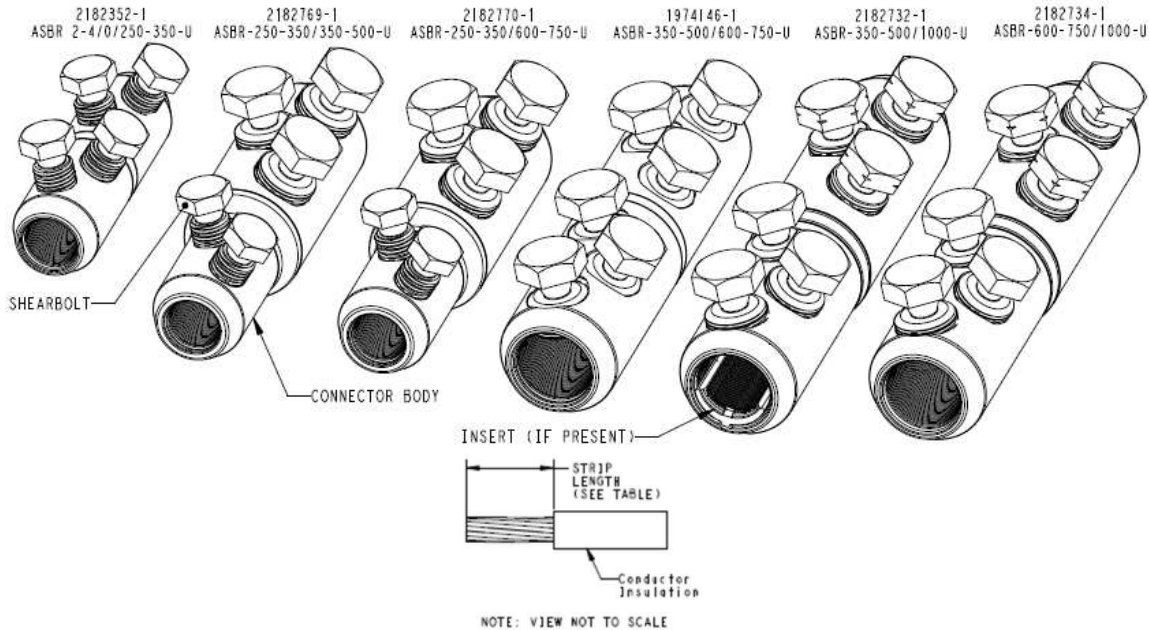


Aluminum Shearbolt Reducer (UL Approved)

07 JAN 20 Rev A



CONNECTOR						CONDUCTOR		
PART NUMBER AND CATALOG NUMBER	LENGTH	OD	SOCKET SIZE	NUMBER OF NOT REMOVABLE INSERTS	INSTALL TORQUE (ft-lbs)	RANGE	DIAMETER RANGE	STRIP LENGTH
2182352-1 ASBR 2-4/0/250-350-U (4 Bolts)	100 [3.9]	31 [1.2]	17 [11/16]	N/A	26 ±3	2 AWG Compact to 4/0 AWG Stranded	6.8-13.4 [.27-.53]	44.5 [1-3/4]
					24 ±3	250 kcmil Compact to 350 kcmil Stranded	13.2-17.3 [.52-.68]	
2182769-1 ASBR-250-350/350-500-U (5 Bolts)	142 [5.6]	33 [1.3]	17 [11/16]	N/A	24 ±3	250 kcmil Compact to 350 kcmil Stranded	13.2-17.3 [.52-.68]	44.5 [1-3/4]
		42.5 [1.67]	22 [7/8]	1 (On 350-500 Only)	36 ±3	350 kcmil Compact to 500 kcmil Stranded	15.7-20.6 [.62-.81]	80 [3-1/8]
2182770-1 ASBR-250-350/600-750-U (5 Bolts)	142 [5.6]	33 [1.3]	17 [11/16]	N/A	24 ±3	250 kcmil Compact to 350 kcmil Stranded	13.2-17.3 [.52-.68]	44.5 [1-3/4]
		42.5 [1.67]	22 [7/8]		33 ±3	600 kcmil Compact to 750 kcmil Stranded	20.7-25.3 [.81-1.0]	80 [3-1/8]
1974146-1 ASBR-350-500/600-750-U (6 Bolts)	170 [6.7]	42.5 [1.67]	22 [7/8]	1 (On 350-500 Only)	36 ±3	350 kcmil Compact to 500 kcmil Stranded	15.7-20.6 [.62-.81]	80 [3-1/8]
				N/A	33 ±3	600 kcmil Compact to 750 kcmil Stranded	20.7-25.3 [.81-1.0]	
2182732-1 ASBR-350-500/1000-U (6 Bolts)	189 [7.4]	42.5 [1.67]	22 [7/8]	1 (On 350-500 Only)	36 ±3	350 kcmil Compact to 500 kcmil Stranded	15.7-20.6 [.62-.81]	80 [3-1/8]
		44.5 [1.75]		N/A	43 ±3	1000 kcmil Compact to 1000 kcmil Stranded	27-29.3 [1.06-1.15]	98 [3-7/8]
2182734-1 ASBR-600-750/1000-U (6 Bolts)	189 [7.4]	42.5 [1.67]	22 [7/8]	N/A	33 ±3	600 kcmil Compact to 750 kcmil Stranded	20.7-25.3 [.81-1.0]	80 [3-1/8]
		44.5 [1.75]			43 ±3	1000 kcmil Compact to 1000 kcmil Stranded	27-29.3 [1.06-1.15]	98 [3-7/8]

Figure 1

1. INTRODUCTION

This instruction sheet provides installation procedures for the Aluminum ShearBolt Sleeve/Reducer.



Dimensions in these instructions are in metric units [with imperial units in brackets]. Figures are for reference only and are not drawn to scale.

2. INSTALLATION PROCEDURES

2.1. Cable Preparation



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 conductors 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



DO NOT remove the insert or inhibitor contained inside the connector. Ensure insert is properly positioned in the connector barrel during installation (insert indent seated in connector notch).

1. Back out all bolts to give clearance for the conductor in the connector body.

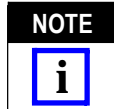


Do not completely remove the bolts from the connector body. Removing bolts followed by improper bolt re-installation could result in stripping of the threads.

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

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

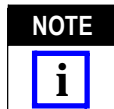
ShearBolt Connectors are designed to be compatible with all Raychem cable accessories and insulation products. For other applications, consult the manufacturer's installation instructions for compatibility.



To facilitate assembly when two different conductor sizes are to be installed, it is recommended to insert the larger conductor into the reducer first.

3. Tighten 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.



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.

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

3. REVISION SUMMARY

- Rev A → Initial Release

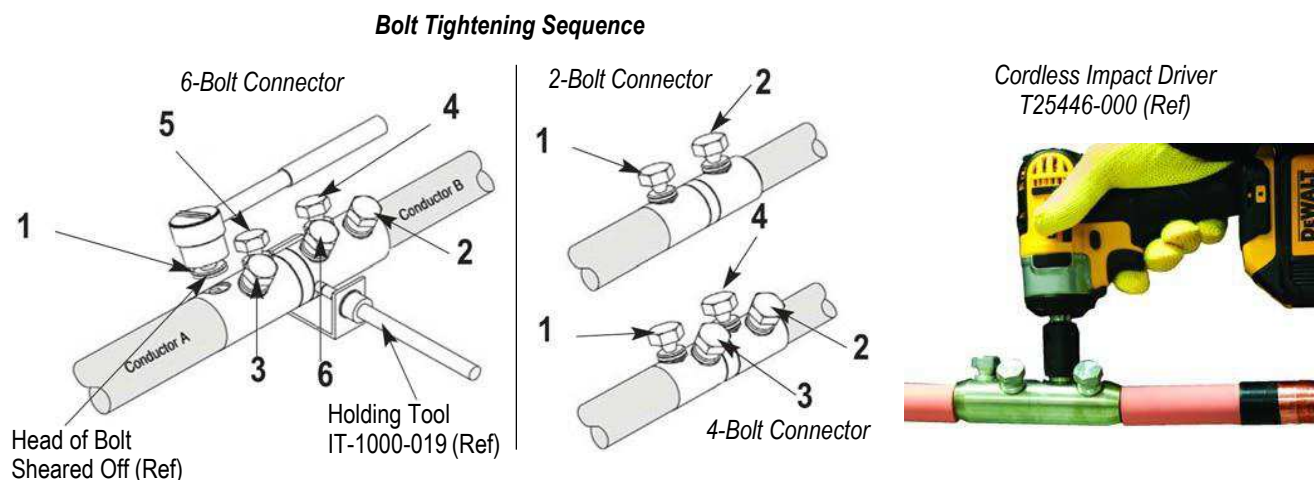


Figure 2