

Service Note

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

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CAUTION WHEN USING 001710100 HIGH VOLTAGE POWER SUPPLY

I. <u>SCOPE</u>:

Provide information on adjusting the voltage setting on the High Voltage Power Supply (001710100). Improper voltage adjustments can result in destruction of the High Voltage Top Assy. PCA (001550000) in the High Voltage Power Supply (001710100).

II. <u>**PARTS</u>:**</u>

N/A

III. <u>TOOLS</u>:

N/A

IV. <u>PROCEDURE</u>:

- 1. Turn Micro Dial potentiometer all the way counterclockwise.
- 2. Hook up DMM to the high voltage output of the High Voltage Power Supply, and set it to read DC voltage. (Note: Since the High Voltage Power Supply is capable of providing voltages as high as 1,500 VDC, it is best to set the DMM on a high voltage range to prevent accidental damage to the DMM. Also, check your meter & meter leads capability of measuring this high a voltage. <u>Failure to ensure your meters capability of measuring high voltages can result in damage to your meter.</u>)
- 3. Apply power to the High Voltage Power Supply.
- 4. While monitoring the DMM voltage reading at the output of the power supply module; adjust the Micro Dial potentiometer to the desired voltage reading. (Note: Typical operation of the HVPS ranges from a low of approximately 400 VDC to a little over 700 VDC on the high end for API equipment. For Monitor Labs Nitrogen Oxides Analyzer Models 8800 typical operation of the HVPS ranges from a low of approximately 400 VDC to a high of 1000 VDC depending on what range the analyzer is run on.)
- 5. If the HVPS is installed in an API instrument you should not need to operate the HVPS above 900 VDC. If your voltage setting starts to approach 900 VDC it is recommended that you reduce the voltage to around 700 VDC and <u>refer to the troubleshooting guide in the manual</u>. (Note: For example, the necessity of higher voltage settings can be an indication of a dirty reaction cell.)

CAUTION WHEN USING 001710100 HIGH VOLTAGE POWER SUPPLY Service Note 99-040-B Page 1 of 2 6. If the HVPS is installed in a Monitor Labs instrument you should not need to operate the HVPS above 1000 VDC. If your voltage setting starts to exceed 1000 VDC it is recommended that you reduce the voltage to around 900 VDC and <u>refer to the troubleshooting guide in the manual.</u> Adjustment of the HVPS much above 1000 VDC results in overdriving transistors Q3 & Q4 of the High Voltage Top Assy. PCA (001550000). This can result in the destruction of the High Voltage Top Assy. PCA (001550000).

If you have questions regarding this procedure or any API equipment, please contact an API Customer Service representative at: Phone: (858) 657-9800 Email: customerservice@advpol.com Fax: (858) 657-9816 WWW: http://www.advpol.com

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