

## TROUBLE SHOOTING

**Symptom: READING IS TOO LOW**
**CAUSE**

- Insufficient air pressure.
- Restrictor plugged.
- Leaks in tubing.
  
- Diaphragm improperly installed.
- Sensor flange nuts loose.
- Pointer off at ZERO.
- Ratio Relay diaphragm is ruptured.

**CORRECTON**

- Increase air pressure to 20 PSI (1.4 bar) or more. See Pages 5 & 6.
- Remove restrictor wire. Check for good air flow.
- Soap all fittings when product is in tank, or use the Thumb Test. See Page 6.
- Install new diaphragm.
- Tight all four flange nuts.
- Zero Pointer. See Page 6.
- Disassemble Ratio Relay and install new diaphragm.

**Symptom: READING IS TOO HIGH**
**CAUSE**

- Pointer off at ZERO.
- Tank Tuner off.
- Sensor nozzle plugged.
- Ratio Relay exhaust is plugged.
- Sensor exhaust nozzle misadjusted.
- Water in tubing.

**CORRECTION**

- Zero pointer. See Page 6.
- Calibrate per Page 5.
- Disassemble sensor. Rod out exhaust hole in nozzle.
- Disassemble Ratio Relay and rod out the exhaust passages.
- Align nozzle properly. See Page 5.
- Disconnect tubes at both ends and blow out with high pressure air.

**Symptom: GAUGE POINTER REMAINS ABOVE ZERO WHEN TANK IS EMPTY**
**CAUSE**

- Gauge pointer is off at ZERO.
- Cleaning wire missing from restrictor.
- Sensor nozzle plugged.
- Ratio Relay exhaust is plugged.
- Gauge pointer is loose on its shaft.
  
- Water in tubing.

**CORRECTION**

- Zero pointer. See Page 6.
- Replace wire.
- Disassemble sensor and rod out exhaust hole in nozzle.
- Disassemble Ratio Relay and rod out exhaust passages.
- Press pointer into shaft firmly with finger. Zero pointer per Page 6.
- Disconnect tubes at both ends and blow out with high pressure air.

**Symptom: GAUGE POINTER IS LOOSE AND WILL NOT RESPOND**
**CAUSE**

- Gauge pinion gear has disengaged from sector gear. Hair spring is wound up.

**CORRECTION**

- Observe tank gauge gears. Depending on the type of gauge, either remove rear cover plate or front dial plate. Return gauge to Tank Mate or to a gauge repair service.

**Symptom: RATIO RELAY WILL NOT RESPOND WHEN THE TWO EXHAUST PORTS IN KNOB ARE COVERED**
**CAUSE**

- Upper diaphragm is ruptured.
- Nozzle O-ring is missing.

**CORRECTION**

- Replace upper diaphragm.
- Replace O-ring.

**Symptom: SYSTEM WILL NOT RESPOND**
**CAUSE**

- No air supply.
- Defective air pressure regulator.
  
- Plugged restrictors.
  
- Impurities in the air.

**CORRECTION**

- Check hook-up to plant air.
- Remove outlet tubing and verify output air flow. Replace regulator if necessary.
- Remove cleaning wires. If plug persists, replace entire restrictor.
- Install air filter/traps in the air supply.

**Symptom: ERRATIC OPERATION**
**CAUSE**

- Water in air lines

**CORRECTION**

- Blow out air lines with high pressure air.