Reverse Segmentable GainMaker Node OIB Shorting Condition Technical Bulletin

Overview

Reverse Segmentable GainMaker® Nodes that were manufactured and shipped prior to August 2007 have the potential for a shorting condition between the optical interface board (OIB) and a ground boss inside the node housing. If the soldermask on the back of the OIB is compromised, a 24 VDC power trace on the board may come into contact with the boss, creating a short to ground.

Our experience has shown that while some nodes having this condition may work indefinitely in the field, others may fail soon after installation. Therefore, we recommend that all nodes having this condition be reworked to add insulation between the OIB and the boss.

Important! This phenomenon has occurred in Reverse Segmentable GainMaker Nodes shipped prior to August 2007, and has been corrected in subsequent shipments of these products. This phenomenon should not occur in the standard GainMaker Nodes, as the OIBs in these nodes are of a different design.

Purpose

This technical bulletin explains to customers using the Reverse Segmentable GainMaker Node how to identify units possibly affected by this condition, and how to initiate rework of the affected nodes.

Audience

This document is intended for authorized service personnel who have experience working with similar equipment. The service personnel should have the background and knowledge required to understand and verify the information provided in this document.

Qualified Personnel

Only appropriately qualified and skilled service personnel should attempt to install, operate, maintain, and service this product.

WARNING:

Allow only qualified and skilled personnel to install, operate, maintain, and service this product. Otherwise, personal injury or equipment damage may occur.

Related Publications

You may find the following publications useful as you implement the procedures in this document.

- *1 GHz GainMaker Broadband Amplifier Platform Reverse Segmentable High Gain Balanced Triple Node Installation and Operation Guide*, part number 4015253

Identifying Specific Units Affected by a Shorting OIB

A unit may be affected by the shorted OIB condition if it was manufactured prior to August 2007 and has not yet been reworked to address this condition.

Erratic operation or total node failure may indicate a short between an OIB power trace and the node housing ground boss. Regardless of whether they exhibit trouble symptoms, all Reverse Segmentable GainMaker Nodes made prior to August 2007 that have not been reworked for this condition should be returned for rework.

Note: Reverse Segmentable GainMaker Nodes with date codes of August 2007 or later will already be reworked or will have a redesigned OIB that prevents the condition from occurring.

To Identify the Manufacturing Date

A label affixed to the node housing indicates the month and year of manufacture. The month is represented by a capital letter, as follows:

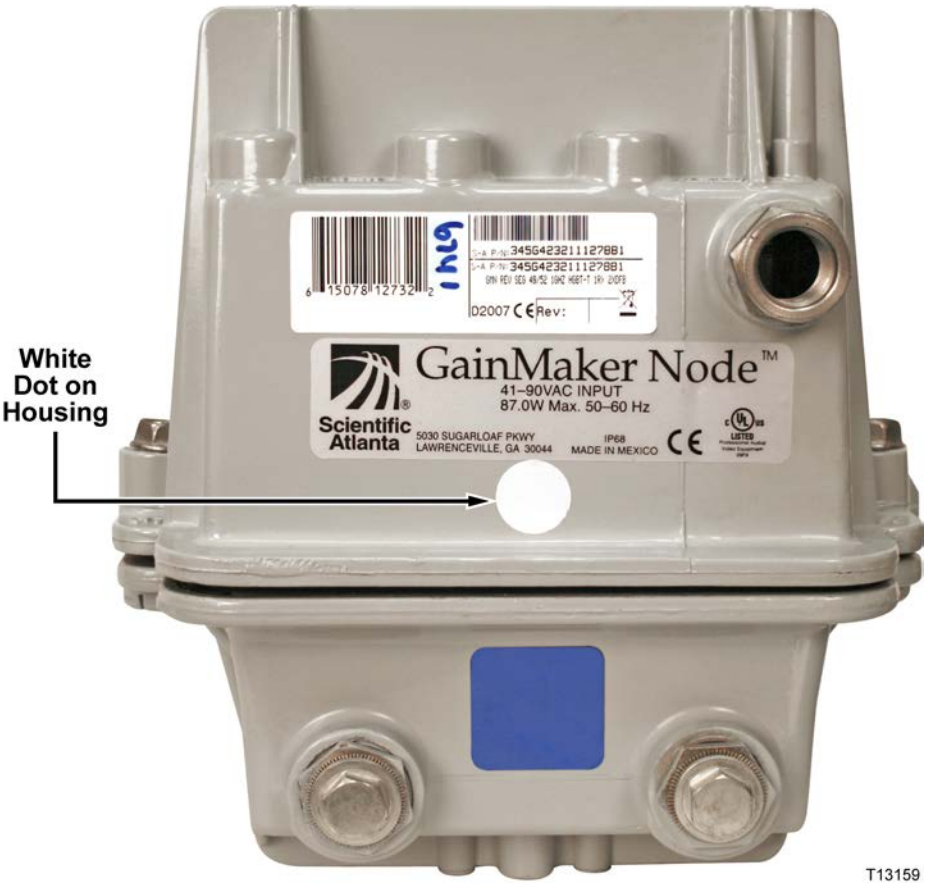
Code	Month
A	January
B	February
C	March
D	April
E	May
F	June
G	July
H	August
J	September
K	October
L	November
M	December

For example, the date code H2007 indicates that the node was made in August of 2007.

A sample date code label as it appears on the interior of a Reverse Segmentable GainMaker Node housing is shown below.

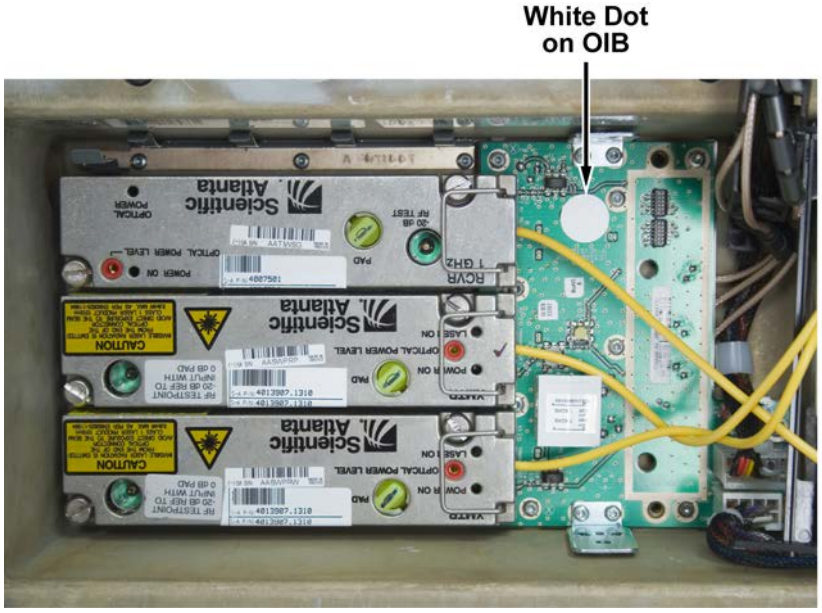
To Identify a Reworked Unit

Units on which the OIB has been reworked (insulation added between the OIB and the housing boss) are identified by a white dot affixed to the fiber entry end of the node housing, as shown below.



Note: Units shipped with a date code later than August 2007 will no longer show the white dot indicating a reworked OIB. These units will have a redesigned OIB that will have the shorting condition removed.

An identical white dot also appears inside a reworked node, affixed to the OIB just above the part number, as shown below.



Recommended Customer Action

We recommend that any unit identified as having this possible condition be returned to Cisco for rework.

If a Reverse Segmentable GainMaker Node exhibits the trouble symptom described in this document, we recommend returning the unit to Cisco for repair or replacement.

For Information

If You Have Questions

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.

Cisco Systems, Inc.
5030 Sugarloaf Parkway, Box 465447
Lawrenceville, GA 30042

678 277-1120
800 722-2009
www.cisco.com

September 2012 Printed in USA Part Number 78-4021645-01 Rev C