

S E R V I C E N O T E

SUPERSEDES: J2912A-02A

J2912A Internet Advisor OC-3 module

Serial Numbers: US36330001 / US36331264

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

T10 Torx driver
 J2912-69902 Exchange J2912A OC3/STM1 module

Situation:

When monitoring OC-3c/STM-1 data output in a network where the data is multiplexed from a OC-3c to OC-12 or higher (STM-1 to STM-4 or higher), the Line Status view will falsely indicate Far End, BIP and Yellow alarms, and counters for Remote, B3 BIP Errors, and Label Mismatch will increment. During these false error indications, the Line Vitals view will count HEC Errors and Path FEBEs, the Decode View will indicate Invalid HECs, the Discover/VP.VC Statistics view will indicate false VP.VCs, and Cell BERT results will indicate BERT errors.

The problem does not seem to occur in networks where the network data does not undergo transitions to higher data rates(OC-12/STM-4, etc), although the possibility exists in purely OC-3c (ATM) networks that may be encountering abnormal conditions which cause consistent pointer adjustments.

Continued

DATE: April 2000

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	LABOR 1.0 Hours
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY:	<input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS:	<input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AUTHOR: RM	ENTITY: 0801	AGILENT RESPONSIBLE UNTIL: March 2001	
		ADDITIONAL INFORMATION:	



The problem is caused by the way that the framer chip in the J2912A modules handle H1/H2 pointer adjustments. These pointer adjustments are a normal phenomena of Sonet and SDH networks, and are particularly important when OC-3/STM-1 data rates are multiplexed up to higher rates, where differences in the clock signals of the multiplexing devices can cause drift (jitter) in the location of the SPE payload bytes within the Sonet/SDH frame. The H1/H2 pointers sole existence is to compensate for these variations in the locations of the Sonet/SDH payloads by incrementing or decrementing in response to movement in the location of the payload within the Sonet/SDH frame. Unfortunately, when these pointers equal certain values, the framer chips erroneously indicate to the Advisor that Far End, BIP and Yellow alarms have occurred.

Solution / Action:

If a J2912A is returned for repair with the error explained above replace the J2912A with the exchange module part number J2912-69902. The top panel of the exchange J2912-69902 needs to be swapped with the customers J2912A top panel to preserve the customers serial number. The EC: label supplied with the J2912-69902 needs to be placed over any existing EC: label or added by the serial number on the customers repaired module before returning it to the customer.