Bulk Type Bushings—Continued

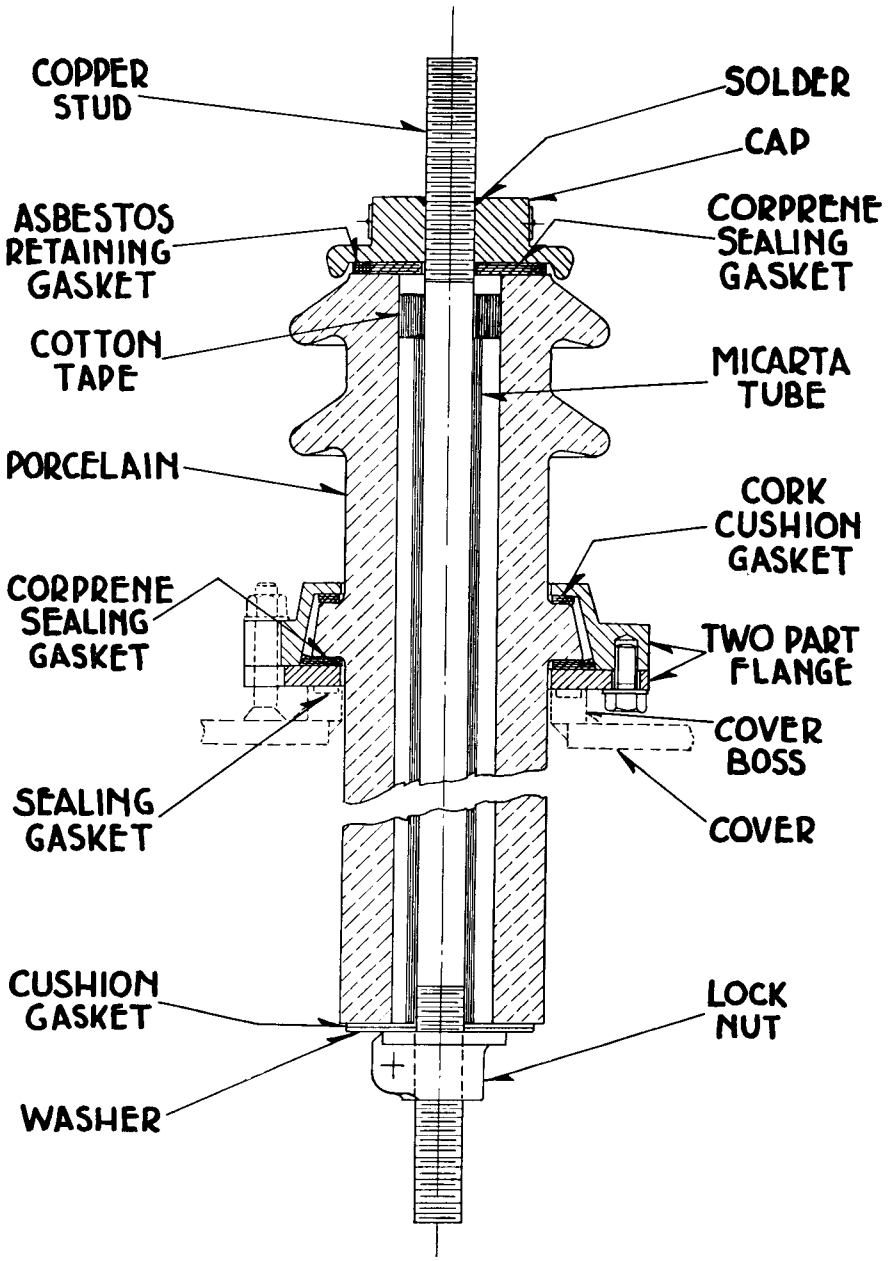

FIG. 1—SECTION OF BULK TYPE BUSHING WITH METAL-TO-METAL GASKET STOP

Westinghouse Electric & Manufacturing Company

Sharon, Pa.

Westinghouse Press
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BULK TYPE BUSHINGS

with Metal to Metal Gasket Stop

INSTRUCTIONS

General Description:

Bushings of this type are used on transformers having windings for 8.7 Kv. and below. The bushing consists of a single piece wet process porcelain with a solid stud lead through the center. The porcelain is made with rain sheds and a mounting collar and there is a micarta insulating tube between the stud lead and the porcelain.

Assembly of Bushing in the Factory:

The copper stud and the cap are sweated together and the micarta tube is placed over the stud. Cotton tape is used for centering the stud inside the porcelain. Corprene and asbestos gaskets are used between the cap and porcelain. The asbestos gasket is used as a stop to keep the corprene gasket from flowing and to limit its compression. At the lower end a cushion gasket is placed between the porcelain and the washer against which the lock nut is tightened to complete the assembly of the porcelain and the lead. Refer to Figure 1.

The porcelain with lead in place is then assembled with a two part flange, a split cork gasket being used between the porcelain collar and the upper part of the flange and a continuous corprene gasket being used between the collar and the lower part of the flange to make an oil tight seal. The upper and lower parts of the flange are drawn together until a metal-to-metal contact is obtained between the upper and lower halves of the two part flange.

Installation:

When installing this type of bushing on the transformer cover, first a sealing gasket is placed in the groove of the cover boss, then the nuts are tightened evenly around until a metal contact is obtained between the lower half of the flange and the cover boss.

When repairing or installing bushings both metal and porcelain surfaces should be thoroughly cleaned before the new gaskets are applied. Surfaces and edges of both sealing gaskets and also the metal and porcelain surfaces, which come in contact with these gaskets should be coated with gasket cement S# 471880. Apply a liberal coating of cement and allow it to become tacky before putting the gaskets in place.

Maintenance and Repair:

These bushings should be inspected and cleaned periodically. Do not use sharp instruments such as knives, scrapers, etc., or abrasive, such as sand paper or emery cloth to clean the porcelains. Cuts and scratches will permit dirt, dust and moisture to accumulate on the surface and will reduce the flashover values.

When porcelains are broken or damaged, replacement may be made in the field by ordering new porcelain, gaskets and cement. When other parts are also damaged and need to be replaced, a complete bushing should be ordered from the factory. Reference to the original stock order and the serial number of the transformer should be made when ordering spare parts or complete bushings.

Power factor tests need not be made as such tests will not show defects in these bushings.

Handling and Storing:

Care must be taken in handling not to crack the porcelain or damage its surface. Spare bulk type bushings should be stored in a clean dry place.

For sectional view of bulk type bushing see Figure 1, page 2.