

Troubleshooting

The table below helps troubleshoot problems with the GEM-500 and GEM-2000 instruments.

Problem	Cause	Corrective Action
Unit does not turn on or operates erratically.	Battery charge is too low	Recharge batteries
	Unit is too hot	Cool down and try again
		Contact the factory.
"Flow Fail" is displayed and audible alarm is heard.	The inlet is blocked	Remove blockage and retry
	The particulate filter or water trap filter is clogged	Replace filter(s)
Readings taken are not what was expected.	Unit may be out of calibration	Calibrate unit with known gas concentration
Unit displays **** or >>>> in some fields.	These symbols are substituted when the measured reading is out of range of the instruments capabilities or when a value needs to be entered manually, such as temperature.	Normal operation, no action is necessary.
Oxygen reading is high on all wells.	Water trap may be leaking air	Check that the water trap housing is screwed on tightly Check or replace o-rings on the water trap and instrument inlet.
	Well head may be leaking air	Check the Well head insert for cracks, replace O-ring on insert.
	Instrument may be out of calibration	Field calibrate oxygen channel
Unit will not download readings or an error occurs while downloading.	Software version may be incorrect	Verify that the communications software is the right version for the instrument being used.
	Software may be using wrong serial port	Check that the proper serial port is selected in the software
		Contact Factory.
Methane and Carbon dioxide readings drift.	Instrument may have gone out of calibration	Perform a field calibration and check well again
	Calibration gases may be not be flowing properly	Verify Cal Gas is flowing when regulator is turned on
	Connection to Cal Gas may be leaking	Verify all connections are

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		tight and filters are not clogged
		Contact the Factory.
Oxygen readings drift	Instrument may be out of calibration	Perform a field calibration - zero and span
		Contact Factory.
Black screen displayed when unit turned on.	Battery may be uncharged	Charge unit over night and try again.
	Unit too hot	Cool down and try again
	Contrast level may be set incorrectly	Adjust contrast level
		Contact Factory.
Nothing happens when the Gas Pod is installed.	Gas pod may not be seated correctly	Remove and re-seat the Gas Pod
		Contact Factory.
Temperature does not update when temperature probe is installed.	Probe may not be connected properly.	Check the probe fitting is fully seated. Check the probe plug is screwed together tightly.
		Contact Factory.