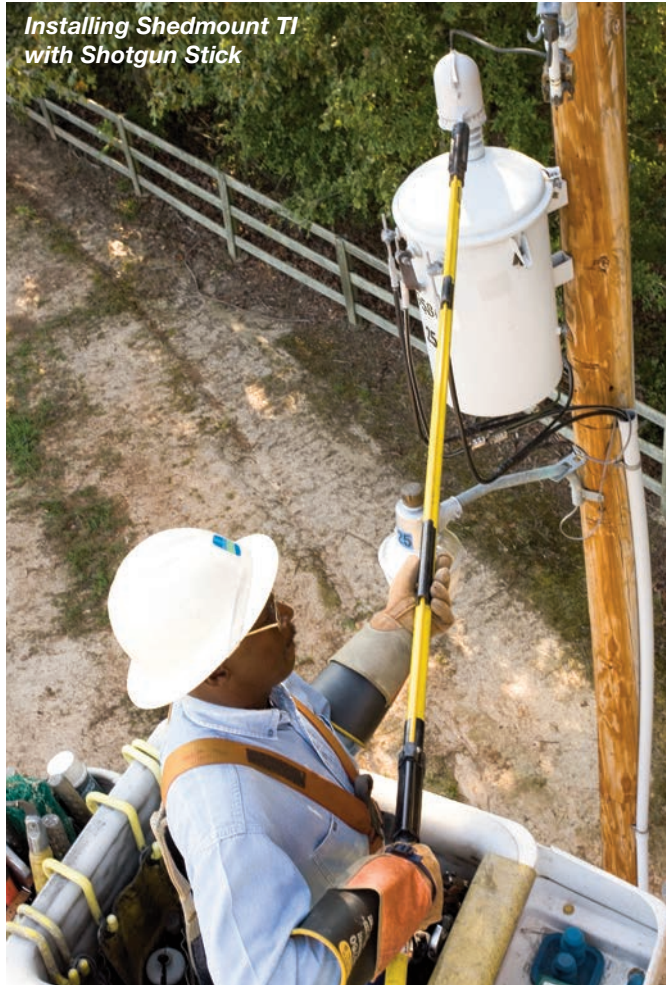
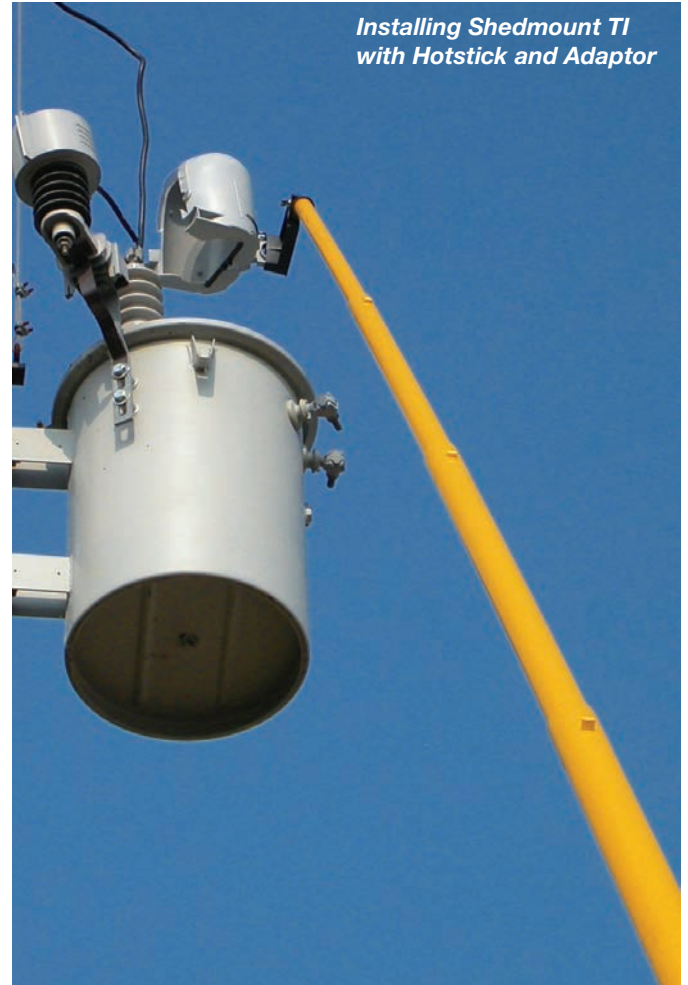




Shedmount TI Wildlife Guard



Installing Shedmount TI with Shotgun Stick



Installing Shedmount TI with Hotstick and Adaptor

*In 2005, Central Moloney Components responded to an industry need for a wildlife guard that actually works when retrofitting to energized pole-mount transformers with the **Shedmount TI**.*

*Designed especially for – but not limited to – distribution transformer primary bushings, the CMI **Shedmount TI** offers the ultimate in safe and easy installation on live equipment.*

*The patented design of the CMI **Shedmount TI** allows the guard to be cocked open before installation. This feature coupled with the unique external closure spring and generous cable opening, allows the guard to be installed very easily with either a shotgun stick or hotstick.*

SUPERIOR DESIGN

The key design detail of the **CMI Shedmount TI** is the stainless-steel spring that enables the guard to be opened and closed without latches. Latches work well on hand-installed guards, but are very difficult to utilize on remotely installed guards. The spring provides a permanent means of holding the guard closed and properly positioned.

The primary challenge to retrofitting guards is the random orientation of high voltage line leads and arrester leads on direct-connected units.

The CMI **Shedmount TI** features an expansive comb opening that fits snugly around entrance cables, regardless of their position.

The CMI **Shedmount TI** provides a universal-fit handle designed to be grasped by the clasp of a shotgun stick. Detents in the handle opening allow the shotgun stick to be used from a wide range of angles. The handle also accommodates a slip-fit adaptor for use with a standard hotstick fitting.

The CMI **Shedmount TI** is molded from premium-grade, track-resistant, UV-stabilized polypropylene copolymer for excellent durability, even in harsh environments. Used by CMI for decades, this material has an excellent field history.

APPLICATIONS

The CMI **Shedmount TI** guard is designed for application on all common distribution-class transformer bushings and arrestors. It can also be used on other similarly sized types of bushings.

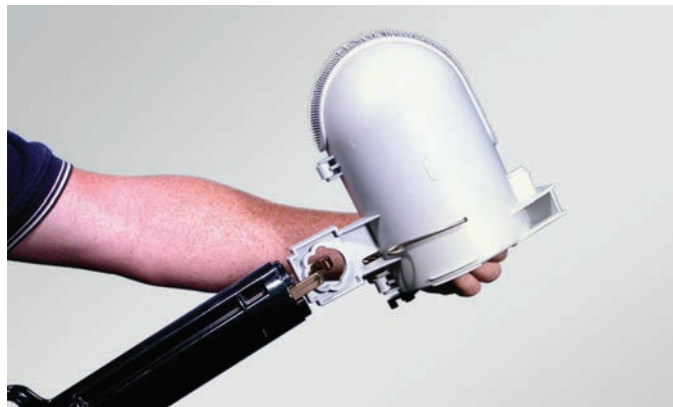
This guard is designed to be installed only over the top shed of the bushing or arrester. This configuration holds the guard firmly in place and limits the electrical stress on the guard itself. **Installation over more than one shed is not recommended.**

Shedmount TI Wildlife Guard

Every Shedmount TI guard is shipped completely assembled and ready to install. Install it using the method of your choice, depending on the type of access available.

S H O T G U N S T I C K I N S T A L L

H O T S T I C K I N S T A L L



1. With close proximity access from either the pole or a bucket truck, the guard handle is designed to provide a secure attachment to a standard shotgun stick. Detents in the handle allow the guard to be positioned at various angles to match the installation position.



2. Cock open the guard using the integral trigger. Note: Triggered installation is optional for level, straight-on shotgun stick applications. The taper on the leading edge of the guard allows the guard to be easily installed by pushing it, uncocked, against the top bushing shed.



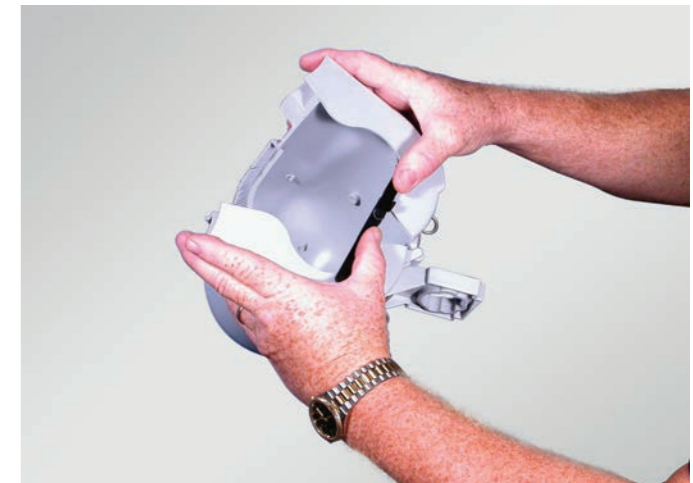
3. Place the guard onto the target bushing, taking care to position the trigger between the top and second bushing sheds.



4. As the trigger makes initial contact with the bushing, it collapses, closing the guard around the bushing and leads. Disengage the shotgun stick from the guard handle and withdraw it. Installation is complete.



1. For more remote installation, attach our patented polymer adapter to the hot-stick.



2. Cock the guard.



3. Insert the handle of the cocked guard into the adapter pocket.

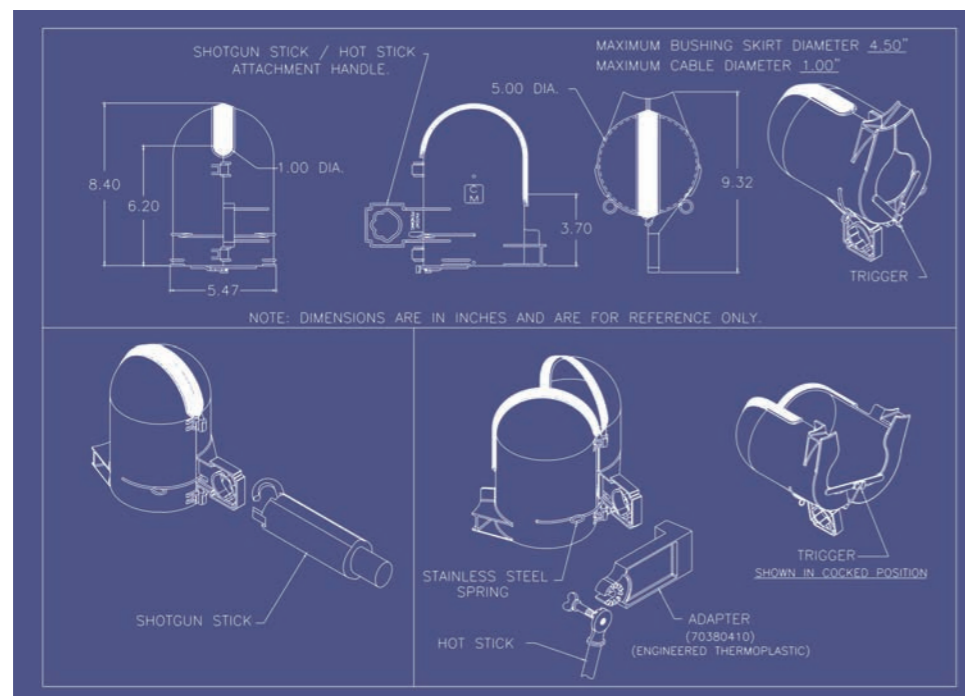


4. Extend the hotstick to the necessary length and apply the guard, taking care to position the trigger between the top and second bushing sheds.



5. Withdraw the hotstick using a twisting motion.

P A R T D I M E N S I O N S



OOPS!
What if I installed the guard incorrectly over more than one shed?
No problem!

Tapered surfaces inside the guard allow it to be pulled off the target bushing, then reinstalled easily with a shotgun stick or hotstick fitting.

Shedmount TI Wildlife Guard



T E S T I N G

The following tests have been conducted on production guards to verify performance on electrical apparatus up to 25 KV Class (15.0KV line to ground).

LIGHTNING IMPULSE WITHSTAND

When tested in accordance with IEEE Std. 4 – 1995, each guard withstood three positive and three negative 150kV BIL impulse waves without disruptive discharge or flashover.

DRY WITHSTAND - EXT. SURFACE GROUNDED

The entire exterior surface of the guard to within 2" of the energized conductor was grounded with copper mesh. A voltage of 24kV (20% greater than maximum rated line to ground) was applied to the exposed conductor and held for one minute. No electrical flashovers or punctures occurred.

DRY POWER FREQUENCY FLASHOVER

The flashover value of the base test fixture (without guard installed) was determined by averaging five consecutive flashover tests. This value was determined to be 87 kV. With the guards installed, the average flashover value was 88 kV (101% of the base value).

WET WITHSTAND - EXT. SURFACE GROUNDED

Precipitation conditions were established in accordance with IEEE Std 4 -1995, 14.2 Table 3, "Conventional Procedure – USA".

The entire exterior surface of the guard within 2" of the

energized conductor was grounded with copper mesh. A voltage of 24kV (20% greater than maximum rated line to ground) was applied to the exposed conductor and held for one minute. No electrical flashovers or punctures occurred.

WET POWER FREQUENCY FLASHOVER

Precipitation conditions were established in accordance with IEEE Std 4 -1995, 14.2 Table 3, "Conventional Procedure – USA".

The flashover value of the base test fixture (without guard installed) was determined by averaging five consecutive flashover tests. This value was determined to be 70 kV. With the guards installed, the average flashover value was 65 kV (93% of the base value).

RADIO INFLUENCE VOLTAGE

The RIV value of the base test fixture (without guard installed) was less than 50 microvolts. With the guard installed, the RIV value was still less than 50 microvolts.

COLD TEMPERATURE

The guards were placed in an environmental chamber for 4 hours @ -25°C. Within one minute of removal, the guards were installed and removed from the test fixture five consecutive times. No cracks or damage to the parts was observed.

ULTRAVIOLET AGING

Test samples consisting of sections removed from a standard production lot were exposed on a Q-Trac natural sunlight concentrator at the Q-Panel Weathering Research facility in Buckeye, Arizona. Exposure time was 6 months, which approximates 8 - 10 years of typical outdoor exposure or 4 – 5 years of severe outdoor exposure. A water spray cycle (day and night) was included to simulate the effect of dew and rainfall.

Samples returned at the conclusion of the test were still in good condition. Functionally, the material was still completely intact and flexible with no cracking or embrittlement. The cosmetic appearance of the samples also remained good, with only very minor surface chalking as evidence of the exposure.

In addition, material samples have passed 1000 hours QUV (per ASTM G 154, appendix X2, Table X2.1, cycle 1) with no change in appearance or properties.

RETENTION TESTING

While installed on the test fixture with the cable opening oriented for maximum wind exposure, the guards remained properly installed when exposed to a constant wind velocity of 85 mph.

O R D E R I N F O R M A T I O N

Shedmount TI ■ Part Number: 70380473 ■ Standard Case Pack: 30 each
Hotstick Adaptor ■ Part Number: 70380410 ■ Standard Case Pack: 30 each



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