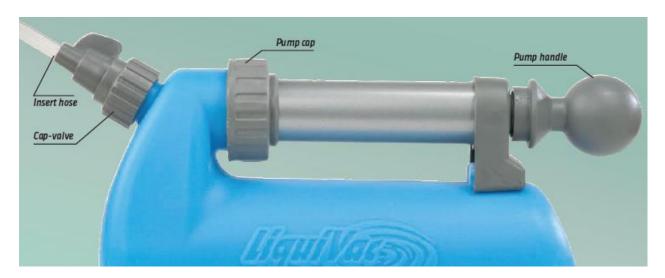


## **Assembly Instructions**

- 1. Place black (1-1/4") gasket inside cap-valve.
- 2. Screw cap-valve on the tank to create a snug fit (without excessive force).
- 3. Insert clear hose into cap-valve as far as it will go to achieve an airtight connection. (If needed, lubricate hose with soapy water to insert hose).
- 4. Check that pump cap is reasonably tightened onto tank.



## **Instructions for Use**

For best results, run cold engine for 1 to 2 minutes to slightly warm oil. Do not use with hot\_engines (no more than 105 °F). Failure to comply may result in tank distortion and/or collapse of hose and/or tank.

- 1. Observe open and closed markings on cap-valve. Twist cap-valve clockwise to Closed position.
- 2. Pump handle 20 strokes to develop vacuum in tank. As air is drawn out of the tank, you will feel more resistance with each pull. Do not pump with the cap-valve in the Open position. This may draw oil into the pump and possibly out the handle.
- 3. Remove dipstick from engine and insert hose into the dipstick/fill tube all the way into the oil reservoir. Caution: Do not force hose into a tight fitting dipstick tube as it could become wedged in the tube. (For most lawn and garden engines, extracting oil through the dipstick/fill tube works fine.) Nevertheless, for certain

models of motorcycles, ATV's etc., it is important that nothing obstructs the hose prior to insertion (check your service manual or with the equipment dealer).

- 4. Twist cap-valve dial counter clockwise to the Open position. Watch for oil to flow through the hose and into the tank.
- 5. If you hear a gurgling sound and perhaps see bubbles in the hose, immediately move the hose slowly up and down just a fraction of an inch to ensure thorough and efficient oil removal. If more vacuum power is needed to completely remove oil, twist the spout cap-valve dial back to the Closed position, pump 10 to 15 times, then twist dial to Open and continue vacuuming oil. Do not pump with dial in Open position to avoid pulling oil into pump and possibly out the handle.
- 6. When all of the oil is vacuumed, remove hose from engine and replace dipstick in engine. Wipe hose with cloth.
- 7. For storage and/or transportation to recycling center, twist cap-valve dial to Closed position and screw on pump handle. Please dispose used oil at a local oil recycling center. To find a recycling center nearest you, visit www.liquivac.com
- 8. Carefully replenish oil supply following manufacturer's recommended engine oil type and capacity. Always check dipstick after oil change for proper fill level. Warning: Never use with gasoline or other flammable liquids. Do not use with hot liquids!

## **Troubleshooting**

- 1. Make sure gaskets are sealing properly to hold a vacuum. Unscrew cap-valve from tank and remove gasket. Reinsert gasket into cap-valve and screw onto tank as tight as possible using only your hands. Do not forcibly over tighten the cap-valve with tools. This may cause the gasket to distort and not seal properly.
- 2. Remove pump from tank. Make sure the large black gasket is seated properly against the tank rim. Screw pump back onto tank and hand tighten.
- 3. Make sure dial on cap-valve is in closed position when pumping, and hose is fully inserted tightly into cap-valve.
- 4. If you have tried the above and each pump stroke does not result in increased resistance, then the internal leather seals in the pump may need lubrication. Just apply several drops of oil into the pump hole (at the handle end), draw on the handle a few times to distribute the oil. Let pump rest in vertical position, handle side up, for 12–24 hours to allow leather to soften. After this time period, draw on handle a few more times then reattach to tank making sure the large gasket is seated onto the tank rim. This may be necessary when the pump has been stored for several months.

## <u>LiquiVac Oil Change System Model 2005</u>

If you need further assistance or replacement parts, call the makers of the LiquiVac (toll-free) at 1.800.225.2224 or visit our web site: www.liquivac.com Parts Included: Clear vacuum hose, cap-valve and 1½" gasket.