

# Installation Instructions for Sea-Dog Line PVC Cowl Vents

## CAREFULLY READ THROUGH THE INSTALLATION INSTRUCTIONS BEFORE STARTING THE INSTALLATION PROCESS

#### **Tools and Hardware Needed for Installation**

12" Straight Edge Pencil or Marking Tool 100 Grit Sandpaper Compass\* Masking Tape\* Saber Saw\*

(select appropriate blade for the material you will be cutting through)

Drill Bit\* (large enough to drill pilot hole for saber saw blade)

 ${\it Electric\,Drill-variable\,speed}$ 

Hole Saw and Mandrill: 3-3/4" for 3" vent or 4-3/4" for 4" vent

6-Stainless Steel Screws (select size based on thickness and type of deck)

Drill Bit (select proper size for pilot holes for selected fastener screws)

Hand Held Screwdriver (select proper blade for the screws you are using)

Polyurethane Caulking Compound (for installation on a curved deck)

Silicone Sealant (for installation on a flat deck)

Epoxy (for sealing the exposed edge of the deck installation hole if it is cored with wood or foam)

\* If cutting deck plate installation hole with saber saw

The Sea-Dog PVC Cowl Vent is designed for installation on the deck of a boat by means of a deck plate. A deck plate and waterproof cover are included with this cowl vent. Sea-Dog Line cowl vents fit all standard matching dimension deck plates.

## Installation hole size is 4-3/4" (121mm) diameter for a 4" vent, or 3-3/4" (95mm) diameter for a 3" vent. Measure carefully to cut the proper installation hole size.

Be sure the location you select for the through-deck hole does not go through any electrical wiring, plumbing or other obstructions. Select the flatest location possible.

#### **CHECK DECK CAMBER**



Check the camber of the deck by placing a 12" (300mm) straight edge on the deck installation location and rock it. Rotate the straight edge 90 degrees and repeat. Do not install the deck plate in an area with more than 1/2" (12mm) of camber over 12" (300mm) length of deck surface. Too much camber will distort the vent's deck plate and may result in water leakage.

When installing the deck plate where deck camber exists, it is critical that a polyure-thane caulking compound be used such as Sikaflex® or 3M 5200®. This will insure a good water-tight seal.

### MARK INSTALLATION HOLE



Carefully choose the location on deck where the cowl vent will be installed. If a hole saw is to be used, mark the center of the installation spot with an "X" for the pilot bit to penetrate. If a saber saw is to be used, scribe the circumference of the hole with a compass. A 3" deck plate requires a 3-3/4" (95mm) hole and a 4" deck plate requires a 4-3/4" (121mm) hole. Do not use the

deck plate as a template, as it measures a 1/4" (6mm) less than the required cutout diameter for the installation hole.

Tip: If your are cutting the installation hole with a saber saw and are concerned about scratching the deck with the base plate of the saw, before scribing the circumference, cover the entire area with wide masking tape and scribe the circumference on the tape. The tape will protect the installation surface from scratches while cutting the hole.

#### **CUTTING THE HOLE**

Be sure all power tools are properly grounded.



#### Using a Hole Saw:

Use a variable speed drill to cut the hole at a lower RPM. This will ensure that the deck material will not be damaged by excessive heat. Be sure to stop and clean out the hole and the hole saw periodically.



#### **Using a Saber Saw:**

Use a new blade that is compatible with the material you are cutting (fiberglass, wood, etc.). Drill a pilot hole near the inside edge of the scribed circumference that is big enough to insert the saw blade into. Insert the saw blade into the hole and slowly start cutting out to the scribed circumference. Cut right on the line or just outside of it.



#### Finishing the Hole:

Sand the edge of the hole smooth so that the deck plate fits properly. Test fit the deck plate. If the deck is cored with wood or foam, seal the exposed edge of the material with epoxy to prevent moisture from penetrating into the core.

#### INSTALLING THE DECK PLATE

It is important to rough up the bonding surfaces between the deck plate and deck to get a good water-tight seal. Use 100-grit sand paper around the edge of the installation hole and around the bottom of the flange on the deck plate.

#### Take the time to bed/caulk the deck plate and fasteners properly.

#### **INSTALLING ON A FLAT DECK SURFACE**

Place the deck plate into the hole from the outside to mark the six (6) fastener holes. Remove the deck plate and drill pilot holes for the screws being used. Do not penetrate all the way through the deck. Place deck plate back into hole to insure correct alignment.



Caulk the deck plate with a 1/4" to 1/2" (7mm-12mm) wide bead of silicone sealant or Boat LIFE Life Seal if installing on a wood or fiberglass deck.



Install using only a HAND-HELD screwdriver. DO NOT over-tighten the screws.

#### CAUTION:

Use shorter length screws if your deck is less than 3/4" (19mm) thick.

#### CAUTION:

Do not use polysulfide compound adhesive/sealers, as they will melt the plastic.

#### **INSTALLING ON A CAMBERED (CURVED) DECK SURFACE**

To fasten the deck plate on a cambered surface, line up two of the six screw holes perpendicular to the camber and drill all six pilot holes. After bedding the deck plate with a polyurethane caulking compound such as 3M 5200° or Sikaflex°, tighten up the two screws and leave the other four snug but not tight. Do not to over tighten the fasteners, which could distort the deck plate and cause leakage. Place the straight edge across the deck plate and be sure that it lies flat on both outside flanges. Let the polyurethane bedding compound dry thoroughly before installing the vent.

### **INSTALLING VENT TO DECK PLATE**



Press the cowl vent firmly into the deck plate until it seats. If you have difficulty, try rotating or twisting the vent as it's pressed into place.

To remove the cowl vent, gently twist and pull up.

The cowl vent comes with a snap-in waterproof cover that can be pressed into the deck plate to seal the opening when the vent has been removed. To remove the cover, insert a thin straight blade screwdriver into one of the slots on the deck plate and gently pry up.

