



REMOVAL • INSTALLATION INSTRUCTIONS

REPLACING DAMAGED WEATHER CASING on Types "S" and "OS" Condenser Bushings

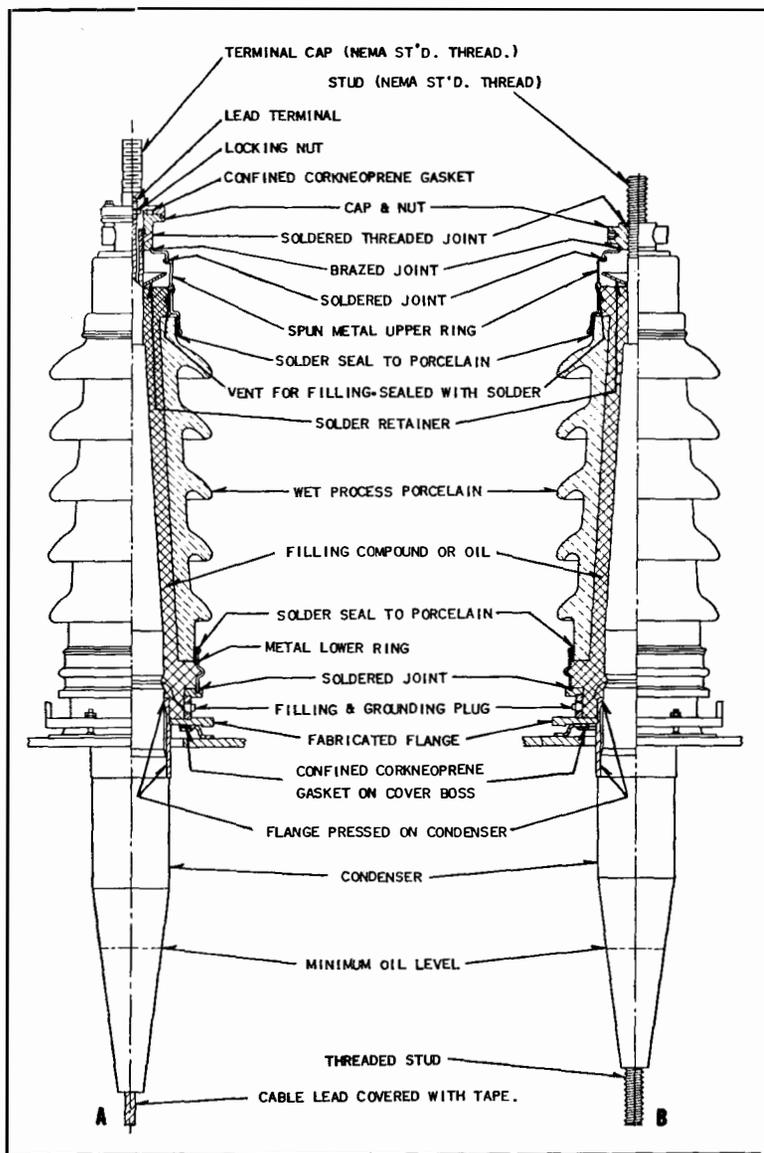


FIG. 1. Sectional View—(A) Bushing with Draw-Through Cable Lead;
(B) Bushing with Solid Copper Conductor.

THE WEATHER CASING consists of the porcelain with the metal upper ring and the metal lower ring soldered to the ends. See Fig. 1. In the event of damage to any of these parts, it will be necessary to replace the completely assembled weather casing.

Note: Do not unsolder the "solder seal to porcelain" joints. Protect these joints from excessive heat with wet rags or waste when other soldered joints are being heated.

REMOVAL OF WEATHER CASING

1. If the porcelain or other parts are only partly damaged and the filling material has not run out, unsolder and remove the screw in the side of the cap to open the vent for filling; remove the filling plug from the flange and drain out the filling material from the weather casing. If the bushing is filled with plastic, place the bushing in a 90°C. oven to soften the filling material.

2. If the porcelain is broken and part of the filling material has run out, remove the remainder and proceed as described below.

3. Remove the terminal cap, or bell connection if used, from bushings with draw-through leads.

4. Place the bushing in an inverted position and apply the torch flame to the soldered joints between the ring and the flange until all solder runs out.

Use preferably, a small oxygen-acetylene torch adjusted to blue flame.

5. Apply the torch flame to the soldered joint between the metal upper ring and the cap nut until all solder runs out.

6. Heat the cap nut to soften the soldered threaded joint and remove cap and nut from central tube or stud. Weather casing assembly can then be lifted off.

INSTALLATION OF WEATHER CASING

1. Remove the bushing plastic from parts to be soldered together by using warm transformer oil. Clean these parts thoroughly with benzine or gasoline.

REPLACING DAMAGED WEATHER CASING

Re-tin the groove in the flange and the threads of the condenser lead, if necessary. Use non-corrosive rosin-alcohol flux similar to Wemco M# 751.

2. Run a die over the threads of the condenser lead. For a 1 inch diameter tube of stud there are usually 14 threads per inch. For a diameter 1½ inches and above there are usually 12 threads per inch.

3. Place the bushing in an upright position and slip the solder retainer over the condenser lead to prevent solder from getting on the end of the condenser.

NOTE: If the bushing does not have the solder retainer, it may be ordered from the Sharon Works. Be sure to give the drawing number on the bushing nameplate.

4. Place the weather casing over the condenser and turn the cap and nut into position until the cap touches the bottom of the groove in the upper ring. Put wet rags around the solder seal to procelain joints to protect them during the soldering operations.

5. Apply the torch flame on the outside of the cap nut so that the tinned surfaces are not oxidized by the open flame. Use flux M# 751.

6. On bushings with tubular leads, feed the solder through the hole in the cap nut until it begins to run out through the opposite hole. Make the soldered joint between the bushing cap and the upper ring by applying heat below the groove and

gradually feeding the solder around the cap. Make a smooth solder joint with a slope to shed water.

7. Apply the torch flame under the flange plate in which the groove is machined. Do not oxidize the tinned surfaces with the open flame. Feed solder gradually so that a smooth solder joint with a slope to shed water is formed.

8. Place the self-tapping screw in the vent hole of the cap and solder over lightly.

9. Before putting in the filling material, test all soldered joints for tightness by applying 15 lbs. per square inch of air pressure through the filling hole in the flange and soaping all the joints.

10. Remove the screw from the vent hole and with the hole in the flange open, place the bushing in an upright position in a 90°C. oven for at least one hour.

11. With the bushing upright, fill from the bottom through the hole in the flange until the filling material begins to run out through the vent for filling hole in the cap. Heat the bushing plastic M# 7399-1 to 125°C. for four hours before using.

12. Cool the bushing to room temperature, then close both holes. Solder over the self-tapping screw to make a smooth sealed surface. After the cap has cooled test the screw for leaks by soaping over it and applying heat on the opposite side of the cap to expand the gas in the gas space.

13. Clean the bushing and paint the metal parts.



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