



Industrial Loadbreak Bushing Insert

200 A

25 kV Class

5811-BI Series

Installation Instructions

1.0 General

The 3M™ Industrial Loadbreak Bushing Insert threads into a universal bushing well to provide the same function as an integral loadbreak bushing. Using bushing inserts makes field installation and replacement possible and efficient. Bushing Inserts and elbow connectors comprise the essential components of all loadbreak connections.

The bushing insert meets all the requirements of ANSI/IEEE Standard 386 and is completely interchangeable with mating products that also meet ANSI/IEEE Standard 386. When mated with a comparably rated component, the bushing insert provides a fully shielded and submersible connection for loadbreak operation.



CAUTION: The 200 A bushing insert should be installed, operated and serviced only by personnel familiar with good safety practice in handling high-voltage electrical equipment. Be sure that the bushing insert is rated for the intended application before it is installed.

Selection Chart

Product No.	Bushing Voltage Rating
5811-BI-25	25 kV

2.0 Installation

2.1 Clean and Lubricate

- Remove shipping cap. Do not energize bushing with shipping cap installed.
- Clean bushing well and apply a thin uniform coating of silicone lubricant. (See Figure 1.)
- Clean mating interface of bushing insert and apply a thin, uniform coating of silicone lubricant. (See Figure 2.)

2.2 Installation

- Place threaded end of bushing insert into bushing well.
- If installing using a torque tool, the torque setting should be set for 15 ft-lbs. (See Figure 3.)
- If installing without a torque tool, turn the insert clockwise until it bottoms on the bushing well stud (approximately 7–7½ turns).

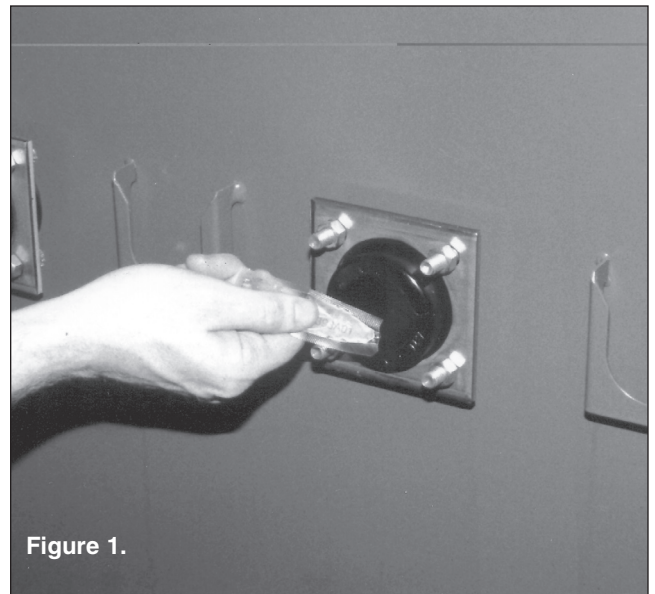


Figure 1.

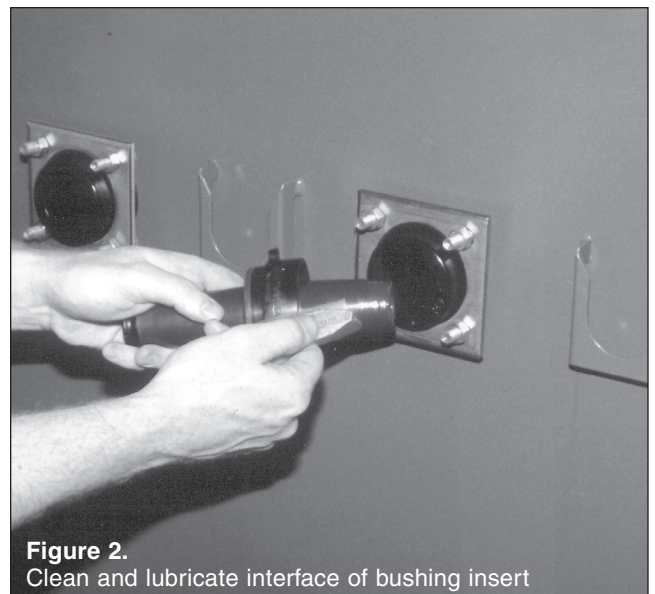


Figure 2.
Clean and lubricate interface of bushing insert

2.3 Ground

- Attach one end of a #14 AWG copper wire to one of the ground tabs of the bushing insert.
- Attach other end of wire to ground. (See Figure 4.)

2.4 Cover Interface

- Do not leave bushing interface exposed.
- Cover with an appropriate mating product using the instructions supplied. **DO NOT USE SHIPPING CAP.**

ATTENTION: This bushing is equipped with latch indicator ring, that serves as a visual indicator to verify that the mating component is properly seated on the bushing insert.

Once the mating component has been properly installed on the bushing, the yellow ring should be completely covered.

If any yellow is visible, the elbow or protective cap must be completely installed or “latched” before energizing to assure a quality connection.

3.0 Removal

- De-energize apparatus and verify apparatus is de-energized.
- Remove mating products and place in stand-off device or in a clean, dry location.
- Remove ground wire.
- Use either a $\frac{5}{16}$ " hex drive tool, torque tool or a strap wrench to remove.
 - If a hex-drive tool is used, insert drive into insert, turning tool slightly to engage hex-broach. Turn counter-clockwise to remove.
 - If a strap wrench is used, wrap around the collar of the bushing insert. Turn counter-clockwise to remove. Take care not to damage bushing interface during this procedure.

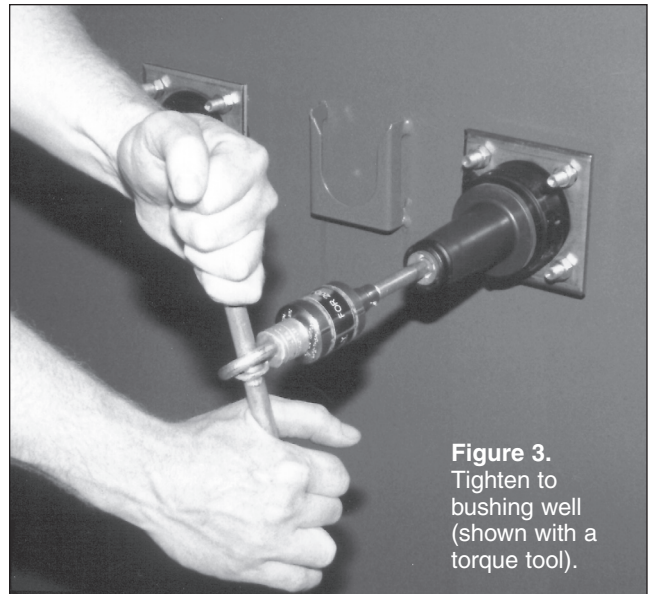


Figure 3.
Tighten to bushing well (shown with a torque tool).

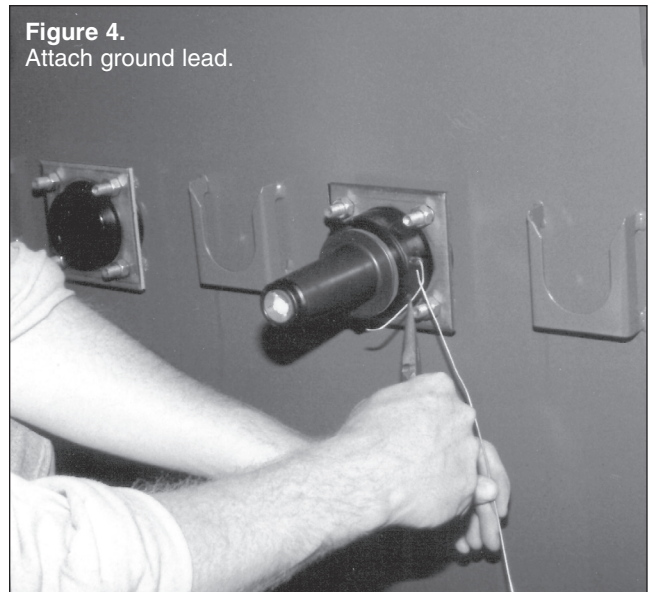


Figure 4.
Attach ground lead.

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