Instructions

Tektronix

TDS5BUP Option 1P

TDS5000B Series
Integrated Thermal Printer Upgrade Kit

075-0814-00

Warning
The servicing instructions are for use by qualified personnel only. To avoid personal injury, do not perform any servicing unless you are qualified to do so. Refer to all safety summaries prior to performing service.

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Service Safety Summary

Only qualified personnel should perform service procedures. Read this *Service Safety Summary* and the *General Safety Summary* in the product service manual or the instruction manual.

Do Not Service Alone. Do not perform internal service or adjustments of this product unless another person capable of rendering first aid and resuscitation is present.

Disconnect Power. To avoid electric shock, switch off the instrument power, then disconnect the power cord from the mains power.

Use Care When Servicing With Power On. Dangerous voltages or currents may exist in this product. Disconnect power and disconnect test leads before removing protective panels, soldering, or replacing components.

To avoid electric shock, do not touch exposed connections.

Kit Description

These instructions describe the installation of the integrated thermal printer (Option 1P) into your TDS5000B Series oscilloscope.

The printer kit is a collection of parts that, once installed, allows hard copies of the oscilloscope display to be printed on the integrated printer.

Products

TDS5000B Series All Serial Numbers

Kit Parts List

Figure 1	Quantity	Part number	Description
---------	1 ea	650-4317-00	Integrated Thermal Printer Kit: TDS5000B Series, consisting of the following:
1-1	1 ea	NS	Thermal Printer
1-2	1 ea	NS	Printer Cover
1-3	2 ea	NS	Screw, mech: T-15, 6-32, 15 mm length
1-4	5 ea	016-1897-00	Refill paper
---------	1 ea	075-0814-XX	Kit Instructions: Integrated Thermal Printer,Option 1P, TDS5000B Series

NS - Not Saleable

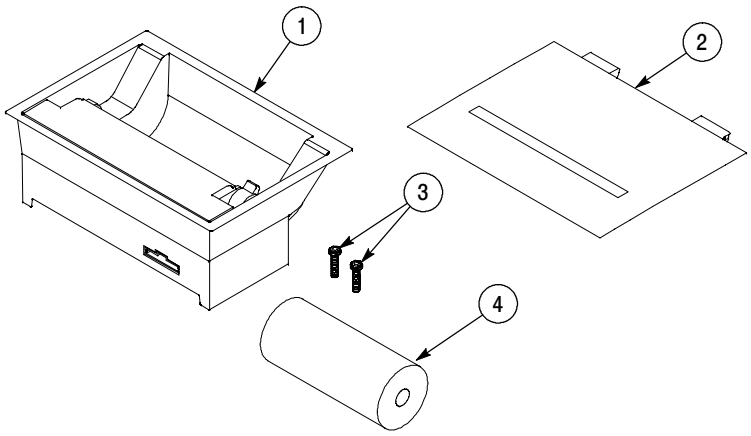

Figure 1: Printer kit parts

Warranted Characteristics

When the printer is installed according to the instructions in this document, the instrument meets all warranted requirements listed in the instrument specification in the *TDS5000B Series Digital Phosphor Oscilloscopes Specifications and Performance Verification Manual*.

The following characteristics supercede those listed in the user or service manual for your instrument.

Table 1: Warranted characteristics

Characteristic	Description
Weight	Printer adds 12 ounces (340 grams) to instrument weight

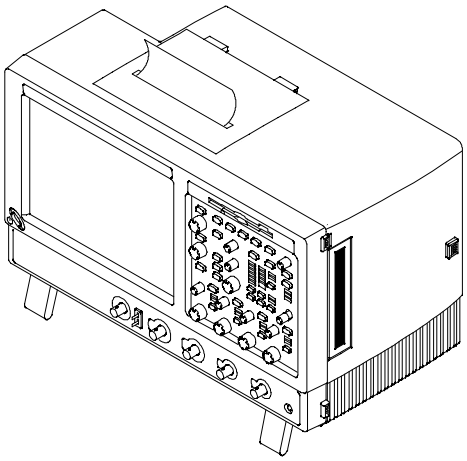

Figure 2: Integrated thermal printer installed in the instrument

Rackmount Considerations

If the instrument is rackmounted, you can access the printouts in one of the following ways:

- Slide the instrument out far enough to reach the printout.
- Leave enough room in the rack above the instrument to reach the printout.
- Run out extra paper to the front of the rack. (You will use more paper this way.)

Installation Instructions

This section contains all procedures needed to install the Integrated Thermal Printer (TDS5UP Option 1P) in the TDS5000B Series instruments.

These instructions are for qualified service personnel who are familiar with servicing the product. If you need further details for disassembling or reassembling the product, refer to the appropriate product manual. Contact your nearest Tektronix Service Center or Tektronix Factory Service for installation assistance.

Minimum Tool and Equipment List

The following tools are required to attach the printer kit hardware and install cabling. All tools are standard tools that are readily available.

Table 2: Tools required for printer installation

Item no.	Name	Description
1	Screwdriver handle (magnetic)	Accepts $\frac{1}{4}$ inch hex-head driver tips
2	T-15 TORX tip	TORX driver tip for T-15 size screw heads

Remove

Remove the Panel from the Instrument

Equipment Required: Torxdriver with T-15 tip (Items 1 and 2).

***NOTE**. The parts that are removed should be stored for use in case reconversion to a standard instrument configuration is desired at a later time.*

1. Remove the line cord from the instrument.
2. Remove the accessory pouch or fold it back to access the accessory door. Reseat the accessory pouch after the printer is installed, if desired.
3. Open the accessory door and pull the door straight up to remove it from the hinge.
4. Remove the two T-15 TORX screws that secure the tray to the instrument. See Figure 3.
5. Remove the tray from the instrument.
6. Locate the 10-pin cable in the accessory bay. This cable connects to the printer in the *Install* procedure.

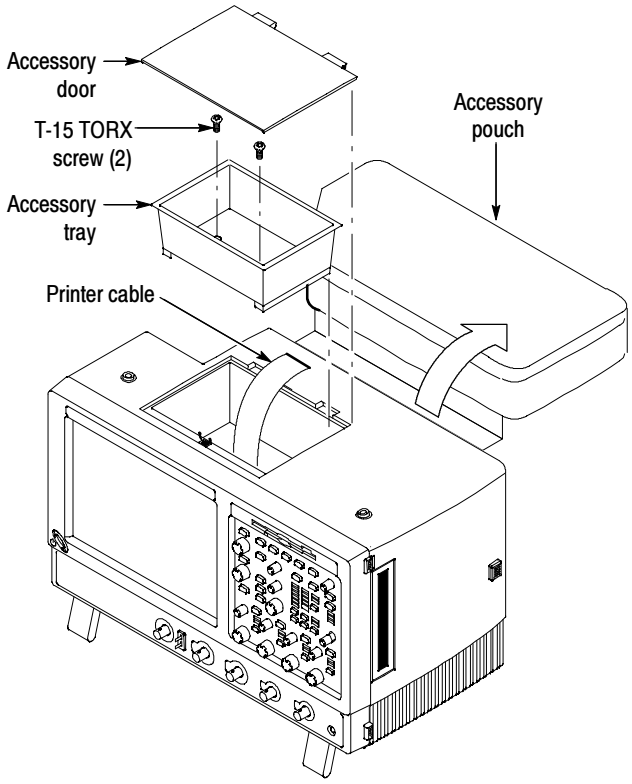

Figure 3: Remove accessory door and tray from instrument

Install the Printer

Use the following procedure to install the printer.

1. Plug the cable into the printer connector as shown in Figure 4.

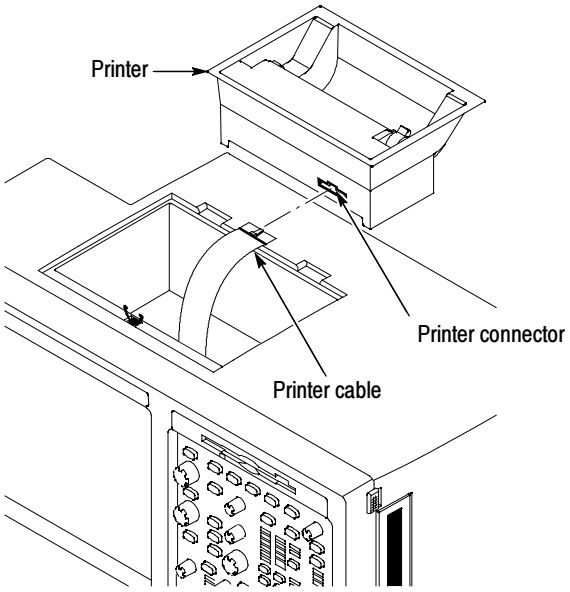

Figure 4: Connect the printer cable to the printer

2. Lower the printer into the instrument, being careful not to pinch the cable. Secure the printer with the two TORX T-15 screws included with the kit. Refer to Figure 5.

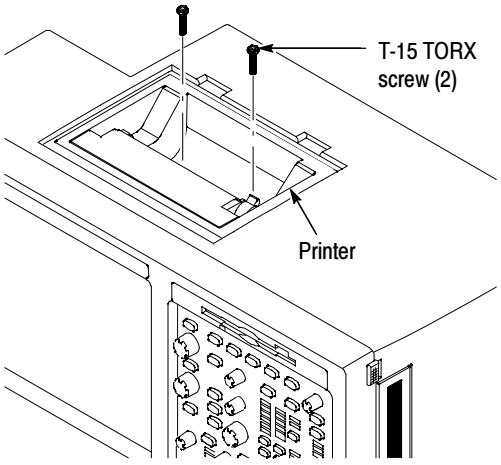

Figure 5: Mount the printer

3. Reconnect the line cord to the instrument.

This completes mounting the printer in the instrument. To complete the installation, do the following procedures: *Loading Paper* and *Install the Printer Software.*

Loading Paper

Refer to Figure 6 and use the following procedure to load paper into the printer:

1. If the printer cover is in place, remove it by opening the cover and pulling straight up at the hinges.
2. Set the printhead tab forward to open a gap for the paper to feed through.

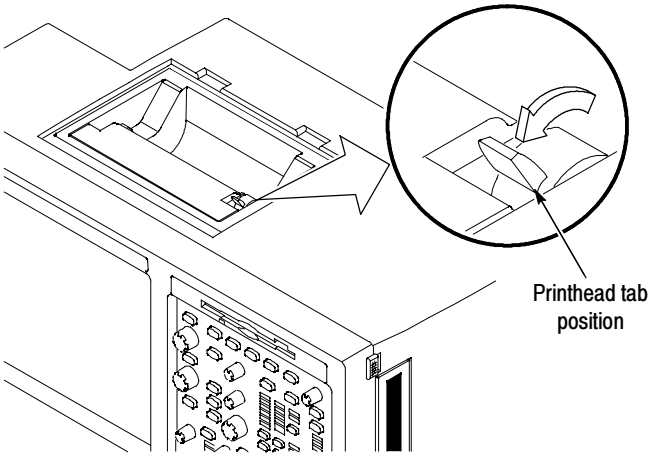

Figure 6: Prepare for paper loading

3. Unroll about six inches of paper from a roll of refill paper.

4. Feed the paper into the printer, between the roller and the black frame. See Figure 7.

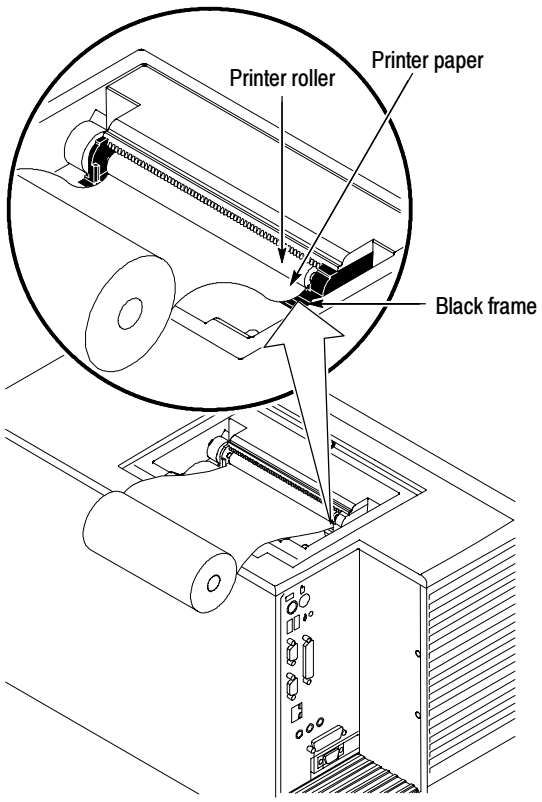

Figure 7: Feed the paper into the printer

5. Rotate the roller to advance about three inches of paper through the printer. See Figure 8 on page 11.

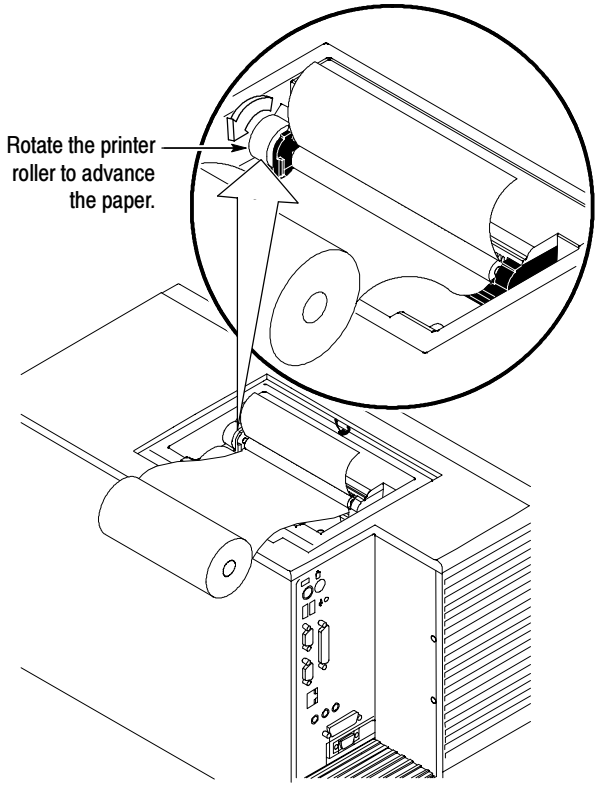

Figure 8: Advance the paper through the printer

6. Set the printhead tab back to secure the paper in the printer. See Figure 9.

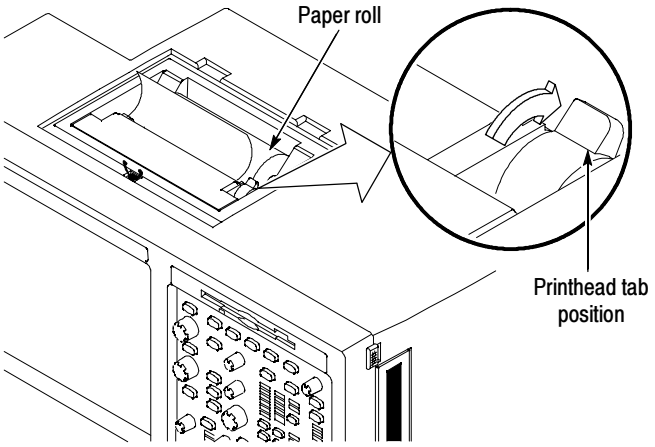

Figure 9: Printer tab position

7. Set the paper roll in the tray.

8. Snap the printer cover into the hinges and feed the paper through the slot in the printer cover. Close the cover. See Figure 10.

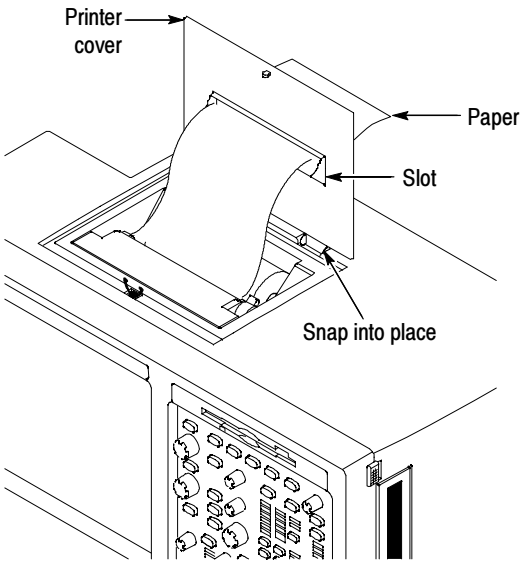

Figure 10: Install the printer cover

Install the Printer Software

After you install the printer hardware and power on the instrument, you need to install the printer driver to complete the printer installation.

Use the following procedure to install the printer driver:

1. Power on the instrument.
2. From the Windows desktop, open the Control Panel.
3. Select Printers, and then select Add Printer.

   The Add Printer Wizard appears.
4. Click Next.
5. Select Local printer, and click Next.
6. In the dialog box that appears, click Have Disk. (The printer driver is on the hard drive.)

   The Install From Disk dialog box appears.
7. Click Browse.
8. In the Open dialog box, navigate to:

   c:\tektronix\thermal printer\
9. In the selection box on the left side of the dialog box, select ftp.inf, and click OK.
10. In the Install From Disk dialog box, click OK.
11. In the Add Printer Wizard dialog box, select FTP, and click Next.
12. In the Available ports selection box, select LPTUSB001: Unknown Printer, and click Next.
13. Change the printer name to: Integrated Thermal Printer
14. Click Next and Finish as directed to complete the printer installation. You can choose to print a test page before completing the printer installation, or you can perform *Test the Printer* separately to verify that the printer operates properly.

Test the Printer

Use the following procedure to verify that the printer functions properly:

1. From the TekScope window, select Page Setup from the File Menu.
2. Select Landscape, Full-Screen and Ink-Saver modes.
3. Click Print. It may take 10 to 15 seconds for the printer to start printing.
4. Verify that the printer prints and that the printout matches what is on the screen.

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