

# Instructions for Cast Resin Bushing, 15 KV & Below



I.L. 48-061-48

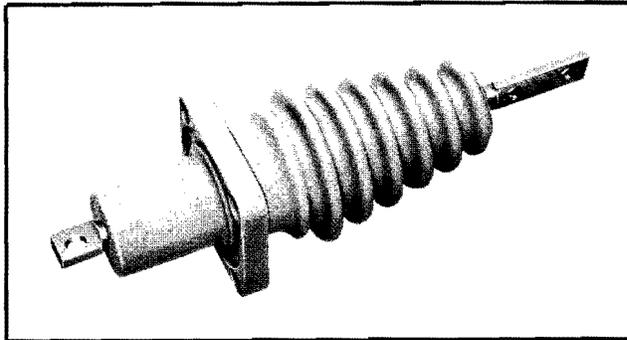


Fig. 1 Cast Resin Bushing

The Westinghouse Cast Resin Bushing, used for voltages 15KV and below, is made by casting an insulating resin around the conductor. The flange is cast as an integral part of the insulating shell. A recessed groove around the underside of the cast flange provides a gasket retainer. To prevent excessive mechanical loading of the bushing, only flexible connections should be made to the bushing conductor. The conductor should not be used as a structural member to support other current carrying parts. The ends of the bushing conductor are flattened and drilled to facilitate bolting to other conductors.

## HANDLING AND STORAGE

Care must be taken in handling the bushing to avoid cracking the resin or damaging its surface.

Store spare cast resin bushings in a clean, dry place in a vertical or horizontal position.

## MAINTENANCE

The exposed insulating surface of the bushing should be cleaned periodically to prevent accumulation of contamination.

When installing the bushing, cement a new gasket in the gasket recess on the underside of the flange to insure that the gasket is properly seated in the groove. Use a 1/4 inch thick cork-buna "N" gasket on Inerteen<sup>®</sup>-filled transformers and a 7/32 inch thick cork-neoprene gasket on oil-filled transformers. A 1 inch outside diameter metal washer should be placed between the mounting nut and the flange. After the nuts are finger tight, each one should be tightened half a turn in sequence until the flange is approximately .010 inches from the tank wall all around the edge.

## RENEWAL PARTS

If renewal parts are required, order from the nearest Westinghouse Sales Office, giving description of parts wanted, with transformer serial number and rating as stamped on transformer instruction plate.

**Westinghouse Electric Corporation** Power Transformer Division, Sharon, Pa.

Effective October, 1966

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# Instructions for Draw Lead Bushing, Type RJ Nema Standard



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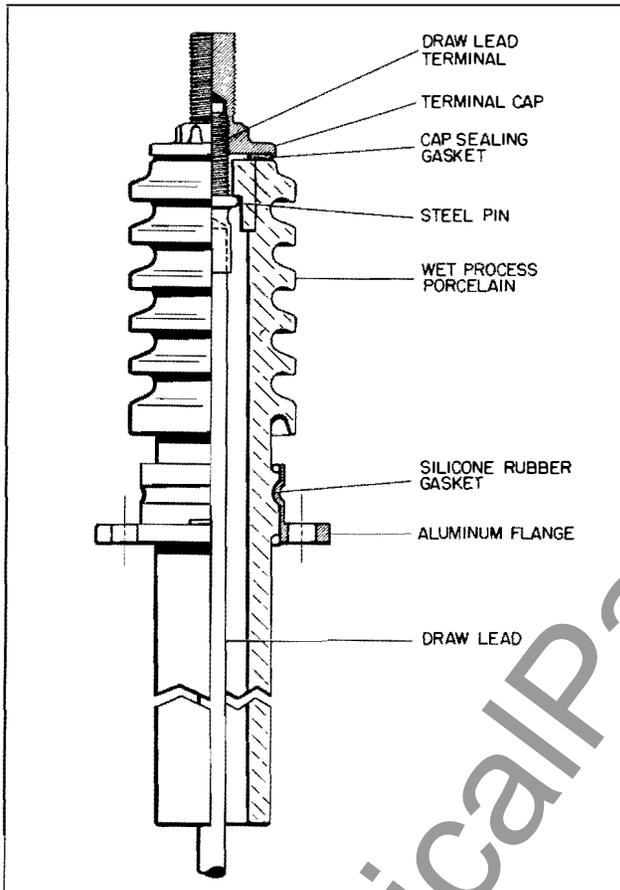


FIG. 1 Typical Cross-Section of "RJ" Draw Lead Bushing

The Westinghouse Draw Lead Bushing, type "RJ", conforms to Nema Standard dimensions and is used for voltages 15 KV and lower, up to 600 amperes. This bushing is made of a single piece, wet process porcelain with a one-piece forged aluminum flange rolled into a groove in the porcelain over a silicone rubber gasket. The draw lead terminal is provided with a steel pin through its diameter. The pin extends beyond the terminal on both sides and engages in a slot provided in the porcelain near the top. The terminal cap screws on to the top end of the draw-lead terminal which extends beyond the top of the porcelain. A nitrile, reusable gasket provides a seal between the terminal cap and the porcelain. See Fig. 1.

## HANDLING AND STORING

Care must be taken in handling the bushing to avoid cracking the porcelain or damaging its surface. Bushings should be stored in a clean, dry place.

## INSTALLATION

These bushings are usually shipped mounted in place on the transformer. The bushing is mounted on a boss which is welded to the transformer tank cover. A recessed groove in the boss contains a nitrile reusable gasket to seal between the bushing flange and the boss. When the mounting nuts are tightened, the flange and boss are drawn together to make a metal-to-metal gasket stop.

The terminal which is crimped to the draw lead has a steel pin pressed through a hole in the terminal diameter below the threads. About 1/4 inch of pin extends on both sides of the terminal to engage a slot inside the porcelain top end. A hole at the top of the draw lead terminal facilitates holding the lead while sliding the bushing over it into position. When the draw lead terminal is properly engaged in the slot about 1/2 inch of thread protrudes above the porcelain top. A stiff draw lead will remain in position. However, it may be necessary to hold some leads by pressing between threads of the terminal with a screw driver until the terminal cap is partially threaded onto the draw lead terminal.

A thin coating of petrolatum is applied to the top surface of the terminal gasket. The coated side of the gasket is then pressed against the terminal cap gasket seat and held in place. The terminal cap has a tapped hole in the bottom and is screwed onto the draw lead terminal until hand tight. The gasket should be properly seated and the terminal cap centered on the porcelain. To obtain proper compression of the gasket the terminal cap is turned 1/2 turn with a wrench after tightening as much as possible by hand.

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POWER TRANSFORMER DIVISION  
SHARON, PA. • MUNCIE, IND. • S. BOSTON, VA.

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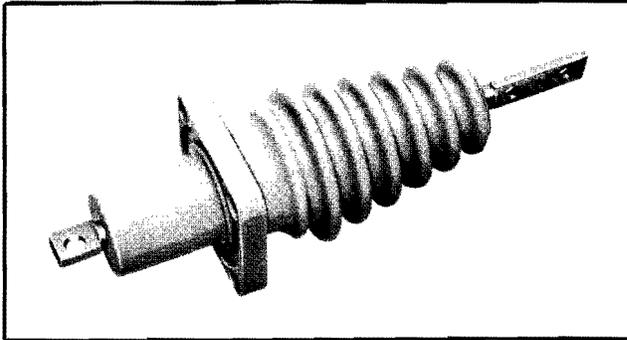


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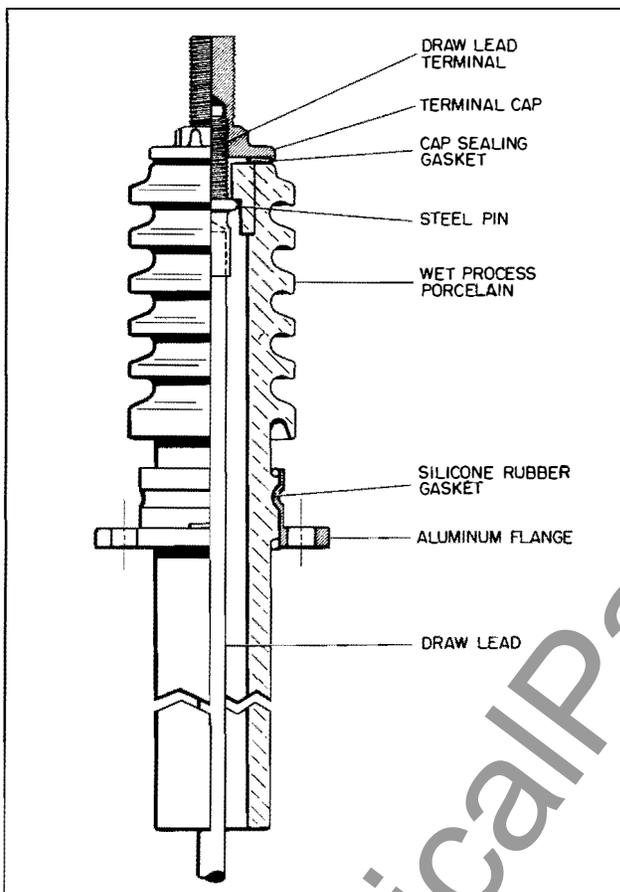


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