

ASSEMBLY INSTRUCTIONS

Series 2300-SH; 4300-SH and 18300-SH *skim-pak*®

1.1 Unpacking

Check all packages for contents and for shipping damage. If damage occurs during shipment, notify the carrier.

2.1 skim-pak™

The light weight "spill response" skimmers are constructed from ABS plastic. There are three sizes 2300-SH, 4300-SH and 18300-SH. The skimmers are designed to be portable and have a unique light weight design that is durable when deployed. On top of the "toes" of the skimmer are voids. Allowing water to enter these voids will add weight to the front of the skimmer, enhancing the skim.

2.2 skim-pak™ top/bottom ports

All three models of the ABS skimmers have bottom ports. Only the 4300-SH and 18300-SH have a top port. The top ports are used to attach the "Control Wand" option to the skimmer. The 2300-SH doesn't have enough reserve buoyancy to support the Control Wand on the top of the skimmer. If the control wand is to be used with the 2300-SH it needs to be connected to the bottom port and supported by the operator. The "dust cap" (Part DC), is provided for skimmers with two ports. The port not in use needs to be covered.

2.3 Skimmer port sizes and flow rates (Figure 2)

23000-SH: bottom port: 1.5" part "F" - 5gpm to 58gpm

4300-SH: bottom port: 2" part "F"; top port: 1.5" part "F" - 5gpm to 95gpm

18300-SH: bottom port: 3" part "F"; top port: 1.5" part "F" - 5gpm to 420gpm

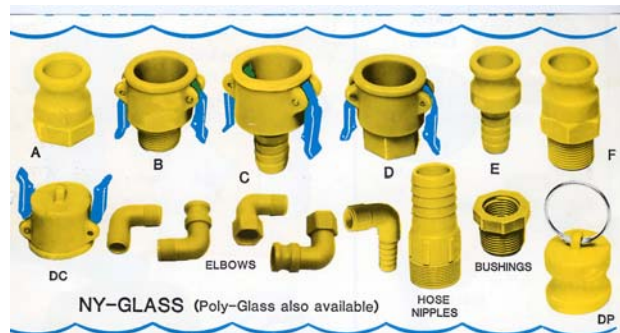


Figure 2. example connector parts

See more port size details below.

2.4 Skim-pak operation

All three models of the skim-pak skimmers have "flow controlled" weirs (See Figure 3). The weir cut is controlled by the flow being drawn from the skimmer. The faster the flow rate the deeper the cut; more water. The slower the flow rate the thinner the cut; less water.

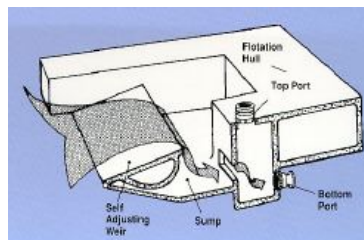


Figure 3. Example of flow controlled weir.

3.1 Debris screens

All three skimmers come with debris screens. These screens cover the front of the skimmer to prevent debris from clogging the skimmer, hoses or pump.

4.1 Hoses

Hoses are PVC flexible suction with "NY-GLASS" light weight fittings. Each hose section is 25' in length and has two part "C" connections from Figure 2.

5.1 Hoses floats

Hose floats are needed when the hose is connected to the bottom port of the skimmer (See Figure 6). The weight of the hose when filled with fluid will pull the back of the skimmer down. The hose float needs to be positioned behind the skimmer to support the hose. Ties are provided to attach the sides of the hose float together. One tie can be wrapped around the hose to prevent it from moving along the hose.



Figure 4. Typical Hose float

4.1 Deployment

The skim-pak ABS plastic series of skimmers have a couple options for deployment.

Control wand deployment:

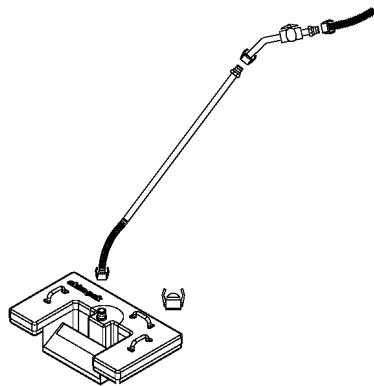


Figure 5. Control Wand Deployment

Hose deployment:

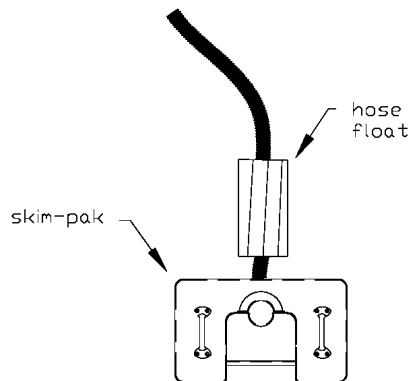


Figure 6. Hose Float deployment

Each deployment has its advantages and disadvantages. The wand deployment is best off a boat or pier, where the operator is elevated above the surface. The hose deployment is best used inside of containment. A rope can be tied to the handles and moved around manually.

4.2 Hose deployment

Each of the skimmers has a bottom port. In order to use the hose deployment insert the 1.5" to 2" crossover then attach the 2" hose with a hose float located about 2" on the hose behind the skimmer.

5.1 Control Wands

Control wands are used to manually push the skimmer head around. The control wand consists of piping, ball valve and flex connection. The flex connection connects to the top port on the 4300-SH and 18300-SH. If used on the 2300-SH it will need to connect to the bottom port and be supported by the operator. The control is most useful when the operator is above the surface being skimmed. Prior to placing the control wand in use remove the blue plug on the skimmer, this allows the system to function at a higher flow rate. In addition, the bottom cap will need to be in place prior to start pumping.

6.1 Cross over connectors

The difference in port sizes can be modified with "cross over" connectors. See Figure 7 for details.

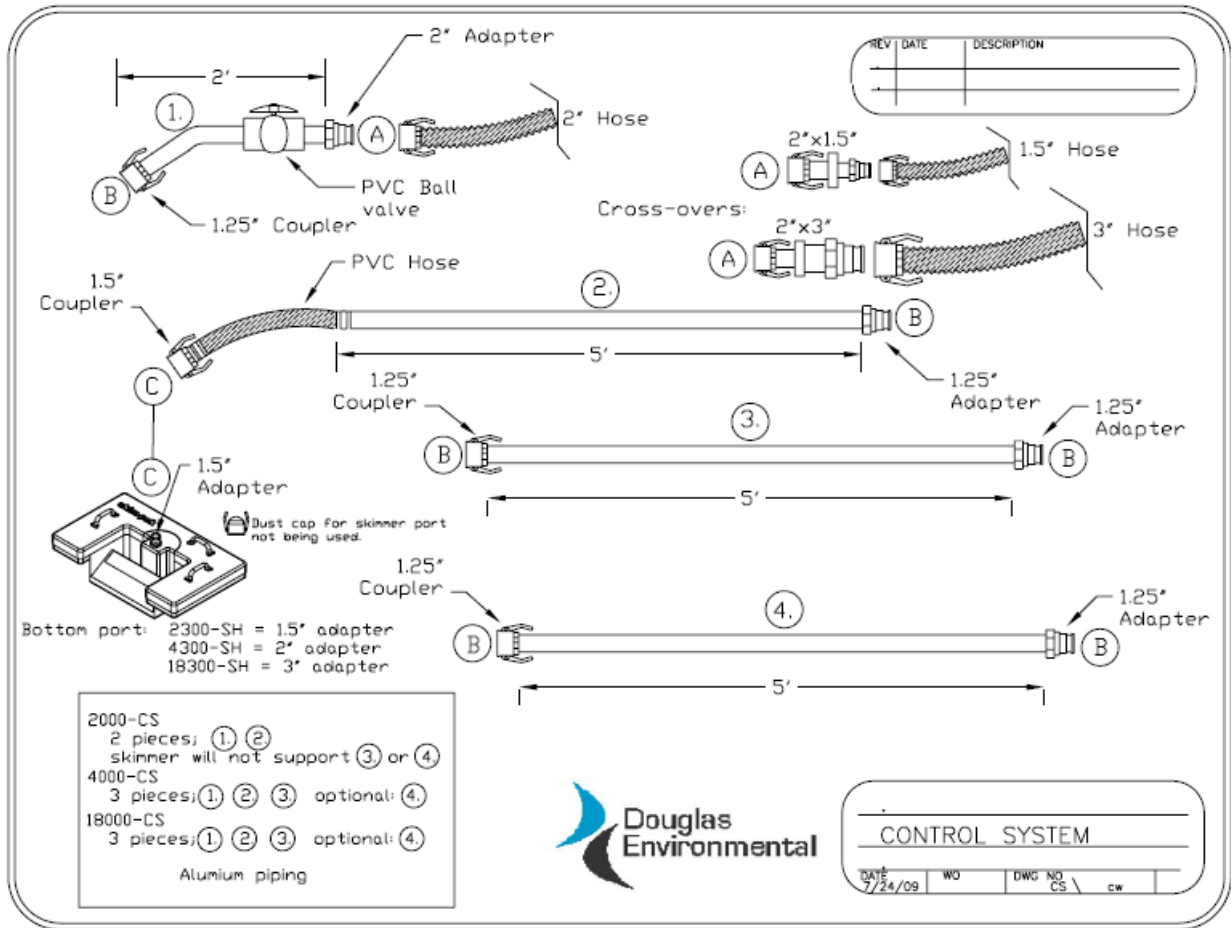


Figure 7. Cross over connections

Please contact Douglas Environmental at skimpak@dougenv.com or 925.827.4100 for assistance.