# turbo PrintServer 20 and PrintServer 32 Printer

# Controller Firmware Version 3.6 Upgrade

Order Number: EK-LPS2X-IN. A01

#### First Printing, June 1994

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This document was prepared using VAX DOCUMENT Version 2.1.

# Installing the Firmware

### Software Requirements

Version 3.6 of the controller firmware ROM chips can be installed in a turbo PrintServer 20 printer or a PrintServer 32 printer. This version is required when:

- Booting from NetWare
- If the current firmware version is older than Version 3.1 and booting is from one of the following:

SCO
AIX
Sequent
HP-UX
Pyramid
Solaris
UNISYS

#### **Kit Contents**

The upgrade kit (order number 4A-LPS2X-FW) contains:

- ROM chips (2)
- Antistatic wrist strap
- This document

## Tool Requirements

The procedure for installing the Version 3.6 controller firmware requires the following tools:

- Flat surface for working on the controller board
- Phillips head screwdriver for loosening and tightening captive screws
- Flat blade screwdriver for extracting ROM chips
- Antistatic wrist strap for preventing damage to electronic components

Your upgrade kit includes an antistatic wrist strap.

#### Caution

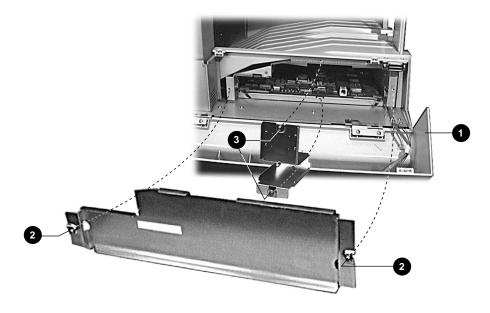
Take these precautions while performing the installation procedure:

- Static electricity can damage electronic components on the controller board. Use an antistatic wrist strap to ground yourself to a metal object.
- Work on a flat surface to keep from bending the controller board.
- Be careful not to gouge any components on the controller board with the screwdriver.
- Be careful when handling the ROM chips. The pins bend easily and damage is not covered by warranty.

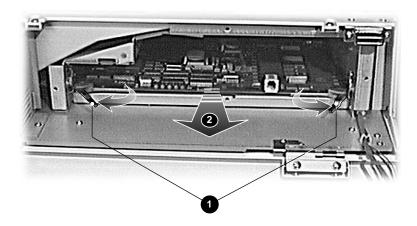
# Installation Procedure

To install the ROM chips:

- 1. Disconnect the power cord from the wall outlet and then from the rear panel.
- 2. Open the operator panel cover (1).
- 3. Loosen the two captive screws from the card cage cover and remove the cover (2).
- 4. Loosen the two captive screws securing the grounding bracket and remove the bracket (3).



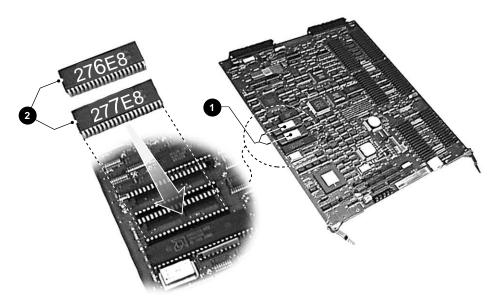
5. Pull open the release handles on each side of the controller board (1) and remove the board (2).



- 6. Extract the existing ROM chips (1) by sliding the flat blade screwdriver underneath each chip and gently loosening the pins from their sockets.
- 7. Carefully align the pins on each new chip with the sockets on the board, noting the orientation of the notch (2).

**Note:** You may find it easier to align the pins with the sockets if you bend in the pins *slightly*. The pins bend easily, so gently rock each chip on its side, on your flat work surface, to adjust the pins for alignment.

Press the chips firmly and evenly to seat them in their sockets.



- 8. Slide the controller board back into the unit.
- 9. Replace the grounding bracket and tighten the captive screws.
- 10. Replace the card cage cover and tighten the captive screws.
- 11. Reconnect the power cord and the Ethernet cable.

### Verification Procedure

To verify correct installation of the chips, power on the printer. The power-up diagnostics run and the following display appears on the operator panel:

If the operator panel is blank, either the board is not fully seated or the chips are not installed correctly.