



05-008B
2 May, 2007

HOW TO INSTALL THE M300E IZS RETROFIT

I. PURPOSE:

This is a service note on how to install and enable the IZS option in a M300E analyzer previously did not have the option.

II. TOOLS:

- #2 Phillips head screwdriver
- 7/16 Crescent wrench
- 1/2 Crescent wrench x2
- Wire cutters, or something that will cut Zip Ties.

III. PARTS:

KIT000220

IV. PROCEDURE:

- 1.) Turn off power to the analyzer and unplug the power cord from the wall. Remove the screws holding the cover onto the chassis and remove the cover.
- 2.) Locate the piece of 1/8th inch tubing running from the sampling inlet to the sample filter. After locating this piece of tubing use a 7/16th crescent wrench and a pair of wire cutters to snip the Zip-Ties holding the tubing and remove the piece of tubing.
- 3.) Take the IZS Retrofit assembly provided in the kit and place it inside the analyzer as shown in FIG 1. Use the six #8 3/8" (SN-11) screws and mount the three valves as shown.
- 4.) Mount the CO scrubber to the bench using the four #8 1/4" (SN-97) screws.
- 5.) Inside the analyzer there will be 3 connectors in the wiring harness located directly next to the valves. Each connector will be labeled. Each valve is also labeled. See below and connect each valve to the corresponding plug.

VALVE → WIRE

SAM/CAL → SAMPLE

S/Z or Z/O → S/Z

S/O → S/O

- 6.) Connect the 1/8th inch tubing coming off the Sample/Cal valve to the fitting that the 1/8th tubing was connected to and remove from in step 2 on the front panel particulate filter. Tighten using a 7/16th crescent wrench.
- 7.) Run the batch of 4 tubing with fittings to the rear panel. Remove the bulk head fittings from the 1/8th in tubing and install them on the rear panel in the slots labeled, VENT/SPAN, PRESSURE/SPAN, and AIR(IZS) using two 1/2" crescent wrenches. Connect the four 1/8th inch tubes to the corresponding bulk head fittings. Tighten with a 7/16th crescent wrench. See FIG 2.

- 8.) Make sure that the front and rear panel do not pinch any of the tubing and that it is routed along the same path as the wires. Plug the analyzer back in and power up the analyzer.
- 9.) After boot up you will need to enable the IZS option in the software. To do this press {SETUP}{MORE}{DIAG} when it asks for the password enter 929. Once in the DIAG menu with the 929 password hit the {NEXT} button until FACTORY OPTIONS appears. Press {ENTER}. Hit the {NEXT} button once and it will be on ZERO/SPAN VALVES. Turn this option ON. Exit back out to the main menu and you should now have three buttons CAL, CALS, and CALZ, if not follow this step again and make sure that the Factory option for the valves is turned on.
- 10.) Replace the cover to the analyzer and perform a leak check on the sample, span, and zero sides of the valve. Do each of the following steps, waiting 2minutes between each step, make sure the Sample pressure drops to <math><10''\text{inHg}</math> each time.
 - a) Cap the Sample Inlet. Leave the analyzer in normal Sample Mode
 - b) Cap the Vent/Span and Pressure/Span Ports on the rear panel. Press CALS
 - c) Cap the AIR(IZS). Press CALZ

If the Sample pressure does not drop below $10''\text{inHg}$ then there is a leak some where. Make sure all the fittings are tight and then proceed to look for the leak.

If the Sample pressure dropped $<10''\text{inHg}$ at each step then the analyzer does not leak. Replace the cover and return the analyzer to normal operation.

FIGURE 1

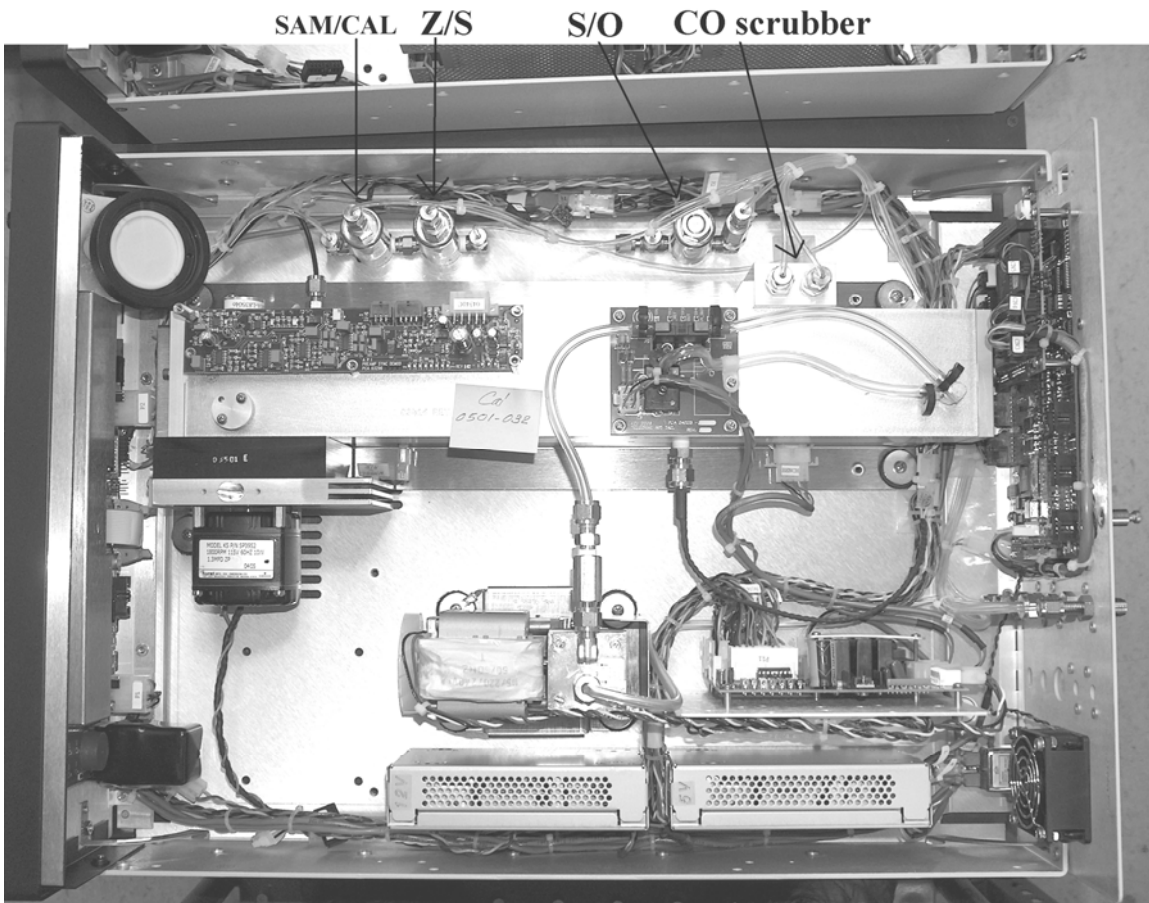
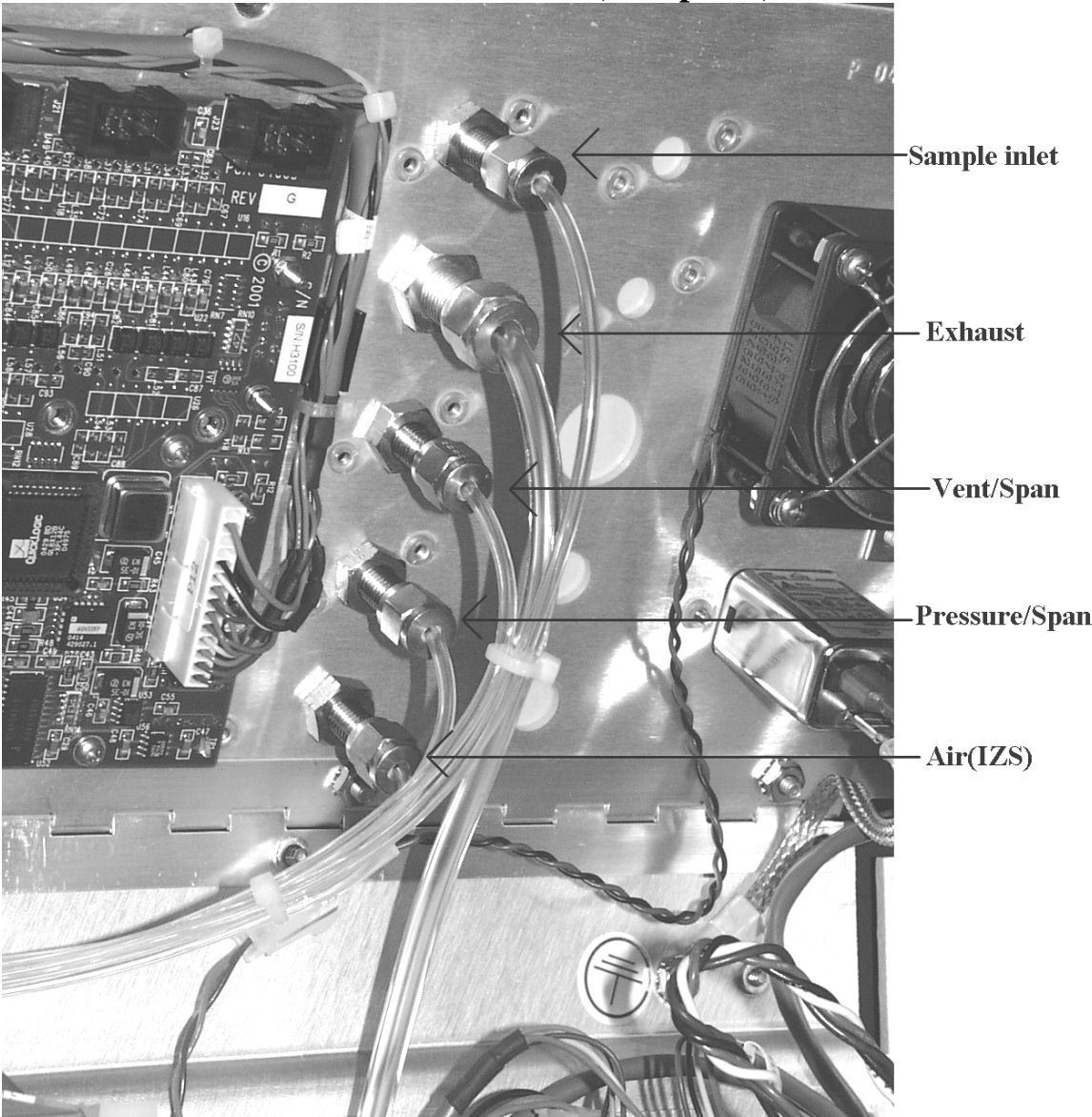
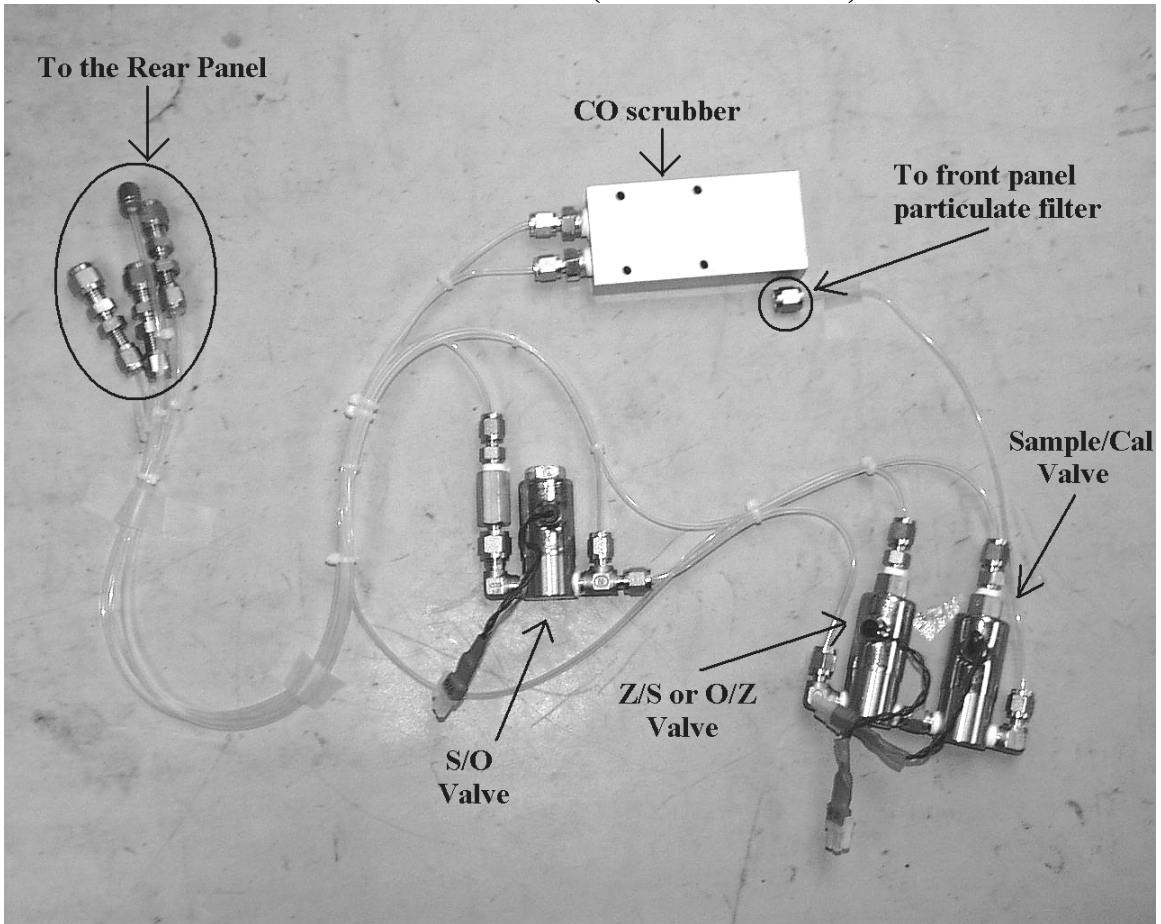


FIGURE 2 (rear panel)



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FIGURE 3 (IZS retrofit Kit)



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