

Service Note

Advanced Pollution Instrumentation

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SUPPRESION DIODE INSTALLATION ON M100 & M200 STATUS CARDS

I. <u>SCOPE</u>:

To inform our customers on the installation of the suppression diodes on the M100 & M200 status cards. The addition of these diodes helps to protect the DAC's on the status card from lightning strikes & fluctuations in ac line voltage.

II. PARTS:

DD0000035 diodes

X2 per status card

III. TOOLS:

Phillips head screw driver Soldering iron Needle nose pliers Diagonal cutters

IV. PROCEDURE:

- 1. Remove power from the analyzer.
- 2. Turn analyzer so that the rear panel is towards you.
- 3. Remove all electrical connectors from the rear panel to facilitate the removal of the status card.
- 4. Remove the Phillips head screws from the rear panel so that you can access the mounting hardware that holds the status card to the rear panel.
- 5. Remove the status card from the rear panel.
- 6. Bend the leads of the diodes so that they look like the picture in the attached diagram.
- 7. Solder the leads of the diodes to the rear of the status card (the side of the status card that faces the rear panel, the hidden side). You will be soldering the leads of the diodes to the connector that the power for the card comes into. The connector is J3. You will notice that J3 is silk screened onto the PC card. Also you will notice that there is a 1 & 8 on the PC card as well, these numbers reference the pin numbers of that connector. You will be soldering the diodes to pins 6, 7 & 8.
- 8. You will be putting one of the diodes onto one side of the connector & the other diode on the other side of the connector (see the attached

diagram). Make sure that you have the polarity of the diodes correct, check the line on the diode to make sure that it is correct compared to the print.

- 9. Once you have the diodes soldered onto the connector push the diode so that it is flush against the PC card as well as practical.
- 10. Install the status card in the reverse order of removal.
- 11. Apply power to the analyzer
- 12. Test the analog output using the analog output test in the DIAG menu.
- 13. Return the analyzer to service.

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

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