



INSTRUCTION - JUNCTION TN03012

RECORD OF REVISIONS

(When updated, this document is changed in its entirety)

| REV | DATE | DESCRIPTION | BY | APPROVAL |
|-----|-------------|-----------------|-----|----------|
| A | FEB-09-2017 | Initial release | GDO | |
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Description

This instruction is for the installation/assembly of junction kits. They are used as a terminal block (buss) for power distribution. The bussing allows for one feeder lead cable to be junction-ed out into multiple supply lead cables. The bussing is split into two groups, one for the black (grey) "BLK" wires and one for the white "WHT" wires. The top of the bussed receptacle in each kit shows this bussing and it is shown in figures on page 2.

Material specification

Contacts

Pins and sockets are copper alloy with nickel finish.

Open Cavity Seal

Locking sealing plug 0413-217-1605 used in all open cavities may be trimmed to length 0.080 ±0.10 inches or trimmed flush with seal (Inserted large end first through rear seal).

Connector Body

Plug and receptacle are thermoplastic with silicone seals

Dialectic Withstanding Voltage

Current leakage is less than 2 milliamps at 1500 VAC.

Vibration

Maintains continuity and exhibits no mechanical or physical damage after vibration level of 20g's at 10-2000Hz.

Temperature and Current Rating

Operative temperature from -55° C to 125° C at continuous rated current of 13 amps and 500 volts.

Thermal Cycle Environmental Temperature

No deformations, cracking, electrical or mechanical defects after exposure to cycles from -55° C to 200° C.

Crimp Process

Connectors employ MIL-C-39029 military standard technology.

Installation instruction:

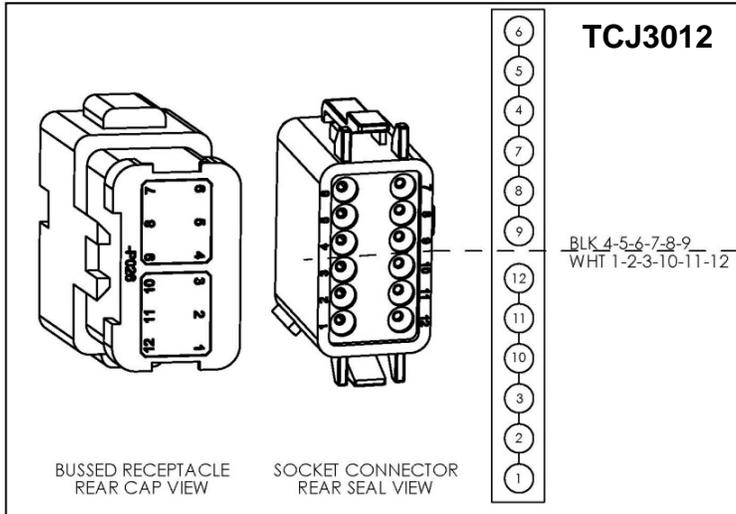
Reference instruction TN02793 for crimping contacts and generic assembly instructions.

When replacing an existing junction connector refer the wire diagram for your cable kit.

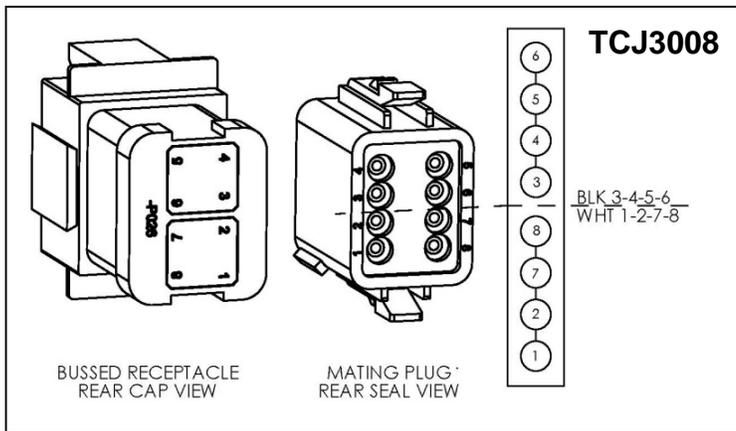
1. Ensure power disconnected from system.
2. Remove existing junctioning or make break in lead that is to feed junction and prepare wires.
Note: To remove an existing junction, a small screwdriver or DTRT-1 placed at the edge of the socket connector's wedge and slight prying on both sides should detach wedge. The contacts are held in with a detent finger.
3. Install contacts to wire as required.
4. Assemble socket connector by inserting contacts. (listen for click)
 - Connector has contact numbers shown beside each contact. See figures on page 2.
 - Use included locking sealing plugs (0413-217-1605) to fill in any open contact locations. See figure on page 2.
5. Install locking wedge into socket connector.
6. Install bussed receptacle to socket connector. (listen for click)
7. Test junction with continuity test.
 - Black wires should have full continuity to each other and no continuity to white wires.
 - White wires should have full continuity to each other and no continuity to black wires.
8. Reconnect heating elements and other devices and test system.

PROPRIETARY DATA

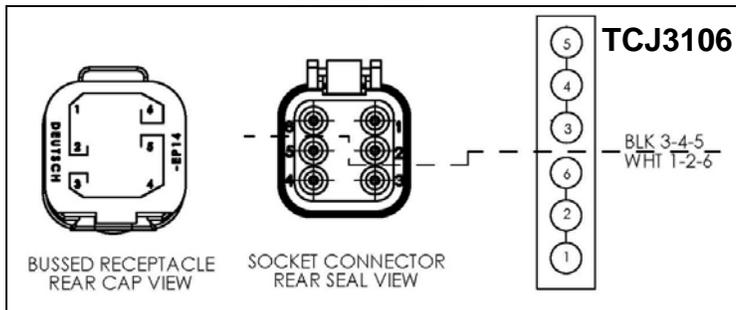
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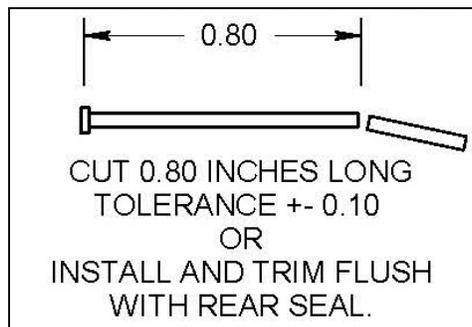
- TCJ3012 – Kit Contains:**
- 1 EA. DT04-12PB-P026, 12 PIN BUSSED RECEPTACLE
 - 1 EA. DT06-12SB, 12 SOCKET PLUG BODY
 - 1 EA. W12S, CONTACT WEDGE
 - 12 EA. 0462-201-16141, SOCKET CONTACT
 - 2 EA. 0413-217-1605, LOCKING SEALING PLUG



- TCJ3008 – Kit Contains:**
- 1 EA. DT04-08PB-P026, 8 PIN BUSSED RECEPTACLE
 - 1 EA. DT06-08SB, 8 SOCKET PLUG BODY
 - 1 EA. W8S, CONTACT WEDGE
 - 8 EA. 0462-201-16141, SOCKET CONTACT
 - 2 EA. 0413-217-1605, LOCKING SEALING PLUG



- TCJ3106 – Kit Contains:**
- 1 EA. DT04-06P-EP14, 6 PIN BUSSED RECEPTACLE
 - 1 EA. DT06-06S-CE02, 6 SOCKET PLUG BODY
 - 1 EA. W6S, CONTACT WEDGE
 - 6 EA. 0462-201-16141, SOCKET CONTACT
 - 2 EA. 0413-217-1605, LOCKING SEALING PLUG



- 0413-217-1605 Locking sealing plug install notes:**
- Install wide end first through orange rear silicone seal. Listen for click and tug to make sure that it is fully seated.
 - It is acceptable to trim the tail of the sealing plug flush with rear seal surface of connector.
 - Removal is done the same as a contact; open connector and depress locking finger out of the way. Then grab tail or press through front with contact remover (DTRT-1 or equivalent).