

# Instructions



**TDS5BUP and TDS5UP Option 1P**

**TDS5000B and TDS5000 Series  
Integrated Thermal Printer Upgrade  
and Thermal Printer Replacement Kit**

**075-0814-03**

**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.

**[www.tektronix.com](http://www.tektronix.com)**



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## **Contacting Tektronix**

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For product information, sales, service, and technical support:

- In North America, call 1-800-833-9200.
- Worldwide, visit [www.tektronix.com](http://www.tektronix.com) to find contacts in your area.

# 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

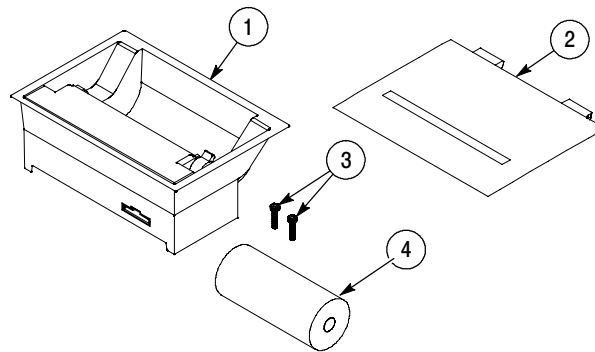
These instructions describe the installation of the integrated thermal printer (Option 1P) into your TDS5000B Series or TDS5000 Series oscilloscope.

The printer kit, once installed, allows hard copies of the oscilloscope display to be printed on the integrated printer.

## Products

**TDS5000B and TDS5000 Series**      All Serial Numbers

## Kit Parts List



**Figure 1: Printer kit parts**

**Table 1: Printer kit parts**

Figure 1	Quantity	Part number	Description
--	1 ea	655-4920-XX	Integrated Thermal Printer Kit: TDS5000B and TDS5000 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-XX	Refill paper (Option 1P only)
--	1 ea	075-0814-03	Kit Instructions: Integrated Thermal Printer, Option 1P, TDS5000B and TDS5000 Series
--	1 ea	335-1536-XX	Label; TDS5000B and TDS5000 Series
--	1 ea	063-3877-XX	Software pkg; Printer Prep, CD; TDS5000B and TDS5000 Series

Figure 1	Quantity	Part number	Description
<b>TDS5000B Series only</b>			
--	1 ea	063-3759-XX	Software pkg; Operating System Restore,CD; TDS5000B Series
--	1 ea	063-3692-XX	Software pkg; product software CD; TDS5000B Series
<b>TDS5000 Series only</b>			
--	1 ea	063-3893-XX	Software pkg; Operating System Restore,CD for TDS5000 Series, Windows ME
--	1 ea	063-3892-XX	Software pkg; Operating System Restore,CD for TDS5000 Series, Windows ME
--	1 ea	063-3508-XX	Software pkg; product software,CD for;TDS5000 Series

**NS - Not Saleable**

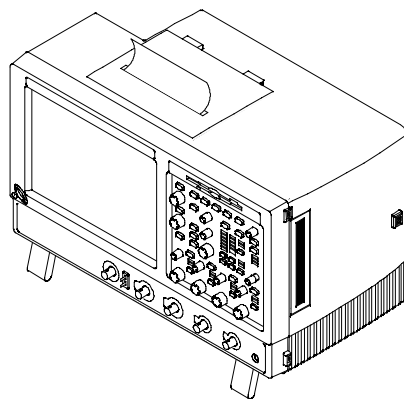
**Warranted Characteristics**

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, Performance Verification Manual, or the TDS5000 Series User Manual.*

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

**Table 2: 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 (Option 1P) in the TDS5000B Series and TDS5000 Series instruments or to replace an existing thermal printer.

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 3: Tools required for printer installation**

Item no.	Name	Description
1	Screwdriver handle (magnetic)	Accepts ¼ inch hex-head driver tips
2	T-15 TORX tip	TORX driver tip for T-15 size screw heads

## Remove the Panel from the Instrument

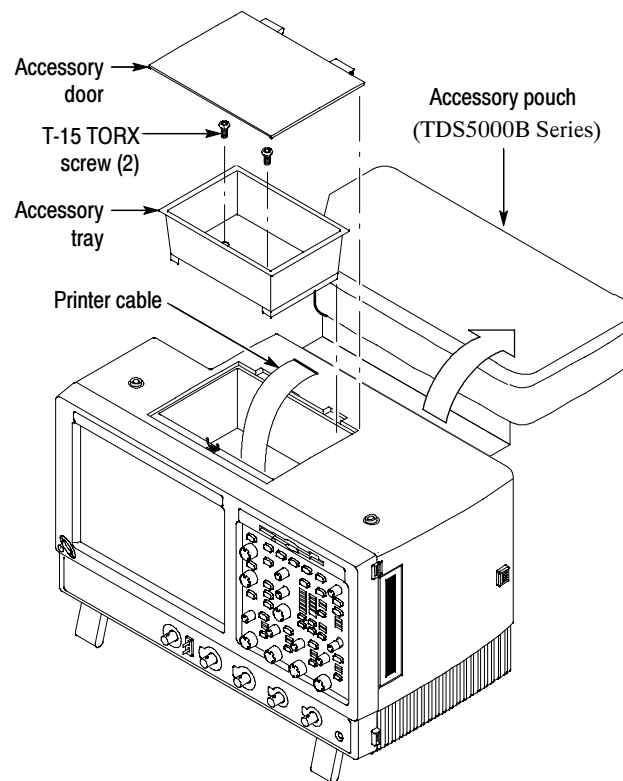
*Equipment Required:* TORX driver with T-15 tip (Items 1 and 2).

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**NOTE.** Save the removed parts for use in case reversion to a standard instrument configuration is desired at a later time.

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1. Remove the line cord from the instrument.
2. Remove the accessory pouch or fold it back (TDS5000B Series), to uncover 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. See Figure 3.
4. Remove the two T-15 TORX screws that secure the tray to the instrument.
5. Remove the tray from the instrument.
6. Locate the 10-pin cable in the accessory bay of the instrument. This cable connects to the printer in the *Install* procedure.

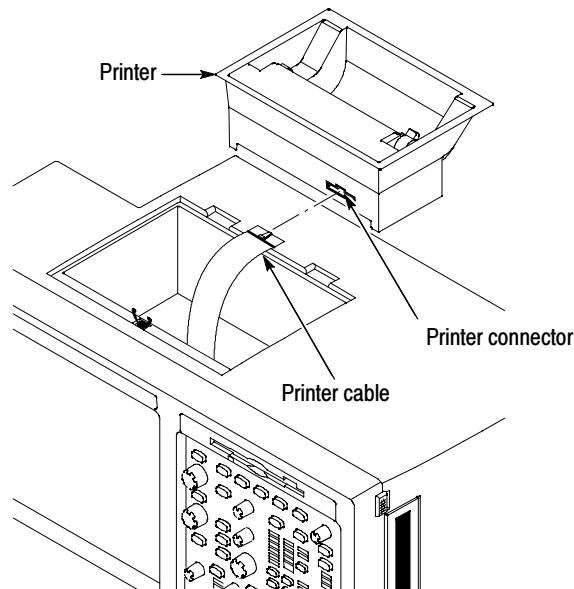


**Figure 3: Remove accessory door and tray from instrument**

## Install the Printer

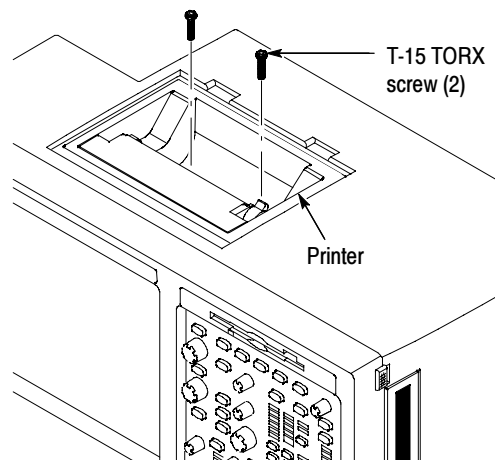
Use the following procedure to install the printer:

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**

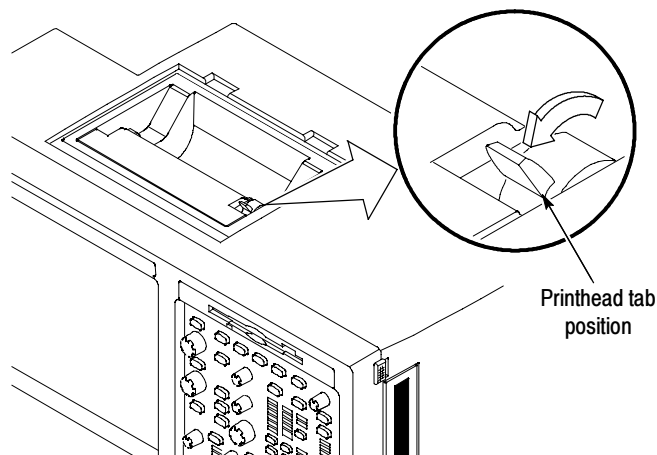
3. Reconnect the line cord to the instrument.

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:

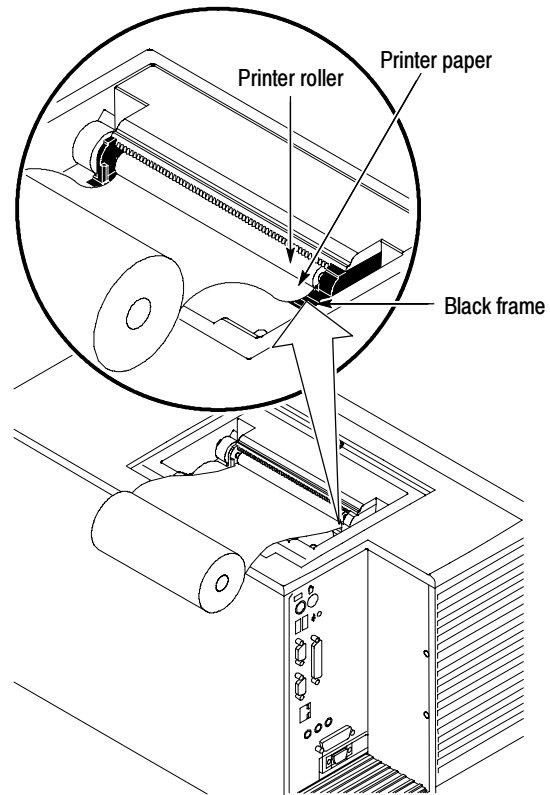
1. If the printer cover is in place, remove it by opening the cover and pulling straight up at the hinges.
2. Set the printhead tab forward to open a gap for the paper to feed through.



**Figure 6: Prepare for paper loading**

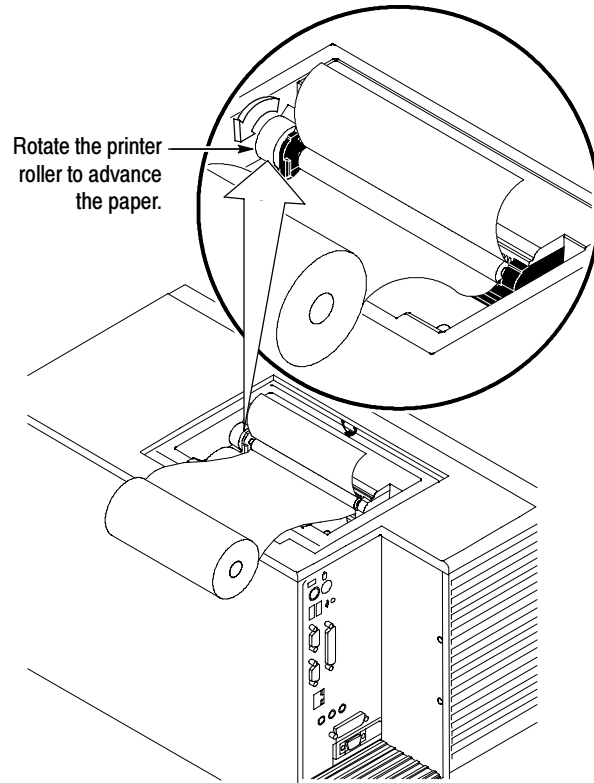
3. Unroll about six inches of paper from a roll of refill paper.

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



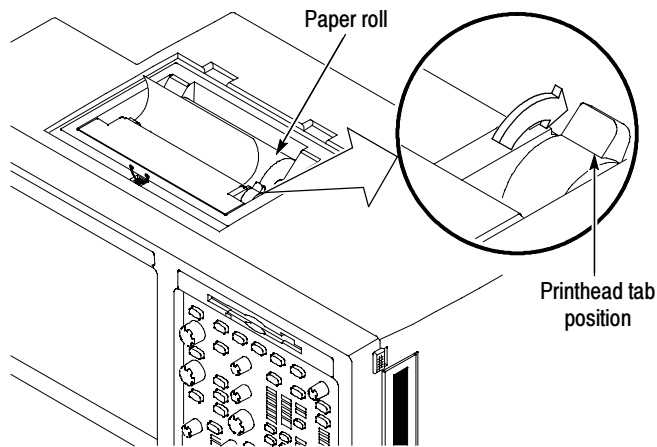
**Figure 7: Feed the paper into the printer**

5. Rotate the roller to advance about three inches of paper through the printer. See Figure 8 on page 12.



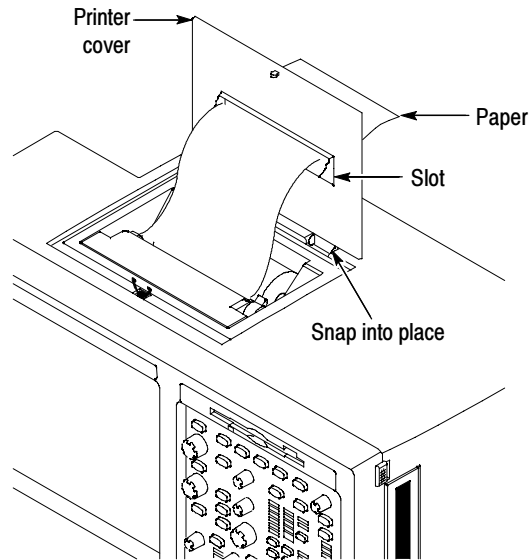
**Figure 8: Advance the paper through the printer**

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



**Figure 9: Printer tab position**

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 Software

For the thermal printer to operate correctly, you need to reinstall TDS5000B Series and TDS5000 Series software. You may not need to use all the software provided with this kit.

### System and Product Software

To reinstall the system software, refer to the *TDS5000B Series or TDS5000 Series Operating System* CD booklet, and for the product software, refer to the *TDS5000B Series or TDS5000 Series Product Software* CD booklet. You will need to reinstall any applications that resided on your hard disk after reinstalling the system software.



**CAUTION.** To avoid data loss when reinstalling the system software, copy any important user files stored on the hard disk to a remote location.

Table 4 summarizes the following instructions.

**Table 4: Software and driver installation summary**

Install task order	TDS5000B		TDS5000	
	Windows 2000		Win2000	Windows ME
	D865GLC	D845GVAD2	D810E2CD/ D815EFV	D810E2CD/ D815EFV
Operating System (OS) software	063-3759-XX <sup>1</sup>	-	-	Install <sup>2</sup>
Product software	063-3692-XX	063-3692-XX	-	063-3508-XX
Printer driver install (page 15)	-	Install	Install	-
Printer Prep software (page 16)	-	063-3877-XX	063-3877-XX	-

<sup>1</sup> *Operating System software install recommended.*

<sup>2</sup> *To determine which OS software to use, see page 15, under Windows ME.*

To determine which software to install, follow these steps:

1. Select My Computer.
2. Click properties.
3. On the general tab, click the support information button.

Note the support information string (for example, D865GLC) that is listed. You also will need the instrument type and the type of operating system. Then use Table 4 and the following information to install the appropriate software.



For TDS5000B instruments, refer to the following information:

**D865GLC.** It is recommended that you restore your hard disk and install the product software.

**D845GVAD2.** You need to install the product software, the printer driver (see page 15), and the Printer Prep software (see page 16).

For TDS5000 instruments, refer to the following information:

**Win2000.** You need to install the printer driver (see page 15), and the Printer Prep software (see page 16).

**Windows ME.** You need to install the appropriate system software (motherboard specific) and the product software.

To determine which system software CD-ROM to use, follow these steps:

1. Select My Computer.
2. Click properties.
3. On the general tab, click the support information button. If the string is:  
D810E2CD - Use Tektronix part number 063-3892-XX (OS software)  
D815EFV- Use Tektronix part number 063-3893-XX (OS software)

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**NOTE.** When you finish with the printer upgrade, apply the provided Printer Upgrade label to the back of your instrument.

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## **Install Printer Driver**

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, click Next, and click Next again.

6. In the dialog box that appears, scroll down and highlight USB001 or USB002, whichever appears in the list.
7. Click Next.  
The Add Printer Wizard appears.
8. Click Next.  
The Use Existing Driver window appears.
9. Click Next. In the Name your Printer window, type Integrated Thermal Printer (case sensitive), and click Next.  
The Printer Sharing window appears.
10. Click Next.  
The Print Test Page window appears.
11. Click Next.
12. In the dialog box that appears, click Finish.

### **Install Printer Prep Software**

To install the Printer Prep software, complete the following steps:

1. Install the Printer Prep disc in the CD-ROM drive on the right side of the oscilloscope. The install browser automatically starts.
2. Click Next.  
The Install Wizard installs the Printer Prep files.
3. Click Finish.

## **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 the printout matches what is on the screen.

■ **End of document** ■