P1P Backlight Replacement

Introduction

These instructions explain how to replace backlight bulbs in the P1P PowerStation. They include steps for disassembling the unit, removing the old bulbs, installing new ones, and reassembling the unit.

These instructions are used with replacement kit BLR-6051.

Warning For safety reasons, the unit should be opened only by qualified service personnel.

Be sure to observe electrostatic discharge (ESD) precautions while working inside the unit.

Before You Start

You must remove the unit from its enclosure (if installed) to gain access to the display. Consult your *P1 Pentium User Guide* if you need help with the removal.

To complete these instructions, you will need the following:

- The backlight bulb replacement kit that you purchased, which includes the following:
  - Backlight bulb in protective casing
  - Electrostatic Discharge Kit
- Large flat-head screwdriver
- Small Phillips-head screwdriver

Electrostatic Discharge Precautions

Modern integrated electronic devices, especially CPUs and memory chips, are extremely sensitive to electrostatic discharges (ESD) and fields. Before you disassemble the PowerStation, be sure to use the Electrostatic Discharge Kit to protect you and the PowerStation from harm resulting from ESD.

Important Open the Electrostatic Discharge Kit and follow the directions for attaching the wrist strap and handling sensitive electronic components.

Disassembling the Unit

To disassemble the unit, complete the following steps:

1. Turn off the unit.

2. Disconnect the unit from the power source.

3. Disconnect all cables attached to the unit.

4. Remove the unit from its enclosure, and place it on a static dissipative mat in a location free from dirt and moisture and protected against static discharge.

5. Locate the notches on all sides of the unit. See *Figure 1* below.

Figure 1 Notch Locations

6. Insert a flat head screwdriver into one of the notches and twist.

7. Repeat step 6 on as many notches as necessary until the protective casing is loosened from the unit.

8. Remove the casing and set aside.

9. Remove the eight screws securing the touchscreen to the backshell.

10. With the touchscreen cable still connected to the CPU board, lay the touchscreen aside as shown in *Figure 2* below.
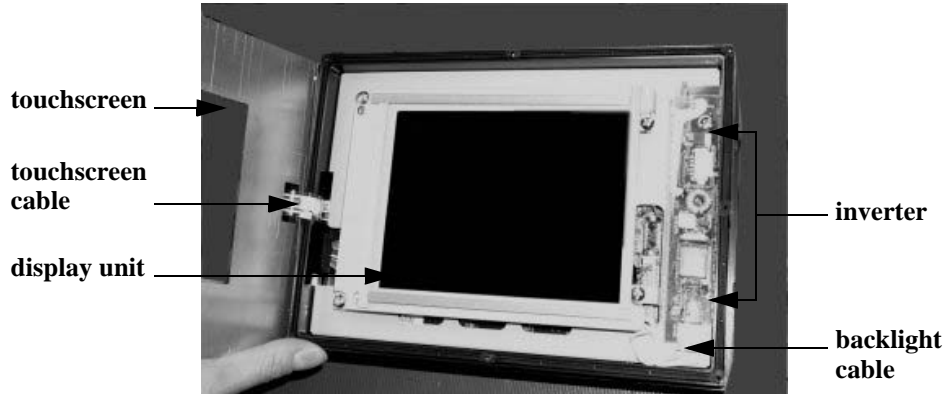

Figure 2 Touchscreen Removed

Important   The rubber gasket that fits along the rim of the unit seals out moisture. Push it back into place if it comes out when you remove the touchscreen. See *Figure 3* below.
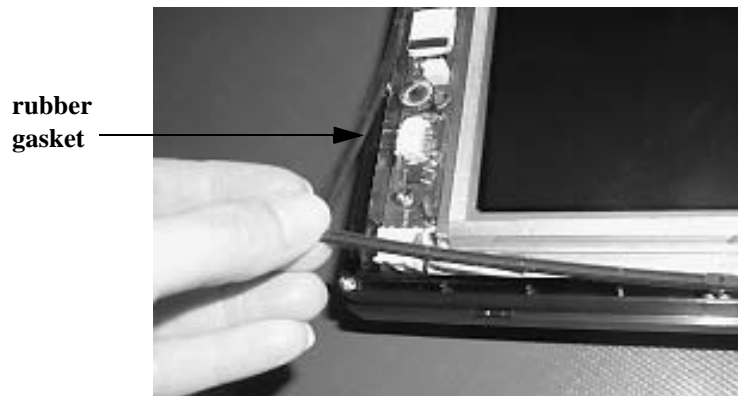

Figure 3 Rubber Gasket

11. Disconnect the backlight cable from the inverter. See *Figure 2* for the location of the backlight cable.

12. Unscrew the four screws that hold the display unit in place.

Removing the Backlight Bulb

To remove the exisiting backlight bulb, complete the following steps:

1. Carefully lay the display unit aside, as shown in *Figure 4*.

2. Remove the screw that holds the backlight bulb casing in place.

   The backlight bulb is encased in the white plastic strip at the bottom of the display unit, as shown in *Figure 4*.
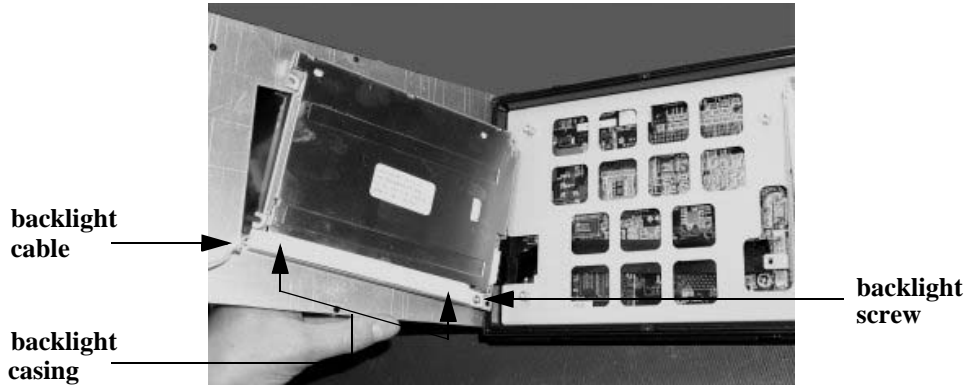

backlight cable →

backlight casing →

← **backlight screw**

Figure 4 Backlight Casing Location

3. Gently lift the backlight bulb casing out of its socket, beginning with the side opposite the backlight cable.

Installing the Backlight Bulb

To install the new backlight bulb, complete the following steps:

Important Ensure that all of the backlight and display components are free of dust or dirt before you assemble them.

1. Insert the new backlight bulb into the socket where the old bulb was, beginning with the side nearest the backlight cable.

2. Insert the backlight cable into the inverter.

Reassembling the Unit

To reassemble the unit, complete the following steps:

1. Replace the display into the PowerStation shell and screw into place.

2. Gently tuck the pink and white wires that comprise the backlight cable into the shell.

3. Ensure that the rubber gasket is still securely placed in the rim of the unit.

4. Replace the touchscreen and screw into place.

5. Tighten the screws until the metal plate is flush with the plastic backshell. This compresses the rubber gasket and seals the unit.

6. Align the Power LED cutout on the protective casing with the power LED on the touch-screen.

7. Snap the protective casing onto the unit.

This completes the assembly of the unit. You can now install your P1P PowerStation in its protective enclosure and connect the power.

When you first operate the unit, you may need to calibrate the touchscreen. If the position of the cursor does not match the location where the user touches the screen, see *Calibrating the Touchscreen* in your *P1 Pentium User Guide.*