

# Slugs, Slides & Shackles

## Selection, Installation, and Positioning

Most mainsails are finished with a 5/16" boltrope slid into a slot along the aft edge of the spar. Install in a cloth sleeve sewn to the edge of the sail or sew directly to a cloth tape and fold back, sandwiching the sail and leaving the rope exposed. A sleeve provides very good aerodynamic performance because the leading edge of the sail is sealed to the spar along its length.

However, there are several disadvantages. When the sail is lowered, the luff comes out of the track and can flog and fly with the wind. Also, there will be some wear along the rope or its tape sleeve as it runs up and down the slot.

**SLUGS/SLIDES:** Small nylon barrels or flat "T" shapes that are secured ahead of the boltrope and inserted in the slot instead of the rope. Keeps the sail stacked in the slot when a stop is used and sail is lowered. Slug diameters may vary from 5/16" - 1/2". Diameter is not typically very critical but experimentation may indicate that one size works more smoothly than another. Flat slides range from 5/8" - 7/8" wide.

**EXTERNAL SLIDES:** Used on track, common in the days of wooden masts where slots were not easy to create and did not always have good strength. Slide measurements provided are for the track it goes on. Slides are actually about 1/8" wider than the track.

**SHACKLES:** Used to secure the sail to slides or slugs. Installation is very quick and can sometimes eliminate the need for a spur grommet in the sail edge.

**HOOPS:** Used primarily to secure lateen sails to their spars. Spars can be no more than 1-1/2" in diameter. Hoops are snapped in place with a grommet.

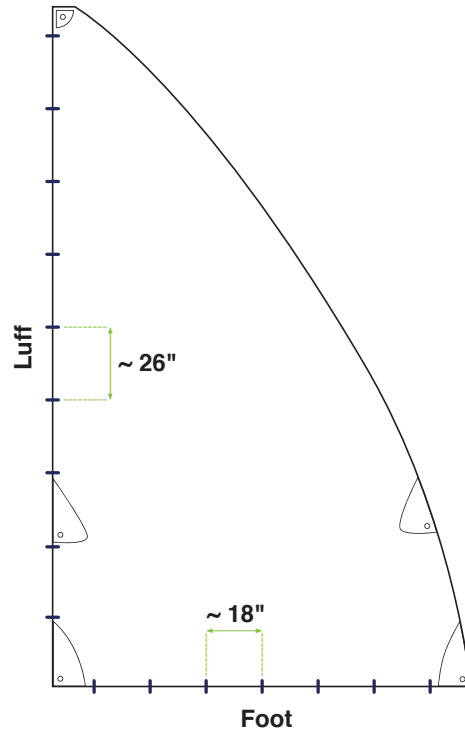
**SLEEVES:** Used on very small boats. Aerodynamically excellent, but sails cannot be lowered easily. Sleeve luffed sails can be used only on unstayed masts unless a slot in the sleeve is provided and the stays are disconnected each time the sail is removed.

### INSTALLING SLUGS & SLIDES

There are several different attachment methods to consider when installing slugs and slides. The strongest and most common attachment method is with a shackle and grommet. Webbing is more labor intensive but allows for greater articulation of the slug position.

**LUFF:** Position the top slug right below the headboard or in the headboard slots designed for slug attachment with webbing. Work down along the luff installing slugs approximately every 26". Avoid placing a slug too close to a reef grommet, rather position the slug at least as high above the grommet as the distance from the slug stop to the tack hook at the gooseneck. The bottom slug should at the very least be high enough to sit above the slug stop when the sail is raised.

**FOOT:** Position slugs or slides equally spaced about 18" apart along the foot of the sail.



### ATTACHMENT METHODS



## SAIL HARDWARE COMPATIBILITY CHART

Each slug and slide was tested on a sail with 5/16" boltrope with a #2 spur grommet (#24104 and #24105 without grommet) installed just behind the boltrope. Use this chart to determine which slugs and slides are compatible with each shackle. All slugs and slides can also be webbed in place without the use of shackles.

		SHACKLES								
		SCREW-ON STAINLESS STEEL			SNAP-IN PLASTIC		SCREW-ON PLASTIC			
		#100043 3/4 x 1/2"	#100049 3/4 x 3/8"	#100047 1-1/16"	#727 7/8"	#728 1-1/8"	#103037 1-3/4"	#24106 15/16"	#137 1-1/8"	#24104 11/16"
SLUGS	#1390 Stainless Steel Welded 5/16"	•	•	•	•	•	•	•		
	#1391 Stainless Steel Welded 7/16"	•	•	•	•	•	•	•		
	#1138 Allslip 5/16"			•			•			
	#6981 Allslip 3/8"			•			•			
	#1140 Allslip 1/2"			•			•			
	#23307 All Nylon Round 5/16"			•	•	•	•	•	•	•
	#23319 All Nylon Round 3/8"			•	•	•	•	•	•	•
	#23308 All Nylon Round 1/2"			•	•	•	•	•	•	•
	#23312 Stainless Bail Sail 5/16"	•	•	•		•	•		•	•
	#23313 Stainless Bail Sail 13/32"	•	•	•	•	•	•	•	•	•
	#23314 Stainless Bail Sail 7/16"	•	•	•	•	•	•	•	•	•
	#67311 Stainless Bail Sail 3/8"	•	•	•	•	•	•	•	•	•
	#67511 Stainless Bail Sail 1/2"	•	•	•	•	•	•	•	•	•
	#4525 Internal Track Round 7/16"			•						
SLIDES	#103038 Selden Mast Plastic 7/16"			•	•	•	•			
	#103039 Selden Mast Plastic 9/16"			•	•	•	•			
	#103040 Selden Mast Plastic 5/8"			•				•		
	#1131 Allslip 5/8"			•			•			
	#1132 Allslip 3/4"			•			•			
	#1137 Allslip 7/8"			•			•			
	#23309 All Nylon Internal Flat 5/8"			•	•	•	•		•	•
	#23310 All Nylon Internal Flat 3/4"			•	•	•	•		•	•
	#23311 All Nylon Internal Flat 7/8"			•		•		•		
	#4524 Internal Track Flat 7/8"			•						
	#1379 Stainless Flat Internal Track 5/8"			•	•	•	•	•		
	#1900 Stainless Flat Internal Track 3/4"			•	•	•	•	•		
	#1380 Stainless Flat Internal Track 7/8"			•	•	•	•	•		
	#23301 External Sail 5/8"	•	•	•				•	•	
#23303 External Sail 7/8"	•	•	•				•	•	•	