

Keysight 33210A 10 MHz Function/Arbitrary Waveform Generator

Installation Instructions for 33210-67001 Retrofit Kit

Retrofit
Instructions

Notices

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Waste Electrical and Electronic Equipment (WEEE) Directive

This instrument complies with the WEEE Directive marking requirement. This affixed product label indicates that you must not discard this electrical or electronic product in domestic household waste.

Product category:

With reference to the equipment types in the WEEE directive Annex 1, this instrument is classified as a “Monitoring and Control Instrument” product.

The affixed product label is as shown below.



Do not dispose in domestic household waste.

To return this unwanted instrument, contact your nearest Keysight Service Center, or visit <http://about.keysight.com/en/companyinfo/environment/takeback.shtml> for more information.

Sales and Technical Support

To contact Keysight for sales and technical support, refer to the support links on the following Keysight websites:

- www.keysight.com/find/33210A
(product-specific information and support, software and documentation updates)
- www.keysight.com/find/assist
(worldwide contact information for repair and service)

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Keysight 33210A Option 001 External Timebase Reference

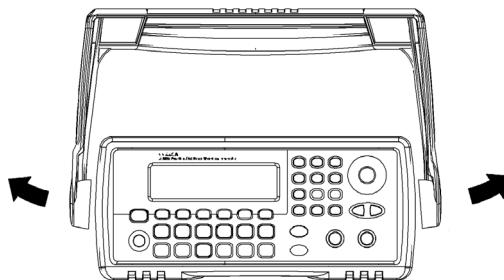
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Installation Instructions for 33210-67001 Retrofit Kit

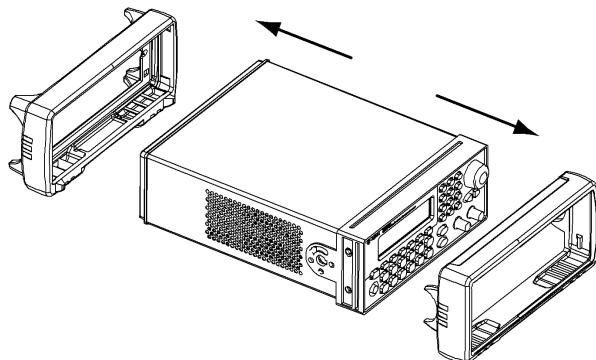
This guide shows how to install the Option 001 External Timebase Reference assembly into the Keysight 33210A. This assembly can be installed on all Keysight 33210A instruments (all serial numbers) that were not shipped with Option 001 installed. The *Keysight 33210A Function/Arbitrary Waveform Generator User's Guide* contains instructions on using the features (identified as "option 001 only") supported by the timebase assembly.

Installing the Timebase Assembly

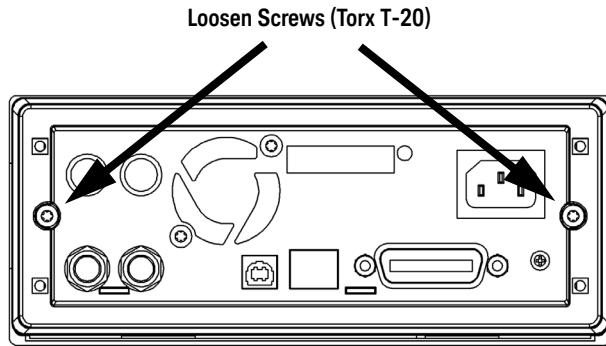
- 1 Turn off the power. Remove all cables from the instrument.
- 2 Rotate the handle upright and pull off.



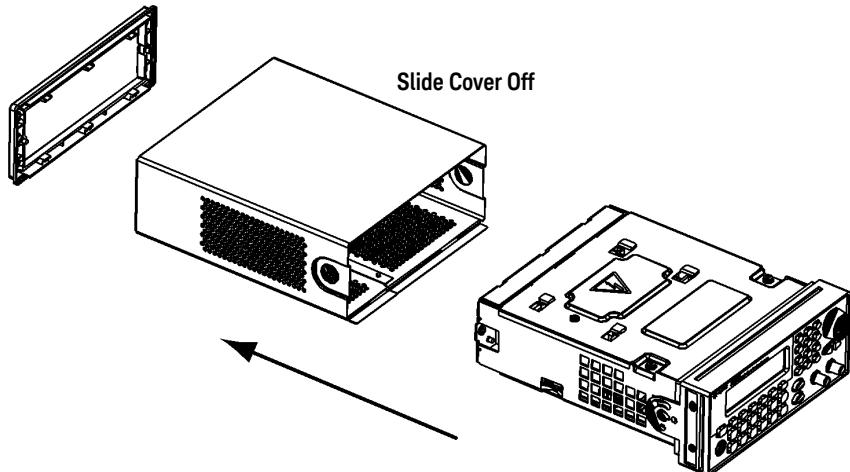
- 3 Pull off the instrument bumpers.



- 4 Loosen the two captive screws in the rear bezel and remove the rear bezel.



- 5 Slide off the instrument cover.

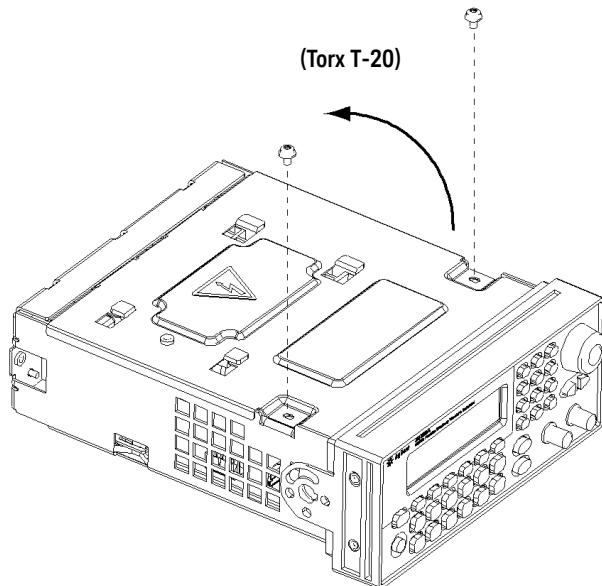
**WARNING**

SHOCK HAZARD. Make sure that the power cable has been removed from the instrument before proceeding. Dangerous voltages may be encountered inside the instrument chassis at any time when the power cord is connected to power, even with the power switch turned off.

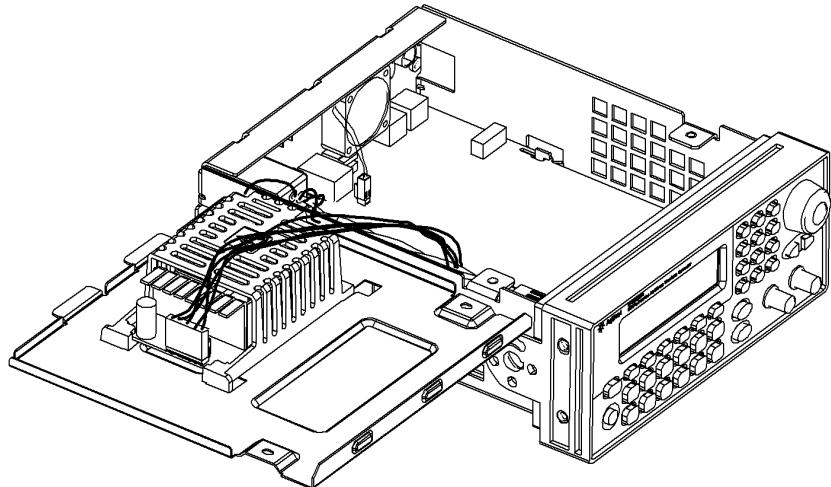
CAUTION

Electrostatic discharge (ESD) can damage components on unprotected circuit boards. Use *static safe* procedures when handling circuit boards. Avoid high-static areas such as carpeted floors. If an anti-static wrist strap is available, its use is recommended. Otherwise, touch the metal instrument chassis to discharge static electricity before removing the timebase assembly from its anti-static bag. Handle the assembly by its edges, and avoid touching components.

- 6 Remove the two screws securing the power supply deck (top plate) to the chassis.
- 7 Raise the front of the deck, pull forward, and then lift the deck (with power supply assembly attached) from the chassis.

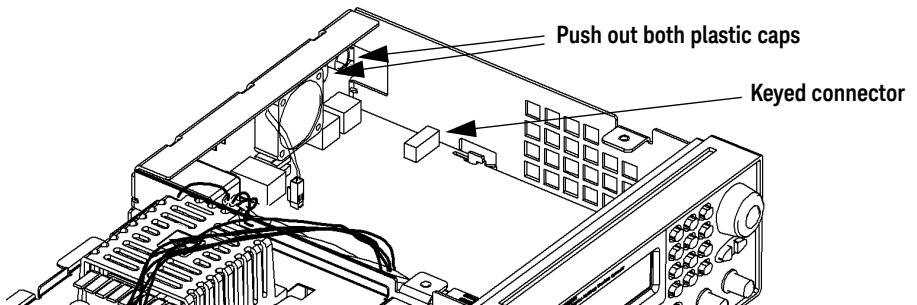


- 8 Lay the deck and power supply assembly (with cables still connected) to the side.



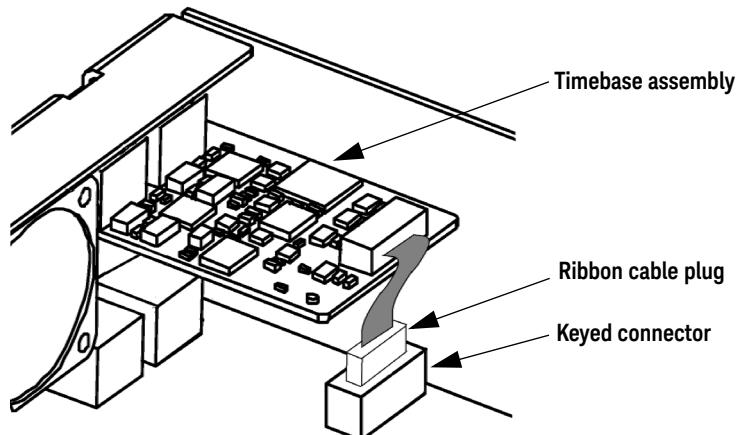
- 9 Remove the two plastic caps from the back panel.

The holes in the back panel for the “10 MHz In” and “10 MHz Out” connectors are capped in all instruments that do not have Option 001 installed. Locate the plastic caps and, from inside the chassis, compress the retention “tabs” and push each cap out through the back panel.



10 Install the External Timebase Reference assembly.

- a** Connect the assembly's ribbon cable by plugging it into the *keyed connector* on the main board, shown in the illustration above.
- b** Insert the assembly's BNC connectors in the back panel holes, and fasten them with the hex nuts and lock washers provided. The installed assembly should be component side up, as shown below.



- c** Tighten the hex nuts with a 9/16-inch open-end or adjustable wrench to secure the assembly. *Do not overtighten*—just one-quarter turn past hand tight!

11 Reassemble the instrument by reversing steps 1 through 8.

The Keysight 33210A is ready to use. No software updates are required. The “Option 001 only” features are now fully supported as documented in the *Keysight 33210A User’s Guide*.

Calibration

Installing the External Timebase Reference assembly has no effect on the instrument's calibration. No recalibration is necessary unless it is time for a scheduled calibration. Refer to the Keysight 33210A 10 MHz Function/Arbitrary Waveform Generator Service Guide for further information about calibration.

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