

# **Poly Tank Pod** Installation Instructions

# POLYTANK POD INSTALLATION INSTRUCTIONS

- 1. Unpack shipment.
- 2. Check parts manifest to make sure all parts have been shipped
- 3. Install the drip pan and screens to the steel drip tray holder.
- 4. Install the completed poly tanks into the rack frame unit.



FIG.3D1. PLACEMENT OF THE STEEL FRAME INSIDE THE SPILL CONTAINMENT PAN. NOTE THAT THE LEG/PLATE IS RESTING ON THE "U" CHANNEL. NEW VERSION HAS THE U CHANNEL INVERTED OR OPEN FACED ON THE FLOOR.



SEE FIG.5.A.1 – STEEL FRAME PLATE BAR WEDGED BETWEEN THE POLY TANK AND THE STEEL PUMP



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FIG.11G1. COMPLETE VIEW OF SUCTION, DISPENSING HOSES AND DRUM ADAPTOR KIT.





#### **GROUND CABLE INSTALLATION**

Step 1: Install wire clamp(a) onto spill containment pan.

**Step 2:** Install wire clamp(b) onto steel frame. (see figure 1)

Step 3: Install wire clamps(c, d, e, f, g, h) to each 3-way valve.

**Step 4:** Fasten wire clamps to each steel plate. (i, j, k) (see figure 2)

**Step 5:** Begin by feeding the wire through clamp(b) situ-ated on the back frame. Bring the wire from clamp(b) to steel plate wire clamps(i, j, k).

**Step 6:** Bring wire from clamp (k) to the top tank valve clamp(c) and continue to feed this wire to clamp (d, e, f, g, h) to complete grounding of the steel plates and the valves. Continue to feed the ground cable to wire clamp(a) situtated on the spill containment pan.

**Step 7:** Install cable clamp to building steel to complete grounding circiut.





## POD SYSTEM TROUBLE SHOOTING AND POINTS OF INTEREST:

#### 1) Air pump is making a loud/ heavy knocking sound.

The Air piston pump on the POD system is a 1:1 piston pump. It has a maximum pressure rating of 80psi. If the air regulator is set at a high pressure or fully open, then the piston will be running full open and will make a knocking sound or be moving very fast. You need to turn the air pressure down by using the air regulator unit. The top cap of the regulator is pulled upwards to unlock it, you then turn the cap counter clockwise to reduce the air pressure. The air pressure gauge will show this pressure decrease. You will begin to notice the piston slowing down and the knocking sound also reducing. Lower the pressure till you hear the piston pump moving smoothly and noise free. This usually happens around 20 Psi . You can increase this once the flow is constant.

The recommendation would be to insure that the air pump regulator pressure is turned down or off before air is sent to the unit. At this point you would open the main air line and send air to the regulator. Using the air regulator, begin to raise the air pressure to the pump. The pump will engage as the pressure increases. Setting the pressure will be determined on the oil viscosities and the oil temperatures.

Light Viscosity oils - ISO 32 to ISO 100 will flow much easier than the thick, higher viscosity oils.

20 PSI setting is ideal for oil dispensing and circulation modes. You can increase pressure in the oil transfer mode to help speed up the oil transfer time. This could be around 30 to 40 psi. Once the oil is transferred, you can reduce the pressure back to 20 psi.

Higher Viscosity oils - ISO 150 to ISO 680, you will need to raise the pressure from O psi to a 20 psi. Listen to the sound of the piston pump. It should be pumping in longer intervals between piston pumps. You can continue to raise the pressure to speed up the flow rate for oil transfer but insure that the pump is not making loud knocking sounds. A setting of 25 psi should work well and effectively for high ISO oils.

#### 2) Experiencing Static Electricity build up and Sparking.

The POD system is equipped with a ground cable system. Most static build up and sparking is caused by high oil flow rate through the filter system. Light viscosity oils tend to flow faster so more chance of static build up. The recommendation would be to lower the air pressure and slow the flow rate down. This will eliminate the static build up. You may find that a setting of 20 psi is needed for some oil types. You can add a ground jumper cable with clamps to help send the static build up from the transfer hose to the closest ground cable clamp.

#### 3) What size micron do I use for different oils viscosities?

Use 4 micron for light viscosity oils - ISO 32 to ISO 100

Use 7 or 10 micron for ISO 150 to ISO 320

Use 25 micron for ISO 460 and ISO 680

### POD SYSTEM TROUBLE SHOOTING AND POINTS OF INTEREST:

#### 4) How long do I filter the oil in the Poly tank?

Rule of thumb is to filter the contents in the tank at a turnover rate of 5 times.

Example: Say you transfer a 45 gallon drum of oil to you POD tank. If the air pumps are set at 30-40 psi and this is providing 2 to 3 gallons of flow per minute then you would need to filter the oil in the tank for 2 Hours.

#### 5) When do I change out filters?

The best way to identify if the filters need replacement is in the "oil filter circulation mode". If the system is normally set at 30-40 psi in circulation mode and the gauges on the filter head were in the green zone then this would be an indicator that the filter system is working to specs. You will notice that the gauge needle will move into the "red" zone after many hours of filtration use and this will indicate that the filter is clogging and should be replaced. See replacement instructions on next page.

#### 6) When do I replace the Air breather?

Your Pod system is equipped with a Desiccant breather. This style breather uses desiccant gel for removing moisture from the air. The blue gel desiccant will change to pink in color to indicate that the breather needs to be replaced. The breather also has a 3 micron particle filter to help keep dirt and dust from entering the canister. This style breather keeps your new oil clean and dry at all times.

#### Summary:

Before sending air pressure to the air piston pump, insure that the air regulator is set at its lowest setting. You can then open up the air line and air will flow to the regulator. Turn the regulator setting so that air will begin to activate the piston pump. Your air pressure gauge on the regulator will indicate how much air pressure is being applied. A setting of 25 to 40 psi will deliver adequate piston action and flow rates for many oil viscosities. If static build up occurs, then lower the air pressure to reduce the flow rate and reduce the static build up.

The air pump and flow rate should be set based air pressure setting and the manner in which the air pump is operating. Loud /heavy knocking sound could indicate that the air pressure is set to high for the viscosity of the oil. Lowering the air pressure should decrease the knocking sound. This will allow the pump to move in a smooth and continuous flow. Lower air pressure will allow you to control the flow rate and noise level of the pumping system. You should not have high piston action or knocking of the piston pump when in operation.

For more information or help please call Paul Dumont 1-800-268-2131 or Cell : 905-699-7862.

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#### How and When to replace the Filter

During normal operation the filter life indicator, the white tab on the filter head, will show in the green, on the right sideof the guage. As the filter fiulls with debris, the differential pressure pushes the white tab to the left and into the red. When it is fully in red the filter will be in bypass and it needs to be replaced.

#### Replacing the filter

To avoid spillage the filter has 2 valves on either side of the filter. Turn both of these to the close position. You may now remove and replace filter. When installing the new filter, put a light coating of oil around the gasket seal on the filter. Then hand-tighten the filter to the head. Use 14 ft/p. Do not overtighten.

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