

## GAS-SENTRY® DETECTORS-SHORT GUIDE

This card is not a substitute for the Operating Manual. Personnel who use this instrument must first read and understand the manual in its entirety.

### OPERATIONAL CHECKS

**Pump Test:** Select a scale and after the display shows a number, block the probe tip to display “*bloc*”.

**WARNING:** *Do not use the detector if “bloc” fails to appear.*

**Zero Check:** If a scale does not read properly in clean air (zero or 21.0% for oxygen), select AUTOZERO, wait for “*End*”, and then select a scale.

**WARNING:** *On a gas call, AUTOZERO outdoors, never indoors.*

**WARNING:** *Do not use the detector if AUTOZERO shows “nogo”.*

**Bump Gas Test:** Sample “2 in 1” bump gas on the GAS scale for about 10 sec. The display should show more than zero. Repeat with the CO scale.

**WARNING:** *If the detector does not respond, re-calibrate.*

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### OPERATION

**To Locate a Gas Leak:** Select the TRACK GAS scale and listen to the beeper or read the display to track increasing gas to its source.

**To Detect CO in Air:** Select the CO scale and, if necessary, AUTOZERO. Sample a location for 30 seconds. If the air has “chemical” odors, use the flue gas probe and filter to get a better reading.

**To Detect CO in Flue Gas:** Connect the flue gas probe and filter to the water-block filter on the hose. Sample for at least 30 sec. but not more than 1 or 2 min. (for extended sampling use the Extended Duty Probe).

**WARNING:** *Replace the filter when 90% of its material turns brown.*

**WARNING:** *Do not touch the probe immediately after a measurement. Let run in air for a minute to cool the probe.*

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### MAINTENANCE

**Batteries:** When “*Lo*” flashes between readings, change the batteries soon.

**WARNING:** *Always change batteries in a non-hazardous location.*

**Filter Check:** Inspect the dust and water-block filter and shake out loose dirt. If the filter is substantially discolored or has a hole, replace it.

**WARNING:** *Do not use a detector without a proper filter.*

**Automatic Calibration:** Calibrate frequently and no less than monthly. To calibrate, first AUTOZERO in clean air. After “*End*”, block the probe to display “*bloc*”. Unblock to display “*go*” and sample calibration gas (2.5% methane, 100 ppm CO) until “*CAL*” appears on the display.

**WARNING:** *Do not use a detector which fails calibration.*

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## % LEL EQUIVALENT TO % NATURAL GAS

% LEL	equivalent to	% GAS
10%		0.5%
20%		1.0%
50%		2.5%
100%		5.0%

## TROUBLESHOOTING THE GAS-SENTRY DETECTOR

Problem	Probable Cause	Action
Display is blank or "Lo" is displayed.	Batteries are low, or one is bad or wrongly inserted.	Re-insert batteries with correct polarity, or replace batteries.
Display shows "bloc".	The intake to the instrument is blocked.	Drain the probe and replace the filters when necessary.
The display does not show "bloc" when the probe tip is blocked.	A leak between the probe tip and the pump, or the pump is dirty.	Disconnect hose and block intake. If "bloc" still does not appear, clean pump.
Display shows "nogo" on AUTOZERO	A sensor drifted.	Use coarse zero procedure (see below).
	Gas or CO is present.	Repeat in clean air.
	A sensor has failed.	Replace sensor.
The display shows "FAIL".	A sensor has failed.	Replace sensor(s).

## COARSE ZERO PROCEDURE

Remove unit from carryall and remove long rubber plug from lower right side. For units with white switches, set middle switch up, select AUTOZERO, wait for *End*, put switch 3 down. For units with push buttons, select AUTOZERO, wait for *nogo*, switch to %OXYGEN, hold down button closer to bottom while switching back to AUTOZERO, release button, wait for *End*.

### Possible Effects of CO

CO in Air	Inhalation Time and Symptoms
50 ppm	Time-weighted (8 hr.) limit in the workplace.
200 ppm	Short-term (15 min.) limit in the workplace.
400 ppm	Headache in 1-2 hrs, life-threatening after 3 hrs.
1,600 ppm	Headache, nausea in 20 mins., death in 1 hr.
6,400 ppm	Headache, nausea in 1 min., death in 10 mins.

**WARNING:** *The detector responds to the gases for which it was designed. Other toxic or dangerous gases may not be detected.*

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