

# INSTALLATION (cont.)

## JOINING LENGTHS

1. Remove all joint caps from the two pieces to be joined, retaining the screws.
2. The joint cap required between a plug-in straight length and feeder type busway piece is  $13\frac{7}{8}"$  long, and these joint caps will be assembled to the feeder piece when shipped from the factory. See Figure 8. The joint cap between two feeder busway pieces is 18" long.
3. Discard any disposable shipping caps (disposable caps do not have jimmy holes or polarizing tabs, and are normally assembled to the slot end).
4. Arrange the pieces to be joined so that the  $A\phi$  sides align. Identified by  $A\phi$  label on housing side and polarizing slot in housing cap. See figure 9. Note that phase transposition lengths, when furnished, will relocate the  $A\phi$  to the opposite side of the busway run.
5. Recheck to insure that all joint insulators are firmly in place.
6. If necessary, loosen the joint bolt slightly allowing the "bolt-end" joint side covers to flare out.
7. Slide the joints together, making sure as the bars interleave that the joint side covers on the slot-end pass inside the joint side covers on the bolt-end. Figure 10. For 3-pole joint assemblies also make certain that the slot-end joint side cover passes between the bolt-end joint side cover and the C-phase insulator. Edges of the joint sides must be flush.
8. When fully joined the distance between the housing caps will be nine inches when joining feeder to feeder and  $4\frac{7}{8}"$  between housing cap and housing side when joining feeder to plug-in.
9. To assist in telescoping the lengths together, one (or both) of the joint caps may be placed loosely in position on one length of busway with the polarizing tab inserted into the polarizing slot on the housing cap, see Figure 11.
10. A screwdriver placed in the "jimmy holes" of the joint cap can then be used to lever the lengths together until the other polarizing tab falls into its mating slot, indicating the joint is aligned. If the polarizing tabs do not coincide with the polarizing slots, the assembly is incorrect.
11. If not already in place, assemble joint caps and insert all mounting screws LOOSELY.
12. Inspect busway run for straightness in all planes and make adjustments if necessary for good alignment.
13. Lubrication grease has been applied to the joint bolt head and thread to reduce friction. Do not remove this grease.
14. Tighten the joint bolt to 50 foot-pounds. When the Belleville springs on both sides of the joint are flattened, the bolt is fully torqued. The bolt head may be relocated to the opposite side of the busway if it is inaccessible.
15. Tighten all joint cap screws.
16. During installation occasional checking with a megger should reveal any improperly made assemblies. The resistance should not drop below one megohm for 100 feet of busway.
17. Megger the complete run before energizing.

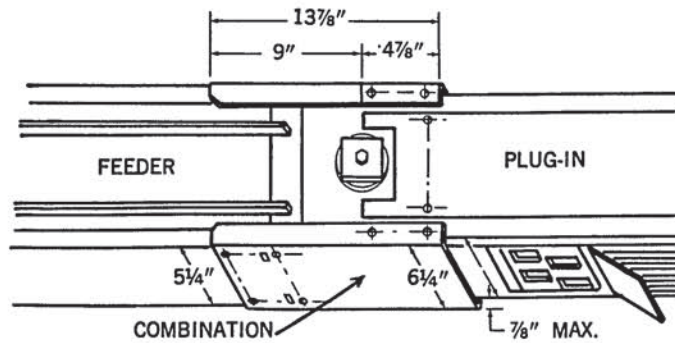


FIGURE 8

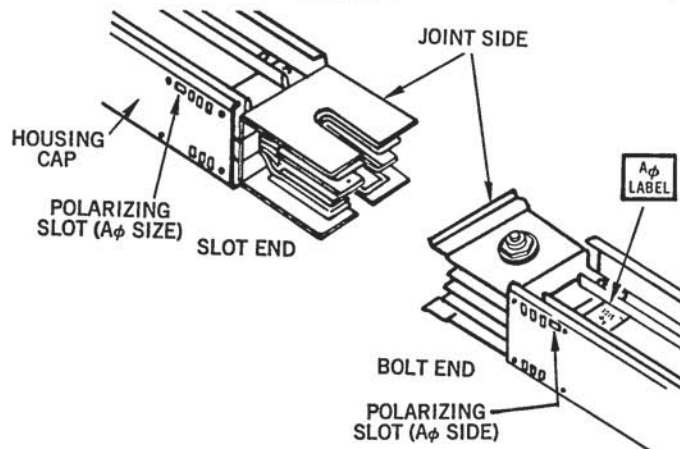


FIGURE 9

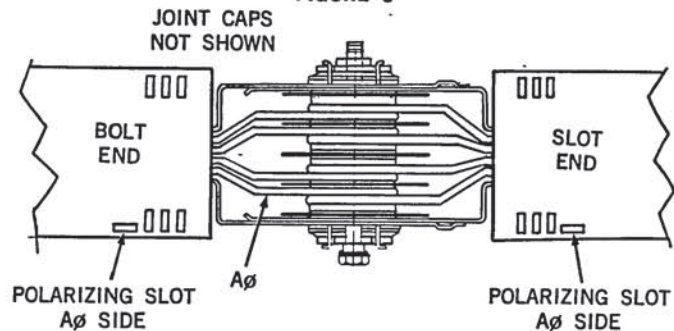


FIGURE 10

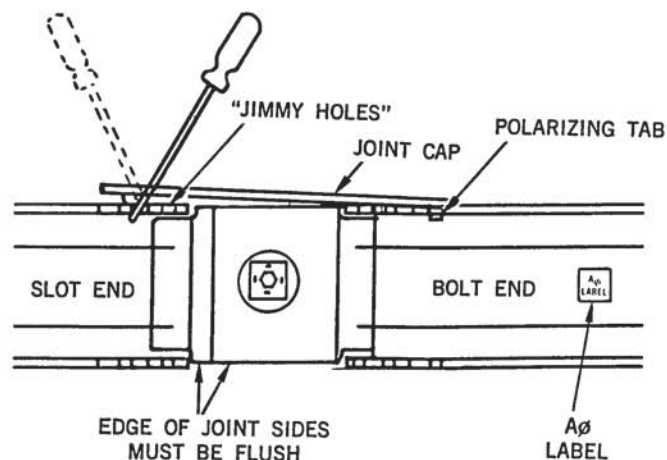


FIGURE 11