



PRODUCT ADVISORY LETTER (PAL)

PRODUCT ADVISORY LETTER NO.: C046-03002

DATE: 12-15-03

AFFECTED PRODUCT(S): TC-10B/TCF-10B Power Line Carrier where the Power Supply alarm is being used.

AFFECTED MODULE(S): Power Supply modules (Style # 1617C38G0x, rev. 3 or lower)

SYMPTOM(s): The alarm output does not come on and the front panel "Output" good LED does not go off even though the output voltage drops significantly.

RECOMMENDATION: Pulsar recommends the corrective action listed below be taken for all Power Supply modules where the power supply failure alarm is being used, especially in TC-10B systems (on/off blocking carrier) where there is no Checkback automatic testing. See note below.

CORRECTIVE ACTION: Call Pulsar at phone # 800-785-7274 (customer service) to obtain a RMA number and reference this PAL. Pulsar can provide a modification kit (C056-03002) that contains a zener diode, a resistor, and instructions on implementing this upgrade. Or, if desired, you can send your Power Supply module in for modification by Pulsar. This upgrade is available at no charge and will not affect any applicable warranty.

TECHNICAL DETAILS: The alarm threshold circuit on the Power supply module does not come on until the total output voltage (40 Vdc) drops to about 11.4 Vdc because the threshold of the alarm relay's drop out is too low. This means that if there is a blown fuse, input failure, or both outputs fail then an alarm will still occur. But if only one of the two outputs, either the +20V or -20V output, fail then there will not be an alarm and the "Output" LED will not go off. To correct this a zener diode is used to replace resistor R5 to raise this threshold to a typical value of 31V. The series resistor for the "Output" LED also has to be changed. This change gives an alarm condition for 99% of all power supply failures.

Note: The most critical applications where this product advisory letter change would need to be implemented are TC-10B systems (on/off blocking carrier) where there is no Checkback automatic testing. In this type of system there would not be anything to notify the user that a failure exists in the TC-10B. Other types of systems normally are using other additional alarms that would indicate failure if the Power Supply output voltage dropped significantly.

Pulsar Technologies appreciates your past support and we want to continue to provide you the best service possible. Please help us by letting us know if future notices should be sent to another individual.

PAL: C046-03002