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 PCB layouts figures 10.1, 10.4, and 10.5 and the circuit diagrams figures 10.2, 10.3, 10,6, 10.7, and 10.8 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.

LOGIC 1 LEVEL:
The logic one level is +5V.

7.1.6 Digital A1 PCB Troubleshooting

First remove the digital A1 PCB as described in section 6.2.4 "Removing the digital PCB".

7.1.6.1 Powering the ScopeMeter

Power the ScopeMeter with the powerAdapter/Battery Charger PM8907.

7.1.6.2 Kernel Test

The Kernel tests the Address/Data outputs from the microprocessor (D1201), the interface transmitter and receiver circuits of the optical interface, and the Random Access Memories (RAM). The test results are measured with an oscilloscope.

NOTE: If loading the ScopeMeters FlashROMs fails, it is possible to get a ScopeMeter which is not functioning. For example: if the operating system of the ScopeMeter is corrupted, it is not possible to operate the instrument normally. In this case you should also use the following procedure to establish communication with the ScopeMeter. When communication is established, you can reload the operating software into the FlashROMs. (For this action you need special software: contact your nearest Fluke/Philips Service Center.)

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

2. Ground testpoint TP216, turn on the ScopeMeter and release the ground (from testpoint TP216).