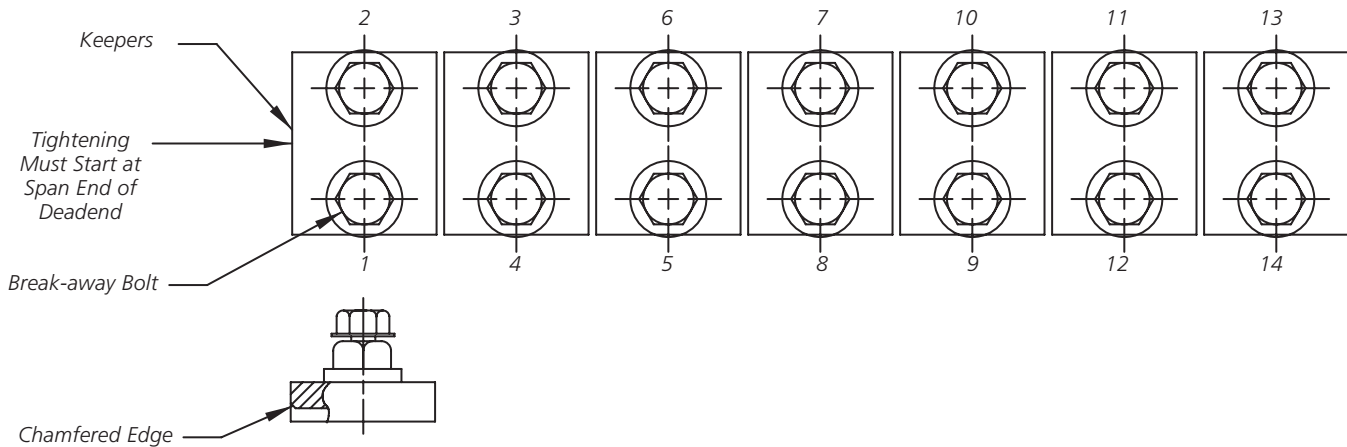


## Installation Instructions for OPGW Bolted Dead End

### Procedure

1. Disassemble dead end. Remove one bolt from the same side of each keeper. Loosen other bolts to permit conductor to be placed in the conductor groove. If keepers and bolts are removed completely, care must be taken to return the keeper closest to the span end of the dead end to its original position (chamfered edge towards span). Remove clevis hardware.
2. Straighten conductor removing set caused by reel.
3. Place conductor into groove and install dead end keepers with washers break-away bolts.
4. Care should be taken during installation to maintain the keepers squarely on the conductor with equal clearance on both sides of conductor.
5. Starting at the span end of the dead end, follow the tightening sequence shown below, tighten all bolts to approximately 5 ft.-lbs. (7 Nm for metric). Repeat to approximately 25 ft.-lbs. (33 Nm for metric). Then final pass until break-away head breaks off. The sequential pattern is set up to equalize the load in each bolt and to prevent the deadend keepers from cocking to one side during installation.



6. If cable guide is not supplied, proceed to step 8. Cable guide, if used, is provided to insure that minimum bending radius of OPGW is not violated. Care should be exercised to avoid undue stress on cable guide. Note: cable guide is not a structural member and adds nothing to the holding strength of the clamp. Train conductor to make it bottom along the cable guide groove. This is important to assure clearance for the link plate/connecting hardware.
7. After placing OPGW into cable guide groove, install cable guide keeper with lockwashers and green break-away bolts alternately tightening bolts by 2 ft.-lbs. Repeat until break-away head breaks off. Care should be taken during installation to maintain the keeper squarely on the conductor with equal clearance on both sides of conductor.
8. Install connecting hardware with dead end clevis bolt. Check for clearance with OPGW.
9. If re-installation is necessary, bolts should be torqued according to the chart below. Installation with a torque wrench must be performed when break-away bolt is not present.

BOLT SIZE (IN.)	BOLT COLOR	BREAK-AWAY TORQUE (FT-LBS.)
1/2	Black	27-32
5/8	Red	35-40
5/8	Blue	40-45

