BLH

RODIME

RO 100/RO 200 SERIES
5¼" DISK DRIVES

INSTALLATION INSTRUCTIONS

CONTENTS

ISSUE 2

1. General Installation Instructions

1.1 The shipping lock on the stepper motor, a label on the top cover which covers a plastic pulley on the motor shaft, must be de-activated prior to power-on of the drive. **THIS LABEL MUST BE REMOVED.**

WARNING — Once removed, the stepper motor shaft should never be rotated by hand. **THIS COULD LEAD TO HEAD/DISK DAMAGE.**

1.2 When installing the drive into an enclosure, the breather holes on the drive top cover must not be obstructed. At least 0.1 inch clearance must be provided between the top cover and the host frame.

There must be at least 0.1 inch clearance between the drive housing and the host frame to ensure functional vibration isolation. The drive may be mounted in either vertical or horizontal orientation.

1.3 The unit requires D.C. power. All voltages are measured at the D.C. power connector in the drive.

Voltage (V.D.C.)	Current Maximum (Amperes)	Current Typical (Amperes)
+ 5 (± 5%)	0.75	0.65
+ 12 (± 10%)	2.4	2.0

At power on, the drive motor takes up to 4A at +12 volt dropping to 2.4A (max) after approximately 15 seconds. No special switch-on sequencing is required but if the +5v is applied first then the +12v must follow within 5 seconds.

1.4 When the drive has been switched off, power should not be re-applied until the disks have come to rest, a period of approximately 10 seconds.

1.5 No preventative maintenance is required and there are no adjustments on the drive.

The only repairs that may be effected on site are replacement of electronic boards, connection of the spare Hall element on the motor speed board, removal of links A and B and replacement of the d.c. motor brake.

The drive has in-built M.T.R. diagnostics and one of the two LED indicators on the master electronic board display fault codes.

THE ENCLOSURE COVERS SHOULD NEVER BE REMOVED IN THE FIELD.

1.6 IT IS MANDATORY THAT ANYONE HANDLING, INSTALLING OR TROUBLE-SHOOTING THE DRIVE BE FAMILIAR WITH THE INFORMATION PROVIDED IN RODIME TECHNICAL DOCUMENTS PRO-0009 and INT-0010 (RO100 Series) or PRO-0020 and INT-0021 (RO 200 SERIES).

1.7 Other than when installed in equipment, the drive should **NEVER** be shipped without the stepper motor lock activitated (see Paragraph 1) and **ALWAYS** boxed in the Rodime approved package.

2. Front Panel LEDs

Two red LEDs located behind the opaque front panel and visible through this panel when illuminated, indicate the status of the drive as follows:—

2.1 The SELECT LED. This LED will be on when the drive is selected.

2.2 The "POWER-ON" LED. This LED is used to indicate "power-on". It is also used to give error messages should a fault condition arise on the drive.

When the drive is coming up to speed this LED flashes at 0.5 second intervals. When the power up routine is complete, this LED should stay on and remain on unless the drive develops a fault. The drive indicates a fault condition by flashing a four bit binary code on this LED, most significant bit first, eg.

Short, short, long, short = 2 (0010)
Short, long, short, long = 5 (0101)

The faults indicated are given in the table below:

Fault Code		Fault
1	(0001) :	No index track data burst * LINK B DISCON.
2	(0010) :	No flag zero
3	(0011) :	Motor speed outside start-up tolerance ± 1%
4	(0100) :	Motor speed outside ± 10% / 5%
5	(0101) :	Flag zero stays true
6	(0110) :	Step pulse while write gate true
7	(0111) :	Static write fault
8	(1000) :	Not used
9	(1001) :	Micro processor self test failed
10	(1010) :	No index
11	(1011) :	Motor not up to speed

Mounting details

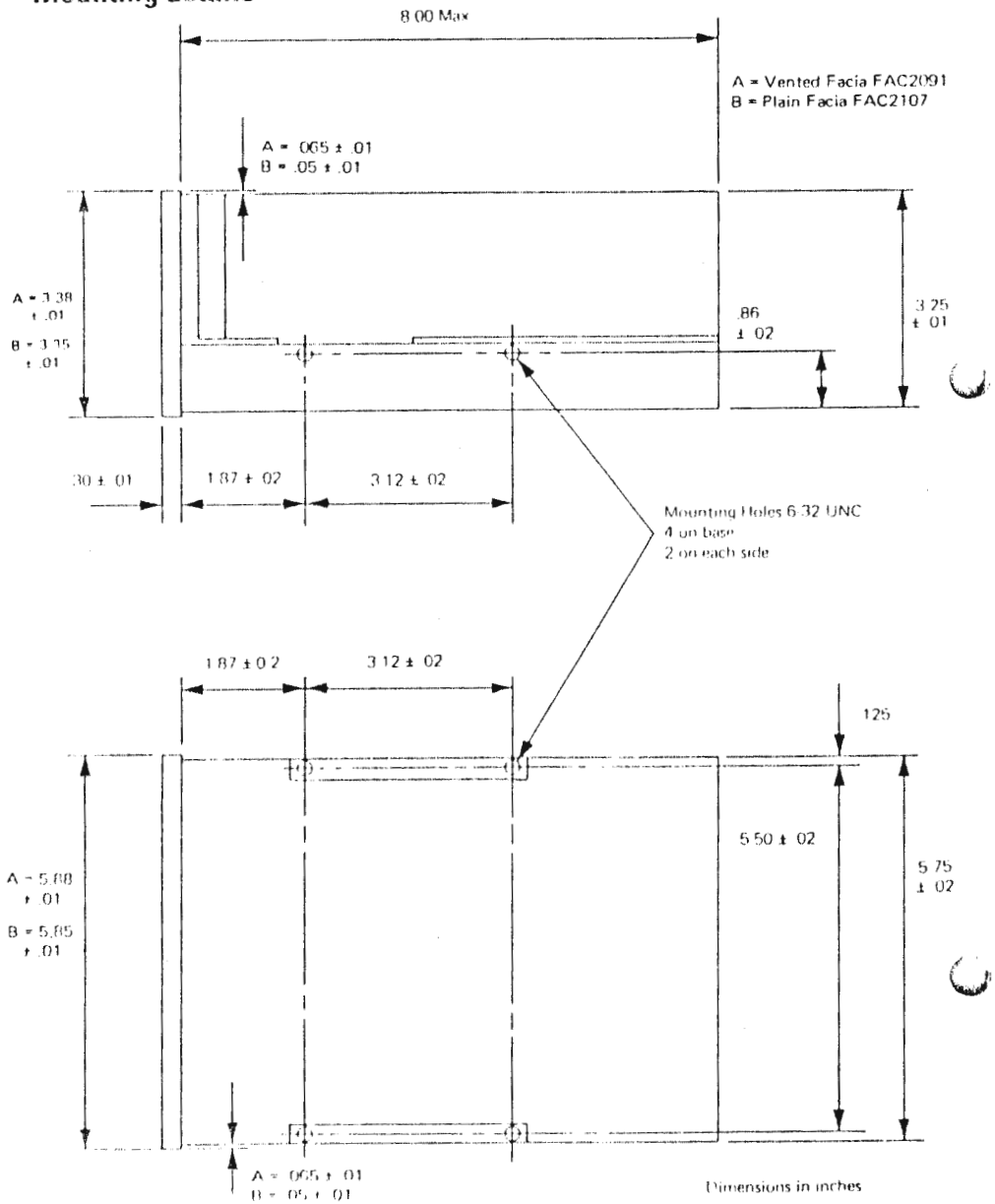


FIGURE 1 : MOUNTING DETAILS

RODIME

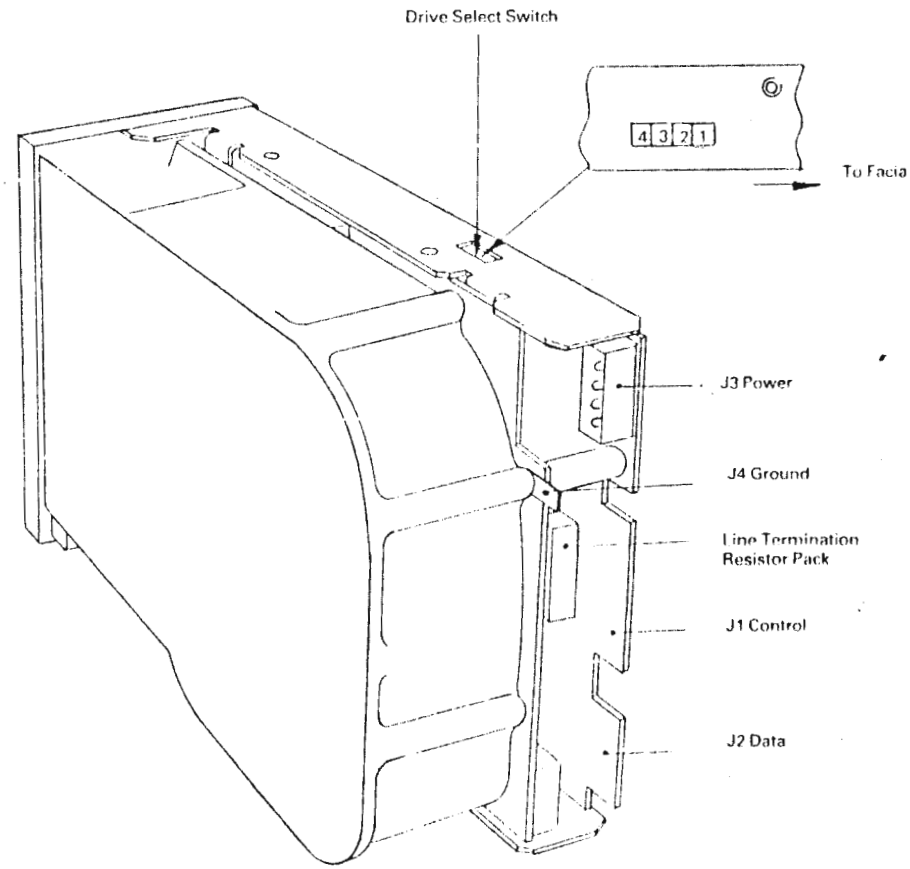
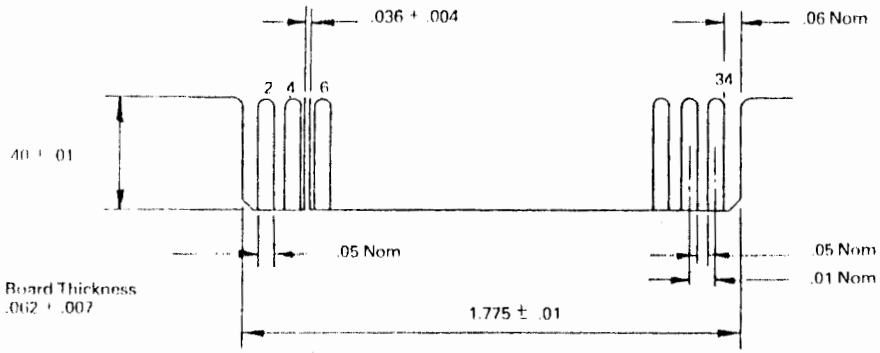
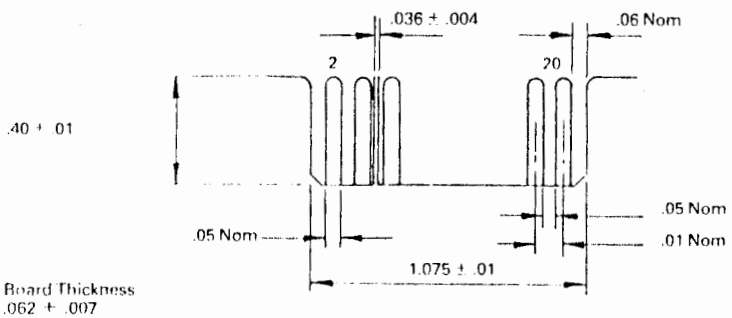


FIGURE 2 : CONNECTOR POSITIONS



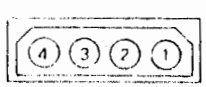
Recommended Mating Connector — AMP Ribbon Connector A/N 88373-3

FIGURE 3: J1 CONNECTOR (CONTROL)



Recommended Mating Connector — AMP Ribbon Connector A/N 88373-6

FIGURE 4: J2 CONNECTOR (DATA)



Recommended Mating Connector Amp P/N 1-480424-0 Utilizing AMP Pins P/N 350078-4

FIGURE 5: J3 CONNECTOR (POWER)

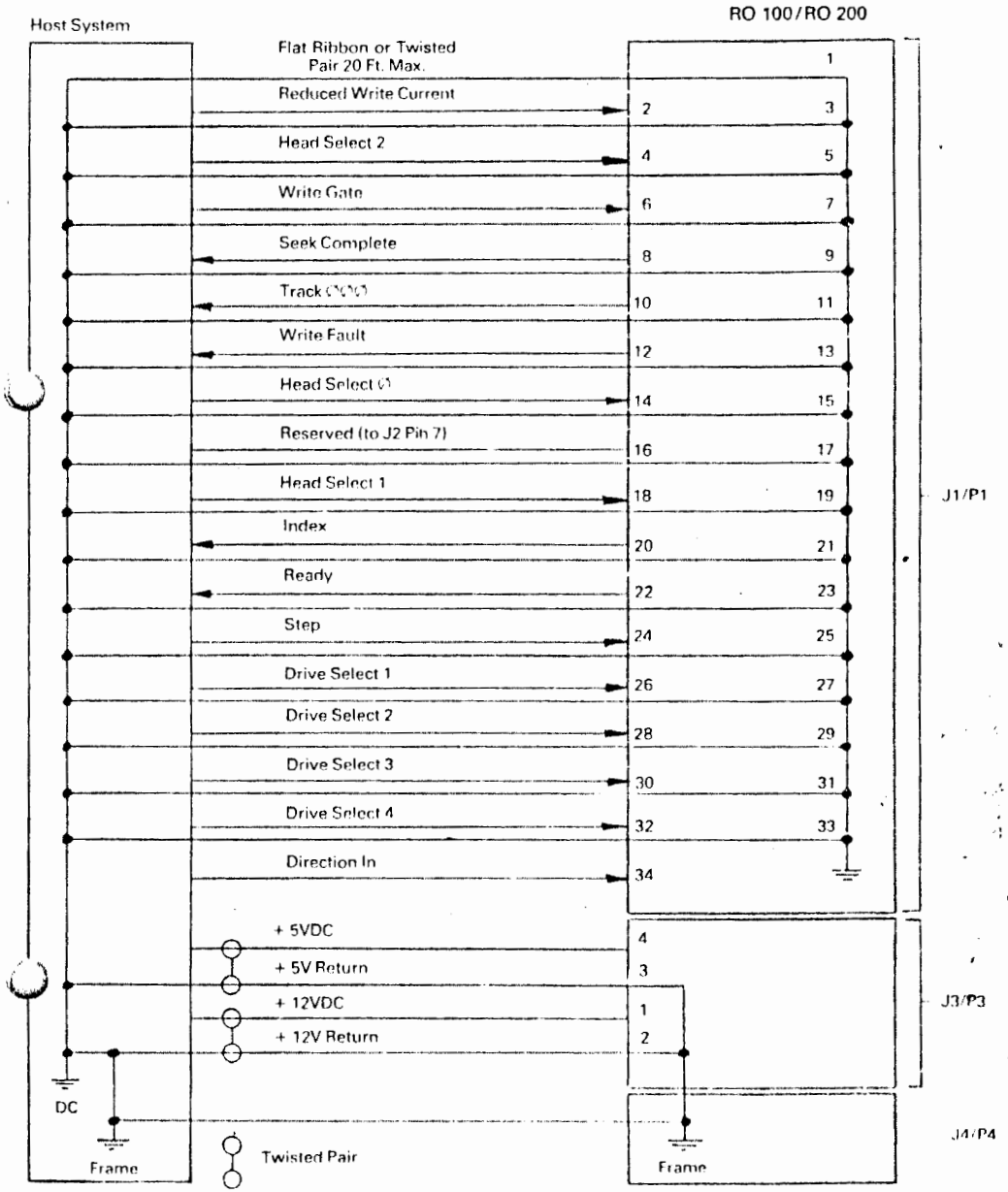


FIGURE 6 : CONTROL AND POWER BUS J1/P1

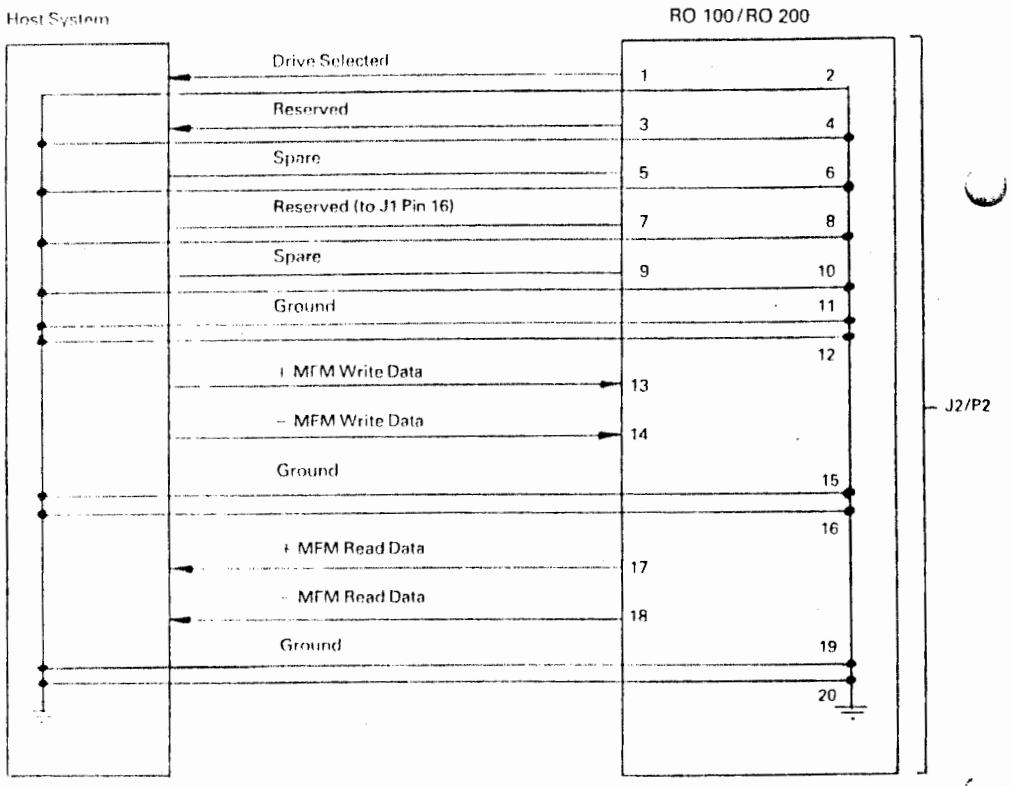


FIGURE 7 : DATA BUS J2/P2

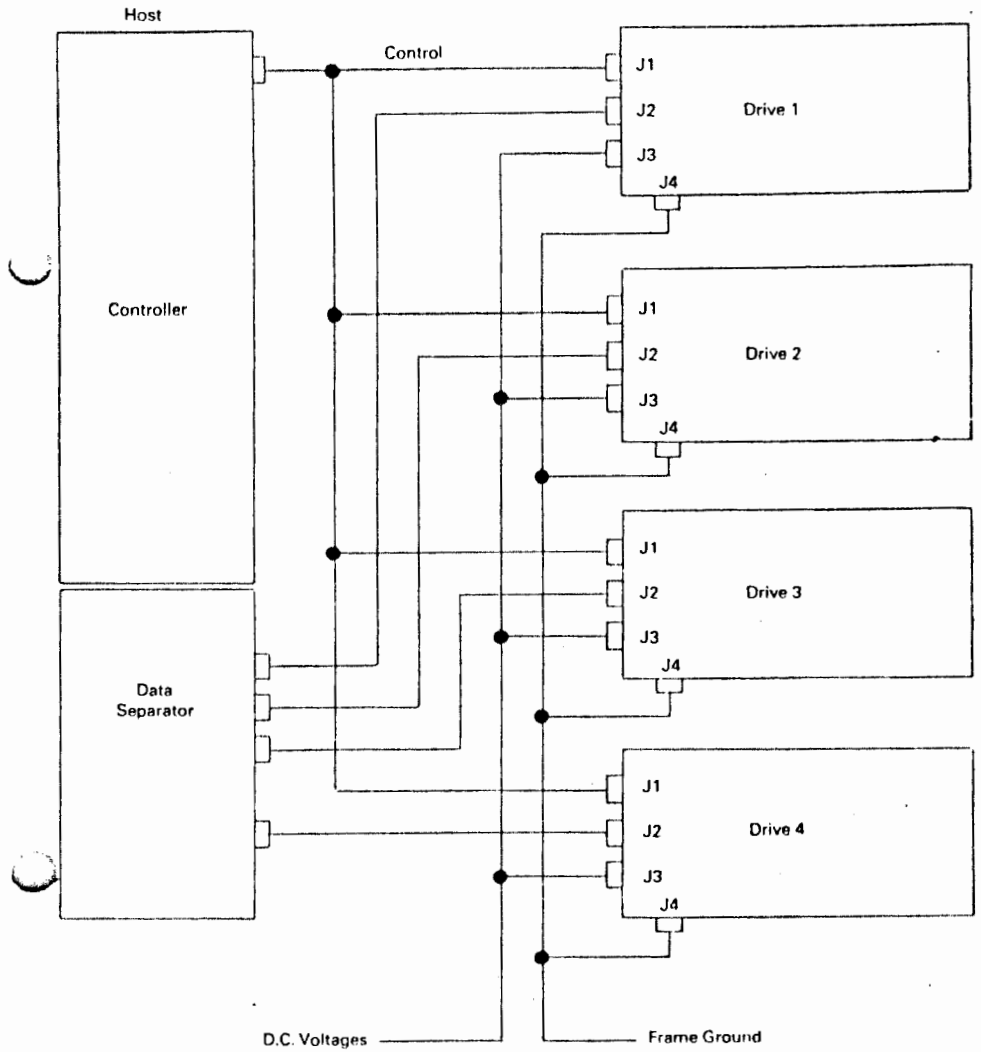


FIGURE 8 : SYSTEM WITH 4 DRIVES

VOLTAGE		GROUND	
PIN 1	+ 12 VOLTS DC	PIN 2	+ 12 VOLT RETURN
PIN 4	+ 5 VOLTS DC	PIN 3	+ 5 VOLT RETURN

FIGURE 9 : POWER INTERFACE J3

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