INTRODUCTION

Part II of the Maintenance Manual is divided into 11 sections. In general, the material contained in Part II will be used to determine what corrective actions to take when the MTU is not operating properly. In most cases, the user will refer to sections on troubleshooting error codes that are displayed on the MTU front panel or error codes that are accessible when the field tester is connected to the FMT.

When a fault has been isolated, Part II directs the user to the proper maintenance action. The user will then perform either a check and adjustment procedure, or replace the faulty equipment, as specified by the error code description or troubleshooting flowchart.

Tabs are provided to identify each topic and to assist the user in locating a maintenance action. The topics covered in Part II are as follows:

- o Section A: MTU error codes and troubleshooting
- o Section B: Power supply unit troubleshooting
- o Section C: FMT and MTU offline and online diagnostics
- o Section D: Status line troubleshooting
- o Section H: Preventive maintenance
- o Section J: Cleaning
- o Section K: Check and adjustment procedures
- o Section L: Subassembly replacement
- o Appendix A: Glossary of terms
- o Appendix B: Signal used in logical circuits
- o Appendix C: MTU registers

PCA LOCATION

Throughout Part II of the Maintenance Manual, printed circuit assemblies (PCAs) are identified by slot number in the MTU or FMT logic gates or by their common names, such as write/read PCA. Use Figure 2.1 and Table 2.1 to locate PCAs in the MTU. For example, in model M2434L1 (master unit), slot 1A05 of the MTU logic gate contains the PCA identified as 512648U (P/N C16B-5126-0480#U). This PCA is referred to as "1A05 in the MTU" throughout the Maintenance Manual. Similarly, use Figure 2.2 and Table 2.2 to locate PCAs in the FMT. When removing PCAs from a logic gate, use PCA removal tool (P/N C960-0300-T001).

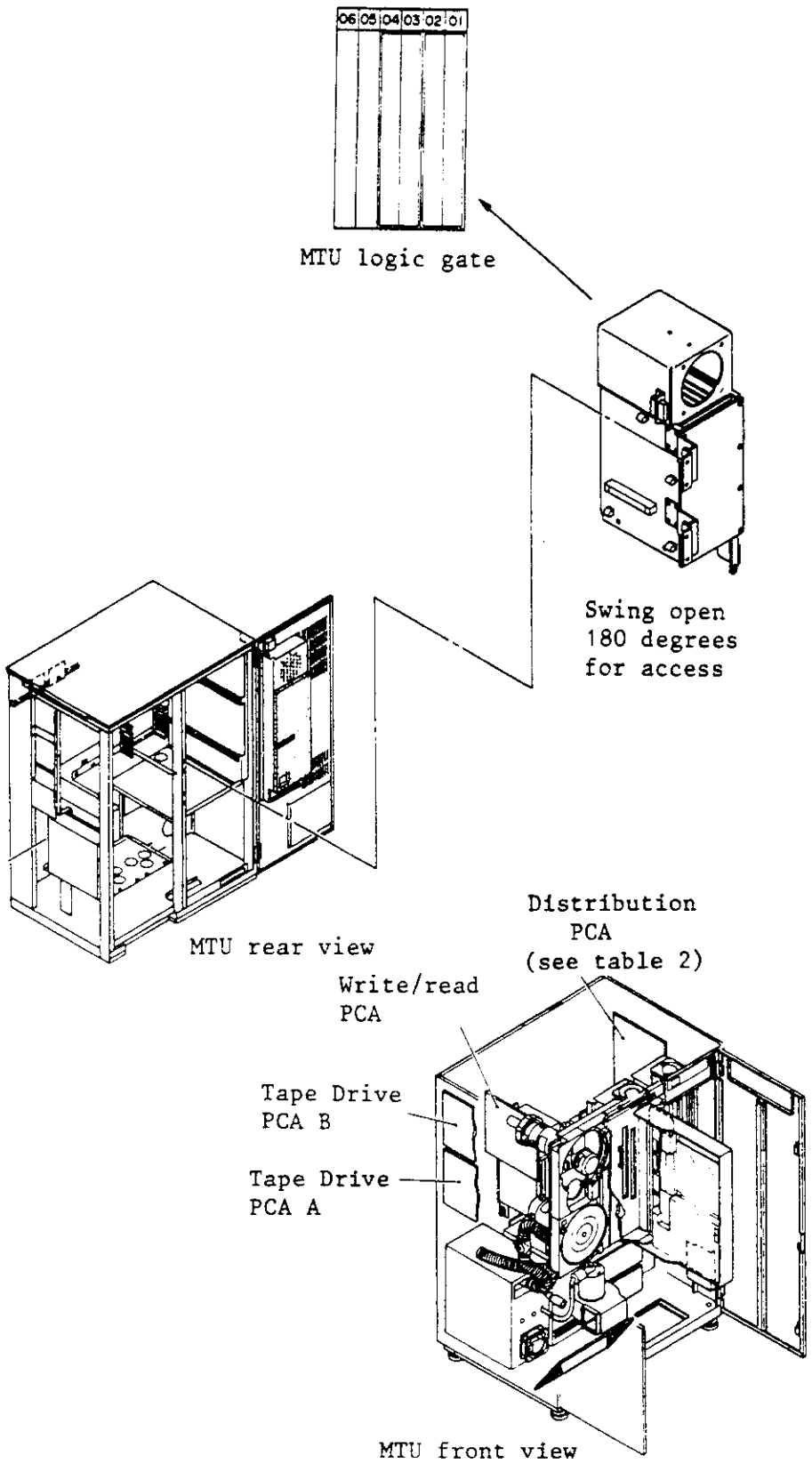

Figure 2.1 MTU PCA location diagram

Table 2.1 MTU PCA location

Model number	MTU PCA logic gate				Tape drive	Tape drive	Write/read
	1A01/1A02	1A03/1A04	1A05	1A06	A PCA	B PCA	PCA
M2430L (slave to M2434L)	P/N B16B-7220-0020A#U Power Unit VQJMU	P/N B16B-7190-0020A#U TKBMU	P/N C16B-5126-0480#U 512648U	P/N C16B-5126-0490#U 512649U	P/N B16B-7200-0200A#U Tape drive TVAMU	P/N B16B-7210-0200A#U Tape drive TVBMU	P/N B16B-7240-0030A#U WRIMU
M2431L (slave to M2434L)							P/N B16B-7260-0020A#U WRKMU
M2432L (slave to M2435L/6L	Power stabilizing circuit	Tape drive circuit	Micro-program control section	Interface control section	Power amplifier	Power amplifier	P/N B16B-7230-0030A#U WRHMU
M2433L (slave to M2435L							P/N B16B-7250-0020A#U WRJMU
M2434L1							P/N B16B-7240-0030A#U WRIMU
M2434L2							
M2435L1							P/N B16B-7230-0030A#U WRHMU
M2435L2							
M2436L1		P/N B16B-7190-0100A#U TKHMU	P/N C16B-5325-0210#U 532521U				
M2436L2							
M2436L8							
M2436N1			P/N C16B-5329-0060 #U	P/N C16B-5329-0100 #U			
M2436N8			532906U	532910U			
M2439L1		P/N B16B-7190-0020A TKBMU	P/N C16B-5324-0010 #U	P/N C16B-5324-0030 #U			P/N B16B-7230-0100 WRMMU
M2439L8			532401U	532403U			

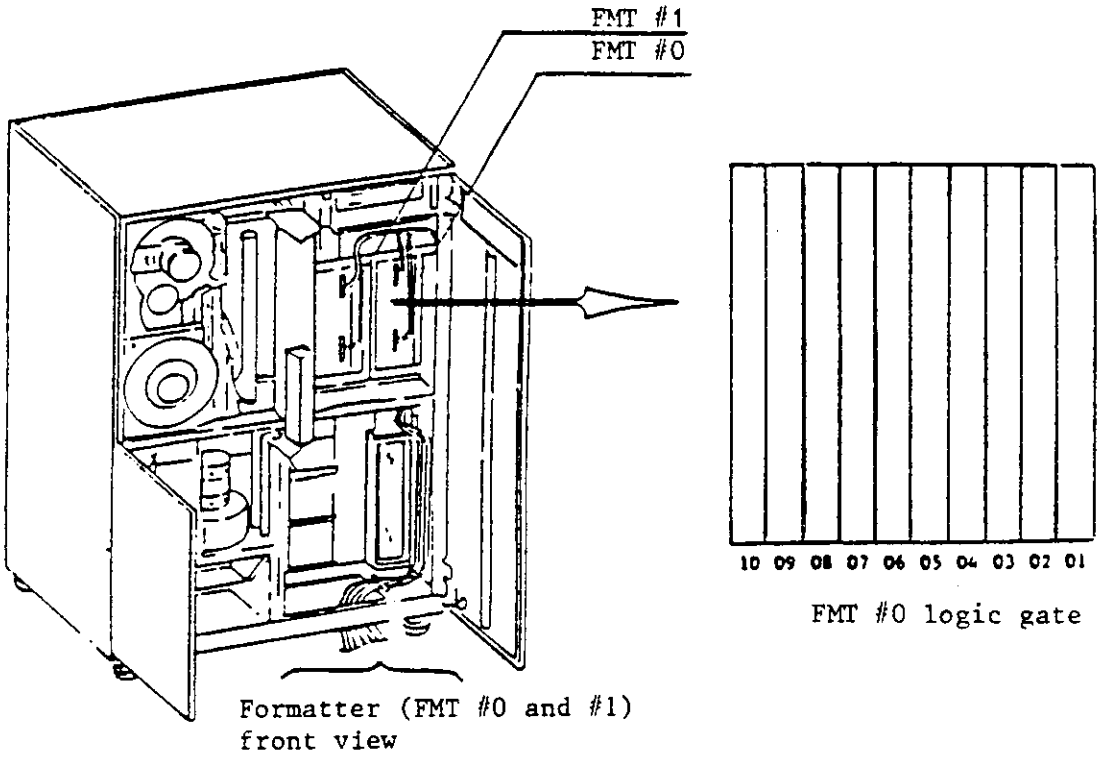

Figure 2.2 FMT PCA location diagram

Table 2.2 FMT PCA location

Model number	FMT PCA logic gate								Distribution board
	1A01	1A02	1A03	1A04	1A05	1A06	1A07	1A08	
M2430L (slave to M2434L)	None	None	None	None	None	None	None	None	None
M2431L (slave to M2434L)									
M2432L (slave to M2435L/6L)									
M2433L (slave to M2435L)									
M2434L1	P/N C16B-5121-0890 #U 512189U (read) (800 bpi)	P/N C16B-5121-0880 #U 512188U (read)	None	P/N C16B-5500-0880 #U 550088J (VFO)	P/N C16B-5126-0360 #U 512636U (DV INT)	P/N C16B-5121-0860 #U 512186U (write)	P/N C16B-5127-0920 #U 512792U	P/N C16B-5125-0670 #U 512567U	P/N B16B-7390-0010A#U 739001 DGAMU
M2434L2									P/N B16B-7390-0020A#U 739002
M2435L1/ M2439L1				P/N C16B-5500-0870 #U 550087U (VFO)			Controller interface	Micro-processor unit	P/N B16B-7390-0010A#U 739001 DGAMU
M2435L2/ M2439L2									P/N B16B-7390-0020A#U 739002
M2436L1	None						P/N C16B-5326-0610 #U 532661U		P/N B16B 7390-0010A#U 739001 DGAMU
M2436L2									P/N B16B-7390-0020A#U 739002
M2436L8		None		None	None	None	None	None	None
M2436N1		P/N C16B-5121-0880 #U 512188U (read)		P/N C16B-5500-0870 #U 550087U (VFO)	P/N C16B-5126-0360 #U 512636U (DV INT)	P/N C16B-5121-0860 #U 512186U (write)	P/N C16B-5326-0610 #U 532661U	P/N C16B-5125-0670 #U 512567U	P/N B16B-7390-0010A#U 939001 DGAMU
M2436N8		None		None	None	None	None	None	None