WOODWARD

Application Note 51547
(Revision NEW, 10/2015)

Original Instructions

RTCNet & LinkNet-HT Plug In Connector

17 Position Plug-in Connector Inspection and Replacement in the event of a Channel Failure

General Information

Introduction

Recently Woodward Field Service Engineers have seen connection failures on a small number of the 17 position plug-in connector (Woodward P/N 1750-1153) used on the RTCNet and LinkNet-HT nodes. This document is intended to help the customer troubleshoot, inspect and replace the 17 position plug-in connector if a defective connector is found at their site.

This 17 position plug-in connector is used on the following LinkNet-HT and RTCNet nodes:

Table 1-1. LinkNet-HT and RTCNet nodes

Family	Module Item Number:	Module Description:
LinkNet-HT	8200-1200	8 Ch. RTD Input Module
LinkNet-HT	8200-1201	8 Ch. TC Input Fail High Module
LinkNet-HT	8200-1202	Analog Input/Output Module
LinkNet-HT	8200-1203	Analog Input/Output Module w/ Loop Power
LinkNet-HT	8200-1204	Discrete Input Module
LinkNet-HT	8200-1205	Discrete Output Module
RTCNet	8200-1100	8 Ch. RTD Input Module
RTCNet	8200-1101	8 Ch. TC Input Fail High Module
RTCNet	8200-1102	Analog Input/Output Module
RTCNet	8200-1103	Analog Input/Output Module w/ Loop Power
RTCNet	8200-1104	Discrete Input Module
RTCNet	8200-1105	Discrete Output Module

Plug-In Connector Inspection and Replacement

Use proper ESD protection as described in manual B82715, Guide for Handling & Protection of Electronic Controls.

In the event of an intermittent or hard channel failure on one of the modules listed in the table on the previous page, inspect the plug-in terminal connectors prior to contacting Woodward for a failure analysis or replacement module. This application note applies specifically to the larger 17 position connector located on all of those modules, however the same can apply for any of the smaller version connectors in the event of a similar fault.

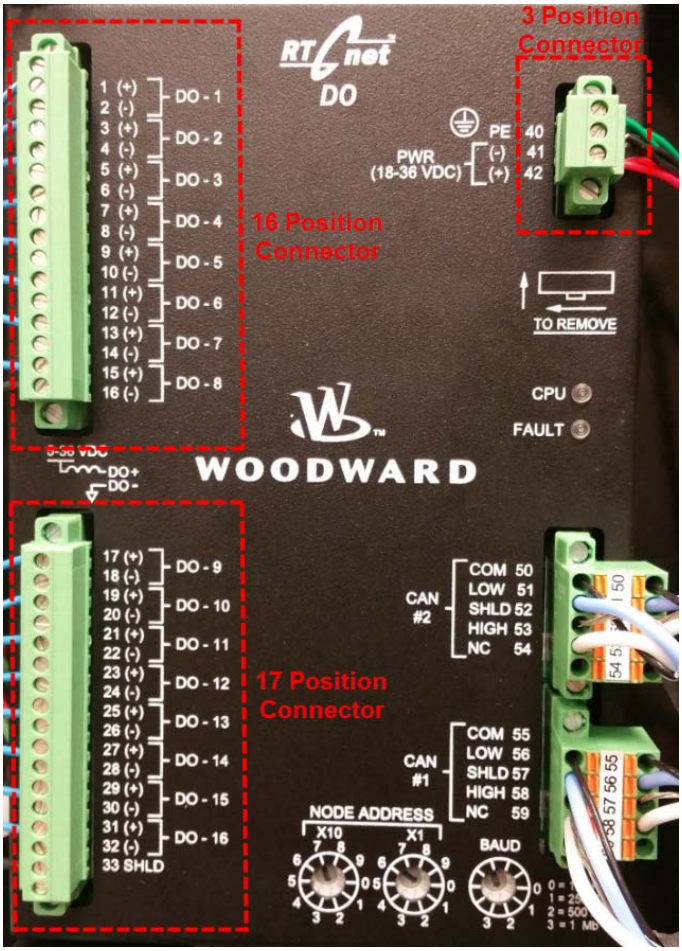

Figure 1-1. Connector location as shown on an RTCNet module.

Note: These connectors are the same type and in the same location as the LinkNet-HT

Plug-In Connector Inspection

1. Remove the connector from the RTCNet or LinkNet-HT node. Once the connector is removed, look at the bottom side or the plug side, hold the connector at an angle, and look down the notched side first.

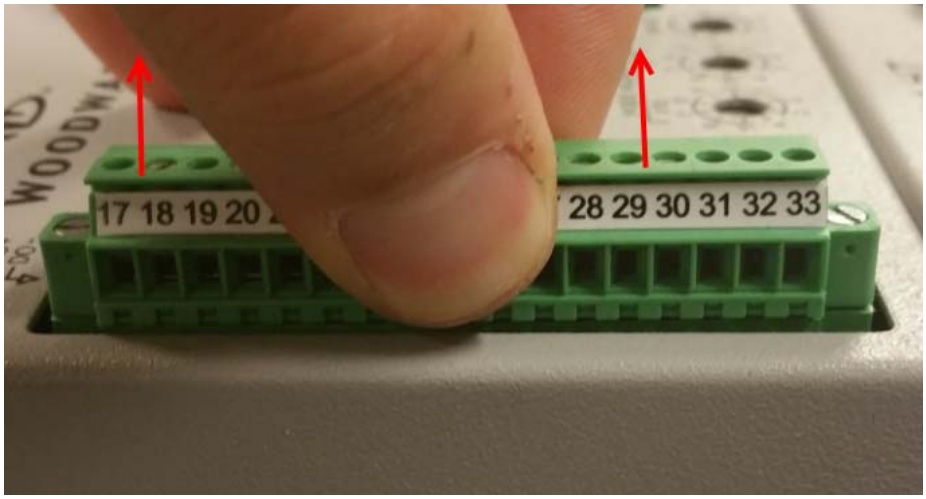

Figure 1-2. Connector Removal

2. Inspect each terminal individually for the socket contact.

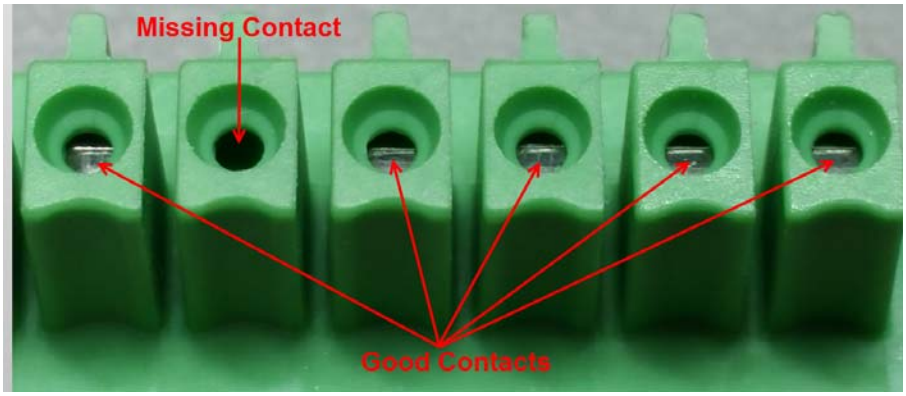

Figure 1-3. Contact Inspection Notch Side

3. Perform the same procedure on the non-notch side of the connector.

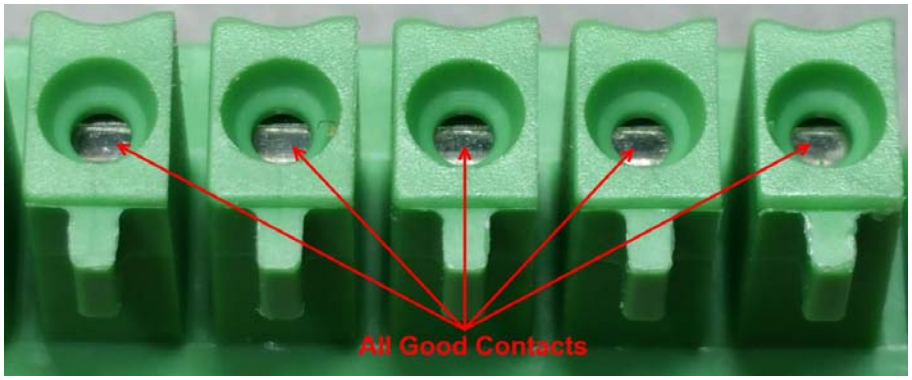

Figure 1-4. Contact Inspection Non-Notch Side

4. If any of the socket contacts are missing, (as in the pictures above), or seem to be misaligned than it is likely that the connector is faulty. If you find a faulty or suspect plug-in connector replace the connector with a spare or contact the proper Customer Service Representative (CSR) to have new connectors delivered to you. The Woodward P/N for the 17 position connector is 1750-1153.
5. Woodward has seen a small number of connectors where the contacts inside of the connector are damaged in some way so that they no longer make proper contact with the mating pin on the Printed Circuit Board Assembly. A picture of a faulty contact is shown below.

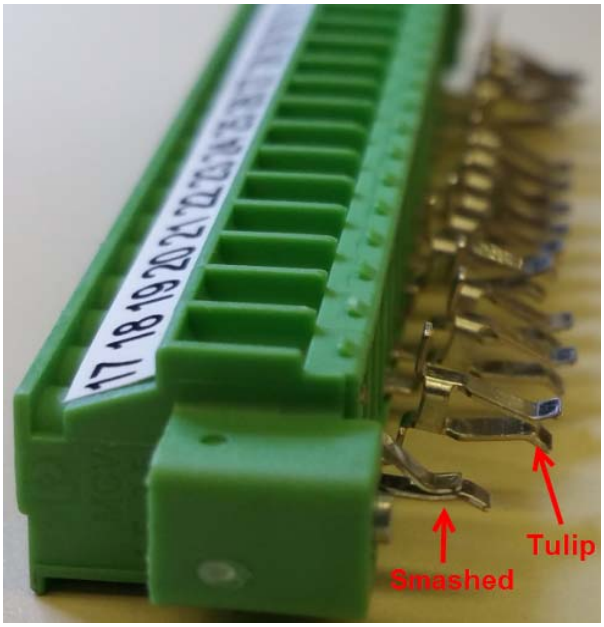

Figure 1-5. Faulty Contacts

Contacting Woodward's Support Organization

For the name of your nearest Woodward Full-Service Distributor or service facility, please consult our worldwide directory at **www.woodward.com/directory**, which also contains the most current product support and contact information.

You can also contact the Woodward Customer Service Department at one of the following Woodward facilities to obtain the address and phone number of the nearest facility at which you can obtain information and service.

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B 5 1 5 4 7 : N E W

PO Box 1519, Fort Collins CO 80522-1519, USA
1000 East Drake Road, Fort Collins CO 80525, USA
Phone +1 (970) 482-5811

Email and Website—www.woodward.com

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