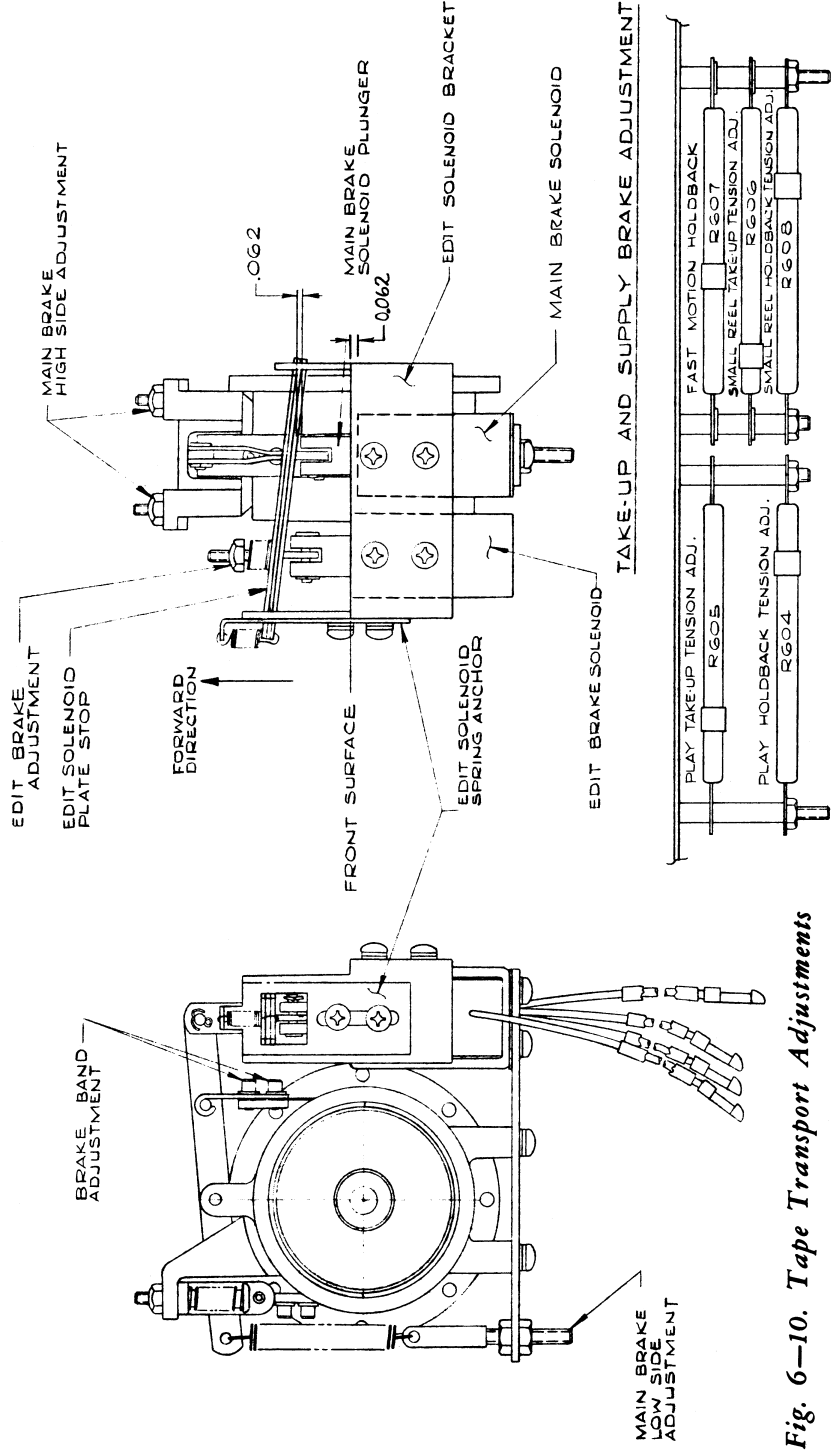
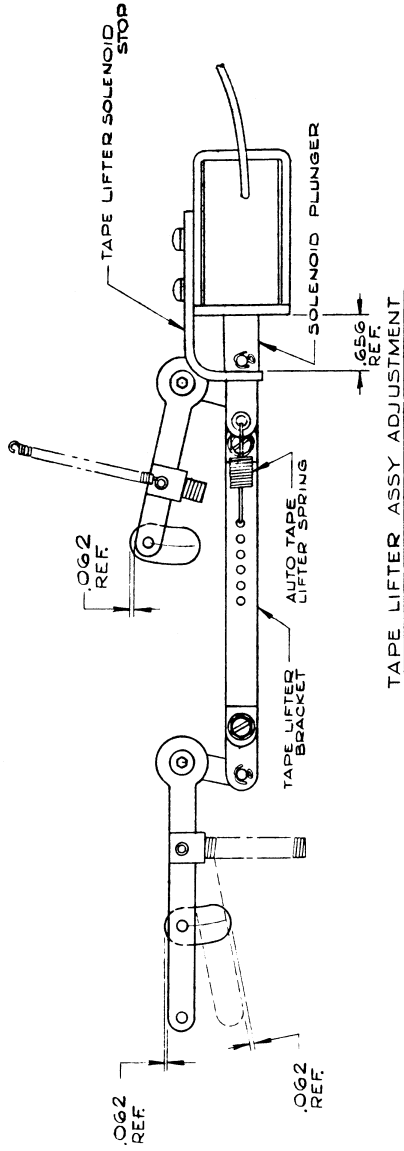


Fig. 6-10. Tape Transport Adjustments

TAPE LIFTER ASSEMBLY
4030259 (Ref. E)
(See Fig. 6-11)

Item	Qty	DESCRIPTION	Ampex Part No.
		Tape lifter, assembly	4030259-03
1	1	Tape Lifter, left hand	4040965-03
2	1	Tape Lifter, right hand	4040966-03
3	2	Link	4230244-01
4	1	Bracket	4260384-01
5	1	Spring	4270254-01
6	2	Pin, Clevis, 1/8-inch dia.	400-005
12		Spring Clip	4030278-01
16		Tape, Plastic Foam, 0.063 thk x 0.187 wide	225-275
17		Tape, Polyvinyl Foam, 0.125 thk x 0.375 wide	225-298
Items of standard hardware not listed			

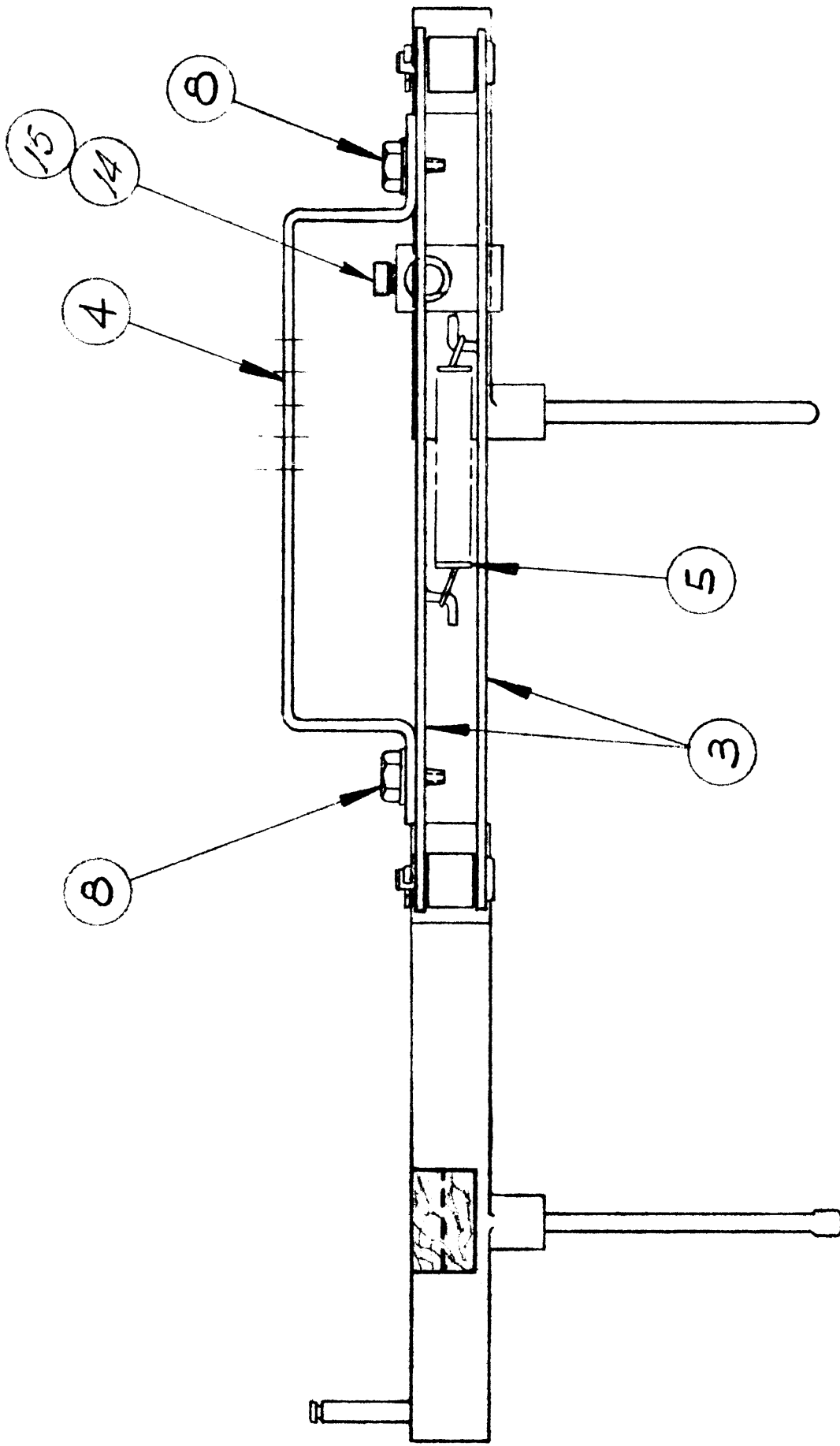


Fig. 6-11. Tape Lifter Assembly, Tape Transport

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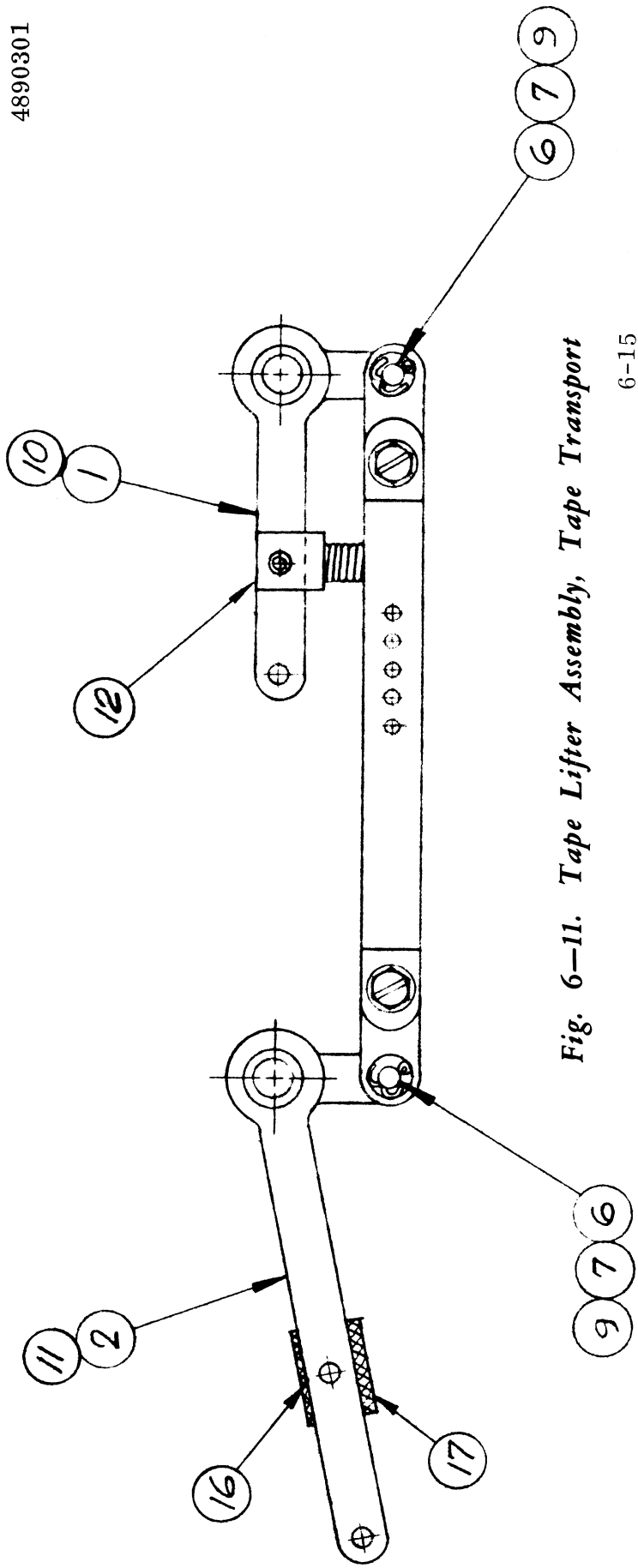
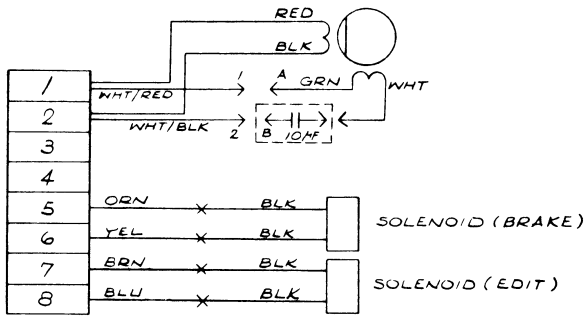


Fig. 6-11. Tape Lifter Assembly, Tape Transport

WIRING DIAGRAM

4890301



TAKE-UP CONNECTIONS
CONNECT KNIFE CONNECTOR (ITEM 8)
1 TO B
2 TO A

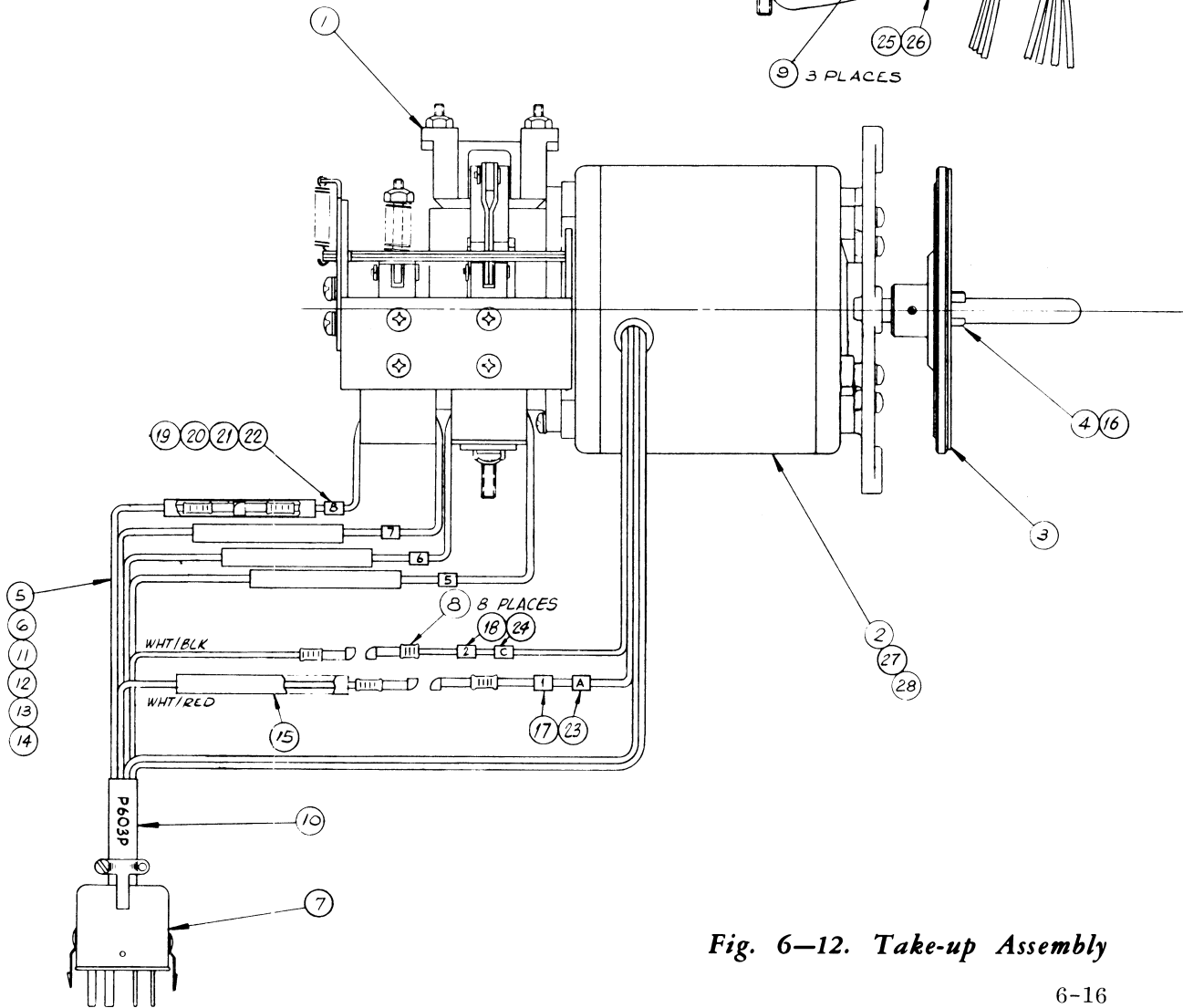
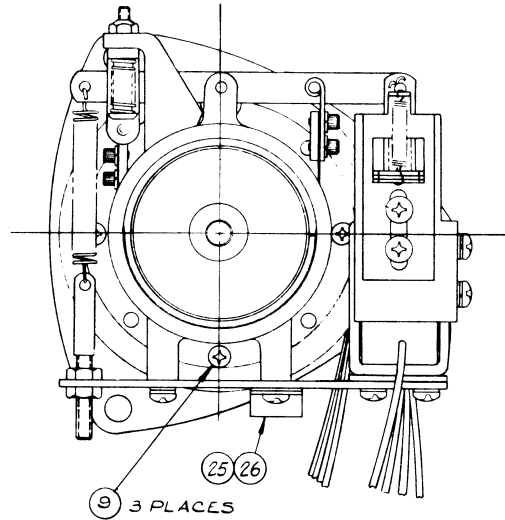


Fig. 6-12. Take-up Assembly

TAKEUP ASSEMBLY

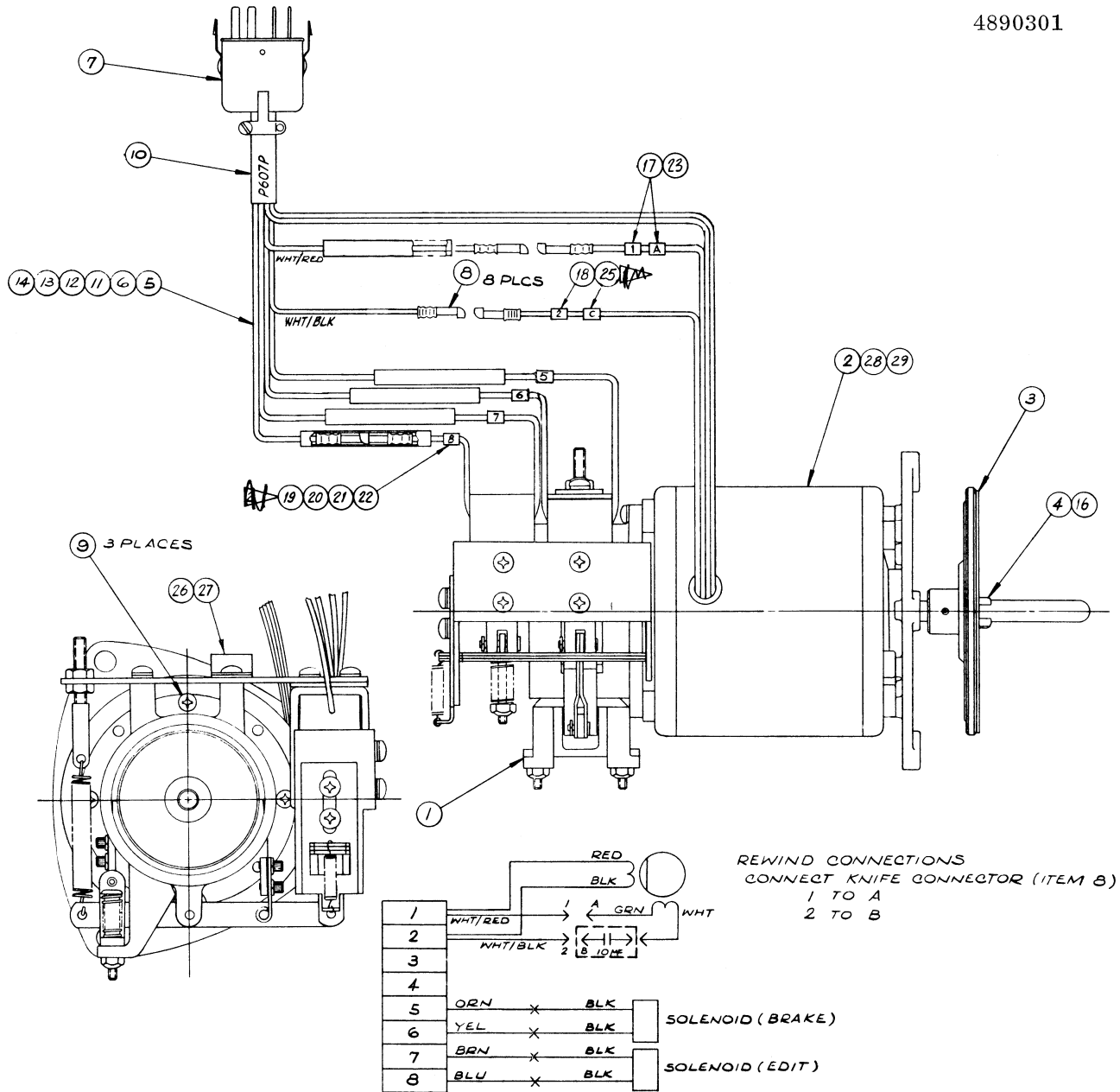
4030297C
(See Fig. 6-12)

Item	-01	-02	-03	DESCRIPTION	Ampex Part No.
	X			Takeup assembly	4030297-01
		X		Takeup assembly	4030297-02
			X	Takeup assembly	4030297-03
1	1	1	1	Brake, assembly (see Fig. 6-14)	4030264-03
2	1			Motor assembly (G. E.)	4040768-02
28			1	Motor assembly (Takanawa)	4040768-08
3	1	1	1	Pad, turntable	4130163-02
4	1	1	1	Drive Plate	4320128-10
7	1	1	1	Connector, plug, 8 pins, male	145-013
8	12	12	12	Solderless Connector	171-008
27		1		Motor Assembly (Ashland)	4040768-04
Items of standard hardware, wire, etc., not listed					

REWIND ASSEMBLY
4030298C
(See Fig. 6-13)

Item	-01	-02	-03	DESCRIPTION	Ampex Part No.
	X			Rewind assembly	4030298-01
		X		Rewind assembly	4030298-02
			X	Rewind assembly	4030298-03
1	1	1	1	Brake assembly (see Fig. 6-14)	4030264-04
2	1			Motor assembly (G. E.)	4040768-01
29			1	Motor assembly (Takanawa)	4040768-07
3	1	1	1	Pad, turntable	4130163-02
4	1	1	1	Drive Plate	4320128-10
7	1	1	1	Connector, plug, 8 pins, male	145-013
8	12	12	12	Solderless connectors	171-008
28	1			Motor Assembly (Ashland)	4040768-03
Items of standard hardware, wire, etc., not listed					

AMPEX



WIRING DIAGRAM

Fig. 6-13. Rewind Assembly

4890301

-03 SHOWN
-04 OPPOSITE HAND

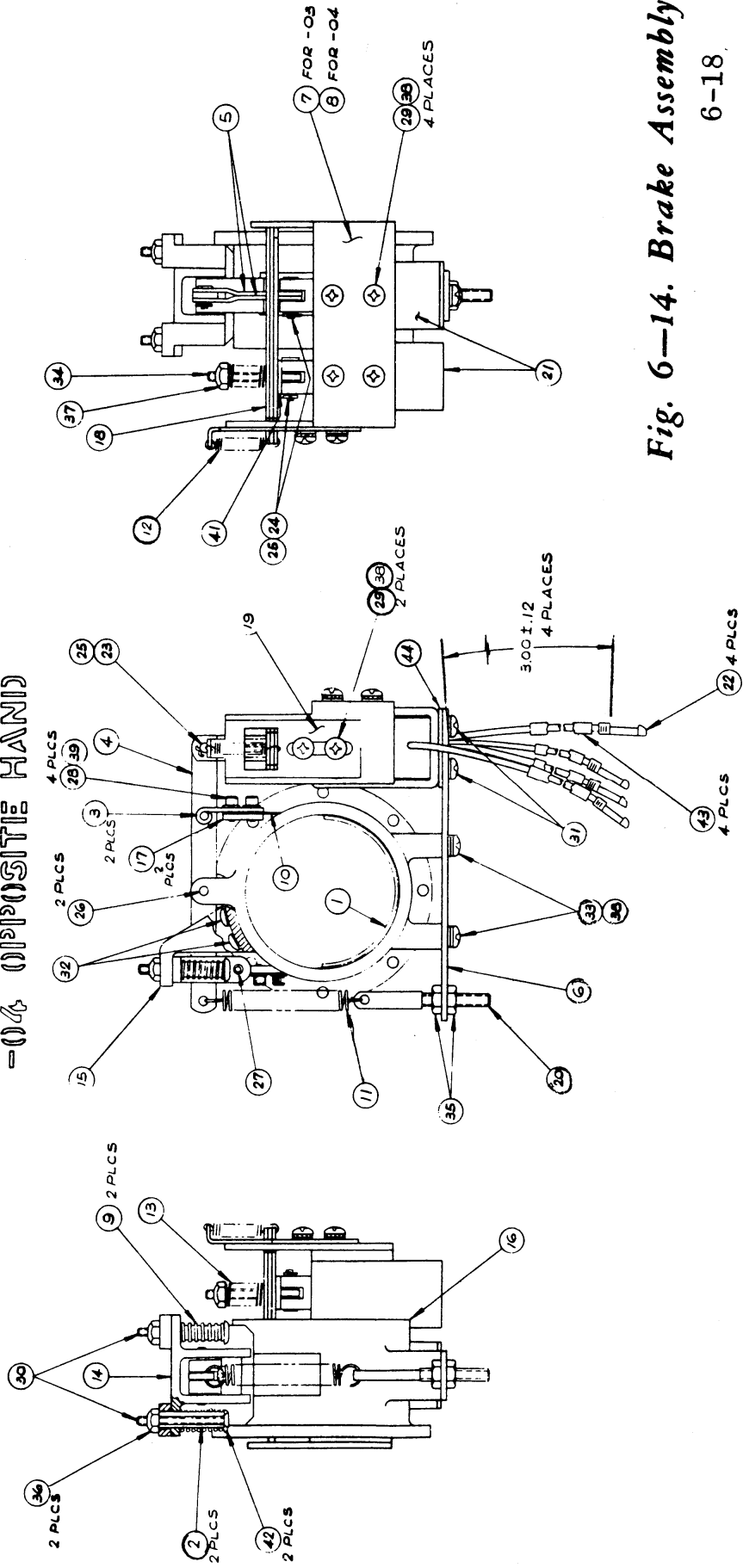


Fig. 6-14. Brake Assembly
6-18.

BRAKE ASSEMBLY
 CATALOG NO. 4030264F
 (See Fig. 6-14)

ITEM -03 -04

DESCRIPTION *

Ampex Part
No.

			DESCRIPTION *		Ampex Part No.
	X		Brake, assembly, takeup		4030264-03
		X	Brake, assembly, rewind		4030264-04
1	1	1	Band, assembly		4040414-10
2	2	2	Spacer		4220141-10
3	2	2	Link, brake band		4230161-10
4	1	1	Lever, brake		4230162-10
5	2	2	Link, solenoid		4230163-10
6	1	1	Bracket, solenoid		4260183-10
7	1	1	Bracket, edit solenoid		4260386-03
8		1	Bracket, edit solenoid		4260386-04
9	2	2	Spring, compression		4270163-10
10	1	1	Spring, leaf		4270164-10
11	1	1	Spring, brake		4270178-10
12	1	1	Spring, edit brake return		4270251-01
13	1	1	Spring, compression		352-085
14	1	1	Cross Head, brake		4330109-10
15	1	1	Anchor, brake		4330110-10
16	1	1	Housing, brake		4330112-10
17	2	2	Clamp, band link		4330113-10
19	1	1	Anchor, spring, edit solenoid		4330260-01
20	1	1	Bolt, spade		4400496-60
21	2	2	Solenoid, brake (K605 thru K607)		4041070-01
22	4	4	Connector, solderless		171-008

* Items of standard hardware not listed.

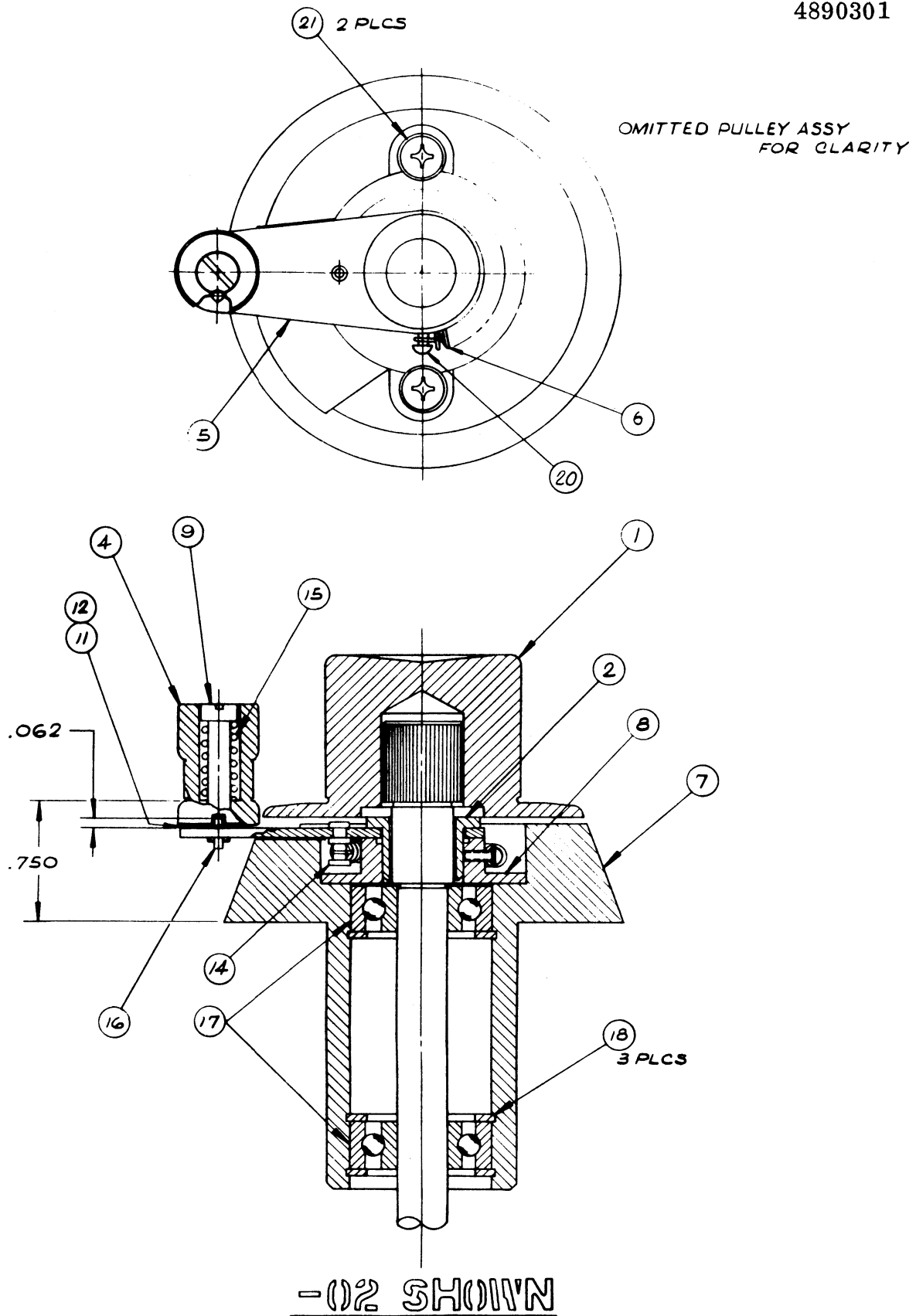


Fig. 6-15. Reel Idler Assembly
6-19

REEL IDLER ASSEMBLY
 CATALOG NO. 4040970G
 (See Fig. 6-15)

ITEM	-02	DESCRIPTION	Ampex Part No.
	X	Reel Idler, assembly	4040970-02
1	1	Pulley, assembly	4040408-80
2	1	Bushing (see note below)	4200121-10
4	1	Tape Guide	4210311-01
5	1	Arm, reel idler (see note below)	4230245-01
6	1	Spring, tension, arm	4270160-20
7	1	Housing, reel idler	4290272-10
8	1	Mount, reel idler (see note below)	4290273-10
9	1	Screw, tape guide mounting	4400593-01
11	1	Washer, .003 thick	4440282-01
12	a/r	Washer, .025 thick	4440282-02
15	1	Spring, compression	352-084
17	2	Bearing, ball	421-116
18	3	Retaining ring, internal	430-027
<p>NOTE</p> <p>Items 2, 5, and 8, not replaceable separately. Contact Ampex Technical Support, Professional Audio, for information if replacement is required.</p>			

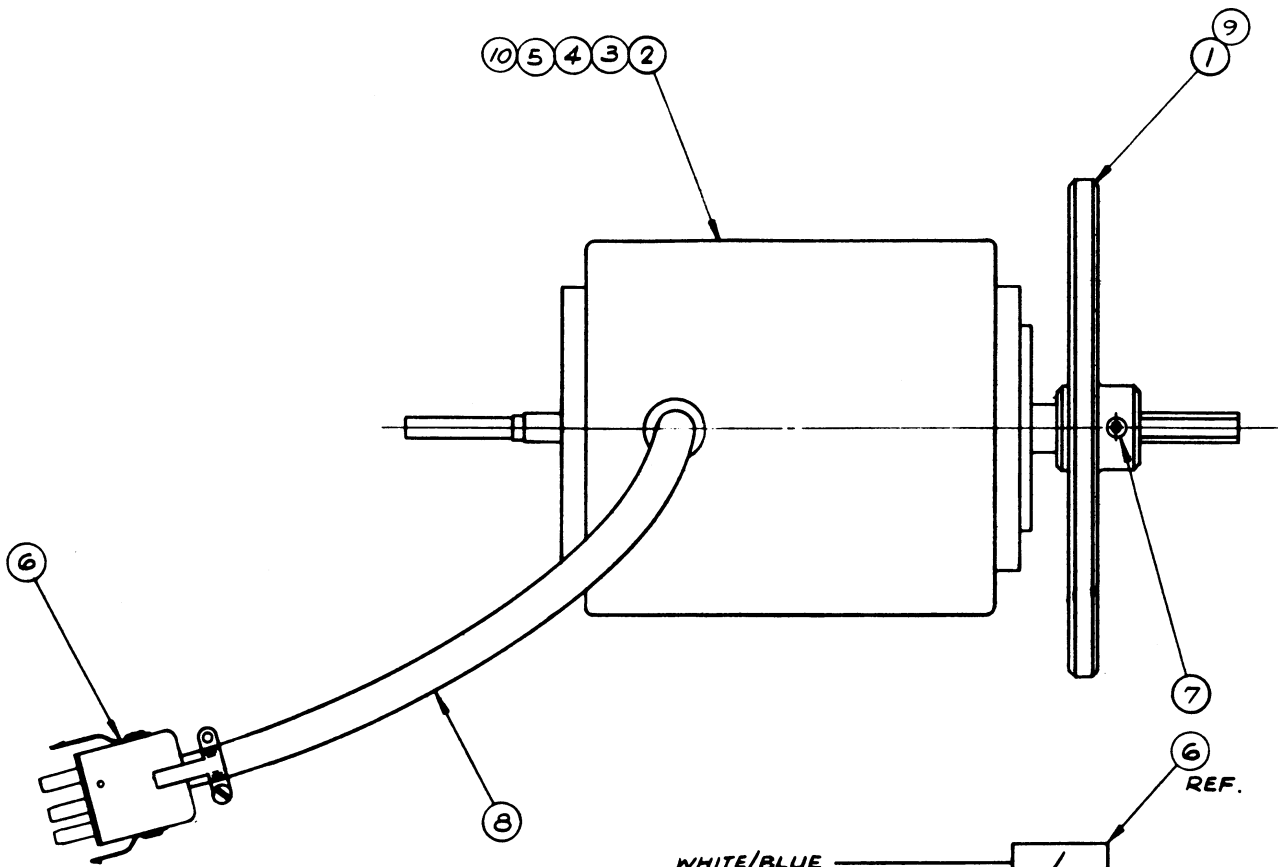
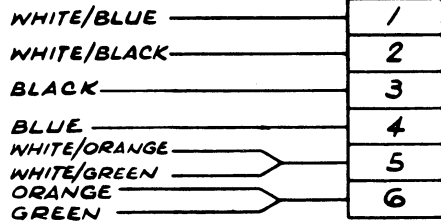


TABLE I		
PART NO.	SPEED	CYCLE
4040993-01	7.5 - 15 IPS	60
4040993-02	3.75 - 7.5 IPS	60
4040993-03	7.5 - 15 IPS	50
4040993-04	3.75 - 7.5 IPS	50
4040993-05		
4040993-06	7.5 - 15 IPS	60



WIRING DIAGRAM

Fig. 6-16. Drive Motor Assembly

DRIVE MOTOR ASSEMBLY
 CATALOG NO. 4040993E
 (See Fig. 6-16)

ITEM					DESCRIPTION	Ampex Part
-01	-02	-03	-04	No.		
	X				Drive Motor, assembly, 7 1/2 and 15 ips, 60 Hz	4040993-01
		X			Drive Motor, assembly, 3 3/4 and 7 1/2 ips, 60 Hz	4040993-02
			X		Drive Motor, assembly, 7 1/2 and 15 ips, 50 Hz	4040993-03
				X	Drive Motor, assembly, 3 3/4 and 7 1/2 ips, 50 Hz	4040993-04
1	1	1			Flywheel	4250113-10
2	1				Motor, drive	4590120-01
3		1			Motor, drive	4590120-02
4			1		Motor, drive	4590121-01
5				1	Motor, drive	4590121-02
6	1	1	1	1	Connector, plug, 6 pins, male	145-012
7	1	1	1	1	Screw, set, hex socket, cup point, 10-32 x 1/4	477-336
9			1	1	Flywheel	4250114-10
NOTE Capstan hard chrome plated (drive motor)						

CONTROL BOX

4020293 (Rev. J)

(See Figs. 6-17 and 6-18)

(An alphanumeric list by electronic designation is given with Fig. 6-20)

Item	Qty	Description	Ampex Part No.
3	1	Dummy plug, remote control (P605P)	4050444-01
4	1	Printed Wiring Board, Record and Tape Lift Delay	4050472-03
5	1	Insulator, wraparound, transformer	4170108-02
6	1	Bracket, transistor mounting	4260399-01
7	1	Cover, assembly, control box	4041015-01
8	1	Transformer, power, T601	4580198-01
9	1	Shield, power transformer	4600149-01
10	2	Shield, power transformer	4600150-01
11	2	Switch, pushbutton, S608, S611	4620064-01
12	1	Lamp Holder, pilot light	4610083-01
13	1	Switch, speed, 3P.D.T., toggle, S602	4620053-01
14	2	Switch, pushbutton, normally open, S604, S605	4620144-10
15	1	Switch, pushbutton, normally closed, S606	4620144-20
16	1	Switch, pushbutton, normally open, S609	4620144-30
18	1	Switch, power, S601	4620199-01
19	2	Switch, reel, S607, S610	4620200-01
22	9	Diode, silicon, CR601-606, CR608, CR611-615	013-678
23	1	Transistor, silicon, Q601	014-611
24	1	Transistor, germanium, 40022, Q602	014-728
25	4	Relay, 4PDT, K601, K602, K603, K604	020-144
26	4	Capacitor, ceramin, .02mFd, 500 vdcw, C602-605	030-001
27	1	Capacitor, electrolytic, 500mFd, 50vdcw, C609	031-134
28	2	Capacitor, ceramin disc, .005mFd, 1400 vdcw, C606, C607	030-465
29	4	Capacitor, paper, .047mFd, 400 vdcw, C608, 613, 615, 616	035-985
30	1	Resistor, fixed, comp, 10 ohm, 10%, 1/2W, R601	041-032
31	2	Resistor, fixed, comp, 1,200 ohm, ±10%, 1W, R602, R603	041-147
32	1	Resistor, adjustable, wirewound, 750 ohm, 55W, (R607	059-013
33	4	Resistor, adjustable, wirewound, 150 ohm, 55W, R604-606, R608	059-014
34	1	Transistor, Q606	014-630
35	1	Lamp, 120V, .025 amp, DS601	060-323
36	2	Fuse, 3 amp, slo-blo, F601, F602	070-002
37	2	Fuseholder, short body	085-001
38	1	Capacitor, electrolytic, 150mFd, 180 vdcw, C614	031-624
39	1	Resistor, wirewound, 40 ohms, 20W, R609	059-236
40	1	Resistor, fixed, comp, 47,000 ohm, 1W, R611	041-166
42	4	Socket, relay	150-119
43	1	Washer, mica, transistor mounting	014-703
46	2	Washer, shoulder, nylon	503-089
49	2	Clamp, capacitor	301-011
50	2	Clamp, cable, plastic, 7/16 ID	302-006
51	1	Connector, power, male, J601S	145-501
71	2	Spacer, plain	280-026
76	2	Resistor, fixed, comp, 180 ohm, 1/2W, R610, R615	041-257
77	3	Capacitor, paper, 0.1mFd, 400 vdcw, C610-C612	035-999
78	3	Resistor, fixed, comp, 100 ohm, 1/2W, R612-614	041-038
79	4	Spring, relay hold down	020-486
		Items riveted on chassis	
	4	Connector, receptacle, 8 sockets, female, J603S, J604S, J606S, J607S	146-003
	1	Connector, receptacle, 6 sockets, female, J602S	146-004
	1	Connector, receptacle, 12 sockets, female, J605S	146-009
84	1	Fuse, 1/2 amp, slo-blo, 120V, F603	070-026

Items of standard hardware, wire, etc., not listed.

NOTE: Resistor tolerances are 10% unless noted otherwise.

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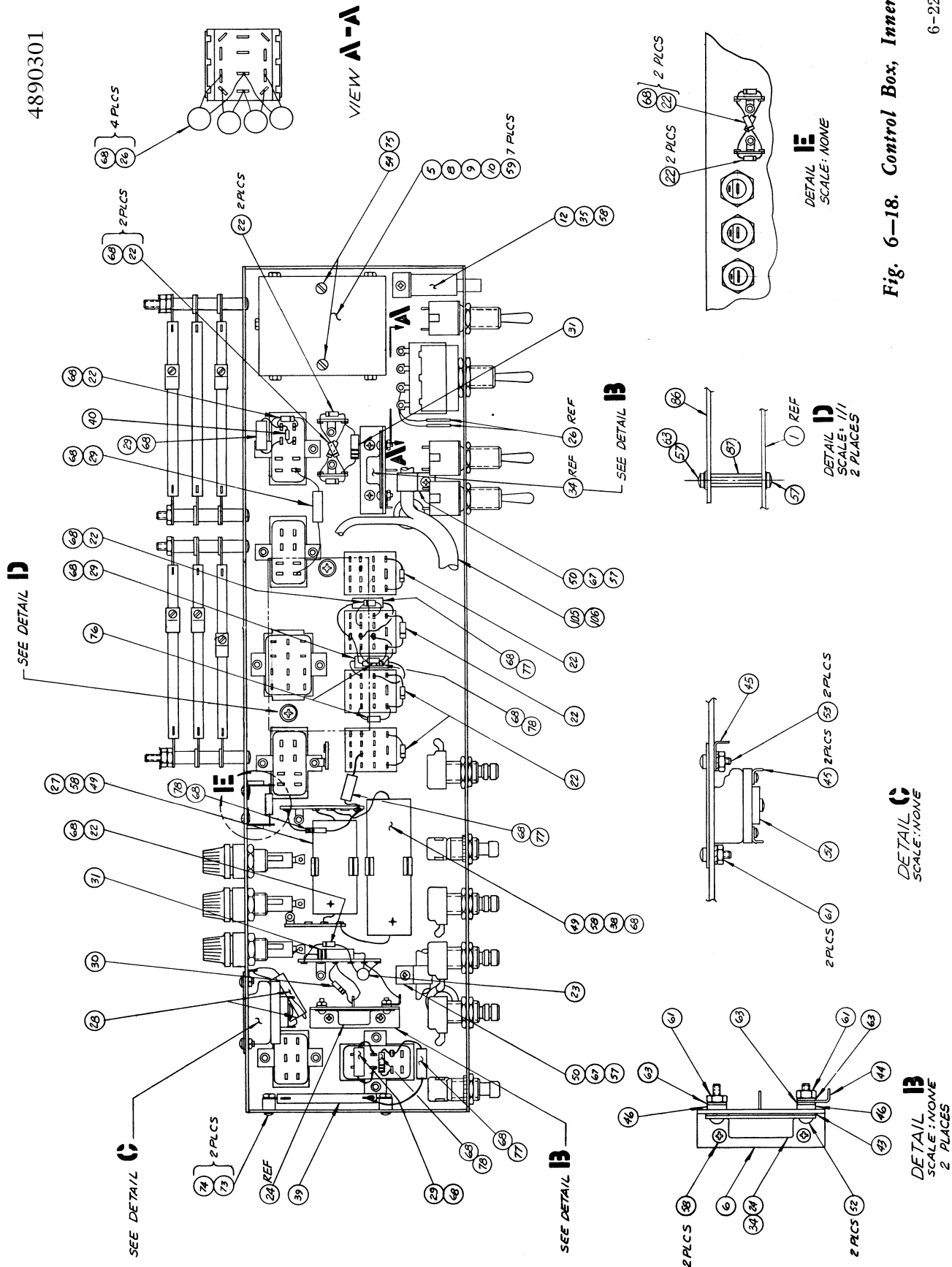


Fig. 6-18. Control Box, Inner

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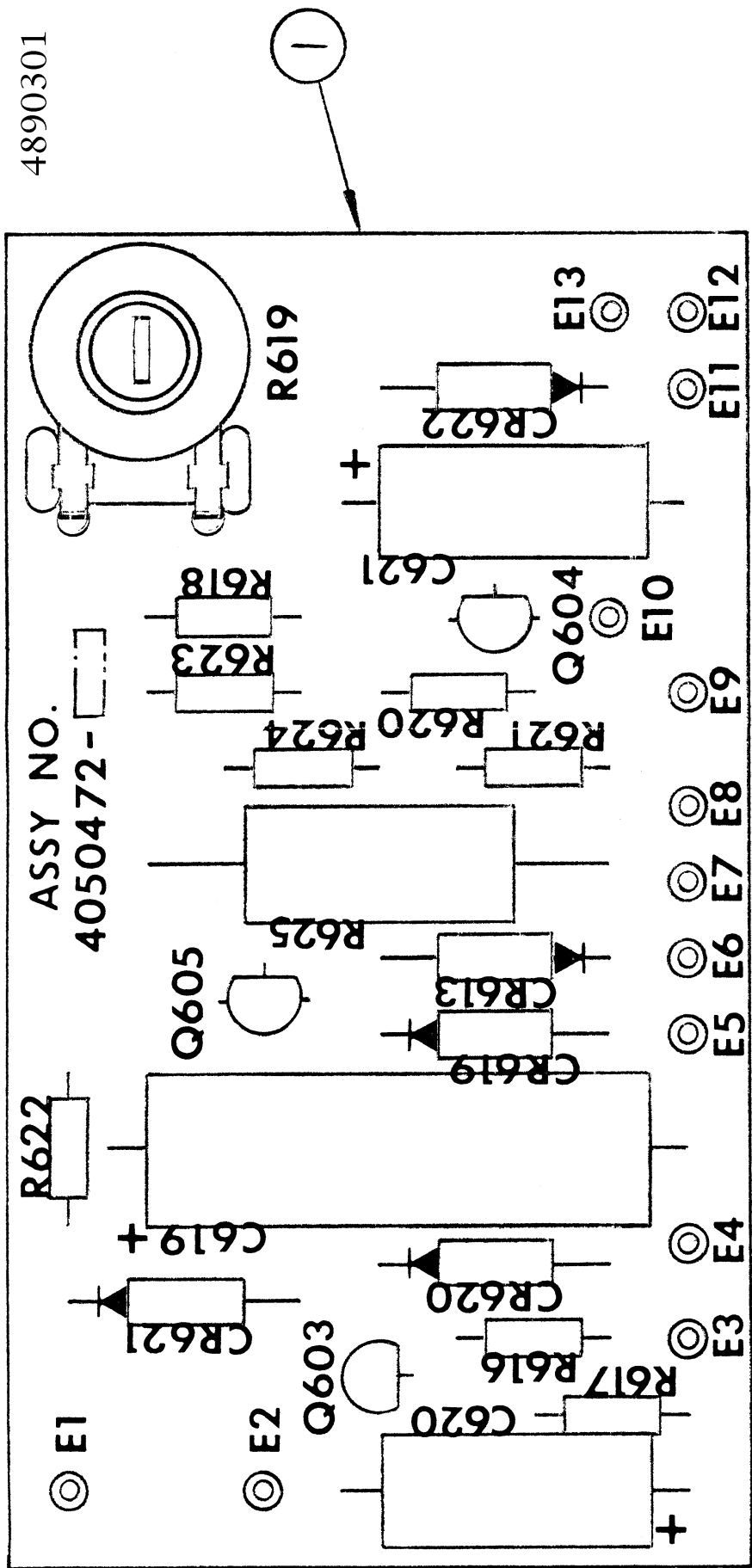


Fig. 6-19. Printed Wiring Assembly, Record and Tape Lift Delay

RECORD AND TAPE LIFT DELAY
 PRINTED WIRING BOARD ASSEMBLY
 Ampex 4050472 (Ref. C)

4890301

Item No.	-03	DESCRIPTION	Ref. No.	Ampex Part No.
1	1	Printed Wiring Board		4500035-01
5	5	Diode, Silicon	CR613,619-622	013-678
4	1	Transistor	Q605	014-247
8	1	Capacitor, Electrolytic, 75 μ F, 50V	C619	031-939
9	1	Capacitor, Electrolytic, 10 μ F, 50V	C621	031-940
10	1	Resistor, Composition, 1K ohm, 2W, 10%	R625	041-202
11	1	Resistor, Composition, 22K ohm, 1/4W, 10%	R620	041-630
12	1	Resistor, Composition, 15K ohm, 1/4W, 10%	R618	041-631
13	3	Resistor, Composition, 10K ohm, 1/4W, 10%	R616, 621, 622	041-633
14	1	Resistor, Composition, 680 ohm, 1/4W, 10%	R617	049-334
15	1	Resistor, Composition, 33K ohm, 1/4W, 10%	R624	049-371
16	1	Resistor, Composition, 47K, 1/4W, 10%	R623	049-372
17	1	Resistor, Variable, 500K ohm,	R619	058-364
18	1	Transistor, Silicon	Q603	580-089
19	1	Capacitor, Tantalum, 330 μ F, 6V	C620	037-072
36	REF	Schematic		4840183
37	REF	Schematic		4840184
20	1	Transistor	Q604	014-698
3	1	Transistor Mounting Pad	Q605	280-131

AMPEX

AUG. 1971

ELECTRONIC COMPONENTS, TAPE TRANSPORT (Fig. 6-20)

4890301

(Location of control box components shown in Figs. 6-17 and 6-18)

Ref. No.	Qty	DESCRIPTION	LOCATION *	Ampex Part No.
B601	1	Motor, drive, assembly (see Fig. 6-16)	T	4040993
B602	1	Motor, takeup, assembly (see Fig. 6-12)	T	4040969-02
B603	1	Motor, rewind, assembly (see Fig. 6-13)	T	4040969-01
C601	1	Capacitor, assembly, drive motor	T	4040591-02
	1	Capacitor, 5.0 mfd, 330 vac		4540292-30
	1	Safety Boot		032-082
	2	Solderless Connectors		171-008
C602	4	Capacitor, ceramic disc; .02 mfd, 500 vdcw	CB	030-001
C603	-	Same as C602	CB	
C604	-	Same as C602	CB	
C605	-	Same as C602	CB	
C606	2	Capacitor, ceramic disc; .005 mfd, -20+80%, 1400 vdcw	CB	030-465
C608	4	Capacitor, mylar, tubular; .047 mfd, ±20%, 400 vdcw	CB	035-985
C609	1	Capacitor, electrolytic; 500 mfd, -10+150%, 50 vdcw	CB	031-134
C610	3	Capacitor, mylar, tubular; 0.1 mfd, ±10%, 400 vdcw	CB	035-999
C611	-	Same as C610	CB	
C612	-	Same as C610	CB	
C613	-	Same as C608	CB	
C614	1	Capacitor, electrolytic; 150 mfd, -10+100%, 180 vdcw	CB	031-624
C615	-	Same as C608	CB	
C616	-	Same as C608	CB	
C617	2	Capacitor, assembly, takeup motor	T	4050361-10
	2	Capacitor, 10 mfd, 236 vac		4540312-10
	2	Safety Boot		032-082
	4	Solderless Connectors		171-008
C620	1	Capacitor, tantalum, 330 mfd, 6 vdcw	CB	037-072
C618	-	Same as C617, for rewind motor	T	
CR601	15	Diode, silicon, large signal, rectifier	CB	013-678
CR602	-	Same as CR601	CB	
CR603	-	Same as CR601	CB	
CR604	-	Same as CR601	CB	
CR605	-	Same as CR601	CB	
CR606	-	Same as CR601	CB	
CR608	-	Same as CR601	CB	
CR609	-	Same as CR601	CB	
CR611	-	Same as CR601	CB	
CR612	-	Same as CR601	CB	
CR613	-	Same as CR601	CB	
CR614	-	Same as CR601	CB	
CR615	-	Same as CR601	CB	
CR616	-	Same as CR601	CB	
CR617	-	Same as CR601	CB	
CR618	-	Same as CR601	CB	
DS601	1	Lamp, incandescent; 120 volts, .025 amp	CB	060-323
F601	2	Fuse, slo-blo; 3 amps, 125 volts	CB	070-002
F602	-	Same as F601	CB	
F603	1	Fuse, slo-blo, 1/2 amp, 125 vac	CB	070-026
J601S	1	Connector, power, 3 contacts, male; flush base, polarized	CB	147-079
J602S	1	Connector, receptacle, 6 sockets, female	CB	146-004
J603S	4	Connector, receptacle, 8 sockets, female	CB	146-003
J604S	-	Same as J603S	CB	
J605S	1	Connector, receptacle, 12 sockets, female	CB	146-009
J606S	-	Same as J603S	CB	
J607S	-	Same as J603S	CB	
K601	4	Relay, armature, 4P2T; 24 volts, 650 ohms; with nylon dust cover	CB	020-144
K602	-	Same as K601	CB	
K603	-	Same as K601	CB	
K604	-	Same as K601	CB	
K605	4	Solenoid, takeup, main brake (see Fig. 6-14)	T	4041070-01
K606	-	Same as K605 (takeup edit brake) (see Fig. 6-14)	T	
K607	-	Same as K605 (supply main brake) (see Fig. 6-14)	T	

*T - Transport, CB - Control Box

ELECTRONIC COMPONENTS, TAPE TRANSPORT

(2 of 2)

Ref. No.	Qty	DESCRIPTION	LOCATION *	Ampex Part No.
K608	-	Same as K605 (supply edit brake) (see Fig. 6-14)	T	
K609	1	Solenoid, assembly, tape lifter (see Figs. 6-8 and 6-9)	T	4030273
K610	1	Solenoid, assembly, capstan idler (see Figs. 6-8 and 6-9)	T	4030272
P601		Not used		
P602	1	Connector, plug, 6 pins, male (drive motor--see Fig. 6-16)	T	145-012
P603	2	Connector, plug, 8 pins, male (takeup motor--see Fig. 6-12)	T	145-013
P604P	1	Dummy Plug, motor drive amplifier	CB	4050138-10
P605P	1	Dummy Plug, remote control	CB	4050444-01
P606P		Not used		
P607P	-	Same as P603P (rewind motor--see Fig. 6-13)	T	
Q601	1	Transistor, silicon, pnp, 300mw	CB	014-611
Q602	1	Transistor, Germanium, power, pnp; 40022	CB	014-728
Q606	1	Transistor, silicon, npn, power	CB	014-630
R601	1	Resistor, fixed, comp; 10 ohms, $\pm 10\%$, 1/2w; RC20GF100K	CB	041-032
R602	2	Resistor, fixed, comp; 1,200 ohms, $\pm 10\%$, 1w; RC32GF122K	CB	041-147
R603	-	Same as R602	CB	
R604	2	Resistor, wirewound, adjustable; 150 ohms, $\pm 10\%$, 55w	CB	059-014
R605	-	Same as R604	CB	
R607	1	Resistor, wirewound, adjustable; 750 ohms, $\pm 10\%$, 55w	CB	059-013
R609	1	Resistor, wirewound, fixed; 40 ohms, $\pm 5\%$, 20w	CB	059-236
R610				
R611				
R612	3	Resistor, fixed, comp; 100 ohms, $\pm 10\%$, 1/2w; RC20GF101K	CB	041-038
R613	-	Same as R612	CB	
R614	-	Same as R612	CB	
R615				
S601	1	Switch, power, toggle; DPST, 2 position	CB	4620199-01
S602	1	Switch, speed, toggle; 3 PDT, 2 position (on-on)	CB	4620053-01
S603	1	Switch, safety, assembly; (switch only, Part No. 4620145-01)	CB	4050436-01
S604	2	Switch, fast forward, pushbutton; normally open	CB	4620144-10
S605	-	Same as S604, (rewind pushbutton)	CB	
S606	1	Switch, stop, pushbutton; normally closed	CB	4620144-20
S607	2	Switch, reel, takeup; toggle; SPST	CB	4620200-01
S608	2	Switch, play, pushbutton; 2 circuit	CB	4620064-01
S609	1	Switch, record, pushbutton; normally open	CB	4620144-30
S610	-	Same as S607; (rewind pushbutton)	CB	
S611	-	Same as S608; (edit pushbutton)	CB	
T601	1	Transformer, power	CB	4580198-01

AUG. 1971

* T - Transport, CB- Control Box

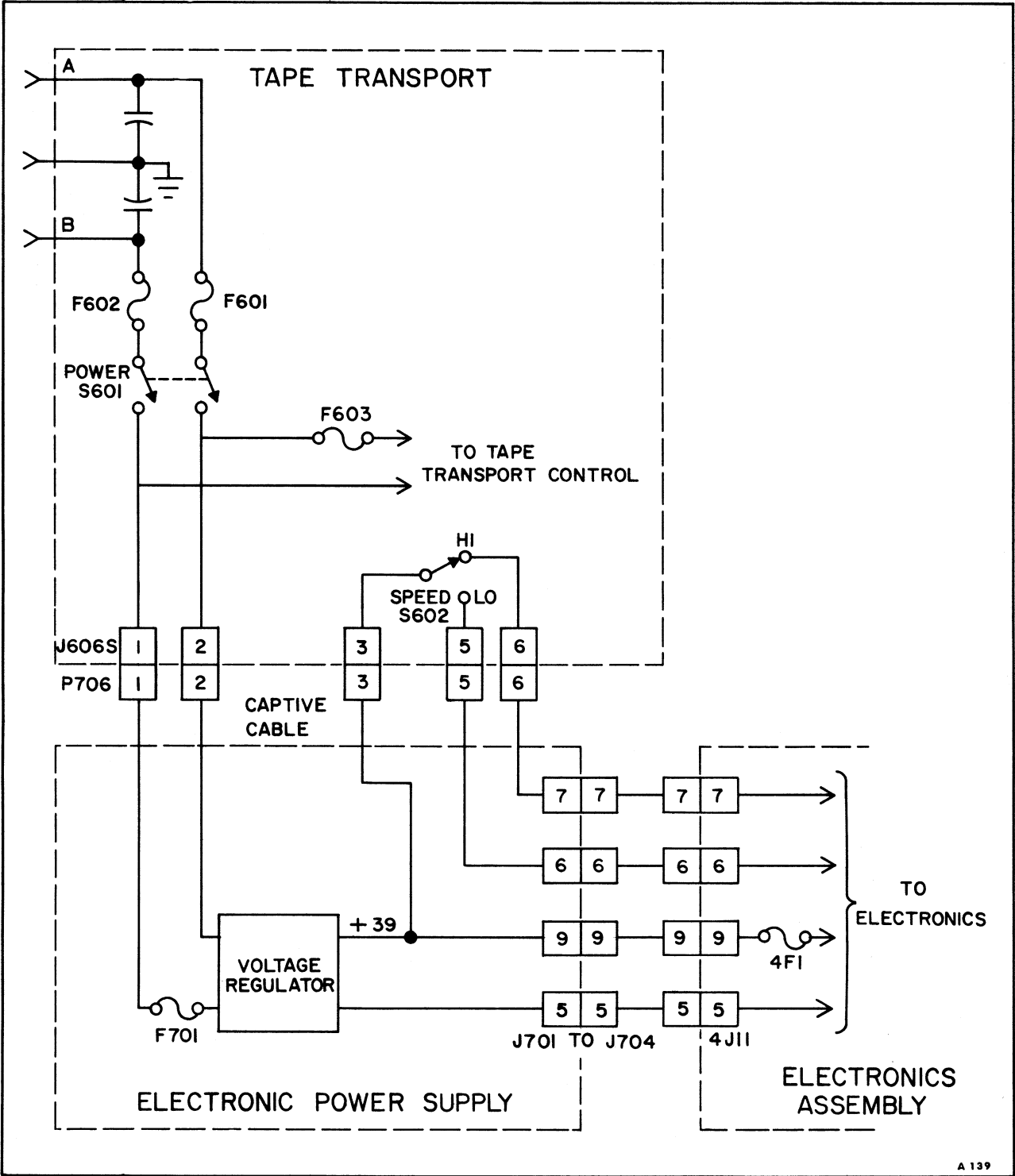
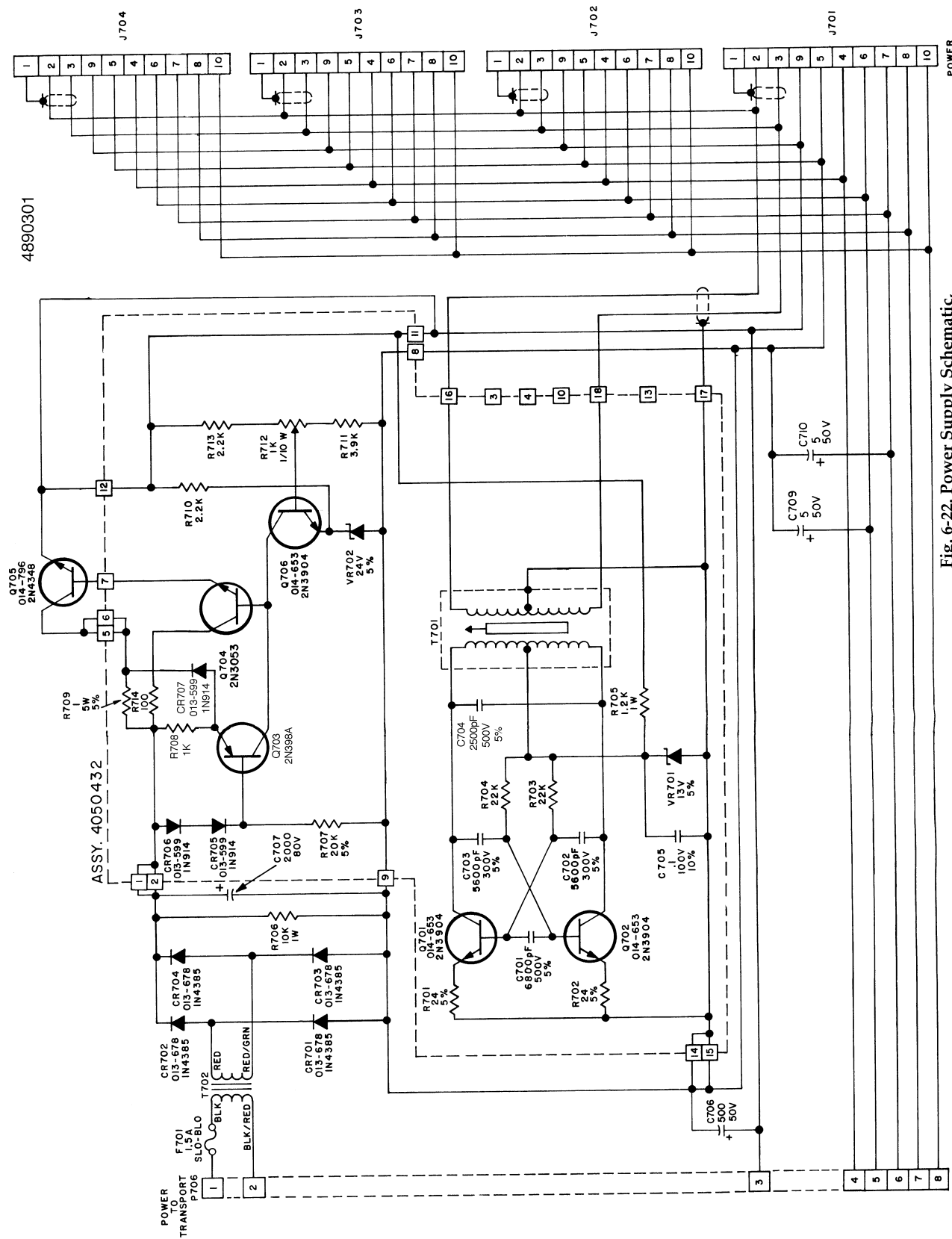


Fig. 6-21. Schematic Diagram, Transport Power Supply



4890301

Fig. 6-22. Power Supply Schematic, Record / Reproduce

Unless otherwise specified, All capacitor values are in Micro-Farads, ratings as indicated All Resistor Values are in Ohms, 1/2 Watt, 10%.

RECORD/REPRODUCE POWER SUPPLY ASSEMBLY

4890301

4020274-03 (Rev. H)

(See Fig. 6-22 for Cable See Fig. 6-35)

Ref. No.	Qty	Description	Ampex Part No.
C701	1	Capacitor, mica; 6800pFd, ±5%, 500 vdcw	056-108
C702	2	Capacitor, mica; 5600pFd, ±5%, 300 vdcw	034-507
C703	-	Same As C702	
C704	1	Capacitor, mica; 2500pFd, ±5%, 500 vdcw	034-994
C705	1	Capacitor, mylar; 0.1mFd, ±10%, 100 vdcw	055-106
C706	1	Capacitor, electrolytic; 500mFd, -10+150%, 50 vdcw	* 031-945
C707	1	Capacitor, electrolytic; 2000mFd, -10+250%, 80 vdcw	* 4550147-03
C709	2	Capacitor, electrolytic; 5mFd, -10+75%, 50 vdcw	* 031-205
C710	-	Same as C709	
CR701	4	Diode, silicon, large signal rectifier	* 013-678
CR702	-	Same As CR701	*
CR703	-	Same As CR701	*
CR704	-	Same As CR701	*
CR705	3	Diode, silicon, small signal switching	013-599
CR706	-	Same As CR705	
CR707	1	Same As CR705	
F701	1	Fuse, slo-blo; 1.5 amp, 125v	* 070-075
J701	4	Connector, receptacle; 10 sockets, female	* 146-018
J702	-	Same As J701	*
J703	-	Same As J701	*
J704	-	Same As J701	*
P706	1	Connector, plug; 8 pins, male	* 145-013
Q701	3	Transistor, silicon	014-653
Q702	-	Same As Q701	
Q703	1	Transistor, Germanium, 2N398A	014-704
Q704	1	Transistor, silicon; 2N3053	014-590
Q705	1	Transistor, silicon, 2N4348	014-796
Q706	-	Same As Q701	
R701	2	Resistor, fixed, comp; 24 ohm, ±5%, 1/2W, RC20GF240J	041-533
R702	-	Same As R701	
R703	2	Resistor, fixed, comp; 22,000 ohm, ±10%, 1/2W, RC20GF223K	041-064
R704	-	Same As R703	
R705	1	Resistor, fixed, comp; 1,200 ohm, ±10%, 1W, RC32GF122K	041-147
R706	1	Resistor, fixed, comp; 10,000 ohms, ±10%, 1W, RC32GF103K	* 041-158
R707	1	Resistor, fixed, comp; 20,000 ohm, ±10%, 1/2W, RC20GF203K	041-529
R708	1	Resistor, fixed, comp; 1,000 ohm, ±10%, 1/2W, RC20GF120K	041-048
R709	1	Resistor, fixed, wirewound, 1 ohm, ±5%, 5W	059-016
R710	2	Resistor, fixed, comp, 2,200 ohm, ±10%, 1/2W, RC20GF222K	041-052
R711	1	Resistor, fixed, comp, 3,900 ohm, ±10%, 1/2W, RC20GF392K	041-055
R712	1	Resistor, variable, comp; 1,000 ohm, ±30%, 1/10W	044-370
R713	-	Same As R710	
R714	1	Resistor, fixed, comp; 100 ohms, ±10%, 1/2W, RC20GF101K	041-038
T701	1	Coil, bias oscillator	4580123-01
T702	1	Transformer, power supply	* 4580156-01
VR701	1	Diode, silicon, zener; 13 volt, ±5%	013-747
VR702	1	Diode, silicon, zener; 24 volt, ±5%	013-712
	2	Card Guide	530-102
	1	Fuse holder, short body	085-001
	2	Pad, transistor (for Q703, Q704)	280-131

NOTE: All items except those marked with * are on printed circuit board, Catalog No. 4050432-05

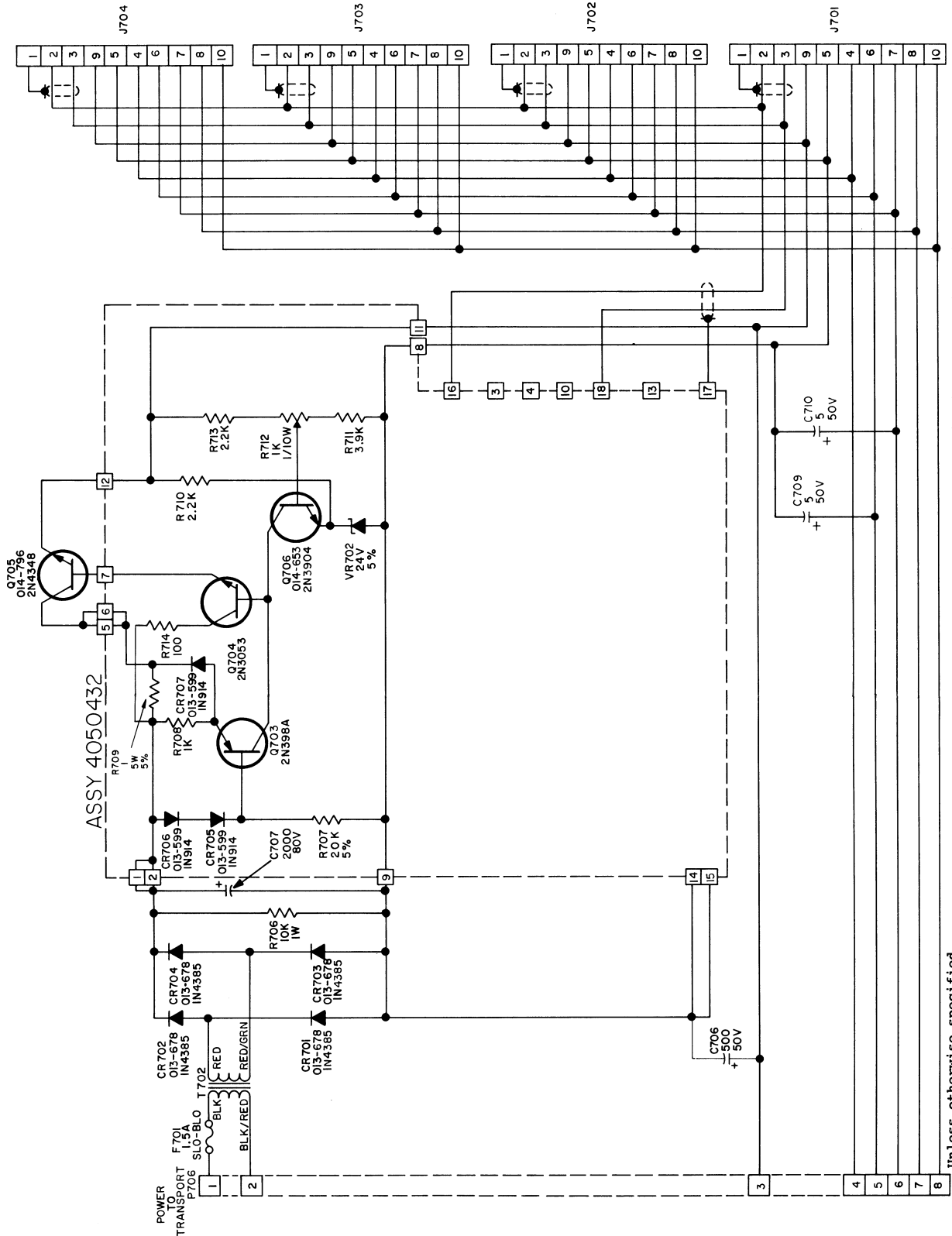
AMPEX

REGULATOR & OSCILLATOR
PRINTED WIRING BOARD ASSEMBLY
Ampex 4050432 (Ref. J)

4890301

Item No.	AG-440B -05	AG445B -06	DESCRIPTION	Ref. No.	Ampex Part No.
1	1	1	Printed Wiring Board		4500105-02
2	1		Bias Oscillator Coil	T701	
3	3	3	Diode, CD458	CR705-707	013-599
4	1	1	Zener, 24V, 5%	VR702	013-712
5	1		Zener, 13V, 5%	VR701	013-747
6	1	1	Transistor, 2N3053	Q704	014-590
7	3	1	Transistor, CD525	Q701, 702, 706	014-653
9	1	1	Transistor, 2N398A	Q703	014-704
11	1		Capacitor, Mica, 2500PF, 500V, 5%	C704	034-994
12	2		Capacitor, Mica, 5600PF, 300V, 5%	C702, 703	034-507
13	1	1	Resistor, Fixed, 1K ohm, 1/2W, 10%	R708	041-048
14	2	2	Resistor, Fixed, 2.2K ohm, 1/2W, 10%	R710, 713	041-052
15	1	1	Resistor, Fixed, 3.9K ohm, 1/2W, 10%	R711	014-055
16	2		Resistor, Fixed, 22K ohm, 1/2W, 10%	R703, 704	041-064
18	1		Resistor, Fixed, 1.2K ohm, 1W, 10%	R705	041-147
19	2		Resistor, Fixed, 24 ohm, 1/2W, 5%	R701, 702	041-533
20	1	1	Resistor, Variable, 1K ohm, 1/10W	R712	044-370
21	1		Capacitor, Mylar, .1μF, 100V, 10%	C705	055-106
22	1		Capacitor, Mica, 6800PF, 500V, 5%	C701	056-108
23	1	1	Resistor, 1 ohm, 5W, 5%	R709	059-016
24	1	1	Resistor, 20K ohm, 1/2W, 5%	R707	041-529
26	2	2	Transistor Pad		280-131
27	1	1	Resistor, Fixed, 100 ohm, 1/2W, 10%	R714	041-038

AMPEX



Unless otherwise specified
 All Capacitor Values are in MicroFarads, ratings as indicated.
 All Resistor values are in Ohms, 1/2 Watt, 10%

Fig. 6-23. Power Supply Schematic, Reproduce Only

REPRODUCE-ONLY POWER SUPPLY ASSEMBLY

4020274-04 (Rev. H)

(See Fig. 6-23, for Cable See Fig. 6-35)

Ref. No.	Qty	Description	Ampex Part No.
C706	1	Capacitor, electrolytic; 500mFd, -10+150%, 50 vdcw	031-945
C707	1	Capacitor, electrolytic; 2000mFd, -10+250%, 80 vdcw	* 4550147-03
C708	1	Capacitor, mylar; 0.1mFd, ±10%, 100 vdcw	055-106
C709	2	Capacitor, electrolytic; 5mFd, -10+75%, 50 vdcw	031-205
C710	-	Same As C709	
CR701	4	Diode, silicon, large signal rectifier	* 013-678
CR702	-	Same As CR701	*
CR703	-	Same As CR701	*
CR704	-	Same As CR701	*
CR705	3	Diode, silicon, small signal switching	013-599
CR706	-	Same As CR705	
CR707	-	Same As CR705	
F701	1	Fuse, slo-blo; 1.5 amp, 125V	* 070-075
J701	4	Connector, receptacle; 10 sockets, female	* 146-018
J702	-	Same As J701	*
J703	-	Same As J701	*
J704	-	Same As J701	*
P706	1	Connector, plug; 8 pins, male	* 145-013
Q703	1	Transistor, Germanium, 2N398A	014-704
Q704	1	Transistor, silicon; 2N3053	014-590
Q705	1	Transistor, silicon, 2N4348	* 014-796
Q706	1	Transistor, silicon	014-653
R706	1	Resistor, fixed, comp, 10,000 ohm, ±10%, 1W, RC32GF103K	* 041-158
R707	1	Resistor, fixed, comp, 20,000 ohm, ±10%, 1/2W, RC20GF203K	041-529
R708	1	Resistor, fixed, comp, 1,000 ohm, ±10%, 1/2W, RC20GF102K	041-048
R709	1	Resistor, fixed, wirewound, 1 ohm, ±5%, 5W	059-016
R710	2	Resistor, fixed, comp, 2,200 ohm, ±10%, 1/2W, RC20GF222K	041-052
R711	1	Resistor, fixed, comp, 3,900 ohm, ±10%, 1/2W, RC20GF392K	041-055
R712	1	Resistor, variable, comp, 1,000 ohm, ±30%, 1/10W	044-370
R713	-	Same As R710	
R714	1	Resistor, fixed, comp, 100 ohm, ±10%, 1/2W, RC20GF101K	041-038
T702	1	Transformer, power supply	* 4580156-01
VR702	1	Diode, silicon, zener; 24 volt, ±5%	013-712
	2	Card Guide	530-102
	1	Fuse holder, short body	085-001
	2	Pad, transistor, for Q703, Q704	280-131

NOTE: All items except those marked with * are on printed circuit board, catalog no. 4050432-06.

AMPEX

ELECTRONICS ASSEMBLY WITHOUT EQUALIZER

CATALOG NO. 4020260

SHEET 1 OF 1

NHA 4010131-134

ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION					
					-10	-11	-12			
1	4030034-30			DUMMY PLUG ASSEMBLY	1	1	1			
2	4030269-01		J10	CONNECTOR ASSEMBLY, 12 Contact	1	1	1			
3	4030269-02		J13	CONNECTOR ASSEMBLY, 12 Contact	1	1	1			
4	4030269-03		J3	CONNECTOR ASSEMBLY, 12 Contact	1	1	1			
5	4040959-01			PANEL, Left Side	1	1	1			
6	4040975-01			ENCLOSURE, Module	1	1	1			
7	4040978-01			COVER, Electronics	1	1	1			
8	4040978-02			COVER, Electronics	1	1	1			
9	4040992-01			COVER PANEL, Decorative	1	1	1			
10	4040994-01			SHIELD, Module Enclosure	1	1	1			
13	4050435-03			PRINTED WIRING ASSEMBLY, Reproduce Amplifier	1	-	-			
15	4050438-04			FRONT PANEL ASSEMBLY	1	1	-			
17	4050440-02			BRACKET ASSEMBLY, Capacitor Mounting	1	1	1			
19	4220245-01			SPACER, Chassis	1	1	1			
20	4230133-02			GUIDE, Printed Wiring Board	6	6	6			
21	4290187-01			SHIELD, Enclosure, rear	1	1	1			
22	4290188-01			SHIELD, Selector Switch	1	1	1			
23	4290661-01			COVER, Module Enclosure	1	1	1			
24	4290661-02			COVER, Module Enclosure	1	1	1			
25	6000035-02			LABEL, Identification	1	1	1			
26	4050468-01			JUMPER PLUG ASSEMBLY, Electronics	1	1	-			
27	4050434-01			PRINTED WIRING BOARD ASSEMBLY, Record	1	1	1			
28	031-126		C15	CAPACITOR, Electrolytic, 250MF, 50V	1	1	1			
29	041-455		R37	RESISTOR, 6.2K ohm, 1/2W, 5%	1	1	1			
30	302-007			CABLE CLAMP, Plastic, 1/4"	1	1	1			
31	302-036			CABLE CLAMP, Plastic, 3/8"	1	-	-			
54	4050433-04			PRINTED WIRING BOARD, Bias Amplifier	-	-	1			
55	4050433-05			PRINTED WIRING BOARD, Bias Amplifier	1	1	-			
57	4050435-05			PRINTED WIRING BOARD ASSEMBLY, Reproduce Amplifier	-	1	-			
59	4050554-01			FRONT PANEL ASSEMBLY	-	-	1			
61	4050435-07			PRINTED WIRING BOARD ASSEMBLY, Reproduce Board	-	-	1			

4020260AA

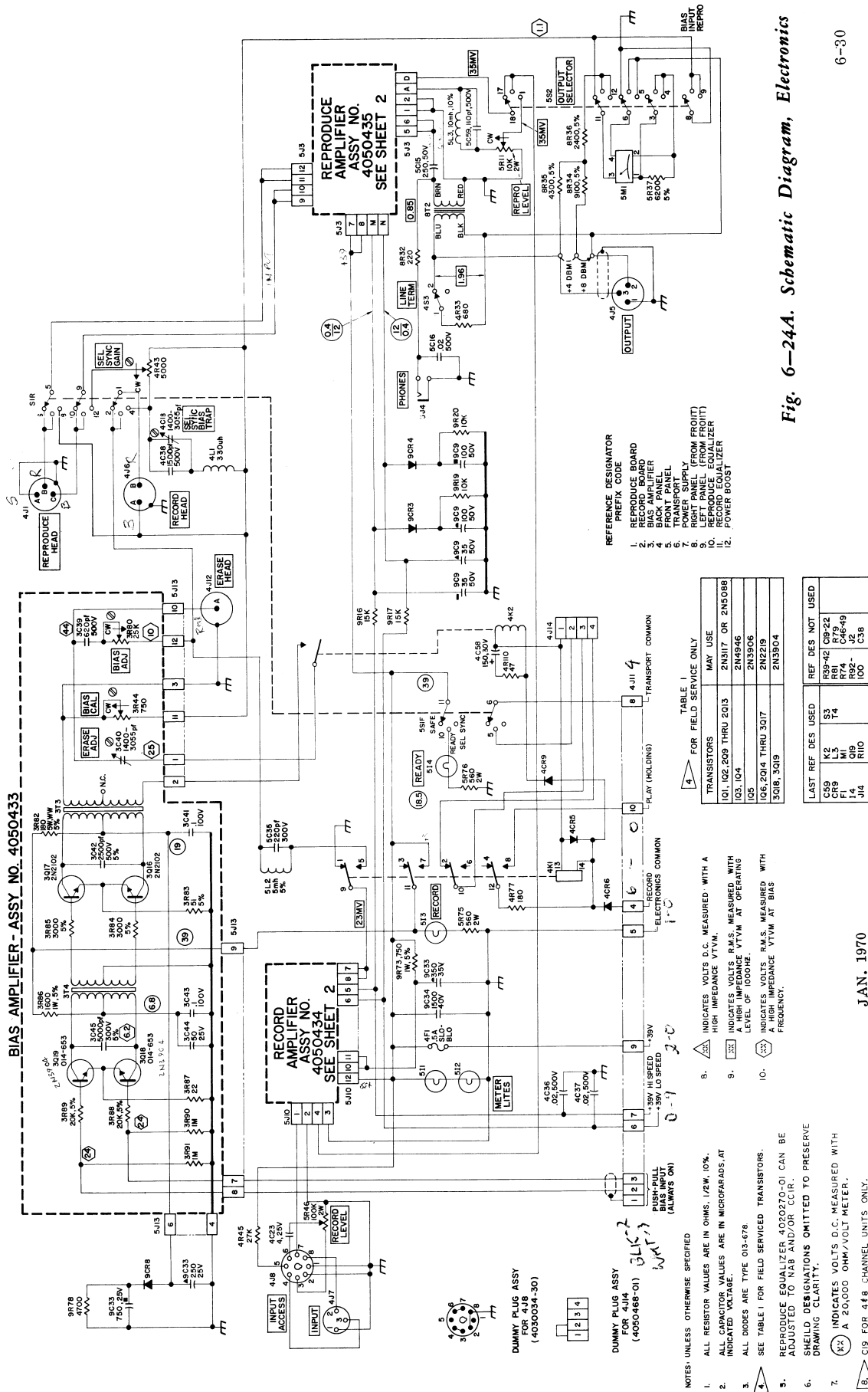


Fig. 6-24A. Schematic Diagram, Electronics

RECORD PRINTED WIRING BOARD ASSEMBLY
4050434 (Rev. E)

Item	-01	Description	Ampex Part No.
1	1	Printed wiring board	4500107-01
2	1	Front Plate, record module	4330262-01
3	2	Transistor, Silicon, CD38, Q14, 15	041-247
4	5	Transistor, Silicon, CD652, Q9-13	014-698
5	1	Capacitor, Electrolytic, 10 μ F, 25V	031-148
6	1	Capacitor, Tantalum, 15 μ F, 15V, 20%, C32	037-446
7	3	Capacitor, Tantalum, 47 μ F, 6V, 20%, C26, 29, 31	037-494
8	2	Capacitor, Tantalum, .68 μ F, 25V, 5%, C25, 27	037-495
9	2	Capacitor, Myalr, .1 μ F, 100V, 10%, C24, 30	055-106
10	2	Resistor, fixed, 4.3k ohm, 1/2W, 5%, R56, 61	041-012
11	2	Resistor, fixed, 110k ohm, 1/2w, 5%, R51, 52	041-024
12	2	Resistor, fixed, 100 ohm, 1/2W, 10%, R50, 72	041-038
13	1	Resistor, Fixed, 3.3k ohm, 1/2W, 10%, R66	041-054
14	2	Resistor, fixed, 10k ohm, 1/2W, 10%, R55, 60	041-060
15	2	Resistor, fixed, 22k ohm, 1/2W, 10%, R49, 63	041-064
16	2	Resistor, fixed, 39k ohm, 1/2W, 10%, R53, 58	041-067
17	1	Resistor, fixed, 47k ohm, 1/2w, 10%, R69	041-068
18	1	Resistor, fixed, 56k ohm, 1/2W, 10%, R65	041-069
19	1	Resistor, fixed, 68k ohm, 1/2W, 10%, R62	041-070
20	2	Resistor, fixed, 100k ohm, 1/2W, 10%, R57, 64	041-072
21	1	Resistor, fixed, 330k ohm, 1/2W, 10%, R68	041-078
22	1	Resistor, fixed, 470k ohm, 1/2W, 10%, R67	041-080
23	1	Resistor, fixed, 680k ohm, 1/2W, 10%, R70	041-082
24	1	Resistor, fixed, 150 ohm, 1/2W, 10%, R71	041-241
25	2	Resistor, fixed, 7.5k ohm, 1/2W, 5%, R54, 59	041-361
26	1	Resistor, fixed, 1.3 megohm, 1/2W, 5%, R47	041-377
27	1	Resistor, fixed, 1.1 megohm, 1/2W, 5%, R48	041-898
29	2	Transistor, pad	280-131
30	2	Screw, sem, pan head, 4-40 x 1/4	475-006
31	2	Washer, flat #4	501-008
32	1	Connector, assembly, 10 pin, J9	4030270-01
33	ref	Schematic	4840169
34	1	Label, record module	4110270-01

REPRODUCE AMPLIFIER PRINTED WIRING ASSEMBLY

CATALOG NO. 4050435

SHEET 1 OF 2

NHA 4020260

ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION						
					-03	-05					
2	4030270-02		J2	CONNECTOR ASSEMBLY, 10 Contact	1	1					
4	4330263-01			FRONT PLATE, Reproduce Module	1	1					
5	4580199-01		T1	TRANSFORMER INPUT	1	1					
6	013-599		CR1,2,7	DIODE	3	3					
7	014-247		Q6	TRANSISTOR, NPN	1	1					
8	014-652		Q5	TRANSISTOR	1	1					
9	014-784		Q3,4	TRANSISTOR	2	2					
10	014-698		Q1,2	TRANSISTOR, NPN	2	2					
11	014-706			HEATSINK, Transistor	2	2					
12	014-723	2N4037	Q7	TRANSISTOR	1	1					
13	014-329	2N2102	Q8	TRANSISTOR	1	1					
14	031-187		C8	CAPACITOR, Electrolytic, 50MF, 50V	1	1					
15	031-190		C13	CAPACITOR, Electrolytic, 50MF, 25V	1	1					
16	034-181		C4,10	CAPACITOR, Mica, 47PF, 500V, 5%	2	2					
17	037-654		C2,3,7,11,12,17	CAPACITOR, Tantalum, 3.3MF, 35V, 20%	6	6					
18	037-446		C6,14	CAPACITOR, Tantalum, 15MF, 15V, 20%	2	2					
19	037-494		C1,5	CAPACITOR, Tantalum, 47MF, 6V, 20%	2	2					
20	041-012		R4	RESISTOR, Composition, 4.3K ohm, 1/2W, 5%	1	1					
21	041-533		R30,31	RESISTOR, Fixed, 24 ohm, 1/2W, 5%	2	2					
22	041-273		R27	RESISTOR, Fixed, 270 ohm, 1/2W, 5%	1	1					
23	041-046		R6,28	RESISTOR, Fixed, 680 ohm, 1/2W, 10%	2	2					
24	041-048		RF	RESISTOR, Fixed, 1K ohm, 1/2W, 10%	1	1					
25	041-010		R29	RESISTOR, Fixed, 2.0K ohm, 1/2W, 5%	1	1					
26	041-054		R10	RESISTOR, Fixed, 3.3K ohm, 1/2W, 10%	1	1					
27	041-056		R24	RESISTOR, Fixed, 4.7K ohm, 1/2W, 10%	1	1					
28	041-058		R8	RESISTOR, Fixed, 6.8K ohm, 1/2W, 10%	1	1					
29	041-061		R14,15	RESISTOR, Fixed, 12K ohm, 1/2W, 10%	2	2					
30	041-062		R5,25	RESISTOR, Fixed, 15K ohm, 1/2W, 10%	2	2					
31	041-067		R2,21	RESISTOR, Fixed, 39K ohm, 1/2W, 10%	2	2					
32	041-069		R22	RESISTOR, Fixed, 56K ohm, 1/2W, 10%	1	1					
33	041-072		R7,23,38	RESISTOR, Fixed, 100K ohm, 1/2W, 10%	3	3					
34	041-076		R12,13	RESISTOR, Fixed, 220K ohm, 1/2W, 10%	2	2					
35	041-075		R3	RESISTOR, Fixed, 180K ohm, 1/2W, 10%	1	1					
36	041-080		R9	RESISTOR, Fixed, 470K ohm, 1/2W, 10%	1	1					
37	041-081		R18	RESISTOR, Fixed, 560K ohm, 1/2W, 10%	1	1					

4050435N

REPRODUCE AMPLIFIER PRINTED WIRING ASSEMBLY				CATALOG NO. 4050435		SHEET 2 OF 2					
						NHA 4020260					
ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION						
					-03	-05					
38	041-404		R26	RESISTOR, Composition, 510 ohm, 1/2W, 5%	1	1					
40	280-131			TRANSISTOR, Pad, .200 diameter	3	3					
43	034-180		C19	CAPACITOR, Mica, 500V, 39PF, 5%	-	1					
80	4840209			SCHEMATIC	-	REF					
82	4840169			SCHEMATIC	REF	-					

4050435N

AUG. 1971

6-32A/B

Bias Amplifier Printed Wiring Board Assembly 4890301

Ampex
Part No.

Item	-05	Description	4050433 (Rev. G)	
1	1	Bias Amplifier Printed Wiring Board		4500106-01
2	1	Bias Equalization Bracket		4040972-01
3	1	Bias Module Label		4110269-01
4	1	Bias Module Front Plate		4330261-01
5	1	Pot, bias calibrate, 750 ohm, R44		4520154-01
6	1	Pot, bias adjust, 25k ohm, R80		4520145-20
7	2	Coil, oscillator, T3,4		4580123-01
18	2	Transistor, 2N2102, Q16,17		014-329
19	2	Transistor, NPN, Q18,19		014-653
20	1	Capacitor, electrolytic, 50mFd, 25V, C44		031-190
21	1	Capacitor, Mica, 2500pF, 500V, 5%, C42		034-994
22	1	Capacitor, Mica, 5000pF, 300V, 5%, C45		034-960
24	2	Resistor, 1 megohm, 1/2W, 10%, R90,91		041-031
25	1	Resistor, 22 ohm, 1/2W, 10%, R87		041-033
26	1	Resistor, 51 ohm, 1/2W, 5%, R83		041-345
27	1	Resistor, fixed, 1.6k ohm, 1W, 5%, R86		041-353
28	2	Resistor, 3k ohm, 1/2W, 5%, R84, 85		041-475
29	2	Resistor, 20k ohm, 1/2W, 5%, R88, 89		041-529
30	2	Capacitor, mylar, .1mFd, 100V, 10%, C41,43		055-106
31	1	Resistor, wirewound 180 ohm, 5W, 5%, R82		059-017
32	2	Transistor, pad, .200 diameter		280-131
33	2	Screw, 4-40 x 1/4, pan head		475-006
34	1	Nut, hex, 1/4-32		492-046
35	1	Nut, hex, 3/8-32		492-095
36	4	Washer, flat, #4		501-008
37	1	Washer, lock, 1/4"		502-028
38	1	Washer, flat internal tooth, #12		502-059
39	1	Washer, flat, internal tooth, 3/8		502-083
42	1	Capacitor, mica, 620pF, 500V, 5%, C39		034-928
43	2	Screw, 4-40 x 5/16, pan head, sen		475-007
44	1	Capacitor, variable, 1,400-3,055pF, 250V, C40		038-011

AMPEX

4890301

RECORD EQUALIZER PRINTED WIRING ASSEMBLY

4020269

(Revision D)

(See Fig. 6-24)

Ref.	-01	-02	Description	Ampex Part No.
		1	Printed Wiring Board	4500109-02
R108	1	1	Resistor, variable, 100k ohm	4250153-01
C54	1	-	Capacitor Trimmer, 50-380pF	4540314-02
C53	1	-	Capacitor Trimmer, 170-780pF	4540314-03
C54	-	1	Capacitor Trimmer 170-780pF	4540314-03
C53	-	1	Capacitor Trimmer, 300-1180pF	4540314-04
C52	1	1	Capacitor, tantalum, 3.3 μ F, 35V, 20%	037-654
	ref	ref	Schematic	4840169
C57	1	-	Capacitor, mylar, .0022 μ F, 50V, 10%	055-164
R109	1	-	Resistor, fixed, 18k ohm, 1/4W, 5%	041-436
4020269C				

REPRODUCE EQUALIZER PRINTED WIRING ASSEMBLY

4020270

(Revision C)

(See Figs. 6-24 and 6-25)

Ref.	-01	Description	Ampex Part No.
	1	Printed Wiring Board, reproduce equalizer	4500110-01
R104, R105	2	Potentiometer, 30k ohm	4520152-01
R102, R107	2	Potentiometer, 2.5 megohm	4520152-02
R103, R106	2	Resistor, 220k ohm, 1/8W, 10%	049-528
R101	1	Resistor, 2.2k ohm, 1/8W, 10%	049-527
C50, C51	2	Capacitor, .0047mFd, mylar	055-222
	ref	Schematic	4840169
4020270C			

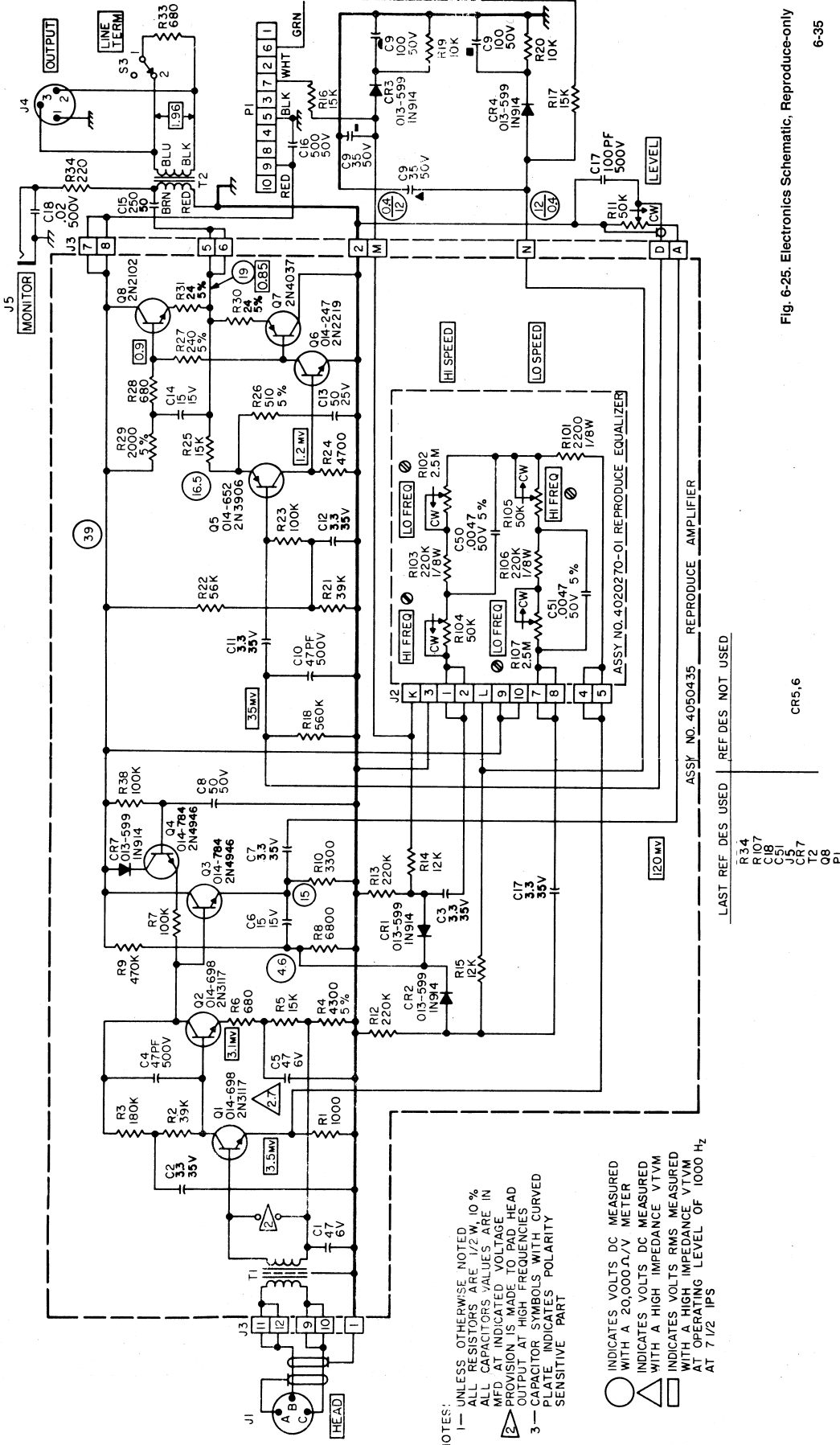


Fig. 6-25. Electronics Schematic, Reproduce-only

NOTES:
 1— UNLESS OTHERWISE NOTED ALL RESISTORS ARE 1/2W, 10%
 ALL CAPACITORS VALUES ARE IN MFD AT INDICATED VOLTAGE
 PROVISION IS MADE TO PAD HEAD OUTPUT AT HIGH FREQUENCIES
 CAPACITOR SYMBOLS WITH CURVED PLATE INDICATES POLARITY SENSITIVE PART

○ INDICATES VOLTS DC MEASURED WITH A 20,000 Ω/V METER
 △ INDICATES VOLTS DC MEASURED WITH A HIGH IMPEDANCE VTVM
 □ INDICATES VOLTS RMS MEASURED WITH HIGH IMPEDANCE VTVM AT OPERATING LEVEL OF 1000 Hz AT 7 1/2 IPS

ASSY NO. 4050435 REPRODUCE AMPLIFIER

LAST REF DES USED	REF DES NOT USED
R34	
R107	
C8	
C51	
C27	
T2	
Q8	
PI	

CR5,6

REPRODUCE MODULE				CATALOG NO. 4020150	SHEET 1 OF 2			
				NHA 4010141-44				
ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION			
					-03	-05		
1	4030269-03		J3	CONNECTOR ASSEMBLY, 12 Contact	1	1		
2	4050087-01			CABLE ASSEMBLY, Interconnecting	1	1		
3	4010435-03			PRINTED WIRING BOARD, Reproduce Amplifier	1	-		
4	4170284-01			LABEL, Module Front	1	1		
5	4170285-01			LABEL, Module Rear	1	1		
6	4260096-01			BRACKET, Capacitor Mounting	1	1		
7	4290655-01			CHASSIS, Module	1	1		
8	4290656-02			COVER, Module	1	1		
9	4520151-01		R11	POTENTIOMETER, 50K	1	1		
10	4550147-05		C9	CAPACITOR, Electrolytic 35/35/100/100	1	1		
11	4580193-01		T2	TRANSFORMER, Output	1	1		
12	4620172-10		S3	SWITCH, Low End Equalization	1	1		
13	4700440-00 -99			WIRE, #22 AWG, bunch tinned	A/R	A/R		
14	4700474-01			CABLE, Shielded	A/R	A/R		
15	034-177		C17	CAPACITOR, 100PF, 500V, 5%	1	1		
16	013-599		CR3,4	DIODE, Silicon, switching	2	2		
17	031-134		C16	CAPACITOR, 500MF, 50V	1	1		
18	031-126		C15	CAPACITOR, 250MF, 50V	1	1		
19	041-046		R33	RESISTOR, 680 ohm, 1/2W, 10%	1	1		
20	041-060		R19,20	RESISTOR, 10K ohm, 1/2W, 10%	2	2		
21	041-062		R16,17	RESISTOR, 15K ohm, 1/2W, 10%	2	2		
22	143-008		J1	CONNECTOR, Receptacle, male, 3 contact	1	1		
23	147-999		J4	CONNECTOR, Audio Receptacle, 3 pin, XLR-3	1	1		
24	172-004			TERMINAL LUG, Lock, #4	1	1		
25	264-017			BUSHING, Strain Relief, black, nylon	1	1		
27	471-328			SCREW, 4-40 x 3/8, flat head, cross-recessed	2	2		
28	471-063			SCREW, 4-40 x 7/16, pan head, cross-recessed	2	2		
30	476-057			SCREW, 4-40 x 5/16, hex washer head	4	4		
31	476-998			SCREW, 6 x 1/4, hex washer head	12	12		
32	492-095			NUT, 3/8-32	2	2		
33	496-004			NUT, 4-40, keps	2	2		
34	497-020			NUT, Speed Nut, type "U"	2	2		
35	501-008			WASHER, Flat, #4	1	1		
36	501-224			WASHER, 3/8, flat	2	2		
37	502-083			LOCKWASHER, 3/8, flat, internal tooth	3	3		

4020150K

AUG. 1971

REPRODUCE MODULE				CATALOG NO4020150	SHEET 2 OF 2						
				NHA 4010141-44							
ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION						
					-03	-05					
38	4230133-02			GUIDE, Printed Wiring Board	2	2					
39	600-036			SLEEVING, #20, clear teflon	A/R	A/R					
40	615-002			WIRE, #22 AWG, bare	A/R	A/R					
41	030-001		C18	CAPACITOR, .02μF, 500V	1	1					
42	041-040		R34	RESISTOR, Fixed, 220 ohm, 1/2W, 10%	1	1					
43	148-015		J5	JACK, Phone with Hardware	1	1					
44	613-021			CABLE, Shielded & Jacketed, white, #26 AWG	A/R	A/R					
45	501-186			WASHER, #4, flat	2	2					
46	502-101			LOCKWASHER, #4	2	2					
48	4050435-07			PRINTED WIRING BOARD, Reproduce Amplifier	-	1					
50	6000035-02			LABEL, Identification	1	1					
81	4840265			SCHEMATIC	-	REF					
82	4840176			SCHEMATIC	REF	-					

4020150K

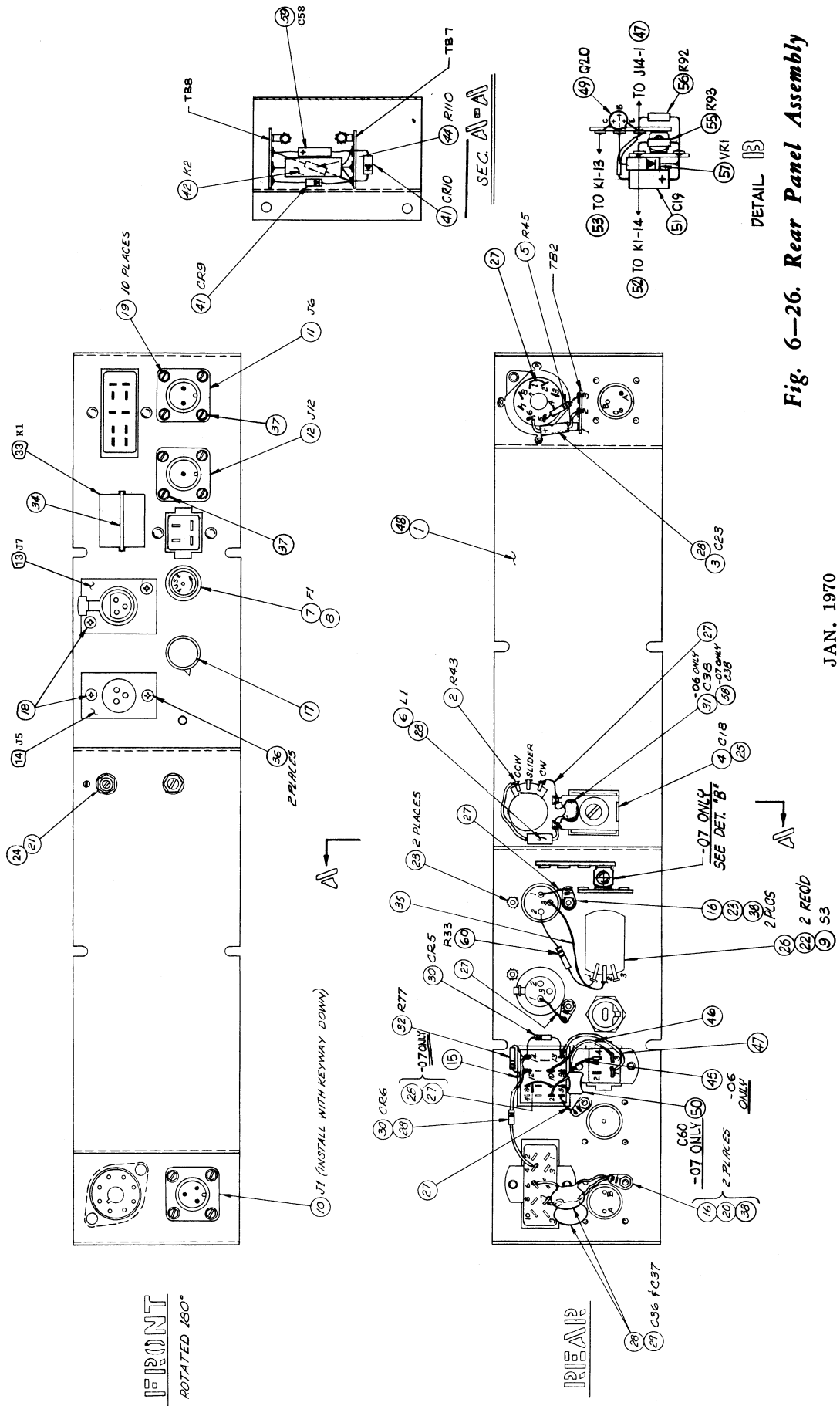


Fig. 6-26. Rear Panel Assembly

JAN. 1970

REAR PANEL ASSEMBLY				CATALOG NO. 4050439	SHEET 1 OF 1						
				NHA 4020260							
ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION						
					-06	-07					
1	4040957-03			PANEL, Rear	1	-					
2	4520154-02		R43	POTENTIOMETER, 5K ohm	1	1					
3	031-309		C23	CAPACITOR, Electrolytic, 4MF, 25V	1	1					
4	038-011		C18	CAPACITOR, Variable, 1400-3055PF	1	1					
5	041-065		R45	RESISTOR, Fixed, 27K ohm, 1/2W, 10%	1	1					
6	540-030		L1	CHOKE, 330MH, 5%	1	1					
7	070-026		F1	FUSE, Slo-Blo, 0.5 amp. 125V	1	1					
8	085-001			FUSE HOLDER	1	1					
9	122-016		S3	SWITCH, Rotary, 1 Pole, 2 throw	1	1					
10	143-008		J1	CONNECTOR, Receptacle, 3 contact, male	1	1					
11	143-009		J6	CONNECTOR, Receptacle, 2 contact, male	1	1					
12	143-010		J12	CONNECTOR, Receptacle, 1 contact, male	1	1					
13	146-998		J7	CONNECTOR, Audio Receptacle, 3 socket	1	1					
14	147-999		J5	CONNECTOR, Audio Receptacle, 3 pin	1	1					
17	230-008			KNOB, Black w/Pointer	1	1					
29	030-001		C36, 37	CAPACITOR, Ceramic, .02μF, 500V	2	2					
31	056-021		C38	CAPACITOR, Mica, 1500PF, 500V	1	-					
32	041-257		R77	RESISTOR, Composition, 180 ohm, 1/2W, 10%	1	1					
33	020-144		K1	RELAY, 24V, 650 ohm, 4P2T	1	1					
34	020-492			SPRING, Relay, holddown	1	1					
41	013-678		CR5, 6, 9, 10	DIODE	3	4					
42	020-592		K2	RELAY, Reed, SPST	1	1					
44	041-034		R110	RESISTOR, 47 ohm, 1/2W, 10%	1	1					
48	4040957-04			PANEL, Rear	-	1					
49	014-247		Q20	TRANSISTOR	-	1					
50	034-056		C60	CAPACITOR, Mica, 390PF, 500V, 5%	-	1					
51	063-045		C19	CAPACITOR, Aluminum, 10μF, 50V	-	1					
55	041-477		R93	RESISTOR, Composition, 13K ohm, 1/2W, 5%	-	1					
56	041-546		R92	RESISTOR, Composition, 130K ohm, 1/2W, 5%	-	1					
57	013-450		VR1	DIODE, Zener, 10V	-	1					
58	034-386		C38	CAPACITOR, Mica, 910PF, 100V, 5%	-	1					
59	037-117		C58	CAPACITOR, Tantalum, 150μF, 30V, 20%	1	1					
60	041-046		R33	RESISTOR, Fixed, 680 ohm, 1/2W, 10%	1	1					

4050439S

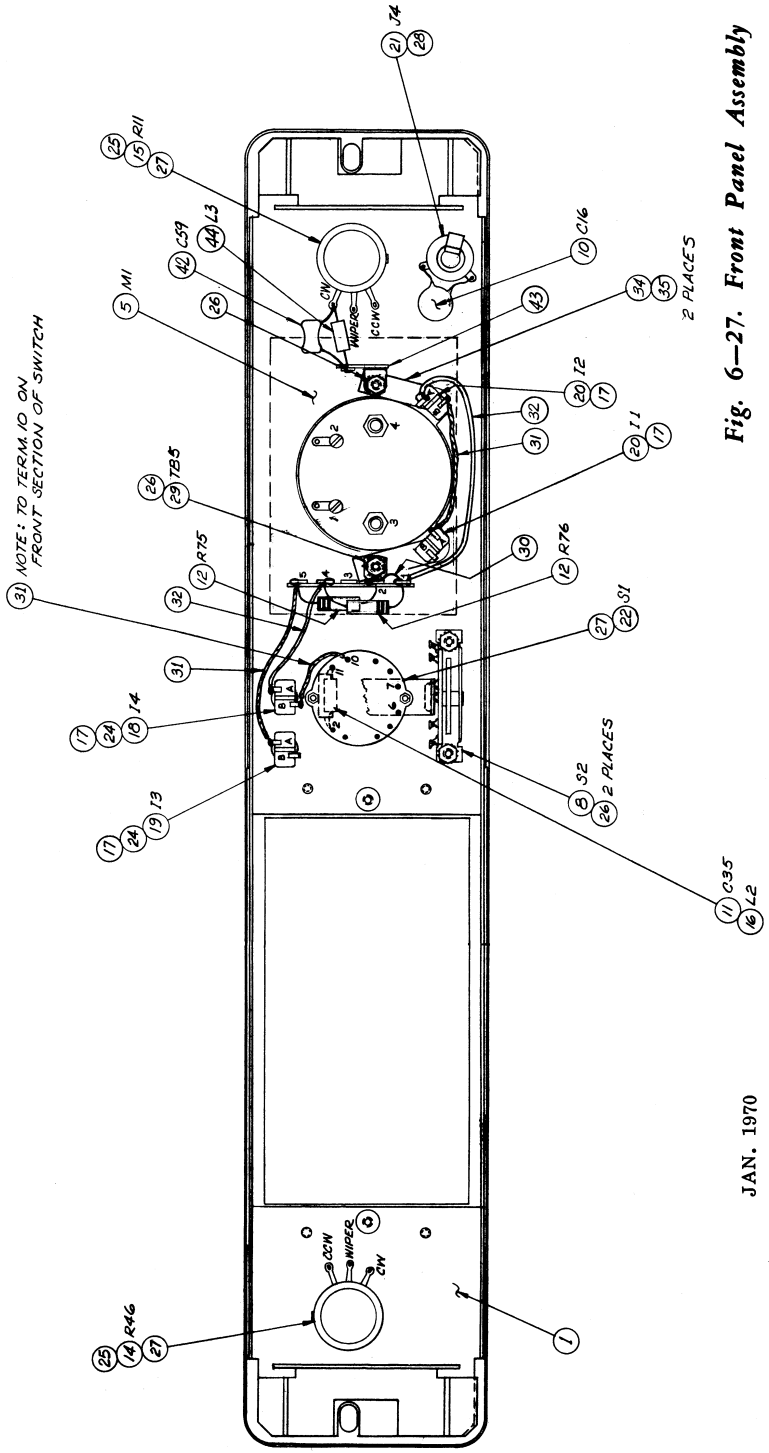
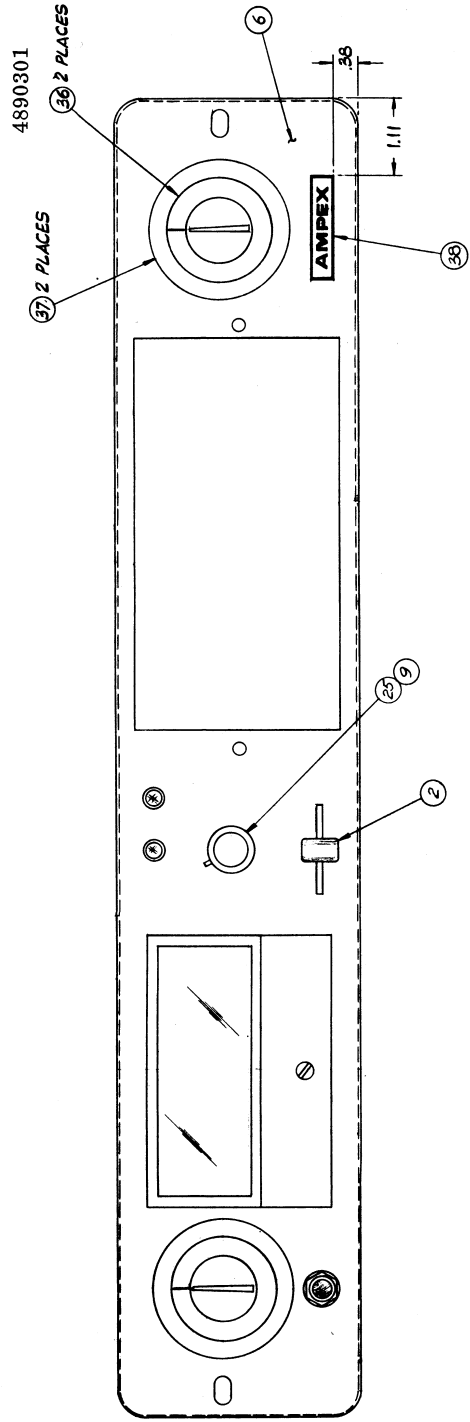


Fig. 6-27. Front Panel Assembly

JAN. 1970

FRONT PANEL ASSEMBLY				CATALOG NO. 4050438	SHEET 1 OF 1						
				NHA 4020260							
ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION						
					-04						
1	4040956-02			PANEL, Backing	1						
2	4100102-02			KNOB, Key Tab	1						
5	4140020-02		M1	METER, VU	1						
6	4290638-01			PANEL, Facing	1						
8	4620198-01		S2	SWITCH, Lever	1						
9	6000005-20			KNOB, Pointer	1						
10	030-001		C16	CAPACITOR, .02MF, ceramic, 500V	1						
11	034-358		C35	CAPACITOR, 220PF, mica, 5%, 300V	1						
12	041-200		R75, 76	RESISTOR, 560 ohm, 2W, 10%	2						
14	044-015		R46	RESISTOR, Variable, carbon, 2W, 100K ohm, 10%	1						
15	044-233		R11	RESISTOR, Variable, carbon, 2W, 10K ohm, 20%	1						
16	051-342		L2	CHOKER, 5MH	1						
17	132-098			SOCKET, Light	4						
18	132-099		T4	LIGHT, Indicator, amber	1						
19	132-100		T3	LIGHT, Indicator, red	1						
20	4610017-01		T1, T2	LIGHT, Indicator, clear	2						
21	148-015		J4	PHONE JACK	1						
22	4620049-02		S1	SWITCH, Selector	1						
24	435-069			RETAINER, C-Lite	2						
29	180-256		TB5	TERMINAL STRIP, A1, G, A1, A1, A1	1						
34	4260115-01			BRACKET, Meter Lamp	2						
35	435-144			CLIP, Lamp	2						
36	6000009-20			KNOB, Black Skirted	2						
37	4040350-02			RESET INDICATOR ASSEMBLY	2						
38	6000039-15			PLATE, Die Cast Trademark	1						
42	034-938		C59	CAPACITOR, Mica, 110PF, 500V, 5%	1						
43	180-026			TERMINAL STRIP, A1, D	1						
44	540-055		L3	INDUCTOR, 10MH, 10%	1						

4050438F

RIGHT SIDE PANEL ASSEMBLY				CATALOG NO. 4050441	SHEET 1 OF 1			
				NHA 4020260				
ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION			
					-03	-04		
1	4040958-01			PANEL, Right Side	1	1		
2	4580193-01		T2	TRANSFORMER, Output	1	1		
3	041-012		R35	RESISTOR, Composition, 4.3K ohm, 1/2W, 5%	1	1		
4	041-040		R32	RESISTOR, Fixed, 220 ohm, 1/2W, 10%	1	1		
6	041-316		R36	RESISTOR, Fixed, 2.4K ohm, 1/2W, 5%	1	1		
7	041-373		R34	RESISTOR, Composition, 9.1K ohm, 1/2W, 5%	1	1		
9	180-994		TB2, 3	TIE POINT, A1, A1, G, A1, A1, A1	2	2		

4050441C

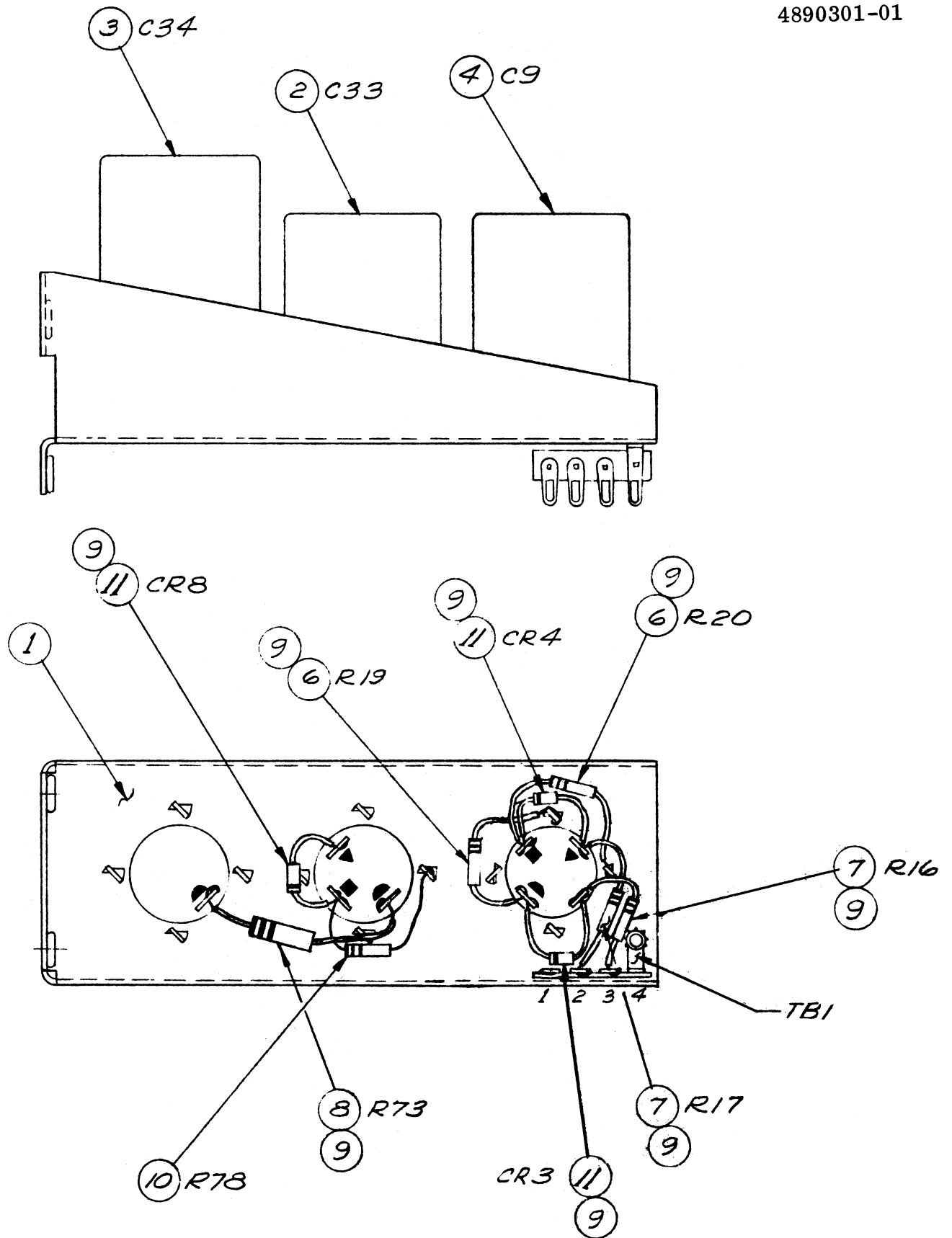


Fig. 6-29. Capacitor Mounting Bracket, Electronics
6-39

CAPACITOR MOUNTING BRACKET ASSEMBLY

CATALOG NO. 4050440

SHEET 1 OF 1

NHA 4020260

ITEM NO.	AMPEX PART NO.	VENDOR OR MIL. NO.	SCHEMATIC REFERENCE	PART DESCRIPTION	QUANTITY REQUIRED PER VERSION					
					-02					
1	4040964-01			BRACKET, Capacitor Mounting	1					
2	4550147-07		C33	CAPACITOR, 350,750,250MF/35,25,25V	1					
3	4550147-04		C34	CAPACITOR, 1500MF, 40V	1					
4	4550147-05		C9	CAPACITOR, 100,100,35,35MF/50V	1					
6	041-060		R19,20	RESISTOR, 10K ohm, 1/2W, 10%	2					
7	041-062		R16,17	RESISTOR, 15K ohm, 1/2W, 10%	2					
8	041-833		R73	RESISTOR, 750 ohm, 1W, 5%	1					
10	041-056		R78	RESISTOR, 4700 ohm, 1/2W, 10%	1					
11	013-678		CR3,4,8	DIODE	3					

4050440C

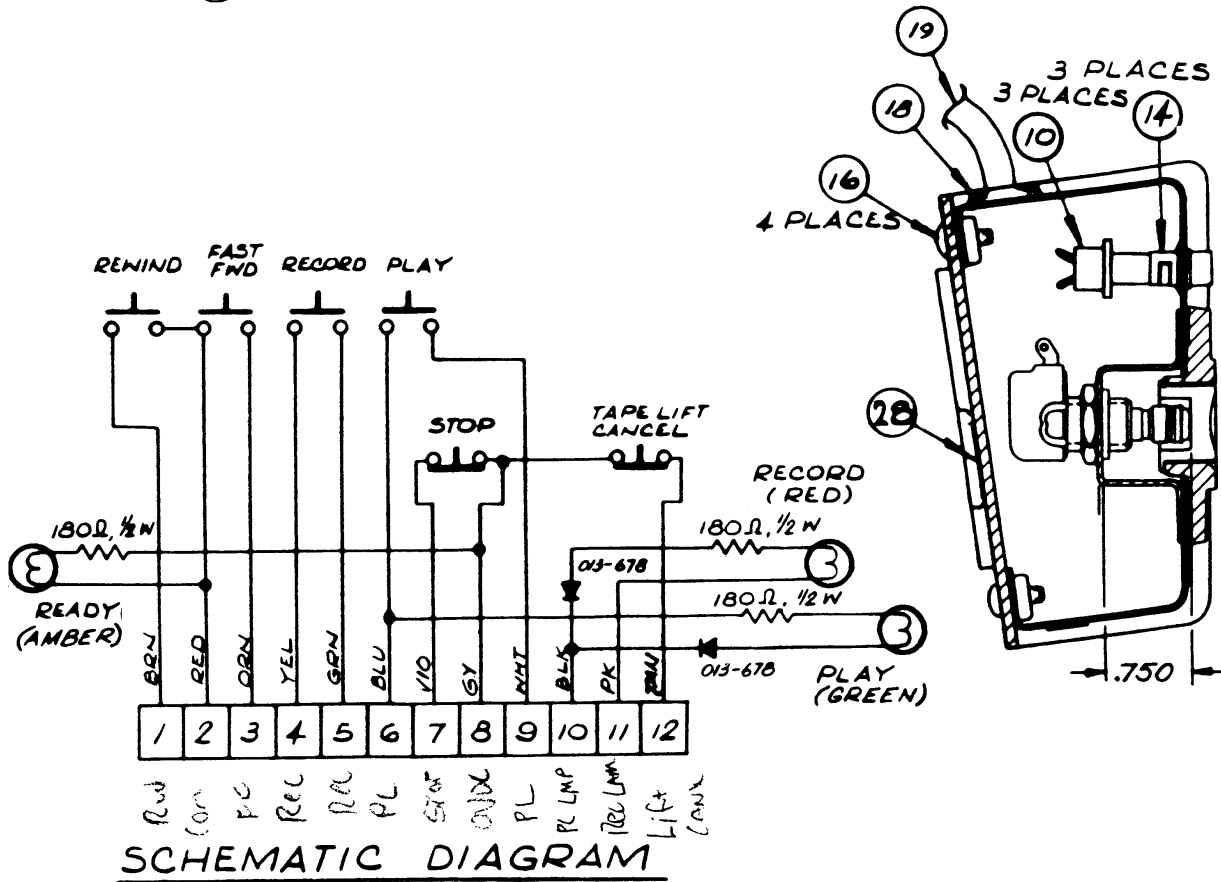
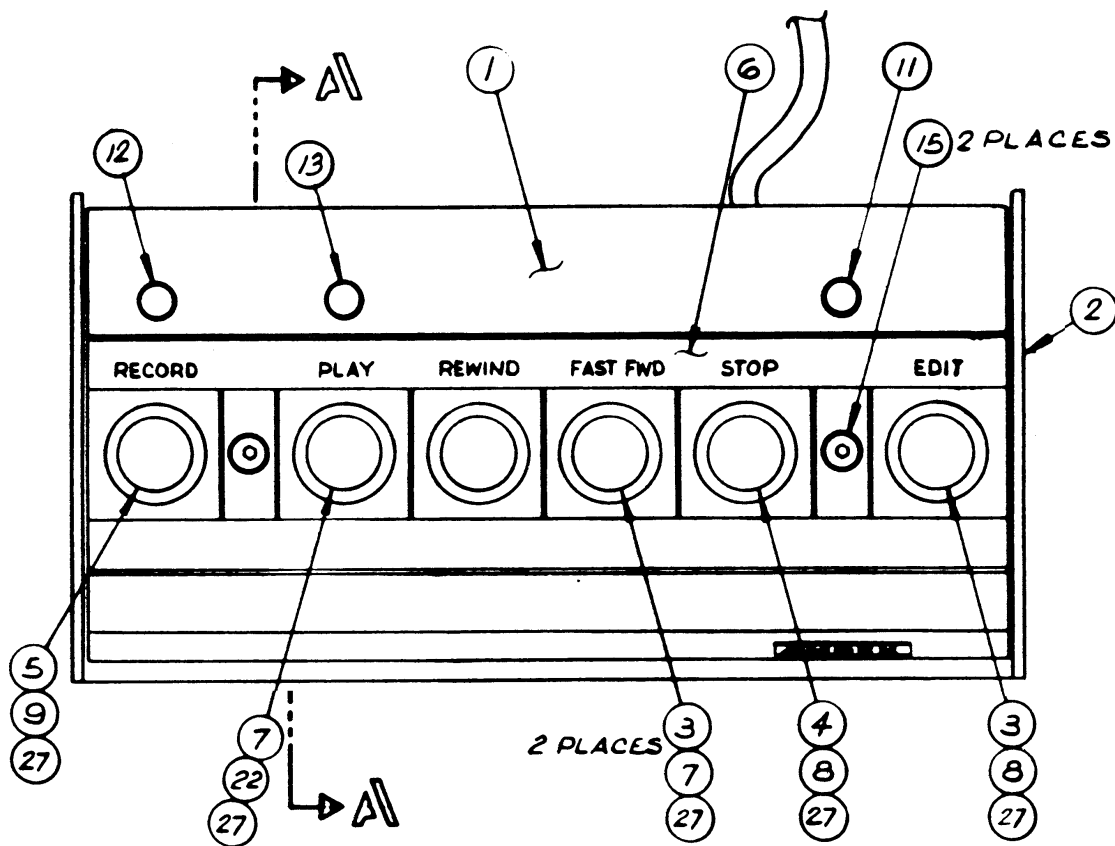
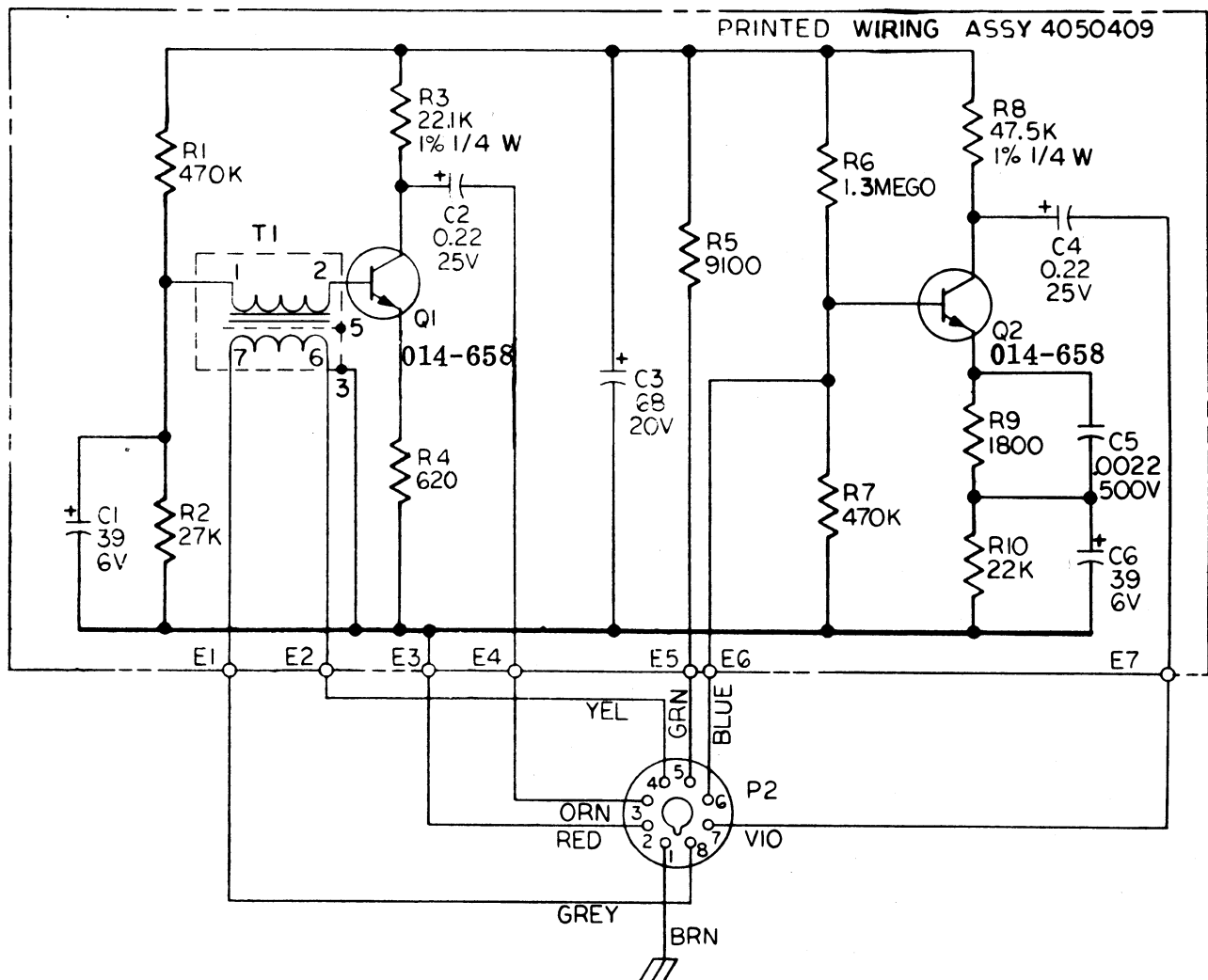


Fig. 6-30. Optional Remote Control

OPTIONAL ACCESSORY
 REMOTE CONTROL ASSEMBLY
 CATALOG NO. 4010080D
 (see Fig. 6-30)

Item	Qty	DESCRIPTION	Ampex Part No.
1	1	Panel, assembly	4040997-01
2	1	Base, assembly	4040999-01
3	3	Pushbutton, white (fast forward, rewind, edit)	4100183-01
4	1	Pushbutton, yellow (stop)	4100183-02
5	1	Pushbutton, red (record)	4100183-03
6	1	Escutcheon	4110274-01
7	3	Switch, pushbutton (fast forward, rewind, play)	4620144-10
8	2	Switch, pushbutton (stop, edit)	4620144-20
9	1	Switch, pushbutton (record)	4620144-30
10	3	Socket, light	132-098
11	1	Light, indicator, amber	132-099
12	1	Light, indicator, red	132-100
13	1	Light, indicator, green	060-338
14	3	Clip, lamp holder	435-069
17	3	Resistor, fixed, comp; 180 ohms, ±10%, 1/2w; RC20GF181K	041-257
18	1	Strain Relief	264-011
19	1	Cable, assembly, remote control (captive)	4050086-01
	1	Connector, plug, 12 pins, male	145-019
	25'	Cable, 12 conductor	617-090
22	1	Pushbutton, green (play)	4100183-04

4890301

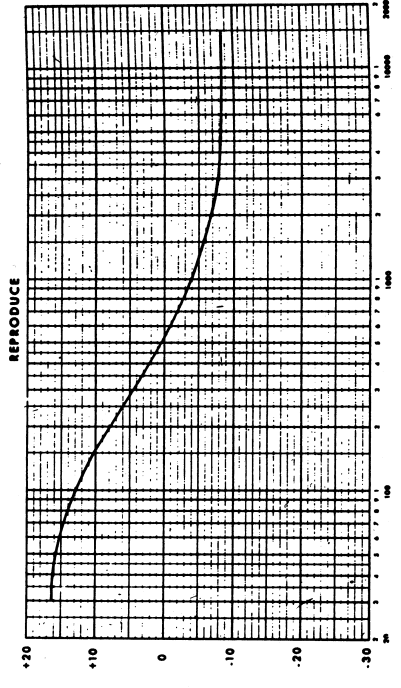


014-658 = 2N3565 Fig. 6-31. Optional Microphone Preamplifier

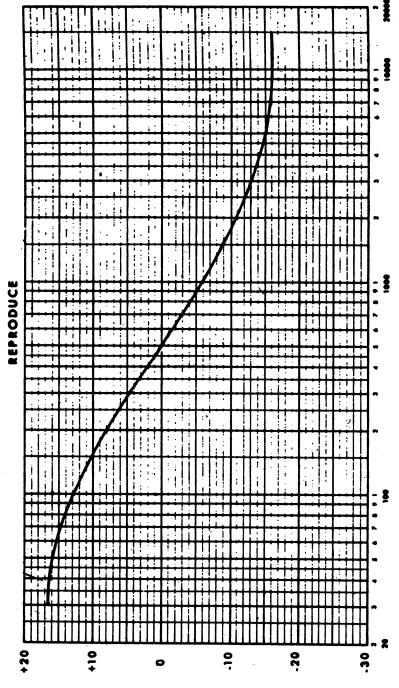
OPTIONAL ACCESSORY
MICROPHONE PREAMPLIFIER
CATALOG NO. 4010066B
(see Fig. 6-31)

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	014-698
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

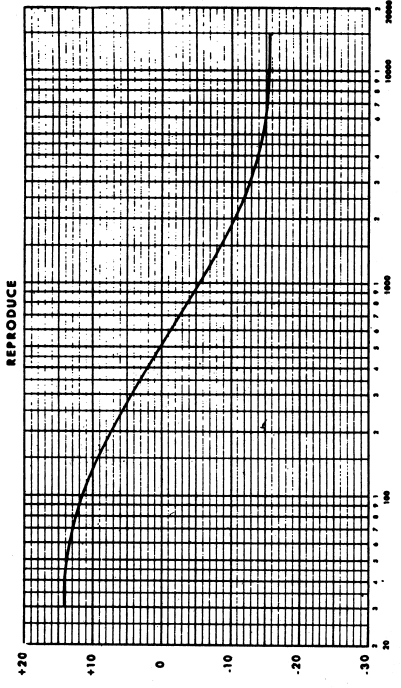
4890301-01



3% ips (120 ussec)



7 1/2 ips MAB



15 ips MAB

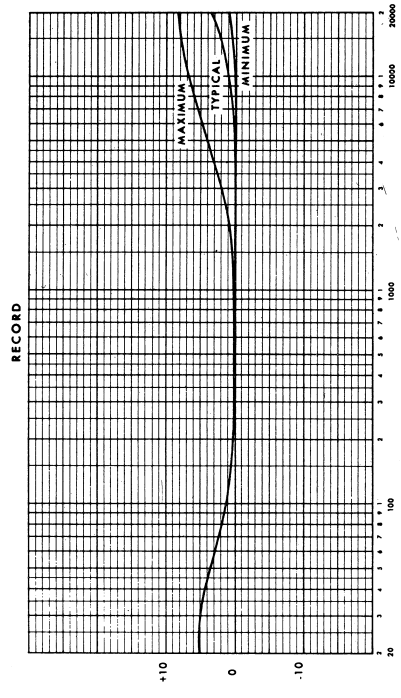
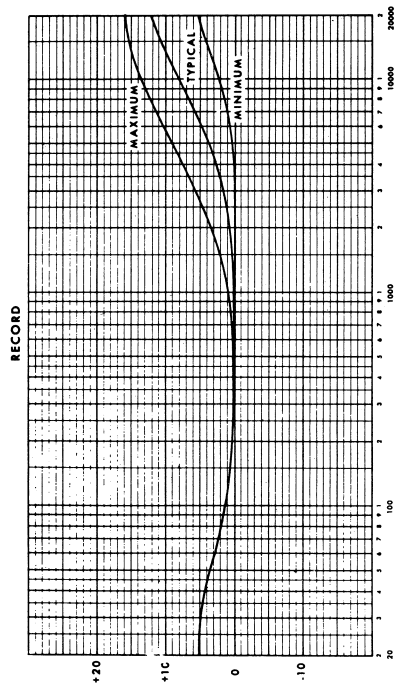
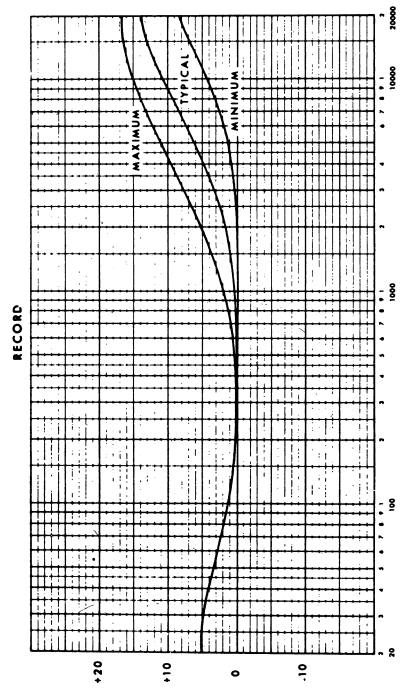


Fig. 6-32. Response Curves, Sheet 1
6-42

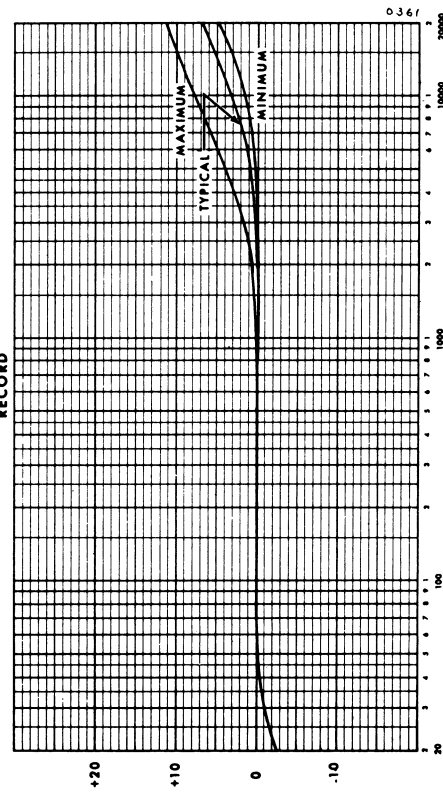
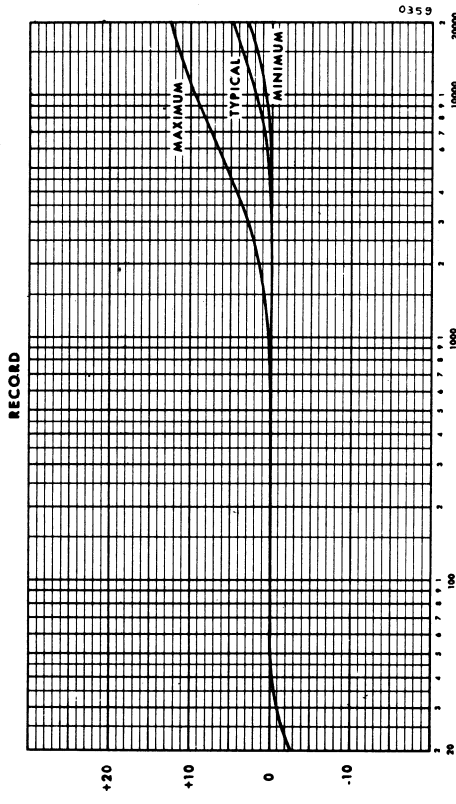
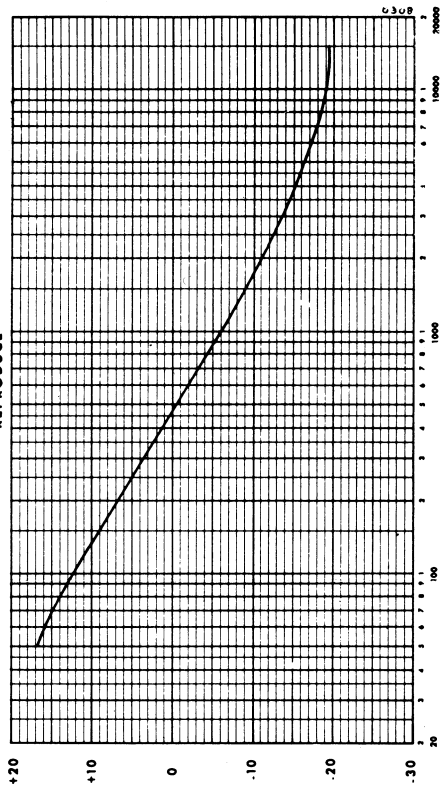
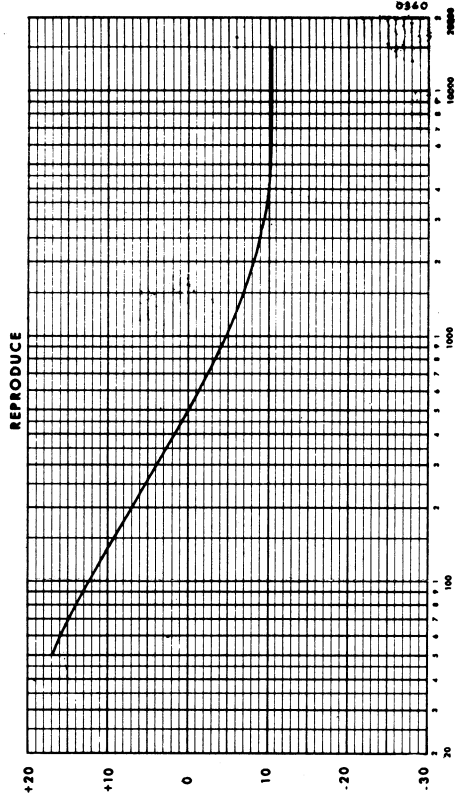
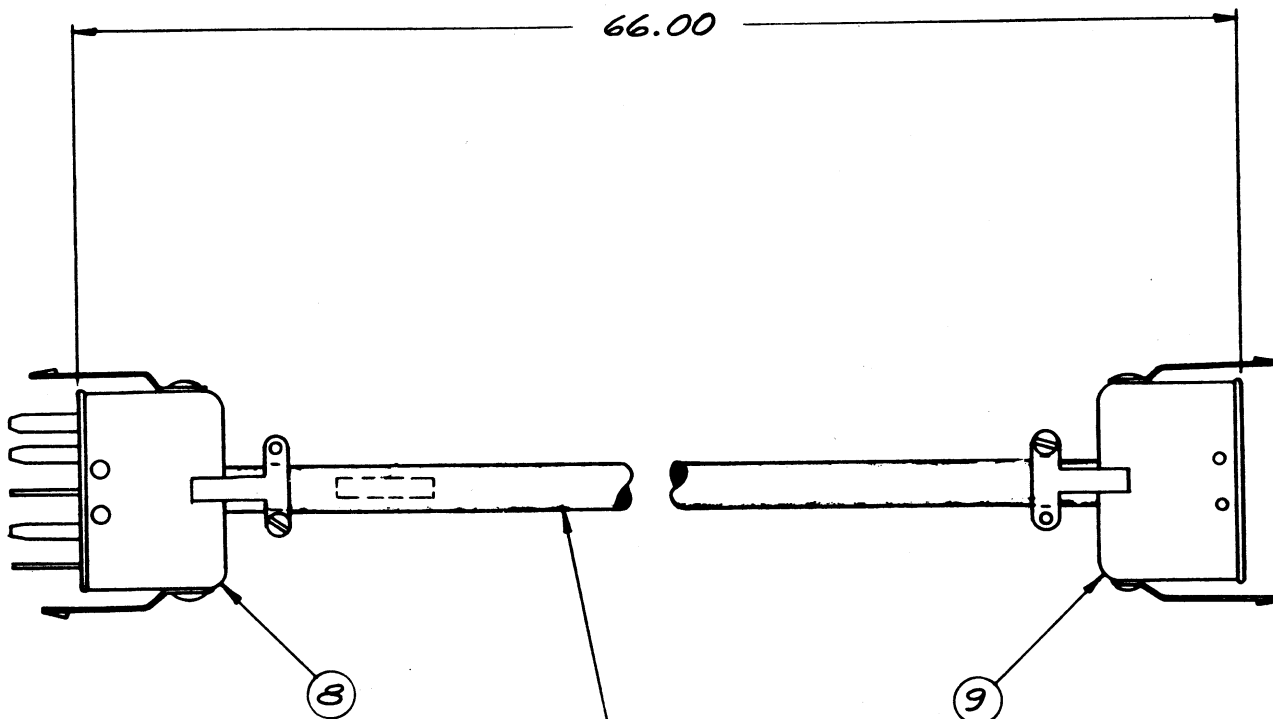


Fig. 6-33. Response Curves, Sheet 2
6-43



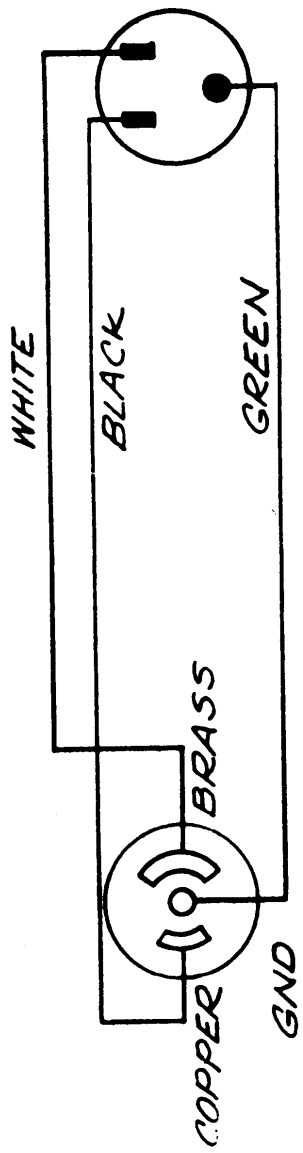
1		1
2		2
3		3
4	YEL	4
5		5
6	BLU	6
7		7
8	GRY	8
9		9
10	BLK	10
	GRN	
	VIO	
	WHT	

① THRU ⑦ ⑩ ⑪


SCHMATIC DIAGRAM

Fig. 6-34 Cable, Electronics
6-44

4890301-01



SCHEMATIC DIAGRAM

PART NO.	
4050416-01	120"

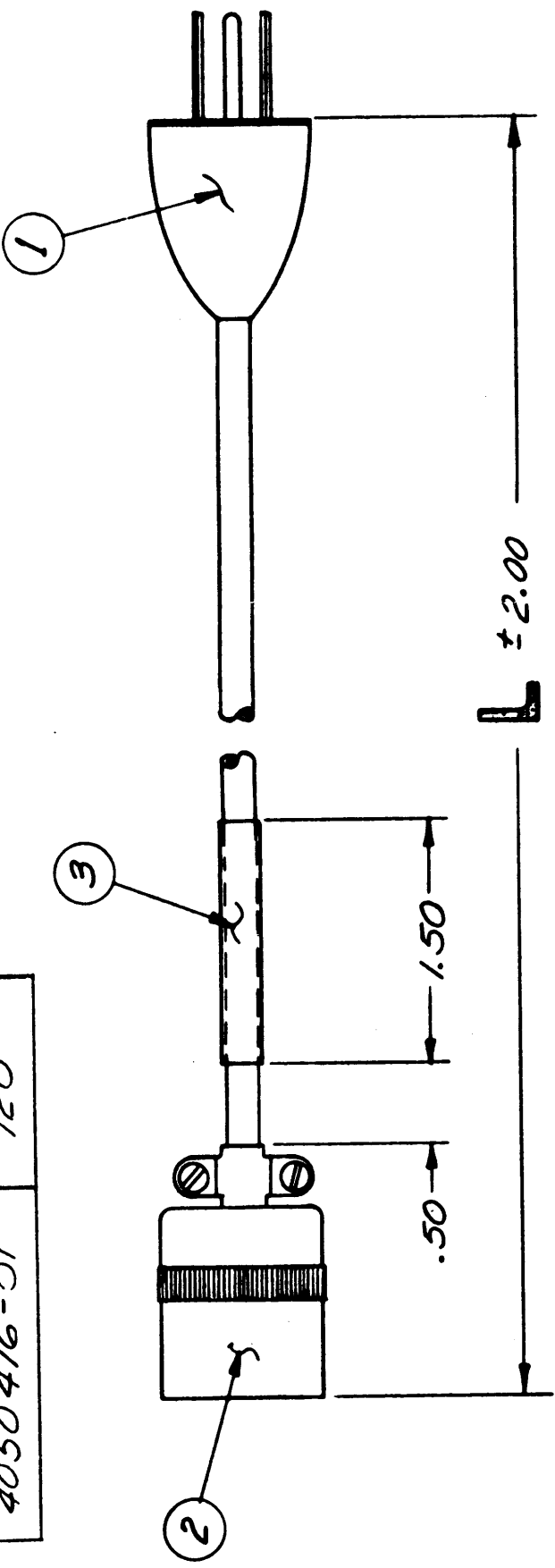


Fig. 6-35. Cable, Power
6-45