

LUBER-FINER MODEL 750-CT & 500-CT INSTALLATION INSTRUCTIONS

Luber-finer 750-CT & 500-CT units incorporate several unique design features for improved reliability and performance. A thermostatic Control in the Pack Hold Down Assembly (T-Handle) enables the Filter Pack to reach operating temperature quickly to perform at peak efficiency sooner than previous models. The Inlet Check Valve Assembly also contains the Flow Control Orifice thereby reducing the pressure within the housing without reducing the oil flow through the Filter Pack.

These units are intended for use as a By-Pass filter (partial flow) for engine lubricating oil systems and other types of oil pressure systems in Industrial Applications. They are designed to bleed a small portion of the lubricating oil flow from the oil pressure system and return the filtered oil directly to the engine crankcase or sump. Figure 1.

The Flow Control Orifice IS REQUIRED on a By-Pass type installation to control the flow rate through the Filter Pack and to prevent starvation of the lubricating system. The 750-CT is normally equipped with a #8 orifice (.125 diameter); the 500-CT is normally equipped with a #6 orifice (.101 diameter).

For usage on Industrial Hydraulic Oil Systems caution must be exercised to prevent damaging the unit from overpressurization. Normal continuous operating pressure is approximately 65 PSI. A By-Pass Relief Valve set at 45-65 PSI should be connected between the Inlet and the Oil Sump to protect the unit from excessive pressure.

Proper installation of all Luber-finer 750C and 750CT by-pass oil filter units requires that there be at least 3½" to 4" spacing between the cover clamp ring and the first mounting bracket band. Failure to observe these instructions could create a potential leak at the unit cover after the initial service interval on the unit.

1. Determine the Pressure Port to be used to supply the By-Pass unit.

A typical installation is shown in Figure 1. The Inlet Pressure Line is connected to an Oil Gallery Port (A). Alternate Pressure Sources are cited in (B), (C) and (D).

- A. Gallery Ports — Some engines have an oil pressure port tapped into the oil gallery in the side of the engine block.
- B. Oil Pressure Gauge — A Tee fitting may be installed to supply the unit with the inlet oil from the gauge connections.
- C. Pressure Port in Full-Flow Filter Base — Some engines have an unused Pressure Port in the base of the Full-Flow Filter.
- D. Pressure Port in External Oil Pumps — An engine with an external oil pump may have an unused Pressure Port.

All possible Port locations may be tested with an oil pressure gauge or by rotating the engine manually with the plug removed for positive identification of the oil port. In addition, the manufacturer's Service Manual may be of assistance.

2. Determine a suitable Return Line Port to the Engine Crankcase.

A typical installation is shown in Figure 1. The Return Line is connected to the Crankcase Port (E). Alternate Return Ports are cited in (F).

- E. Crankcase Return Port — The engine may have a return port in the crankcase for returning filtered oil.

A Turbocharger Return line may be used to return oil to the crankcase with the use of a Tee fitting.

- 3. Choose a mounting location for the Luber-finer unit that is solid and will allow the oil lines to be routed clear from high temperature areas and will provide satisfactory service room for element replacement.
- 4. Heavy Duty Hydraulic flex hose is recommended for the connecting oil lines. The Center fitting in the bottom of the unit is the Outlet. Figure 1 and Figure 2.
- 5. Liquid Teflon Pipe Sealant should be applied to all threaded connections. A wrench for backup should be used on both Check Valve Fittings when installing the oil lines to prevent damaging the valves.
- 6. Make certain the engine's oil system is full.
The Model 500-CT requires 2½ extra gallons of oil and the 750-CT requires 3½ extra gallons of oil.
- 7. Inspect all connections for leakage. The Cover Vent Plug may be loosened slightly to bleed trapped air from the unit.