

#### 7.1.4.2 Performance Verification Procedure

The Performance Verification Procedure is a very quick way to check most of the ScopeMeter's specifications. It is based on the specifications listed in Chapter 2 of this Service Manual. If the instrument fails of any of these tests, Calibration Adjustments (see chapter 5) and/or repair (see chapter 7) is necessary. The complete Performance Verification Procedure is described in chapter 4.

### 7.1.5 Troubleshooting

#### 7.1.5.1 Trouble shooting hints

##### OPENING THE SCOPEMETER:

To troubleshoot the ScopeMeter, open the instrument as described in subsection 6.2.2 "Opening the ScopeMeter" of chapter 6 "DISASSEMBLING THE SCOPEMETER".

##### TEST POINT AND COMPONENTS LOCATION:

Added with the new A1 PCB layouts figure 10a.1 and the circuit diagrams figure 10a.2 are location reference lists for fast location of the test points and the components.

##### CONNECTING THE GROUND (ZERO) LOGIC 0 REFERENCE:

While performing measurements, it is possible to use the metal shielding as zero reference. It is also possible to install the metal screws, as is described in section 5.6.1 "Hardware SCOPE Calibration Adjustments". You can use one of the screws as a zero reference: refer to figure 5.2. The new A1 provides a ground alligator clip connection in the lower left corner ( $\infty$ ).

##### LOGIC 1 LEVEL:

The logic one level is +5V.

### 7.1.6 Digital A1 PCB Troubleshooting

#### 7.1.6.1 Powering the ScopeMeter

Power the ScopeMeter with the Power Adapter/Battery Charger PM8907.

#### 7.1.6.2 Kernel Test

Start with the Kernel Test if the Scopemeter does not function at all (no display, no beep at power on). With the Kernel Test the microprocessor and the transmitter/receiver circuit of the optical interface can be tested.

*NOTE: If loading the ScopeMeter FlashROM fails, it is possible to get a ScopeMeter which is not functioning. For example: if the operating system is corrupted, it is not possible to operate the ScopeMeter normally. In this case you can reload the operating software as follows:*

- *ground test point TP202, and turn on the ScopeMeter*
- *load the operating software into the FlashROMs. For this action you need special software: contact your nearest Fluke Service Center.*
- *release the ground from TP202 and perform a MASTER RESET (hold down the LCD key and turn ScopeMeter on).*

Proceed as follows to start the kernel test:

1. Ground TP202 on the digital A1 PCB.
2. Power the ScopeMeter with the Power Adapter/Battery Charger PM8907.
3. Turn on the ScopeMeter.