MagneTek Drives & Systems

For Lancer GPD 602
Adjustable Frequency Drives

CONTROL EXPANSION OPTION
MEMORY MODULE

IMPORTANT

Before installing this option, a TECHNICALLY QUALIFIED INDIVIDUAL, who is familiar with this type of equipment and hazards involved, should READ this ENTIRE INSTRUCTION SHEET.

DESCRIPTION

The Memory Module installs on the right side of the GPD 602 enclosure.

The EEPROM (Electrically Erasable Programmable Read Only Memory) incorporated in the module provides three functions: customer-designated, factory-set constants; Digital or Programming Operator command back-up; and alternate constant setting and reference. The Memory Module is added to the Drive either by itself or in combination with a Digital Operator or a Programming Operator (see Table 1), according to the required functions for the application.

RECEIVING

All equipment is tested against defect at the factory. Any damages or shortages evident when the equipment is received must be reported immediately to the commercial carrier who transported the equipment. Assistance, if required, is available from the nearest MagneTek Sales Office.

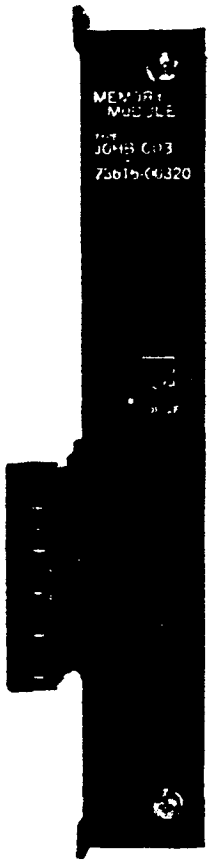

Figure 1. Memory Module, Front View

CHANGE RECORD						DWG. NO. 02Y00025-0251
1	STD-3278 10/18/88 REL					SHEET 1 OF 4
						EFF. 11/13/87 (G)

Table 1. Memory Module Functions

Installation Variations	Customer-designated Constant Settings	Back-up Memory	Alternate Constant Settings
Memory Module Only	YES	-	-
With Digital Operator	YES	YES	-
With Programming Operator	YES	YES	YES

INSTALLATION

WARNING

HAZARDOUS VOLTAGE CAN CAUSE SEVERE INJURY OR DEATH.

LOCK ALL POWER SOURCES FEEDING DRIVE IN "OFF" POSITION.

1. Turn off all electrical power to the Drive.

2. Verify that the "CHARGE" lamp is out. Then loosen two mounting screws and remove the Drive front cover.

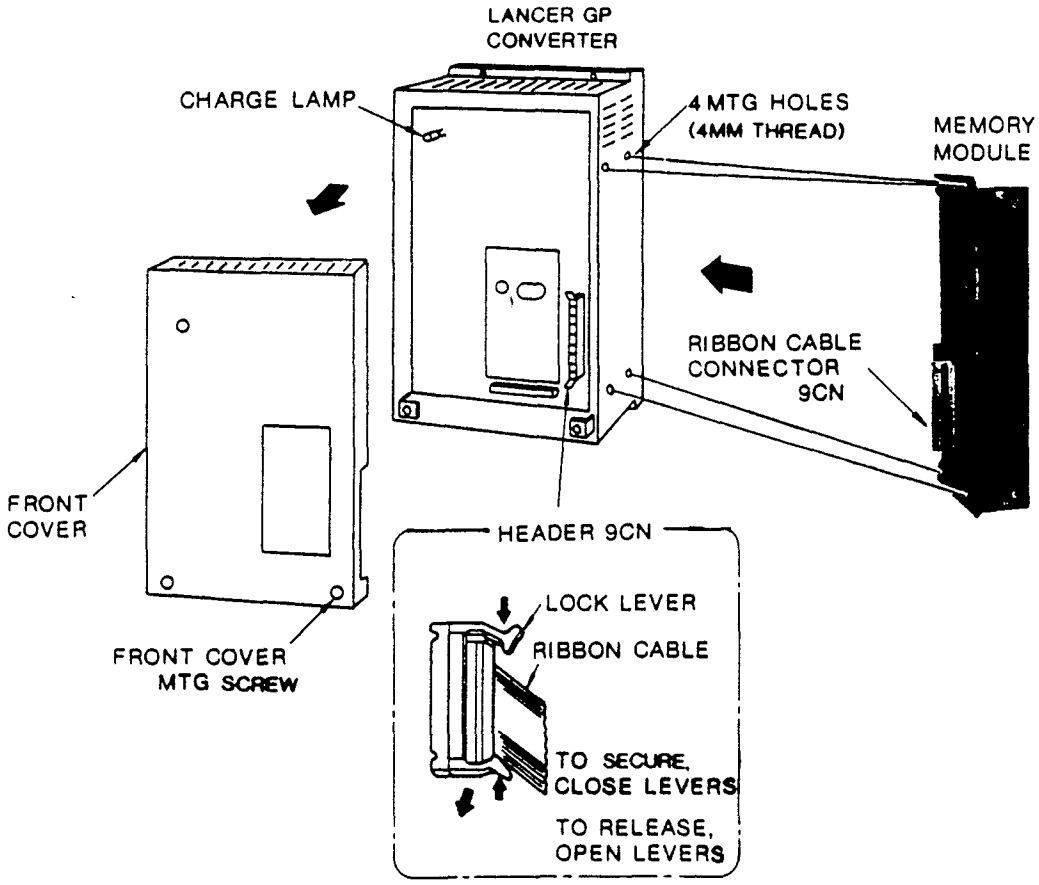

Figure 2. Installation

DWG. NO. 02Y00025-0251
SHEET 2 OF 4
EFF. 11/13/87 (G)

3. See Figure 2. Position the module on the side of the Drive enclosure. Align with four tapped mounting holes and secure using M4 (4 mm dia.) screws, with flat and lock washers.

4. Align the connector 9CN of the ribbon cable from the module with the pins of header 9CN on the Control PCB. Push downward to seat the connector, then squeeze two lock levers inward until they click in place.

5. Replace and secure the Drive front cover.

NOTE

The Memory Module does not require any change to interconnection wiring.

IMPORTANT

The SET/DRIVE switch on the front of the Memory Module must be in the DRIVE position for normal operation. If the Memory Module is not being used with a Programming Operator, no other adjustments are needed before starting the Drive.

MEMORY MODULE OPERATION

A. When Installed Separately

With the Memory Module installed, the V/f pattern selector switch (1S) in the Drive is disabled, and the factory-set V/f constants in the module become effective. Additional factory-set constants in the module also become effective.

A listing of factory preset constants is packed with the Memory Module when it is shipped.

B. When Used With Digital Operator

When a power failure occurs, or the AC main contactor is turned off, some of the digital control commands are retained in the Memory Module, and instantly reset to the same values when power is again applied to the Drive.

The following commands are backed up:

1. Frequency setting value
2. AUTO/MAN mode selection
3. MONI/SET function selection
4. FWD/REV setting

RUN and JOG commands are not stored.

The operation described in A above is also available in this configuration.

C. When Used With Programming Operator

The operations described in A and B above are available in this configuration. In addition, the alternate constant setting and reference function is available. In this function, using the "Setting" mode of the Programming Operator, the user can set constant values into the EEPROM of the Memory Module which are different from the initial or factory-set constants.

Because this function is controlled from the keyboard of the Programming Operator, it is discussed in detail in instruction sheet 02Y00025-0250.

Table 2. List of Constants

	CONSTANT	UNIT	SETTING RANGE	INITIAL VALUE	REMARKS
01	Max Frequency (Fo)	Hz	50.0 to 360.0	60.0	V/f pattern selection
02	Max Voltage (Vo)	V	208 to 230V: 0 to 230 380 to 460V: 0 to 460	200	
03	Max Voltage Frequency (A)	Hz	20.0 to Fo	60.0	
04	1/40 Frequency	V	0 to Vo	10	
05	Torque Compensation Gain (KT)		0.0 to 9.9	1.0	-
06	Carrier Frequency Lower Limit (Fc11)	Hz	380 to 2500	380	-
07	Min Output Frequency	Hz	0.2 to 10.0	1.5	-
08	DB Time	(s)*	0.0 to 20.0	1.0	Motor stopping torque
09	DB Voltage	V	230V unit: 0 to 30	20	
			460V unit: 0 to 60	40	
10	Frequency Reference Upper Limit	%	0 to 110	110	-
11	Frequency Reference Lower Limit	%	0 to 120	0	-
12	Setting Prohibited Frequency	%	0 to 120	120	-
13	No. of Poles		(0), 2, 4, 6, 8 10, 12, 14	(0)	RPM indication
14	Slip Compensation Gain (ks)		0.0 to 9.9	0.0	-
15	Frequency Range	Hz	0.0 to Fo	60.0	Frequency memory

* Unit of sec is not displayed.
Setting the No. of poles at 0, output frequency is displayed in Hz.
Constants 14 and 15 are optional.

Note: For details of constants, refer to Programming Operator instruction sheet 02Y00025-0250.