Technical Support Note



Title: 'Lo' indication on the O2 display on Exhaust Gas Analyzers TSN Number: 06 File:S:\Bridge_Analyzers\Customer_Service_Documentation\Technical_Support_Notes\ 06 EGA Lo O2 Changing Instruction.docx Created by: R. Schrader Last Revision Date: 07-Nov-07

What a 'Lo' message means:



A 'Lo' message on the O2 display after the analyzer is Zeroed means that the O2 sensor is becoming too weak to provide reliable operation, and it should be replaced. The O2 sensor is located on the analyzer case at the left side of the handle is an operator serviceable item – as it is gradually consumed during operation and is intended to be replaced in the field when it expires after 12-18 months of service.

The analyzer automatically tests for sensor degradation during the Zero sequence – during the room air purge cycle. If the sensor output is less than 50% of the nominal ambient oxygen sensor output for room air, 'Lo' is flashed on the O2 display, indicating that the O2 sensor is exhibiting low O2 sensitivity and is due for replacement.

<u>NOTE:</u> The sensor will still be reliable and can continue to be used for a month after the 'Lo' indication is first seen, allowing enough time for the user to procure and install a new oxygen sensor.

Instructions for replacing the O2 sensor:

- 1. Locate the O2 sensor to the left of the handle, and remove its black plastic cover.
- 2. Remove the cable connector from the O2 sensor. <u>NOTE:</u> Do not pull on the cable to do this. Use a needle nose pliers to grip the plastic housing and remove it from the O2 sensor opening. Pulling on the cable may cause the cable connection to fail at the connector. Care should be taken here getting the

Bridge Analyzers, Inc. PO Box 39325 Solon, Ohio 44139 USA (510) 337-1605 office (216) 274-9262 fax support@bridgeanalyzers.com

Technical Support Note



connector out– as some force is necessary to release the connector from its locking tab inside the O2 Sensor.

- 3. Unscrew the O2 sensor from the analyzer. This may be done wither by gripping the sensor with your fingers or by using an adjustable wrench on the housing end where the connector was just removed. (It has a flattened design feature on it.)
- 4. Install the new sensor by reversing the steps above, including plugging in the cable connector and installing the black protective cap.
- 5. When complete, simply power up the analyzer and perform a Zero function. This will calibrate the O2 sensor to room air oxygen and the 'Lo' reading on the O2 display should disappear.

Bridge Analyzers, Inc. PO Box 39325 Solon, Ohio 44139 USA (510) 337-1605 office (216) 274-9262 fax support@bridgeanalyzers.com