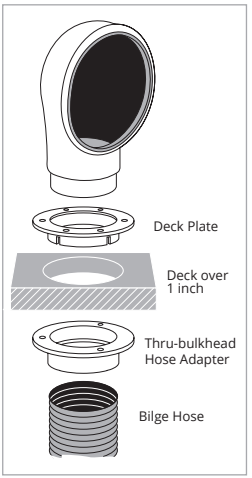
MARINCO®

COWL VENTS

INSTALLATION INSTRUCTIONS

(PART #'S: N10863, N10864, N10963, N10964)



Description

Nicro Cowl Vents install using the same Snap-In deck plates as the Day&Night 2000. The 3" snap-in cowl vent requires a 3-3/4" installation hole, the 4" snap-in cowl vent requires a 4-3/4" installation hole.

PRECAUTIONS

The Cowl vent is designed to be installed on the deck or hatch surface of your boat by means of a deck plate. There are three (3) important factors that must be addressed to insure a good deck plate installation:

1) Make sure the deck plate is properly caulked when fastening it to the deck or hatch. We recommend using a 1/4" to 1/2" (7mm-12mm) wide bead of silicone sealant.
2) The installation hole must be cut to 4-3/4" (121mm) in diameter for a 4" vent, 3-3/4" (95mm) in diameter for a 3" vent. This will insure that the opening of the deck plate is not distorted. Measure carefully to cut the proper sized hole.
3) When installing the deck plate on a cambered surface, make sure you do not tighten the fasteners too much; this will distort the deck plate and may result in leakage.

Very Critical: Deck Camber (or deck curvature)

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

To check for camber, place a 12" (300mm) straight edge on the deck location for the vent and try to rock it. Then rotate it 90° and repeat.

Do not install the vent in an area with more than 1/2" (12mm) of camber over 12" (300mm) length of deck surface. Too much camber will distort the unit's deck plate and may result in leakage. 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, tighten up the two screws and leave the other four snug but not tight. 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.

Problem Areas to Avoid

Cut the hole for your Cowl vent only after carefully considering the location and the correct sizing of the hole.

We recommend that you MEASURE TWICE AND CUT ONCE!

DO NOT install the Cowl vent in an area with more than 1/2" of camber over a 12" length of deck surface.

Be careful that the location you select for the through-deck hole does not go through any electrical wiring, plumbing or other obstructions. Be sure that power tools are properly grounded.

Take the time to bed the deck plate and fasteners properly with sealant. Silicone seal or Boat LIFE Life Seal® are good for flat installations on wood or fiberglass. Polyurethane bedding compound such as 3M 5200® or Sikaflex® are recommended on cambered surfaces or hatch installations where fasteners will not be used. **CAUTION: Do not use polysulfide compounds, as they will melt the plastic.**

Installing Cowl Vent in a Hatch or through the Deck
Step One: Marking the Hole

When mounting on a deck, make sure to check the camber of the deck. See precautions.

Carefully choose the location on the hatch or deck where the Cowl vent will be installed. If a hole saw is to be used simply 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, or trace the outline of the outside edge of the trim ring (not available for 4" threaded deck plate models). 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 installing the Cowl vent using the saber saw method and are concerned about scratching the deck or hatch with the base plate of the saw follow this tip: Select your installation location and, before scribing the circumference, cover the entire area

with wide masking tape. Scribe the circumference on top of the tape. The tape will protect the installation surface while you are cutting the hole.

Step Two: Cutting the Hole

Using a Hole Saw
If you are cutting the hole with a hole saw, we recommend the use of a variable speed drill. Cutting the hole at a lower RPM will ensure that the hole is not cut too quickly, which can melt the plastic on a hatch. Follow the directions for the drill motor itself and be sure it is properly grounded. A slow, steady speed is preferred. Be sure to stop and clean out the hole and the hole saw periodically.

Using a Saber Saw
To cut the hole with a saber saw, select a blade that is compatible with the material you are cutting (fiberglass, wood, acrylic etc.). Be sure the saw is properly grounded. 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 carefully to avoid mistakes, breaking the blade, or melting the plastic on a hatch. Always cut right on your line or just outside of it.

Finishing the Hole
Sand the edge of the hole smooth so that the trim ring and deck plate fit properly. Test fit the entire unit. 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.

NOTE: Most hatches are made of acrylic which is very durable. Even older acrylic is easy to cut and will not chip or crack as long as the proper tools and methods are used.

Step Three: Installing the Interior Trim Ring

Deck or Hatch Mount
For a deck or hatch having a thickness of 1" (25mm) or more, place the trim ring into the hole from the interior side and mark the three fastener holes. Make sure the holes do not lie directly beneath the holes to be drilled for the deck plate installation in Step 4. Remove trim ring and drill out the holes with a 5/32" bit. Place trim ring back into hole to ensure correct alignment. Fasten the trim ring into place with three #10x3/4" flat head screws provided. For decks having a thickness of less then 1" the trim ring can be flipped upside down so the flat part is against the deck or the trim ring can be left off.

CAUTION: Do not use the #10 sheet metal screws to install the trim ring in an acrylic hatch as this may cause the hatch to crack.

Step Four: Installing the Deck Plate

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

Deck Installation
Place the deck plate into the hole from the outside to mark the six (6) fastener holes. Mark the fasteners holes making sure they do not interfere with the trim ring holes in step three. Remove the deck plate and drill 5/32" holes. Do not penetrate all the way

through the deck. Place deck plate back into hole to insure correct alignment. Bed the deck plate and the #10x3/4" flat head screws provided with silicone or polyurethane sealant (polyurethane for a cambered deck). Caution: Use shorter length screws if your deck is less than 3/4" (19mm) thick. DO NOT over-tighten the screws. Install the trim ring first, then the deck plate, using only a HAND-HELD screwdriver.

Hatch Installation
Fastener holes are not required for hatch installations if the deck plate is to be glued to the hatch. If machine screws (not provided) are to be used, drill 7/32" clearance holes completely through the material using the deck plate as a template to mark the center location of the holes.

To glue the deck plate to a hatch, apply a 1/4" (7mm) bead of polyurethane bedding compound around the bottom of the flange on the deck plate. Rotate the deck plate into the hole as you are pressing it into place. This will insure a proper seat. Polyurethane needs to cure thoroughly for maximum strength; depending on the brand, this can take up to a few days.

If you choose to use fasteners to install the deck plate, use #10 machine screws with a Nylock nut and washer (not provided). Insert the machine screws all the way through the 7/32" holes. Be sure to apply silicone sealant to the deck plate and also to the machine screws so that the threads do not “weep” water below during wash down, rain or heavy spray. Tighten the screws by hand (not a power-driver), and make them snug but not tight enough to crack the deck ring. Allow silicone sealant to cure thoroughly to insure a watertight seal.