

# 24kV 250A BUSHING INSERT INSTALLATION & OPERATING INSTRUCTIONS

## **DESCRIPTION:**

The CHARDON 250A class Bushing Insert is designed for assembly to a high-voltage bushing well and is used as a mating interface A connector per CENELEC EN 50180 and 50181. Using bushing inserts makes field installation and replacement possible and efficient. They are fully screened and fully submersible when mated with connectors and they meet the requirements of IEC 60502-4 and CENELEC HD 629.1 S2.

## **KIT CONTENT:**

- Bushing Insert with Shipping Cap
- Grounding Wire
- Silicone Lubricant

- Paper Towel
- Instruction Sheet





#### **CAUTION:**

- The installation of Chardon products must be carried out by qualified technical personnel.
- Contact with energized equipment can cause serious damage and even death.
- Wear appropriate protective equipment.
- Make sure Chardon Accessories are completely dry and in good condition at the time of installation.



#### **DANGER:**

- Do not touch or handle energized products without adequate protective equipment. Errors in the compliance of this instruction can result in damage to the product, serious injuries to people and even death.
- All associated equipment must be de-energized during installation and maintenance.
- The following instructions do not cover details or variables in the change / installation of the product, to prevent contingencies, please contact the team of Chardon technicians if required.

#### SAFETY INFORMATION

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians, who are familiar with this equipment should install, operate and service it.

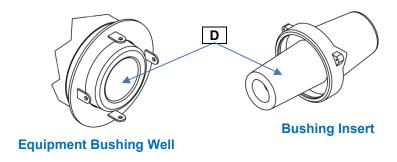
## Warranty

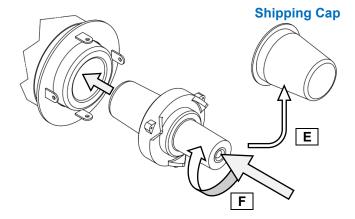
Chardon products are guaranteed for a period of 2 years after their date of purchase, to make this guarantee effective you can come only by presenting a purchase invoice to your authorized Chardon distributor. The warranty will not be valid in the following cases:

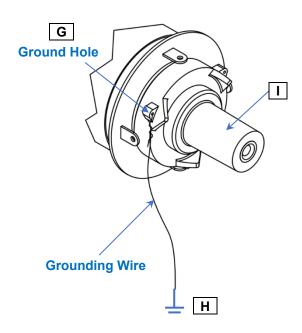
- 1. When the product has been used under conditions other than normal.
- 2. When the product has not been operated according to the instructions for use.
- 3. When the product has been altered or repaired by persons not authorized by Chardon.
- 4. When using components that are no compatible with Chardon accessories.

Inasmuch as CHARDON GROUP, Inc. has no control over the use which others may put the material, it does not guarantee that the same results as those described herein will be obtained, each user of the material should make his own tests to determine the material's suitability for his own particular use. Statements concerning possible uses of the materials described herein are not to be construed as constituting a license under any CHARDON GROUP, inc. patent covering such use or as recommendations for use of such materials in the infringement of any patent.

FOR MORE INFORMATION, PLEASE CONTACT YOUR LOCAL DEALER







## STEP 1:

- **A.** Ensure the **Bushing Insert** has the same voltage rating as the equipment system.
- **B.** Ensure equipment is properly de-energized.

## STEP 2:

- **C.** Remove the shipping cap from the Equipment Bushing Well.
- **D.** Clean Bushing Well and apply a thin uniform coating of lubricant provided to the **Bushing Insert** interface as shown.



### NOTE:

Do not substitute other lubricants for those provided.

# STEP 3:

- **E.** Remove the shipping cap from Bushing Insert.
- F. Place the bushing insert into the bushing well and tighten in a clockwise direction until it bottoms, achieving a torque to 17~20Nm (150~180 in-lbs) by hand or using a torque wrench with 6mm (0.24") socket.

Replace the shipping cap after tightening if the mating product is not to be assembled immediately. Do not energize bushing with shipping cap installed.

# **STEP 4:**

- **G.** Attach a **Grounding Wire** to the ground hole on the body of the bushing insert. Hold the strand with pliers close to ground hole and tightly twist the loose end around the strand at least 2 turns. Ensure wire is successfully contacting with ground hole.
- **H.** Connect the other end of **Grounding Wire** to the grounding system.
- I. Clean the operating interface. Uniformly apply one tube of lubricant provided to the bushing operating interface. Use only the lubricant provided with the bushing insert.



### WARNING:

The Shipping Cap is not suitable as an Insulating Cap for energized use.



## **WARNING:**

All associated apparatus must be de-energized before preparation or repreparation procedures.