

Instructions Manual



**020-A046-50, 020-A047-50 and 020-A048-50
AWG410, AWG420 and AWG430
16M Words Waveform Memory (Option 01)
Upgrade Kit**

075-A006-50

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075A00650

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Kit Description

This kit includes parts and instructions to upgrade waveform memory of the AWG400 Series Arbitrary Waveform Generator for Option 01. It replaces the A60 4M words memory modules located on the AWG circuit board A52 with the A62 16M words memory modules (1 word = 16 bits).

If this kit has been installed, disregard these instructions and use the A62 memory modules as a direct replacement.

Instruments

AWG410
AWG420
AWG430

Minimum Tool and Equipment List

Tool	Part Number
Screwdriver handle	n/a
#2 Phillips tip	n/a

Kit Parts List

Kit number	Ckt number	Quantity	Part number	Description
020-A046-50 (for AWG410)	A62	3 ea	671-B134-00	16M words memory modules for CH 1
		1 ea	075-A006-50	Instruction sheet
020-A047-50 (for AWG420)	A62	6 ea	671-B134-00	16M words memory modules for CH 1 and CH 2
		1 ea	075-A006-50	Instruction sheet
020-A048-50 (for AWG430)	A62	9 ea	671-B134-00	16M words memory modules for CH 1, CH 2, and CH 3
		1 ea	075-A006-50	Instruction sheet

Service Safety Summary



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 the General Safety Summary in the appropriate AWG400 series manual before performing any service.*

Do Not Service Alone

Do not perform internal service on this product unless another person capable of rendering first aid and resuscitation is present.

Avoid Exposed Circuitry

To avoid injury, remove jewelry such as rings, watches, and other metallic objects. Do not touch exposed connections and components when power is present.

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.

Installation Instructions

These instructions assume a certain familiarity with the instrument. If further details are required for disassembly or assembly, refer to the AWG400 Series Service Manual. For assistance to install this kit, please call your nearest Tektronix, Inc., Service Center or Tektronix Factory Service.



CAUTION. *Many components within this instrument are extremely susceptible to static-discharge damage. Service the instrument only in a static-free environment. Observe standard handling precautions for static-sensitive devices while installing this kit. Always wear a grounded wrist and foot strap while installing this kit.*

The kit installation involves these tasks:

1. Cabinet removal
2. Memory module replacement
3. Reassembly

The following provides the details.

Cabinet Removal

You will need a screwdriver with a size Phillips #2 tip. See Figure 1 as a guide.

1. Make sure that the instrument is turned off.
2. Make sure that the instrument's front cover (optional accessory) is installed; if it is not, install it by snapping its edges over the trim ring.
3. Orient the instrument so its face is down with the front cover on the work surface and its bottom is facing you.
4. Unplug the line cord from its receptacle at the rear cover.
5. Remove the six screws securing the two feet at the rear of the cabinet.
6. Remove the two screws securing the cabinet to the main chassis.
7. Grasp the left and right edges at the rear of the cabinet.
8. Pull upward to slide the cabinet off the instrument. Take care not to bind or snag the cabinet on the instrument's internal cabling as you remove it.

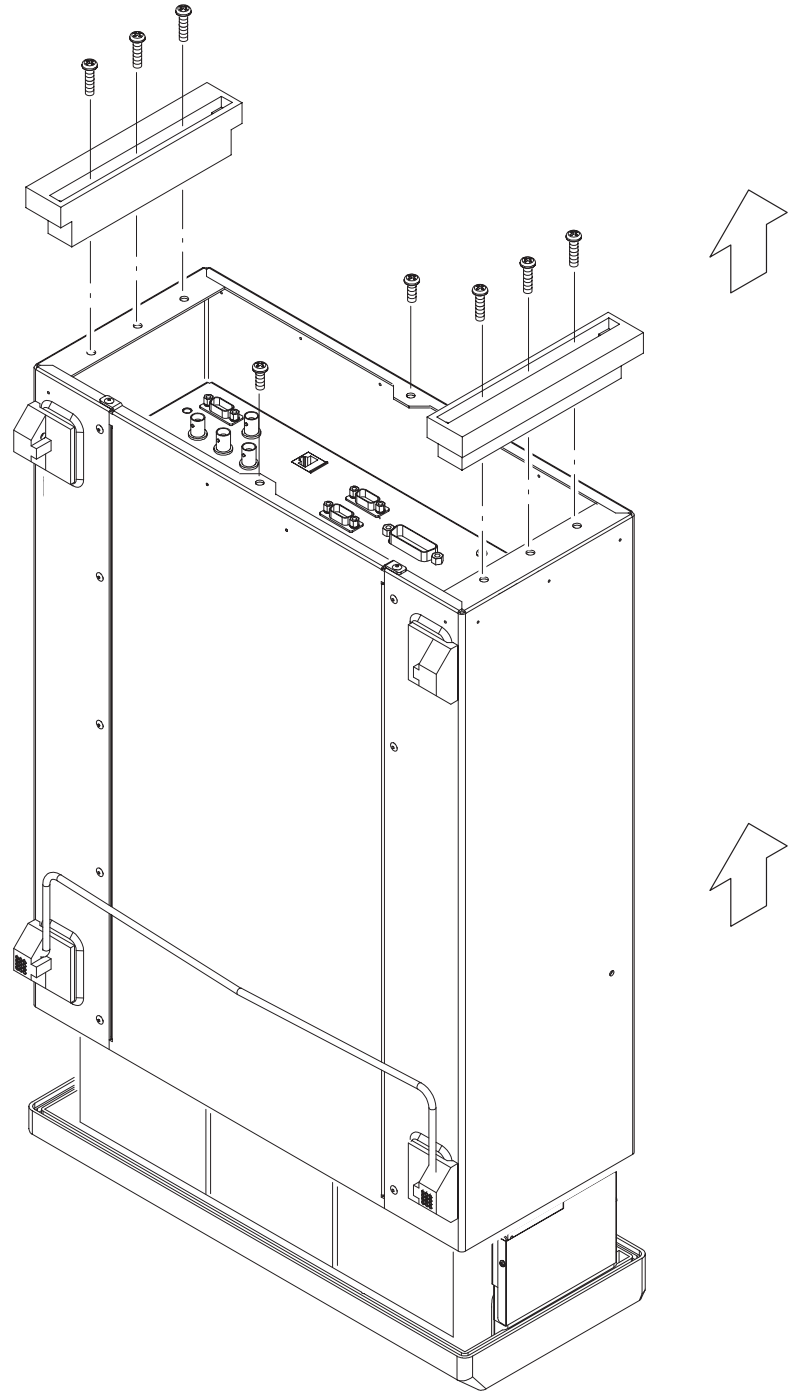


Figure 1: Cabinet removal

Memory Module Replacement

Replace the A60 4M words memory modules with the A62 16M words modules. See Figure 2 as a guide. Each channel has three memory slots. The number of memory cards is dependent on the AWG400 models:

AWG410 3 memory cards for CH 1
AWG420 6 memory cards for CH 1 and CH 2
AWG430 9 memory cards for CH 1, CH 2, and CH 3

No tools are needed for this procedure.

1. Orient the instrument so its top is down on the work surface and its bottom is facing you.
2. Remove the old memory cards by spreading the pawls at each end of the card connector securing the card in place.
3. Insert the new memory card in each connector, and tilt the card down until it locks in place. When properly inserted, a pawl on each end of the connector latches around each end of the card to lock it in place.

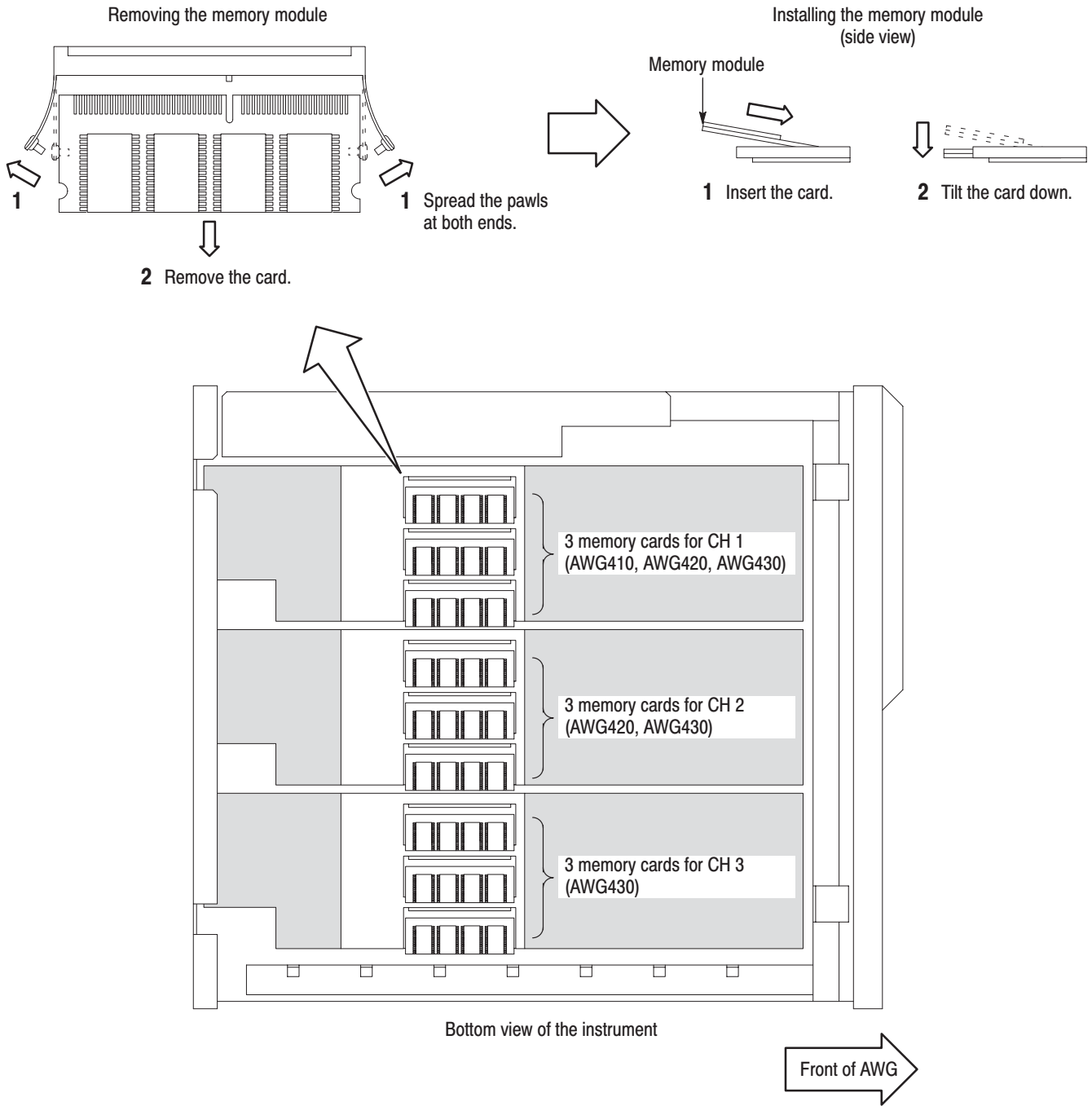


Figure 2: Memory module removal and installation

Reassembly

Reinstall the cabinet and check the instrument status.

1. Do the procedure *Cabinet Removal* on page 4 in reverse order to reinstall the cabinet.
2. Connect the power cord to the instrument.
3. Power-on the instrument.
4. Press the **UTILITY** front panel button and then the **Status** bottom menu button.
5. Make sure that the Options field adds “01” on the display.

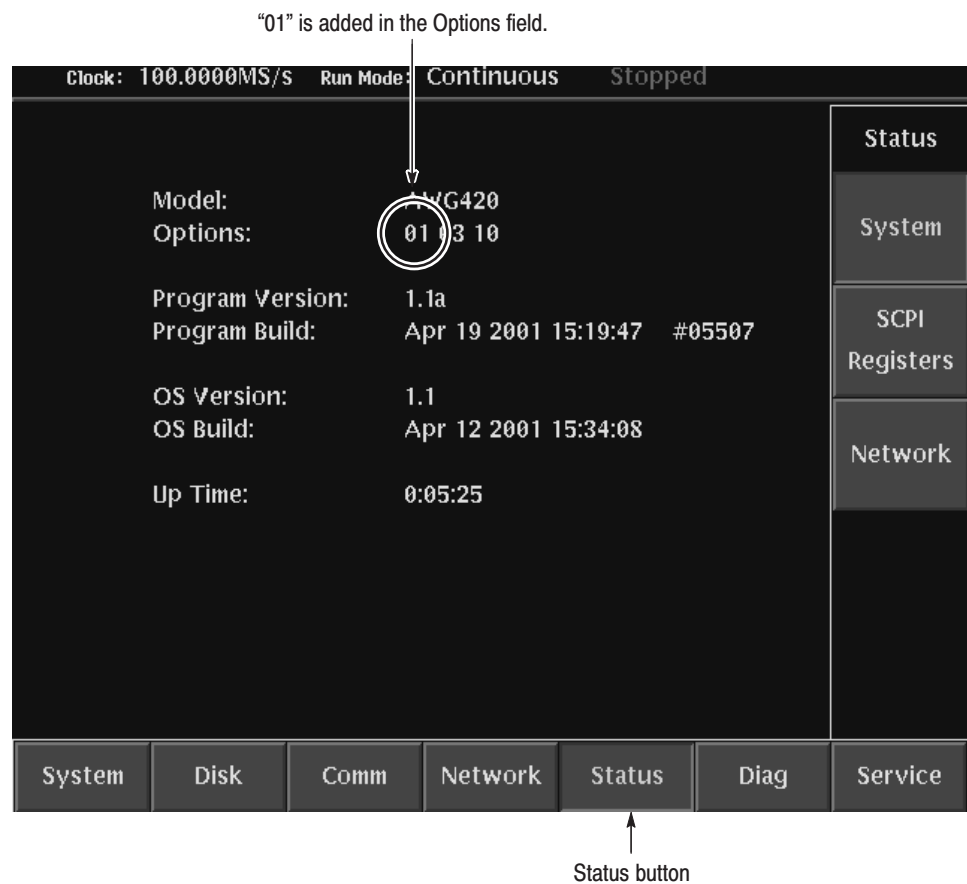


Figure 3: Status display