



**99-004 Rev B
2 May, 2007**

M400A HEATER REPLACEMENT

I. SCOPE:

To inform our customers of a new heater for the M400A ozone analyzer. We have found that on some M400A analyzers, with the ozone generator option, the ozone generator and the flow control block do not stay at 40° C. What we have done is to make a KIT to replace the current 20 watt heaters with 30 watt heaters. This reduces the on time of the heaters and will allow it to stay on longer when the ambient temp is low and more heat is required to keep the temp stable. The symptom of the problem is that you will get the temp wandering around more than 2° C. and you might get an IZS temp warning or orifice temp warning.

II. PARTS:

KIT000071

III. TOOLS:

7/16" wrench
Long slotted head screwdriver
Phillips head screwdriver
Diagonal cutters

IV. PROCEDURE:

1. Remove power from the analyzer and remove the cover.
2. Cut any tie wraps that hinder the removal of the ozone generator from the analyzer.
3. Disconnect the IZS lamp from the lamp power supply and the electrical connectors at the base of the ozone generator for the heater/thermistor and the valve.
4. Remove the two 1/8" fittings from the ozone generator, label the tubes so that you know which tube goes to which fitting.
5. Loosen the two screws that connect the IZS to the floor of the analyzer.
6. Turn the ozone generator on its side so that you have access to the heater and thermistor assembly.
7. Remove the screw that holds the heater and thermistor into the ozone generator and remove the heater and thermistor from the ozone generator.
8. Coat the heater and thermistor lightly with the Dia-electric grease that comes in the kit and install them into the ozone generator.

M400A HEATER REPLACEMENT

Service Note-99-004

Page 1 of 2

9. Install the ozone generator back into the analyzer and hook up the two electrical connectors at the base of the ozone generator.
10. Screw the ozone generator back to the floor of the analyzer with the slotted screwdriver.
11. Hook up the IZS lamp to the lamp power supply.
12. Connect the two tubes to the ozone generator (Make sure that you have the tube connected to the correct fittings).
13. Locate and remove the electrical connector to the flow control block and remove the two pneumatic connectors (this is located in front of the power supply module next to the motherboard).
14. Remove the two Phillips head screws that hold the flow block to the floor of the analyzer.
15. Remove the flow block from the analyzer.
16. Remove the captive screw that holds the heater and thermistor into the flow block. Remove the heater and thermistor from the block.
17. Lightly coat the heater and thermistor with the Dia-electric grease provided in the kit.
18. Install the heater and thermistor into the block and re-install the captive screw.
19. Install the block back into the analyzer ensuring that you have the insulator between the block and the floor of the analyzer (this looks like a small sheet of Teflon or a piece of cardboard). If your analyzer does not have the insulator between the flow block and the chassis floor, then put the one that is provided in the kit in between the flow block and the chassis floor.
20. Install the electrical connector and the pneumatic connections.
21. Turn the unit on and make sure that the ozone generator comes up to temp.
22. Allow the unit to warm up for a half of an hour and then generate some ozone to make sure that the analyzer is connected correctly.
23. Put the cover back onto the analyzer and put it back into service.

If you have questions regarding this procedure or any API equipment, please contact an API Customer Service representative:

Phone: (619) 657-9800

Email: customerservice@advpol.com

Fax: (619) 657-9816

WWW: <http://www.advpol.com>