



TELEDYNE INSTRUMENTS

Advanced Pollution Instrumentation

A Teledyne Technologies Company
9480 Carroll Park Drive, San Diego, CA 92121-5201
Phone (858) 657-9800 Fax: (858) 657-9818 Toll Free 1800 324-5190
E-mail: api-customerservice@teledyne.com <http://www.teledyne-api.com>

Service Note

97-010 Rev B
2 May, 2007

M101AS PROM BUG

SCOPE: To correct Prom Bug in M101AS

TOOLS: #2 Phillips Screwdriver
Wide Flat blade Screwdriver

BACKGROUND:

The M101AS is designed to allow the user to display continuous H₂S, continuous SO₂, or switching H₂S and SO₂ based on user parameters. The H₂S and SO₂ calibrations maintain separate slopes and offsets. API has discovered that in some software revisions, specifically A.6 and possibly earlier revisions, the analyzer will display the SO₂ "STRAY LIGHT" value when in H₂S mode. This does not affect the operation or data capture abilities of the analyzer. As the correct value for stray light is used internally, it is simply a display problem.

If you have A.6 software or older and believe you may be experiencing this problem, contact API and we will tell you how to test for it.

PROCEDURE:

1. Remove power from the analyzer.
2. Remove the analyzer cover.
3. Locate the V/F and CPU card assembly. The cards are standing up in the motherboard and on the right they connect to a common backplane.
4. Rotate the plastic bar across the V/F and CPU until it is not blocking access to the cards.
5. Use the flat blade screwdriver to loosen the captive screw which bolts the backplane into the motherboard.
6. Gently pull up on the V/F and CPU assembly until it is out of the motherboard connector.
7. Rotate the V/F and CPU assembly toward you until you can access the CPU.
8. On the CPU you will see a 28 pin I.C. with a label which shows the rev of software currently installed. Pry this chip out of the socket with the flat blade screwdriver, paying attention to which direction pin 1 is facing (away from the backplane).
9. Insert the new software I.C. into the CPU socket, being careful not to bend any pins. Ensure that pin 1 of the I.C. is pointing away from the backplane connector.
10. Assembly in the reverse order of disassembly.
11. Apply power to the analyzer and allow 1 hour for warm up then re-calibrate.