



Conversion from Oil to TAPCO HYDRAULIC FLUIDS

Step 1 Record

Complete the Tapco Fluid installation data sheet which requires basic information, ie; Company name, address, brand name of hydraulic equipment.

Step 2 Prepair

Have the following items available for the conversion.

- Wet/Dry Vacuum (10 gal. Capacity)
- A small pumping device, manual, air or electric.
- Screw driver and 2 pipe wrenches, etc.
- Parker Micro glass filters (10 micron)
- Old rags and paper towels.
- Empty 55 gallon drum, 5 gallon s
- Extra hoses.
- Cap fittings, male & female

Step 3 Inspect

Before starting the conversion, run the system and inspect it thoroughly. Look for problems that the operator may not be aware.

Take special notice of how the system is behaving. Observe the pressure and note if there is any fluctuation. Confirm that the fluid flow is smooth and not erratic by feeling with your hand the amount of vibration in the hydraulic lines and hoses. This could be an indication of future problems, regardless, if the system is operating on Tapco Fluid or oil. However, once the fluid is installed the cleaning power of Fluid will eliminate sludge and varnish and improve the operation efficiency and smoothness of the entire system. Make sure the pump does not vibration excessively or sucking air. This can be determined by listening to the operating sounds. An intermittent whining sound indicates a small problem that can be corrected by ensuring that the internal intake pipe is fully submerged in fluid and also the return line orifice is fully submerged in fluid.

Step 4 Removing the Oil

- Identify and remove the filler cap, screws and screen.
- Proceed to remove all the oil from the reservoir with the pump and transfer the oil into the empty 55 gallon drum
- Once the oil has been removed, look for a clean out plug at each end of the tank.
- If clean-out plugs are available, remove and place a 5-gallon pail or similar container under the drain opening to catch the oil as it drains.
- If clean-out plugs are not available you may have to remove the cover plate. After lifting off, use old rags and paper towels to remove the

remaining oil, the best possible. If the cover plate is not removed, then use a wet/dry vacuum through the fill hole to remove the remaining oil.

Step 5 Installing Tapco Hydraulic Fluid

- After removing as much oil as possible, remove the old filter and replace it with a 10-micron fiberglass media, hydraulic fluid filter.
- Replace the cover plate and check seals for any damage.
- Pump Tapco Fluid into the empty reservoir to a level above the fluid level gauge or 2 inches from the top of the tank. Check to make sure all seals are free from leaks.
- Disconnect the return line and place it into an empty container, large enough to hold at least 1/3 of the total power pack volume.

Step 6 Purging the system

- On occasions, the return lines will not be the same size or type as the other hydraulic lines. Be prepared to replace the return line if it looks worn, soft or does not meet standard hydraulic requirements.
- Start the system (Note: If the equipment has solenoids on the hydraulic system, it is best to work them in order to allow Tapco Fluid to purge the entire system at one time.)
- Once the system is started and purging, observe the color of the fluid pouring out of the return line.
- Initially, the fluid will be the color of the hydraulic oil. After a few seconds the fluid will start to lose the oil color and start to pick up the color of Tapco Fluid. This could be Blue or Red. Shortly after this point it will turn to a deep color of Blue or Red.
- At this point shut the system down. Allow the return line to rest in the container to allow any air that might be in the fluid or system to disperse.
- Re-connect the return line to the power pack and run the system again for several minutes. While running, inspect the entire system for leaks, observe the system pressure and check the fluid level. (Note: The fluid level will be lower than the initial filling because of fluid filling the lines and the fluid lost during the purging process. It is important to check the oil level switch at this time to ensure it is functioning correctly. Fill power pack with Tapco Fluid within 2 inches from the top.)
- Replace the screen and filler cap and run the system again for a final inspection.
- Allow the Tapco Fluid & Oil mixture from the purging process to settle until the oil rises to the top. The oil can be skimmed off, leaving the Tapco Fluid for reserve purposes.

Instruct the operator on proper fluid maintenance. This should include providing fluid samples for pH levels, viscosity, solids and reserve alkalinity. Testing should take place at least twice a year. (No Cost for this service.) Use only Tapco Fluid to replenish the Tank .