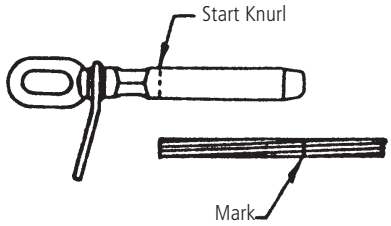
Installation Instructions

Non-Adjustable Quick Compress Dead Ends for ACSR Conductors (VES/HES and VED/HED Series)

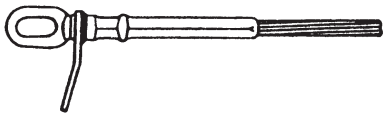
1. Prior to making any connections, the conductor must be wire brushed. If the conductor is weathered or blackened, carefully unlay the aluminum strands for a distance equal to the compression length of the dead end barrel. Clean the aluminum strands thoroughly with a wire brush. An alternate way to thoroughly clean the aluminum oxidation from the conductor is to use the ConductaClean® system. Straighten several feet of conductor removing set caused by reel.
2. Mark the conductor from the end, a distance equal to the length of compression barrel.



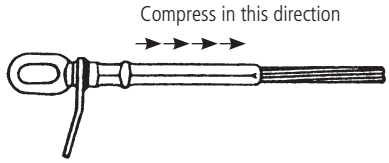
3. Cut the aluminum strands back a distance equal to the length of the core grip plus 1/4 inch (6 mm). Do not nick the steel strands. File burrs as necessary for ease of insertion.

4. Insert the steel core into the core grip. Do not twist the core grip while inserting core wire.

5. Insert the core grip and conductor into the compression barrel. Be sure the conductor is inserted beyond the mark on the conductor.



6. To compress the aluminum barrel, select the proper die size as stamped on the barrel.
7. The dead end will bow during compression unless care is taken to have 15 feet (4.5 m) of the conductor supported straight out from the end of the dead end. The weight of the conductor should not hang unsupported when compressing.
8. Make the initial compression at the "start knurl" and continue making compressions to the end of the dead end body. Complete die closure is required for each compression. Overlap the previous compression by approximately 1/4 die bite. It is recommended that die grooves be well lubricated with a lightweight oil. Oil coating should be maintained during entire compression operation.
9. Remove flash, if any, with a file or an abrasive cloth.

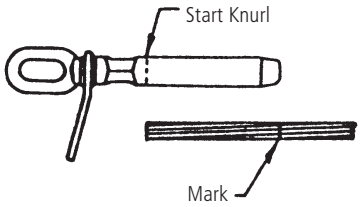


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

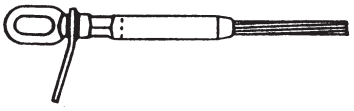
Installation Instructions

Non-Adjustable Quick Compress Dead Ends for AAC, AAAC and ACAR Conductors

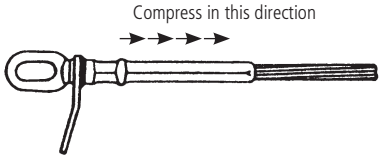
1. Prior to making any connections, the conductor must be wire brushed. If the conductor is weathered or blackened, carefully unlay the aluminum strands for a distance equal to the compression length of the dead end barrel. Clean the aluminum strands thoroughly with a wire brush. An alternate way to thoroughly clean the aluminum oxidation from the conductor is to use the ConductaClean® system. Straighten several feet of conductor removing set caused by reel.
2. Mark the conductor from the end, a distance equal to the length of compression barrel.



3. File burrs or sharp edges off the aluminum strands as necessary for ease of insertion.
4. Insert the conductor into the compression barrel. Be sure the conductor is inserted beyond the mark on the conductor.

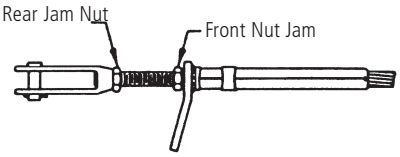


5. To compress the aluminum barrel, select the proper die size as stamped on the barrel.
6. The dead end will bow during compression unless care is taken to have 15 feet (4.5 m) of the conductor supported straight out from the end of the dead end. The weight of the conductor should not hang unsupported when compressing.
7. Make the initial compression at the "start knurl" and continue making compressions to the end of the dead end body. Complete die closure is required for each compression. Overlap the previous compression by approximately 1/4 die bite. It is recommended that die grooves be well lubricated with a lightweight oil. Oil coating should be maintained during entire compression operation.
8. Remove flash, if any, with a file or an abrasive cloth.



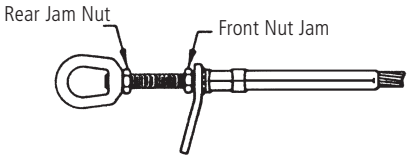
Installation Instructions for Adjustable Quick Compress Dead Ends for ACSR, AAC, AAAC and ACAR Conductors

1. To install, follow steps 1-9 on previous page for ACSR or 1-8 above for AAC, AAAC and ACAR.



To Adjust Dead Ends

2. Loosen rear nut jam.
3. Rotate clevis or eye for proper sag.
4. Tighten rear jam nut.

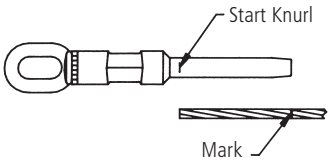


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions

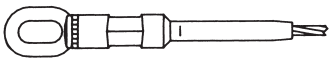
Non-Adjustable Quick Compress Dead Ends for Alumoweld® and Steel Ground Wire

1. Serve the conductor, prior to cutting, to help maintain the round contour. File burrs or sharp edges off the conductor as necessary for ease of insertion.
2. Straighten several feet of conductor removing set caused by reel.
3. Prior to making connections, the conductor must be clean. If the conductor is weathered or blackened, clean strands thoroughly with wire brush.
4. Mark the conductor for a distance from the end equal to the length of compression of the aluminum barrel.



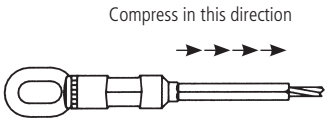
---

5. Insert the conductor into the compression barrel. Be sure the conductor is inserted beyond the mark on the conductor.
6. Select the proper die size to compress the aluminum barrel. The die size indicated on the aluminum barrel should match that indicated on the compression dies.
7. The dead end will bow during compression unless reasonable care is taken to have about 15 feet of the conductor supported straight out from the end of the dead end such that the weight of the conductor does not hang unsupported from the end of the dead end when compressing.



---

8. It is recommended that die grooves be well lubricated with a light weight oil. Oil coating should be maintained during entire compression operation.
9. Make initial compression starting at the start knurl. Continue making compressions to the end of the dead end barrel. Overlapping the previous compression by approximately 1/4 die bite. Complete die closure is required for each compression.
10. Compressed portion of the dead end should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.

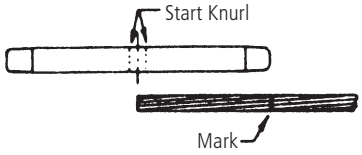


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions for Quick Compress Joints for AAC, AAAC, ACAR Conductors, Alumoweld® and Steel Ground Wire

1. Prior to making any connections, the conductor must be clean. If the conductor is weathered or blackened, carefully unlay the aluminum strands for a distance equal to half the length of the joint. Clean the aluminum strands thoroughly with a wire brush. An alternate way to thoroughly clean the aluminum oxidation from the conductor is to use the ConductaClean® system. Straighten several feet of conductor removing set caused by reel.

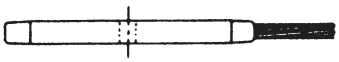
2. Mark the conductor from the end, a distance equal to half the length of the joint.



---

3. File burrs or sharp edges as necessary for ease of insertion.

4. Insert the conductor into one end of the joint. Be sure the conductor is inserted to the mark on the conductor.



---

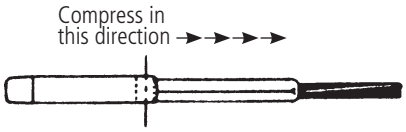
5. To compress, select the proper die size as stamped on the joint.

6. The joint will bow during compression unless care is taken to have a minimum of 15 feet (4.5 m) of the conductor supported on both sides.

7. Make the initial compression at the 'start knurl' and continue compressing toward one end of the joint. Complete die closure is required for each compression. Overlap the previous compression by approximately 1/4 die bite. It is recommended that die grooves be well lubricated with a lightweight oil. Oil coating should be maintained during entire compression operation.

8. Repeat Steps #1 through #7 with the other side to complete the joint.

9. Remove flash, if any, with a file or an abrasive cloth.



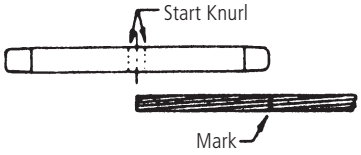
CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions

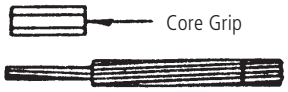
Quick Compress Joints for ACSR Conductors

1. Prior to making any connections, the conductor must be wire brushed. If the conductor is weathered or blackened, carefully unlay the aluminum strands for a distance equal to half the length of the joint. Clean the aluminum strands thoroughly with a wire brush. An alternate way to thoroughly clean the aluminum oxidation from the conductor is to use the ConductaClean® system. Straighten several feet of conductor removing set caused by reel.

2. Mark the conductor from the end, a distance equal to half the length of the joint.

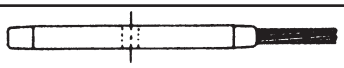


3. Cut the aluminum strands back a distance equal to the length of the core grip plus 1/4 inch (6 mm). Do not nick the steel strands. File burrs as necessary for ease of insertion.



4. Insert the steel core into the core grip. Do not twist the core grip while inserting core wire.

5. Insert the core grip and conductor into one end of the joint. Be sure the conductor is inserted to the mark on the conductor.



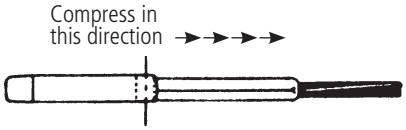
6. To compress, select the proper die size as stamped on the joint.

7. The joint will bow during compression unless care is taken to have a minimum of 15 feet (4.5 m) of the conductor supported on both sides.

8. Make the initial compression at the 'start knurl' and continue compressing toward one end of the joint. Complete die closure is required for each compression. Overlap the previous compression by approximately 1/4 die bite. It is recommended that die grooves be well lubricated with a lightweight oil. Oil coating should be maintained during entire compression operation.

9. Repeat Steps #1 through #8 with the other side to complete the joint.

10. Remove flash, if any, with a file or an abrasive cloth.

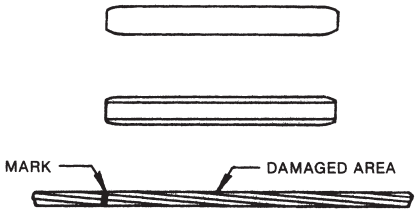


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions

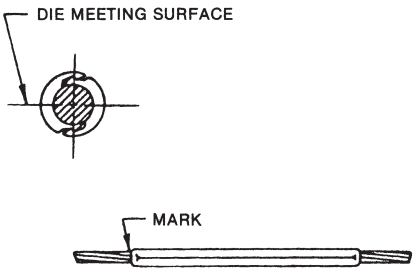
Standard Compression and Quick Compress Repair Sleeves on ACSR, AAC, AAAC and ACAR Conductors

1. Compression Repair Sleeves can be used to restore the electrical and mechanical integrity of a conductor when no more than 1/2 of the aluminum strands are damaged.
2. Mark the conductor from the damaged area 1/2 the length of the repair sleeve.
3. Select die size for compressing the repair sleeve. The die size on the die and the die size marked on the repair sleeve must be the same.
4. Prior to making connections. the groove of the aluminum accessories and the conductor must be clean. If the conductor is weathered or blackened, clean strands thoroughly with wire brush. Check accessory groove for foreign particles, removing if present.
5. Coat the aluminum conductor with AFL Filler Compound (AFC) over the length to be covered by the repair sleeve.



6. Place the repair sleeve groove on the conductor adjacent to damaged area and slide other half (keeper) in place.

7. Slide repair sleeve assembly over the damaged area to the mark on the conductor.
8. Make the initial compression over the center portion of the repair sleeve. Make the second compression on one end overlapping the initial compression by 1/4 die bite. Make the third compression on the opposite end, overlapping the initial compression by 1/4 die bite. Continue making compressions to one end of the repair sleeve overlapping the previous compression by 1/4 die bite. Complete die closure is required for each compression. Go back and complete the compression on the opposite end.
9. The compressed repair sleeve should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.

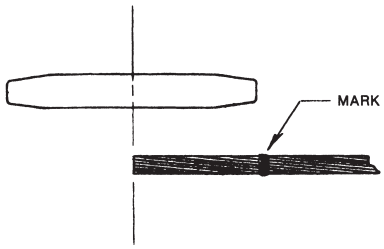


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions

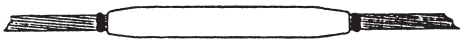
Standard Compression and Quick Compress Jumper Connectors on ACSR, AAC, AAAC, ACAR, Alumoweld® and Steel Ground Wire Conductor

1. Measure back from each conductor end and mark at a distance equal to 1/2 the length of the aluminum jumper connector.
2. File burrs or sharp edges off the aluminum strands as necessary for ease of insertion.
3. Prior to making connections, the conductor must be wire brushed and accessory bores must be clean. If the conductor Is weathered or blackened, carefully unlay aluminum strands for a distance equal to or greater than 1/2 the length of the aluminum jumper connector and clean strands thoroughly with wire brush. An alternate way to thoroughly clean the aluminum oxidation from the conductor is to use the ConductaClean® system. Check accessory bore for foreign particles, removing if present.



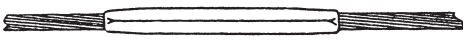
---

4. Inject AFL Filler Compound (AFC) into each end of jumper connector and on the conductor to insure that excess compound will be forced from the jumper connector when compressions are completed. Insert conductor ends into the jumper connector. If the mark on the conductor is not at the end of the jumper connector, and there is resistance to further entry, twist the jumper connector on the conductor. This will work the compound between conductor strands and bleed air from the jumper connector.
5. Select die size for compressing jumper connector. The die size on die and die size marked on aluminum jumper connector must be the same.
6. The jumper connector will bow during compression unless reasonable care Is taken to have about 15 ft. (4.5 m) of the conductor supported straight out from both ends of the jumper connector such that the weight of the conductor does not hang unsupported from the end of the jumper connector when compressing.



---

7. Compress jumper connector full length making initial compression over center stop. Overlap each successive compression by approximately 1/4 die bite. Complete die closure is required for each compression.
8. Compressed jumper connector should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.



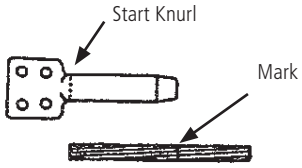
CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions

Standard and Quick Compress Compression Terminals

(These instructions are not for HiTemp® Conductors)

1. Prior to making any connections, the conductor must be clean. For new conductor, the outside diameter shall be wire brushed to remove the aluminum oxidation. If the conductor is weathered or blackened, carefully unlay the aluminum strands for a distance equal to the compression length of the terminal. Clean all of the aluminum strands thoroughly with a wire brush. An alternate way to thoroughly clean the aluminum oxidation from the conductor is to use the ConductaClean® system.



2. Mark the conductor from the end, a distance equal to the compression length of the terminal.

Quick Compress:

3a. Insert the conductor into the terminal. Be sure the conductor is inserted to the mark on the conductor. The terminal comes pre-filled with compound from the factory.

Standard Compression:

3b. Inject sufficient AFL Filler Compound (AFC) in the end of the terminal bore and on the conductor to ensure that excess compound will be visible at terminal end when barrel is completely compressed. See chart below for proper amount of AFC required for each terminal size.

AFC Filler Compound Required

PARTIAL TERMINAL CATALOG NUMBER	LB.	GRAMS (G)
5172., 5672., 5872.	0.01	5
5173., 5673., 5873.	0.01	5
5174., 5674., 5874.	0.02	9
5175., 5675., 5875.	0.02	9
5176., 5676., 5876.	0.02	9
5106., 5606., 5806.	0.02	9
5109., 5609., 5809.	0.02	9
5110., 5610., 5810.	0.03	14
5111., 5611., 5811.	0.03	14
5112., 5612., 5812.	0.03	14
5113., 5613., 5813.	0.03	14
5120., 5620., 5820.	0.04	18
5124., 5624., 5824.	0.05	23
5127., 5627., 5827.	0.06	27
5130., 5630., 5830.	0.09	41
5134., 5634., 5834.	0.12	54
5136., 5636., 5836.	0.15	68
5138., 5638., 5838.	0.17	77
5140., 5640., 5840.	0.2	91
5142., 5642., 5842.	0.24	109
5144., 5644., 5844.	0.28	127
5148., 5648., 5848.	0.32	145

Continued

CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

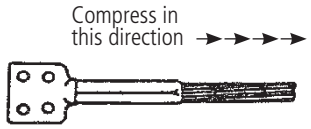
Installation Instructions (cont.)

Standard and Quick Compress Compression Terminals (These instructions are not for HiTemp® Conductors)

4. To compress, select the proper die size as stamped on the jumper connector.

5. Compress the terminal, beginning at the "start knurl." Continue compressing toward the end of the terminal. Complete die closure is required for each compression. Overlap the previous compression by approximately 1/4 die bite. It is recommended that die grooves be well lubricated with a lightweight oil. Oil coating should be maintained during entire compression operation. (Other acceptable mediums that can be used instead of oil are wax, soap or plastic bag the terminal was shipped in.)

6. Remove flash, if any, with a file or an abrasive cloth.

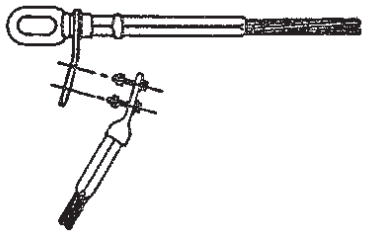


To Attach Terminal Connector to Dead End or Tee Tap

7. Clean contact surface of pads to be connected by wire brushing thoroughly and immediately coating with a thin film of No. 2 Electrical Joint Compound (EJC). **DO NOT USE AFC.**

8. Bolt terminal to dead end pad. Partially tighten all bolts and then re-tighten each bolt to the recommended torque:

   Aluminum 1/2" bolts - 25 lb-ft (34 N.m)
   Stainless Steel 1/2" bolts - 40 lb-ft (54 N.m)

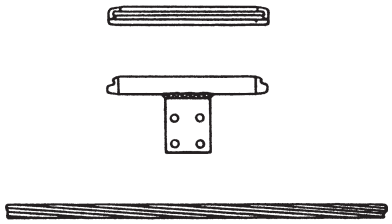


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

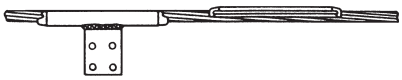
Installation Instructions

Quick Compress Open Run Tee Tap for ACSR, AAC, AAAC and ACAR Conductors

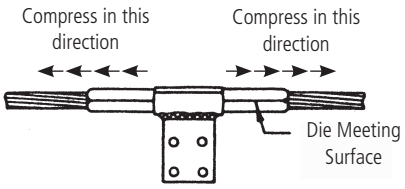
1. Remove the keeper.
2. To compress, select the proper die size as stamped on the jumper connector.
3. Prior to making connections, the groove of the aluminum accessories and the conductor must be clean. If the conductor is weathered or blackened, clean strands thoroughly with wire brush or abrasive cloth. Check the accessory groove for foreign particles and remove if present.
4. Coat the aluminum conductor with AFL Filler Compound (AFC) over the length to be covered by the tee tap.



5. Place run groove on conductor and slide the keeper in place.



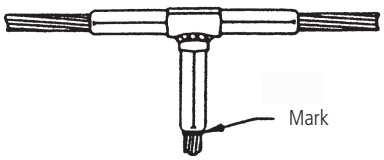
6. Make initial compression on either side of run starting at the "start knurl". Make the second compression on the opposite end of the run at the "start knurl". Continue making compressions to the end of the tee, overlapping the previous compression by approximately 1/4 die bite. Go back and complete the compression on the opposite end.
7. Compressed portion of tee should have a smooth, uniform appearance. Remove flash, if present, with file or abrasive cloth.



Installation Instructions

Quick Compress Open Run Tee Connector for ACSR, AAC, AAAC and ACAR Conductors

1. Install run tee using steps 1 - 7 above.
2. Insert conductor full depth into branch bore and mark conductor at end of branch. Remove conductor after marking.
3. Inject sufficient AFC In the end of the branch bore and on the conductor to insure that excess compound will be visible at the branch end when completely compressed.
4. Insert the conductor into the branch to the mark on the conductor.
5. Make initial compression starting at the "start knurl". Continue making compressions to mouth of the branch overlapping the previous compression by approximately 1/4 die bite.
6. Compressed portion of the branch should have a smooth, uniform appearance. Remove flash, If present, with file or abrasive cloth.



CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.