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**Regulator  
Troubleshooting**

**WARNING: THIS EQUIPMENT CONTAINS LETHAL VOLTAGES AND AMPERAGES. ANY ELECTRICAL CHECKS SHOULD BE MADE BY QUALIFIED ELECTRICAL PERSONNEL. RECOMMENDED APPROPRIATE TEST EQUIPMENT AND TECHNICAL MANUALS SHOULD BE USED.**

1. Common problems and common causes:
  - A. No input voltage: bad input contactor, blown fuse, T2 transformer bad.
  - B. Cuts off after coming on: bad OC/OC board, something shorted in control section, component or wiring open.
  - C. Comes on but no output: CDA board bad, bad resistors, bad RE1, RE2, RE3.
2. Two useful things to check:
  - A. Check with output shorted (S1 to S2) load disconnected (tells if regulator is good).
  - B. Saturable type: disconnect 4A and 6A from OC/OC board (takes auto protection off).
3. Static checks can be made as well:
  - A. RE1, 2, and 3 have same values.
  - B. Voltage dividing network can be measured outside of circuit.
  - C. Visual inspection.
  - D. Continuity and short checks.

At some point, you may need to contact Flight Light for additional assistance. In order to reduce the amount of time spent resolving the issue, please answer the following questions prior to contacting technical support:

1. What is the regulator serial number?
2. Do you have a regulator manual?
3. What is the output (KW) of the regulator?
4. What is the input to the regulator?
  - A. High voltage input (oil type) 2400VAC, 4160VAC, etc.
  - B. Medium voltage input (dry and oil type) 480VAC, 240VAC, 230VAC, etc.
5. Do you have a 3-step, 5-step, or single-step regulator?
6. What type of control does the regulator use?
  - A. Saturable (electronically maintained output via CDA feedback full wave rectification)
  - B. Resonant (inductance and capacitance  $X_L=X_C$ )

**Flight Light Technical Support: 916-394-2800**

**Visit our web site: [www.flightlight.com](http://www.flightlight.com)**