

Service Note

Advanced Pollution Instrumentation

A Teledyne Technologies Company
9480 Carroll Park Drive, San Diego, CA 92121-5201
Phone (858) 657-9800 Fax: (858) 657-9818 Toll Free 1800 324-5190
E-mail: api-customerservice@teledyne.com http://www.teledyne-api.com

97-031 REV. B 2 May, 2007

## PARTICULATE FILTER RETAINING RING UPGRADE

**SCOPE:** 

We have found that for some applications there is a potential problem with particulates getting by the particulate filter retaining ring and clogging the sintered filters. This problem seems to happen only in areas that have extremely high ambient particulate levels.

**NOTES:** 

Unlike the old rings, the "improved" Teflon retaining rings have the two notches only on one side. Therefore the direction that these are installed is vitally important to the airflow within the filter housing. The notches in the retaining ring <u>must be</u> installed <u>up</u> (the notches must be facing you as you are putting the glass/black aluminum plate back onto the filter housing.). The replacement filter rings are no cost to our customers, please contact our customer service department for replacements for your instruments. We will need to know the amount of rings that you require and the sizes.

**TOOLS:** No tools are required for this maintenance.

**PART** #'s: 37mm Kit 28

47mm Kit 29

## **PROCEDURE:**

- 1. Turn off the power and remove the vacuum source from the rear of the analyzer (if applicable).
- 2. Unscrew the knurled ring and remove the glass/aluminum window from the filter housing. Remove the o-ring from the filter housing and inspect it for any tears or degradation. If the o-ring is torn or has any signs of cracks throw the o-ring away and replace with a new o-ring.
- **3.** Remove the Teflon retaining ring and the particulate filter and dispose of the filter and the retaining ring.
- 4. Replace the particulate filter with a new filter and install the new retaining ring with the two notches "up". With the new retaining ring installed you should be able to see the two notches cut into the ring. If the ring is installed upside down you will not get any flow through the filter housing.
- 5. Place the o-ring into the groove in the housing and place the glass/aluminum window onto the o-ring and install the knurled ring onto the housing.
- **6.** Tighten the knurled ring hand tight; do not use any tools to tighten the knurled ring. Leak check the unit.
- 7. Re-apply power to the unit and turn on. Hook up the vacuum source to the unit (if applicable)
- **8.** Flow check the unit.
- **9.** Install the decal onto the front panel per the diagram included in the kit.

Should you have questions, please do not hesitate to contact API Customer Service.