RSA5BUP (Options 56 and 59)
RSA5100B Series Real-Time Signal Analyzers
Internal HD and Removable SSD
Instructions



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- 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 *General Safety Summary* located in the *RSA5100B Real-Time Signal Analyzer Service* manual (Tektronix part number 077-0903-XX) 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, 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, 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 describes the installation of the following upgrade options:

Option 56: Removable Solid State Drive

Option 59: Internal Hard Drive

Products

RSA5103B Series. All serial numbers.

RSA5106B Series. All serial numbers.

RSA5115B Series. All serial numbers.

RSA5126B Series. All serial numbers.

Option 56 kit parts list

Quantity	Part number	Description
1 ea	075-1056-XX	MANUAL, TECH: RSA5KB Option 56 and 59 INSTALLATION INSTRUCTIONS
1 ea	071-2191-XX	MANUAL, TECH; SVCPT-UPG; TEKTRONIX SUPPLEMENTAL INFORMATION SHEET FOR THE PEOPLES REPUBLIC OF CHINA; CHINA ROHS
2 ea	211-1050-XX	SCREW, MACHINE; 6-32 X 0.312 L, PNH, STEEL, ZINC FINISH, T15
4 ea	211-1081-XX	SCREW, MACHINE; M3 X 0.5 X 3.5MM, FLAT WAFER HD W/SERRATIONS STRESS RELIEVED, PHL, ZINC PLATED STEEL
1 ea	407-5337-XX	BRACKET, RHDD; SATA COMBO CABLE RETENTION
1 ea	407-5473-XX	BRACKET; HARD DRIVE 2.5 INCH REMOVABLE
1 ea	335-3314-XX	MARKER, ID, REMOVABLE HD
1 ea	850-0263-XX	DRIVE ASSEMBLY; REMOVABLE HARD DRIVE, PROGRAMMED, RSA5XXXB SERIES
1 ea	N/A	LABEL, MANUFACTURED; PRODUCT LABEL, SAFETY CONTROLLED

Option 59 kit parts list

Quantity	Part number	Description
1 ea	075-1056-XX	MANUAL, TECH: RSA5KB Option 56 and 59 INSTALLATION INSTRUCTIONS
1 ea	071-2191-XX	MANUAL, TECH; SVCPT-UPG; TEKTRONIX SUPPLEMENTAL INFORMATION SHEET FOR THE PEOPLES REPUBLIC OF CHINA; CHINA ROHS
1 ea	200-5324-XX	COVER; EMPTY DRIVE BAY
4 ea	210-1543-XX	SCREW, SHOULDER, SPECIAL; 6-32 (USE WITH VIBE ISOLATION GROMMETT)
4 ea	211-0510-XX	SCREW, MACHINE; 6-32 X 0.375, PNH, ZINC PLATED STEEL, T15
2 ea	211-0690-XX	SCREW, MACHINE; 6-32 X 0.875, PNH, BLACK ZINC PLATED STEEL, TORX & SLOT
4 ea	348-1835-XX	GROMMET; VIBRATION ISOLATION
1 ea	850-0264-XX	DRIVE ASSEMBLY; INTERNAL FIXED DRIVE, PROGRAMMED, RSA5XXXB SERIES
1 ea	N/A	LABEL, MANUFACTURED; PRODUCT LABEL, SAFETY CONTROLLED

Removing the installed drives

This section contains all the procedures to remove Option 56 (Removable Hard Disk Drive) or Option 59 (Internal Hard Disk Drive only) from your instrument. The section following this one describes the installation of the new drive(s).

Minimum tool and equipment list

The following tools are required to for installation of this kit. All tools are standard tools that are readily available.

Table 1: Tools required for installation

Item		
no.	Name	Description
1.	Screwdriver handle (magnetic)	Torque driver handle. Accepts 1/4-in. hex-head driver tips
2.	No. 2 Phillips or Pozidriv tip	Phillips or Pozidriv-driver tip for number 2 size screw heads
3.	P-1 Phillips tip	Phillips driver tip for P-1 size screw heads
4.	T-15 TORX tip	TORX driver tip for T-15 size screw heads
5.	T-20 TORX tip	TORX driver tip for T-20 size screw heads

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 *RSA5100B Series Real-Time Signal Analyzers Service Manual*, Tektronix part number 077-0903-XX.

Removing a removable hard disk drive (Option 56)



WARNING. To avoid electric shock, switch off the instrument power, then disconnect the power cord from the mains power. Failure to do so could result in injury or death.

If you are upgrading from Option 56 to Option 59, you need to remove the drive assembly from the instrument to begin the upgrade process. Perform the following steps to remove the removable hard disk.

- 1. Loosen the thumbscrews securing the drive to the front panel.
- **2.** Grasp the drive assembly by the thumbscrews and pull the drive assembly straight out of the instrument.
- **3.** Place the removed drive assembly in anti-static packaging and store it in a protected location for possible future use or discard the drive.

Removing the internal hard drive (Option 59)

NOTE. Right-side or left-side references in these instructions assume you are viewing the instrument from the front panel.



WARNING. To avoid electric shock, switch off the instrument power, then disconnect the power cord from the mains power. Failure to do so could result in injury or death.

If you are upgrading from Option 59 (internal hard drive) to Option 56, you have to remove the internal hard drive from your instrument.

- 1. Remove the power cord.
- 2. If it is installed, pull the front cover off the instrument.
- **3.** Remove the two T-15 Torx-head screws that secure the plastic carrying handle to the side of the instrument. (It is not necessary to remove the black metal handles.) (See Figure 1.)
- **4.** Remove four T15 Torx-head screws along each side that attach the top and bottom covers to the instrument, and two T20 screws near the front edge of the top cover (next to the folding handles).
- 5. Remove the top and bottom covers. Remove the top cover by pulling it straight back about 1 inch. Pull out on the sides of the top cover, flexing the sides slightly to clear the instrument chassis, and pull the top cover away from the instrument.
- **6.** Remove the eighteen T15 Torx-head screws that secure the top shield to the chassis and remove the shield.

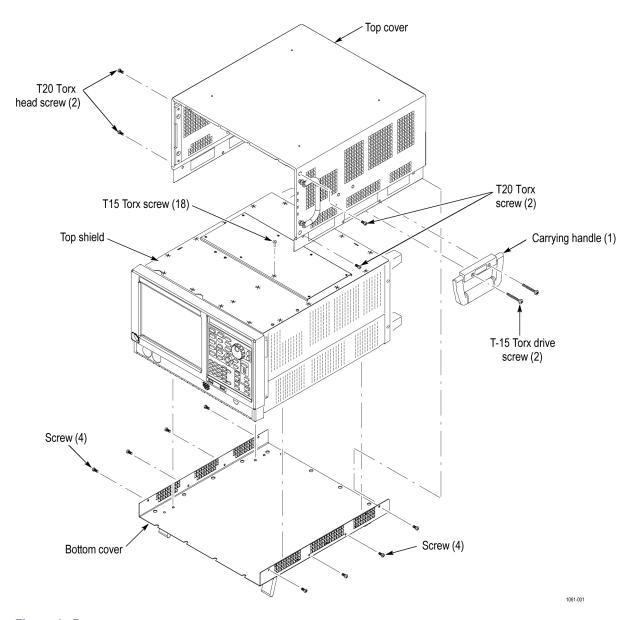
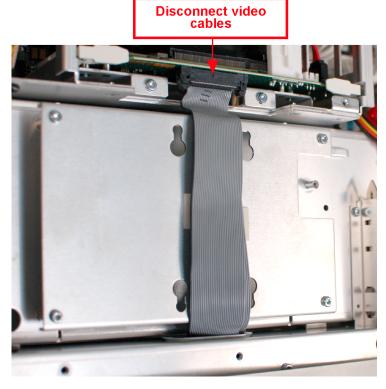


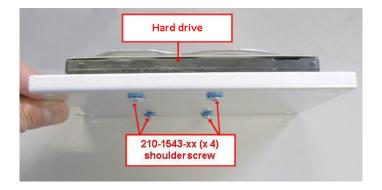
Figure 1: Remove covers

Removing the internal hard drive

1. Disconnect the two video cables from the PC carrier board. Move the cables out of the way.



- 2. Remove the four screws at the corners of the hard disk drive mounting plate that secure the mounting plate to the instrument.
- **3.** Lift the hard disk drive mounting plate out of the instrument. Disconnect the SATA cable from the hard disk drive.
- **4.** Remove the four screws that secure the hard disk drive to the mounting plate.



5. Place the removed hard drive in anti-static packaging and store it in a protected location for possible future use or discard the drive.

NOTE. If you discard or recycle the removed drive, be sure to follow your organization's security protocols to ensure the destruction of sensitive data.

6. Reinstall the hard disk drive mounting plate in the chassis.

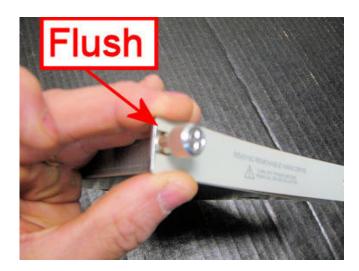
Installing new drive options

This sections describes how to install your new drive options.

Installing Option 56: Removable hard disk drive

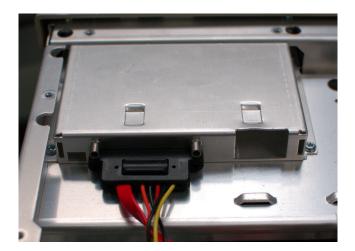
To perform the following procedure you must have already removed option 59 from your instrument. (See page 5, *Removing the internal hard drive (Option 59)*.)

- 1. Attach the removable hard drive to the removable hard disk drive bracket (part number 407-5473-XX) with four screws (part number 211-1081-XX) using a torque driver with a P1 tip. Tighten the screws to 4.0 in-lbs.
- 2. Attach the removable hard drive label to the removable hard drive bracket. Start by centering one end of the label and making it flush with the bracket. Make sure the label is correctly oriented with the bottom of the label aligned with the bottom of the bracket.

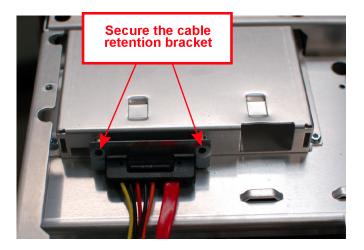


3. Slide the removable hard disk drive assembly into the drive opening and secure the hard drive with the two thumbscrews.

4. Connect the SATA and power cable connector to the connector on the removable hard drive.



5. Slide the SATA combo cable retention bracket (part number 407-5337-XX) over the cable and secure the retention bracket with two screws (part number 211-1050-XX) using a torque driver with a T15 tip. Tighten the screws to 4.0 in-lbs.



Reinstall top shield and cosmetic covers

- 1. Place the instrument on its bottom feet.
- **2.** Place the top shield on top of the instrument and reinstall the eighteen T15 Torx-head screws.
- **3.** Place the instrument on its rear feet, so the front panel is facing up and the top is toward you.
- **4.** Place the top cover over the top of the instrument and slide it toward the front panel. Make sure that the top cover wraps around the flanges on the rear panel on all three sides.

- 5. Reinstall the four T20 Torx-head screws (two on each side) near the front edge of the top cover (next to the folding handles) that secure the top cover to the instrument.
- **6.** Rotate the instrument so the bottom faces you.
- 7. Place the bottom cover on the instrument, with the flip feet towards the front.
- **8.** Align the four screw holes on each side in the top and bottom covers with the holes in the chassis, and install eight T15 Torx-head screws, four on each side. Torque these screws to 8.0 in/lb.
- **9.** Position the plastic carrying handle and its bracket on the right side of the instrument, and install the two T15 Torx-head screws that secure it in place. Torque these screws to 8.0 in/lb.

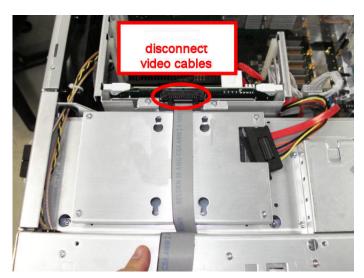
This completes the upgrade to Option 56.

Installing Option 59: Internal hard drive

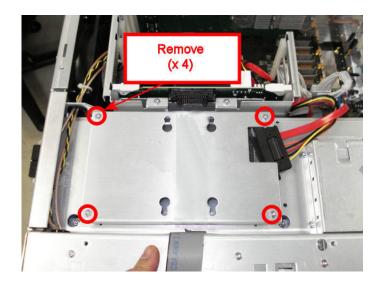
To perform the following procedure you must have already removed Option 56 from your instrument. (See page 4, *Removing a removable hard disk drive (Option 56)*.)

To install the internal hard drive:

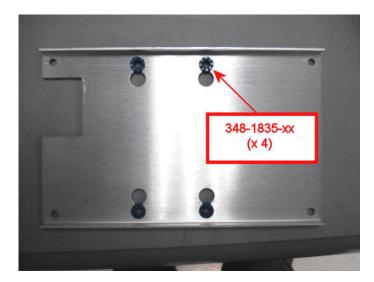
1. Disconnect the video cables from the PC Carrier board and fold them over the front of the instrument.



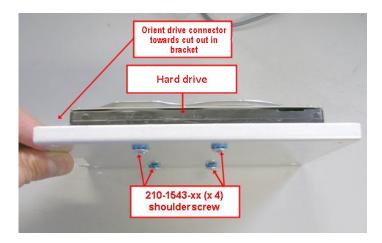
2. Remove the four screws that secure the HDD bracket to the chassis and remove the bracket.



3. Install four grommets (part number 348-1835-XX) on the HDD bracket as shown.



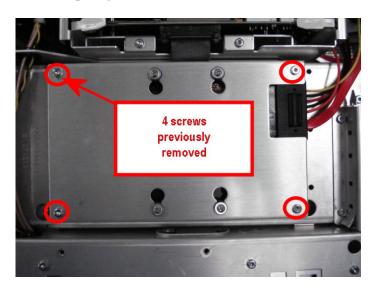
4. Place the drive assembly (part number 850-0264-XX) onto the HDD bracket so that the connector appears in the cutout in the HDD bracket. Secure the drive assembly to the HDD bracket with four screws (part number 210-1543-XX) using a torque drive with a P1 tip. Tighten the screws to 4.0 in-lbs.



5. Connect the HDD SATA cable to the drive assembly.



6. Place the drive assembly and HDD bracket on the chassis as shown. Secure the HDD bracket to the chassis with four screws using a torque driver with a T15 tip. Tighten these screws to 10 in/lb.



- 7. Reconnect the smaller video cable to the PC Carrier board.
- **8.** Reconnect the larger video cable to the PC Carrier board.

Reinstall top shield and cosmetic covers

- 1. Place the instrument on its bottom feet.
- 2. Place the top shield on top of the instrument and reinstall the eighteen T15 Torx-head screws.
- **3.** Place the instrument on its rear feet, so the front panel is facing up and the top is toward you.
- **4.** Place the top cover over the top of the instrument and slide it toward the front panel. Make sure that the top cover wraps around the flanges on the rear panel on all three sides.
- 5. Reinstall the four T20 Torx-head screws (two on each side) near the front edge of the top cover (next to the folding handles) that secure the top cover to the instrument.
- **6.** Rotate the instrument so the bottom faces you.
- 7. Place the bottom cover on the instrument, with the flip feet towards the front.
- **8.** Align the four screw holes on each side in the top and bottom covers with the holes in the chassis, and install eight T15 Torx-head screws, four on each side. Torque these screws to 8.0 in/lb.
- **9.** Position the plastic carrying handle and its bracket on the right side of the instrument, and install the two T15 Torx-head screws that secure it in place. Torque these screws to 8.0 in/lb.

This completes the upgrade to Option 59.

Attach labels

Please attach all labels provided in this kit on the instrument's rear panel.

Attach the product/option label

Place the new product label over the existing label on the rear panel.

Verify instrument software version

Tektronix recommends to update to the latest available application software for your instrument.

- 1. Select **Help > About** to check the software version.
- **2.** Use your Web browser to go to: www.tektronix.com/software.
- **3.** Search for your instrument's model number and follow the link to the software.
- **4.** If the installed software is older than that available, download the software.
- **5.** Follow the instructions on the Web page to install the software.
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