

Installation Instructions

Standard Compression Dead End for ACSR and ACSS Conductor

CAUTION: ACSR Dead Ends Cannot Be Used on ACSS HT Conductor

1. Mark the conductor a distance of $\frac{3}{4}$ the length of the aluminum body (**Figure 1**).

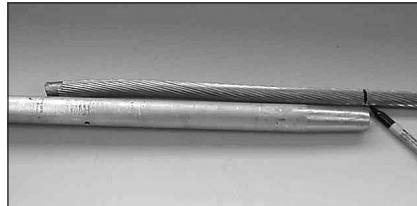


FIGURE 1: Mark the conductor and clean $\frac{3}{4}$ the length of the aluminum body.

2. Prior to making connection, the outer strands of the conductor must be cleaned with a wire brush or abrasive cloth (**Figure 2**).

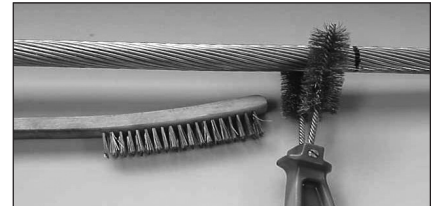


FIGURE 2: Clean a distance of at least $\frac{3}{4}$ the distance of the aluminum dead end body.

3. Prior to any strand cutting, tape the end of the conductor to help maintain the round contour.

4. Slide the aluminum dead end body over conductor until sufficient working length protrudes from tongue end. (**Figure 3**).



FIGURE 3: Slide aluminum dead end body over conductor.

5. Cut back aluminum strands equal to the depth of the steel forging barrel plus 1 inch (25.4 mm). Do not nick the steel strands. File burrs, if present. (**Figure 4**). Use of a cable trimming tool is recommended. (**Figure 4a, 4b**).



FIGURE 4:

6. Insert steel core into steel barrel to full length of bore. (**Figure 5**).

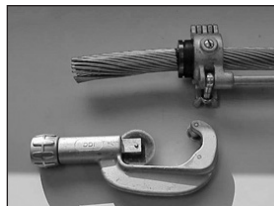


FIGURE 4a:



FIGURE 4b:

7. Using the proper SH die set, compress steel barrel full length making initial compression adjacent to rib closest to barrel. Overlap each successive compression by at least $\frac{1}{4}$ inch (6.4 mm). Complete die closure is required on all compressions. (**Figure 5a, 5b**).



FIGURE 5a:



FIGURE 5b:

8. Slide the aluminum body over the steel forging until the tongue end butts solidly against felt washer and shoulder of steel eye. Align eye with tongue to desired orientation for attachment to insulator string. (**Figure 6**).



FIGURE 5b:



FIGURE 6:

Installation Instructions (cont.)

Standard Compression Dead End for ACSR and ACSS Conductor

9. Inject filler compound (AFC or AFCHT for HiTemp®) into filler hole until compound emerges at felt washer and tapered end of aluminum body. (*Figure 6a*).

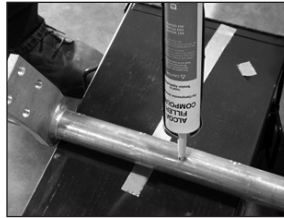


FIGURE 6a:

10. Insert and drive filler plug (cavity up) into hole and peen edge of hole over top surface of plug. (*Figure 7*). Leaving the filler plug in the small plastic bag makes it easier to insert when working with gloves. (*Figure 7a*).



FIGURE 7:

11. Using the proper AH die set, make the initial compression on the aluminum body beginning at the "start" mark nearest the tongue. Overlap each successive compression by at least ¼ inch (6.4 mm). Press only to the "stop" mark. Complete die closure is required for each compression. (*Figure 8*).



FIGURE 7a:



FIGURE 8:

Note: A light oil coating on the die grooves and aluminum sleeve is recommended.

12. To press the dead end body over the conductor, use the same die used in step 11. Begin compressing at the "start" mark about centrally located. Overlap each successive compression by at least ¼ inch (6.4 mm). Press to the end of the body, including the tapered portion. Complete die closure is required on each compression. (*Figure 9*).

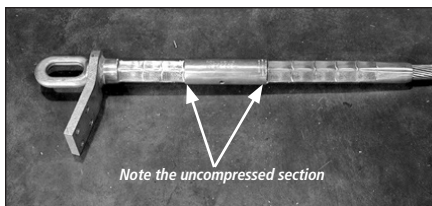


FIGURE 9:



FIGURE 10:

During this compression sequence, the plastic bag in which the dead end assembly was received can be used as a medium between the aluminum body and dies (instead of oil as mentioned in step 11).

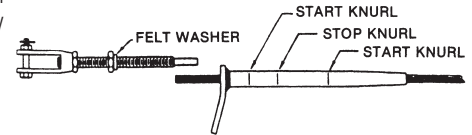
13. Compressed portion of dead end body should have a smooth uniform appearance. (*Figure 10*). If die flash is present, remove with a file or emery cloth.

14. Remove any excess filler compound which may have been forced out the end of the dead end body.

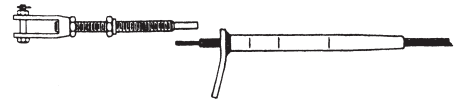
Installation Instructions

Adjustable Compression Dead Ends on ACSR Conductors

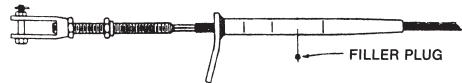
1. Prior to making connections, the outer strand on all conductors (even new conductors) must be cleaned with a wire brush or abrasive cloth. If the conductor is weathered or blackened, carefully unlay aluminum strands for a distance equal to or greater than 3/4 the length of the aluminum dead end body and clean strands thoroughly with wire brush or abrasive cloth. Check accessory bore for foreign particles, removing if present.
2. Serve the conductor, prior to cutting, with tape to help maintain the round contour making it easier to slide the end through the aluminum dead end.
3. Straighten several feet of conductor removing set caused by reel (if necessary).
4. If a comealong is being used, it should be located at least ten (10) feet from end of conductor.



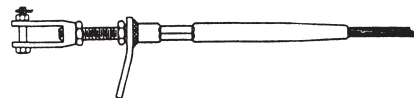
5. Slide dead end body over conductor until sufficient working length protrudes from tongue end.
6. Cut back aluminum strands a distance equal to the depth of the bore of the steel forging barrel plus 1 inch. Do not nick steel strands. File burrs as necessary for ease of insertion.



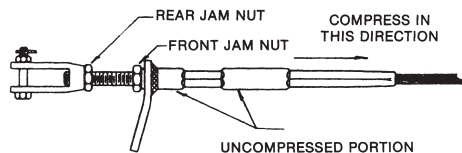
7. Insert steel core into steel barrel to full length of bore.
8. Select die size for compressing steel barrel. The die size on the die and die size marked on steel barrel must be the same.
9. Compress steel barrel full length making initial compression adjacent to corrugations. Overlap each successive compression by approximately 1/4 die bite. Complete die closure is required for each compression.



10. Remove any remaining tape from the aluminum strands and slide aluminum dead end body over steel forging until tongue end butts solidly against felt washer and shoulder of steel dead end. Align clevis or eye with tongue of dead end to ensure proper positioning when dead end is fastened to insulator hardware.
11. Inject AFL Filler Compound (AFC) into filler hole until compound emerges at the felt washer and the tapered end of the body. Insert and drive filler plug into hole andpeen edge of hole over top surface of plug.
12. Select die size to compress aluminum dead end body. Die size for aluminum dead end body and die size marked on die must be the same.
13. It is recommended that die grooves be well lubricated with a light weight oil. Oil coating should be maintained during entire compression operation.
14. Make the initial compression on the dead end body over the steel shank beginning at the "start knurl" nearest the dead end tongue. Continue making compressions to the "stop knurl", overlapping the previous compression by approximately 1/4 die bite. Complete die closure is required for each compression.



15. To press the dead end body over the conductor, use the same die used in step 13. Make the initial compression at the "start knurl" and proceed with compression. Continue making compressions to the end of the dead end body, overlapping the previous compression by approximately 1/4 die bite. Complete die closure is required for each compression.
16. Note there should be an uncompressed area on the dead end body where it covers the compressed barrel of the steel forging (area of the filler plug).
17. 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.

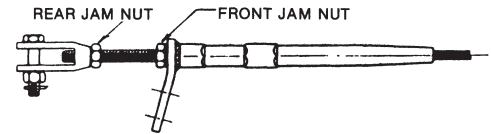
SAFETY: Consult your safety training department to ensure that the installation procedure adopted is in compliance with your company's standard procedure.

Installation Instructions

Clevis Adjustment of Adjustable Compression Dead Ends on ACSR Conductors

Standard Method

1. Loosen rear jam nut.
2. Rotate clevis for proper sag and tension.
3. Tighten rear jam nut.



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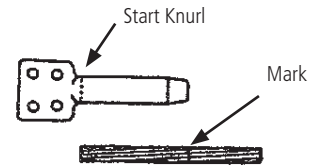
SAFETY: Consult your safety training department to ensure that the installation procedure adopted is in compliance with your company's standard procedure.

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.
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

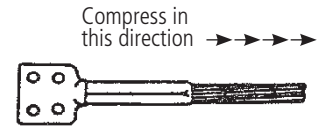
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CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions (cont.)

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

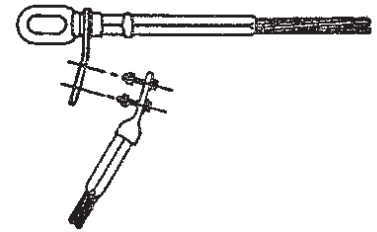
4. To compress, select the proper die size as stamped on the jumper connector.
5. Compress the terminal, beginning at the "start knurl." Continue compressing toward the end of the terminal. Complete die closure is required for each compression. Overlap the previous compression by approximately 1/4 die 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)

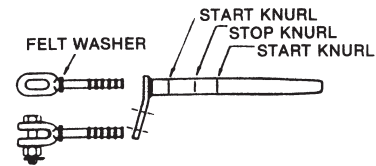


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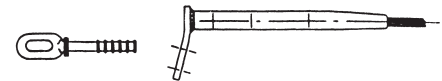
Installation Instructions

Adjustable and Non-Adjustable Compression Dead Ends on AAC, AAAC, ACAR and AWAC Conductors

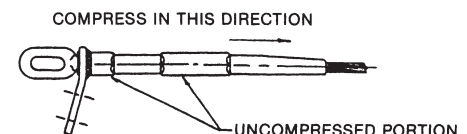
1. Prior to making connections, the conductor must be wire brushed and accessory bore must be clean. If the conductor is weathered or blackened, carefully unlay aluminum strands for a distance equal to or greater than 1/4 the length of the aluminum dead end body and clean strands thoroughly with wire brush or abrasive cloth. Check accessory bore for foreign particles and remove if present.
2. Straighten several feet of conductor removing set caused by reel.



3. Coat the steel dead end shank with a liberal quantity of AFL Filler Compound (AFC).
4. Insert steel dead end shank into tongue end of aluminum body until the felt washer butts solidly against the front jam nut on the clevis rod of the adjustable clevis or shoulder of non-adjustable steel dead end.
5. For non-adjustable steel dead ends, align the steel eye or clevis with the tongue of the aluminum dead end body to ensure that the tongue will be in proper position when the dead end is fastened to insulator hardware.
6. Select die size to compress aluminum dead end body. Die size for aluminum dead end and die size marked on die must be the same.



7. It is recommended that die grooves be well lubricated with a light weight oil. Oil coating should be maintained during entire compression operation.
8. Make the initial compression on the dead end body over the steel shank beginning at the "start knurl" nearest the dead end tongue. Continue making compressions to the "stop knurl", overlapping the previous compression by approximately 1/4 die bite. Complete die closure is required for each compression.
9. Insert conductor full depth into dead end body and mark conductor at end of barrel. Remove conductor after marking.
10. Inject sufficient AFL Filler Compound (AFC) In the end of the dead end bore and on the conductor to ensure that excess compound will be visible at the end of the dead end body when the barrel, is completely compressed.
11. Insert clean end of the conductor into the dead end body to the mark on the conductor.
12. The dead end will bow during compression unless reasonable care is taken to have about 15 ft. (4.5 m) 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.
13. To press the dead end body over the conductor, use the same die used in step 8. Make the initial compression at the "start knurl" nearest the end of the dead end body. Continue making compressions to the end of the dead end body, overlapping the previous compression by approximately 1/4 die bite. Complete die closure is required for each compression.
14. Compressed portion of the dead end should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.



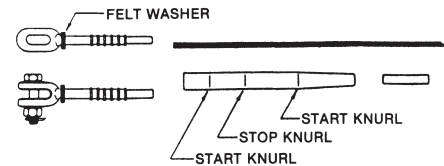
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SAFETY: Consult your safety training department to ensure that the installation procedure adopted is in compliance with your company's standard procedure.

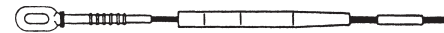
Installation Instructions

Compression Dead Ends on EHS ACSR, Alumoweld® and Steel Ground Wire

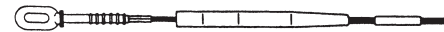
1. Serve the conductor, prior to cutting, to help maintain the round contour. File burrs or shape edges off the conductor as necessary for ease of insertion.
2. Straighten several feet of conductor removing set caused by reel.



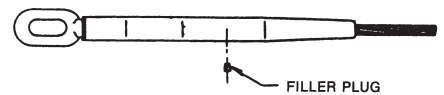
3. Slide the aluminum filler sleeve over conductor.
4. Slide the aluminum dead end body over conductor; tapered end first.
5. Select the die size for compressing the steel barrel. The die size marked on the die and the die size marked on the steel dead end must be the same.
6. Insert the conductor into the bore of the steel dead end.



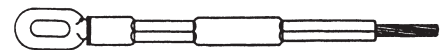
7. Compress the steel barrel full length making initial compression adjacent to the corrugations. Overlap each successive compression by approximately 1/4 die bite. Complete die closure is required for proper compression.



8. Slide the aluminum dead end body over steel forging until the end butts solidly against the felt washer.
9. Slide the aluminum filler sleeve into the aluminum dead end body until the ends of the filler sleeve and the aluminum dead end body are flush.
10. Inject AFL Filler Compound (AFC) into filler hole until compound emerges at the felt washer. Insert and drive filler plug into hole and peen edge of hole over top surface of plug.
11. Select the die size to compress the aluminum dead end body. The die size for the aluminum dead end body and the size marked on the die must be the same.



12. It is recommended that die grooves be well lubricated with a light weight oil. Oil coating should be maintained during entire compression operation.
13. Make the initial compression on the dead end body over the steel shank beginning at the "start knurl" nearest the eye or clevis. Continue making compressions to the "stop knurl" overlapping the previous compression by 1/4 die bite. Complete die closure is required for each compression.
13. To press the dead end body and filler sleeve over the conductor, use the same die used in step 13. Make the initial compression at the "start knurl" nearest the end of the dead end body. Complete die closure is required for each compression.
14. The compressed portion of the dead end should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.



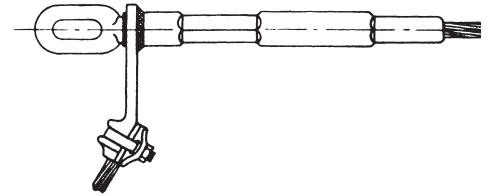
CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions

Bolted Jumper Connectors on Alumoweld® and Steel Ground Wire

Standard Method

1. Clean conductor and grooves of the bolted jumper. If installation is to be made on old cable, clean strands with a wire brush or emery cloth.
2. Coat the clamp groove and conductor liberally with No. 2 Electrical Joint Compound (EJC). DO NOT USE AFL FILLER COMPOUND (AFC).
3. Bolt conductor in groove, partially tighten nuts, then re-tighten each nut to recommended torque. (3/8" bolt-15 lbf-ft (20 N.m); 1/2" bolt-25 lbf-ft (34 N.m))
4. DO NOT remove the EJC that squeezes out when clamp is tightened.



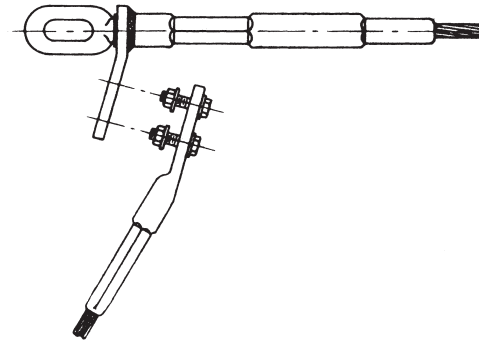
CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions

Terminal Connectors on Alumoweld® and Steel Ground Wire

Standard Method

1. Insert conductor full depth into terminal bore and mark conductor at end of barrel. Remove conductor after marking.
2. 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 and when barrel is completely compressed.
3. Insert clean end of the conductor into the terminal barrel to the mark on the conductor.
4. Select die size for compressing aluminum terminal. The die size on die and die size marked on the terminal must be the same.
5. Make initial compression starting at "start knurl". Continue making compressions to the mouth of the terminal overlapping the previous compression by approximately 1/4 die bite. Complete die closure is required for each compression. Compressed portion of the terminal should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.
6. Clean contact surface of terminal and of dead end pad by wire brushing through No. 2 Electrical Joint Compound (EJC). DO NOT USE AFL FILLER COMPOUND (AFC).
7. Bolt terminal to dead end pad. Partially tighten all bolts and then re-tighten each bolt to recommended torque. 1/2" bolt-25 lbf-ft (34 N.m); 5/8" bolt-40 lbf-ft (54 N.m)



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Installation Instructions

Standard Compression Splice for ACSR

1. Mark the conductor a distance of $\frac{1}{2}$ the length of the aluminum sleeve (**Figure 1**).

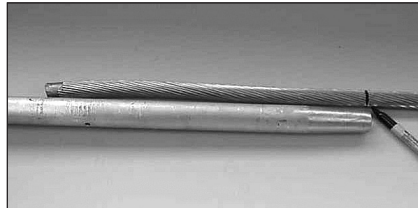


FIGURE 1: Mark the conductor and clean $\frac{1}{2}$ the length of the sleeve.

2. Prior to making connection, the outer strands of the conductor should be cleaned with a wire brush or abrasive cloth (**Figure 2**).

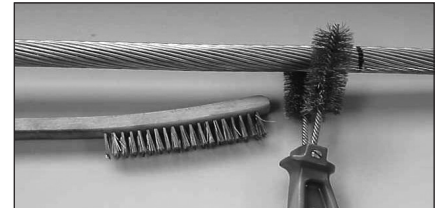


FIGURE 2: Clean the outer strands of the conductor with a wire brush.

3. Remark each conductor half the length of the aluminum sleeve, if the mark was removed during wire brushing. Prior to any strand cutting, tape the end of each conductor to help maintain the round contour (**Figure 3**).

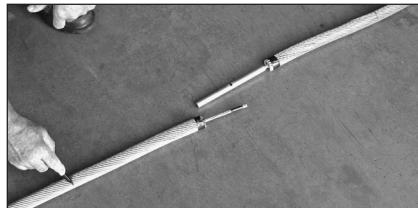


FIGURE 3: Re-mark the conductors after cleaning if needed.

4. Slide the aluminum sleeve over one conductor until sufficient working length protrudes from end (**Figure 4**).

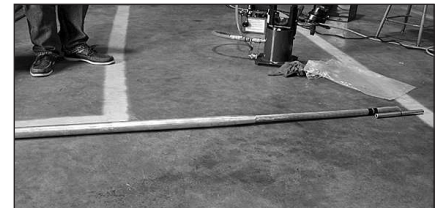


FIGURE 4: Slide sleeve over one conductor so it protrudes out the end.

5. Cut back aluminum strands of both conductors $\frac{1}{2}$ the length of the steel sleeve plus 1 inch (25.4 mm). Do not nick the steel strands. File any burrs, if present (**Figure 5a**). Use of a cable trimming tool is recommended (**Figure 5b**).

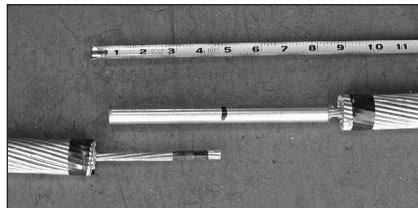
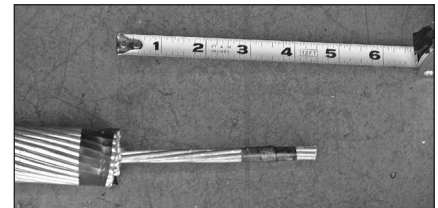


FIGURE 5a: Cut back the Aluminum strands on both conductors $\frac{1}{2}$ the length of the Steel sleeve plus 1 inch (25.4 mm).



6. Insert ends of steel core into steel sleeve making sure the ends butt solidly against center stop (**Figure 6**).

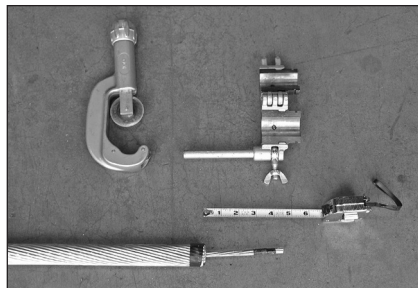


FIGURE 5b: Use of a cable trimming tool is recommended.



FIGURE 6: Slide sleeve over one conductor so it protrudes out the end.

7. Using the proper SH die set, compress steel sleeve full length making initial compression over center of sleeve (**Figure 7a**). Overlap each successive compression by at least $\frac{1}{4}$ inch (6.4 mm) (**Figure 7b**). Complete die closure is required on all compressions.

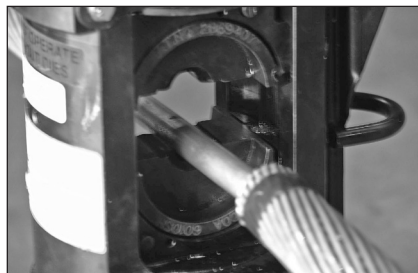


FIGURE 7a: Make the initial compression on center of Steel sleeve.



FIGURE 7b: Overlap each compression on Steel sleeve $\frac{1}{4}$ inch (6.4 mm).

Installation Instructions (cont.)

Standard Compression Splice for ACSR

8. Slide the aluminum sleeve over the installed steel sleeve, centering between the two marks that were made in **Step 3** (**Figure 8a & 8b**).

9. Inject AFC filler compound into the filler hole until compound emerges from both ends of aluminum sleeve (**Figure 9**).

10. Insert and drive filler plug (cavity up) into hole and peen edge of hole over top surface of plug. Leaving the filler plug in the small plastic bag makes it easier to insert when working with gloves (**Figure 10a, 10b & 10c**).

11. Using the proper AH die set, make the initial compression at the "start" mark on one side of center (**Figure 11a**). The second compression should be made at the other "start" mark on opposite side of center. Continue making compressions to the end, overlapping each by at least 1/4 inch (6.4 mm) (**Figure 11b**). Repeat this on opposite side of joint (**Figure 11c**). Complete die closure is required for each compression.

Note: A light oil coating on the die grooves and aluminum sleeve is recommended.

12. Compressed portion of splice sleeve should have a smooth uniform appearance. If die flash is present, remove with a file or emery cloth (**Figure 12**). Remove any excess filler compound which may have been forced out the ends of the splice.

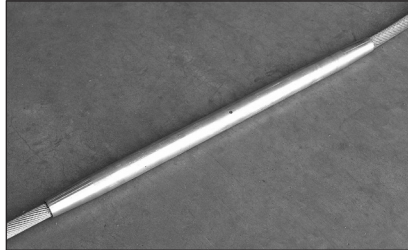


FIGURE 8a: Slide the Aluminum sleeve over the installed Steel sleeve.

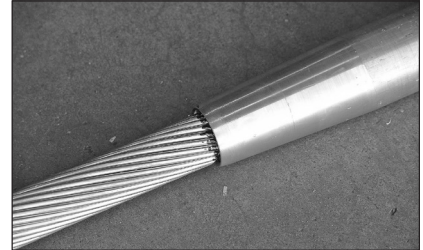


FIGURE 8b: Center the Aluminum sleeve between the marks.



FIGURE 9: Inject AFC Filler Compound into the filler hole.



FIGURE 10a: Peen edge of filler hole over top surface of plug.



FIGURE 10b: Filler plug left in plastic bag is easier to insert with gloves.

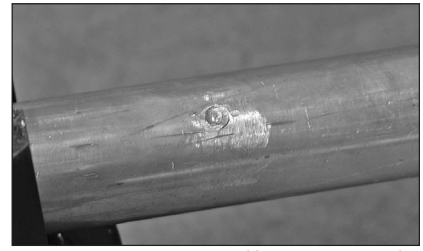


FIGURE 10c: Peen edge of filler hole over top surface of plug.



FIGURE 11a: Make the initial compression at the "start" mark.



FIGURE 11b: Overlap each compression by 1/4 inch (6.4 mm).



FIGURE 11c: Completed compression splice.

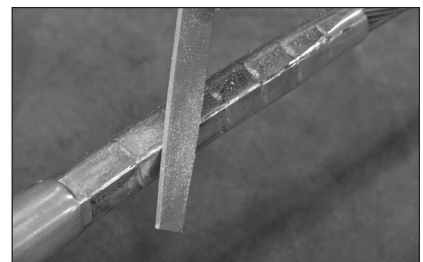
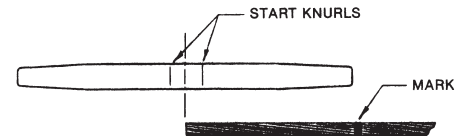


FIGURE 12: If die flash is present, remove with a file or emery cloth.

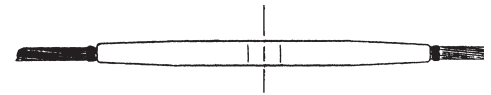
Installation Instructions

Compression Joints on AAC, AAAC, ACAR and AWAC Conductors

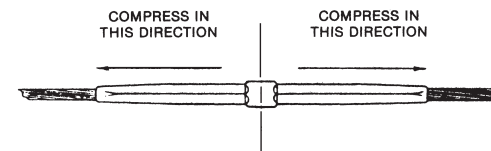
1. Measure back from each conductor end and mark at a distance equal to $\frac{1}{2}$ the length of the aluminum joint.
2. File burrs or sharp edges off the aluminum strands as necessary for ease of insertion.
3. Prior to making connections, the conductor must be wire brushed and accessory bores must be clean. If the conductor is weathered or blackened, carefully unlay aluminum strands for a distance equal to or greater than $\frac{1}{2}$ the length of the aluminum joint and clean strands thoroughly with wire brush or abrasive cloth. Check accessory bore for foreign particles, removing if present.
4. Straighten several feet of conductor removing Set caused by reel.



5. Inject AFL Filler Compound (AFC) into each end of joint and on the conductor to ensure that excess compound will be forced from the barrel when compressions are completed. Insert conductor ends into the joint. If the mark on the conductor is not at end of the joint, and there is resistance to further entry, twist the joint on the conductor. This will work the compound between conductor strands and bleed air from the joint.
6. Select die size for compressing joint. The die size on die and die size marked on aluminum joint must be the same.
7. The joint 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 joint such that the weight of the conductor does not hang unsupported from the end of the joint when compressing.



8. Make initial compression on either side of joint starting at the "start knurl". Make the second compression on the opposite end of the joint at the other "start knurl". Continue making compressions to one end of joint overlapping the previous compression by approximately $\frac{1}{4}$ die bite. Complete die closure is required for each compression. Go back and complete the compressions on the opposite end. The center portion of the joint, approximately one inch, is not compressed. It is recommended that die grooves be well lubricated with a light weight oil. Oil coating should be maintained during entire compression operation.
9. Compressed portion of the joint should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.

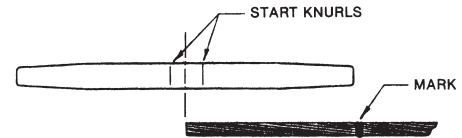


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

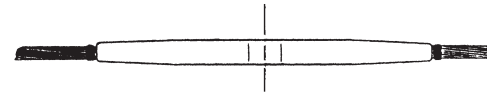
Installation Instructions

Compression Joints on AWAC, Alumoweld® and Steel Ground Wire

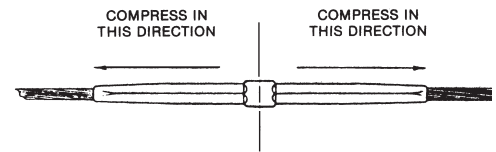
1. Measure back from each conductor end and mark at a distance equal to $\frac{1}{2}$ the length of the aluminum joint.
2. File burrs or sharp edges off the conductor strands as necessary for ease of insertion.
3. Prior to making connections, the conductor must be clean. If the conductor is weathered or blackened, clean strands thoroughly with wire brush or abrasive cloth.
4. Straighten several feet of conductor, removing set caused by reel.



5. Insert conductor ends into the joint. If the mark on the conductor is not at the end of the joint, and there is resistance to further entry, twist the joint on the conductor. This will work the compound between conductor strands and bleed air from the joint. (Joints are pre-filled so additional AFL Filler Compound (AFC) should not be required.)
6. Select die size for compressing joint. Die size on die and die size marked on aluminum joint must be the same.
7. The joint 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 joint such that the weight of the conductor does not hang unsupported from the end of the joint when compressing.



8. Make initial compression on either side of the joint starting at the "start knurl". Make the second compression on the opposite end of the joint at the other "start knurl". Continue making compressions to one end of joint overlapping the previous compression by approximately $\frac{1}{4}$ die bite. Complete die closure is required for each compression. Go back and complete the compressions on the opposite end. The center portion of the joint, approximately one inch, is not compressed. It is recommended that die grooves be well lubricated with a light weight oil. Oil coating should be maintained during entire compression operation.
9. Compressed portion of the joint should have a smooth appearance. Remove flash, if present, with file or emery cloth.
10. Single piece compression joints (jiffy joints) for ACSR, ACAR, AWAC and alloy conductors follow the procedure above.

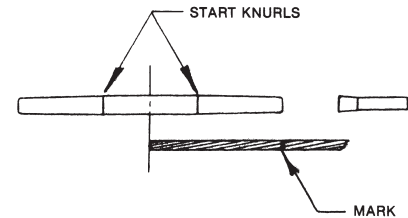


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

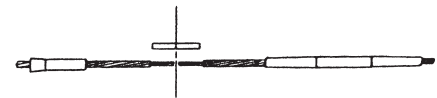
Installation Instructions

Compression Joints on Extra High Strength ACSR Conductors

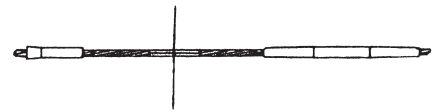
1. Measure back from each conductor end and mark at a distance equal to $\frac{1}{2}$ the length of the aluminum joint.
2. Prior to making connections, the conductor must be wire brushed and accessory bore must be clean. If the conductor is weathered or blackened, carefully unlay aluminum strands for a distance equal to or greater than $\frac{1}{2}$ the length of the aluminum joint and clean strands thoroughly with wire brush or abrasive cloth. Check accessory bore for foreign particles, removing if present.
3. Prior to cutting, serve the conductor with tape to help maintain the round contour making it easier to slide the end through the joint and filler sleeve.
4. Straighten several feet of conductor removing set caused by reel.



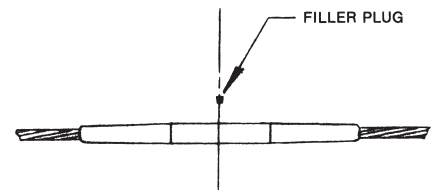
5. Slide the aluminum filler sleeve over conductor end beyond mark.
6. Slide the aluminum joint over other conductor end beyond mark. End with staked if filler sleeve first.
7. Cutback aluminum strands on each conductor end a distance equal to $\frac{1}{2}$ the length of the steel joint plus one inch (25.4 mm). Do not nick steel strands. File burrs as necessary for ease of insertion.



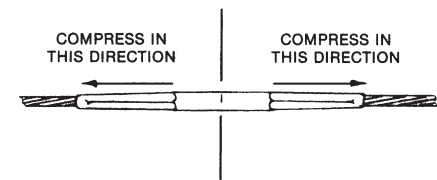
8. Insert ends of steel core into the steel joint making sure the ends butt solidly against center stop.
9. Select die size for compression steel joint. The die size on die and die size marked on steel joint must be the same.
10. Compress steel joint full length making initial compression over center stop. Overlap each successive compression by approximately $\frac{1}{4}$ die bits. Complete die closure is required for each compression.



11. Remove tape from ends of aluminum strands. Slide the aluminum joint over the installed steel joint and center between the two marks on the cable.
12. Slide the aluminum filler sleeve into the aluminum joint until ends of the filler sleeve and aluminum joint are flush.
13. Inject AFL Filler Compound (AFC) into filler hole at end of joint until compound is visible at both ends of joint. Insert drive filler plug into hole andpeen edge of hole over top surface of plug.
14. Select die size to compress aluminum joint. Die size for aluminum joint and die size marked on die must be the same.
15. The joint 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 joint such that the eight of the conductor does not hang unsupported from the end of the joint when compressing.



16. Make initial compression on either side of joint starting at the "start knurl". Make the second compression on the opposite end of the joint at the other "start knurl". Continue making compressions to one end of the joint overlapping the previous compression by approximately $\frac{1}{4}$ die bite. Complete die closure is required for each compression. Go back and complete the compression on the opposite end. The center portion of the joint is not compressed. It is recommended that die grooves be well lubricated with a light weight oil. Oil coating should be maintained during entire compression operation.
17. Compressed portion of the joint should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.

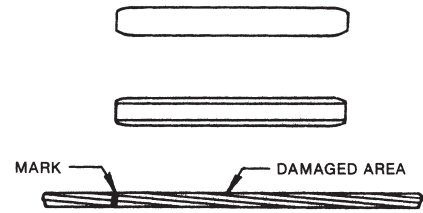


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions

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

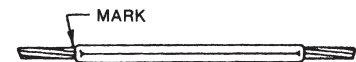
1. Compression Repair Sleeves can be used to restore the electrical and mechanical integrity of a conductor when no more than 1/3 of the aluminum strands are damaged.
2. Mark the conductor from the damaged area 1/2 the length of the repair sleeve.
3. Select die size for compressing the repair sleeve. 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.

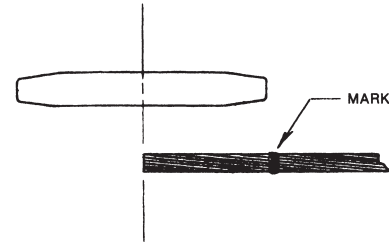


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

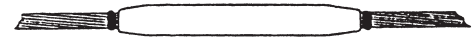
Installation Instructions

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

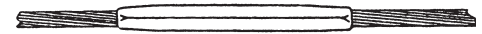
1. Measure back from each conductor end and mark at a distance equal to 1/2 the length of the aluminum jumper connector.
2. File burrs or sharp edges off the aluminum strands as necessary for ease of insertion.
3. Prior to making connections, the conductor must be wire brushed and accessory bores must 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.

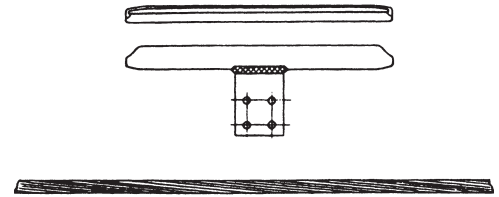


CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable systems.

Installation Instructions

Open Run Tee Taps and Tee Connectors on ACSR, AAC, AAAC and ACAR Conductors

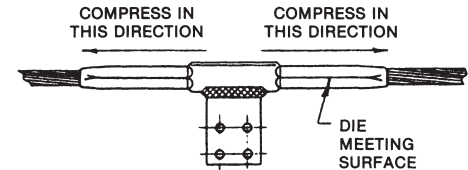
1. Remove the keeper.
2. Select die size for compressing the aluminum run. The die size on the die and die size marked on the aluminum run must be the same.
3. Prior to making connections, the groove of the aluminum accessories and the conductor must be clean. If the conductor is weathered or blackened, clean strands thoroughly with wire brush or abrasive cloth. Check the accessory groove for foreign particles, removing 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 one end of the tee overlapping the previous compression by approximately 1/4 die bite. Complete die closure is required for each compression. 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 emery cloth.
8. See page 131 for terminal installation instructions.



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

Open Run Tee Connectors on ACSR, AAC, AAAC and ACAR Conductors

Installation of Tee With Compression Branch

1. Install run tee as before per steps 1-7, page 144.
2. Select die size for compressing aluminum branch. The die size on die and the die size on the branch must be the same.
3. Insert conductor full depth into branch bore and mark conductor at end of branch. Remove conductor after marking.
4. Inject sufficient AFL Filler Compound (AFC) in the end of the branch bore and on the conductor to ensure that excess compound will be visible at the branch end when completely compressed.
5. Insert cleaned end of the conductor into the branch to the mark on the conductor.
6. 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. Complete die closure is required for each compression.
7. Compressed portion of the branch should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.

