

SECTION VI

PARTS LISTS AND SCHEMATICS

This section contains assembly parts lists and schematic diagrams. The assemblies are separated in the manual into five groups: system, transport, head assemblies, electronics, and miscellaneous.

Three indexes list the drawings as follows:

- **Indented List of Assemblies** — List of assemblies in sequence of appearance in the manual.
- **Numerical List of Assemblies** — List of assemblies in numeric sequence.
- **Numerical List of Schematics** — List of schematics in numeric sequence.

Four illustrations follow the indexes to aid in the identification and location of major components and assemblies.

CATALOG/PART NUMBER IDENTIFICATION

The catalog/part number of a particular unit is determined by its features. This number is found on the identification plate at the rear of the unit, see Figure 6-1. Tables 6-1, 6-2, and 6-3 list the version numbers and features for one, two, and four channel recorders, respectively.

For example, if the number on the identification plate is 4010202-23, the first group of digits, 4010202, means the unit is a one channel recorder. Using Table 6-1, the version number -23 indicates that the recorder operates on 60 Hz and is portable, that it has two tracks, a 3-3/4 and a 7-1/2 in/s speed combination, and an AC motor.



Figure 6-1. Location of Parts, Top of Transport

Table 6-1. Version Numbers for One Channel Recorders (4010202)

VERSION NO.	POWER FREQ. (IN HZ)	TYPE OF ENCLOSURE	NUMBER OF TRACKS	TAPE SPEED IN/S	CAPSTAN DRIVE
-01	60	Rack	1	7-1/2 – 15	AC
-02	50				
-03	60	Console			
-04	50				
-05	60	Portable	2		
-06	50				
-07	60	Rack			
-08	50				
-09	60	Console	1	3-3/4 – 7-1/2	
-10	50				
-11	60	Portable			
-12	50				
-13	60	Rack	2		
-14	50				
-15	60	Console			
-16	50				
-17	60	Portable	1	7-1/2 – 15	
-18	50				
-19	60	Rack			
-20	50				
-21	60	Console	2		
-22	50				
-23	60	Portable			
-24	50				
-25	60/50	Rack	1	7-1/2 – 15	Servo
-26		Console			
-27		Portable			
-28					
-29		Rack	2		
-30		Console			
-31		Portable			
-32					
-33		Rack	1	3-3/4 – 7-1/2	
-34		Console			
-35		Portable			
-36					
-37		Rack	1	15 – 30	
-38		Console			
-39	Portable				
-40					
-41	Rack	2			
-42	Console				
		Portable			

Table 6-2. Version Numbers for Two Channel Recorders (4010203)

VERSION NO.	POWER FREQ. (IN HZ)	TYPE OF ENCLOSURE	TAPE SPEED IN/S	NUMBER OF TRACKS	CAPSTAN DRIVE	
-01	60	Rack	7-1/2 – 15	2	AC	
-02	50	Rack				
-03	60	Console				
-04	50	Console				
-05	60	Portable				
-06	50	Portable				
-07	60	Rack	3-3/4 – 7-1/2			
-08	50	Rack				
-09	60	Console				
-10	50	Console				
-11	60	Portable				
-12	50	Portable				
-13	60	Rack	7-1/2 – 15	2 – 4		
-14	50	Rack				
-15	60	Console				
-16	50	Console				
-17	60	Portable				
-18	50	Portable				
-19	60	Rack	3-3/4 – 7-1/2			
-20	50	Rack				
-21	60	Console				
-22	50	Console				
-23	60	Portable				
-24	50	Portable				
-25	50/60	Rack	7-1/2 – 15	2	Servo	
-26		Console				
-27		Portable				
-28		Rack	3-3/4 – 7-1/2			
-29		Console				
-30		Portable				
-31		Rack	15 – 30			
-32		Console				
-33		Portable				
-34		Rack	7-1/2 – 15			2 – 4
-35		Console				
-36		Portable				
-37		Rack	3-3/4 – 7-1/2			
-38		Console				
-39	Portable					

Table 6-3. Version Numbers for Four Channel Recorders (4020204)

VERSION NO.	POWER FREQ. (IN HZ)	TYPE OF ENCLOSURE	TAPE SPEED IN/S	CAPSTAN DRIVE	TAPE SIZE
-01	60	Rack	7-1/2 – 15	AC	1/2 inch
-02	50	Rack			
-03	60	Console			
-04	50	Console			
-05	60	Portable			
-06	50	Portable			
-07	50/60	Rack	15 – 30	Servo	
-08		Console			
-09		Portable			
-10		Rack			
-11		Console			
-12		Portable			
-13	50/60	Rack	7-1/2 – 15	Servo	1/4 inch
-14		Console			
-15		Portable			
-16		Rack			
-17		Console			
-18		Portable			

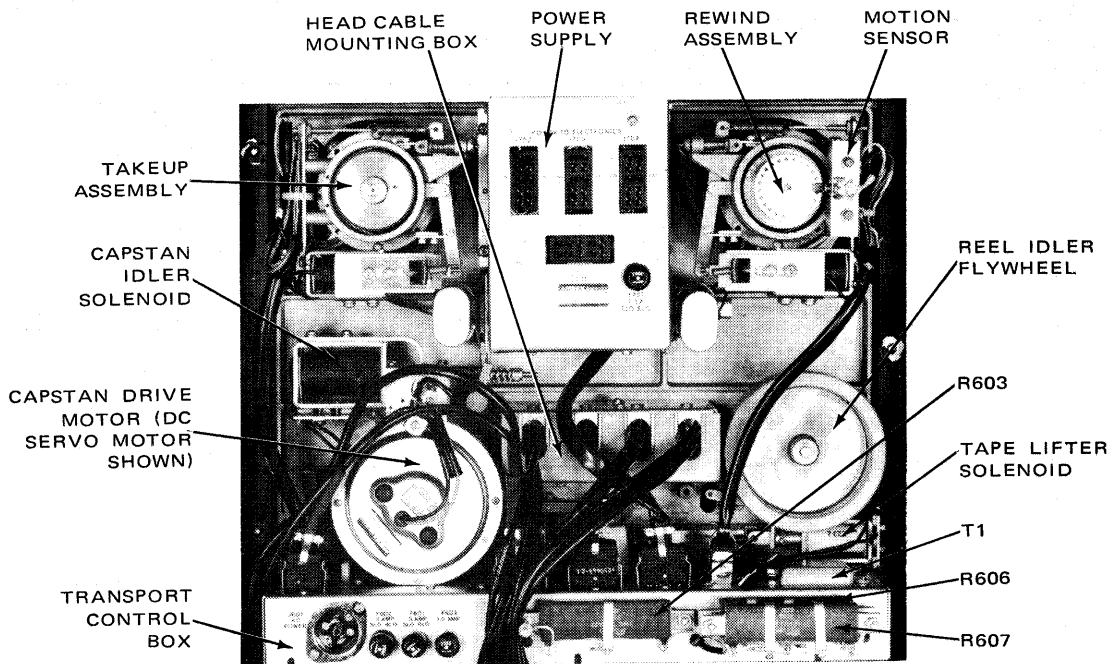


Figure 6-2. Location of Parts, Bottom of Transport

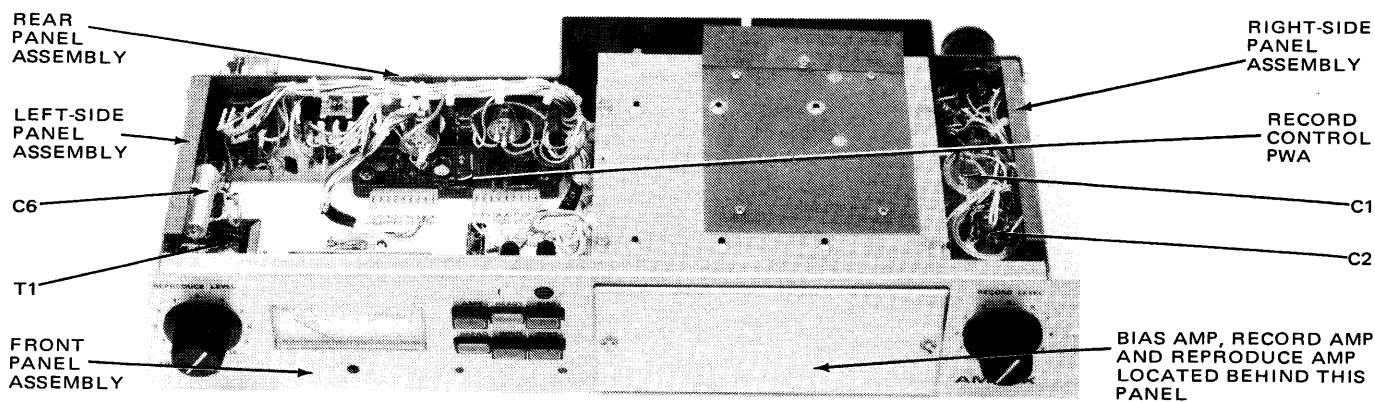


Figure 6-3. Location of Components, Record/Reproduce Unit

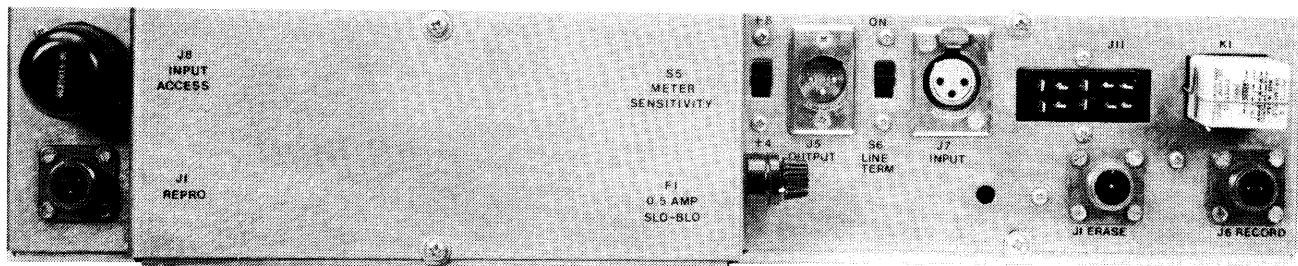


Figure 6-4. Rear Panel of Record/Reproduce Unit

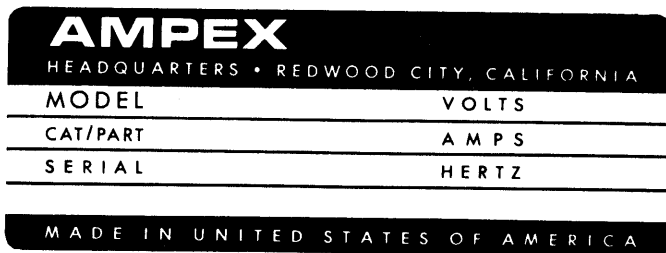


Figure 6-5. Identification Plate

INDENTURED LIST OF ASSEMBLIES

TITLE	ASSEMBLY NO.	PAGE NO.
SYSTEM		
One Channel Tape Recorder	4010202	6-13
Two Channel Tape Recorder	4010203	6-15
Four Channel Tape Recorder	4010204	6-17
TRANSPORT		
Tape Transport Assembly	4020271	6-19
Scrape Flutter Idler and Guide Assembly	4041150	6-27
Tape Lifter Assembly	4030259	6-28
Tape Lifter Solenoid Assembly	4030273	6-29
Capstan Idler Assembly	4030279	6-30
Capstan Idler Solenoid Assembly	4030272	6-31
Takeup Tension Arm Assembly	4030322	6-32
Reel Idler Assembly	4040970	6-33
Takeup Assembly	4030297	6-34
Takeup and Rewind Brake Assemblies	4030264	6-36
Rewind Assembly	4030333	6-38
Takeup and Rewind Brake Assemblies (See Page 6-36).	4030264	
Motion Sensor Assembly	4050587	6-41
Drive Motor Assembly	4040993	6-42
Servo Motor Assembly	4020361	6-44
Transport Control Box Assembly	4020338	6-45
Transport Control Chassis Assembly	4041149	6-49
Transport Control PWA	4050656	6-50
Transport Control Harness Assembly	4050635	6-52
Capstan Servo Chassis Assembly	4020353	6-53
Capstan Servo PWA	4050692	6-57
Servo Power Cable	4050585	6-63
HEAD ASSEMBLIES		
1 Track, 2 Track, and 2-4 Track Head Assemblies for 1/4-Inch Tape	4020355	6-65
Record Shield Can Assembly, 2-4 Track	4350021	6-69
Record Shield Can Assembly; 1 Track, 2 Track and 4 Track	4350022	6-70
Playback Shield Can Assembly, 2-4 Track	4350023	6-71
Playback Shield Can Assembly (All Head Assemblies).	4350024	6-72
Head Gate Assembly (All Head Assemblies).	4350029	6-73

INDENTURED LIST OF ASSEMBLIES (Continued)

TITLE	ASSEMBLY NO.	PAGE NO.
HEAD ASSEMBLIES (Continued)		
4 Track Head Assembly for 1/2-Inch Tape	4020356	6-74
Record Shield Can Assembly; 1 Track, 2 Track, and 4 Track (See Page 6-70).	4350022	
Playback Shield Can Assembly, (All Head Assemblies) (See Page 6-72).	4350024	
Head Gate Assembly, (All Head Assemblies) (See Page 6-73).	4350029	
4 Track Head Assembly for 1/4-Inch Tape	4020359	6-76
Record Shield Can Assembly; 1 Track, 2 Track, and 4 Track (See Page 6-70).	4350022	
Playback Shield Can Assembly, (All Head Assemblies) (See Page 6-72).	4350024	
Head Gate Assembly, (All Head Assemblies) (See Page 6-73)	4350029	
Head Cable Mounting Box Assembly	4050653	6-78

ELECTRONICS

Power Supply Assembly	4020274	6-81
Regulator and Oscillator PWA	4050432	6-85
Power Supply Connector Panel	4040968	6-89
Record/Reproduce Electronics Assembly	4020337	6-90
Bias Amplifier PWA	4050433	6-91
Record Amplifier PWA	4050434	6-95
Record Equalizer PWA	4020269	6-98
Reproduce Amplifier PWA	4050435	6-100
Reproduce Equalizer PWA	4020270	6-102
Record Control PWA	4050564	6-103
Left Side Panel Assembly	4050593	6-107
Rear Panel Assembly	4050601	6-108
Rear Panel	4041183	6-110
Front Panel Assembly	4050616	6-112
Control Cluster Assembly	4050617	6-115
Right Side Panel Assembly	4050621	6-116
Record/Reproduce Unit (Electronics) Harness Assembly.	4050632	6-117
Enclosure Assembly	4050639	6-118
Record/Reproduce Unit (Electronics) Interconnect Cable Assembly	4050442	6-119

CONSOLE

Console Assembly	4020084	6-121
Console Base Assembly	4040979	6-125

MISCELLANEOUS

Remote Control Assembly (Optional Accessory)	4010080	6-127
Transistor Microphone Preamplifier Assembly (Optional Accessory)	4010066	6-130
Transistor Microphone Preamplifier PWA	4050409	6-132

NUMERICAL LIST OF ASSEMBLIES

ASSEMBLY NO.	REV.	TITLE	PAGE NO.
4010066	B	Transistor Microphone Preamp Assembly (Optional Accessory)	6-130
4010080	E	Remote Control Assembly (Optional Accessory)	6-127
4010202	D	One Channel Tape Recorder	6-13
4010203	D	Two Channel Tape Recorder	6-15
4010204	E	Four Channel Tape Recorder	6-17
4020084	S	Console Assembly	6-121
4020269	J	Record Equalizer PWA	6-98
4020270	D	Reproduce Equalizer PWA	6-102
4020271	AT	Tape Transport Assembly	6-19
4020274	P	Power Supply Assembly	6-81
4020337	B	Record/Reproduce Electronics Assembly	6-90
4020338	F	Transport Control Box Assembly	6-45
4020353	E	Capstan Servo Chassis Assembly	6-53
4020355	E	1 Track, 2 Track, and 2-4 Track Head Assemblies for 1/4-Inch Tape	6-65
4020356	D	4 Track Head Assembly for 1/2-Inch Tape	6-74
4020359	A	4 Track Head Assembly for 1/4-Inch Tape	6-76
4020361	C	Servo Motor Assembly	6-44
4030259	E	Tape Lifter Assembly	6-28
4030264	G	Takeup and Rewind Brake Assemblies	6-36
4030272	J	Capstan Idler Solenoid Assembly	6-31
4030273	F	Tape Lifter Solenoid Assembly	6-29
4030279	G	Capstan Idler Assembly	6-30
4030297	D	Takeup Assembly	6-34
4030322	D	Takeup Tension Arm Assembly	6-32
4030333	C	Rewind Assembly	6-38
4040968	E	Power Supply Connector Panel	6-89
4040970	K	Reel Idler Assembly	6-33
4040979	H	Console Base Assembly	6-125
4040993	F	Drive Motor Assembly	6-42
4041149	—	Transport Control Chassis Assembly	6-49
4041150	B	Scrape Flutter Idler and Guide Assembly	6-27
4041183	—	Rear Panel (Record/Reproduce Unit)	6-110
4050409	B	Transistor Microphone Preamplifier PWA	6-132
4050432	M	Regulator and Oscillator PWA	6-85
4050433	L	Bias Amplifier PWA	6-91
4050434	J	Record Amplifier PWA	6-95
4050435	AB	Reproduce Amplifier PWA	6-100
4050442	B	Record/Reproduce Unit (Electronics) Interconnect Cable Assembly	6-119
4050564	B	Record Control PWA	6-103
4050585	—	Servo Power Cable	6-63
4050587	A	Motion Sensor Assembly	6-41

NUMERICAL LIST OF ASSEMBLIES (Continued)

ASSEMBLY NO.	REV.	TITLE	PAGE NO.
4050593	—	Left Side Panel Assembly (Record/Reproduce Unit)	6-107
4050601	A	Rear Panel Assembly (Record/Reproduce Unit)	6-108
4050616	A	Front Panel Assembly (Record/Reproduce Unit).	6-112
4050617	C	Control Cluster Assembly (Record/Reproduce Unit)	6-115
4050621	C	Right Side Panel Assembly (Record/Reproduce Unit)	6-116
4050632	C	Record/Reproduce Unit (Electronics) Harness Assembly.	6-117
4050635	D	Transport Control Harness Assembly	6-52
4050639	C	Enclosure Assembly (Record/Reproduce Unit).	6-118
4050653	B	Head Cable Mounting Box Assembly	6-78
4050656	C	Transport Control PWA	6-50
4050692	G	Capstan Servo PWA	6-57
4350021	—	Record Shield Can Assembly, 2-4 Track	6-69
4350022	E	Record Shield Can Assembly; 1 Track, 2 Track, and 4 Track	6-70
4350023	C	Playback Shield Can Assembly, 2-4 Track	6-71
4350024	—	Playback Shield Can Assembly, (All Head Assemblies)	6-72
4350029	C	Head Gate Assembly, (All Head Assemblies)	6-73

NUMERICAL LIST OF SCHEMATIC DIAGRAMS

SCHEMATIC NO.	REV.	TITLE	PAGE NO.
4840153	A	Transistor Microphone Preamplifier PWA	6-133
4840168	J	Power Supply	6-87
		Regulator and Oscillator PWA	6-87
4840248	D	Record/Reproduce Electronics	6-105
		Record Control PWA	6-105
4840249	D	Bias Amplifier PWA	6-93
		Record Amplifier PWA	6-93
		Record Equalizer PWA	6-93
		Reproduce Amplifier PWA	6-93
		Reproduce Equalizer PWA	6-93
4840261	D	Tape Transport Assembly	6-25
4840279	A	Capstan Servo Chassis	6-55
4840356	E	Capstan Servo PWA	6-61