

# **Shear Bolt Mechanical Connectors**

*Installation Instructions* 

### Caution: De-Energize and ground all electrical systems before installing product

## 1) Cable Preparation

- a. Ensure end of cable is cut straight and square.
- b. Determine strip length by lining up the end of cable with wire mark on the barrel and mark the insulation on cable at barrel entry (see figure 1).
- c. Strip insulation carefully to avoid nicking or cutting conductor strands.
- d. Aluminum conductor must be scratch brushed thoroughly just prior to insertion into the connector in order to remove the hard non-visual/non-conductive oxides that develop on the surface.
- e. Ensure conductor is clean and dry before inserting into connector.
- f. If desired, apply PENETROX<sup>TM</sup> oxide inhibiting compound to aluminum conductor after scratch brushing to impede further formation of surface oxides after the connection is made.

#### 2) Cable Insertion

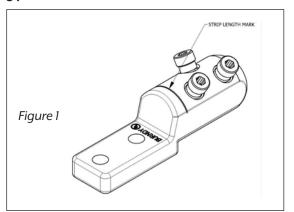
- a. If necessary, unscrew shear bolts to provide enough clearance for conductor to enter barrel, but do not remove. Unscrew by hand ONLY as using an impact wrench could result in cross threading and/or stripping.
- b. Insert conductor fully into barrel.
- c. Hand tighten each shear bolt until they are in contact with the conductor.
- d. Using a 3/8" hex bit and wrench or impact wrench, tighten each shear bolt until the head of the bolt shears off following the sequence shown in figure 2.
  Ensure bit is fully seated in hex recess before tightening.
- e. When installing screws, it is important to maintain axial application of torque on the head of the screw. Any bending moments or side loading introduced by the installation tool can easily cause the screw to seat sideways in the terminal body thread and lead to cross threading and/or stripping.

#### 3) Terminal Installation

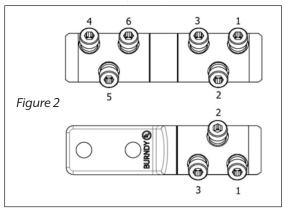
a. Scan QR code for video representation of installation of Burndy Shear Bolt.













Customer Service 1-800-346-4175 Technical Services 1-800-451-4956 www.burndy.com

## **Features & Benefits**

- Dual Rated AL9CU for both copper and aluminum conductor
- cULus Listed Wire Connector to UL486A-486B
- Up to 35kV voltage rating
- Easy Installation with shear bolt technology, no crimp tools necessary
- 3/8" Hex Key for all sizes
- Tin Plated aluminum connectors and screws
- Range-taking on most sizes



Catalog Number	Wire Range	# Stud Holes	Stud Size	Stud Spacing	# Shear Bolts	Socket Head Size	Figure
One-Hole Lug**							
KASB28U12	2/0-4/0 AWG	1	1/2"	_	2	3/8"	1
KASB31U12	250-350 kcmil	1	1/2"	_	2	3/8"	1
KASB34U12	350 - 500 kcmil	1	1/2"	_	3	3/8"	1
KASB39U12	600 - 750 kcmil	1	1/2"	_	3	3/8"	1
KASB44U12	1000 kcmil	1	1/2"	_	3	3/8"	1
KASB45U12	1250 kcmil	1	1/2"	_	3	3/8"	1
Two-Hole Lug							
KASB28U2N	2/0-4/0 AWG	2	1/2"	1.75	2	3/8"	2
KASB31U2N	250-350 kcmil	2	1/2"	1.75	2	3/8"	2
KASB34U2N	350 - 500 kcmil	2	1/2"	1.75	3	3/8"	2
KASB39U2N	600 - 750 kcmil	2	1/2"	1.75	3	3/8"	2
KASB44U2N	1000 kcmil	2	1/2"	1.75	3	3/8"	2
KASB45U2N	1250 kcmil	2	1/2"	1.75	3	3/8"	2
<u>Splice</u>							
KSSB28U	2/0-4/0 AWG	_	_	_	4	3/8"	3
KSSB31U	250-350 kcmil	_	_	_	4	3/8"	3
KSSB34U	350 - 500 kcmil	_		_	6	3/8"	3
KSSB39U	600 - 750 kcmil	_	_	_	6	3/8"	3
KSSB44U	1000 kcmil	_	_	_	6	3/8"	3
KSSB45U	1250 kcmil	_	_	_	6	3/8"	3

<sup>\*\*\*</sup> U12 Suffix denotes 1/2" stud hole. Additional stud hole sizes also offered, such as U38 for 3/8", U58 for 5/8", etc. Contact your Burndy Salesperson for additional options.







Figure 1 Figure 2