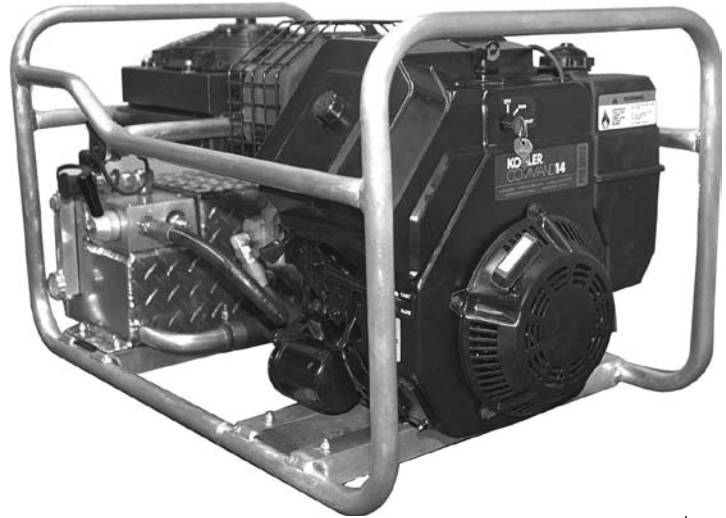


**Transmate**

**82000 HPU**  
**Hydraulic Power Unit**  
**372-82000-01**



Thank you for purchasing the Transmate 15 HP KOLHER Hydraulic Power Unit. This unit will give you years of service if the simple instructions below are followed. Please read the enclosed Kohler engine manual for engine performance characteristics and maintenance instructions. If you have any questions, please call us at 1-800-426-9341

This unit has been used for many years to power the QuikValve™ insertion machine (360-00), the TapMate™ drilling machine (350-00), and the Exerciser™ valve and hydrant exerciser (375-00). It is also capable of powering the TapMate Too™ drilling machine (351-00).



The hydraulic power unit converts the power produced by the engine into hydraulic power in the oil. Not only does the oil produce power but it also lubricates all mechanical components in the hydraulic system. Keeping this in mind, the correct selection of hydraulic oil is important for the proper operation and life of this unit. Hydraulic oil should be selected based on ambient outside temperature and number of continuous hours of use per day.

## **Power unit Specifications:**

Unit weight- Dry:..... 198 lb.  
Unit weight - with fluids full:..... 240 lb.  
Maximum pressure:..... 2000 psi  
Maximum flow rate:..... 8 gpm  
Hydraulic oil reservoir size: ..... 4.5 gallons  
Maximum allowable oil temperature: ..... 180 degrees F

## **This unit is equipped with the following items:**

1. Oil sight glass
2. Reservoir oil temperature gauge.
3. Electric start engine with 15 amp. charging system.
4. Air to oil heat exchanger.
5. Hydraulic oil bypass valve
6. Gel Cell Battery

## **About the power unit:**

This power unit has a reservoir size of 4.5 gallons. The best way to make sure there is enough oil in the reservoir is to check the sight glass. Fill the reservoir so that the oil is 1" from the top of the reservoir as viewed through the sight glass. One inch, (1"), from the top of the reservoir will allow enough room in the reservoir for expansion of the oil when it warms up.

This power unit has a full duty cycle rating. This means that it can run full time with no down time for hydraulic oil cool down. However please keep in mind that the hydraulic oil temperature should never go beyond 180 degrees F.. If the oil temperature goes beyond 180 degrees F. stop the unit and let the oil cool down to 130 degrees F.

This unit has an electric start engine with a 15 amp. charging system. In the event that the battery is dead a recoil start has been added to the unit. Follow the same start up procedure if starting with the recoil start.

An air to oil heat exchanger has been provided on this power unit. This heat exchanger needs to be running whenever the power unit is running. The heat exchanger will come on when the key is turned to "on". If the battery is dead turn the key on and pull the recoil start. When the engine starts running the charging system will run the heat exchanger and charge the battery at the same time.

## **Operating Instructions:**

### **Pre-Start Checklist**

1. Fill hydraulic oil reservoir to one (1) inch from the top with hydraulic oil. See specifications below. Over filling the reservoir will result in oil flow out the filler breather cap when the oil gets warm.
2. Check engine oil, fill if needed. Do not over fill. This engine is equipped with an oil pressure switch. If the oil pressure decreases below an acceptable level, it will shut off the engine. See specifications below.
3. Check and fill gasoline tank if needed. See specifications below.
4. Check the air cleaner components for dirty, loose, or damaged parts.
5. Insure that the by-pass lever (on the hydraulic reservoir manifold) is in the "OFF" position, to prevent resistance which could keep the engine from starting.

## Connecting Equipment

1. Identify the pressure out port and the return port. The pressure port is connected to the manifold block that sits in the hydraulic reservoir. The return port is connected directly to the heat exchanger. The male quick disconnect is the pressure port and the female quick disconnect is the return port.
2. Hook the pressure hose to the pressure port and the return hose to the return port.
3. In the event the hoses can not be hooked up please position the bypass valve to "Tool off, off or open". Once the unit is running connect the return hose then the pressure hose. Position the bypass valve to "Tool on, on or closed" when oil flow is needed.

## Starting the Engine

1. Place the choke to the "on" position.
2. Position the throttle lever to midway between "slow" and "fast".
3. Activate the starter switch. Release the switch as soon as the engine starts.

### NOTE:

- When the engine starts, slowly adjust the choke until the engine is running smoothly. Once the engine is warmed up turn the choke off.
- Position the throttle to "fast" as indicated.

## Stopping the Engine

1. Turn the by-pass lever to the "OFF" position.
2. Move the throttle to the "slow" or "low" idle position. Allow the engine to run at idle for 30-60 seconds; the stop the engine.

## Storage

If the engine will be out of service for two or more months, use the following storage procedure:

1. Change the oil and oil filter while the engine is still warm from operation.
2. Drain the fuel and fuel system (or run the engine until the fuel tank and system are empty).
3. Remove the spark plug. Add one tablespoon of engine oil into the spark plug hole. Install the plug, but do not connect the plug lead. Crank the engine two or three revolutions.
4. Remove the spark plug and rotate the crankshaft until the piston is at the top of its stroke. Reinstall the plug, but do not connect the plug lead.
5. Clean the exterior surfaces of the engine.
6. Store the engine in a clean, dry place.

## Maintenance Instructions:

1. Read engine manual for proper maintenance schedule.
2. Change hydraulic oil every 3 - 12 months depending upon use.

## Fluid Specifications:

1. Gasoline - Regular unleaded with an octane rating of 87 or higher.
2. Hydraulic oil
  - High quality oil ISO VG 32-68
  - Shell Tellus T 32 - 68 or equivalent

**As outside temperature conditions vary so widely please consult your hydraulic oil distributor or manufacturer for proper hydraulic oil selection.**

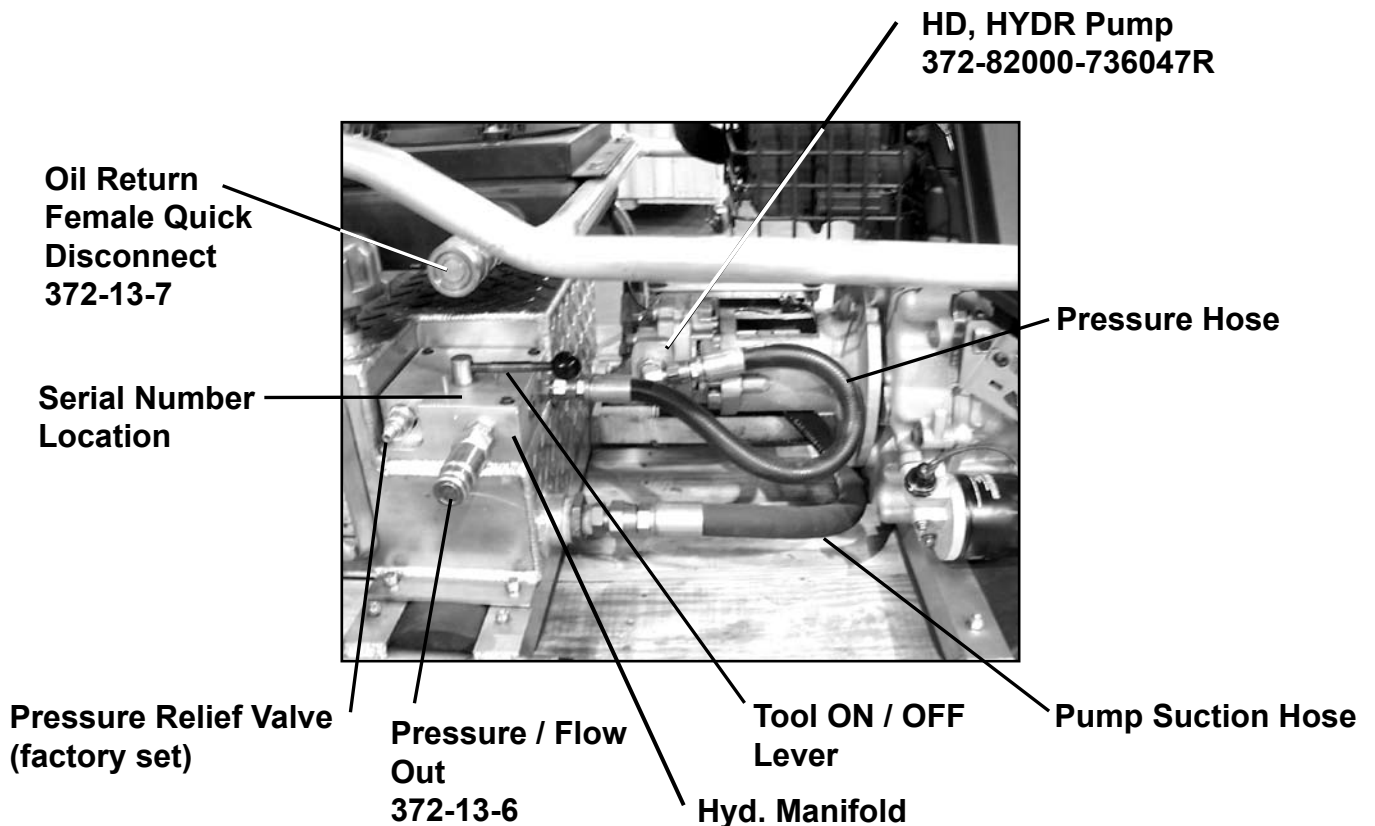
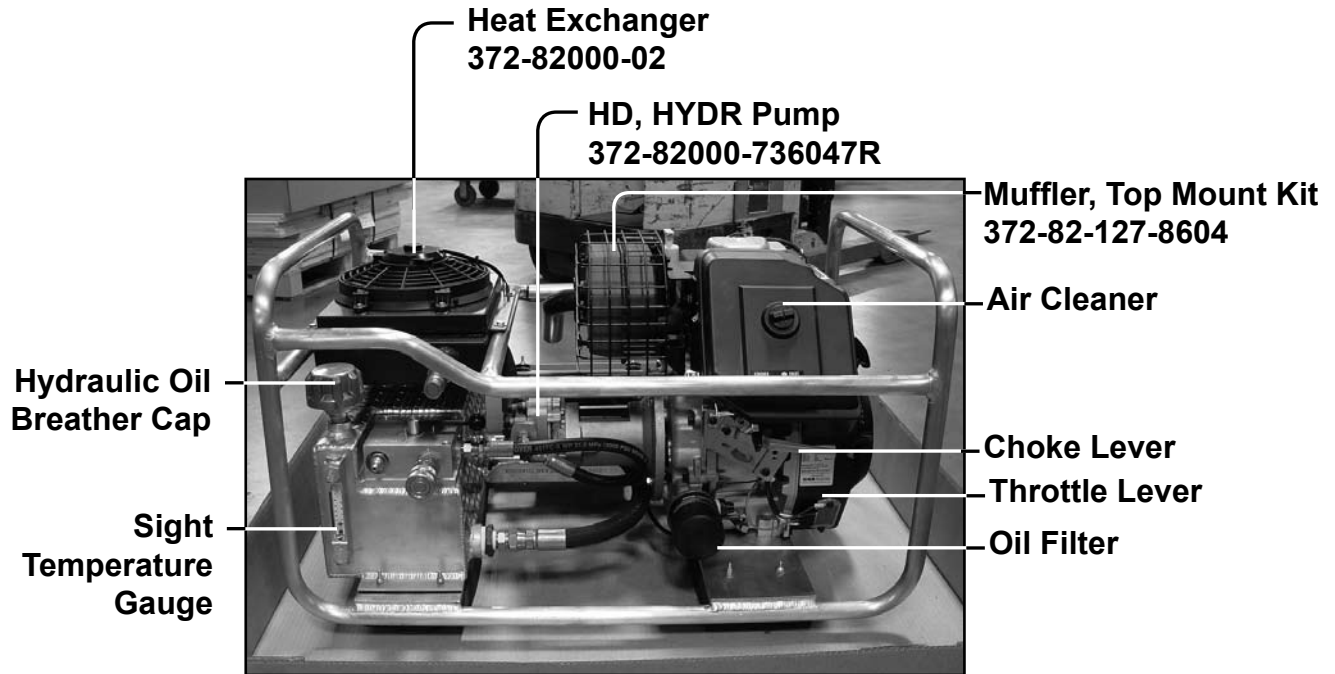
3. Engine Oil: **High quality oil 10w - 30 or 10W - 40 only.**

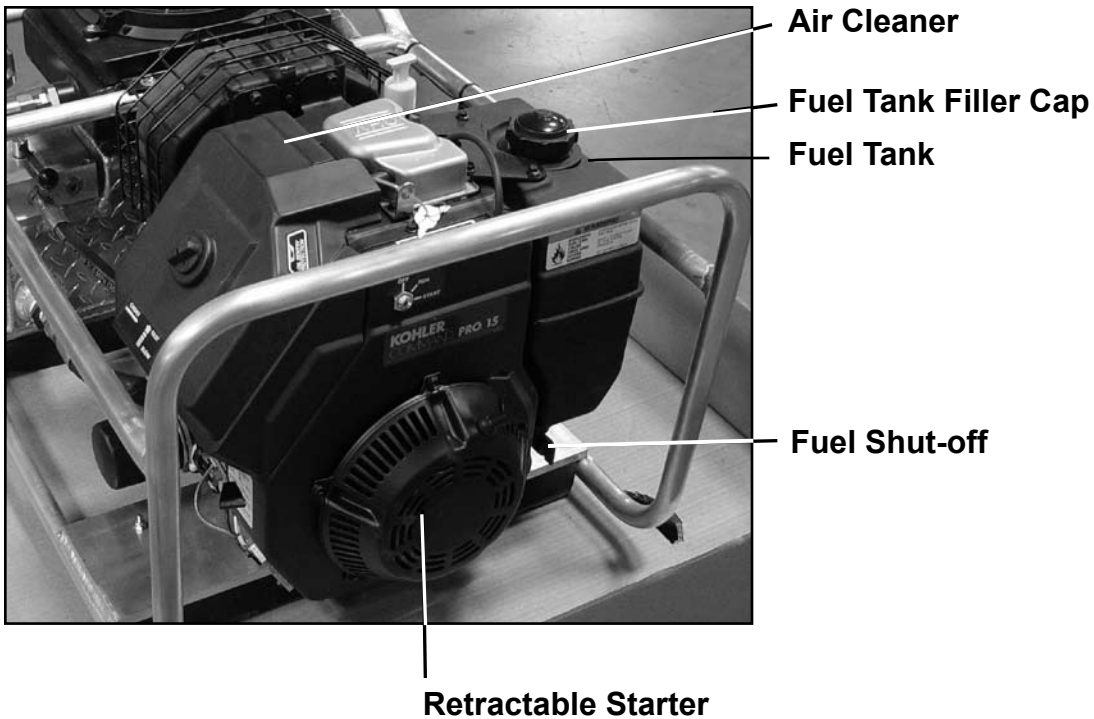
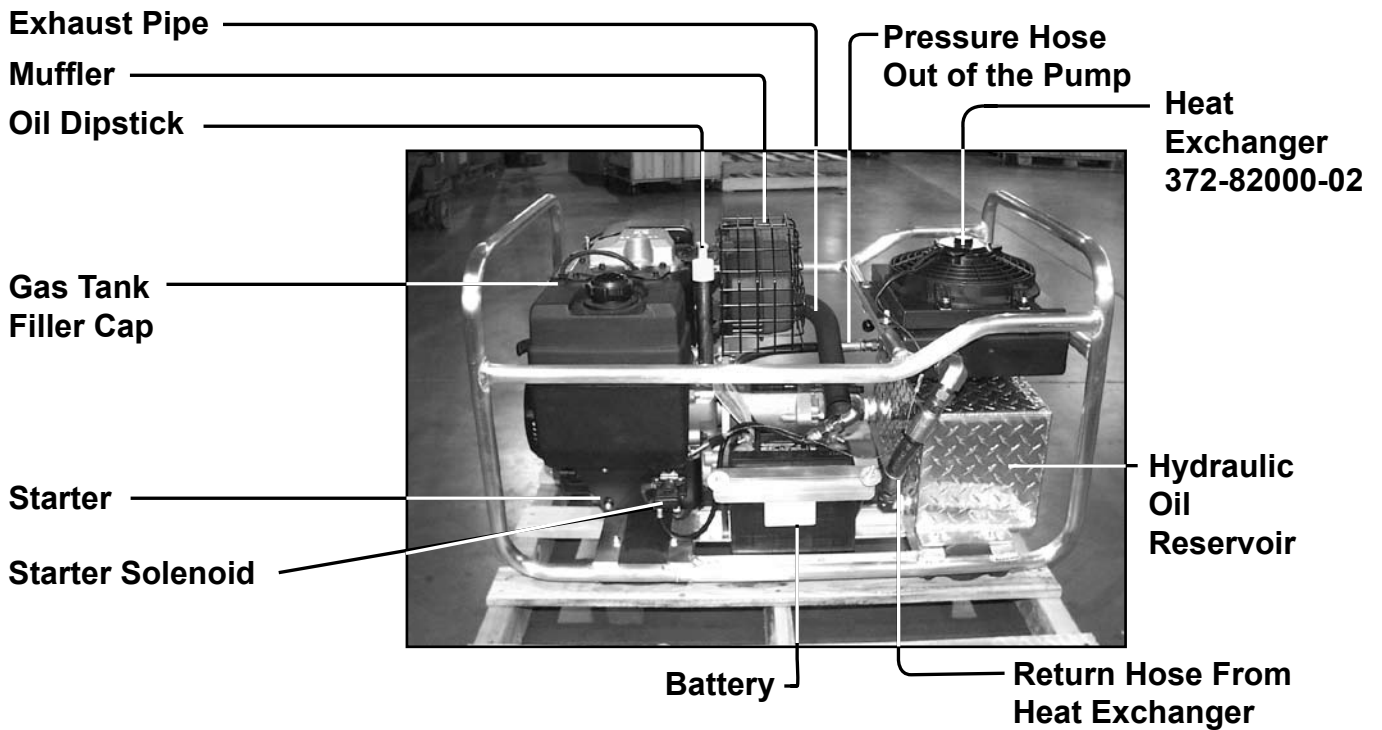


## Troubleshooting:

POTENTIAL PROBLEM	SOLUTION
1. Engine will not start	Check gas tank, turn on gas valve  Check to see that hoses are properly connected to the unit  Position bypass valve to off
2. Pump developing flow, but no pressure	Call Transmate at 1.800.426.9341
3. Hydraulic oil is milky white	Fluid is contaminated with water, change fluid immediately.

## 82000 Overview



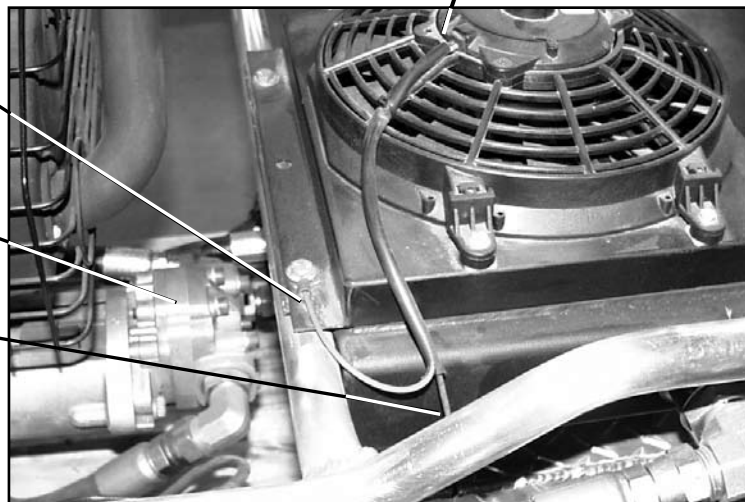


## Heat Exchanger View

Ground Wire from Heat Exchanger

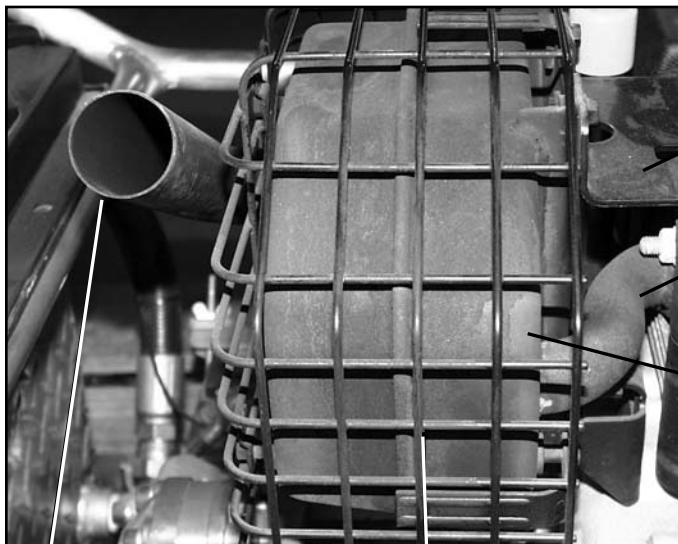
Hydraulic Pump  
372-82000-736047R

Power Wire From Heat Exchanger - fan motor to yellow wire from engine charging system



Heat Exchanger  
372-82000-02

## Exhaust system view



HD Engine 15 HP Top Mounting Kit  
372-82-1278604 (includes manifold,  
bracketry, gaskets & hardware)

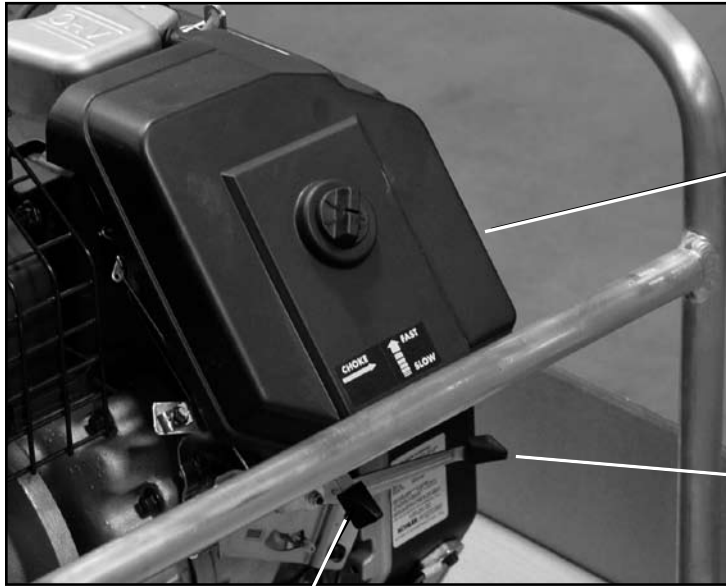
Exhaust Manifold

Muffler  
372-82-1206811 (Muffler only)

Exhaust Pipe

Muffler Guard  
372-82-1275526

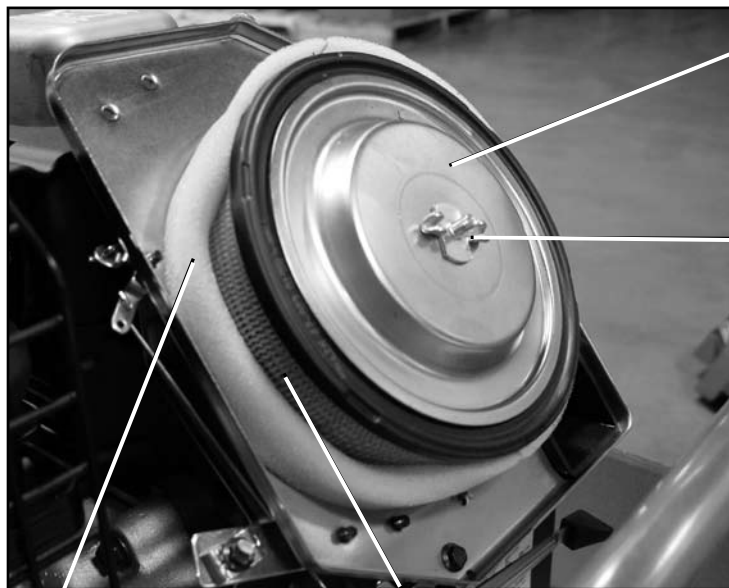
## Air Cleaner View



**Air Cleaner**

**Throttle Lever**

**Choke Lever**



**Element Cover**

**Element Cover Nut**

**Foam Precleaner**

**Paper Element**

## Engine Oil Filter View

