

# Service Note

Advanced Pollution Instrumentation

A Teledyne Technologies Company

9480 Carroll Park Drive, San Diego, CA 92121-2251

Phone (858) 657-9800 Fax: (858) 657-9818 Toll Free 1800 324-5190
E-mail: api-customerservice@teledyne.com http://www.teledyne-api.com

97-004C 2 May, 2007

## IZS RETROFIT IN TAPI CO ANALYZER M300 INSTRUCTIONS

#### I. PURPOSE:

This service note provides the instructions on how to retrofit ZERO/SPAN valves option into a TAPI CO analyzer.

#### II. SCOPE:

Model M300

#### III. TOOLS:

Philips head screwdriver. A pair of adjustable wrenches.

### IV. PARTS:

009440000

# V. <u>PROCEDURE</u>:

- 1. Turn the power off.
- 2. Remove the screws holding the cover and take the cover off.
- 3. Disconnect the 1/8" tubing between "SAMPLE" inlet bulkhead fitting and the sample filter (to avoid leaking use two wrenches to disconnect the fitting).
- 4. Mount "Z/S-SAMPLE/CAL VLV" valve into the analyzer (use drawing 00300 step 4 for reference). NOTE: Make sure the black wiring is positioned towards the pump (or the center of the analyzer) and the labels on the valves are positioned towards the left side.
- 5. Mount the "SHUT OFF' valve into the analyzer (use drawing 00300 step 5 for reference).
- 6. Mount the CO scrubber into the analyzer (use drawing 00300 step 6 for reference).
- 7. Find the gray cable with the 3-pin connector covered with the heat shrink. The connector has two wires (black and clear). Remove the heat shrink and connect the CO scrubber heater (3-pin connector with two red wires) to the gray cable.
- 8. Install "VENT/SPAN" and "PRESSURE SPAN" stainless steel bulkhead fittings into rear panel and "AIR IZS" brass bulkhead fitting into the rear panel of the analyzer (use drawing 00300 step 8 for reference).
- 9. Connect 1/8" tubing between sample filter, rear panel bulkhead fittings, "Z/S -SAMPLE/CAL VLV" and "SHUT OFF" assemblies. CAUTION: Make sure you do not over-tighten the fittings.
- 10. Connect the power cables to the valve assemblies. Green and white cable with the "SAM/CAL" label to "Z/S SAMPLE/CAL VLV" (use drawing 00300 step 4 for reference). Green and yellow with the "S/O + Z/S" label to "SHUT OFF"

valve (use drawing 00300 step 5 for reference).

- 11. Leak check the analyzer.
- 12. Put the cover back on.
- 13. Turn the power on.

IZS Retrofit in TAPI CO Analyzer M300 Instructions 97-004 Rev <u>B</u> Page 1 of 3

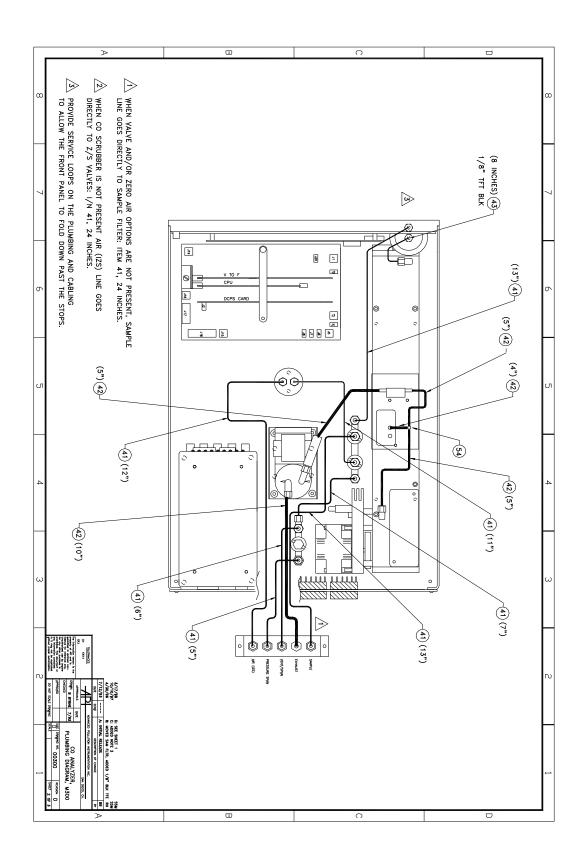
CSF0001D 5/24/11

- 14. If you have the analyzer with the non-AMX software you need to activate the IZS option manually. To accomplish this press SETUP-IZSC-IZS-OFF, that will change the OFF button to ON.
- 15. Check all the test parameters.
- 16. Check the sample flow in both "SPAN CALIBRATION" and "ZERO CALIBRATION" modes.
- 17. Recalibrate the analyzer.
- 18. After 15-20 minutes, check if CO scrubber is warm. If not, troubleshoot the problem with the heater. **NOTE:** There is no test function or watch for the CO scrubber temperature. Thus there is no way, but manual check, to tell if the heater is ON.

If you have any troubles or questions following the above procedure, please call the Customer Service Dept.

IZS Retrofit in TAPI CO Analyzer M300 Instructions 97-004 Rev <u>B</u> Page 2 of 3

CSF0001D 5/24/11



IZS Retrofit in TAPI CO Analyzer M300 Instructions 97-004 Rev B Page 3 of 3

CSF0001D