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

96-002 Rev B
2 May, 2007

REPLACEMENT OF THE PRESSURE SENSOR IN THE FLOW SENSOR ASSEMBLY

Subject: **Necessary information on how to replace the pressure sensor in flow sensor board (API part number 00402).**

Tools: **Philips head screwdriver, 25W soldering iron, solder removal tool, solder, <u>a pair of soldering tweezers</u>**

Procedure:

1. **Remove the flow sensor board from the unit. Be careful disconnecting the tubing from the flow sensor and the pressure sensor.**
2. **Desolder the pressure sensor terminals.**
3. **Loosen the screws attaching the pressure sensor to the board.**
4. **Carefully remove the pressure sensor from the board. Make sure the solder pads are not damaged.**
5. **Install a new pressure sensor into the board.**
6. **Install the screws attaching the pressure to the board. Please do it before soldering the terminals.**
7. **Solder the terminals.**
CAUTION: MAKE SURE YOU USE SOLDERING TWEEZERS AS A   HEAT SINK. FAILURE TO DO IT WILL CAUSE THE DAMAGE TO THE FLOW SENSOR.
8. **Clean the board, attach the tubing to the flow sensor and pressure sensor.**
9. **Install the board into the unit.**
10. **Leak check the analyzer.**
11. **Turn the power on.**
12. **Check the voltage on TP1 (if the pressure sensor S1 was replaced) or TP2 (if the pressure sensor S2 was replaced) flow sensor board for 8.00 ± 0.10 Vdc.**
13. **Check the front panel. If the front panel pressure reading is slightly different from the measured pressure, readjust R2 or R1 on the flow sensor board, to achieve correct pressure reading.**