

TEKTRONIX®

This insert is provided as a supplement to the instruction manual furnished with this modified instrument. The information given in this insert supersedes that given in the manual.

This insert material Copyright © 1975 by Tektronix, Inc., Beaverton, Oregon. Printed in the United States of America. All rights reserved. Contents of this insert may not be reproduced in any form without permission of the copyright owner.

607/605

MOD WF

MODIFICATION INSERT

607
MOD WF

This manual insert describes the special features of MOD WF as it applies to the Tektronix 607 Storage Monitor. MOD WF replaces the standard CRT with a special 10 x 10 division internal CRT graticule, having the same characteristics as the standard; changes the implosion shield from clear to blue-tinted; shortens the AC power cord to 12 inches; deletes the POWER/PULL ON knob and Tektronix' identification from the lower panel; deletes the control-panel door and combines the recessed control panel and lower panel as a single flush panel; and adds -X, -Y, and -Z inputs via rear-panel REMOTE PROGRAM connector J20.

The following input connections have been added via J20.

| <u>Contact</u> | <u>Function</u> | <u>Connection</u> |
|----------------|-----------------|--------------------------------|
| 11 | -Y Input | Vert Ampl, inverting input |
| 12 | -X Gnd | Horiz Ampl common* |
| 13 | -Z Input | Z-Axis, inverting input |
| 23 | -Y Gnd | Vert Ampl common* |
| 24 | -X Input | Horiz Ampl, inverting input |
| 25 | -Z Gnd | Z-Axis common (chassis ground) |

* Normally isolated by 47 Ω from chassis ground.

J20 Interconnections

Differential Operation. Performance characteristics for differential input operation are the same via J20 as via the standard BNC connectors. NOTE: The grounding caps must be removed from J300, J500 and J650 to permit differential or -input operation.

Compatibility. The J20 connections are unique to MOD WF, and are not compatible with fixtures and cables prepared for use with 607 MOD 818B and similarly modified monitors.

X and Y Gain. Gains of the X and Y amplifiers are initially set for Y 125 mV/div; X 133 mV/div, to facilitate X-Y phase checking.

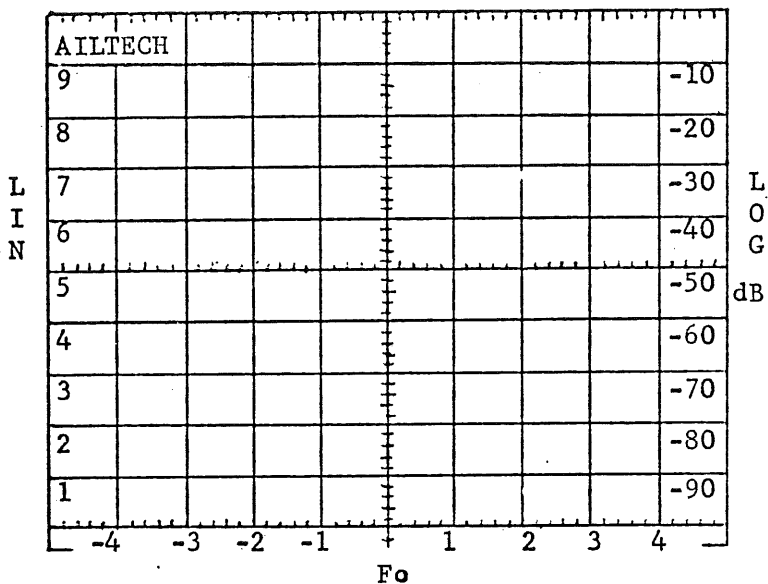
NOTE

MOD WF is compatible with standard catalog option 3 (less handle and feet).
Option 1 (internal 8 x 10 graticule) is inapplicable, and Option 4 (added time base) is not compatible with the modified control panel.

ADJUSTMENTS

1. Adjust according to the procedure outlined in the Instruction Manual.
2. Check the X-Y Phase Difference: Performance Check and Adjustment section of the manual.
 - a. Remove the sweep signal and apply a 1 volt sine-wave signal to both the +Y and +X inputs. Adjust the X-Gain, R215, for 7.5 horizontal divisions. Adjust the Y-Gain, R415, for 8 vertical divisions. Adjust the sine-wave generator and positioning controls so that the display is a diagonal line running from the lower left-hand corner of the graticule display to the upper right-hand corner of the graticule display. Set the sine-wave generator frequency to 500 kHz.
 - b. CHECK -- Any opening of the loop indicates a phase shift. The vertical height of the opening at the center of the graticule should not exceed 0.1 division. If necessary, slightly adjust C470 to reduce phase shift. This adjustment will affect frequency response. If adjustment is necessary, repeat the manual steps to obtain minimum phase shift with best frequency response.
 - c. ADJUST -- R215, X-Gain, for a horizontal display of 10 divisions and R415, Y-Gain, for a vertical display of 10 divisions.
 - d. Remove the sine-wave signal from the X and Y inputs.
3. Apply a dc voltage source to pin 4 of J20 (-Z-Axis input) and vary the voltage between 0 and -2 volts. With the voltage set to -1 volt, observe the displayed signal. Vary the voltage source between 0 and -1 volt; the displayed signal should vary from off to full brightness.

607
MOD WF



Internal graticule, special pattern 9.60. Horizontal major divisions are 0.86 cm; Vertical divisions are 0.65 cm.

PARTS LIST

Electrical

Change:

V100 037-4117-00 1 ELECTRON TUBE, CRT, T7420-401-9.60

Mechanical

Add:

030-0967-02 1 SHAFT, extension
 034-0759-00 1 ID LABEL
 129-0299-00 3 SPACER
 131-0890-00 2 CABLE LOCK
 358-0378-01 4 PANEL BUSHING

Change:

030-0889-03 1 SHAFT, extension, push on
 034-0709-00 1 FRONT PANEL
 034-0713-00 1 REAR PANEL
 200-1667-00 1 COVER, 25-pin connector
 337-1674-00 1 SHIELD, electron tube, CRT, blue-tinted
 366-1540-00 2 KNOB
 036-3125-00 1 KNOB
 366-0261-01 2 KNOB

Delete:

200-1282-00 1 ACCESS DOOR
 386-2067-00 1 SUBPANEL