VIBRATION ANALYSIS HARDWARE

Product Manual

MNX10012 / REV D

MODELS:

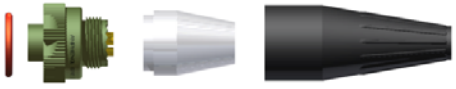
CF-AXX & JXX

CF-BXX

CF-C2X & C3X

CF-DXX

CF-GXX

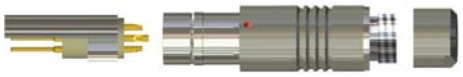


CF-RXX

CF-C1

CF-C3 & C4

CF-C66



Field Installable Connector Kits

Contents

Section I
Overview

Introduction

This document contains information on the operation, installation and maintenance of the CF-AXX, CF-BXX, CF-C2X, CF-C3X, CF-DXX, CF-GXX CF-JXX, CF-RXX, CF-C1, CF-C3, CF-C4, & CF-C66 Series Connectors. This manual is an overview of the field installable connector assemblies.

Description

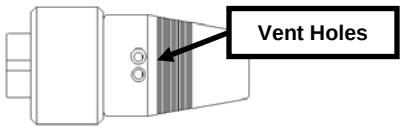
These field installable connector kits are designed for field installation of common connectors. Factory installed connectors are generally recommended, but these can be used in cases where cables cannot be removed and a new connector is necessary.

Section II
Installation

CF-AXX & JXX Series

CF-AXX & JXX Series with Epoxy Injection Vent Holes

1. Strip outer jacket of wire .300”.
2. Cut off shield and drain wire (for twisted shielded pair wires only).
3. Strip the insulation of two conductor wires back .200”.
4. Solder Accelerometer (+) wire to solder cup for Pin A.
   Solder Accelerometer (-) wire to solder cup for Pin B.
   For 3 socket version, Temperature (+) wire to solder cup for Pin C.
5. Slide the knurled ring over the threaded section of the connector plug.
6. Thread the strain relief onto the connector plug.
7. Place the assembled connector body horizontally with the epoxy injection holes level and facing upward.
8. Using the syringe fill the strain relief body with epoxy until the epoxy begins to extrude from the other small hole.
9. Allow to dry in the horizontal position and refill the strain relief as the epoxy settles after 1 ½ hours.



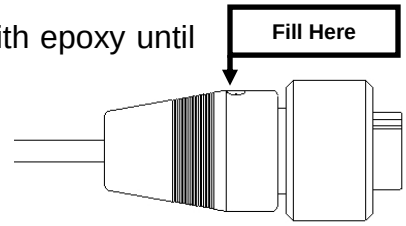


Figure 1 – CF-AXX & JXX with Injection Vent Holes

For CF-AXX & JXX Series with OD > .250

1. Strip outer jacket of wire .300”.
2. Cut off shield and drain wire (for twisted shielded pair wires only).
3. Strip the insulation of two conductor wires back .200”.
4. Solder Accelerometer (+) wire to solder cup for Pin A.
   Solder Accelerometer (-) wire to solder cup for Pin B.
   For 3 socket version, Temperature (+) wire to solder cup for Pin C.
5. Slide the knurled ring over the threaded section of the connector plug.
6. Thread the strain relief onto the connector plug.
7. Fill the strain relief body with epoxy up to the top of the strain relief.
8. Allow the epoxy to dry for approximately 3 hours.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6


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Figure 2 – CF-AXX & JXX without Injection Vent Holes

CF-BXX Series

For CF-BXX Series with Epoxy Injection Holes

1. Strip outer jacket of wire .300”.
2. Cut off shield and drain wire (for twisted shielded pair wires only).
3. Strip the insulation of two conductor wires back .200”.
4. Solder Accelerometer (+) wire to solder cup for Pin A.
   Solder Accelerometer (-) wire to solder cup for Pin B.
   For 3 socket version, Temperature (+) wire to solder cup for Pin C.
5. Thread strain relief onto threaded connector plug.
6. Place the assembled connector body horizontally with the epoxy injection holes level and facing upward.
7. Using the syringe fill the strain relief with epoxy until the epoxy begins to extrude from the other small hole.
8. Allow to dry in the horizontal position and refill the strain relief as the epoxy settles after 1 ½ hours.
9. After 3 hours push the Silicone Boot shell over the assembled connector body until it snaps into place.
   a. For CF-B2A – The connector body should be recessed approximately 1/8” from tip of Silicone Boot when properly installed.

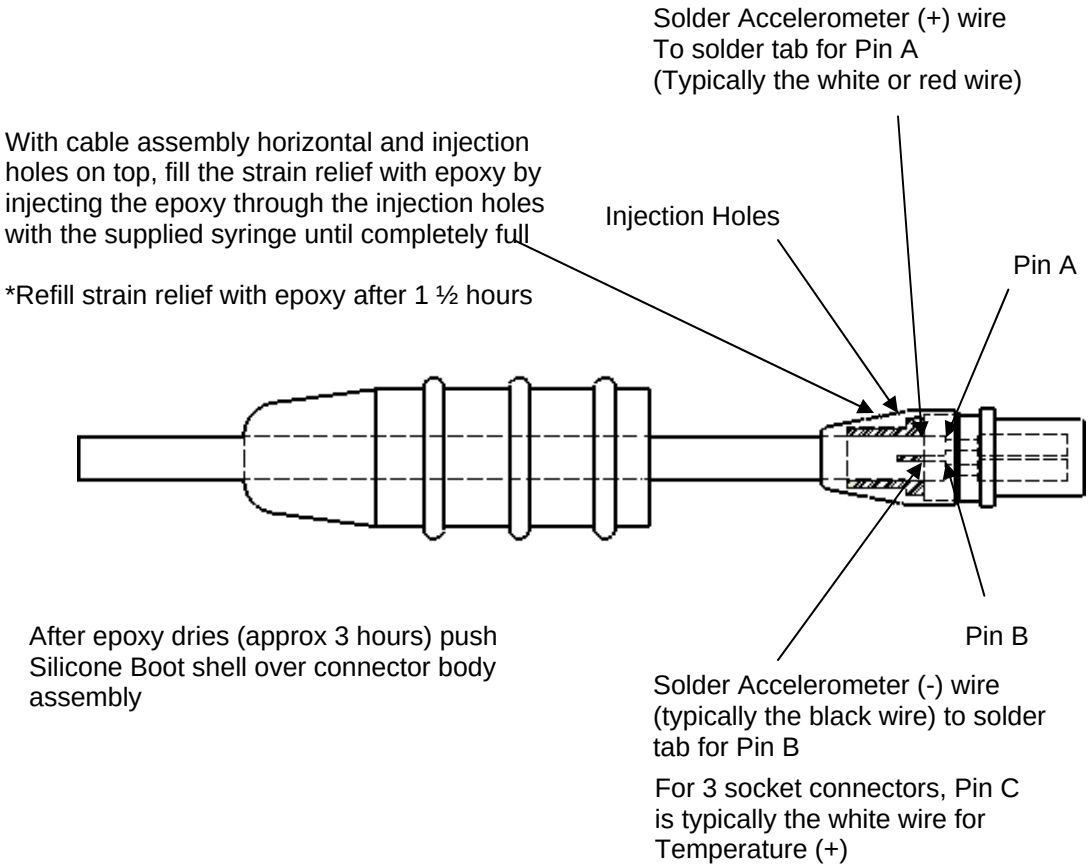


Figure 3 – CF-BXX with Injection Vent Holes

CF-C2X & C3X Series

For CF-C2X & C3X Series:

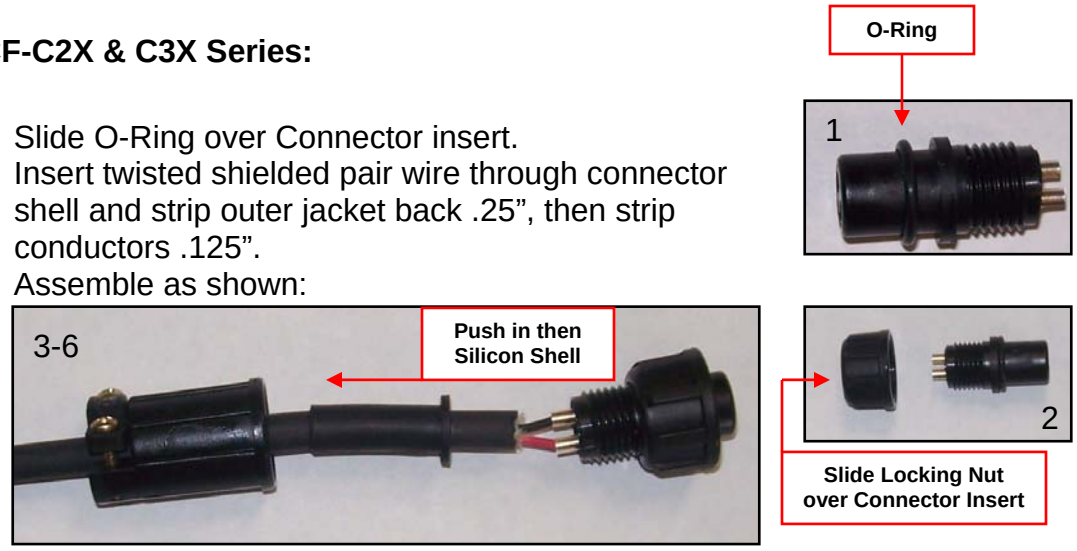


Figure 4 - CF-C2X & C3X Series

1. Slide O-Ring over Connector insert.
2. Insert twisted shielded pair wire through connector shell and strip outer jacket back .25", then strip conductors .125".
3. Assemble as shown:
4. Solder Cup A to red or white wire of cable.
   Solder Cup B to black wire of cable.
   When used with (3) conductor, Solder Cup C to white wire of Cable.
   Note: Any shield drain wire should be clipped off at this end of cable.
5. Slide cable strain relief up cable and into connector shell. Fill Shell ½ full with Silicone RIV. Slide shell down to threaded connector. Insert and thread into place.
6. Screw the cable clamp into place over the Cable and cable strain relief.

NOTE *When used with (3) Pin Connector:*
Dual Output sensor – Vibe Temp;
Pin A – Positive Vibration
Pin B – Negative
Pin C – Positive Temperature
Dual LP Series
Pin A – 4-20mA Positive
Pin B – Negative
Pin C – Positive Dynamic Vibration

CF-DXX, GXX, RXX, & C1 Series

For CF-DXX Clamping Series:

1. Strip outer jacket of wire .300”.
2. Cut off shield and drain wire (for twisted shielded pair wires only).
3. Strip the insulation of two conductor wires back .200”.
4. Solder Accelerometer (+) wire to solder cup for Pin A.
   Solder Accelerometer (-) wire to solder cup for Pin B.
   For 3 socket version, Temperature (+) wire to solder cup for Pin C.
5. Thread back-shell onto connector.
6. Thread strain relief onto back-shell.
7. Clamp cable with cable clamps.

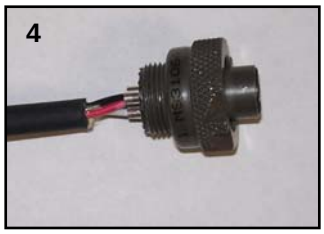


Figure 5 – CF-DXX with Clamping Strain Relief

For CF-D2D Series:

1. Strip outer jacket of wire .300”.
2. Cut off shield and drain wire (for twisted shielded pair wires only).
3. Strip the insulation of two conductors wires back .200”.
4. Solder Accelerometer (+) wire to solder cup for Pin A.
   Solder Accelerometer (-) wire to solder cup for Pin B.
   For 3 socket version, Temperature (+) wire to solder cup for Pin C.
5. Thread elbow body onto connector.
6. Thread back-shell onto elbow.
7. Tighten cable clamps.

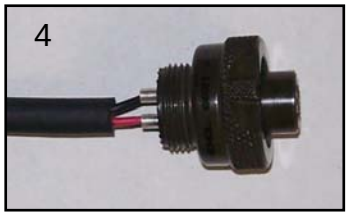


Figure 6 – CF-D2D
Right Angle Connector

For CF-GXX & C1 Clamping Series:

1. Strip outer jacket of wire .600”.
2. Cut off shield and drain wire (for twisted shielded pair wires only).
3. Strip the insulation of two conductor wires back .200”.
4. Insert three conductors into rubber insert as shown on right.
5. Solder Accelerometer (+) wire to solder cup for Pin A.
   Solder Accelerometer (-) wire to solder cup for Pin B.
   For 3 socket version, Temperature (+) wire to solder cup for Pin C.
   Note: When soldering CF-C1, Pin A is (-) and Pin B is (+).
6. Thread back-shell onto connector.
7. Clamp cable with cable clamps.

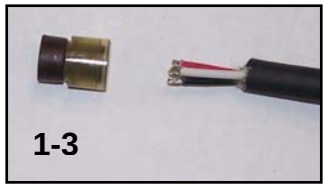


Figure 7 – CF-GXX with Clamping Strain Relief

For CF-DXX & RXX Epoxy Fill Series:

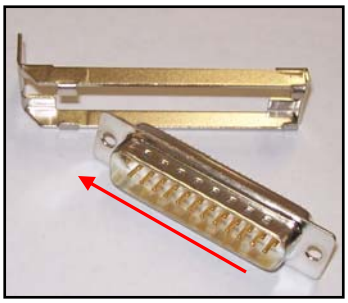
1. Strip outer jacket of wire .300”.
2. Cut off shield and drain wire (for twisted shielded pair wires only).
3. Strip the insulation of two conductor wires back .200”.
4. Solder Accelerometer (+) wire to solder cup for Pin A.
   Solder Accelerometer (-) wire to solder cup for Pin B.
   For 3 socket version, Temperature (+) wire to solder cup for Pin C.
5. Thread strain relief onto connector.
6. Fill the strain relief body with epoxy up to the top of the strain relief.
7. Allow to dry in the vertical position and refill the strain relief as the epoxy settles after 1 ½ hours.
8. After 3 hours push the Silicone Boot shell over the assembled connector body until it snaps into place. The Silicone Strain Relief should be flush with the metal strain relief when properly installed.

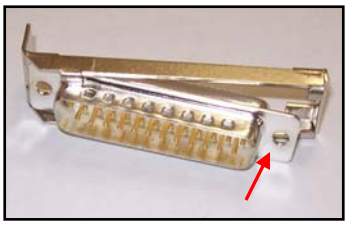
Figure 8 – CF-DXX & RXX with Non-Clamping Strain Relief

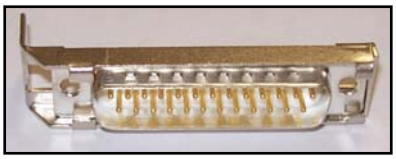
CF-C3 &C4

For CF-C3 & C4 25 Pin Connectors:

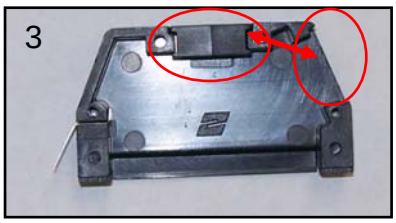
1. Solder customer specific pin outs.
2. Slide connector into slide lock as shown.

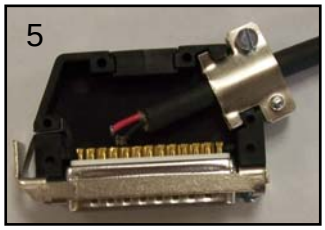






3. Place spring and hole cover into back-shell. ***Note: You may switch the hole cover and the cable entry if need be.***
4. Screw connector and slide lock into bottom of back-shell. Making sure that spring is on inside of slide lock.
5. Place cable clamp in back-shell and tighten down.
6. Screw down the side to the back-shell.





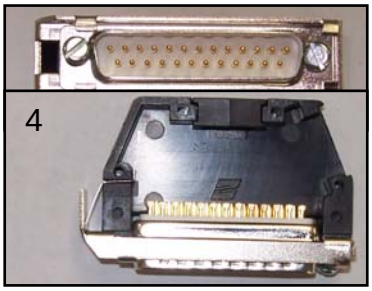


Figure 9 – CF-C3 & C4 Connector Assembly

CF-C66 Series

For CF-C66 6 Pin Circular Push-Lock Connector:

1. Strip outer jacket of cable .500”.
2. Strip the insulation of two conductor wires back .375”.
3. Solder Accelerometer (+) wire to solder cup for Pin 1.
   Solder Accelerometer (-) wire to solder cup for Pin 5.
   Solder Shield Drain to case.
4. Slide insert into connector as far down as you can.
5. Slide cut out shell around connector.
6. Slide in other side of shell.
7. Screw on end cap.

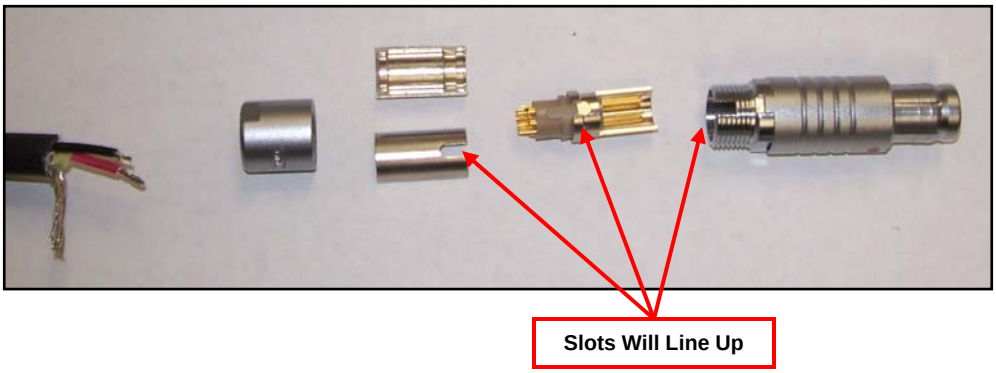


Figure 10 – C66 Connector Assembly

Section III
Operation

Assembled connectors, after adhesive cure, can be attached to sensors as normal.

Section IV
Maintenance

General

There are no customer replaceable parts on the Connector Kits. The product should provide trouble-free continuous service under normal operating conditions.

Warranty

If any CTC vibration analysis hardware product should ever fail, we will repair or replace it at no charge.

CONTACT INFORMATION:
Connection Technology Center, Inc (CTC)
7939 Rae Blvd.
Victor, NY 14564
1-800-999-5290 (US & Canada) 1-585-924-5900 (International)
sales@ctconline.com – www.ctconline.com