



## INSTRUCTION - CONNECTOR TN02793

### RECORD OF REVISIONS

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

REV	DATE	DESCRIPTION	BY	APPROVAL
G	AUG-10-2016	ECR 2016-0015	GDO	
F	NOV-10-2015	Correct alternate part numbers on Figure 1.	GDO	DJE
E	NOV-05-2015	Material Spec for Open Cavity Seal, move polarity note	GDO	DNE

### 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



**NOTE:**  
Connector bodies marked for polarity.

2 Connector polarity  
 1 - Black or Gray wire  
 2 - White wire



3 Connector polarity  
 A - Black or Gray wire  
 B - White wire  
 C - Green wire

**Figure 1** - Examples of 2 and 3 contact connectors, Use procedures for TC connectors and TJ junctions.

#### PROPRIETARY DATA

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### SOCKET CONTACT ASSEMBLY



1. Align crimped contact straight into connector seal, per polarity (Note).



2. Push contact until a click is heard from engagement of internal retention tab. A slight pull will confirm the contact is locked in place.



3. Once the contacts are in place, insert a retainer: 2 wire plugs use a wedge/cap with 2 holes. 3 wire plugs use an wedge/cap with 3 holes that the contacts align behind.

### SOCKET CONTACT REMOVAL



1. Remove orange wedge cap using small screwdriver. Insert between the edge and the body on the narrow side of the connector. Then pull straight out.

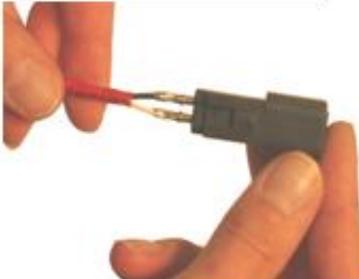


1. Gently pull the contact wire and release the locking finger from the contact with a small screwdriver. See contact diagram page 3.

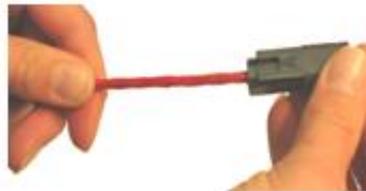


3. Gently pull the contact wire out and push the rear seal back in place if dislodged.

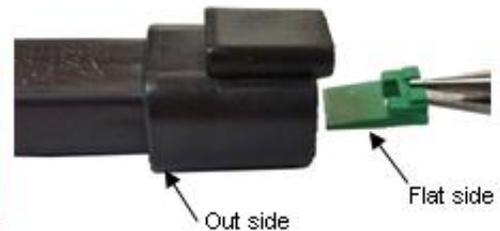
### PIN CONTACT ASSEMBLY



1. Align crimped contact, insert straight into connector seal, per polarity (Note).



2. Push contact until a click is heard from engagement of internal retention tab. A slight pull will confirm the contact is locked in place.



3. Once the contacts are in place, insert a wedge retainer, flat side to the outside of connector body: For 3 connector receptacles insert the wedge in the middle using pliers.

### PIN CONTACT REMOVAL



1. Remove wedge using DT-RT1 or seal pick. Pull straight out. For 3 connector receptacles remove the wedge in the middle using pliers.



2. Gently pull the contact wire and release the locking finger from the contact with a small screwdriver or pick. See contact diagram page 3.

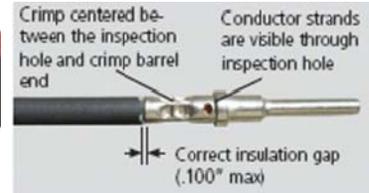


3. Gently pull the contact wire out and then push the seal back in place if displaced.

**TANIS CRIMP TOOL**  
**P/N: TU02793**

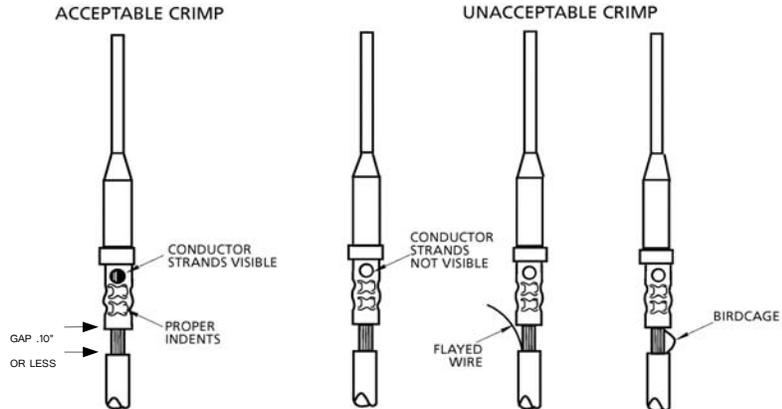
4 way adjustable hand crimp tool for solid contacts, 16-22 AWG

*Alternate Crimp Tools:*  
-AF8-TH163 "DMC, CRIMP TOOL WITH TH163 TURRET HEAD"  
-HDP-400 "Deutsch power crimper"  
-HDT-48-00 "Deutsch 4-way indent tool"



- Strip 0.40"-0.60" of jacket insulation from wire. Strip wire insulation 0.25"-0.321" Open crimp handles to retract the indenters (crimp contacts).
  - Insert contact. Turn adjusting cap until contact is flush with indenters cover.
  - Insert wire in contact so that it is to the bottom of the contact but shielding is even or with in .10 of the contact. Contact must be centered between the four indenters. Close handles until handle contacts the stop.
  - Release handles, and remove crimped contact.
  - Inspect terminal to insure that all strands are in crimp barrel and crimp is per illustrated inspection procedures below.
- Note: Tool must be readjusted for each type/size of contact or wire.

**SOLID CONTACT CRIMP INSPECTION**



NOTE: Solder should not be added to contact terminals.

