

Service Note

Advanced Pollution Instrumentation

A Teledyne Technologies Company 9480 Carroll Park Drive, San Diego, CA 92121-2251

Phone (858) 657-9800 Fax: (858) 657-9818 Toll Free 1800 324-5190 E-mail: api-customerservice@teledyne.com http://www.teledyne-api.com

01-027C 2 May, 2007

PMT Preamp Handling and Cleaning

I. PURPOSE:

If you are experiencing noise in an instrument, it may be due to dirt or contamination on the preamplifier card. This could be cause by fingerprints, liquids or other common environmental contaminants. The preamplifier card is especially sensitive in the area where the signal enters from the PMT housing. This service note applies to preamp assembly numbers: 011050000, 011050100, 021070000, 021070100, 021070200. Caution – static sensitive parts.

II. TOOLS:

N/A

III. PARTS:

N/A

IV. PROCEDURE:

- A. Proper operation of the analyzer is dependent upon the PMT preamp board being dirt and oil free. Contamination, even as little as a fingerprint, can cause small currents to influence this sensitive amplifier. The results in high auto-zero and stray light readings and an overall increase in noise. The following precautions should be taken when servicing this assembly:
 - 1. Wash hands with an appropriate hand cleaner (hand soap that does not contain any hand lotion additives) before handling this assembly.
 - 2. Handle by holding the printed circuit board edges.
 - 3. Clean assembly of contaminates such as rosin flux, dirt, lubricants, or fingerprints with an appropriate circuit board cleaner such as isopropyl alcohol based P.C. Board cleaner.
 - 4. Be sure to store this assembly in a static-safe bag when not installed in the analyzer.