



06-002

14 March, 2006

## **Retrofitting an "E" series SOx analyzer from UV driver to a UV transformer**

### **I. PURPOSE:**

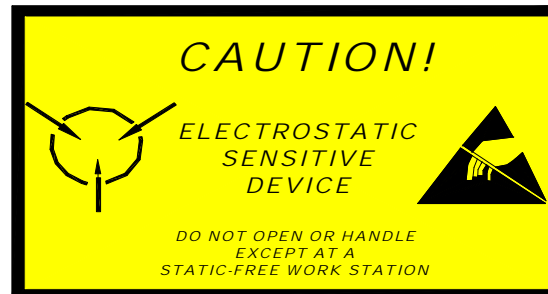
This service notes goes through how to replace the UV driver board in an "E" series SOx analyzer to a UV transformer.

### **II. TOOLS:**

#2 Phillips Head screwdriver

### **III. PARTS:**

KIT000239



The electronics used in T-API analyzers are sensitive to Electrostatic Discharge (ESD). When working on any T-API device, please ensure that you are properly grounded prior to handling or touching any electronic circuitry in the analyzers! For more information on how to protect sensitive components from ESD during handling, please contact T-API customer service and ask for the ESD Service note number 03-022A.

### **IV. PROCEDURE:**

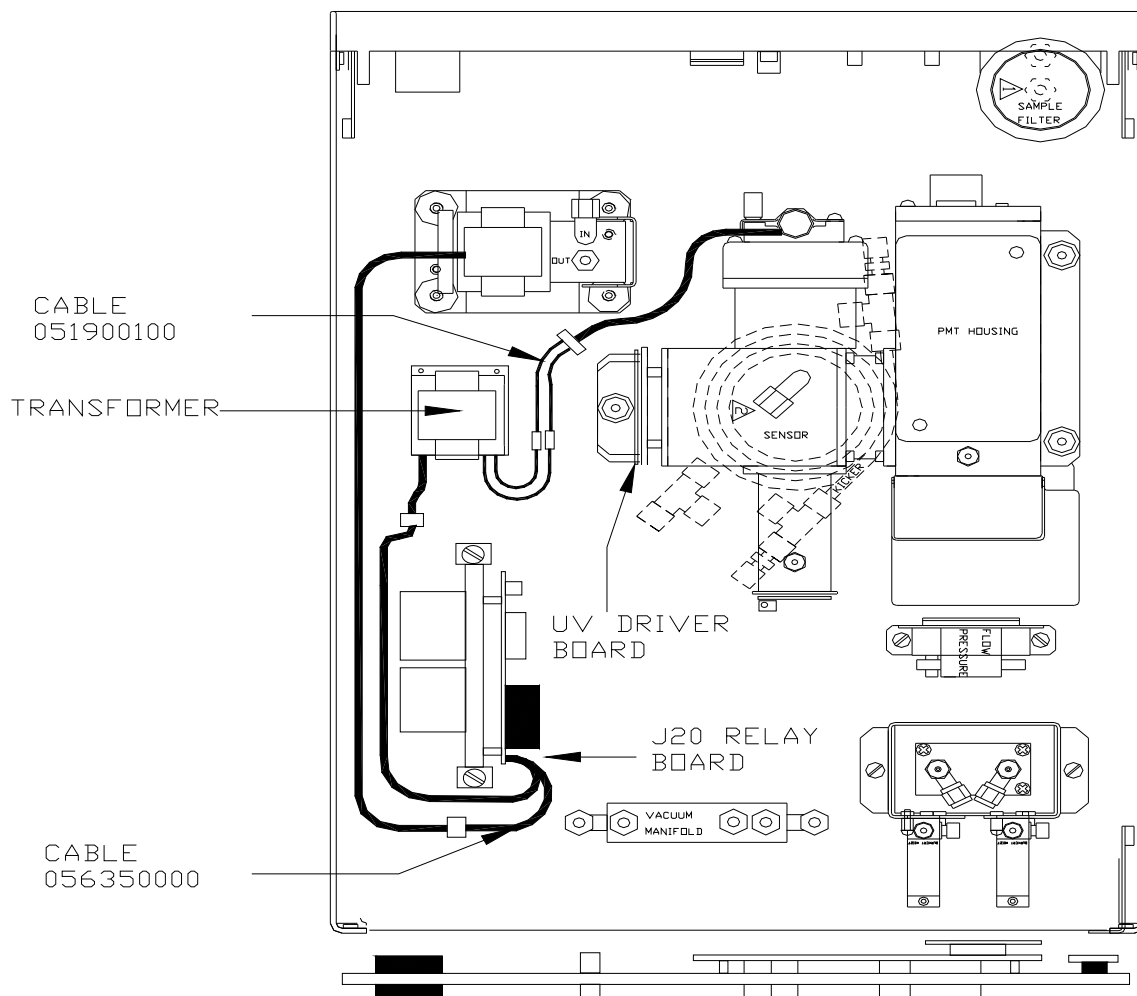
1. Turn off power to the analyzer and remove the power cable from the back of the analyzer. Remove the top cover of the analyzer.
2. Locate the UV lamp driver board on the reaction cell (See Figure 1). Disconnect the cables going to P1 and P2 of the UV lamp driver board. The board can either be left in the analyzer or removed and placed into an ESD storage container.
3. Take the UV transformer, 004840000 provided in the kit, and place it in the analyzer as shown in Figure 1. Make sure the side with the wires is facing the back of the analyzer.
4. Use the 4 screws (SN-11) and install them from the bottom of the analyzer into the 4 tapped holes of the transformer. Securing it down tightly.

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5. Disconnect the pump from J20 of the relay board. Take cable 056350000 and plug it into J20 of the relay board. Take the cable from the pump and plug it into the other side of 056350000. Take the small 2 pin connector of cable 056350000 and run it near the transformer.
6. Take the two pin connector of the transformer and connect it to the two pin connector of cable 056350000. Take the two red wires and connect them to cable 051900100. There is no polarity for these connectors so you can hook them up in either direction. Take the other end of cable 051900100 and connect it to the UV lamp.
7. Inspect the analyzer to make sure all the new cables are secured in their connectors and that they will not get caught by the pump or other moving parts in the analyzer.
8. Plug the analyzer back in and turn power on to the analyzer. Make sure that the UV lamp reading starts to increase after about 10 minutes and make sure the pump turns on.
9. Re-install the cover and return the analyzer to normal operation. Please follow service note 04-012 to readjust the UV lamp. If there are any questions about this installation please contact API's customer service department.



**Figure 1**

Retrofitting an "E" series SO<sub>x</sub> analyzer from UV driver to a UV transformer

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