

## 1. Scope

This specification applies to fiberglass guy strain insulators used to insulate guy wire from pole mounted hardware which may accidentally become energized.

## 2. Reference Standards

Except as modified herein, these insulators shall meet the applicable requirements of the latest revisions of ASTM A-153 and A-220.

## 3. Material ID Numbers

This specification applies to the following District Material ID Numbers: 1001571, 1001839, 939209 and 939267

## 4. Physical Characteristics

Fiberglass guy strain insulators shall be dimensioned per Figures 1, 2, 3 and 4.

## 5. Construction

### 5.1 Fiberglass Rod

Fiberglass rod shall be manufactured from glass fibers in a suitable resin binder. A minimum 1.5 mil thick high gloss coating designed to resist surface contamination shall be applied to the fiberglass rod. The coating and resin binder shall both contain UV inhibitors. The fiberglass rod shall be highly weather resistant, thermally stable and resistant to impact and torsional loading. The fiberglass rod shall be sky gray in color.

### 5.2 End Fittings

End fittings shall be manufactured from high strength heat treated aluminum alloy or hot dip galvanized ductile iron. End fittings shall be permanently secured to the fiberglass rod. As per Figures 1 and 2, the 42" fiberglass strain insulator (Cat. ID 1001571) and 54" fiberglass strain insulator (Cat. ID 1001839) shall be equipped with straight clevis end fittings, including clevis pins and stainless steel cotter pins. One end shall be equipped with a roller designed to accommodate preformed and automatic guy grips for 3/8" and 1/2" guy strand. As per Figures

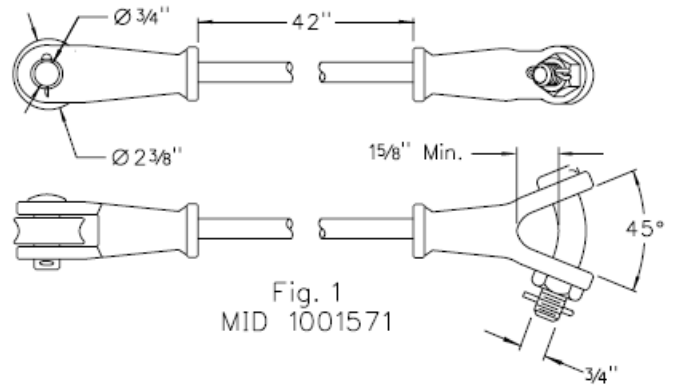


Fig. 1  
MID 1001571

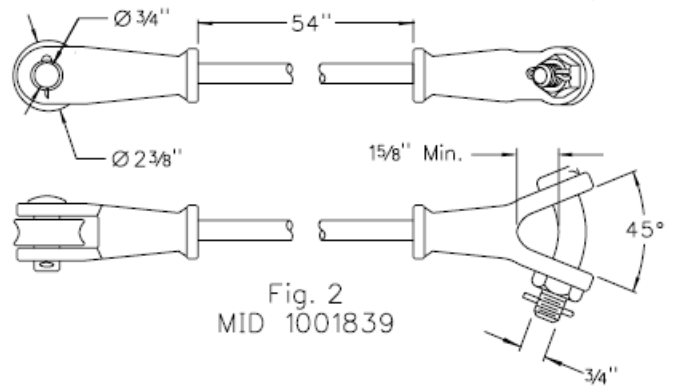


Fig. 2  
MID 1001839

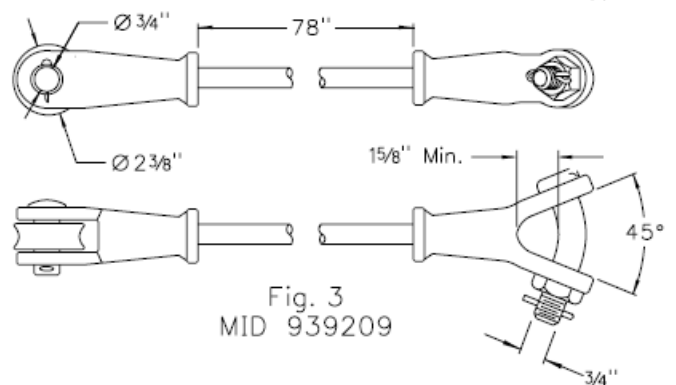


Fig. 3  
MID 939209

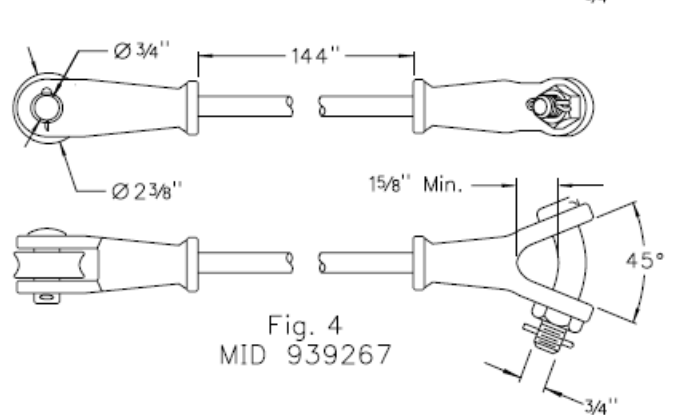


Fig. 4  
MID 939267

3 and 4, the 78" fiberglass strain insulator (Cat. ID 939209) and the 144" fiberglass strain insulator (Cat. ID 939267) shall be equipped on one end with a straight clevis fitting, including clevis pin, stainless steel cotter key and roller as described earlier. The other end shall be a Y-clevis, complete with 3/4" bent bolt, nut and stainless steel cotter pin.

## 6. Ratings

Minimum Mechanical Specifications	
Breaking Strength	30,000 lb. min.

Minimum Electrical Specifications				
	MID 1001571	MID 1001839	MID 939209	MID 939267
60 Hz Wet Flashover	200kV	200kV	425kV	760kV
60 Hz Dry Flashover	340kV	340kV	780kV	925kV

## 7. Identification

At least one end fitting on each fiberglass strain insulator shall be permanently marked with the manufacturer's name or logo.

## 8. Packaging

Fiberglass guy strain insulators shall be packaged a maximum of 10 units per box.