Instructions

# Tektronix

040-1717-00 TDSUSBF USB 2.0 Test Fixture Socket Upgrade Kit

075-0901-00

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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### **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 to find contacts in your area.

## Service Safety Summary

Only qualified personnel should perform service procedures. Read this Service-Safety Summary and the safety summaries in your product manual before performing any service procedures.

**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, disconnect the mains power by means of the power cord or, if provided, the power switch.

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

To avoid electric shock, do not touch exposed connections.

### **Kit Description**

This kit includes an A receptacle upgrade for the TDSUSBF product and adapters. The modifications remove three dongle cables, and replace them with sockets, resulting in improved signal quality for those devices that do not need the extension cable.

This document supports Tektronix modification: TDSUSBF USB 2.0 Test Fixture.

#### **Products**

**TDSUSBF** Test Fixture

#### **Minimum Tool and Equipment List**

Required tools and equipment	Part number
Solder Iron	NS
Torx T-10 screwdriver	NS

NS - Not Saleable

#### **Kit Parts List**

Circuit/fig- ure number	Quantity	Part number	Description
-	3 ea.	131-6277-XX	USB Type A receptacle
-	1 ea.	174-5197-XX	5-inch A-to-B USB cable
-	1 ea.	103-0434-XX	B-to-A adapter
-	1 ea.	131-7922-XX	mini B-to-A adapter
-	1 ea	075-0901-XX	TDSUSBF USB 2.0 Test Fixture Socket Upgrade Kit.

Kit Description

## Installation Instructions

These instructions are for 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, Inc., Service Center or Tektronix Factory Service for installation assistance.



**CAUTION.** To prevent static discharge damage, service the product only in a static-free environment. Observe standard handling precautions for static-sensitive devices while installing this kit. Always wear a grounded wrist strap, grounded foot strap, and static resistant apparel while installing this kit.

#### Remove

For each of the three sections of the test fixture (DEVICE SQ TEST, DEVICE REV TEST, and DEVICE TDR TEST), you need to remove the cables. To do so, perform these steps:

- **1.** Disconnect the dongle cable strain relief assembly, which consists of a nut, a washer, and a cable clamp.
- 2. Unsolder the cable leads from the test fixture.
- 3. Remove the cable and strain relief assembly.

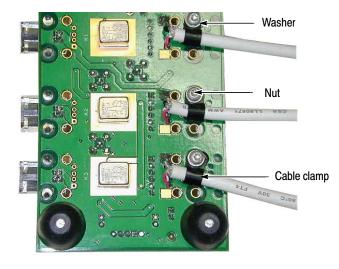


Figure 1: Bottom view of the original test fixture

#### Install

For each of the three sections of the test fixture (DEVICE SQ TEST, DEVICE REV TEST, and DEVICE TDR TEST), you need to install new receptacles. To do so, perform these steps:

- **1.** Install the sockets on the back of the fixture.
- 2. Solder receptacle leads and shield ground pins.



Figure 2: Bottom view of the fixture showing new connectors

#### **DUT Connection Methods**

To connect to a USB 2.0 Device Under Test (DUT), use one of the following methods:

- To test a device with an A type plug, attach the device directly to the test fixture.
- To test a device with a mini-B type receptacle, connect the mini-B adapter into the fixture, and connect the mini-B plug into the DUT.

#### **Verify Operation**

- **1.** Connect the DUT to an A receptacle.
- 2. Power the test fixture and place the test switch in the INIT position.
- **3.** Connect the test fixture to the USB host.
- 4. Check for DUT enumeration.
- End of document