

**Performance Check and Calibration Procedures
2445/2465 Option 10 Service**

af. Enter the command **CH2 POS:0.0**.

ag. CHECK—The oscilloscope trace is within 0.5 division of the center horizontal graticule line.

3. Verify GPIB Trace Separation

a. Enter the **VMOde CH2:OFF,INVert:OFF,CH1:ON; CH1 POS:3.0** commands.

b. Enter the command **HMOde ALTernate**.

c. Enter the **HORizontal ASEcdiv:1E-3,BSEcdiv:.5E-3, TRACEsep:-4.0** command.

d. VERIFY—There are two traces on the crt.

e. Disconnect the test setup.

CALIBRATION PROCEDURE

INTRODUCTION

The "Calibration Procedure" is used to restore optimum performance or return the option to conformance with its "Performance Requirements" as listed in the "Specification" (Section 1). The GPIB option should be calibrated only when the vertical section of the standard instrument is known to meet its "Performance Requirements" as stated in the "Specification" section of its manual. Performing this procedure while the temperature is drifting or before the standard instrument is calibrated may cause erroneous calibration settings.

The four Vertical POSITION controls and the TRACE SEP control are digitized by the GPIB Option. The option can accurately control them only after they are calibrated. They are automatically calibrated by GPIB calibration routine 11 of the Diagnostic Monitor.

PREPARATION

Remove the wrap-around cabinet from the instrument as described in the "Maintenance" section of the standard instrument Service manual. Then set the CAL/NO CAL jumper P501 in the standard instrument to the CAL position (between pins 1 and 2).

Turn the oscilloscope on by pressing in the POWER button. Check that it enters its normal operating mode and that no error message is displayed on the crt. If an error message is present, have the instrument repaired or calibrated by a qualified service technician before performing this procedure.

Before starting this procedure, remove any signal sources from the CH 3 and CH 4 input connectors.

CALIBRATE VERTICAL POSITIONING

a. Set the CH 1 and CH 2 VOLTS/DIV VAR controls to their calibrated detents.

b. Push the TRIGGER SLOPE switch while holding in both the ΔV and Δt switches to access the Diagnostic Menu.

NOTE

If the calibration feature is disabled (the CAL/NO CAL jumper is in the NO CAL position), CAL messages will not appear in the Diagnostic Menu of the crt readout.

c. Repeatedly push the TRIGGER MODE switch until the "BU CAL F1" message appears in the Diagnostic Menu of the crt readout.

d. Start the calibration routine by pushing up on the TRIGGER COUPLING switch.

e. Repeatedly push the TRIGGER MODE switch up until the "GP CAL 11" message appears in the Diagnostic Menu of the crt readout.

f. Start the calibration routine by pushing up on the TRIGGER COUPLING switch.

g. When the routine ends (after about one minute), exit the Diagnostic Menu by pushing the A/B TRIG switch.

h. Return the CAL/NO CAL jumper to its NO CAL position and reinstall the instrument cabinet.