

# Troubleshooting Information

## Wybron Eclipse I Dowser PC Board Level

### TROUBLESHOOTING

**1. Symptom: The vanes do not have full travel and the unit is “shutting down” (all 4 LEDs are flashing in unison).**

- a. Problem: The vanes are hitting screws protruding into the unit.

Remedy: First, double check the installation of the mounting and barndoor tabs on the front and back covers. The screws should come flush with the back of the cover, not protruding into the dowser "vane area" by more than 1/16", else interference with the vanes will cause shutdowns. The screws supplied should have been 8/32 x 1/4" panheads for model 17000, and 1/2" for models 11010 and 9001.

- b. Problem: The linkage set screws have loosened.

Remedy: Tighten them per the following procedure:

1. Remove both the front and back covers from the dowser.
2. Set the dowser to "local control" and connect to the powersupply.
3. Use the local control buttons to fully close the vanes. If the dowser doesn't respond, remove power and manually close the vanes.
4. Looking at the unit with the local control buttons facing you, the second vane from the left hand side connects to a coupler which connects the vane to the motor. Make sure the coupler set screw is tight. Use a 0.050" or 1.3mm or 1/16" Allen wrench.
5. Beneath the coupler, is the gear that drives the other set of vanes. Loosen both set screws on this gear. Gently press across the vanes to ensure they are evenly closed, and retighten the set screws.

- c. Problem: The vanes are bowed.

Remedy: With the vanes fully open, look along them for any bowing where

they might have been bent. This will also show up as the edges of the vanes clashing instead of meshing when closing. Minor bends can be straightened with gentle pressure in reverse direction.

**2. Symptom: The unit is “shutting down” (all 4 LEDs are flashing in unison) for an unknown reason.**

- a. Problem: It is drawing excessive current (typical current is about 0.4 amps when initializing or opening or closing quickly)

Remedy: The unit may have been dropped, causing misalignment of the vanes axles. Remove the two screws attaching each vane to the linkage and verify that they spin freely. Binding may indicate bent axles on the bulkheads, or cracked brass pivots. Replace as necessary.

Remedy: Check the PC board for corrosion due to exposure and replace the PC board if this is found.

Remedy:

If no binding or other mechanical friction exists, replace the motor.