



# Freddy TOS Tramp Oil Separator Users Manual

#### Section 1 – Introduction

In order that you get the best from your new Freddy TOS, the following instructions have been prepared. Please read them carefully. Safety is of paramount importance. Therefore, if you are unsure about anything please contact our service or parts department:

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## **Section 2 – General Operating Instructions**

#### 1. Electric Units:

Check electric cord for wear and grounding. Plug the unit into a 110/1/60 outlet.

## 2. Air Operated Units:

The unit requires a minimum of 15 psi at 0.5 SCFM air flow to operate. Ensure the left hand bowl on the control unit is 3/4 full with pneumatic lubricant. The lubricator is set at the factory. If you need to adjust the lubricator, turn the tapered screw counter-clockwise on the lubricator to increase the rate. If you need to decrease the rate turn the screw clockwise.



#### 3. Pre Filters:

To change/clean the pre-filter begin by removing the suction head from the fluid so the pump is sucking air only. Do this for 30 - 60 seconds until you observe the liquid level in the filter housing drop about and inch. Stop the pump via the air valve or switch.

Unscrew the filter bowl, remove the filter and wash or replace it. Replacement filters (part no 171-0011) are sold in case lots of 30. A Permanent Washable Filter Strainers is supplied as an option. Contact the parts department for replacement filters.

## 4. Adjusting Pump Rate:

The pump rate on the electric unit is preset and fixed. The pump rate on the air operated unit is adjustable by turning the black knob on the air regulator up or down. Clockwise increases the pressure and pump speed and counter-clockwise decreases the pressure and pumping speed. The normal pump rate for the air pump is about 40 -60 beats per minute. After adjustment, press the knob down in the locking position.

#### 5. Installation Procedure:

The unit should be operated on a level, solid base with brakes engaged on the casters. All outlet pipes should have the shortest possible run length. (A First Time installation procedure is supplied separately).

#### 6. Start-up Procedure:

**IMPORTANT:** Follow the First Time Installation and Start-up Procedure Also, perform the following:

- A. Verify that the flow to the TOS is unrestricted
- B. Open all valves in the inlet piping and clean coolant outlet. Verify that the oil outlet valve is closed.
- C. Position the Fluid Pick-up device in the tank. Depending upon the application different fluid skimming devices are supplied.

The **Static Pick-Up** is a curved "J" pipe with a magnet to affix it in one position on the tank. This pick-up is used where the tank access is open and the coolant volume is constant.

**Floating Skimmer Head**: The floating skimmer pick-up is applied where the volume of liquid in the sump is variable and sump access is limited

Affix the magnetic holder to the side of the tank and rotate the floating-head so that it sits level on the tank.

Additional skimmer styles are available for specific applications.

## The Freddy TOS is now ready for operation.



### **Normal Operating Procedures:**

Before starting the unit check the free-oil level that has accumulated at the top of the tank. It should be removed if the oil weir is not visible. To do this, open the oil discharge valve, drain the oil into the oil tanks then close the oil discharge valve. The height of the oil weir should be checked to ensure that coolant is not being discharged with the oil. The discharge weir is set too low if coolant is being discharged into the oil container. To raise or lower the oil weir use the tool provided and turn the weir clockwise or counter-clockwise as indicated.

Check regularly to verify that the oil weir discharge pipe is not obstructed.

Start the pump and recheck the correct height of the suction pipe.

#### **Maintenance Instructions:**

Since there are only a few moving parts in the Freddy TOS, maintenance consists of cleaning or changing the prefilters cartridges as necessary, periodic flushing of the sediment which may accumulate in the bottom of the unit, , and (rarely) cleaning the filter media if it becomes clogged with sediment.

The filter media can be cleaned by removing the basket and using a hose or power washer on the media. (See Precautions below)

Daily: Check all hoses for damage and verify connections are tight. Drain the oil from the tank if necessary. Check the prefilters and change (or clean) as required. On air operated models check the lubricating oil level and refill if required. Empty the oil storage tank(s) as required.

#### Feed Rate:

If there is a reduction in the feed rate from the pump it could be due to one of the following:

The prefilter is plugged. Replace or clean.

The suction pipe on the float is set too high. Adjust as necessary

The suction line is blocked or split. Replace as required.

The pump has worn and needs service

#### **Precautions:**

Always fill the Freddy TOS with clean fluid before processing at the machine tool sump. This avoids depleting the fluid volume in the sump.

DURING NORMAL USE, IT SHOULD NOT BE NECESSARY TO DRAIN THE TOS OR REMOVE THE BASKET OF MEDIA. If you want to drain the TOS or remove the media, you must first remove the floating oil layer on the top of the unit.



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If the basket is removed through an oil layer or the unit is drained with free-oil on top of the unit, then the media will need to be cleaned prior to reuse. To remove the oil layer, close the oil outlet valve then close the discharge valve at the end of the discharge line. Allow the level to rise in the media tank several inches above the oil discharge weir.

Observe this process to avoid overflowing the media tank which would cause liquid to spill on the floor. Turn the unit off for 10 minutes allowing the oil to rise then open the oil charge valve and allow all the fluid (oil and process fluid) to drain to the oil storage container. After the level has drained back to the normal operating level you can then remove the media basket.

A drain line at the bottom of the system allows for the removal of residual coolant or wash water in the media tank.

Exceeding the rated flow to the Freddy TOS may affect the quantity of tramp oil the unit can effectively remove.

If required, prime the electric pump by opening the valve at the bottom of the media tank and filling the pump.

Disconnect the unit from the power supply in the event of a problem.







