BEST MANAGEMENT PRODUCTS, INC.

The SNOUT[®] INSTALLATION INSTRUCTIONS

U.S. Patent # 6126817 Canadian Patent #2285146



PRODUCT NAME

The SNOUT[®] Oil-Water-Debris Separator U. S. Patent # 6126817, 7951294, 7857966, 8512556 others pending Canadian Patent # 2285146, 2688012,2690156 others pending

MANUFACTURER

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PRODUCT DESCRIPTION

Basic Application: The SNOUT[®] Oil-Water-Debris Separator is a patented plastic composite hooded outlet cover that attaches to the wall of a stormwater catch basin or other water-quality structure over the outlet pipe in such a manner as to prevent the exit of floating debris and oil.

Composition and Materials: The SNOUT[®] is hand fabricated from marine grade fiberglass. The attachment hardware is 18-8 stainless steel, the anti-siphon device is schedule 40 PVC and the access hatch is ABS plastic.

These materials have proven to be extremely durable and maintenance free. The SNOUT[®] is adaptable to any type catch basin construction and is available in flat or curved back styles.

INSTALLATION (Structure wall to be finished smooth, flush and free of loose material)

1. Select the SNOUT[®] Oil-Water-Debris Separator of size and configuration to fit application. (Our SNOUTS are numbered to reflect that they will fit over a pipe with an <u>outside diameter</u> less than that number. For example: An 18 series SNOUT[®] will fit over a pipe with an O.D. less than 18". Select F for flat-walled structures and R for round-walled structures.) The SNOUT size must be larger than pipe size.

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- 2. Center the SNOUT[®] directly over the exit pipe so that the entire pipe is covered and so that the lower edge of the hood is <u>at least</u> 1/2 the pipe diameter below the lowest inside point of the pipe (deeper is even better.)
- 3. Drill * equally spaced 7/16" holes through the SNOUT[®] flange. (*Number of holes vary depending on size of SNOUT[®].)
- 4. Mark and drill catch basin and install the tamp-in lead anchors.
 - (1) Drill a 3/4"hole into the base material to the required depth (approximately 1-1/4" deep.)
 - (2) Blow the hole clean of dust and other material.
 - (3) Insert the anchor into the hole. Narrow end of cone must point out, lead shield slides over cone.
 - (4) Position the setting tool or a 9/16 socket against the anchor outer cone. (The outer rim of the tool or socket should seat onto the lead shield rim.) Set the anchor by driving the lead sleeve over the cone using several <u>sharp</u> hammer blows. Be sure the anchor is at the required embedment depth (flush or slightly below face of concrete)
- 5. Attach the vent pipe adapter in the pre-drilled hole in the top of the SNOUT[®] using the 2 flat O ring gaskets and PVC lock-nut supplied in the kit. Install with female slip adapter up and a washer on each side of the SNOUT[®] shell. Tighten lock-nut hand tight.
- 6. Remove PSA backing and with firm pressure, attach gasket strip(s) to back of flange and trim excess.
- 7. Attach the SNOUT[®] to the catch basin wall with 3/8" diameter stainless steel bolts in lead expansion anchors. Do not over tighten; 10-15 foot-pounds should be sufficient.
- 8. Cut the anti-siphon vent stack to length and attach to hood at slip adapter with PVC cement.
- 9. Attach 90 degree fitting to vent stack with PVC cement. Ensure that fitting opening is accessible for maintenance and inspection.
 - SNOUT[®] Installation Kit Items included with each SNOUT[®] (Number and sizes will vary with size of SNOUT[®])
 - () 3/8" expansion anchor assemblies (anchors, stainless bolts & stainless washers)
 - (1) 1" or 2" female pipe adapter
 - (2) Neoprene O rings
 - (1) PVC lock-nut
 - () PSA backed gasket strip(s)
 - (1) 1" or 2" diameter 12" length PVC pipe
 - (1) 90 degree elbow

BEST MANAGEMENT PRODUCTS, INC. The SNOUT[®] INSTALLATION INSTRUCTIONS U.S. Patent # 6126817 Canadian Patent #2285146 EXTRA INSTALLATION INSTRUCTIONS for a Two-Part SNOUT[®]

Larger size SNOUTs are shipped knocked down in two parts. Therefore it will be necessary to site assemble the two halves. Use the supplied gasket(s) to make the connections between the 2 parts of the SNOUT[®] and the SNOUT[®] & the wall of the structure. Overlap intersecting gaskets approximately 1" to insure a good seal.

- (1) Stand base section upright & install one of the PSA-backed gaskets to the top connecting flange. Trim excess and save.
- (2) Place dome part on the base section and temporarily clamp together to align.
- (3) Locate evenly spaced bolt locations along connecting flange.
- (4) Drill holes to receive the 1" x 3/8" SS bolts, nuts and washers.
- (5) Remove clamps.
- (6) Bolt the dome to the base after lowering the two halves into the structure.

Continue with instructions above starting with step #1 for one-part SNOUT[®] installation.

2-Part SNOUT[®] Installation Kit Items included with each SNOUT[®] (Number and sizes will vary with size of SNOUT[®])

- () 3/8 x 1" stainless steel bolts, washers and nuts. The correct amount for connecting the two halves will be supplied.
- () 3/8" expansion anchor assemblies (anchors, stainless bolts & stainless washers)
- (1) 1" or 2" female pipe adapter
- (2) Neoprene O rings
- (1) PVC lock-nut.
- () PSA backed gasket strips. Enough gasketing material will be provided to gasket between the two halves and around the outside of the SNOUT[®] flange against the structure wall.
- (1) 1" or 2" diameter 12" length PVC pipe
- (1) 90 degree elbow

Optional Flow Restrictors for flow control are available for the 12" 18" and 24" SNOUTS

Flow Restrictor Installation Instructions:

1. Attach Flow Restrictor to SNOUT[®]

(a) Position the Flow Restrictor Plate on the SNOUT[®] bottom flange with the smooth side facing up.

(b) Align the back edges of both the SNOUT[®] and Flow Restrictor and drill five equally spaced holes 1/4" diameter through both flanges.

(c) Remove gasket backing and with firm pressure attach gasket strip to the bottom flange of the SNOUT[®] where it mates with the Flow Restrictor and also across its back (wall) flange. Overlap any intersecting gaskets approximately 1" to insure a good seal.

(d) Bolt the Flow Restrictor to the SNOUT[®]

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(e) Insert your pre-slotted standpipe into the sleeve in the Flow Restrictor base so that the bottom (inlet) of the pipe is at least 1/2 the outlet pipe diameter below the lowest inside point of the outlet (min. of 6" below plate.) Secure the standpipe with a rubber coupler (FERNCO type).

2. Center the SNOUT[®] directly over the outlet pipe so that the entire pipe is covered and so that the exit pipe is inside the hood and is as close to the bottom edge of the hood as possible. <u>NOTE!! This is the correct location for a SNOUT[®] with a Flow Restrictor.</u>

Flow Restrictor Basic Kit

- (1) Flow Restrictor
- (1) PSA backed gasket strip(s)
- (5) 1" X 1/4" stainless steel bolts
- (5) 1/4" stainless steel lock-nuts

Also Required

- (1) size x size rubber coupler (FERNCO type)
- (1) PVC pipe

MAINTENANCE

The catch basin should be emptied of debris and the accumulated solids removed as required by site conditions or at least once a year. BMP recommends scheduling maintenance when sump is half full, or six inches of floatable pollutants accumulate on the surface. The SNOUT[®] itself requires no real maintenance other than routine inspection and rinsing with a hose or pressure washer during the cleaning sequence of the catch basin and flushing the anti-siphon vent with water or air to verify that it is clear.

TECHNICAL SUPPORT

For technical consultation or additional information, and for custom design and fabrication services, please contact T.J. Mullen at (800) 504-8008 (tim@bmpinc.com)

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