

NOTE: Not to Scale.

CONNECTOR				CONDUCTOR			
CATALOG NO. AND PART NO.	LENGTH IN. [mm]	OD IN. [mm]	SOCKET SIZE IN. [mm]	CONDUCTOR RANGE	STRIP LENGTH IN. [mm]	CONDUCTOR OD RANGE IN. [mm]	REMOVE INSERT FOR CONDUCTOR SIZE GREATER THAN OR EQUAL TO IN. [mm]
CSBS 2-250 1974136-1	3.2 [81]	1.05 [26.7]	1/2 [13]	2 AWG Compact-250 kcmil Stranded	1 1/2 [38]	.27-.58 [6.8-14.6]	4/0 AWG Compressed .51 [13]
CSBS 2/0C-500C 1099861-1	4 [101.6]	1.2 [30.5]	11/16 [17]	2/0 AWG Compact-500 kcmil Compact	1 7/8 [47]	.37-.73 [9.6-18.7]	300 kcmil Compact .57 [14.5]
CSBS 2/0-500 CPR 1974127-1	4 [101.6]	1.3 [33]	11/16 [17]	2/0 AWG Compact-500 kcmil Compressed	1 7/8 [47]	.37-.79 [9.6-20]	350 kcmil Compressed .66 [16.8]
CSBS 300C-750C 1099879-1	5 [127]	1.45 [36.8]	3/4 [19]	300 kcmil Compact-750 kcmil Compact	2 3/8 [60.2]	.57-.91 [14.5-23]	500 kcmil Compact .73 [18.7]
CSBS 300-750 1974102-1	5 [127]	1.5 [38.1]	3/4 [19]	300 kcmil Compact-750 kcmil Stranded	2 3/8 [60.2]	.57-.99 [14.5-25.4]	600 kcmil Compressed .86 [22.0]
CSBS 500-1000 1974111-1	7 [178]	1.75 [44.4]	3/4 [19]	500 kcmil Compact-1000 kcmil Stranded	3 3/8 [86]	.73-1.15 [18.7-29.3]	1000 kcmil Compact 1.06 [27]
CSBS 1000-1250 1974112-1	7 [178]	1.9 [48]	3/4 [19]	1000 kcmil Compact-1250 kcmil Stranded	3 3/8 [86]	1.06-1.29 [26.9-32.7]	N/A
CSBS-2000 2182603-1	8.2 [208]	2.3 [58]	3/4 [19]	2000 kcmil Compact to Stranded	4 [101.6]	1.53-1.63 [39-41.4]	N/A

Figure 1

1. INTRODUCTION

This instruction sheet provides installation procedures for Copper ShearBolt Connectors described in Figure 1.



NOTE

ShearBolt Connectors are designed to be compatible with all Raychem* cable accessories and insulation products. For other applications, consult the manufacturer's installation instructions for compatibility.

To obtain information on Energy Products, visit TE Connectivity Energy website at <http://energy.te.com>. Reason for revision is provided in Section 3, REVISION SUMMARY.

2. INSTALLATION PROCEDURE

2.1. Cable Preparation



CAUTION

DO NOT use a conductor that has been previously terminated.

1. Strip both conductor ends to the dimension shown in Figure 1. Ensure that each conductor end has a straight (right-angle) cut before installing.
2. Using a wire brush dedicated for use on copper conductors, thoroughly clean the conductor ends.

2.2. Connector Installation

1. Determine if the insert should be removed according to the conductor size (see table in Figure 1). If insert removal is required, use a small screwdriver to lift or tap the insert from the connector body. If insert is not removed, ensure it is properly positioned in the connector barrel during installation (insert indent seated in connector notch). DO NOT remove the inhibitor contained inside the connector.
2. Back out (but do not remove) all bolts to give clearance for the conductor in the connector body.



CAUTION

Do not completely remove bolts from the connector body. Removing bolts followed by improper bolt re-installation could result in stripping of the threads.

3. Insert the conductor into the connector body. For proper installation, there should be NO GAP between the insulation and the connector body.

Tighten the bolts in a three-step process:

- a. Hand-tighten the bolts to firmly grip conductor in place. Follow the tightening sequence shown in Figure 2.
 - b. Using a cordless impact wrench (minimum torque of 1,460 in-lbs/122 ft-lbs), such as TE Part No. T25446-000, apply a one second interval (equivalent to 1.5 turns of the bolt with a standard socket wrench) to each bolt, repeating the tightening sequence shown in Figure 2. Bolts should remain un-sheared.
 - c. Repeat the tightening sequence as shown in Figure 2, tightening each bolt until the head of the bolt shears off.
4. Smooth sharp edges of protruding bolts using the provided aluminum oxide paper or a file. Clean connector to remove particles.



NOTE

A standard hexagonal socket wrench may also be used. To prevent twisting and bending of the conductor core during installation, the optional TE Holding Tool IT-1000-019 (or equivalent) can be used. This support tool helps to keep the wrench in proper parallel alignment, to avoid stripping of the threads.

3. REVISION SUMMARY

- Changed information in table in Figure 1 and test in Paragraph 2.2 and new photo in Figure 2.
- Add note in section 2.2 for insert positioning.

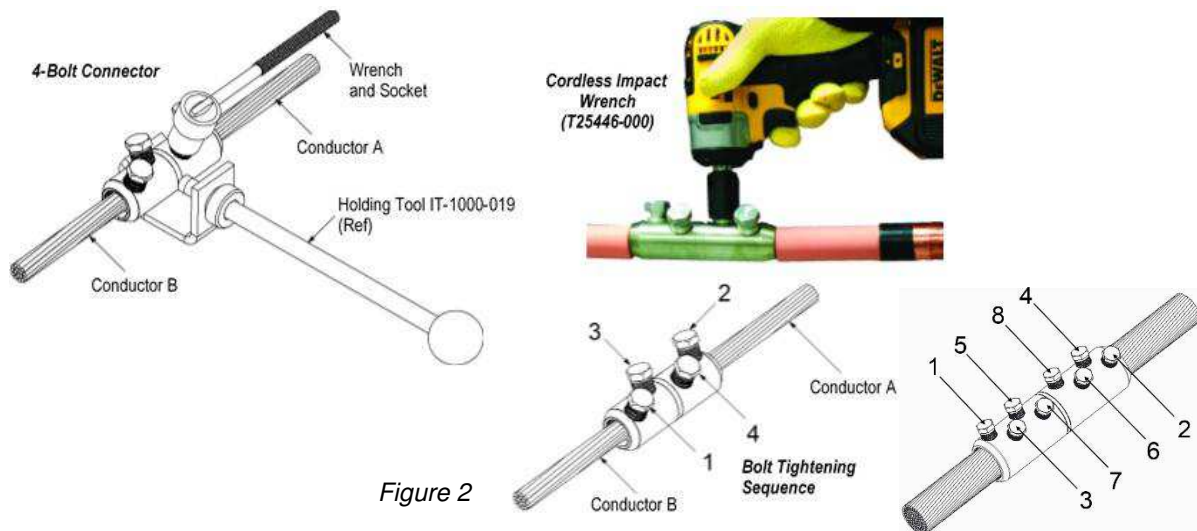


Figure 2