

## 1" Pipe-Style Snow Guard Accessories Installation Instructions

### SNOW GUARD ACCESSORIES

- End Caps (PP56)
- End Collars (PP65)
- External Couplings (PP84)
- Ice Flags (PP95)
- Ice Screens (PP98)
- Internal Couplings (PP86)

All Alpine 1" pipe-style snow guard accessories fit 1" pipe-style snow guards for through-fastened or clamp-to-seam applications.

- Ice Flags and Ice Screens must be installed on systems with at least two pipes
- Accessories are available in aluminum, brass and stainless steel
- Aluminum and stainless steel accessories can be powder coated
- Internal couplings are not powder coated
- Ice Screen is available in stainless steel and brass

### EXTERNAL COUPLING (PP84)

External Couplings are used to join pipes together.

#### INSTALLATION

1. Install pipe and slide external coupling over end until pipe end contacts the dimple.
2. Install next pipe, sliding it in until it contacts the dimple (*fig. 6*).

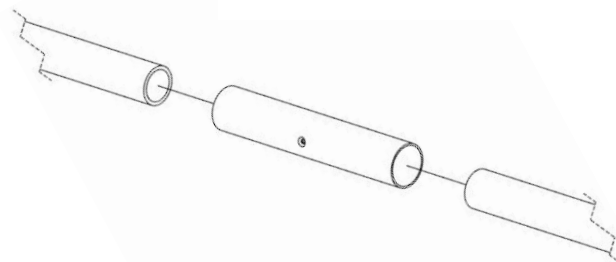


Fig. 6

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### INTERNAL COUPLING (PP86)

Internal Couplings are used to join pipes together.

#### INSTALLATION

1. Insert assembled coupling into end of one pipe so half of solid aluminum shaft is inserted (*fig. 7*).
2. Twist exposed half of coupling in a clockwise motion until rubber gasket engages pipe. Continue to tighten until coupling cannot be easily pulled out of pipe (*fig. 8*).
3. Slide next section of pipe over exposed half of coupling.
4. Twist tube in a clockwise motion until rubber gasket engages pipe. Continue tightening until tubing cannot be easily pulled apart (*fig. 9*).
5. If system needs to be unassembled, simply turn pipe counter-clockwise until pipes can be pulled apart.

Fig. 7 & 8

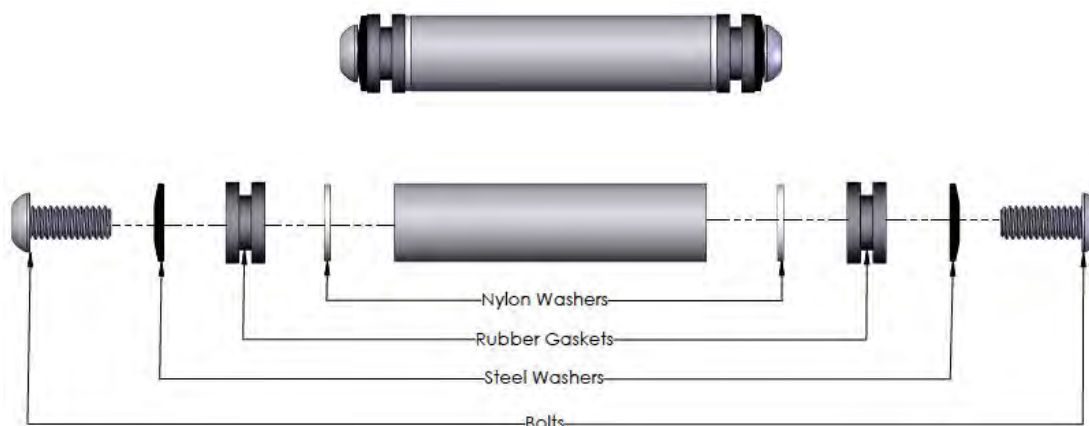


Fig. 9



- Internal Couplings come assembled and ready for installation
- If they come apart or loosened during shipment, re-assemble following (*fig. 10*)
- ***Be sure not to over-tighten prior to inserting coupling into pipe***
- Over tightening bolt will cause gasket to expand and make installation of coupling difficult

Fig. 10 Assembled & Disassembled



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### END COLLARS (PP65)

End Collars keep pipes from sliding through snow guard brackets.

- Pipes cannot extend past last bracket more than 6"
- An End Collar is required for each end of each pipe on each run of snow guards
- A run should not exceed 100' to allow for thermal expansion

#### End Collar Paired with External or Internal Coupling Installation

1. End Collars should be placed over end of each run of pipe, on inside of outermost brackets (*fig. 1*).
2. Place End Collar over pipe and tighten set screw until it no longer slides.
3. As last pipe in the run is installed, End Collars should be installed.
4. End Collars should be installed from brackets a minimum of 1/8" for every 10' of pipe.
5. It may be necessary to place one End Collar further inside the bracket than the other End Collars on some three-pipe or high-hole systems using the External Coupling (*fig. 2*).

Fig. 1

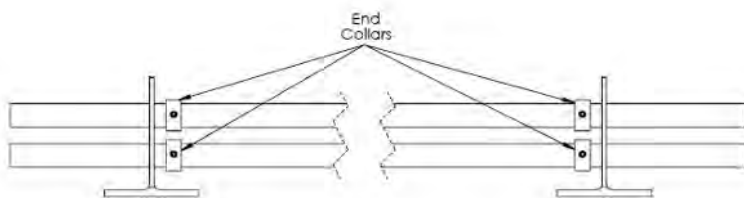
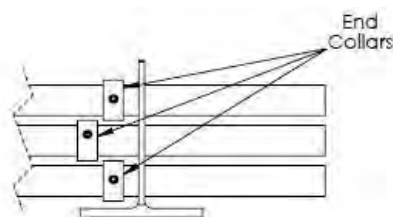


Fig. 2



## 1" Pipe-Style Snow Guard Accessories Installation Instructions

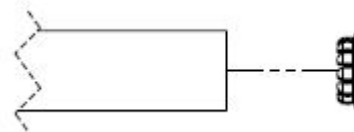
### END CAPS (PP56)

End Caps prevent moisture and insects from getting inside of pipes.

Fig. 5

### INSTALLATION

1. Install End Cap by pressing it into end of pipe (*fig. 5*).



### ICE FLAGS (PP95)

Ice Flags hang from pipe between brackets, evenly spaced within the first/only row of snow guards, to help keep ice and snow from sliding underneath.

***Ice Flags should not touch roof surface.***

### INSTALLATION

Fixed Three-Pipe Systems (PP115, PP117, PP145, PP314, PP315, PP325)

1. Install Ice Flag on top pipe.

Adjustable Three-Pipe Brackets (PP215, PP225, PP235, PP503)

1. Install Ice Flag on middle pipe.
  - For all two and three pipe-style systems, use bolt and nut to hold Ice Flag in position (except ASG3000 – see *fig. 12*, the long leg of ice flag rests against uphill side of pipes)
  - Apply silicone or adhesive between Ice Flags and Pipes to keep flag from sliding (*fig. 11*)
  - Ice Flag for ASG3000 sits between pipes (*fig. 12*)
  - Ice Flags for PP225 with End Caps, End Collars, Internal Couplings (*fig. 13*)

Fig. 11  
Apply Silicone or Adhesive

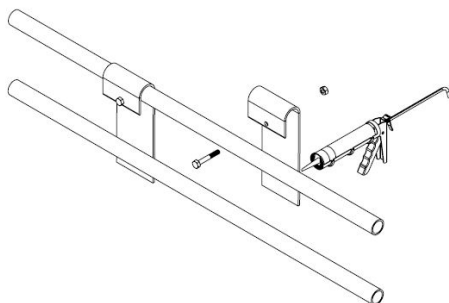


Fig. 12  
Ice Flags on ASG3000  
Two-Pipe Snow Guard

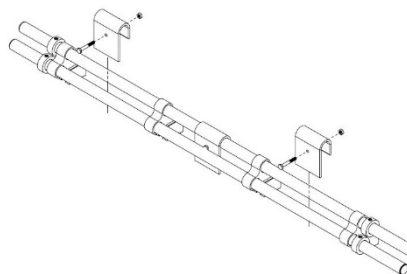
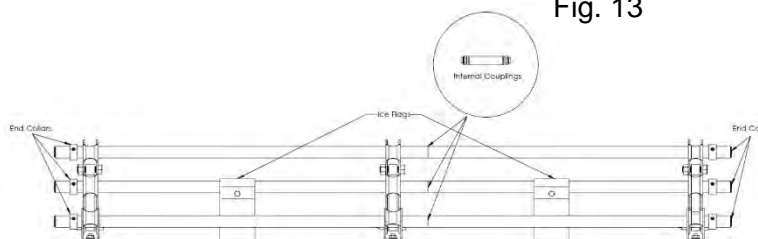


Fig. 13



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### ICE SCREEN (PP98)

Ice Screen comes in 4' lengths, 5" high. For most installations, it will need to be cut to size to fit between snow guard brackets.

### INSTALLATION

1. Place Ice Screen on upslope side of installed pipes.
2. Place a U-bolt on pipe and fit it through openings in Ice Screen.
3. Place backing plate behind Ice Screen and insert U-bolt ends through openings.
4. Tighten supplied locking nuts.

- Each length of Ice Screen includes 4 U-bolts, 4 backing plates and 8 locking nuts
- Ice Screen should be attached to bottom two pipes in a three-pipe installation (as shown below) or on both pipes of a two-pipe installation
- ***Use two U-bolts for sections 24" or less; use three U-bolts for sections greater than 24"***

