

POINT 4 Data Corporation

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TECHNICAL  
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TO: Installers of POINT 4 MARK 5/9 Lowboys

FROM: Tech Support

DATE: December 10, 1984

SUBJ: MARK 5/9 LOWBOY COMPUTER SYSTEM  
UNPACKING AND INSTALLATION, Rev 07

This technical memo describes the POINT 4 MARK 5/9 Lowboy Computer System and provides unpacking and installation procedures.

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**WARNING!**

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for Class A computing devices pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference. Only shielded cables with the shield terminated to the metal hood of the connector should be used.

## I. INTRODUCTION

A fully-assembled POINT 4 MARK 5 or 9 Computer System is shipped in a lowboy cabinet which is 22 inches wide, 31 inches high, and 30 inches deep. The cabinet has four casters which allow it to be moved with ease, four preinstalled leveller feet, and a stabilizer bar to prevent the cabinet from tipping over (see Figure 1).

The system components are completely accessible by virtue of removable panels at the front and sides. The rear panel is hinged and can also be removed.

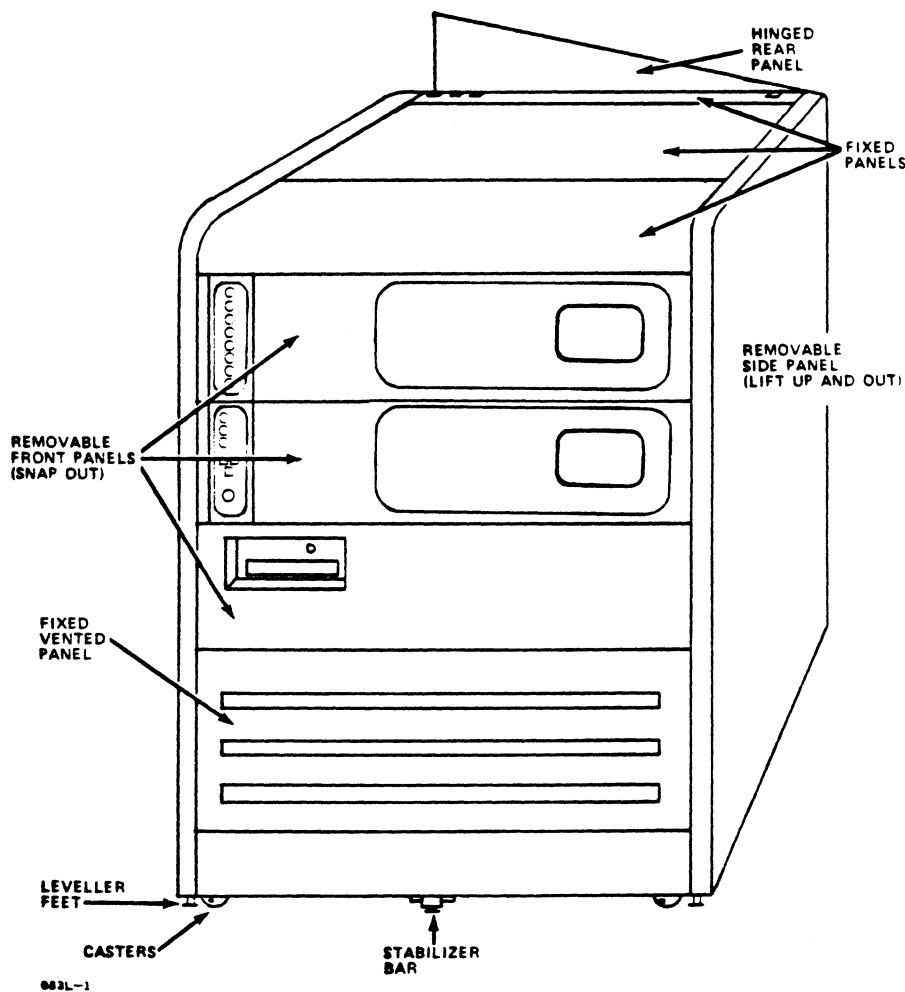


Figure 1. POINT 4 MARK 5/9 Lowboy Cabinet

## II. MARK 5/9 LOWBOY COMPUTER SYSTEM COMPONENTS

A full-configuration MARK 5 or 9 Lowboy Computer System includes the following (see also Figure 2):

1. CPU Power supply
2. Computer chassis with boards arranged in the following order:
  - a. CPU
  - b. LOTUS 730 Controller
  - c. POINT 4 310 Mux
  - d. POINT 4 301 Expansion Board
  - e. LOTUS Cache Memory (LCM)
3. Rack-mounted Peripheral Subsystem (RPS) which includes:
  - Fujitsu or Priam 8-inch Disk Drive
  - QIC-02 1/4-inch Streaming Tape Drive
  - Peripheral Power Supply Unit

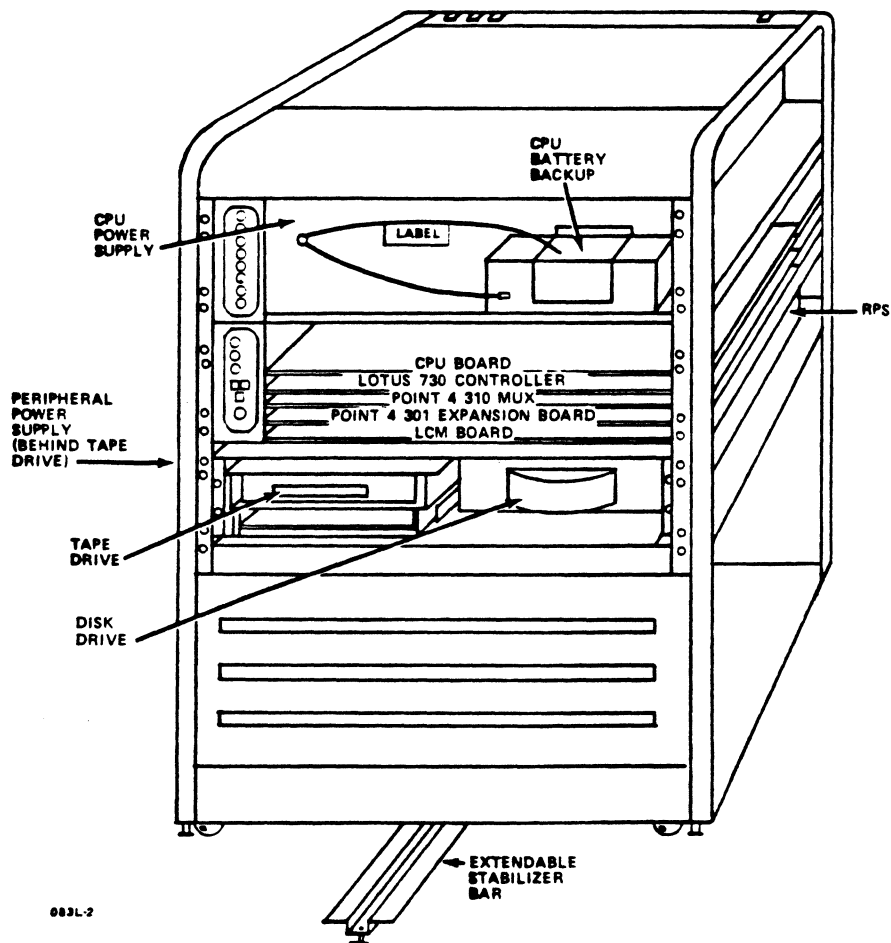


Figure 2. POINT 4 MARK 5/9 Components

### III. UNPACKING THE MARK 5/9 LOWBOY

The MARK 5 or 9 Lowboy is shipped on a wooden pallet and is firmly held in place by four 2x4 retainer boards (three fixed and one removable). The unit is protected by styrofoam angles and a plywood board that doubles as a ramp. The assembly is covered by a cardboard carton (or a wooden crate for delivery abroad) held in place by straps. An Allen key is taped to the rear panel.

The recommended procedure for unpacking the Lowboy is as follows:

1. Remove the straps.
2. Lift off the cardboard cover (or wooden crate if foreign delivery).
3. Unbolt the removable 2x4 retainer board (see Figure 3). One of the bolts will be used to secure the ramp (step 5).

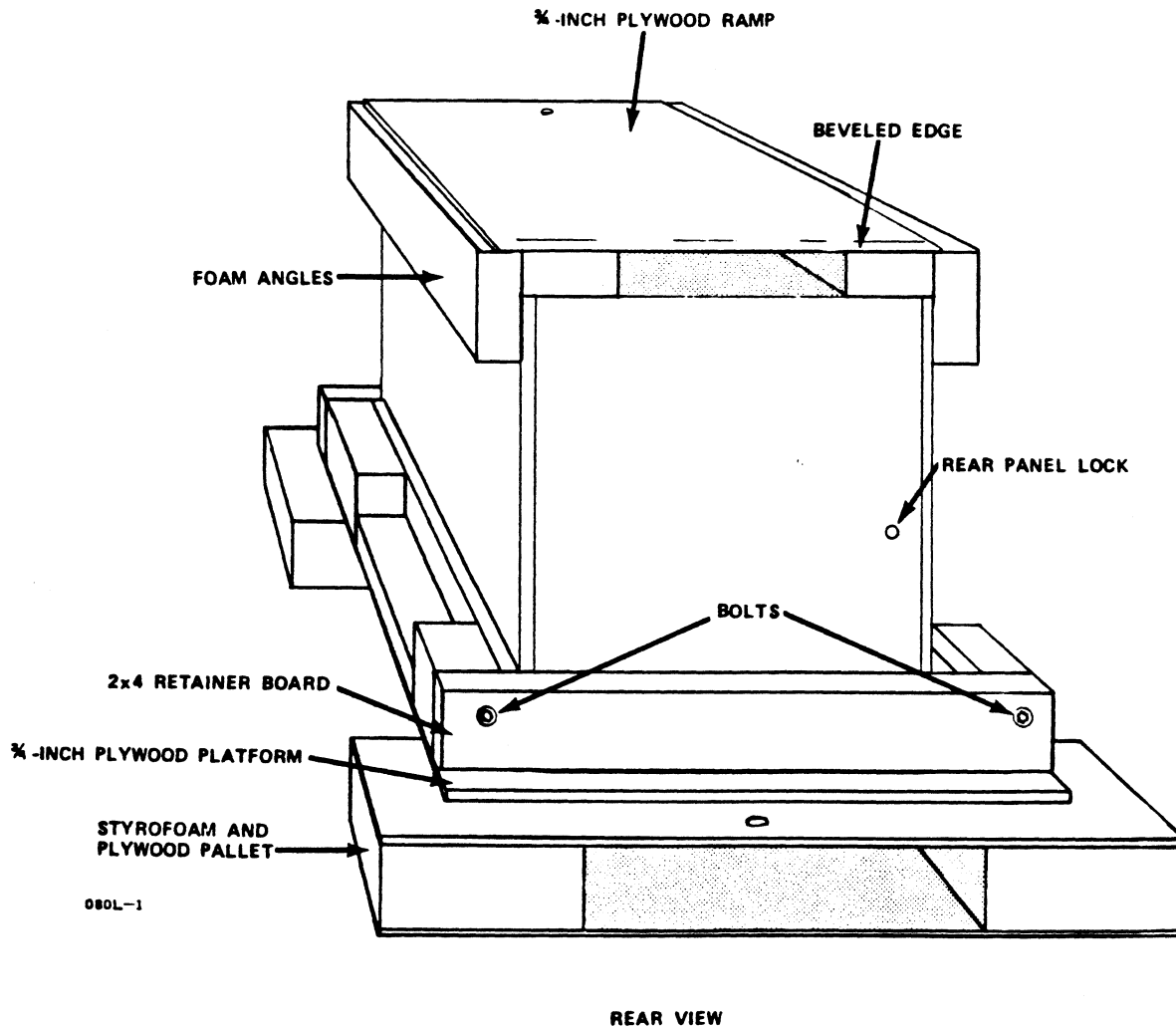


Figure 3. MARK 5/9 Lowboy Packaging

4. Remove the plywood ramp and styrofoam protectors from the top of the unit.
5. Place the ramp on the pallet so that the hole in the ramp lines up with the hole in the pallet. Insert one of the bolts taken from the retainer board in step 3 through both holes (see Figure 4).
6. Make sure that the leveller feet are clear of the pallet and can not impede the rollers. Roll the unit down the ramp.
7. Move the unit close to its permanent place which should allow access to the sides and rear of the unit.
8. Store the pallet, ramp, and other packing material in a safe place.

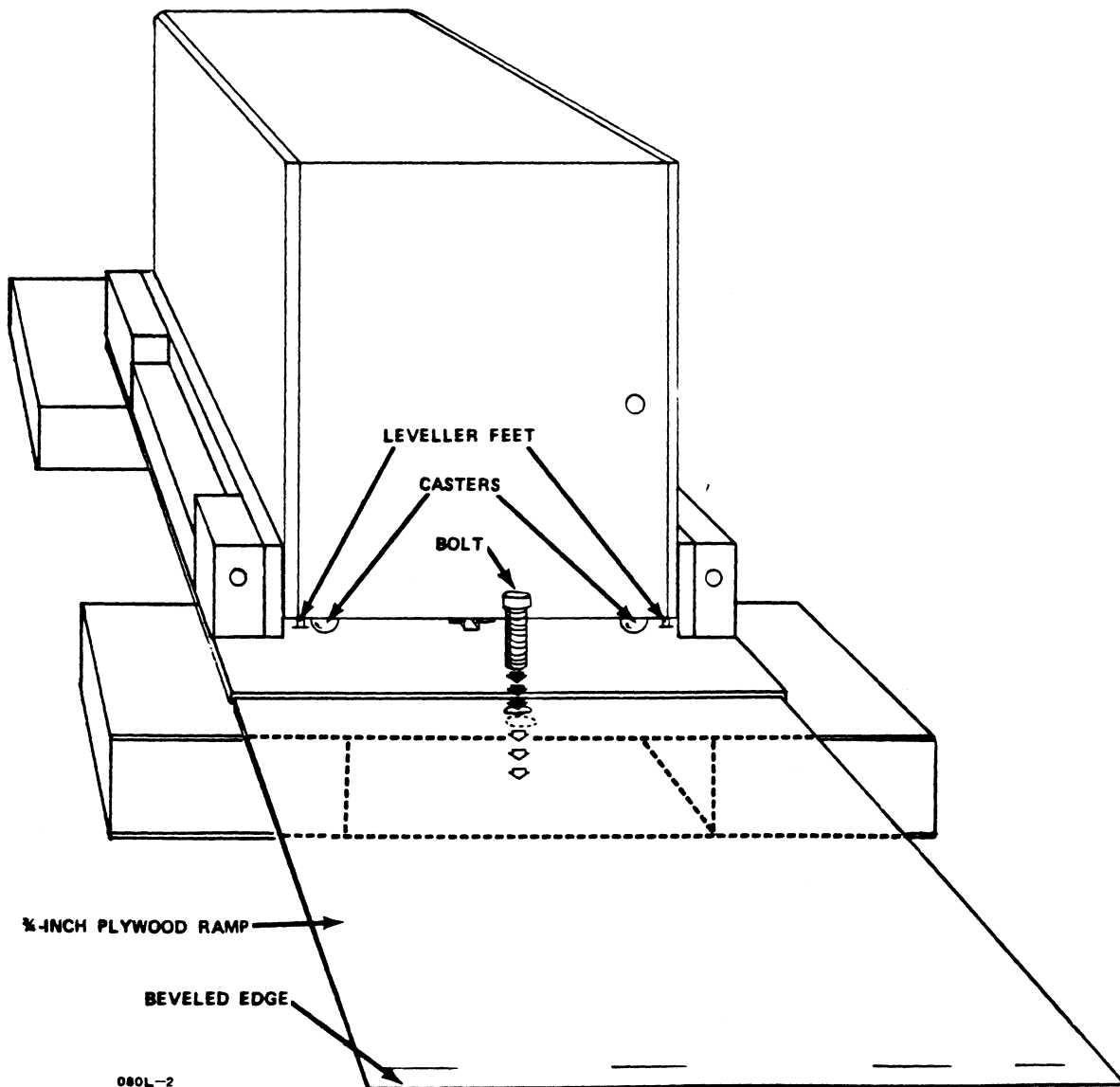


Figure 4. Ramp Installation

#### IV. SYSTEM INSTALLATION

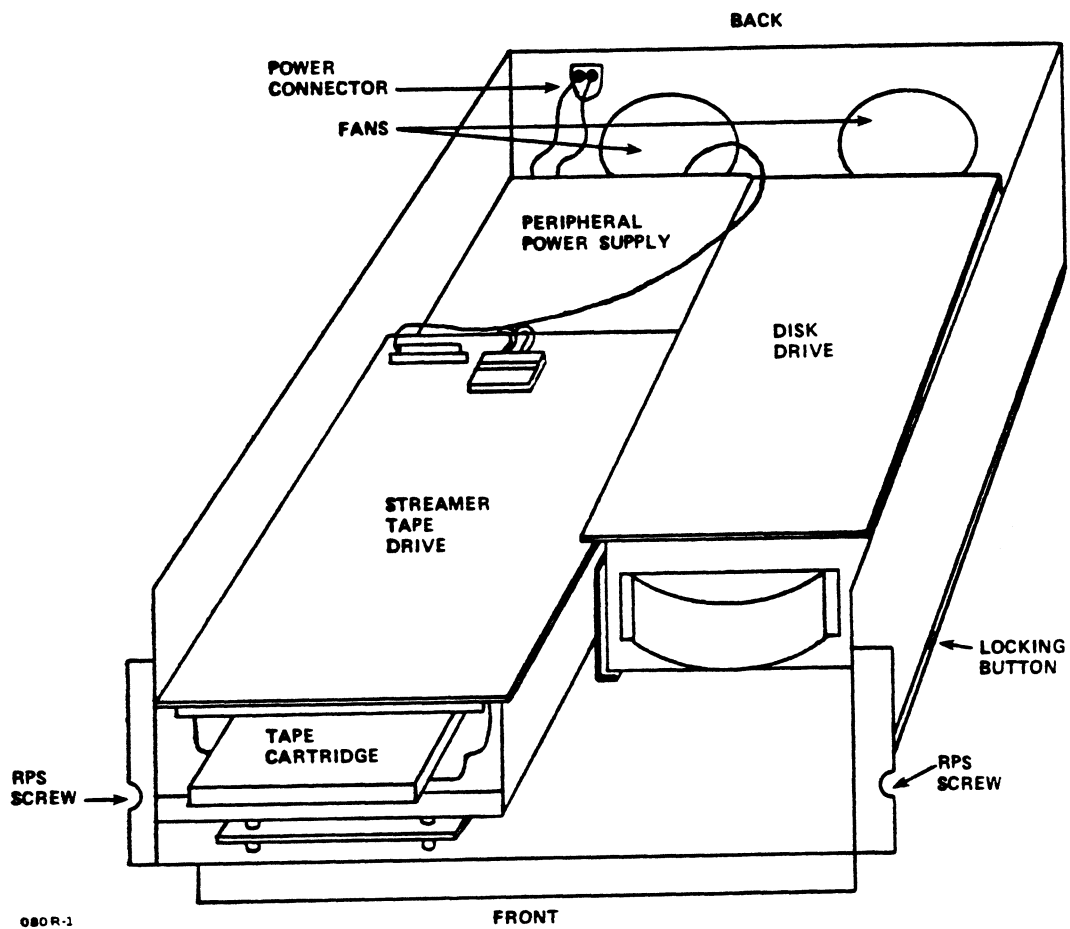
The POINT 4 MARK 5 or 9 Lowboy Computer System is shipped fully assembled and no additional cabling is required. The recommended installation procedure is as follows:

1. Pull out the stabilizer bar at the front of the unit to prevent it from tipping over.
2. Snap out the three removable front panels (i.e., the panels covering the CPU power unit, the computer chassis, and the RPS).
3. Check the battery in front of the CPU power supply for a red label with instructions on it. Attach red wire to the positive (+) terminal of the battery.
4. Check each board in the computer chassis as follows:
  - a. Slide the board out by pulling out on the metal tabs.
  - b. Remove the packing from around the board.
  - c. Check that the board components are firmly seated.
  - d. Using the metal tabs, slide the board back into place.
5. Make sure all cables are connected.
6. If the disk drive is equipped with an automatic head lock, skip to step 8.
7. If your disk drive does not have an automatic head lock, use the procedure appropriate for your drive:
  - a. Fujitsu without automatic head lock:
    - Remove the screws on each side of the Rack-mounted Peripheral Subsystem (see Figure 5).
    - Slide the assembly out until it is fully extended. The head lock hole is at the bottom of the casing (see Figure 6).

#### **CAUTION**

Stabilizer bar must be extended the full 10 inches to prevent tipping; use caution in sliding out the assembly so that the RPS cable is not disconnected.

- With a screwdriver turn the Fujitsu head lock to the off position (counterclockwise).
- Push in the locking buttons on the sides of the runners, slide the unit back, and replace the screws.



**Figure 5. Rack-Mounted Peripheral Subsystem (Front View)**



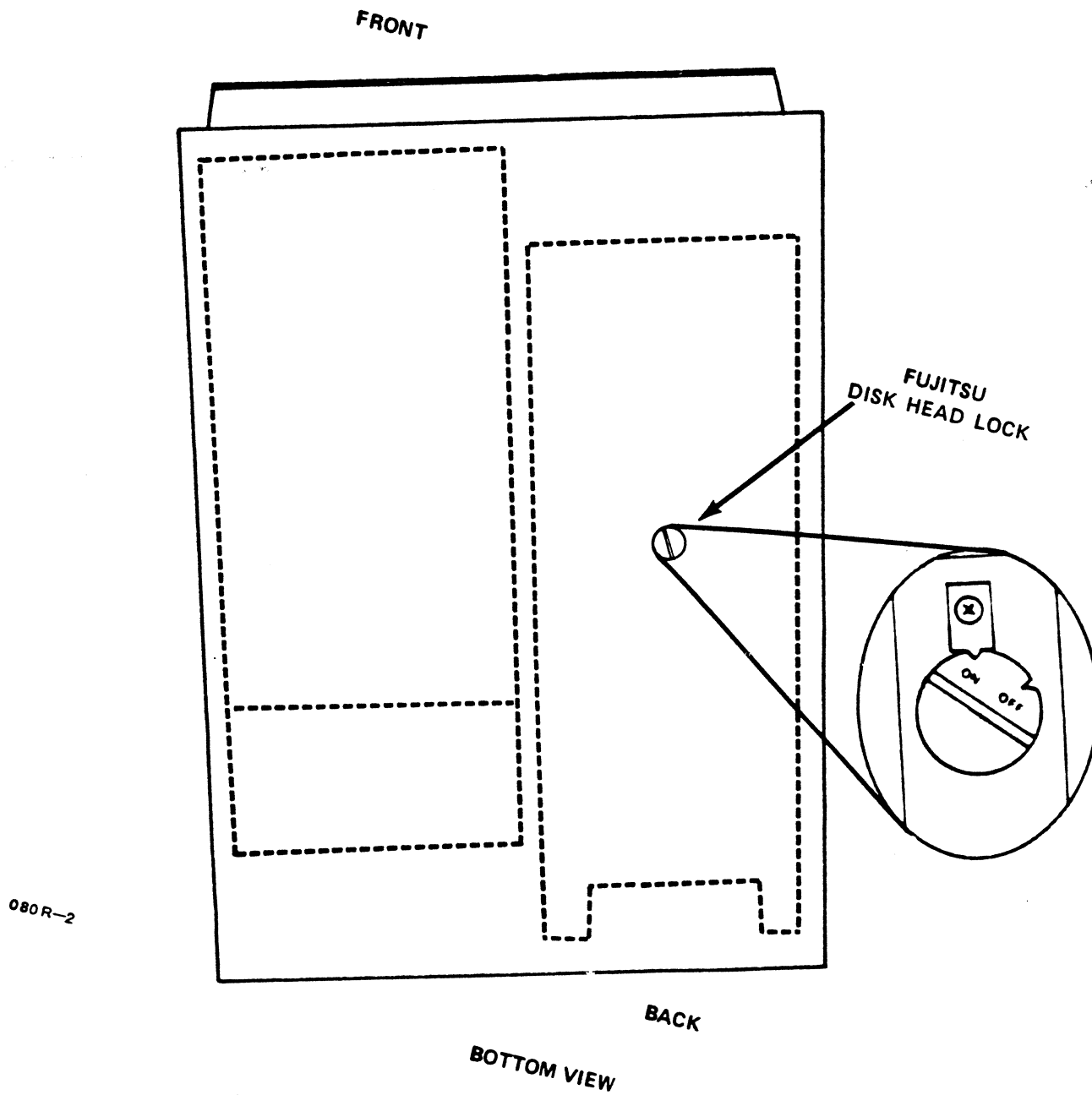
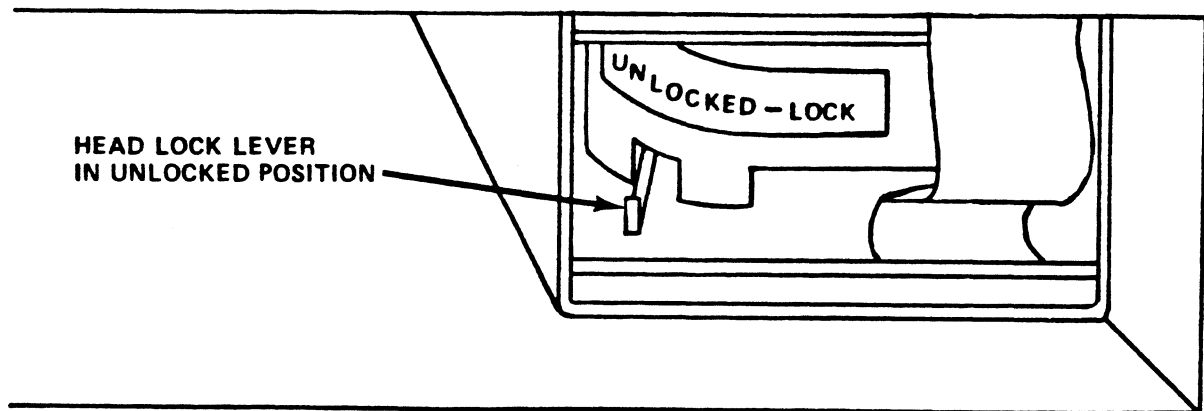


Figure 6. Unlocking Fujitsu Head Lock (Bottom View)

POINT 4 MARK 5/9 Lowboy Unpacking/Installation

b. Priam without automatic head lock:

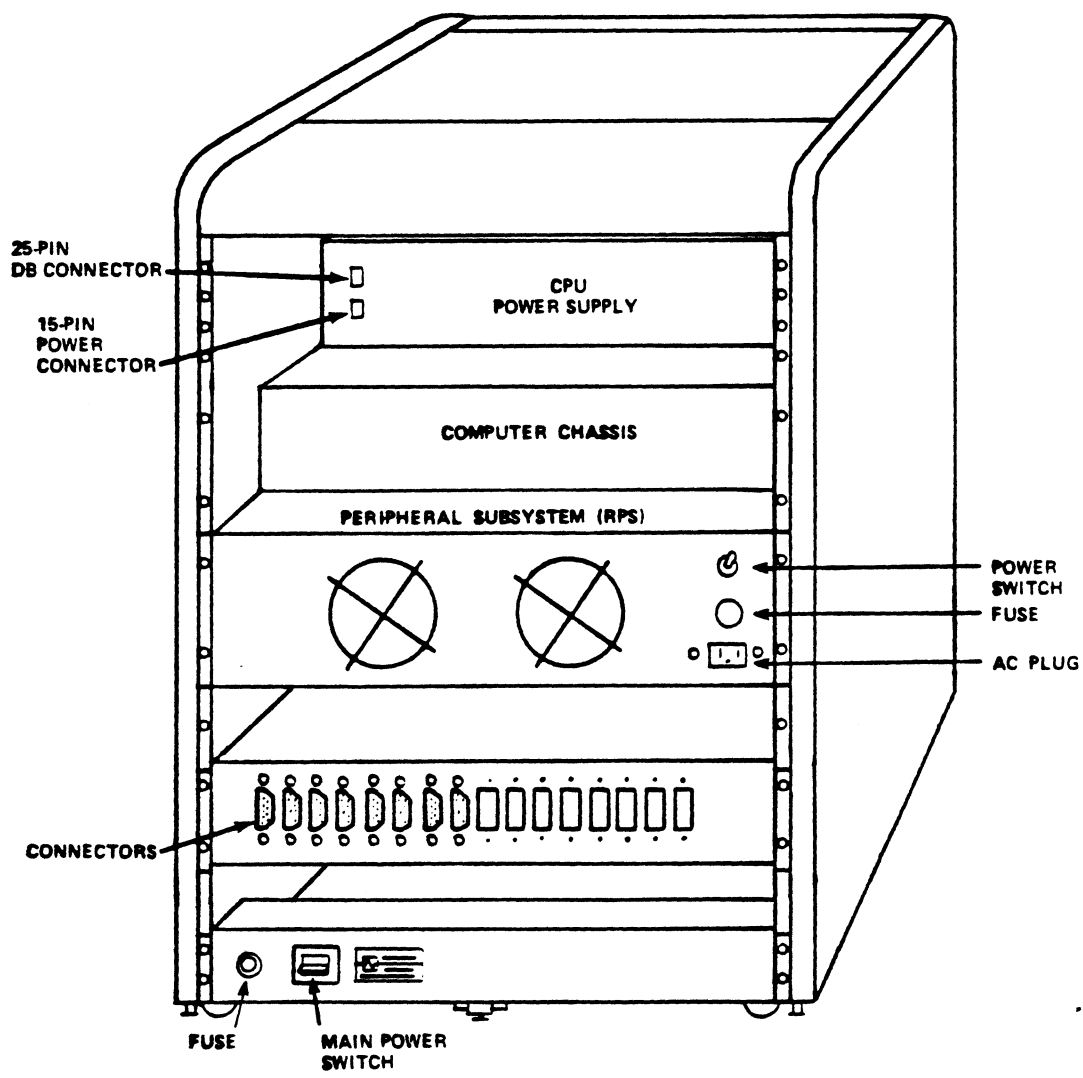
- Remove the cardboard protector from beneath the head lock lever (see Figure 7).
- Push the lever down and to the left to the position marked "unlocked".
- Replace the cardboard protector beneath the head lock lever.



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Figure 7. Priam Disk Drive Head Lock

8. Snap the front panels back into place.
9. Remove the left side panel (as seen from the front).
10. Disconnect the green ground wire.
11. Check the plug and fuse on the CPU power supply unit and make sure that the switch is turned to the ON (up) position.
12. Reconnect the ground wire and slide the panel back into place.
13. Detach the Allen key from the rear panel. Unlock the panel by inserting the key and turning it counterclockwise. The rear panel may be removed entirely by first detaching the green ground wire and then pulling down on the spring hinge. When replacing the rear panel, make sure that the ground wire is reconnected.
14. Check the connectors on the CPU power supply unit; make sure they are firmly seated.
15. Check the fuse on the rear of the RPS. Make sure the plugs are firmly seated and the power switch is turned to the ON position.
16. IRIS users - make sure the Pico-N is installed on the backplane.
17. Plug CRT and printer cables into the connector panel at the back of the unit (port zero is the leftmost connector).
18. Plug the unit into the main AC power (3-pronged, grounded wall outlet). General power is controlled by a lighted on/off button at the rear of the unit (see Figure 8). If it does not light up when the unit has been connected to the main power outlet, press the button; a red light should come on.
19. Close the rear panel (make sure the cables extend freely through the bottom of the door; the ground wire must be reconnected if the panel was removed entirely).
20. Push the stabilizer bar back so that it does not extend beyond the cabinet.
21. Move the unit to its permanent place.
22. Lower the leveler feet by turning them counterclockwise until the rollers are lifted off the floor.
23. Adjust the leveler feet so that the unit is level.



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Figure 8. Rear View Of Assembly