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**16-001**

**05 January, 2016**

**O3 GEN DETECTOR RETROFIT (700E/T)**

- I. **PURPOSE:** To give instructions on how to properly install the O3 generator reference detector (KIT000354) on to an ozone generator in a (700E/T) calibrator.
- II. **TOOLS:**  
Phillips Screw Driver#6  
Phillips Screw Driver#4  
Pot Trimmer  
Cutters
- III. **PARTS:**  
KIT000354 (INCLUDES THE FOLLOWING)  
- OR0000039 ORING, 2-012V (PA)  
- OP0000031 WINDOW, QUARTZ, 1/2"DIA, .063" THICK (PA)  
- 055370000 DETECTOR COLLAR, PET VERSION (KB)  
- 005600100 APERTURE, O3 GENERATOR, M700E/M703E (KB)  
- 041200200 PCA, DET PREAMP, W/OP20, O3GEN  
- (2) SN0000136 SCW, PH, P, SS, #6-32X7/8, SEMS  
- SN0000001 SCW, PH, P, SS, #4-40X.25, SEMS



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.

**O3 GEN DETECTOR RETROFIT (700E/T)**

Service Note16-001 Rev A (7177) 1/5/2016

Page 1 of 4

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**PROCEDURE:**

1. Turn off the instrument, remove cover and locate ozone generator (figure 1.)
2. Remove the two screws located at the circular panel on the O3 generator tower (figure 1.)
3. Remove the panel and the o-ring.
4. Install OR0000039 (o-ring) and OP0000031 (window) do not touch or stain the window (figure 3.)
5. Next place 005600100(silver disc) inside 055370000 (round white plastic part.) (figure 3.)
6. Line up 041200200 (detector board) on top of the 055537000 and place SN0000136 on both outside holes and tighten SN0000001 in the middle hole. (figure 3.)
7. Install the assembly into the O3 generator tower and tighten screws. (figure 2.)
8. Locate plug IZS DET P3 in the wire harness remove the heatshrink (figure 4) and connect it to the detector board at J1. (figure 2.)
9. Turn on the instrument, press SETUP-MORE-DIAG-929-NEXT-until you see factory options press ENTER-NEXT until you see ozone gen. reference:off press OFF-verify this now says "ON" before exiting and then power cycle the instrument.
10. Set the calibrator to Ref mode by pressing SETUP-GAS-O3-MODE-REF then press ENTER-EXIT-until the calibrator is in STANDBY mode, ensure there is no source of air or gas pressure connected while adjusting the O3 lamp
11. Press SETUP-GAS-O3-ADJ. Wait 5 minutes for the readings to stabilize.
12. Press the <TST TST> buttons until O3 GEN DRIVE, this value should be 2500mv.
13. Press <TST TST> buttons until O3 GEN REF, this value should be 2750mv  $\pm$  100mv. If it is not you will need to peak the O3 generator's UV lamp and adjust the reference detector potentiometer VR1 until the value is within specifications. Exit back to the Main Menu (Figure 2.)
14. Last perform a O3 GEN CAL by pressing SETUP-MORE-DIAG-929-ENTER-NEXT until you see O3 GEN CALIBRATION press ENTER-CAL.

**O3 GEN DETECTOR RETROFIT (700E/T)**

Service Note16-001 Rev A (7177) 1/5/2016

Page 2 of 4

PRINTED DOCUMENTS ARE UNCONTROLLED

Figure 1



Figure 2

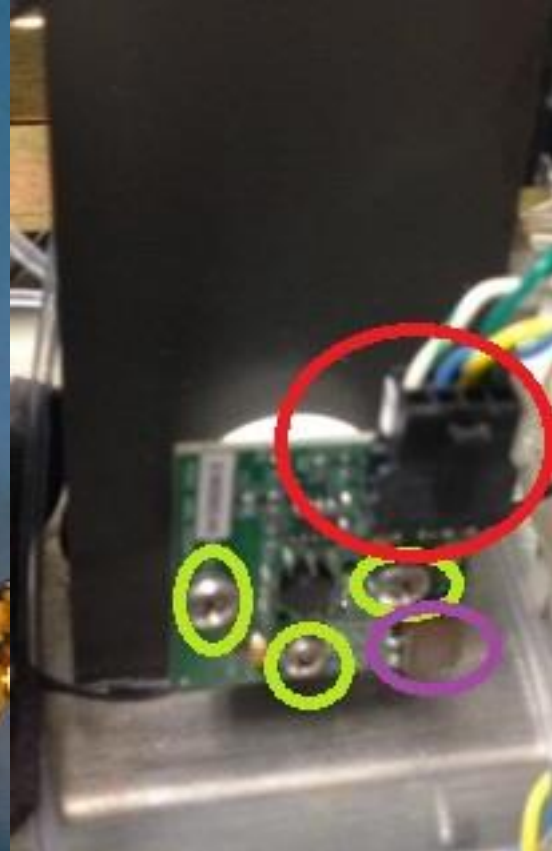
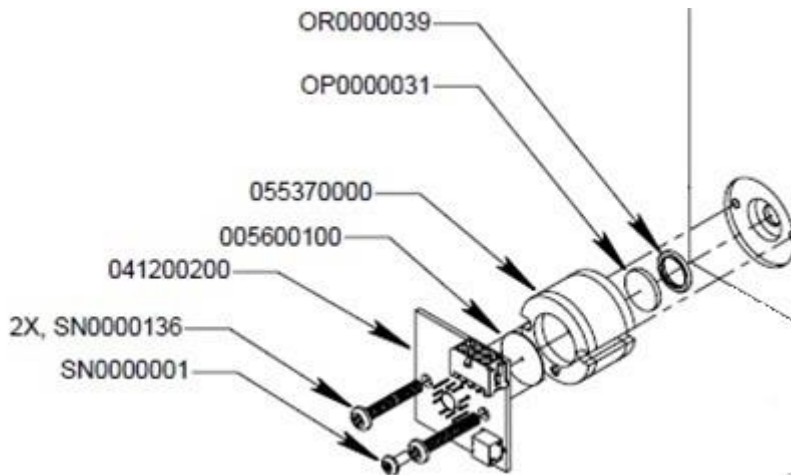


Figure 3



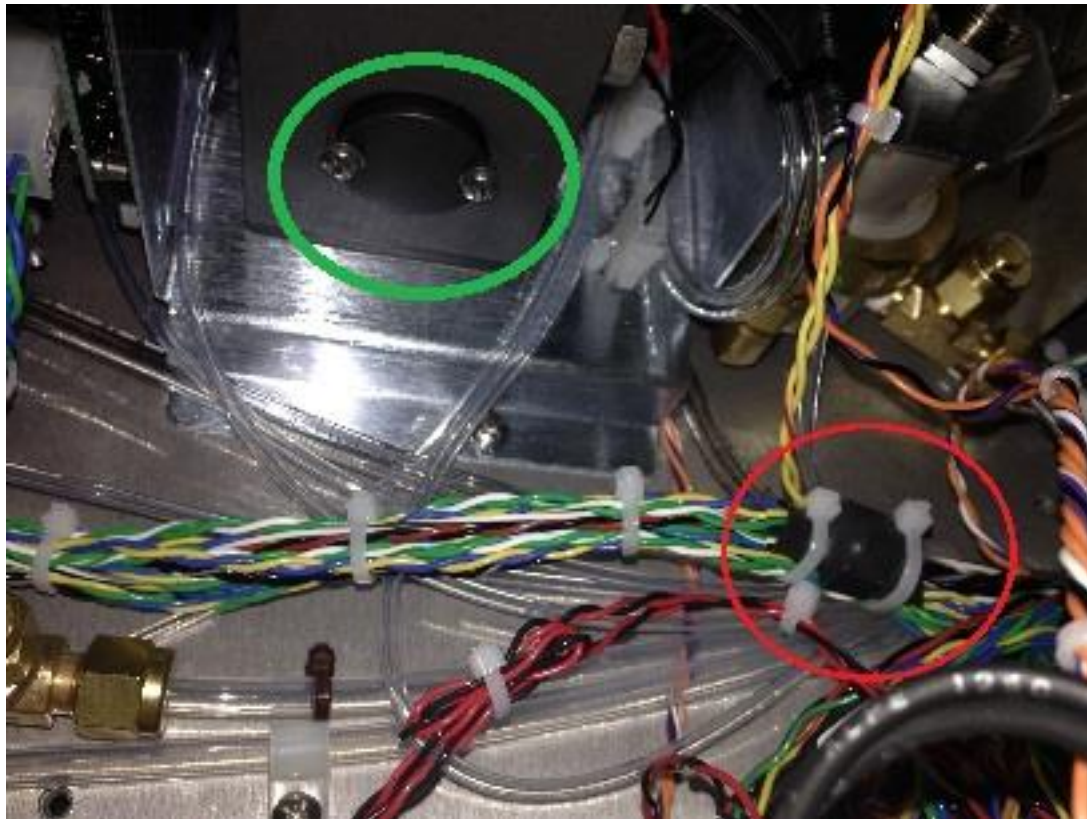
**O3 GEN DETECTOR RETROFIT (700E/T)**

Service Note16-001 Rev A (7177) 1/5/2016

Page 3 of 4

PRINTED DOCUMENTS ARE UNCONTROLLED

Figure 4



**O3 GEN DETECTOR RETROFIT (700E/T)**

Service Note16-001 Rev A (7177) 1/5/2016

Page 4 of 4

PRINTED DOCUMENTS ARE UNCONTROLLED