

# Service Note

Advanced Pollution Instrumentation

A Teledyne Technologies Company

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08-016A 12 November, 2008

## **M702SS Retrofit Installation Instructions**

#### I. PURPOSE:

This note contains the instructions for converting a standard M702 calibrator into one containing all Stainless Steel tubing for the calibration gasses. The main purpose of this retrofit is for performing NH<sub>3</sub> calibrations.

### II. TOOLS:

#2 Philips Screw Driver 1/2" Wrench 9/16" Wrench 7/16" Wrench

#### III. PARTS:

KIT000275 KIT, RETROFIT, M702 to SS



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 the calibrator and remove the power plug. Remove any tubing that is connected to the back of the calibrator. Keep in mind that these connections will be pressurized and you will want to turn of the source of these gasses before disconnecting the tubing.
- 2. Use the Philips screw driver and remove the screws holding the cover on top of the M702 calibrator. Remove the cover on top of the oven and then remove the thermal padding.
- 3. For the next steps you will be using Figure 1 as a reference for the Teflon tubing to remove and then replace with the appropriate stainless steel tubing.

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4. Remove the piece of tubing marked "A", you will also remove the rubber grommet that the tubing passes through. Take the 1/8" piece of tubing that will fit in this location from the KIT and install it where the previous tubing was located and push the rubber grommet that is around this piece of tubing into place on the oven.

- 5. Remove the piece of tubing marked "B", you will also remove the rubber grommet that the tubing passes through. Take the 1/8" piece of tubing that will fit in this location from the KIT and install it where the previous tubing was located on the regulator. Push the rubber grommet that is around this piece of tubing into place on the oven. The other end of the tubing will remain disconnected for right now.
- 6. Remove the Teflon cross/tee marked "C". Take the stainless steel tee with attached reducer from the KIT and install the 1/8" side to the tubing that was installed in step 5.
- 7. Remove the piece of tubing marked "D". Take the ¼" piece of tubing from the KIT and install it where the previous tubing was located, connecting one end to the stainless steel tee and the other end to the rear panel.
- 8. Remove the ¼ Teflon nut and ferrules from the piece of tubing marked "E" that was connected to the ¼ Tee/Cross. Connect this piece of tubing to stainless steel TEE. Make sure to finger tighten and then tighten it using a wrench 1¼ turns.
- 9. Ensure that all connections are tight and leak free. Replace the thermal padding and the cover to the oven. Replace the cover to the calibrator. Turn the calibrator back on and allow it to warm up for at least 1 hour before use.

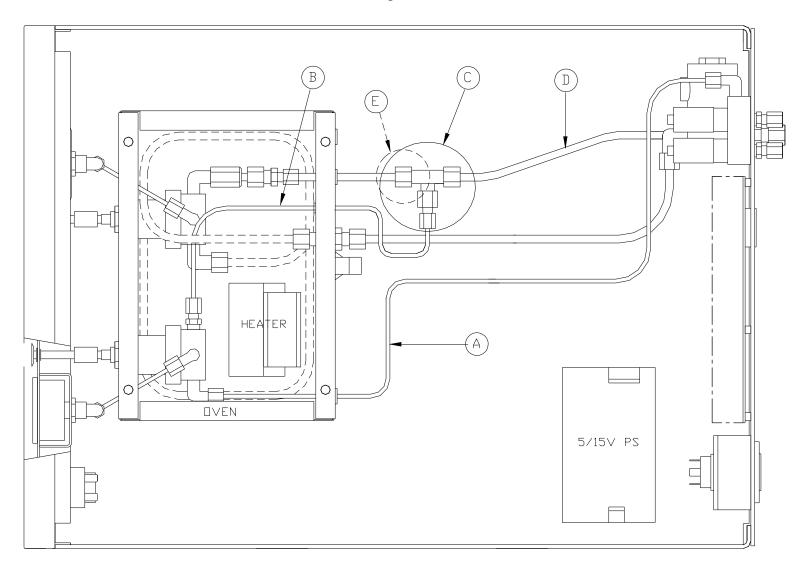
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Figure 1



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