PRELIMINARY

INSTALLATION OF A 75/150MB FUJITSU DISC DRIVE INTO A SYSTEM 64 CABINET

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INSTALLING A FUJITSU DISC DRIVE INTO A SYSTEM 64

Power must be disconnected from the system during the entire procedure that follows.

1. Remove the front doors and the side panels from the System 64 cabinet.

2. Remove the bottom two front panels from the cabinet. The front panels will be held in place by 3/8" hex nuts. Also remove the power supply mount (see Figure 7).

3. Remove front panel from the operator panel/slide assembly (also known as the cradle-- shown in Figure 1), which is furnished in the kit.

4. Remove the four rack mounting brackets (see Figure 1) from the rails. They are held on with four screws each.

5. Slide the rails to the rear of the cradle until they stop. Unlock the rails by depressing the release buttons (see Figure 1), and then slide the rails the rest of the way off the cradle.

6. Mount the rails in the System 64 cabinet. Rails must be mounted so that the flanges go behind the vertical, perforated rack members (when viewed from the front as shown in Figure 2). The bottom notch of the rail flange should be fastened through the third hole from the floor of the cabinet. The flange brackets (see Figure 1) are threaded and go behind all except the right rear rail flanges (see Figure 2).

7. Place one of the cable retractor brackets (see Figure 1), which have been supplied in the installation kit, behind the right rear rail flange and mount it with four of the #10 screws (12678-506, MDS #041052601) supplied in the kit (see Figure 2).

8. Count five holes up on the right rear vertical rack member. Skip the five holes and mount the second cable retractor bracket using two of the #10 screws as shown in Figure 2.

9. Slide the empty cradle into the rails to be sure it fits properly. The cradle should slide

in and out smoothly. If it does not, adjust the distance between the rails by loosening the mounting screws. Slide the cradle in and out and tighten the rail mounting screws when the rails are adjusted properly.

10. Remove the cradle from the rails by pulling the cradle until the safety latches lock it into place. Release the safety latches by depressing the buttons (see Figure 1) and continue to pull the cradle the rest of the way out of the cabinet.

11. Lock the spindle, the spindle motor, and the heads of the disc drive to be installed in the System 64 cabinet.

12. Remove the strain relief bracket from the disc drive's card cage and save the screws. Remove the buss cable (60 conductor) from OM1, the radial cable (26 conductor) from OM2, and the start cable (10 conductor) from CN1, located underneath the disc drive (see Figure 4C).

13. Disconnect the cables from the disc drive power supply (PW1, PW2, and CN18 as shown in Figure 8).

14. To Remove the Fujitsu Drive from the customer's existing cabinet, remove the four nuts from the shock mount studs underneath the disc drive and lift the drive out of the old cabinet.

15. Set the drive gently down on the floor. Lift the drive up on its side with the motor side down (see Figure 4A).

16. Place the cradle next to the drive on its side and slide the edge of the cradle under the drive. Work the drive into the cradle until the shock mount studs protrude through the bottom of the cradle. Put the ground strap lugs around the rear studs and replace all four nuts (see Figure 4C).

17. Route the 10 conductor cable as shown in Figure 4C. The common connector goes to CN1 (red stripe to Pin 1), the plug from which the old remote start cable was removed. The connector on the short end of the cable should be routed to the plug on the disc control panel (red stripe to Pin 1) so that the cable is supported

by the orange wire and the blower assembly when the disc drive is placed upright.

18. Attach a self-sticking cable clamp on the bottom of the cardcage as shown in Figure 4B. Route the long end of the ten conductor cable around the cross member of the cradle and clamp it to the bottom of the cardcage as shown in Figure 4C.

19. Install the cable retractors as shown in Figure 2. The ribbon cable retractor goes on the upper bracket (use two flat washers #10502-003, MDS #041133201 as shown in Figure 2).

20. Mount the disc drive cable retractor bracket (see Figure 1) on to the disc drive with the screws from the ribbon cable strain relief. Notice in Figure 3 that the alternate bracket must be used if the drive cardcage does not have a screw hole on the upper left corner.

21. Slide the disc drive with the cradle into the rails.

22. Place two cable clamps on the face of the disc drive cardcage as shown in Figure 5.

23. Slide the disc drive all the way into the cabinet to measure amount of slack needed for the Power Cable between the disc drive and the end of the Power Cable retractor. With the drive all the way into the cabinet, take up enough of the slack to prevent the Power Cable from interfering with the terminator in plug OM1.

    Attach the Power Cable to the Power Cable retractor with the ties as shown in Figure 6.

24. Connect the Buss Cable to OM2 and the Radial Cable to OM3. Route them through the cable clamps on the disc cardcage as shown in Figure 5. Also route the Disc Ready Cable through the clamp as shown in Figure 5.

25. Fasten the free end of the ribbon cable retractor to the disc drive cable retractor bracket. Use two #8 screws (12678-304, MDS #041052401) and two flat washers (10502-003, MDS #041133201).

26. Attach the Buss Cable, the Radial Cable, and the Disc Ready Cable to the ribbon cable retractor with the ties as shown in Figure 6.

27. Attach the power supply to the power supply mount. The connector side of the power supply must be closest to the cable retractor brackets. Use the angle brackets (43302-001, MDS #041933401) to hold the rear of the power supply to the power supply mount. Use metric screws (12615-004, MDS #042655001) in the power supply chassis and #8 screws (12678-304, MDS #041052401) in the power supply mount.

    Reinstall the power supply mount with the power supply (see Figure 7).

28. Attach two cable clamps to the topside of the power supply as shown in Figure 7.

29. Route the free ends of the Buss and Radial Cables through the slot between the fans under the System 64 cardcage. Connect these cables to the proper edge connectors on the IOU 52 board. The Radial Cable, with the stripe facing up, goes to the middle connector. The Buss Cable, with the stripe facing up, goes to the bottom connector.

30. Route the Disc Ready Cable to the connector of the Disc 1 front panel light (see Figure 7). This connector has one red wire and one white wire with a green stripe. The connector is keyed to fit with Pin 1 corresponding to the stripe on the Disc Ready Cable, but the connector can be offset if care is not taken.

31. Remove the old AC power cord from the disc drive power supply, and install the cord supplied in the kit. The short wires should go to the power supply as shown in Figure 8. The other end of this cord is to be routed into the AC box through the hole behind ground lug E6 inside the box.

    The blue wire should be connected to TB3-6B, the brown wire should be connected to TB2-6B, and the green and yellow wire should be connected to ground lug E6 (see Figure 9).

32. Unlock the spindle, the motor, and the heads on the disc drive.

33. Set the power supply's REMOTE/LOCAL switch to LOCAL.

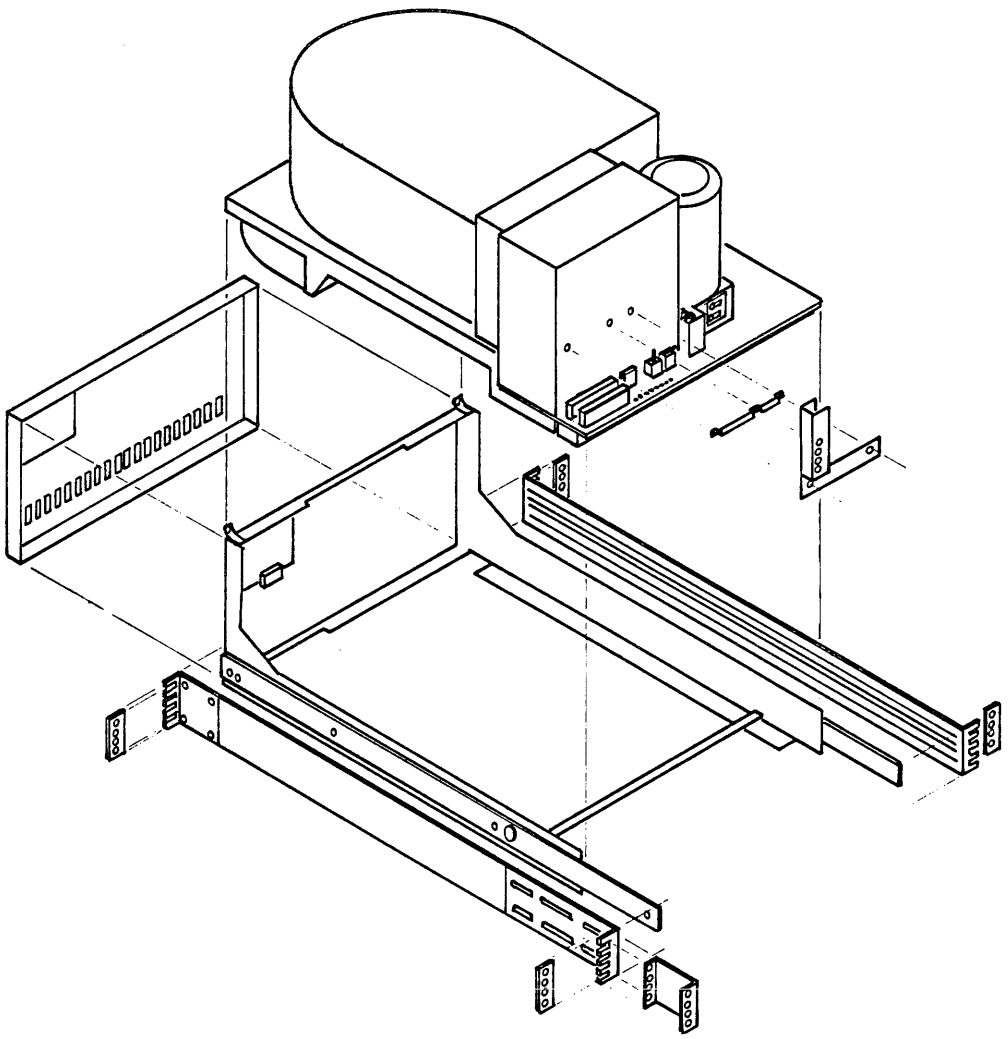


Fig 1

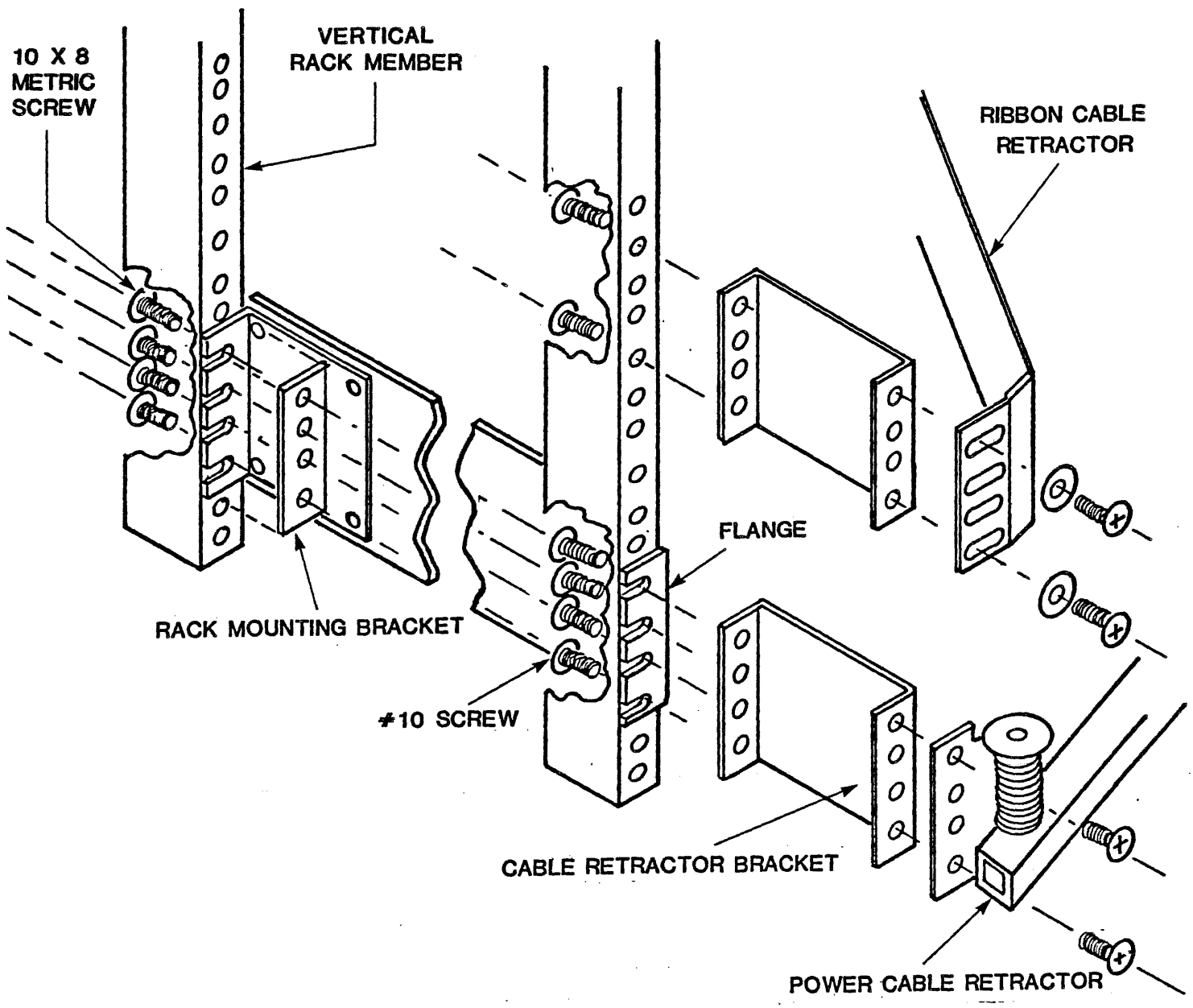

10 X 8
METRIC
SCREW
VERTICAL
RACK MEMBER
RIBBON CABLE
RETRACTOR
FLANGE
RACK MOUNTING BRACKET
#10 SCREW
CABLE RETRACTOR BRACKET
POWER CABLE RETRACTOR

Fig. 2

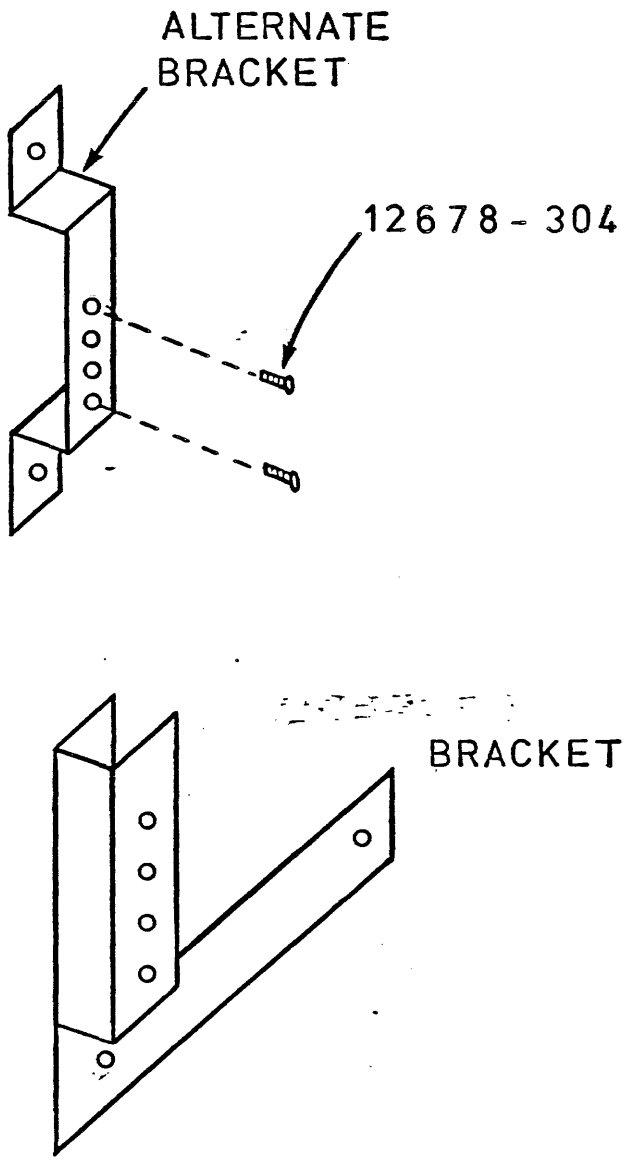


FIG. 3

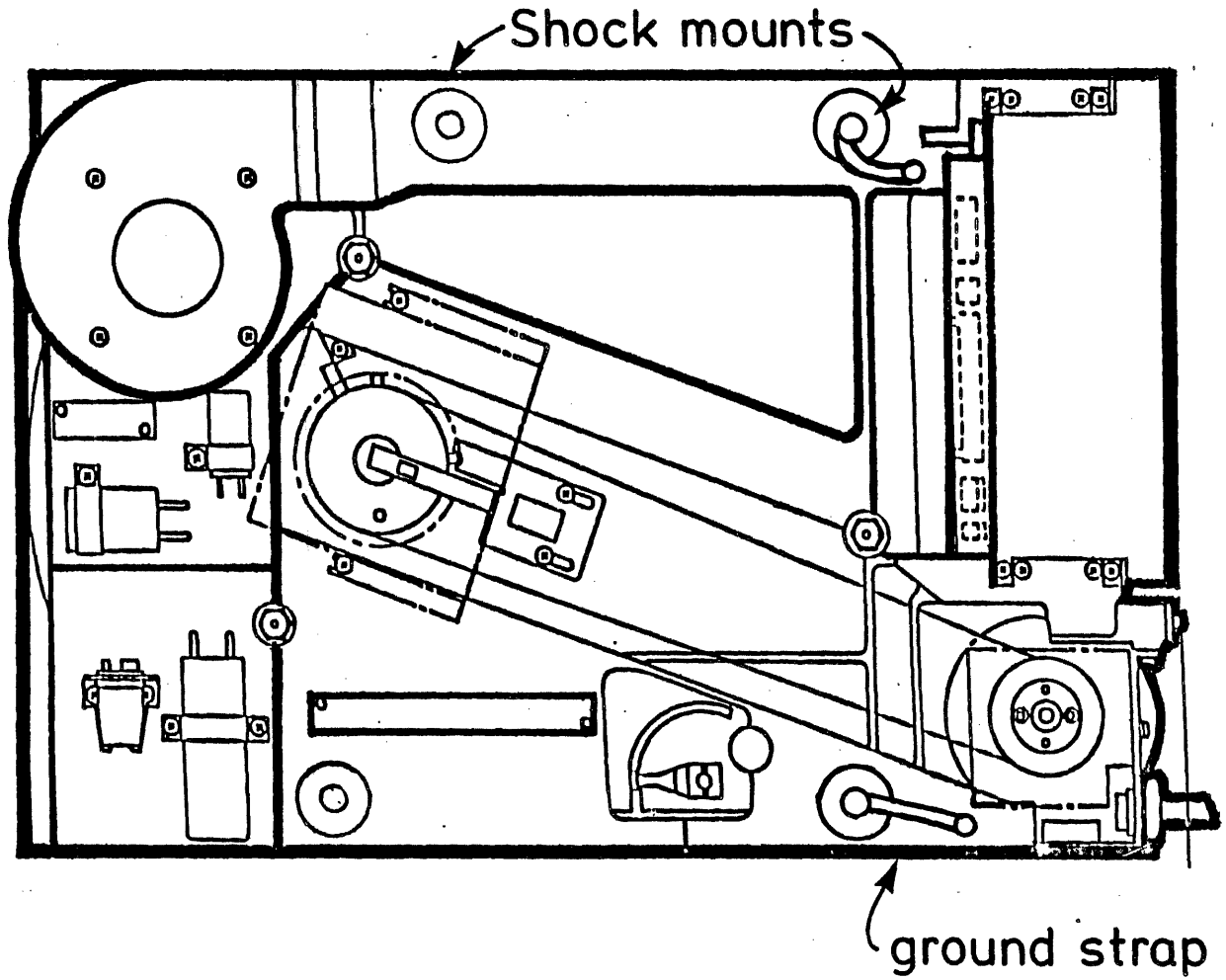


Fig 4A

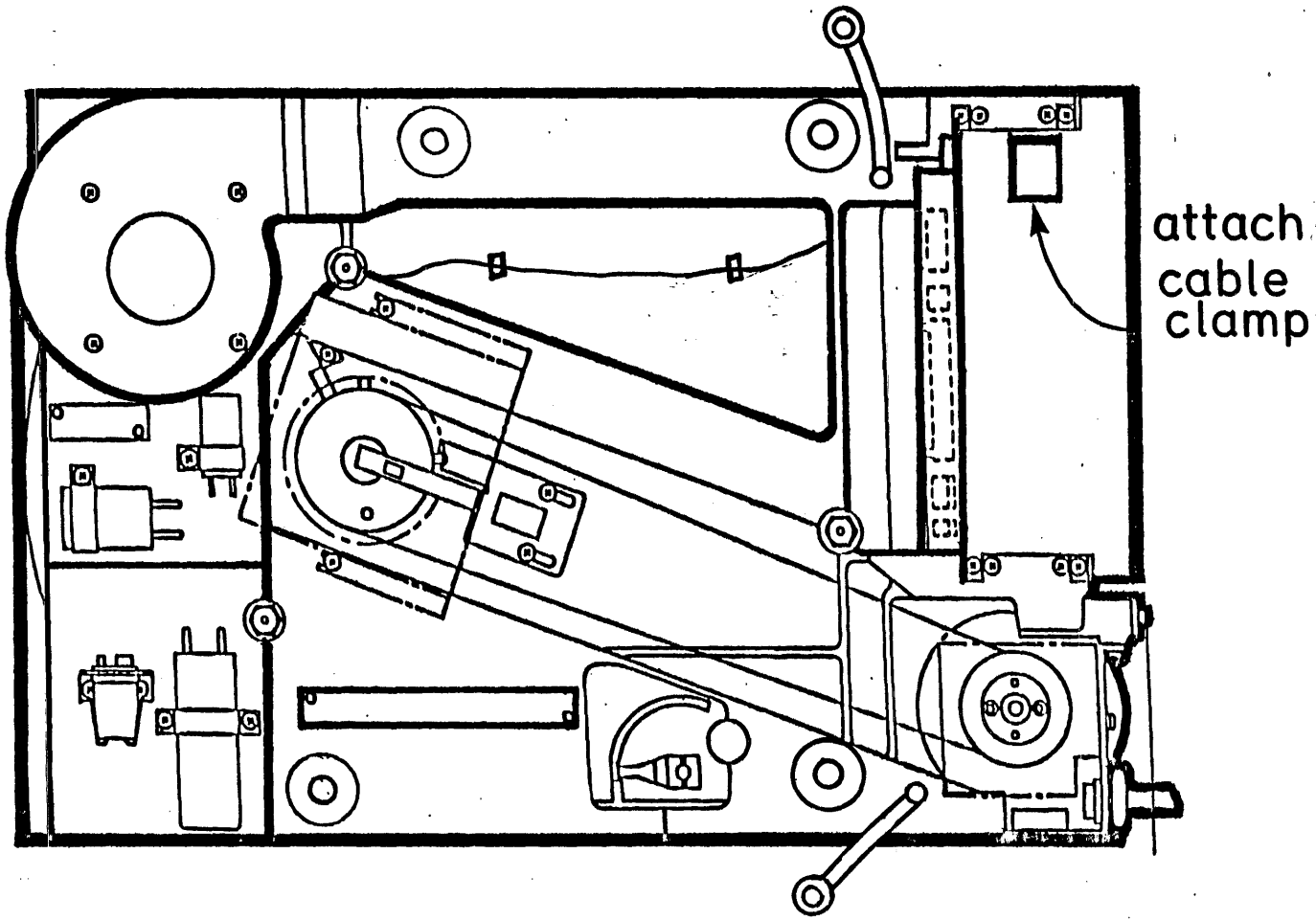


Fig 4B

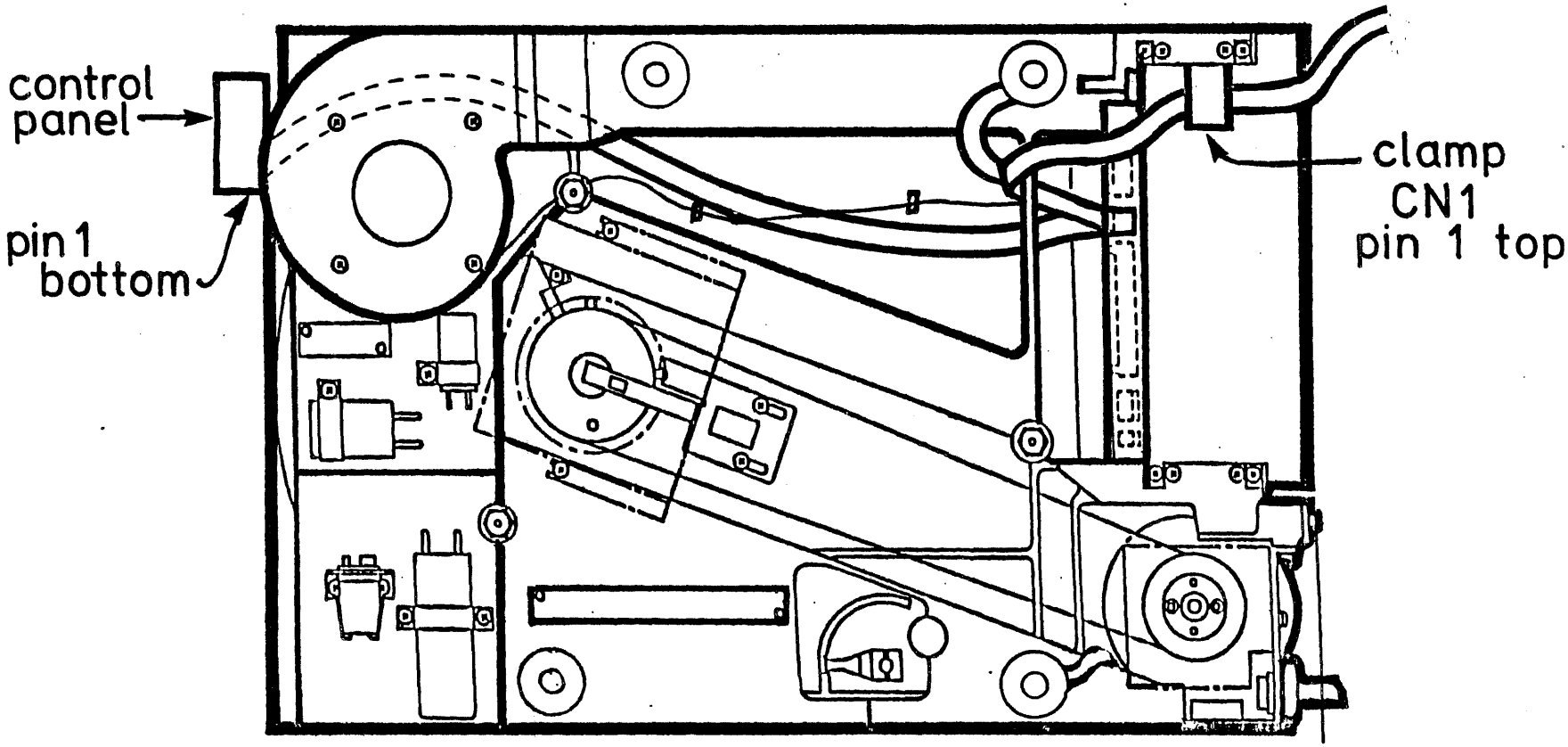
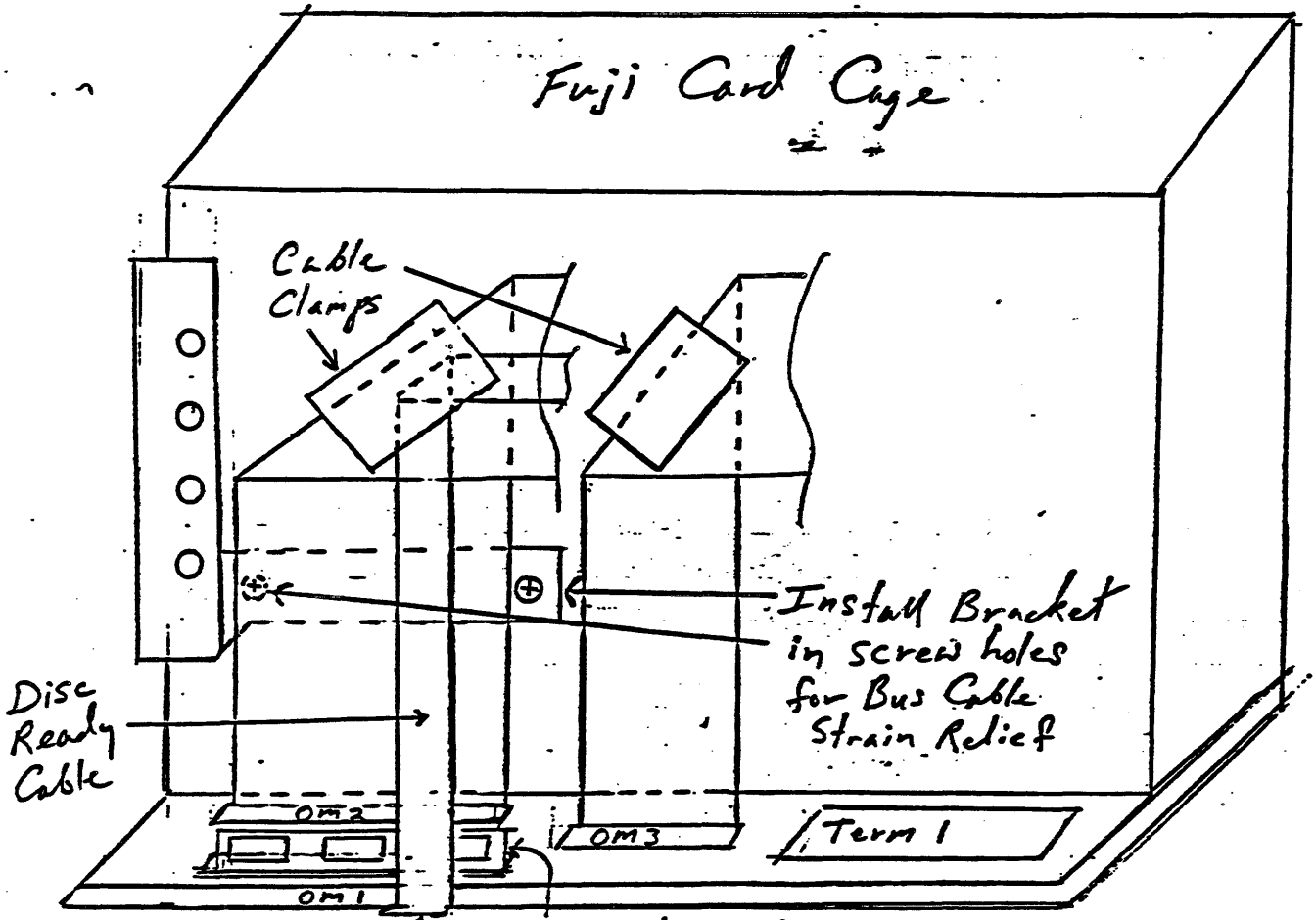


Fig 4-C

Installation of Disk I/O Cable Retractor



PRELIMINARY

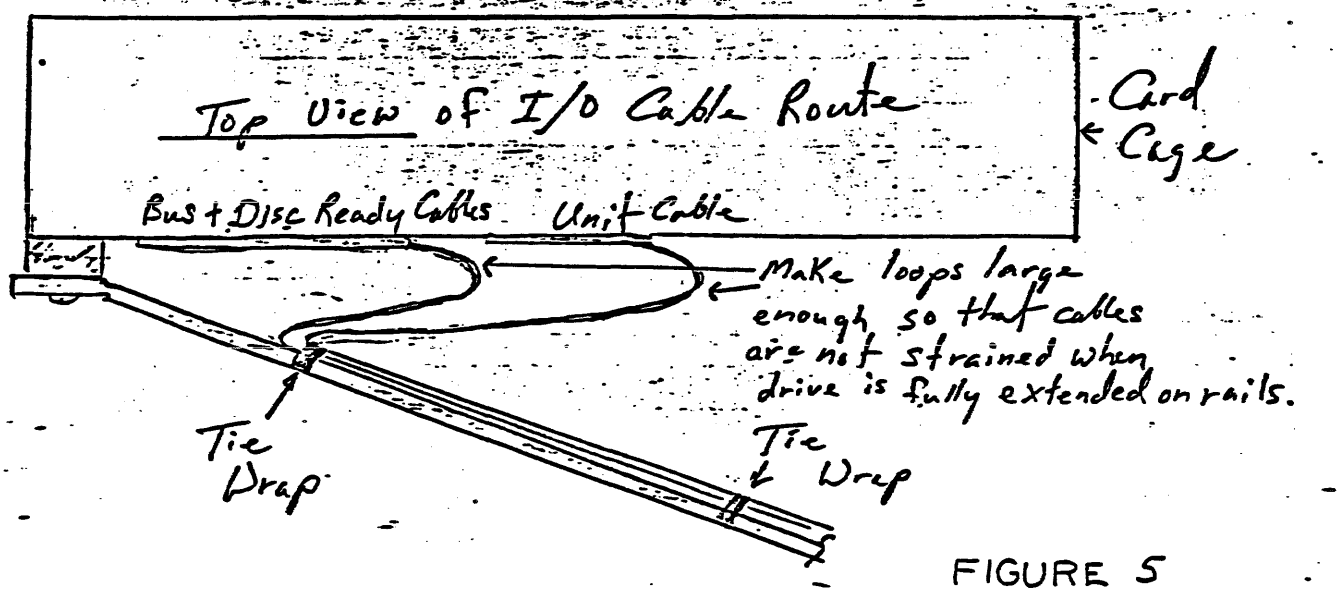


FIGURE 5

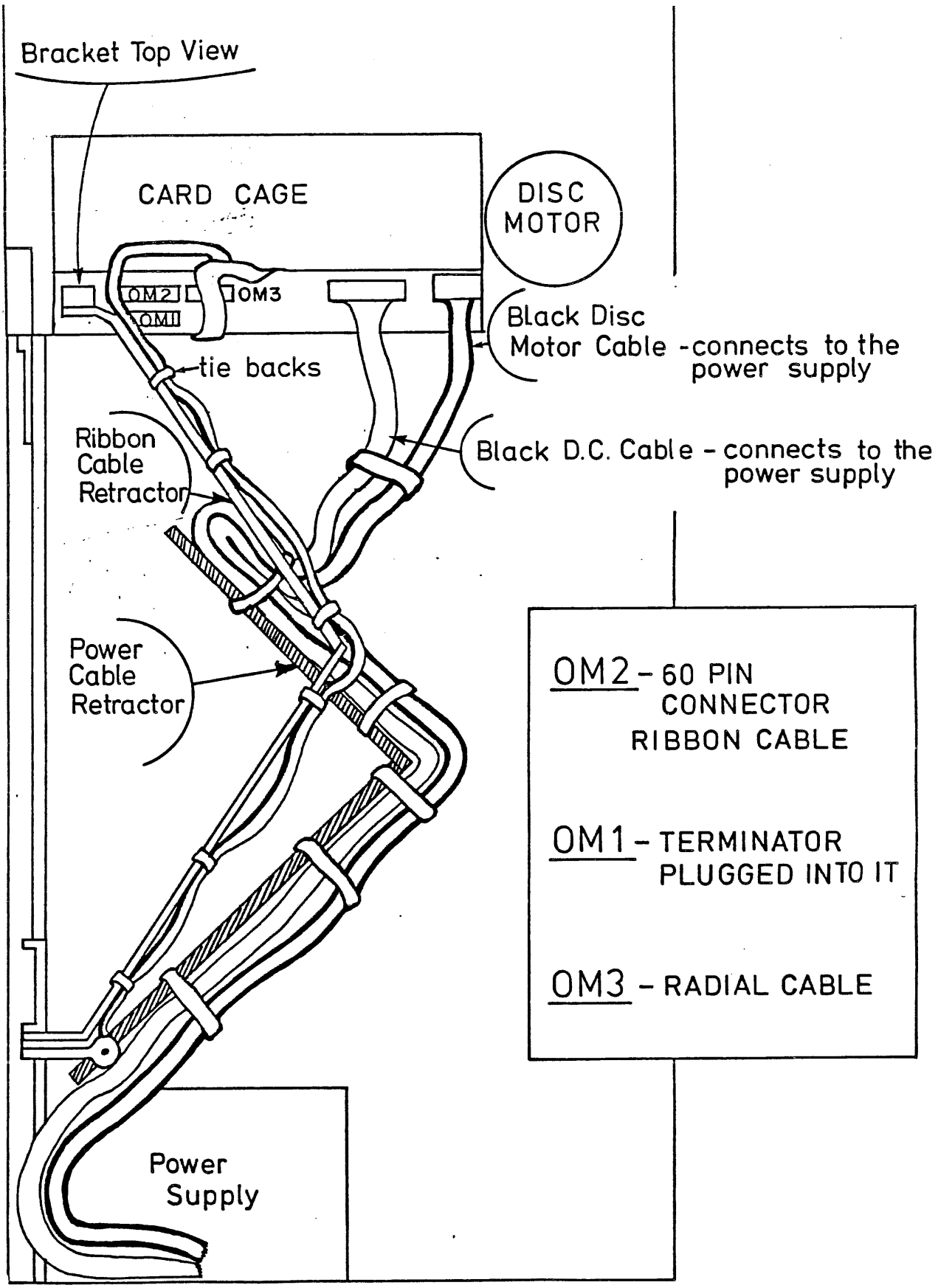
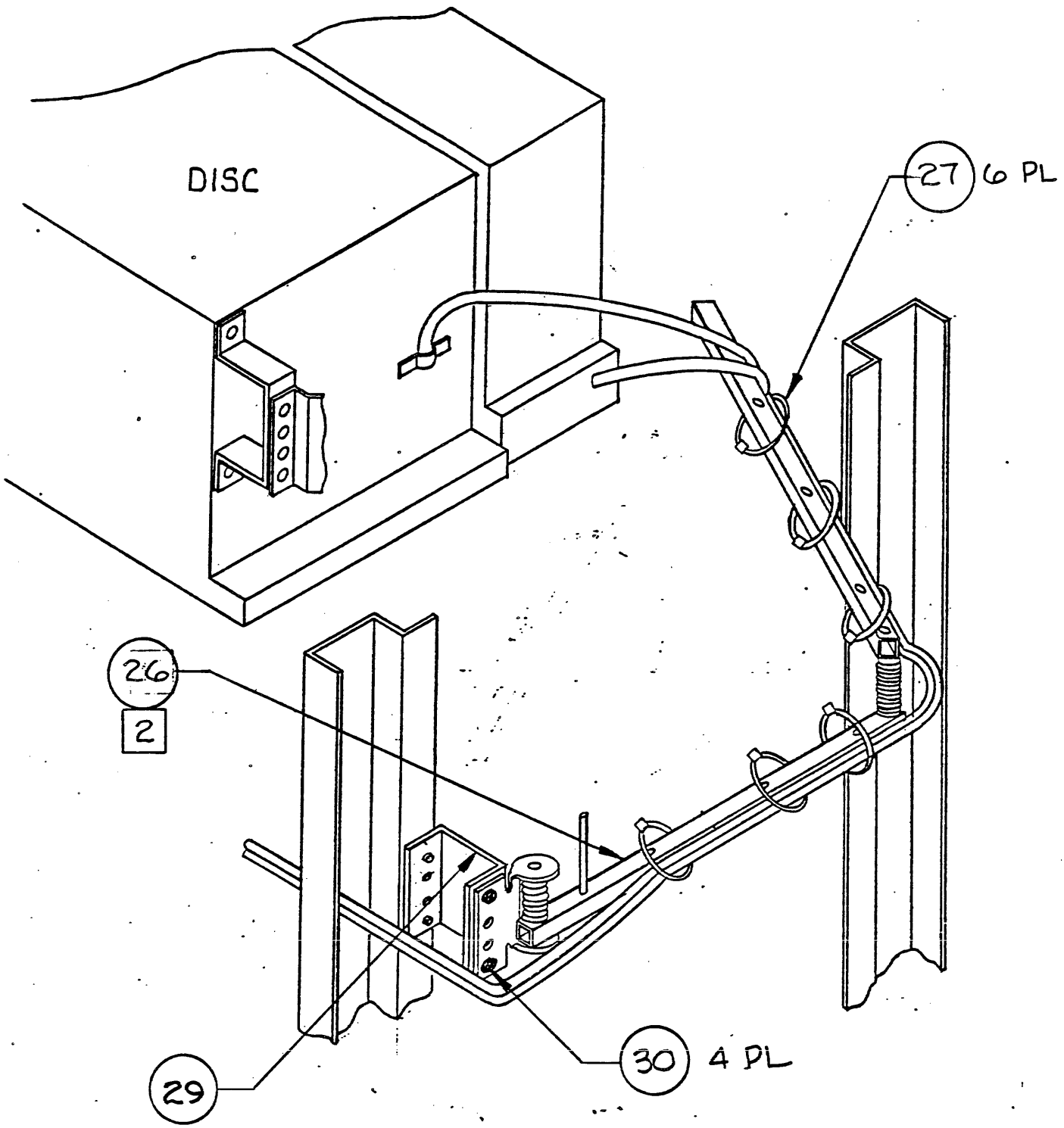

Bracket Top View
CARD CAGE
DISC MOTOR
OM2
OM3
OM1
Black Disc Motor Cable - connects to the power supply
tie backs
Ribbon Cable Retractor
Black D.C. Cable - connects to the power supply
Power Cable Retractor
OM2 - 60 PIN CONNECTOR RIBBON CABLE
OM1 - TERMINATOR PLUGGED INTO IT
OM3 - RADIAL CABLE
Power Supply

Fig. 6

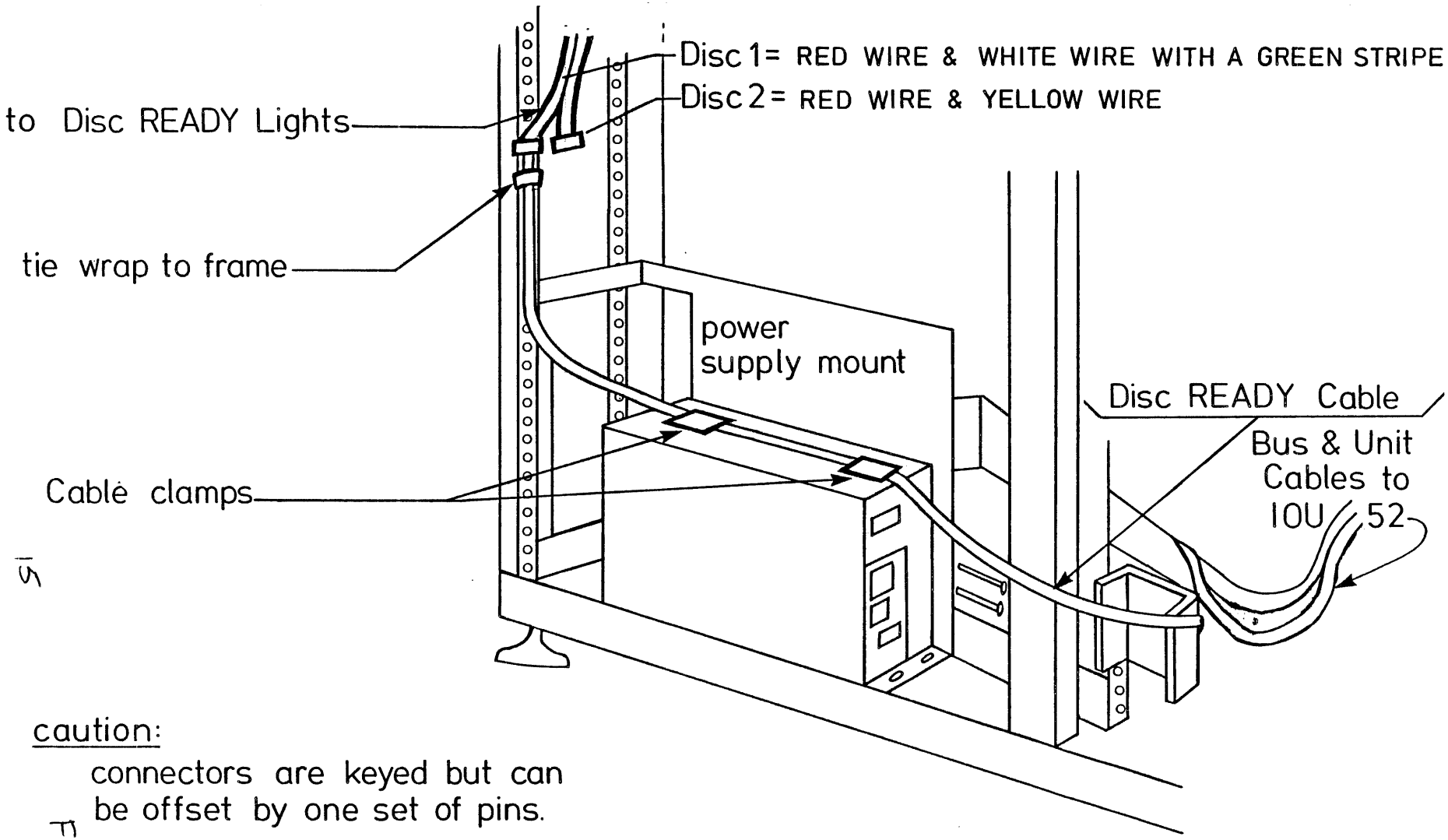
MDS QANTEL BUSINESS COMPUTERS
a Motorola Data Sciences Company

PRELIMINARY



	SHEET	DRAWING NO.	REV
	5 OF 5	A24196-001	A

FORM 403



caution:

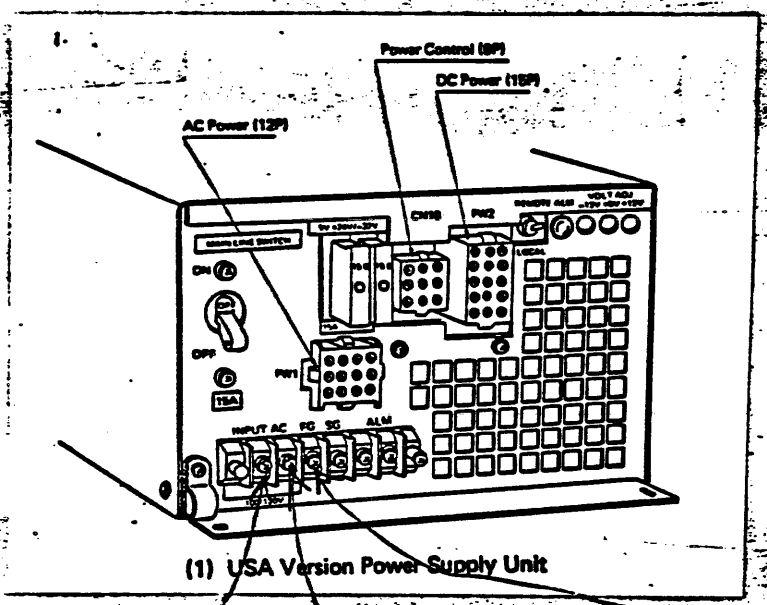
connectors are keyed but can be offset by one set of pins.

Fig. 7

A.C. Connections to Disk Power Supply.

PRELIMINARY

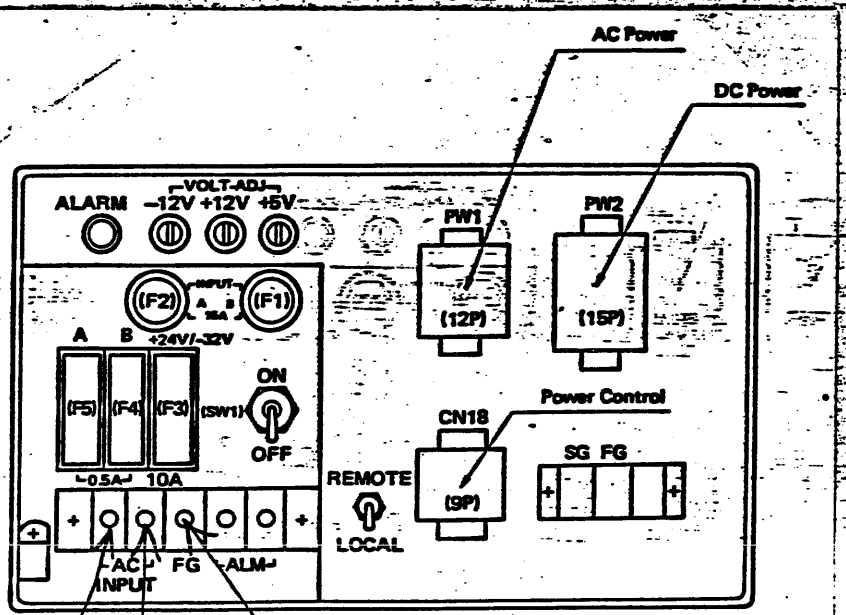
New Style



(1) USA Version Power Supply Unit

Brown — Light Blue — Green & Yellow

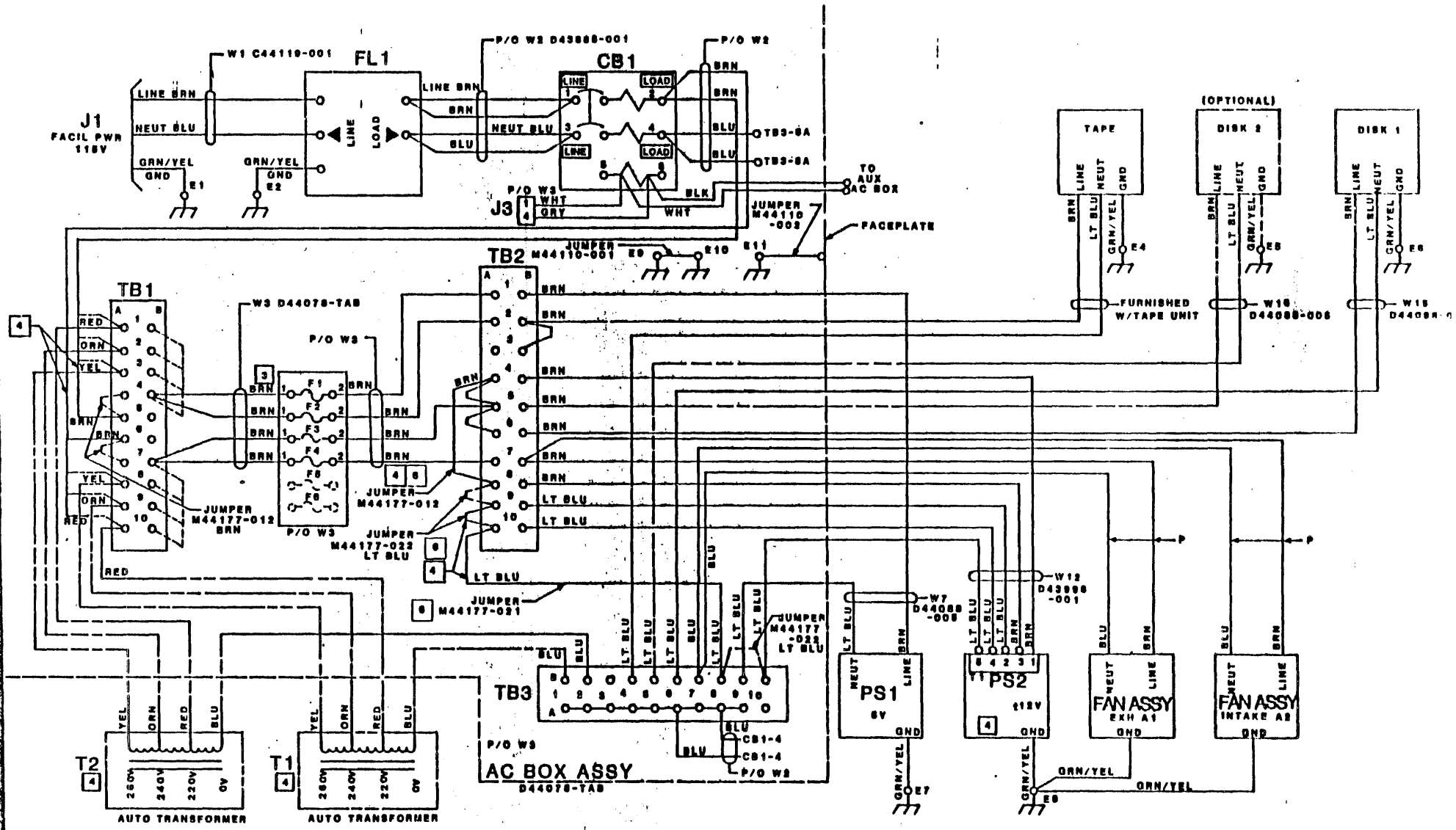
Old Style



Old Style

Brown — Light Blue — Green & Yellow

FIGURE 8



NOTES: UNLESS OTHERWISE SPECIFIED

1. PHANTOM LINES INDICATE FUTURE OPTIONAL VERSIONS
2. P/O DENOTES "PART OF"
3. SEE TABLE NO.1
4. 115V VERSION SHOWN REFER TO TABLE 2 FOR OTHER VOLTAGES
5. GROUND TERMINALS E3-E8 ARE LOCATED IN THE AC BOX
6. JUMPER CONNECTIONS FOR 100VAC, 115VAC AND 127VAC VERSION LOCATED AT TB2 AND TB3 SHALL NOT BE USED FOR 200VAC THRU 250VAC VERSION

TABLE NO. 2
JUMPER TERMINATION

	100VAC	115VAC	127VAC	200VAC	220VAC	240VAC	250VAC
	FROM CB1-2 TO TB1-1A FROM CB1-2 TO TB1-10A	FROM CB1-2 TO TB1-6A FROM CB1-2 TO TB1-6A	FROM CB1-2 TO TB1-6A FROM CB1-2 TO TB1-6A	FROM CB1-2 TO TB1-1A FROM CB1-2 TO TB1-10A	FROM CB1-2 TO TB1-6A FROM CB1-2 TO TB1-6A	FROM CB1-2 TO TB1-6A FROM CB1-2 TO TB1-6A	FROM CB1-2 TO TB1-6A FROM CB1-2 TO TB1-6A
T1	FROM TB1-7B TO TB1-8B FROM TB1-4B TO TB1-3B	FROM TB1-6A TO TB1-7A FROM TB1-4A TO TB1-6A	FROM TB1-7B TO TB1-8B FROM TB1-4B TO TB1-3B	FROM TB1-7B TO TB1-8B FROM TB1-4B TO TB1-3B	FROM TB1-6A TO TB1-7A FROM TB1-5A TO TB1-4A	FROM TB1-7B TO TB1-10B FROM TB1-4B TO TB1-1B	FROM TB1-7B TO TB1-10B FROM TB1-4B TO TB1-1B
PS2		FROM TB2-4A TO TB2-6A FROM TB2-9A TO TB2-10A FROM TB3-6B TO TB2-10A			FROM TB2-6A TO TB2-9A FROM TB3-6B TO TB3-10B		

TABLE NO.1

AC VOLTAGE	F1	F2	F3	F4	F5	F6
100,115,120,127	15A	---	15A	8A	---	---

(SLO BLO)