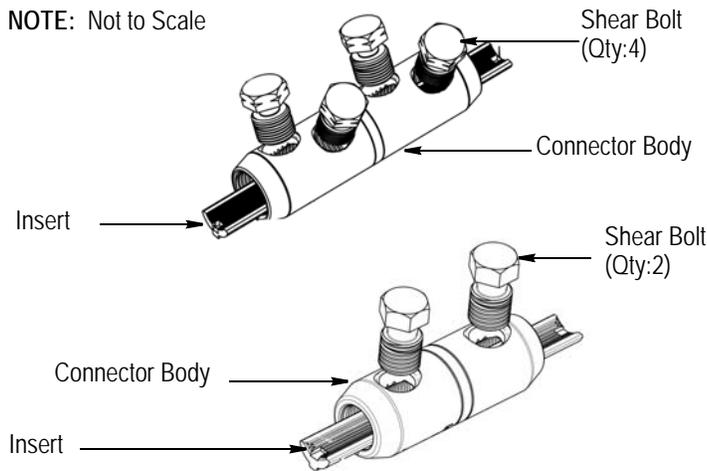
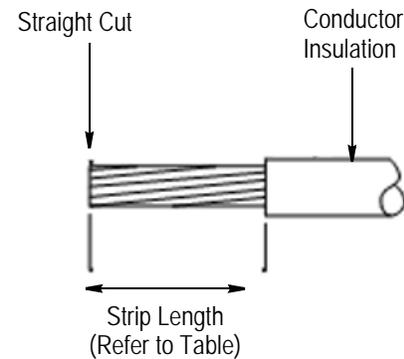


NOTE: Not to Scale



Typical for Both Conductor Ends



CONNECTOR				CABLE			
PART NUMBER AND CATALOG NUMBER	LENGTH mm [in.]	OD mm [in.]	SOCKET SIZE mm [in.]	CONDUCTOR RANGE	STRIP LENGTH mm [in.]	CONDUCTOR DIA RANGE mm [in.]	REMOVE INSERT FOR CONDUCTOR SIZE GREATER THAN (mm [in.])
1974178-1 ASBS 2-3/0-S (2-Bolt)	65 [2.5]	24[0.94]	13[1/2]	#2 AWG Compact Stranded to 3/0 AWG Standard Stranded	30 [1.2]	6.8-11.9 [.27-.47]	1/0 AWG Compact Stranded 8.5 [.33] Diameter
1974130-1 ASBS-3/0-500-S (4-Bolt)	125 [4.9]	34 [1.34]	19 [3/4]	3/0 AWG Compact Stranded to 500 kcmil Standard Stranded	60 [2.36]	10.7-20.6 [.423-.813]	300 kcmil Standard Stranded 16 [.630] Diameter

Figure 1

1. INTRODUCTION

This instruction sheet provides installation procedures for Aluminum ShearBolt connectors.

i **NOTE**
Dimensions in these instructions are in metric units [with inches in brackets]. Figures and illustrations are for reference only and are not drawn to scale.

To obtain information on Energy Products, visit TE Connectivity Energy website at <http://energy.te.com>.

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.

Reasons for reissue of this instruction sheet are provided in Section 3, REVISION SUMMARY.

2. INSTALLATION PROCEDURES

2.1. Cable Preparation

i **NOTE**
DO NOT use a conductor that has been previously terminated.

1. Determine the conductor sizes to be installed. Ensure that each conductor end has a straight (right-angle) cut. Strip both conductor ends to the dimension shown in Figure 1.

2. Using a wire brush dedicated for use on aluminum or copper conductors, thoroughly clean the bare surface strands of each conductor end. Cleaned conductor ends should be installed *immediately* to prevent reformation of fresh oxides.

2.2. Connector Installation

1. Determine whether the insert should be removed according to conductor size (see Figure 1). If insert removal is required, use a small screwdriver to lift or

tap the insert from the connector body. DO NOT remove the inhibitor contained inside the connector.

2. Back out all bolts to give clearance for the conductor in the connector body.
3. Insert the conductors into the connector body. For proper installation, there should be NO GAP between the insulation and the connector body.

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

! *CAUTION*
To facilitate assembly when two different conductor sizes are to be installed, it is recommended to insert the larger conductor into the connector barrel first.

4. Tighten the bolts in a three-step process:
 - a. Hand-tighten the bolts to firmly grip conductors in place. Follow the tightening sequence shown in Figure 2.
 - b. Using a wrench with a hexagonal socket, tighten the bolts one to one-and-a-half turns, (one

second interval if using the TE Connectivity cordless impact wrench) repeating the sequence in the previous step. Bolts should remain un-sheared. Prevent core bending by using Holding Tool IT-1000-019 (or equivalent) with the wrench as shown in Figure 2.

i *NOTE*
Cordless Impact Driver T25446-000 can be used instead for installation. A holding tool is not needed if using this wrench.

c. Repeat the sequence (above), tightening each bolt until the head of the bolt shears off. The wrench should remain parallel to the connector body.

5. Smooth sharp edges of protruding bolts using the provided aluminum oxide paper or a file. Clean connector to remove particles.

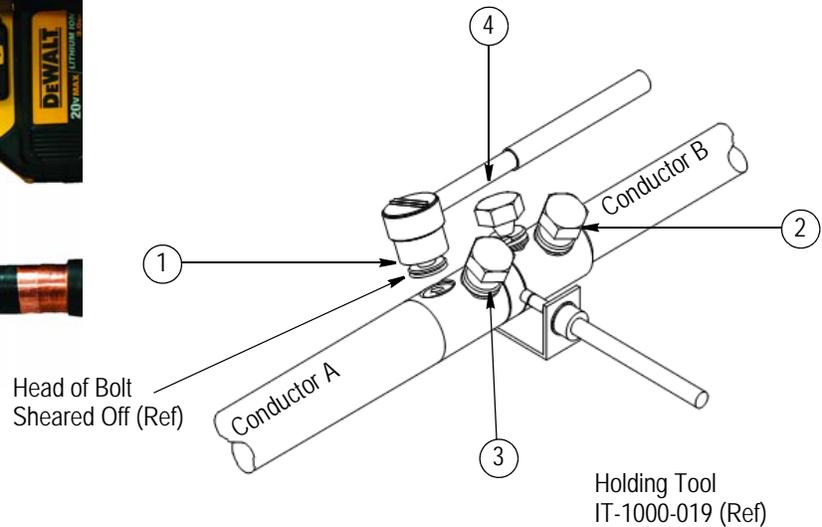
3. REVISION SUMMARY

- Product expansion
- New Cordless Impact Driver

*Cordless Impact Driver
T25446-000 (Ref)*



Bolt Tightening Sequence



4-Bolt Connector

Figure 2