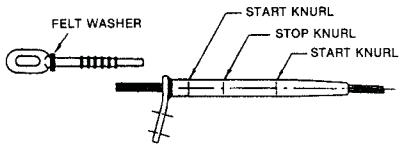
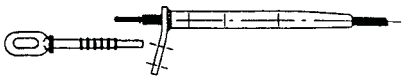
Installation Instructions for HiTemp Compression Dead Ends For ACSS and ACSS/TW Conductors

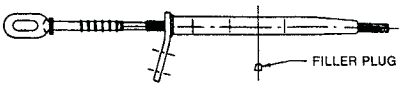
1. Prior to making connections, the conductor and accessory bore must be clean. If the conductor is weathered or blackened, carefully unlay aluminum strands for a distance equal to or greater than 3/4 the length of the aluminum dead end body and clean strands thoroughly with wire brush or abrasive cloth. The outer layer of new conductor should be wire brushed the same length. Check accessory bore for foreign particles, removing if present.
2. Prior to cutting, serve the conductor 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.



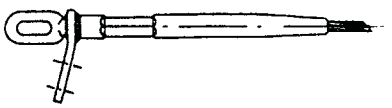
5. Slide aluminum dead end body over conductor until sufficient working length protrudes from tongue end.
6. Cut back aluminum stands a distance equal to the depth of the bore of the steel forging barrel plus 1 inch. Do not nick steel strands. File burrs as necessary for ease of insertion.



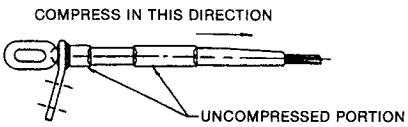
7. Insert steel core into steel barrel to full length of bore.
8. Select die size for compressing steel barrel. The die size on the die and die size marked on steel barrel must be the same.
9. Compress steel barrel full length making initial compression adjacent to corrugations. Overlap each successive 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 insure proper positioning when dead end is fastened to insulator hardware.
11. Inject HiTemp AFL Filler Compound (AFCHT) into filler hole until compound emerges at the felt washer and the tapered end of the body. Insert and drive filler plug into hole and peen 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. 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 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.

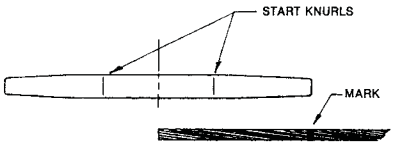


14. To press the dead end body over the conductor, use the same die used in step 13. Make the initial compression at the "start knurl" and proceed with compression. Continue making compressions to the end of the dead end body, overlapping the previous compression by approximately 1/4 die bite. Complete die closure is required for each compression.
15. 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).
16. Compressed portion of the dead end should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.

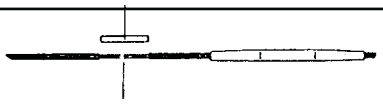


Installation Instructions for HiTemp Compression Joints For ACSS and ACSS/TW Conductors

1. Measure back from each conductor end and mark at a distance equal to 1/2 the length of the aluminum joint.
2. Prior to making connections, the conductor 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 1/2 the length of the aluminum joint and clean strands thoroughly with wire brush or abrasive cloth. The outer layer of new conductor should be wire brushed for 1/2 the length of aluminum joint. 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.
4. Straighten several feet of conductor, removing set caused by reel (if necessary).
5. Slide aluminum joint over one conductor end beyond mark.

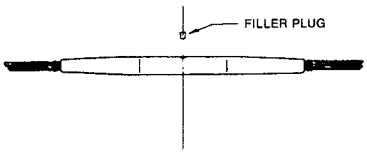


6. Cut back aluminum strands on each conductor a distance equal to 1/2 the length of the steel sleeve plus 1 inch. Do not nick steel strands. File burrs as necessary for ease of insertion.

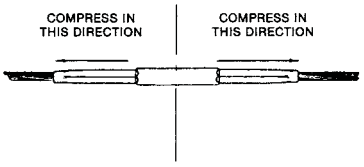


7. Insert ends of the steel core into the steel sleeve making sure the ends butt solidly against center stop.
8. Select die size for compressing steel sleeve. The die size on die and die size marked on steel sleeve must be the same.
9. Compress steel sleeve full length making initial compression over center stop. Overlap each successive compression by approximately 1/4 die bite. Complete die closure is required for each compression.

10. Remove any remaining tape from the aluminum strands and slide aluminum joint over the installed steel sleeve. Center the aluminum joint between the two marks on the conductor.
11. Inject HiTemp AFL Filler Compound (AFCHT) into filler hole at center of joint until compound is visible at both ends of joint. Insert drive filler plug into hole and peen edge of hole over top surface of plug.
12. Select die size to compress aluminum joint. Die size for aluminum joint and die size marked on die must be the same.
13. The joint must be supported a minimum of 15 feet on each side to prevent bowing during comperssion.

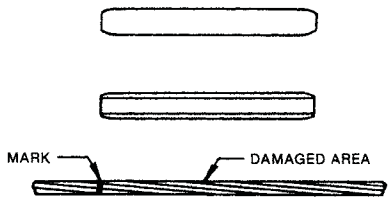


14. Make the initial compression at the 'start knurl' on one side of the center. The second compression should be made at the other 'start knurl' on the opposite side of center. Continue making compressions to the end of 1/2 the joint overlapping the previous compression by approximately 1/4 die bite. The last bite should be over the initial bite made over the end of the joint. Complete die closure is required for each compression. Go back and complete the same sequence over the opposite end. The center portion (over the steel sleeve) of the aluminum 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.
15. Compressed portion of the joint should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.

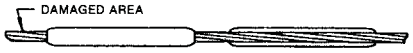


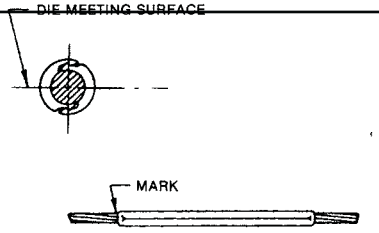
Installation Instructions for HiTemp Repair Sleeves For ACSS and ACSS/TW Conductors

1. Mark the conductor from the damaged area 1/2 the length of the repair sleeve.
2. Compression repair sleeves can be used to restore the electrical and mechanical integrity of a conductor when no more than one-third of the outer aluminum strands are damaged.
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 or abrasive cloth. Check accessory groove for foreign particles, removing if present.
5. Coat the aluminum conductor with HiTemp AFL Filler Compound (AFCHT) 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.

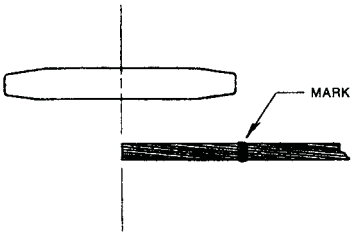




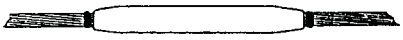
7. Slide repair sleeve assembly over the damaged area, to the mark on the conductor.
8. Make the initial compression over the center portion of the repair sleeve. Make the second compression on one end overlapping the initial compression by 1/4 die bite. Make the third compression on the opposite end,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

Installation Instructions for HiTemp Jumper Connectors For ACSS and ACSS/TW Conductors

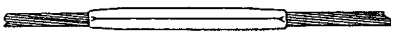
1. Measure back from each conductor end and mark at a distance equal to 1/2 the length of the aluminum jumper connector.
2. File burrs or sharp edges off the aluminum strands as necessary for ease of insertion.
3. Prior to making connections, the conductor and accessory bores must be clean. If the conductor 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 or abrasive cloth. The outer layer of new conductor should be wire brushed 1/2 the length of the jumper. Check accessory bore for foreign particles, removing if present.



4. Inject HiTemp AFL Filler Compound (AFCHT) 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 the 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 must be supported a minimum of 15 feet on each side to prevent bowing during compression.



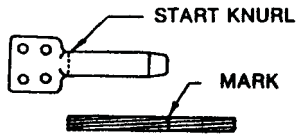
7. Compress jumper connector full length making initial compression over center stop. Overlap each successive compression by approximately 1/4 die bite. Complete die closure is required for each compression.
8. Compressed jumper connector should have a smooth uniform appearance. Remove flash, if present,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



Installation Instructions for HiTemp Terminal Connectors For ACSS and ACSS/TW Conductors

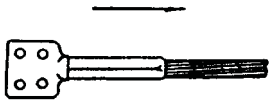
Standard Method

1. Prior to making connections, the conductor 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 1/2 the length of the terminal bore and clean strands thoroughly with wire brush or abrasive cloth. The outer layer of new conductor should be wire brushed the length of the terminal bore. Check accessory bore for foreign particles, removing if present.
2. Insert conductor full depth into terminal bore and mark conductor at end of barrel. Remove conductor after marking.
3. Inject sufficient HiTemp AFL Filler Compound (AFCHT) in the end of the terminal bore and on the conductor to insure that excess compound will be visible at terminal end when barrel is completely compressed.

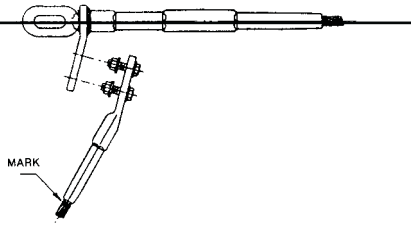


4. Insert cleaned end of conductor into the terminal barrel to the mark on the conductor.

5. Select die size for compressing aluminum terminal. The die size on the die and die size stamped on the terminal must be the same.
6. Make initial compression starting at "start knurl" marking. 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 a file or abrasive cloth.

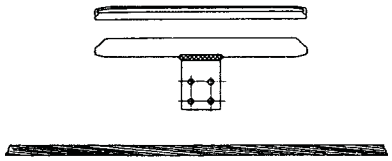


7. Clean contact surface of terminal and connecting surface by using a wire brush. Liberally coat contact surfaces with Alnox®. DO NOT USE AFCHT.
8. Bolt two surfaces together. Partially tighten all bolts and then retighten each to recommended torque.

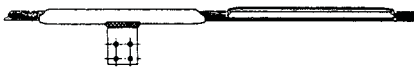


Installation Instructions for HiTemp Open Run Tee Taps & Tee Connectors for ACSS and ACSS/TW Conductors

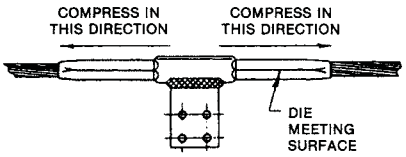
1. Remove the keeper.
2. Select die size for compressing the aluminum run. The die size on the die and die size marked on the aluminum run must be the same.
3. Prior to making connections, the groove of the aluminum accessories and the conductor must be clean. The conductor strands should be thoroughly cleaned with wire brush or abrasive cloth. Check the accessory groove for foreign particles, removing if present.
4. Coat the aluminum conductor with HiTemp AFL Filler Compound (AFCHT) 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. 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.



Installation of "tee" with compression branch

8. Install run tee as before per steps 1-7.
9. Select die size for compressing aluminum branch. The die size on die and the die size on the branch must be the same.
10. Insert conductor full depth into branch bore and mark conductor at end of branch. Remove conductor after marking.
11. Inject sufficient HiTemp AFL Filler Compound (AFCHT) 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.
12. Insert cleaned end of the conductor into the branch to the mark on the conductor.
13. 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.
14. Compressed portion of the branch should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.