



PRODUCT ADVISORY LETTER NO.: FB46-00001

DATE: February 25, 2000

AFFECTED PRODUCT(S): FCB (including product supplied by ABB Power T&D Company, Inc.)

AFFECTED MODULES:

IFO module (Part # - 1606C23G0x, rev./sub 12 or lower that shipped before 6-1-99)

High Power IFO module (Part # - 1610C94G01, rev./sub 2 or lower that shipped before 6-1-99)

MODEM module (Part # - 1606C18G01, rev./sub 9 or lower that shipped before 6-1-99)

DTT module (Part # - 1606C22G01, rev./sub 6 or lower that shipped before 6-1-99)

SYMPTOM(s): Signs of corrosion (or dark spots on body of the capacitor) will appear on the electrolytic capacitors indicated below. This eventually causes the module to fail.

RECOMMENDATION: Pulsar recommends the corrective action listed below be taken.

MODIFICATION KIT NO.: FB56-00001

CORRECTIVE ACTION: Replace the following 100 uF, 35V wet-slug tantalum capacitors (silver color body with a red band at one end) with a 47 uF, 35V solid dry tantalum capacitor (gold color body).

IFO module, Part# 1606C23G0x. Replace C39 and C40.

High Power IFO module, Part # 1610C94G01. Replace C39 on main board and C1 on top auxiliary board.

MODEM module, Part # 1606C18G01. Replace C2, C4, C6 and C8.

DTT module, Part # 1606C22G01. Replace C1, C2 and C6.

Request modification kit # FB56-00001 if you desire to do a field modification. If you choose to have your modules updated by our factory, please return the modules 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. Field modification kit # FB56-00001 is available at no charge.

TECHNICAL DETAILS: The lifetime of the 100 uF, 35V wet-slug tantalum capacitors that were being used was about 9-10 years according to our supplier. This is decreased by higher ambient temperatures and any ripple voltage riding on the dc voltage coming from the FCB Power Supply module. These wet-slug capacitors also were not hermetically sealed resulting in more possibility for leakage of electrolyte. Since the time that the design of the FCB was first done, much better capacitors have become available. The solid dry tantalum capacitors being used now have been used by Pulsar on various modules for more than 12 years with no problems of corrosion or failure. The supplier of these dry tantalum capacitors does not specify their lifetime but states only that it would be much longer than the wet-slug type that we were using and that these capacitors would not have any possibility of leakage.

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: FB46-00001