



## **PRODUCT ADVISORY LETTER NO.: C046-95001**

**DATE:** NOVEMBER 7, 1995

**AFFECTED PRODUCT(S):** TC-10B/TCF-10B (including product supplied by ABB Power T&D Company, Inc.)

**AFFECTED MODULE:** Transmitter (style # - 1610C01G01 rev./sub 2 or higher that shipped before 8-4-95)

**SYMPTOM(s):** Transmitter outputs erroneous frequencies or shuts down at high temperatures. This condition disappears after the temperature drops.

**RECOMMENDATION:** Pulsar recommends the corrective action listed below be taken in applications where the ambient temperature would exceed 40 degrees C.

**MODIFICATION KIT NO.:** C056-95001

**CORRECTIVE ACTION:** Only 1 part needs to be changed. Replace resistor, R34, (which is 475K ohms) with a 100K ohm, 5%, 1/4W resistor. Request modification kit # C056-95001 if you desire to do a field modification. If you choose to have your transmitter modules updated by our factory, please return the module to us by first calling phone # 800-785-7274 (ext. 211 or customer service) to obtain a RMA number and referencing this PAL. Neither of these methods will affect any applicable warranty and both are available at no charge.

**TECHNICAL DETAILS:** The transmitter has a circuit that keeps the transmitter shutdown for about 1 second when first powering up to prevent any erroneous frequencies from being transmitted. If the electrolytic capacitor, C51, in this circuit is in an ambient temperature that reaches 40 degrees C (104 degrees F) the normal dc leakage current through this capacitor can possibly reach a level high enough to begin shutting the transmitter down. The temperature of 40 degrees C is the lowest temperature at which the problem can occur and in most cases the circuit will not cause a problem at even higher temperatures. When the problem occurs, the transmitter will start outputting different frequencies all across the spectrum for a few seconds before shutting itself down as the temperature continues to increase. The recommended change will desensitize the circuit making the design less susceptible to capacitor leakage, so that it will operate correctly with ambient temperatures above 60 degrees C.

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: C046-95001