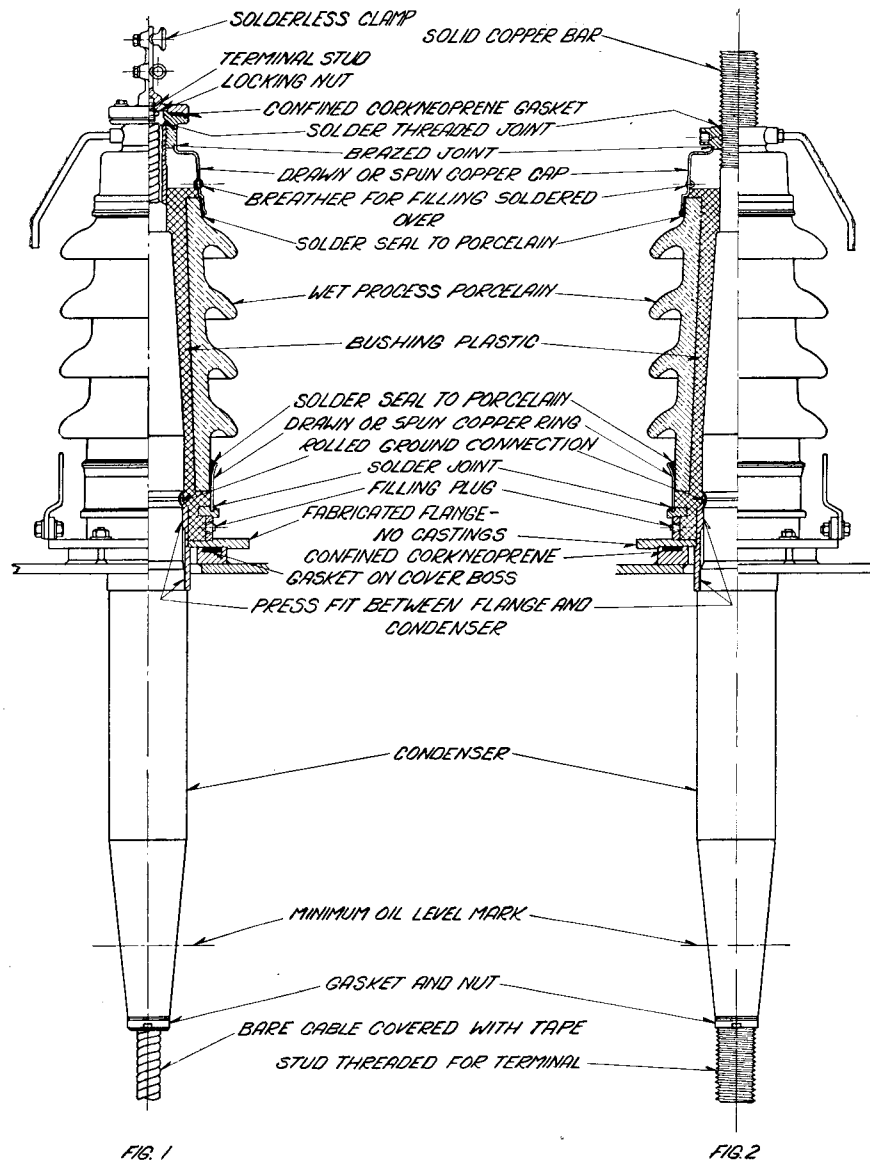


Replacing Damaged Porcelains on Types "S" and "OS" Condenser Bushings

INSTRUCTIONS



Partial Sections of Types "S" and "OS" Condenser Bushings

FIG. 1—BUSHING WITH FISHED THROUGH CABLE

FIG. 2—BUSHING WITH SOLID COPPER BAR

General

Refer to Figures #1 and #2. The weather casing consists of the porcelain, copper cap and copper ring

soldered to the porcelain. In case of damages to any of these parts the complete weather casing only can be replaced.

Caution

1. Do not unsolder the "solder seal to porcelain" joints. Protect them with wet rags or waste from excessive

REPLACING DAMAGED PORCELAINS ON TYPES "S" AND "OS" CONDENSER BUSHINGS—(Continued)

heating when joints are being heated.

2. Use, preferably, a small oxygen-acetylene torch adjusted to blue flame.
3. Remove bushing plastic with warm transformer oil from parts to be soldered together. Clean them thoroughly with benzine or gasoline.
4. Use non-corrosive rosin-alcohol flux similar to Wemco M# 751.

To Remove the 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 breather hole, remove the filling plug from the flange and drain out the filling material from weather casing. If bushing is filled with plastic, place the bushing in a 90° C. oven to soften the filling material.
2. If porcelain is broken and part of the filling material has run out, remove the remainder and proceed as described below.
3. Remove the solderless clamp, terminal cap or bell connector from bushings with fished-through leads, if used.
4. Place bushing, preferably, in an inverted upright position and apply the torch flame to soldered joints between ring and flange until all solder runs out.
5. Apply torch flame to soldered joint

between condenser lead and cap nut until all solder runs out.

6. Remove weather casing by rotating it counter-clockwise.

To Install a New Weather Casing

1. Re-tin the groove in flange and the threads of condenser lead, if necessary.
2. Run a die over the threads of condenser lead. For 1" diameter tube or stud there are usually 14 threads per inch. For 1½" diameter and above there are usually 12 threads per inch.
3. Place bushing in an upright position and slip the wooden solder retainer sleeve over the condenser lead to prevent solder getting on end of condenser. If bushing does not have the wooden solder retaining sleeve order same from Sharon Works giving drawing number on bushing nameplate.
4. Place weather casing over the condenser and turn it clockwise until the ring touches the bottom of the groove in the flange.
5. Protect "solder seal to porcelain" joints with wet rags.
6. 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.
7. 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. On bushings with solid lead make a smooth solder joint with a slope to shed water.

8. 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.
9. Place the self-tapping screw in the breathing hole of the cap and solder over lightly.
10. Before putting in 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.
11. Remove the screw from the breather 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.
12. With bushing upright, fill from the bottom through the hole in the flange until the filling material begins to run out through the breathing hole in the cap. Heat bushing plastic M# 7399-1 to 125° C. for four hours before using.
13. Cool bushing to room temperature, then close both holes. Solder over the self-tapping screw to make a smooth surface.
14. Clean the bushing and paint the metal parts.

Westinghouse Electric & Manufacturing Company

Sharon, Pa.