SmartSkim® Sump Caddy

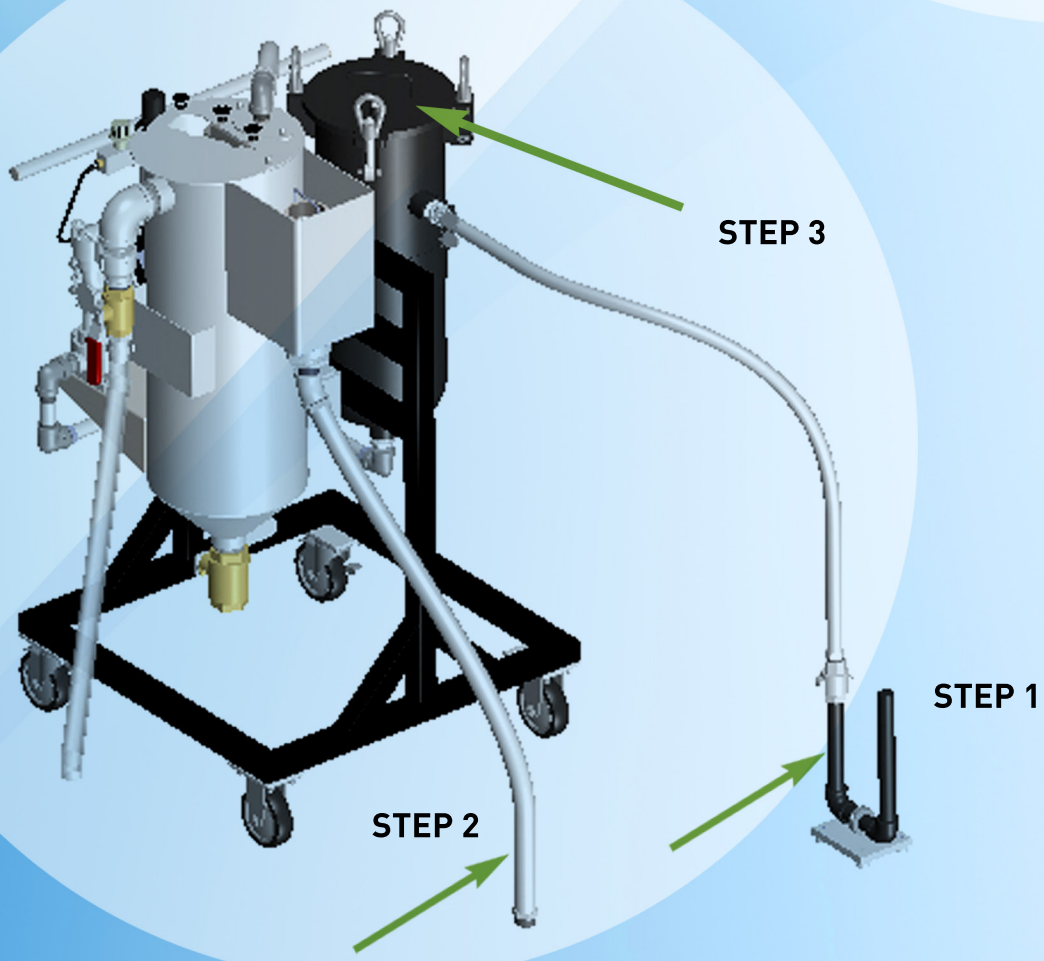
User Guide

(Updated September 1, 2018)

Universal Separators, Inc.
support@smartskim.com
www.smartskim.com

SmartSkim
Contaminant control for industrial fluids

SmartSkim
Contaminant control for industrial fluids



STEP 1: Place the slotted-pipe skimmer in your sump. The slotted-pipe skimmer comes with a magnetic base. The base can be attached to the bottom of the sump or the side of the sump for deeper sumps. It's best to position the skimmer so that the fluid level of the sump is at about the lower 1/3 of the slot. If the fluid level is too high up the slot, then there is the possibility that the skimmer will pull in more of the coolant below the surface rather than the tramp oils that reside on the surface of the fluid.

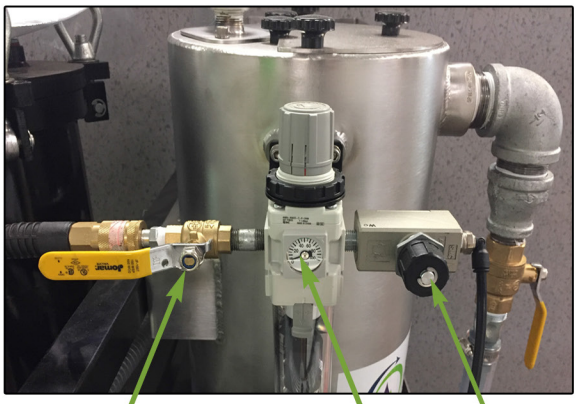
STEP 2: Place the clean fluid return hose in the sump, preferably away from where the skimmer is. By having the return hose away from the skimmer, it will assist in moving the tramp oils towards the skimmer, and will also reduce the possibility of turbulence. The return hose comes with a cup magnet that assists in keeping the hose from coming out of the sump.

STEP 3: Insert a filter bag into the filter housing. The Sump Caddy includes two (2) 100 micron filter bags. The 100 micron filter bag is made of nylon and can be cleaned and reused. If you are machining ferrous materials and purchased the optional magnetics separator, you would place the magnetic separator into the housing after you have inserted the filter bag.

Universal Separators, Inc.
support@smartskim.com
www.smartskim.com

SmartSkim
Contaminant control for industrial fluids

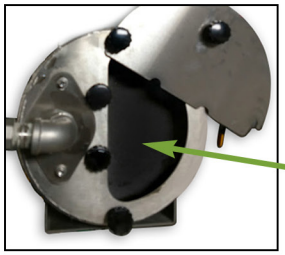
STEP 4: Connect plant (compressed) air to the Sump Caddy air service assembly. The air service assembly includes a shut off valve, air filter/regulator and needle valve. Once plant air is connected, set the air filter/regulator to 30 PSI and leave it at that setting. The air flow and pump speed will be set by the needle valve. Oil separation in the Sump Caddy is most efficient when the pump is running slowly. Different coolants reject tramp oils at different rates. As a general rule, synthetic and low oil semi-synthetic coolants tend to reject tramp oils the best. High oil semi-synthetic and oil soluble coolants will reject tramp oils, but generally at a slower rate.

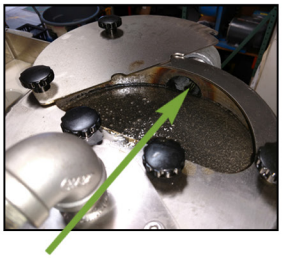


If your sump has a lot of floating chips/fines, you may have to run the Sump Caddy pump initially at a faster speed in order to filter out the chips/fines with the filter housing. Once the level of chips/fines has been reduced, you can slow down the pump to focus on separating out the tramp oils.

STEP 5: When beginning operation of the Sump Caddy, make sure the tramp oil discharge valve is in the closed position. Also, the adjustable weir should be in the lowered position until a significant buildup of tramp oil in the V1.5 Oil Separator has occurred. To lower the weir, turn the weir knob clockwise. When shipped, the Sump Caddy is usually in a lowered position.

STEP 6: Once there is a sufficient buildup of tramp oil in the separator, raise the adjustable weir (turn counter-clockwise to raise) so that the tramp oil buildup can spill over the half-moon opening that allows for the tramp oil to exist the separator. The tramp oil discharge valve will need to be opened to allow the accumulated tramp oil to flow into your disposal container. Remove tramp oil from the system on an as-needed basis. Allowing for too much tramp oil to build up inside of the separator can cause large amounts of tramp oils to flow back into your sump.





STEP 7: Occasionally open the solids discharge valve on the bottom of the separator to release any buildup of solids in the separator. The V1.5 separator is designed for any solids entering into the system to accumulate in the coned-bottom.

Solid Discharge Valve

COMMON SPARE PARTS

Part #	Description
BN1-100PP	100 micron nylon re-usable filter bag
2035	Pump rebuild kit
1850	Slotted-pipe suction skimmer
2686	MagSleeve magnetic separator (1” diameter)
3093	MagSleeve magnetic separator (1.5” diameter)