
TEK PRODUCT
MODIFICATION

Part No. 045-0204-02
Product Group 46

M75861, M78167
M79019

045 KIT

Fan Replacement

2245A	B021238 - B032454
2246A	B020327 - Up
2246 MOD A	B111719 - B123563
2246 1Y	B710986 - B716415
2246 2Y/9X	B111719 - B123563
2247A	B020618 - B031437
2252	B010100 - B022225

A new fan, Tektronix part number 119-5039-00, replaces B25, Tektronix part number 119-3564-00, which is no longer available. Shorter mounting screws have been provided to mount the new fan.

NOTE

If the serial number of the instrument is not included in those listed above, or if this kit has been installed previously, disregard the instructions and use Tektronix part number 119-5039-00 as a direct replacement for the fan, B25.

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Kit Parts List

Ckt Number	Quantity	Part Number	Description
B25	1 ea.	119-5039-00	Fan, tube axial: 12 VDC, 2.3 W, 80 mm
	4 ea.	213-0882-00	Screw, thread forming: 6-32 × 0.437 inch, pnh
	1 ea.	-----	Label, kit identification

Instructions

WARNING

Dangerous shock hazards may be exposed when the instrument cabinet is removed. Before proceeding, ensure the POWER switch is in the OFF position, then disconnect the instrument from the power source. Installation of this kit should only be attempted by qualified service personnel.

CAUTION

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

NOTE

These instructions assume a certain familiarity with the instrument. If further details are required for disassembly or assembly, refer to the Maintenance section in the service manual.

Cabinet Removal

- Step 1:** Disconnect the power cord from its rear-panel connector.
- Step 2:** Install the protective front cover over the front panel and set the instrument face down on a clean, flat surface.
- Step 3:** Remove the screw from the right side near the rear of the cabinet.
- Step 4:** Remove the four screws used to secure the plastic rear cover and set the cover aside.

- Step 5:** Slide the cabinet housing up and off the instrument. Set the instrument down flat on the work surface.

WARNING

Potentially dangerous voltages exist at several points throughout this instrument. If it is operated with the cabinet removed, do not touch exposed connections or components. Before replacing parts or cleaning, disconnect the ac power source from the instrument and verify that the line-rectifier filter capacitors have discharged. Also, check the low voltages at the power supply/main board interface connector (J1204). If any of the supply-voltage or line-voltage filter capacitors remain charged for more than 20 seconds, discharge them to ground through a 1 k Ω , 5 or 6 watt resistor.

Processor Board Removal

- Step 1:** On 2252 instruments, disconnect the three-wire ribbon cable from J2304 (located along the left edge of the Processor board).
- Step 2:** On 2247A and 2252 instruments, disconnect the External Counter/Timer Timebase Input cable from J1902 (located along the rear edge of the Processor board).

NOTE

To unplug the ribbon cable from connector J2701 in 2252 instruments, insert a thin-shafted, flat-bladed screwdriver into one of two outside slots of the ribbon-cable holder. Pull one side of the cable holder at a time until the pins are free from the connector.

- Step 3:** On 2252 instruments, unplug the ribbon cable from J2701 (located along the rear edge of the Processor board).
- Step 4:** On all instruments except the 2252, disconnect the ribbon cable from J2105 on the Potentiometer board.
- Step 5:** Disconnect the remaining ribbon cables from the Processor board. To aid the release of the ribbon-cable pins from the connector, slide a thin-shafted, flat-bladed screwdriver between the ribbon cable (near the connector) and the etched-circuit board and pry gently upward.
- Step 6:** Remove the six screws used to mount the Processor board, (one in each corner and two in the middle) and set the board aside.

Fan Replacement

- Step 1:** On 2252 instruments, remove the screw used to secure the Connector board and housing to the rear panel. Slide the housing to the right to release the housing from the rear panel and set the Connector board and housing aside.
- Step 2:** Remove the eight screws used to secure the metal shield to the top of the power supply chassis and set the shield aside.
- Step 3:** On 2252 instruments, remove the screw used to secure the DAC board bracket to the bottom-left side of the main chassis near the rear of the instrument.
- Step 4:** Carefully position the DAC board assembly to gain access to the two screws used to secure the fan to the bottom-left side of the power supply chassis. Remove the two screws.
- Step 5:** Note the orientation of the two-wire fan cable, then disconnect the cable from J2205 on the Power Supply board.
- Step 6:** Remove the two screws used to secure the top of the fan to the power supply chassis and remove the fan from the instrument.
- Step 7:** Using the four 6-32 × 0.437 inch screws provided in this kit, install the new fan by performing the reverse of the procedure described in steps 1 through 6.

Assembly and Performance Verification

NOTE

To facilitate installation of the Processor board, connect the two ribbon cables to the right-rear corner of the Processor board before installing the mounting screws.

- Step 1:** Install the Processor board by performing the reverse of the procedure described in the Processor Board Removal section of this kit.
- Step 2:** Refer to the Performance Check Procedure in the service manual and verify instrument operation and accuracy.
- Step 3:** Install the instrument cabinet by performing the reverse of the procedure described in the Cabinet Removal section of this kit.
- Step 4:** Remove the protective backing from the kit identification label, provided in this kit, and place the label on a clean, flat surface of the rear panel near the serial number tag.
- Step 5:** For future reference, update the Replaceable Electrical Parts list in the service manual with the information provided in the parts list of this kit.