## PCS CAN Master Connection Kit User Guide

## **Kit Contents**

- 2 CAN Tee Connectors
- 2 Terminating Resistor Plugs
- 1 CAN Extension Wire

If any of the above items are missing or replacement parts are needed, please contact Powertrain Control Solutions.

CAN communication uses a two wire connection that can be used to connect a series of devices together. PCS CAN devices use a connector system to provide an easy means for connecting new devices to CAN without cutting or splicing wires. The four components to the PCS CAN connector system are listed below.

- Device Connector
- Tee Connector
- Extension Cable
- · Terminating Resistor Plug

The Device Connector is on the harness of the device, such as the Transmission Controller, D200, XFC, Accelerometer, or EGT. This connector has an orange key in the connector and can only plug into one of the three ports on the Tee Connector.

The Tee Connector has three ports on it. One is keyed for a device (the orange key), while the other two ports are used for the Extension Cable or the Terminating Resistor Plug (both with black keys).

The Extension Cable is twelve inches on two twisted wires and has a black keyed connection on each end.

The Terminating Resistor Plug is a necessity. It looks like a connector with no wires coming out of it. It is keyed black and can be inserted in two of the three ports of the Tee Connector. A CAN network should have one terminating resistor plug on each end of the bus for a total of two resistors.

On all Device Connectors and Extension Cables, the white with red stripe wire should connect to pin 1 and the white with black stripe wire should connect to pin 2. The pin numbers can be found on the side of the connector body.

**NOTE:** CAN communication will **NOT WORK** if Terminating Resistor Plugs are not used.

**NOTE:** Orange or black keys may be in connectors with black or gray housings. The key color can be seen by looking at the end of the connector that is inserted into the Tee.

This Master Connection Kit will only have to be purchased once for a CAN network. As new items are added to the CAN network, only the CAN Add-on Connection Kit (P/N: A-CON5501) is required. The connections for a two device CAN network are shown in **Figure 1**.

If more than two devices need to be on the CAN network, and the CAN Master Connection Kit is already installed, then a CAN Add-on Connection Kit (P/N: A-CON5501) is required for every new device. This kit includes a Tee Connector and one Extension Cable. The connections for a three device network are shown in Figure 2. Simply remove one of the Terminating Resistor Plugs, and insert the Extension Cable. Connect the other end of the Extension Cable to the new Tee Connector. Insert the Termination Resistor Plug into the other black keyed port on the new Tee and insert the new device's orange keyed device connector into the remaining port on the Tee.

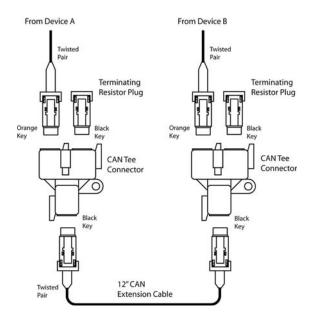


Figure 1: Two Device CAN Network using the CAN Master Connection Kit.

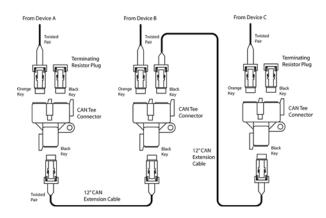


Figure 2: Three Device CAN Network using the Master Connection Kit and One CAN Add-on Connection Kit.

LIMITED WARRANTY STATEMENT. Powertrain Control Solutions, LLC. Warrants all merchandise against defects in factory workmanship and materials for a period of 12 months after purchase. This warranty applies to the first retail purchaser and covers only those products exposed to normal use or service. Provisions of this warranty shall not apply to Powertrain Control Solutions, LLC. Product used for a purpose for which it is not designed, or which has been altered in any way that would be detrimental to the performance or life of the product, or misapplication, misuse, negligence or accident. On any part or product found to be defective after examination by Powertrain Control Solutions, LLC., Powertrain Control Solutions, LLC. will only repair or replace the merchandise through the original selling dealer or on a direct basis. Powertrain Control Solutions, LLC. assumes no responsibility for diagnosis, removal and/or installation labor, loss of vehicle use, loss of time, inconvenience or any other consequential expenses. The warranties herein are in lieu of any other expressed or implied warranties, including any implied warranty of merchantability or fitness, and any other obligation on the part of Powertrain Control Solutions, LLC., or selling dealer.