



Howard Industries, Inc.  
Certified to ISO 9001:2015

Catalog Section

61-21

## 2163 Wildlife Protector

Snap-on Wildlife Protection for High-Voltage Bushings



Howard Industries, Inc.  
Certified to ISO 9001:2015  
10002179



The Howard Industries 2163 Wildlife Protector is designed to prevent outages caused by wildlife contact with exposed high-voltage bushings and lightning arresters. The protector is intended for factory or field installation on porcelain high-voltage bushings typically used on overhead distribution transformers. It can also be installed on many types of porcelain and polymer-housed, direct-connected lightning arresters.

The 2163 Wildlife Protector is made from a UV-enhanced, high-density

polyethylene resin that provides good mechanical strength and electrical properties combined with excellent weathering characteristics. The protector's two-piece design makes installation easy. Positive latches on both sides of the protector clamp it securely into place, yet provide a means for removal when necessary.

The large size of the 2163 Wildlife Protector permits installation on a wide range of bushings and lightning arrester types. This design also features internally molded ridges that act

as guides to ensure proper mounting position.

A ring of flexible fingers lining the protector's bottom opening provides for a snug fit on the bushing or arrester, preventing wildlife entry. Line lead and arrester lead provisions are also shielded by flexible fingers that block wildlife entry. An optional riser tube is available to provide additional line lead insulation.

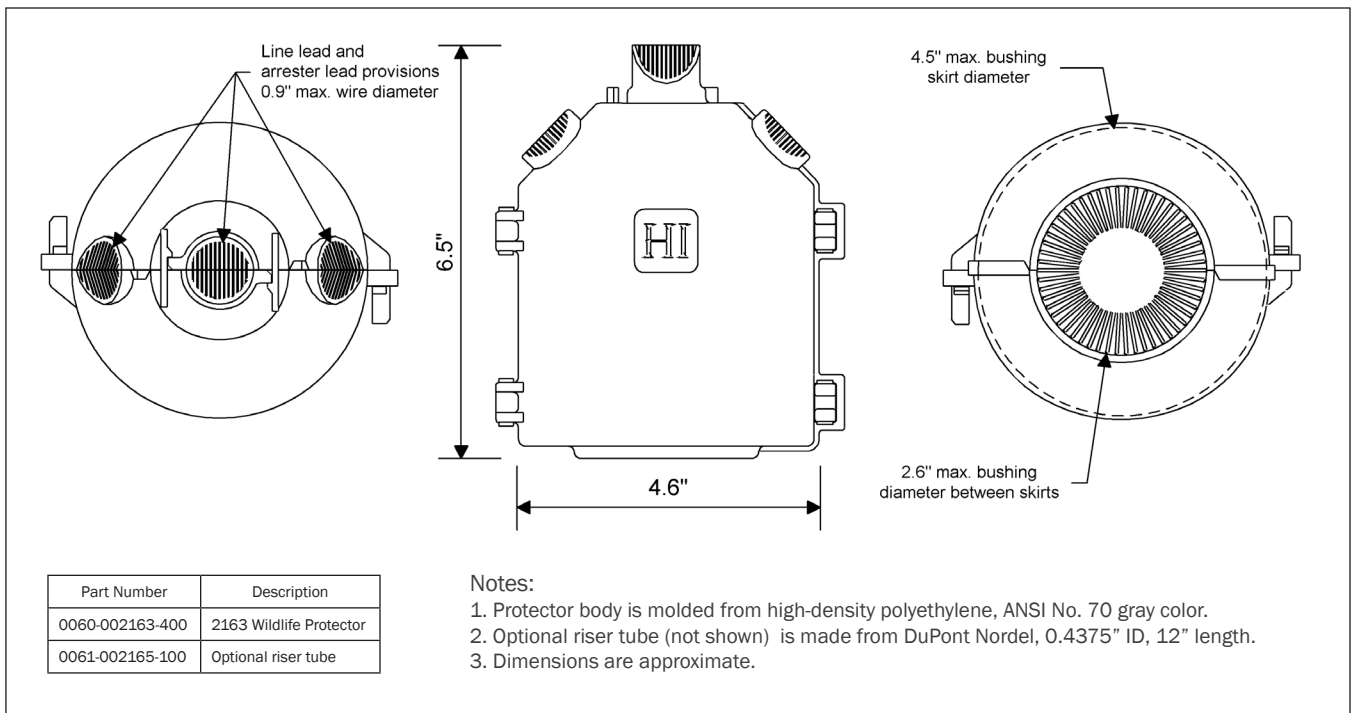


Figure 1: 2163 Wildlife Protector for high-voltage bushings and lightning arresters.

### Installation

1. Place one half of the 2163 Wildlife Protector at the top of the bushing or arrester, making sure the molded ridges inside the protector are positioned between the first and second skirts. This position is necessary, so that the bushing's or arrester's creepage distance is not compromised.
2. Place the other half of the protector on the opposite side of the bushing or arrester and engage all four latches by snapping the two halves together. Guide the line and arrester leads into proper position while closing the protector. Make sure that all four latching mechanisms are locked.
3. As an alternate installation method, the two protector halves can be partially assembled on one side (without fully engaging the latches) and flexed open to slip around the bushing or arrester. Then, engage all four latches by snapping the two sides together while guiding the line and arrester leads into proper position. Make sure that all four latches are locked.

### Removal

To remove the protector, begin by opening one side first. Compress the latching tabs and pry the latches apart. It may be possible at this point to spring open and remove the protector with the other side still latched. If not, proceed to unlatch the opposite side to remove the protector.



Figure 1: 2140 Wildlife Protectors installed on overhead distribution transformers.