Upgrade Instructions

4820 Printer Terminal Holder

Intermec

A **UNOVA** Company

Instructions

This terminal holder connects the INTERMEC® 600 Series and 700 Series Computers to the 4820 Printer. Perform these instructions, *in the order given*, to ensure reliable operation of this equipment.

1. **Test the printer and old terminal holder.**
2. **Remove the old terminal holder.**
3. **Connect the new terminal holder.**
4. **Orient and test the new terminal holder.**

Terminal Holder Installation Kit

- Terminal Holder Assembly   Various
- Four screws, 8-32 x 1.25" *(flathead)*   P/N: 801-115-000
- I/O extension cable   P/N: 226-329-001
- 13-conductor shielded flex cable   P/N: 321-560-001 * *See note*
- Ferrite bead   P/N: 309-369-001 * *See note*
- Double-sided tape for ferrite bead (1.25")   P/N: 906-011-002 * *See note*
- Double-sided tape for printer frame (3–4")   P/N: 906-029-001
- 13x16 plastic bag   P/N: 901-250-004
- 3x4 plastic bag   P/N: 901-250-003
- Terminal holder upgrade instructions   P/N: 962-018-012

▶ **NOTE:**   *These items are required for regulatory compliance to prevent EMI interference.*

Tools Required

- #1 Phillips screwdriver with a 9.5" (24 cm) shaft
- Needle-nosed pliers
- Wire cutter
- Loctite® 425 *(orderable as a separate line item — P/N: 901-386-002)*

Customer Support Center

Should you need assistance, the Intermec Customer Support Center (technical support) telephone number is 800-755-5505 (U.S.A. or Canada) or 425-356-1799. The facsimile number is 425-356-1688. Email is *support@intermec.com*.

If you email or fax a problem or question include the following information in your message: your name, your company name and address, phone number and email to respond to, and problem description or question (the more specific, the better). If the equipment was purchased through a Value-Added Reseller please include that information.
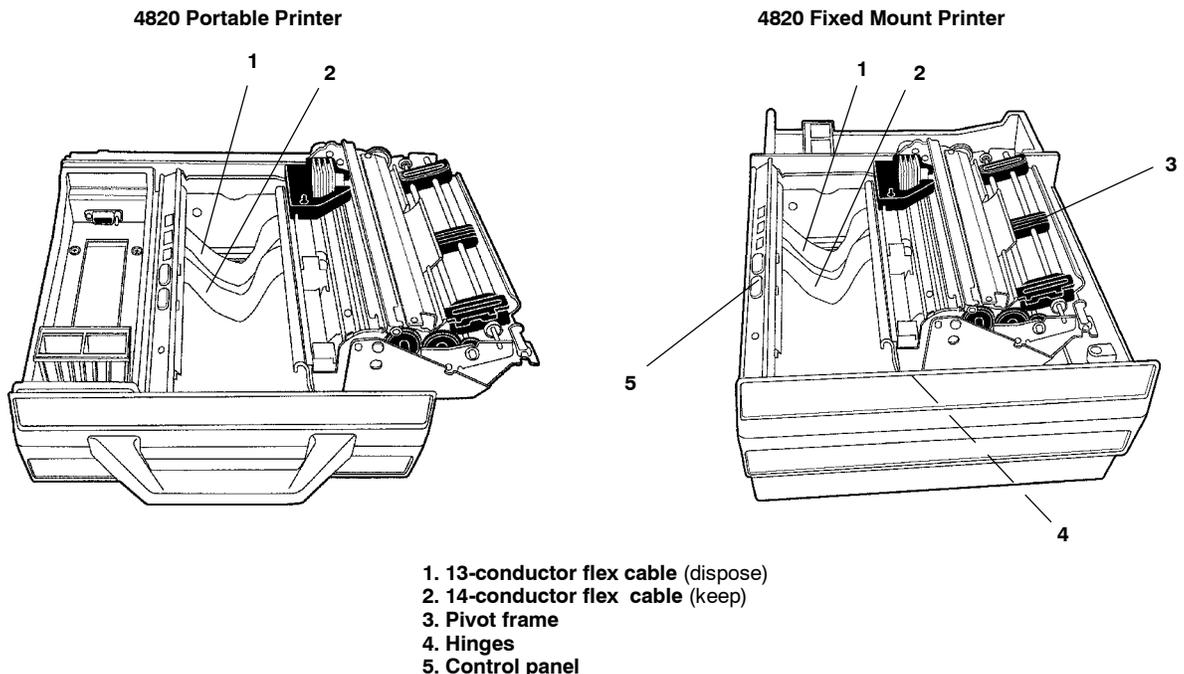
Test Printer and Old Terminal Holder

Before you dismantle the 4820 Printer, insert an Intermec 62XX Computer in the old terminal holder, then perform a print test to ensure that both the printer and the terminal holder are in working order. Troubleshoot any problems before continuing with this upgrade. Contact the Intermec Customer Support Center if you have any questions.

Remove the Pivot Frame

▶**NOTE:** *Disable* power to the 4820 Printer before dismantling the printer.

1. Remove the lid from the printer, unlatch the pivot frame, and remove any paper from the paper tray.
2. Detach the two flex cables from the back of the control panel, then pull the pivot frame up and out of its hinges.
3. Detach the 13-conductor flex cable from the pivot frame and discard it. Put the pivot frame and remaining 14-conductor flex cable aside for later.
   ▶ If you are upgrading a 4820 Fixed-Mount Printer, go to page 4.
   ▶ If you are upgrading a 4820 Portable Printer, go to page 9.

4820 Portable Printer   **4820 Fixed Mount Printer**

1. **13-conductor flex cable** (dispose)
2. **14-conductor flex cable** (keep)
3. **Pivot frame**
4. **Hinges**
5. **Control panel**

Figure 1
Removing Pivot Frame

Upgrade the Fixed-Mount Printer

1. Use the Phillips screwdriver to remove the blank cover plate. Save the cover plate, its four screws, and their white spacers for future use.
2. Remove the old terminal holder, pull the slide retainer back to reveal the two concealed screws. Discard all four screws.

1. Slide retainer
2. Terminal holder
3. Blank cover plate
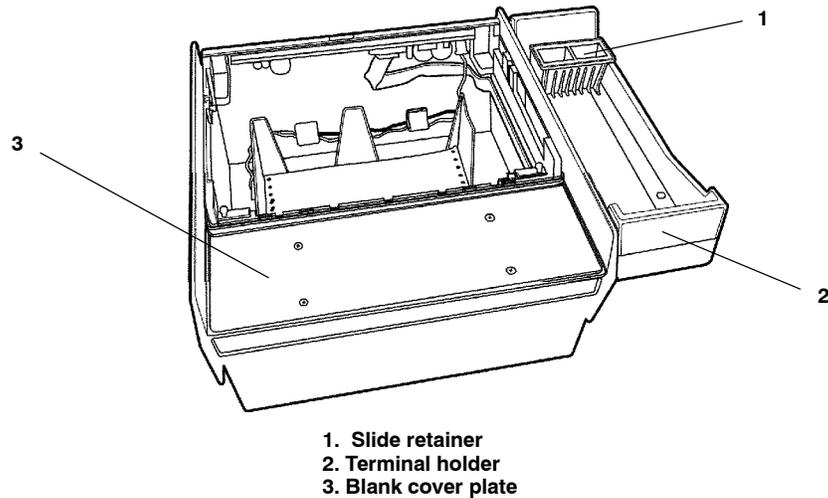
Figure 2
Detaching Cover Plate and Terminal Holder

Install I/O Extension Cable

1. Detach the old terminal holder ground cable from the printer ground cable.
2. Detach the old terminal holder ribbon cable from the printer control panel. Dislodge the ribbon cable from the printer frame, and pull the ribbon cable out through the slot. Replace the 3–4" double-sided tape on the printer frame, if needed.
3. Align the I/O extension cable along the same path as the old ribbon cable. Insert the I/O extension cable into the control panel. Press the I/O extension cable onto the tape inside the printer frame.
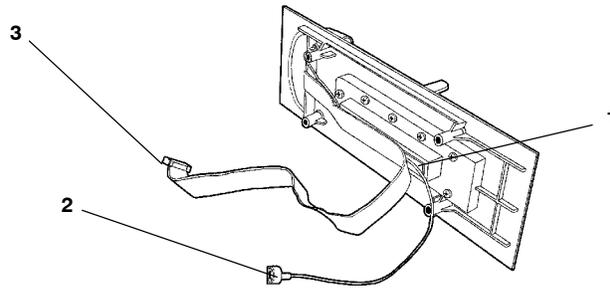

Ribbon cable

Slot in printer frame
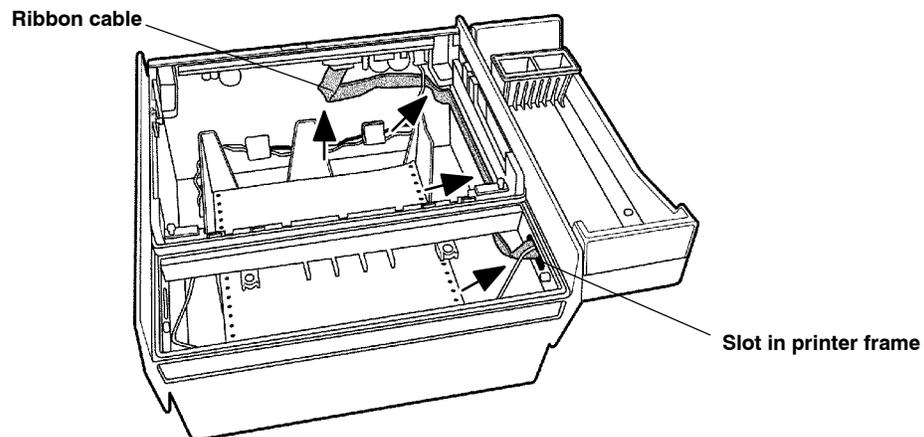
Figure 3
Following Ribbon Cable Path

Press Cables to Bottom of Terminal Holder

Do the following to keep the ground cable and ribbon cable out of the paper path.

1. Strip the protective paper off the tape on the bottom of the new terminal holder.
2. Press the terminal holder ground cable across the middle of the tape.
3. Do the same with the terminal holder ribbon cable, over the ground cable. Make sure the ribbon cable is firmly in place.


1. Tape
2. Ground cable
3. Ribbon cable

Figure 4
Pressing Cables to New Terminal Holder

Install Terminal Holder and Ferrite Bead

1. Position the new terminal holder on the printer, with the connector end closest to the control panel. Pull the two terminal holder cables through the slot in the printer frame.
2. Clamp the ferrite bead around the three green, red, and black power cables. Strip the protective paper from one side of the 1.25" double-sided tape and press the tape to the ferrite bead. *Do not put the tape on the clasp.* Strip the protective paper from the other side of the tape, then press the bead to the wall of the printer frame.
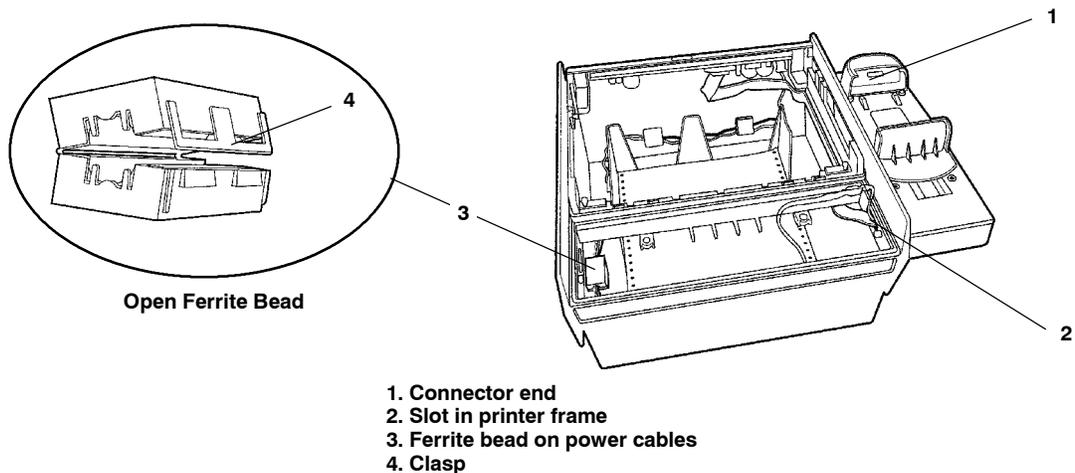

Open Ferrite Bead

1. Connector end
2. Slot in printer frame
3. Ferrite bead on power cables
4. Clasp

Figure 5
**Ferrite Bead Clamped on Power Cables**

Connect Cables

1. Insert the male ground connector (terminal holder ground cable) into the female ground connector (printer ground cable). Use needle-nosed pliers, if necessary.

2. Connect the terminal holder ribbon cable with the I/O extension cable. Close the clasps on the I/O extension connector to secure the two cables.

Ground Connectors   **Ribbon Connectors**

1. **Female ground connector** (printer cable)
2. **Male ground connector** (terminal holder cable)
3. **Joined connectors**
4. **Clasp**
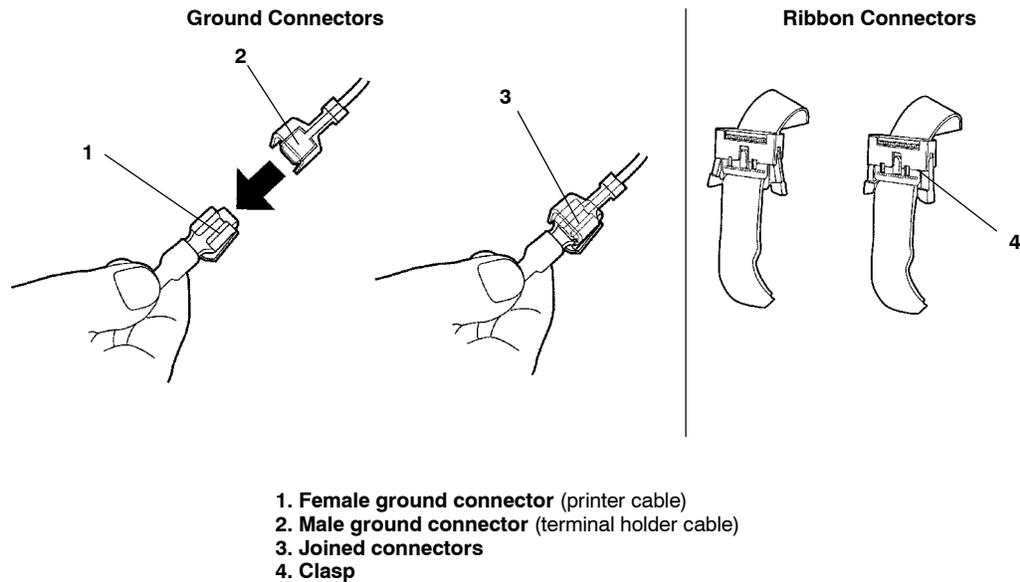
Figure 6
Connecting and Securing Cables

Store Excess Cables

Insert all excess ground and ribbon cabling in the channel between the printer frame and the paper tray.

1. **Paper tray**
2. **Channel**
3. **Printer frame**
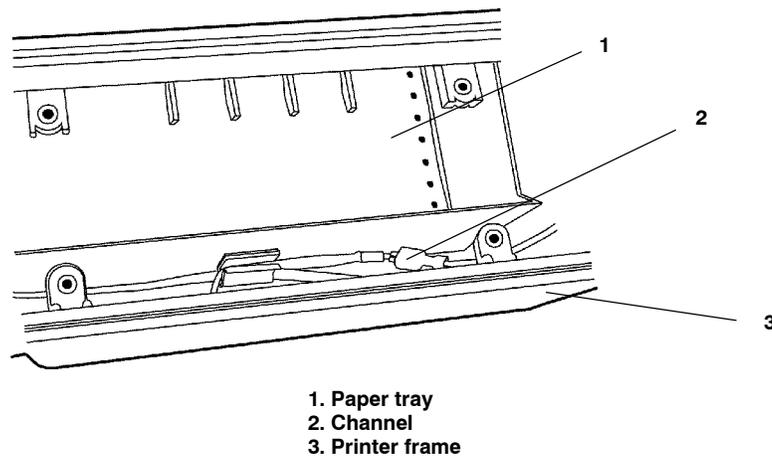
Figure 7
Moving Excess Cabling out of Paper Path

Install Flex Cables and Pivot Frame

1. Install the new 13-conductor shielded flex cable to the back of the pivot frame and align the pivot frame back onto its hinges.
2. Attach the two flex cables to the printer control panel and lower the pivot frame into place.
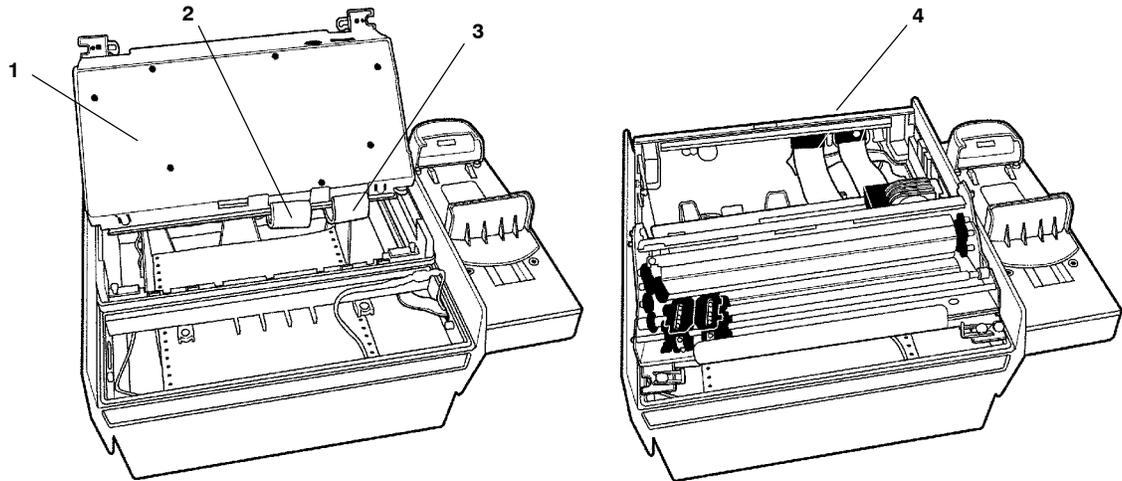

1. Pivot frame
2. 14-conductor flex cable
3. 13-conductor shielded flex cable
4. Control panel

Figure 8
Attaching Pivot Frame

Reinstall the Blank Cover Plate and Printer Lid

1. Position white spacers over the printer screw holes where the blank cover plate is to be attached, then place the cover plate on the spacers.
2. Squeeze a small drop of Loctite 425 onto the tip of each screw, enough to cover 3–4 threads, then insert each screw into a hole and tighten into place.
3. Put the lid back onto its hinges and close into place.
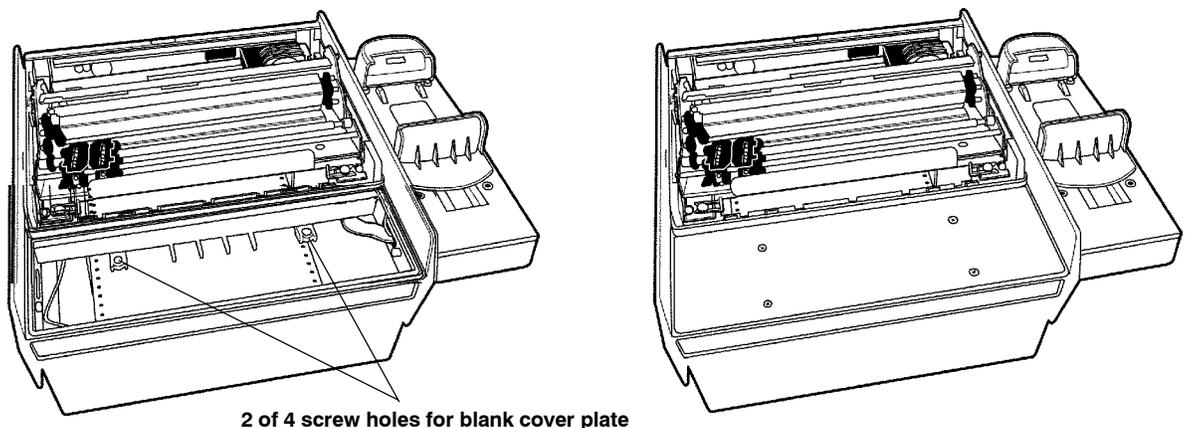
2 of 4 screw holes for blank cover plate

Figure 9
Attaching Blank Cover Plate

Secure New Terminal Holder

Four 8-32 x 1.25" flathead screws are included in this kit. Loctite 425 is required to secure these screws.

1. Squeeze a small drop of Loctite 425 onto the tip of each screw, enough to cover 3–4 threads, then insert each screw into a hole and tighten into place.
2. Use a soft cloth to wipe away excess threadlocker.
3. Go to page 12 to orient and test the new terminal holder.

1. New terminal holder
2. Screws
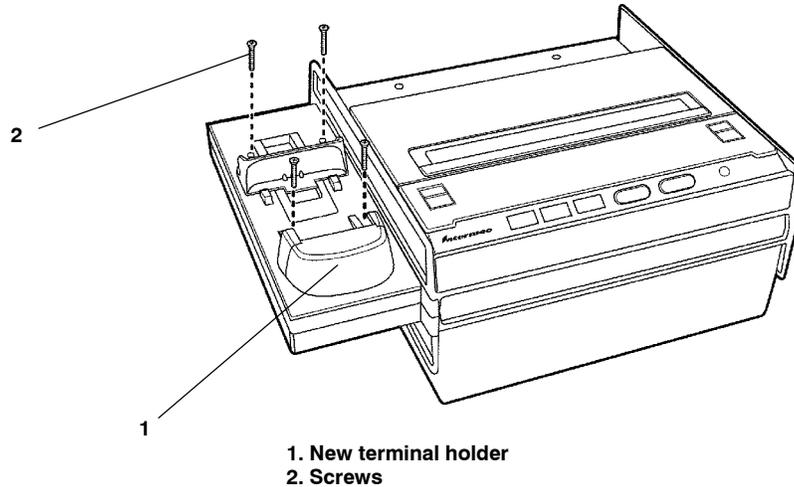
Figure 10
Aligning Screws with New Terminal Holder
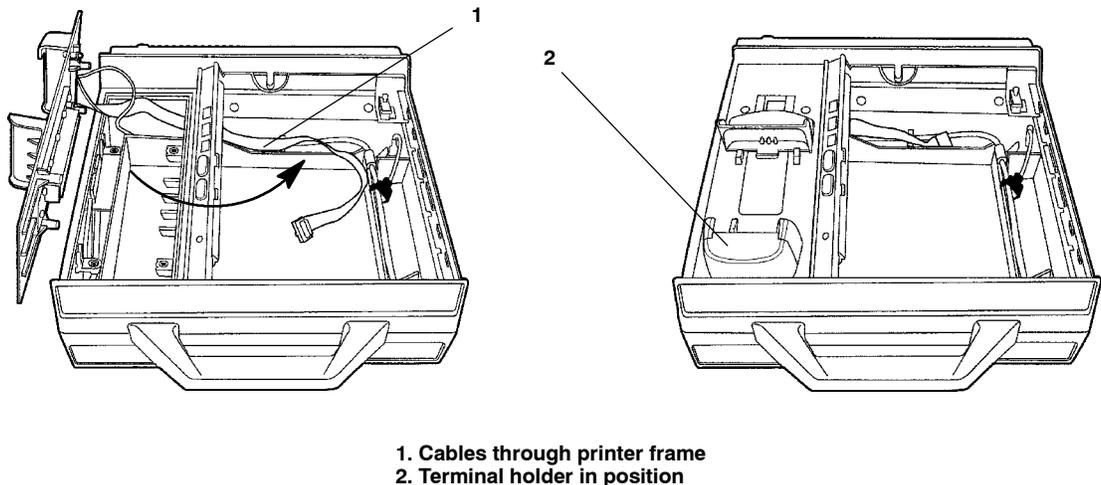
Upgrade the Portable Printer

1. Use the Phillips screwdriver to remove the old terminal holder from the printer. Pull the slide retainer back to reveal the two concealed screws. Discard all four screws.

2. Detach the old terminal holder cables from the printer control panel, then discard the old terminal holder.

1. Slide retainer
2. Terminal holder
3. Control panel
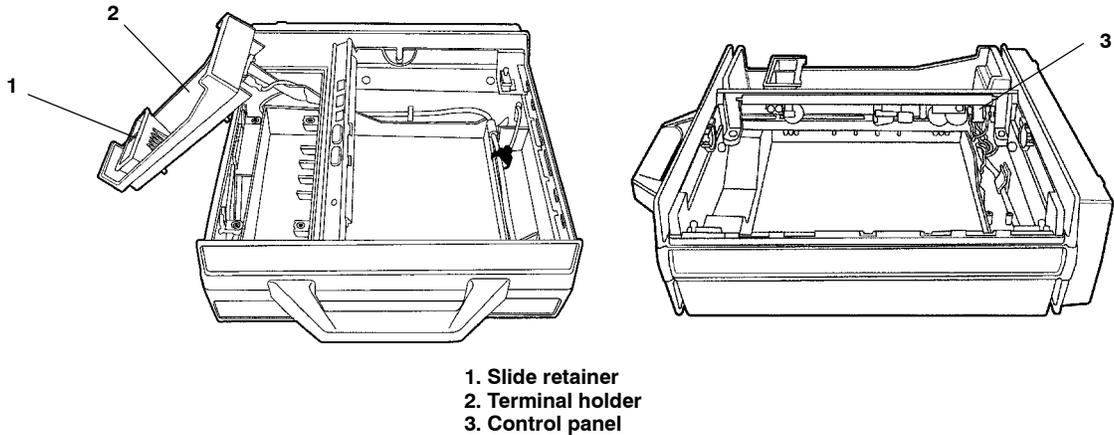
Figure 11
Removing Old Terminal Holder

Position New Terminal Holder

Pull the new terminal holder cables through the printer frame, then position the terminal holder on the printer screw holes.

1. Cables through printer frame
2. Terminal holder in position

Figure 12
Positioning New Terminal Holder

Install Ferrite Bead

If the portable printer has an ac foot and one gray power cable,
Position the ferrite bead onto the floor of the printer frame, between the paper tray and the battery compartment, *as in Figure 13 below*.

If the portable printer is dc-powered and has three power cables,
Position the ferrite bead onto the wall of the printer frame, between the paper tray and the printer frame *(see Figure 5 on page 5 for location)*.

1. Clamp the ferrite bead around the power cable.
2. Strip the protective paper from one side of the 1.25" double-sided tape and press the tape to the ferrite bead. *Do not put the tape on the clasp.*
3. Strip the paper off the other side of the tape, then press the bead into place.
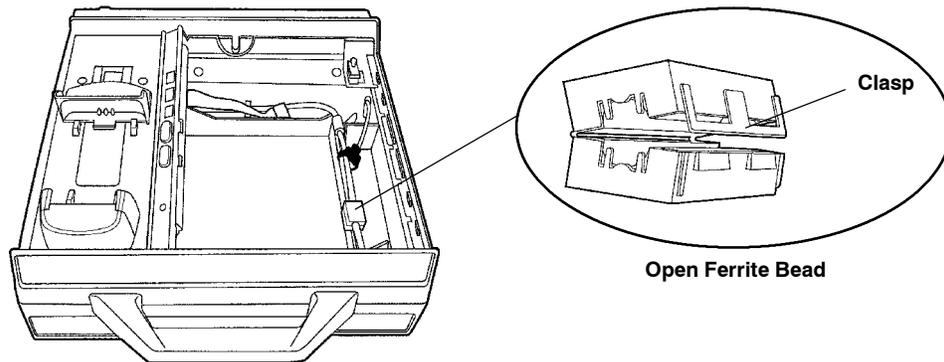

Clasp

Open Ferrite Bead

Figure 13
Ferrite Bead Clamped on Gray Power Cable

Connect Cables

1. Use wire cutters to clip a square out of the red insulating boot on the printer ground connector to fit within the new terminal holder insulating boot.
2. Slide the male ground connector (printer cable) into the female ground connector (terminal holder cable). Use needle-nosed pliers, if necessary.
3. Connect the terminal holder ribbon cable to the the control panel.
4. Route the excess cabling between the paper tray and the printer frame under the control panel.
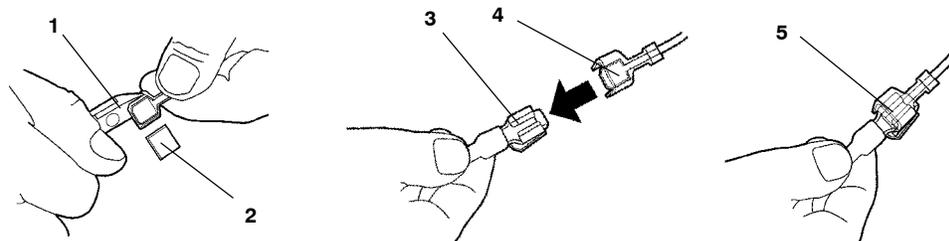
1. **Wire cutters**
2. **Cut piece off insulating boot**
3. **Female ground connector** (printer cable)
4. **Male ground connector** (terminal holder cable)
5. **Joined connectors**

Figure 14
Connecting Ground Cables — *Portable Printer Only*

Install Flex Cables and Pivot Frame

1. Install the new 13-conductor shielded flex cable to the back of the pivot frame and align the pivot frame, with its 14-conductor flex cable, back onto its hinges.

2. Attach the two flex cables to the printer control panel and lower the pivot frame into place.

3. Install the lid back onto its hinges and close into place.

Secure New Terminal Holder

Four 8-32 x 1.25" flathead screws are included in this kit. Loctite 425 is required to secure these screws.

1. Squeeze a small drop of Loctite 425 onto the tip of each screw, enough to cover 3–4 threads.

2. Insert each screw into a hole and tighten into place. Use a soft cloth to wipe away excess threadlocker.

3. Go to page 12 to orient and test the new terminal holder.
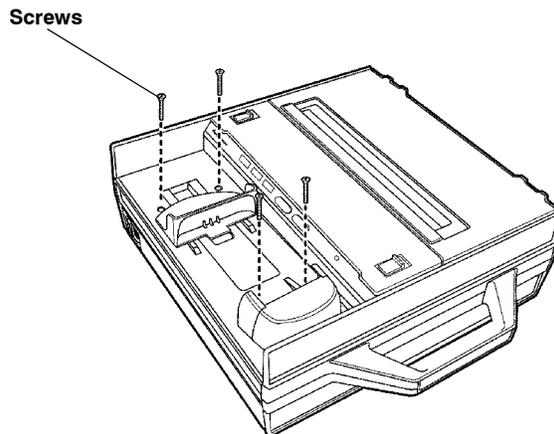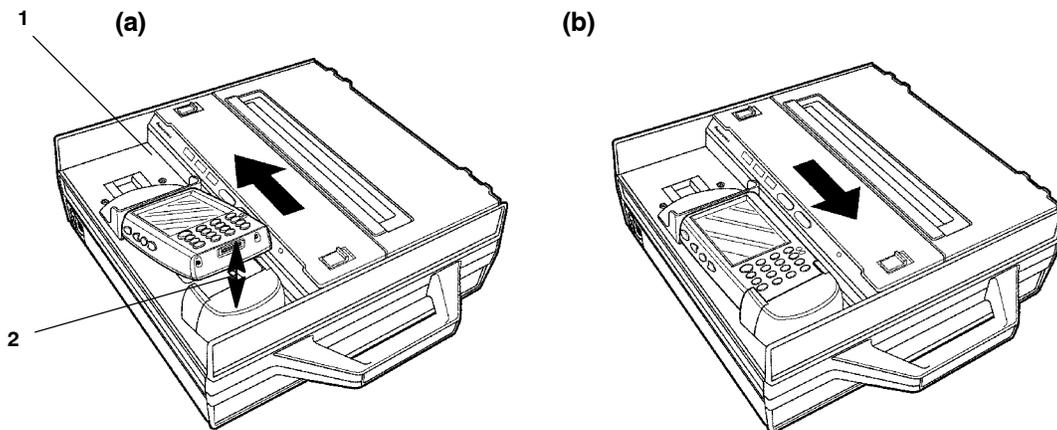

Figure 15
Aligning Screws for New Terminal Holder

Orient and Test the New Terminal Holder

Use a 600 Series or 700 Series Computer to test the terminal holder installation.

Insert the Computer

1. Insert the *top* of the computer into the terminal slide retainer and use the computer to push the slide retainer all the way in the direction shown (Figure 16, part *a*).

2. Lower the *bottom* of the computer into the terminal holder, then slide the computer to fully seat it in the docking connector (Figure 16, part *b*).

(a)   (b)

1. Top (display) of computer
2. Docking connectors

Figure 16
Installing Computer

Perform a Print Test

Apply power to the 4820 Printer, then load paper into the unit. Perform a print test to ensure that both the printer and the new terminal holder are in working order. Contact the Customer Support Center if you have any questions.