



# product modification

Scan by Zenith

050-2241-00

M62235

## Q2201. Q2209. Q2210. OR Q2206 REPLACEMENT

For the following TEKTRONIX<sup>®</sup> instruments:

2245 Serial Numbers B010100 - B011999  
2246 Serial Numbers B010100 - B040100

Silicon control rectifier, pn 151-0565-00, replaces Q2206 (pn 151-0506-01). Use of the new SCR requires replacement of the FET, Q2201, which changes from pn 151-1197-00 to pn 151-1214-00. Because failure of the FET or SCR may cause excess stress to the inverter transistors, Q2209 and Q2210 should also be replaced.

### NOTE

If the instrument serial number is greater than those listed above or if this kit has been previously installed, disregard the instructions and use the new SCR and FET as direct replacements.

## CAUTION

### STATIC SENSITIVE DEVICES

Static discharge can damage any semiconductor component in this instrument. Static voltages of 1kV to 30kV are common in unprotected environments.

#### TO AVOID DAMAGE, OBSERVE THE FOLLOWING:

1. Minimize handling of static-sensitive components.
2. Transport and store static-sensitive components or assemblies in their original containers, on a metal rail, or on conductive foam. Label any package that contains static-sensitive assemblies or components.
3. Discharge the static voltage from your body by wearing a wrist-strap while handling these components. Servicing static-sensitive assemblies or components should be performed only at a static-free work station by qualified service personnel.
4. Nothing capable of generating or holding a static charge should be allowed on the work station surface.
5. Keep the component leads shorted together whenever possible.
6. Pick up components by the body, never by the leads.
7. Do not slide the components over any surface.
8. Avoid handling components in areas that have a floor or work-surface covering capable of retaining a static-charge.
9. Use a soldering iron that is connected to earth ground.
10. Use only approved, anti-static type, desoldering tools.

## KIT PARTS LIST:

Ckt. Number	Quantity	Part Number	Description
W2202	1 ea	131-0566-00	Bus. cond. dummy resistor
Q2206	1 ea	151-0565-00	Transistor, Si, thyristor, SCR
Q2209	2 ea	151-0476-03	Transistor, Si, inverter
Q2210			
Q2201	1 ea	151-1214-00	Transistor, Si, FET
VR2204	1 ea	307-0456-00	Resistor, var sensitive, 250V ac, 15W
	1 ea	-----	Label, 050-kit

## INSTRUCTIONS:

**WARNING**

*Dangerous shock hazards may be exposed when the instrument covers are removed. Before proceeding, ensure the mainframe power switch is in the off position then disconnect the instrument from the power source. Disassembly should only be attempted by qualified service personnel.*

- ( ) 1. Remove the instrument wrap-around cabinet.
- ( ) 2. Remove the Top Processor circuit board and the metal shield beneath it.
- ( ) 3. Replace Q2206, Q2209, Q2210, and Q2201 with the transistors included in the kit.
- ( ) 4. Replace R2202 with the dummy resistor (W2202) included in the kit.
- ( ) 5. Replace VR2204 with the voltage sensitive resistor included in the kit.
- ( ) 6. Re-install the Top Processor circuit and metal shield.
- ( ) 7. Refer to the Instruction Manual and verify performance.
- ( ) 8. Remove the protective backing from the 050-kit label (included in the kit) and place it on a clean, dry area near the serial number tag.
- ( ) 9. Correct the electrical parts list of the Instruction Manual with the information included in the kit parts list.

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