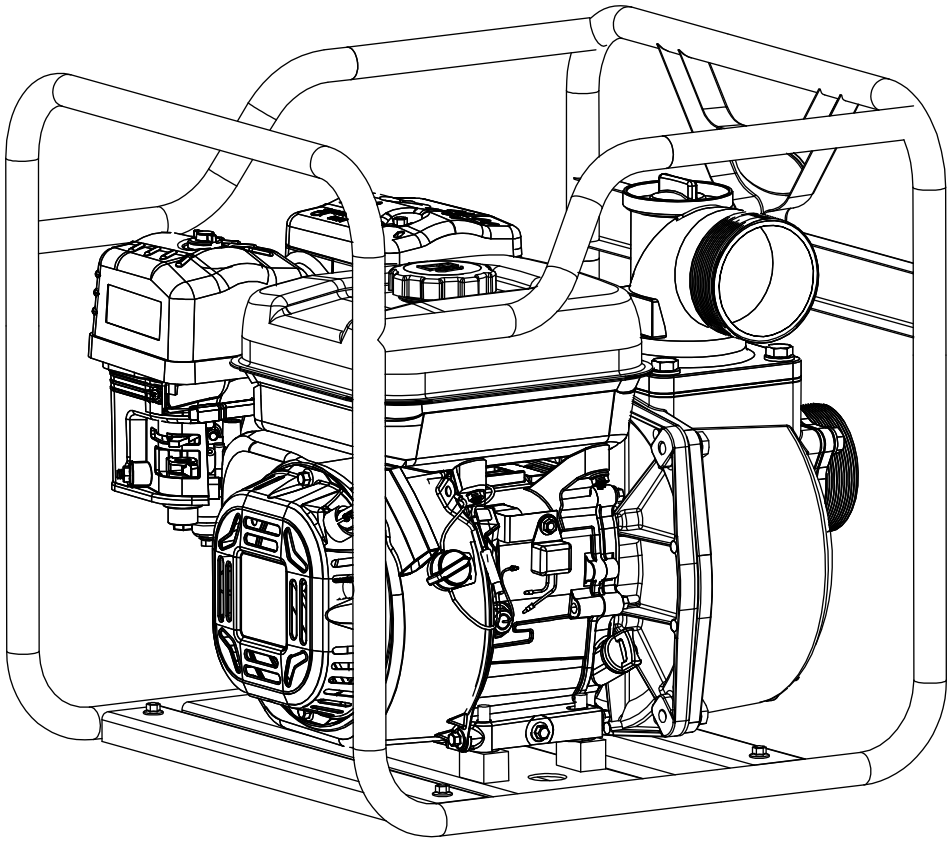
Water Pump
OPERATOR'S MANUAL

Model:
FOEDP50 - FOEDP80 - FOEDP100



Official Licensed Product

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SAVE THIS MANUAL FOR FUTURE REFERENCE

This manual contains important information regarding safety, operation, and maintenance.

INTRODUCTION

Thank you for purchasing this superior quality general purpose water pump from Ford Power Equipment. When operating and maintaining this product as instructed in this manual, your water pump will give you many years of reliable service.

Product Applications:

This water pump has many applications and is designed to pump water and non-corrosive liquids. Common applications include irrigation and the drainage of pools, hot tubs, floods, ponds, sewage, construction sites, utility pits, and mines.

Product Specifications:

Iten	Type	FOEDP50	FOEDP80	FOEDP100
Pump	Suction port diameter	50mm(2 inch)	80mm(3 inch)	100mm(4 inch)
	Discharge port diameter	50mm(2 inch)	80mm(3 inch)	100mm(4 inch)
	Suck Grade(m)	7	7.5	7
	Lift(m)	32	28	30
	Volume of Flow(m^3/h)	28	58	90
Engine	Model	FE212	FE212	FE420
	Type	4-Stroke	4-Stroke	4-Stroke
	Displacement(cc)	212cc	212cc	420cc
	Fuel tank capacity(L)	3.6	3.6	6.5
	Oil capacity(L)	0.6	0.6	1.1

Record the following information below for service or warranty assistance.

Date of Purchase:	
Model Number:	
Serial Number	

SAFETY RULES

Safety Symbols

WARNING! Indicates a potentially hazardous situation which could result in serious injury or death if not avoided.

CAUTION! Indicates a potentially hazardous situation which could result in damage to equipment or property.


Hot surface


Risk of fire


Risk of explosion

Safety Instructions

Most accidents can be prevented by following the instructions in this manual. However, the manufacturer cannot anticipate every possible hazardous circumstance that the user may encounter. Therefore, the Warnings in this manual, on tags, and on affixed decals are not all-inclusive. To avoid accidents, the user must understand and following all manual instructions and use common sense.

WARNING! **Read and understand this manual in its entirety before operating this water pump.**

- Improper use of this water pump could result in serious injury or death.
- Know how to stop this pump quickly in case of an emergency.
- Never leave the pump running while unattended to for any reason.
- Keep children and pets away from the pump when it is running.

WARNING! **Only use this pump to pump water not intended for consumption**

- Do not use pump to pump water to be consumed by humans or animals.
- Do not pump flammable liquids such as gasoline or engine oil which could cause an explosion or flames.
- Do not pump sea water, chemical solutions, or any other fluids that could corrode or damage the pump.

WARNING! **Only use this unit as it is intended or serious injury or death could result.**

- Do not bypass any safety device. Moving parts are covered with guards. Make sure all protective covers are in place.
- Inspect hoses and connections making sure they are secure before starting engine.
- Use only recommended accessories to avoid damage to this unit.
- Never transport or make adjustments to this unit while it is running.

SAFETY RULES

WARNING! **Do not operate indoors or in a confined space preventing dangerous carbon monoxide gas from dissipating.**

- Carbon monoxide gas is a poisonous, odorless gas that can cause headache, confusion, fatigue, nausea, fainting, sickness, seizures, or death. If you start to experience any of these symptoms, **IMMEDIATELY** get fresh air and seek medical attention.
- Never use indoors, in a covered area, or in a confined space, even if doors and windows are open.
- Keep exhaust from this unit from entering a confined area through windows, doors, vents, or other openings.
- When working in areas where vapors could be inhaled, use a respirator mask according to all of its instructions.

WARNING!   **Keep engine away from sparks and flammables.**

- The fuel and its vapors used to power this unit are highly flammable and could explode resulting in serious injury or death. Always refuel outdoors in a well ventilated area with the engine off and the pump on a level surface.
- Never overfill fuel tank. If fuel spills, move the unit at least 30 feet away from the spill and wipe up any remaining fuel on the unit before starting the engine.
- Never smoke while operating or fueling this unit.
- Never operate or store this unit near an open flame, heat, or any other ignition source.
- Keep engine free of grass, leaves, or grease which are flammable.
- When adding or draining fuel, unit should be turned off for at least 2 minutes to cool before removing fuel cap. If unit has been running the fuel cap is under pressure, remove slowly. To keep fuel from spilling, secure unit so it cannot tip while opperating or transporting.
- When transporting unit, disconnect the spark plug wire and make sure the fuel tank is empty with the fuel shutoff valve turned to the "OFF" position.
- Keep pump at least 3 feet (1 meter) away from equipment , outlets, or buildings.

WARNING! **Pull cord recoils rapidly and pulls arm towards engine faster than you can let go which could result in injury.**

- To avoid recoil, pull starter cord slowly until resistance is felt, then pull rapidly.

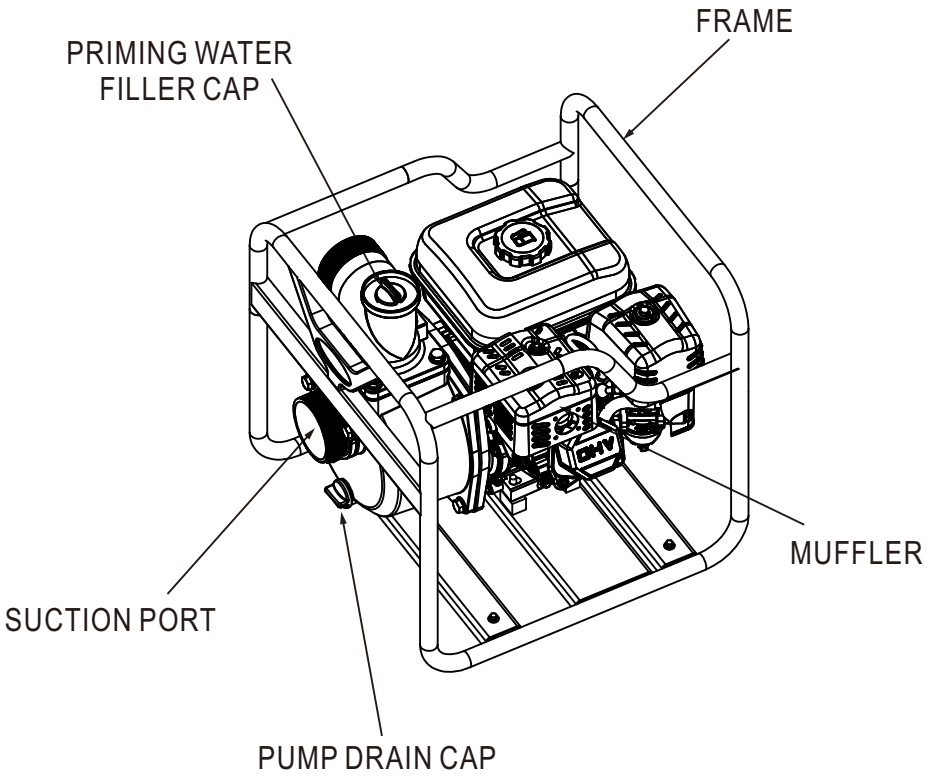
WARNING! **Never operate this unit if there are any broken or missing parts and only use Ford Equipment replacement parts specifically designed for this unit.**

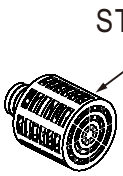
- Improper treatment of water pump can damage the unit and shorten it's life.
- Always repair this unit as specified in this manual. If you have any questions contact your dealer or consult a qualified service center.
- Never modify governed speed.

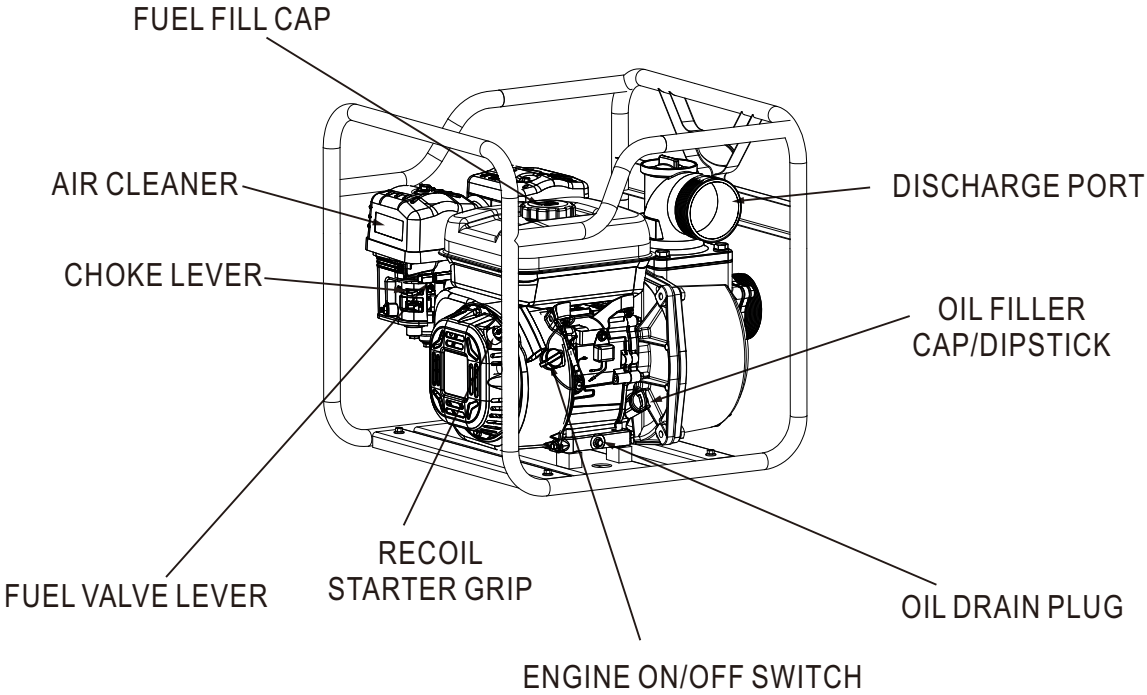
WARNING!  **Avoid contacting hot areas of this unit**

- Use caution around the muffler and other engine parts as they can be extremely hot.
- Allow hot components to cool before touching.

WATER PUMP FEATURES







ASSEMBLY

Packing List

- Water Pump
- Quick Start Guide
- Operator's manual and product registration card
- Spark Plug Wrench
- Funnel
- Strainer
- Hose Fitting Wing Nuts (2)
- Gaskets (2)
- Hose Barb Fittings (2)
- Hose Clamps (3)

WARNING! **Do not attempt to assemble or operate this water pump until you have read and understood this entire manual. If you have any problems assembling or operating this unit contact your dealer or a qualified service center.**

WARNING! **Do not operate this water pump if any of the parts are damaged or missing until the part is replaced. Using this product with damaged or missing parts can cause damage to the machine or result in serious injury or death.**

Unpacking

1. Carefully open product by cutting down the sides of the box if you feel the equipment is too heavy to lift out. Be careful not to cut the machine or accessonies.
2. Remove the product, parts, and all accessories. Make sure all items listed on the packing list are included and not damaged.

Suction Hose Installation (See Fig 1)

- Select a commercially available hose (not included) that is larger than the pump's suction port.
  Minimum hose size: FOEDP50 = 2in. (50 mm) FOEDP80 = 3in. (80 mm) FOEDP100=4in.(100mm)
  To maximize the pump's power, the pump should be placed as close to the water level as possible and the hose should be as short as possible. Avoid using a long hose as it increases fluid friction.
- At the pump's Suction Port connect the gasket, hose barb fitting, hose wing nut, hose clamp, and suction hose as shown in figure 1.
- To prevent leakage, veify the gasket is in good condition and the hose wing nut and hose clamp are tightly secured.
- Connect a hose clamp and the Zinc plated Steel Strainer at the opposite end of the hose as shown in figure 1. The stainer helps prevent debris from clogging the pump.

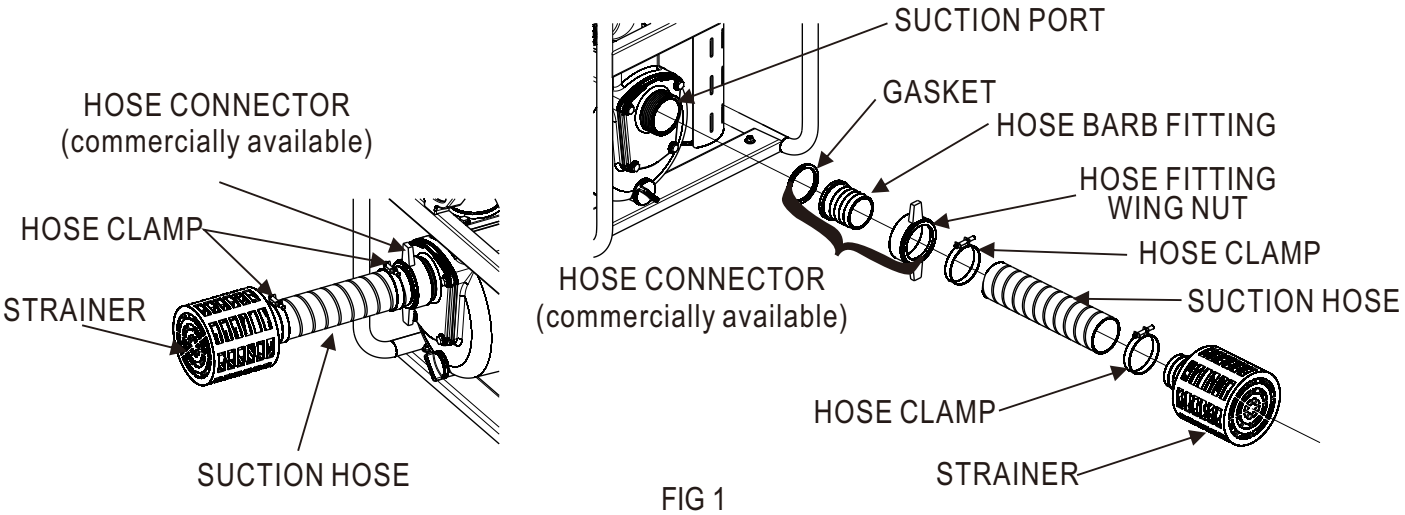


FIG 1

ASSEMBLY

Discharge Hose Installtion (See Fig 2)

- Select a commercially available hose (not included) that is larger than the pump's Discharge Port.
  Minimum hose size: FOEDP50 = 2in. (50 mm) FOEDP80 = 3in. (80 mm) FOEDP100=4in.(100mm)
  To reduce fluid friction, selected a larger diameter hose that is as short as possible.
- At the pump's Discharge Port connect the gasket, hose barb fitting, hose wing nut, hose clamp, and discharge hose as shown in figure 2.
- To prevent leakage, veify the gasket is in good condition and the hose wing nut and hose clamp are tightly secured.

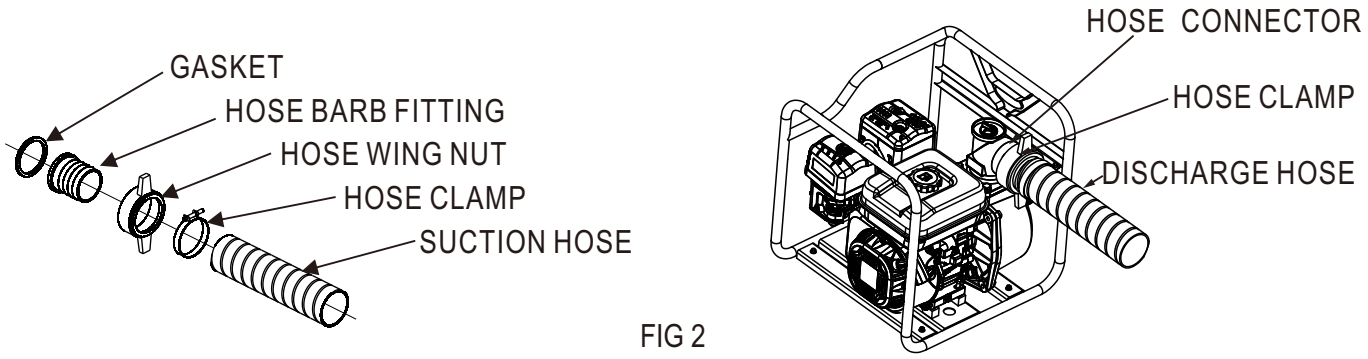


FIG 2

Adding / Checking Engine Oil (See Fig 3)

- To check oil, set water pump on a level surface, wipe dipstick clean, then reinsert dipstick without rethreading.
- To add oil, set water pump on a level surface. Remove the crankcase dipstick to ensure you do not overfill the engine.
- Carefully add 600ml (20oz) of 4-Cycle engine oil (SAE 10W-30) to empty reservoir until oil reaches the outer edge of the oil fill hole (Crankcase Dipstick hole).
- Be sure oil level is correct and replace dipstick before attempting to start the engine.

CAUTION!	**Oil must be added to unit prior to first use. Running the engine without enough oil can cause engine damage.**

Adding Fuel (See fig 4)

- Set water pump on a clean and level surface in an area that is well ventilated.
- Remove fuel cap.
- Insert a funnel into the fuel tank and carefully pour fresh, unleaded gasoline, with an octane rating of 86 or higher, into the tank until fuel level reaches 1 1/2 inches below the top of the neck.

CAUTION!	**To avoid spillage, do not overfill fuel tank as gasoline expands. Never use gasoline that is stale, contaminated or mixed (oil/gasoline). Keep water and dirt from entering fuel tank.**

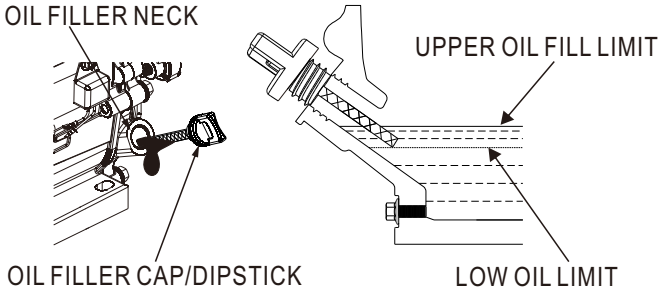


FIG 3

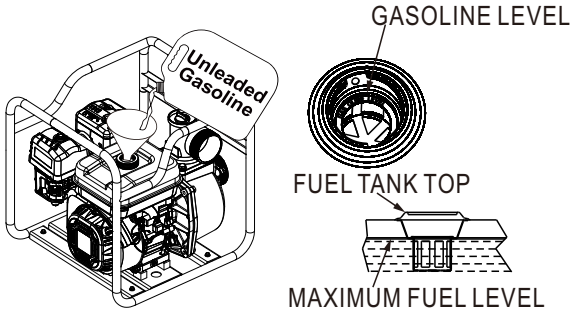


FIG 4

OPERATION

WARNING! **Read and understand this manual in its entirety before operating this water pump.**

- Improper use of this water pump could result in serious injury or death.
- Know how to stop this pump quickly in case of an emergency.
- Never leave the pump running while unattended to for any reason.
- Keep children and pets away from the pump when it is running.

Pre-Operation Check List

- Read and understand this operator manual in its entirety before operating water pump.
- Check oil level and add oil to the proper level if low.
- Check fuel level and add fuel if needed. Inspect underneath the pump for fuel or oil leakage.
- Check all gaskets and hoses for kinks and damage.
- Check connections of all hoses to make sure they are secure. Make sure all nuts, bolts, and screws are tightened.
- Remove any debris, especially around recoil starter and muffler.
- Look for any signs of damage. Provide any necessary maintenance.

WARNING! **Do not operate indoors or in a confined space preventing dangerous carbon monoxide gas from dissipating.**

- Carbon monoxide gas is a poisonous, odorless gas that can cause headache, confusion, fatigue, nausea, fainting, sickness, seizures, or death. If you start to experience any of these symptoms, **IMMEDIATELY** get fresh air and seek medical attention.
- Never use indoors, in a covered area, or in a confined space, even if doors and windows are open.
- Keep exhaust from this unit from entering a confined area through windows, doors, vents, or other openings.
- When working in areas where vapors could be inhaled, use a respirator mask according to all of its instructions.

Priming the Water Pump (See Fig 5)

The water pump must be primed prior to starting the engine.

- Remove the filler cap from the pump chamber.
- Add water to the pump chamber until it is completely full.
- Reinstall filler cap, secure tightly.

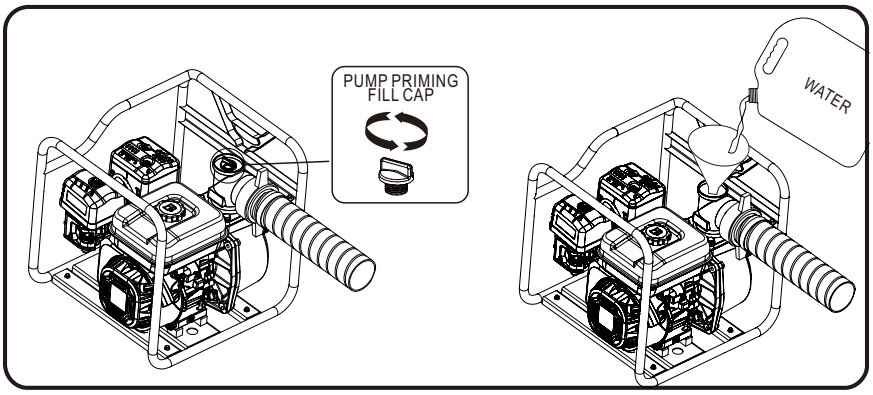


FIG 5

CAUTION! **Do not operate the pump dry or you will destroy the pump seal. If the pump is opperating dry, stop the engine immediately and allow engine to cool before priming the water pump.**

OPERATION

Placing the Water Pump (See Fig 6)

To maximize the pump's power, the pump should be placed as close to the water level as possible and the hose should be as short as possible.

- As hose length increases, pump output decreases.
- The Total Head is the total pumping height. As Total Head increases the pump's output decreases.
- The Discharge Head capacity is greater than the Suction Head capacity. Therefore, the Suction Head should always be shorter than the Discharge Head.

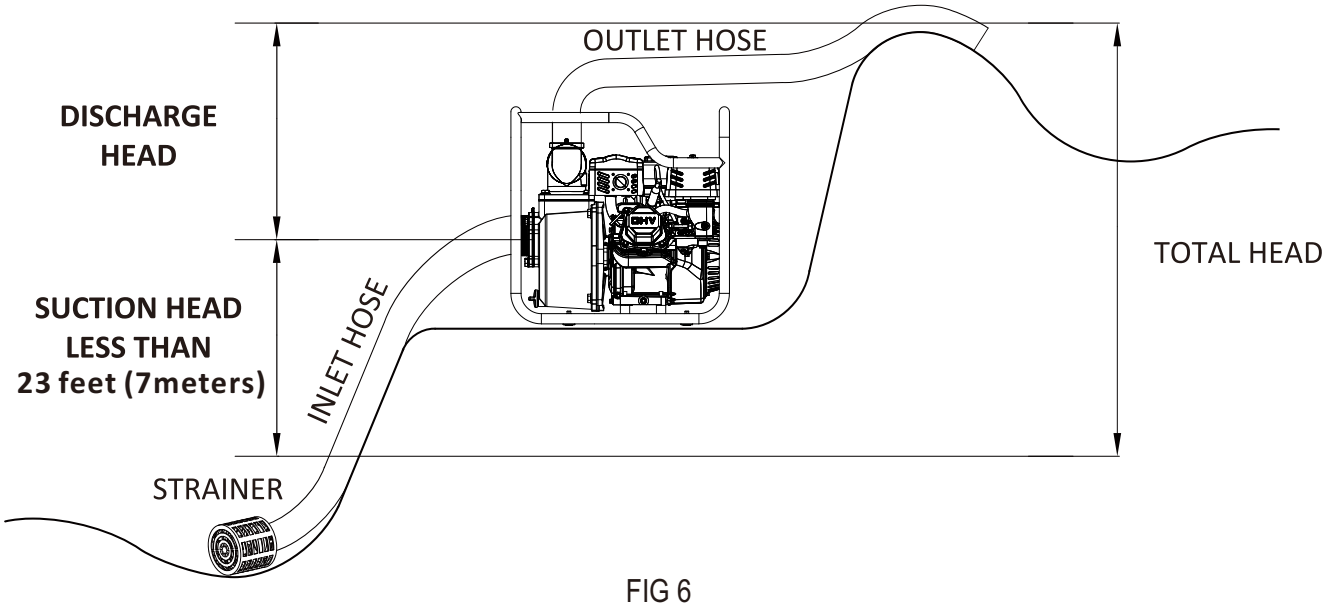


FIG 6

Protect the Discharge Hose from Hazards (See Fig 7)

If the discharge hose must be placed across a path or road, the hose should be run across the road perpendicular to the traffic flow. Place two heavy duty boards parallel to the hose on each side to protect the hose from being run over or crushed. Crushing or driving over the discharge hose restricting water flow while the pump is running could cause pump damage.

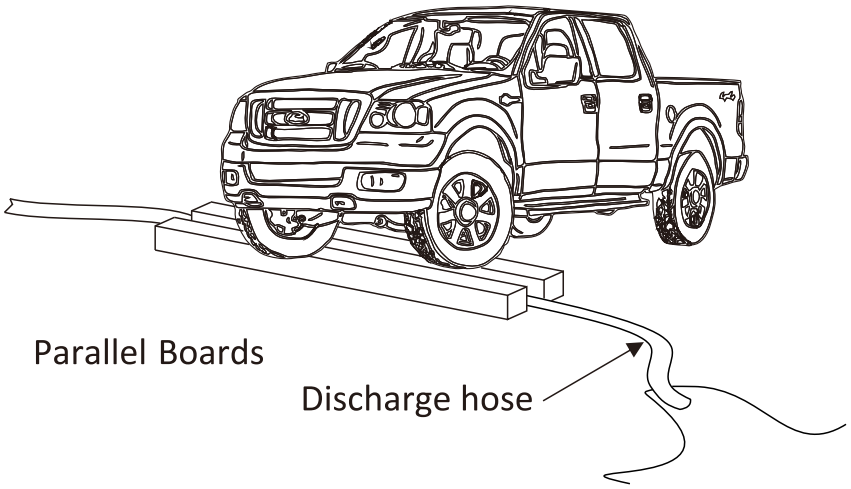


FIG 7

OPERATION

Starting Water pump (See Fig 8A-8C)

- Place water pump on a level surface near the water level. Keep the pump at least 3 feet away from walls or equipment.
- Prime water pump. (see page 10)
- Turn fuel valve to the ON position.
- If engine is cold, slide choke lever to the “CHOKE” position. If engine is warm, leave choke lever on “RUN” position.
- Slide the throttle lever about ⅓ of the way past the “SLOW” position.

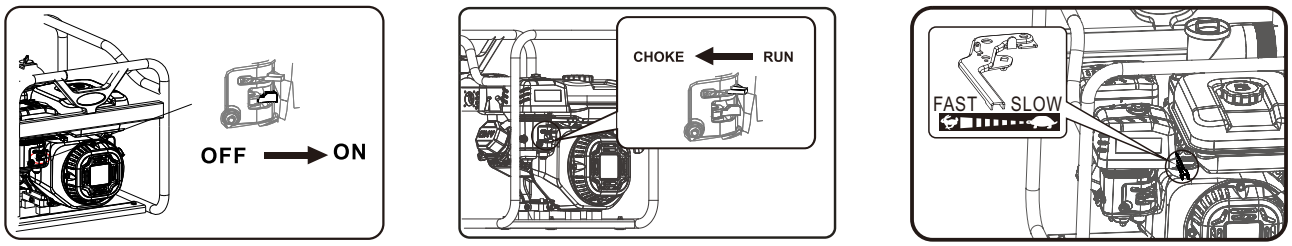


FIG 8A

- Turn the engine OFF/ON switch to the “ON” position.
- Pull the recoil handle (starter cord) slowly until resistance is felt, then pull rapidly.
- Let engine run for several seconds and then gradually slide the choke lever to the “RUN” position as the engine warms up until the choke is fully slid to the “RUN” position.

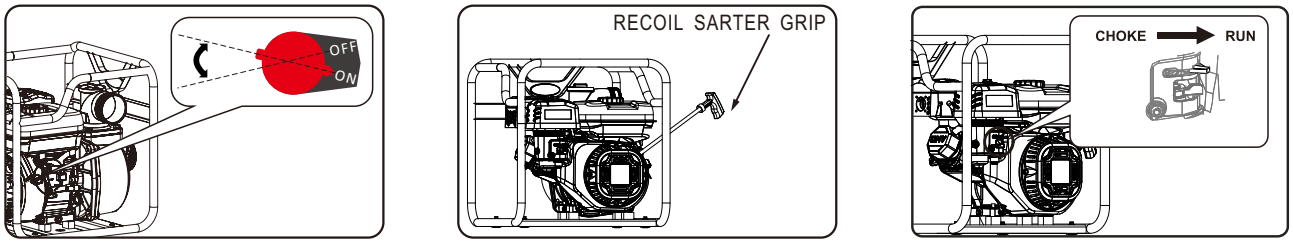


FIG 8B

WARNING! **Pull cord recoils rapidly and pulls arm towards engine faster than you can let go which could result in injury.**

- To avoid recoil, pull starter cord slowly until resistance is felt, then pull rapidly.

- Slide the throttle lever to the “FAST” postition. Adjust throttle lever as needed. The higher the throttle setting, the faster the engine speed and the greater the pump’s output volume.

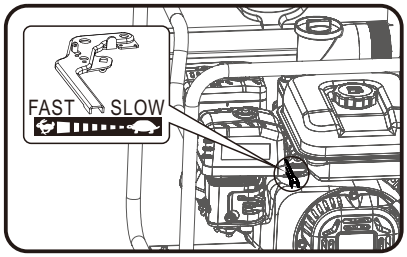


FIG 8C

OPERATION

Stopping Water Pump (See Fig 9)

For an emergency stop:

- Turn the OFF/ON switch to the “OFF” position.

For normal conditions:

- Slide the throttle lever to the “SLOW” position
- Turn the OFF/ON switch to the “OFF” position.
- Turn the fuel valve to the “OFF” position.
- After use drain the pump chamber.

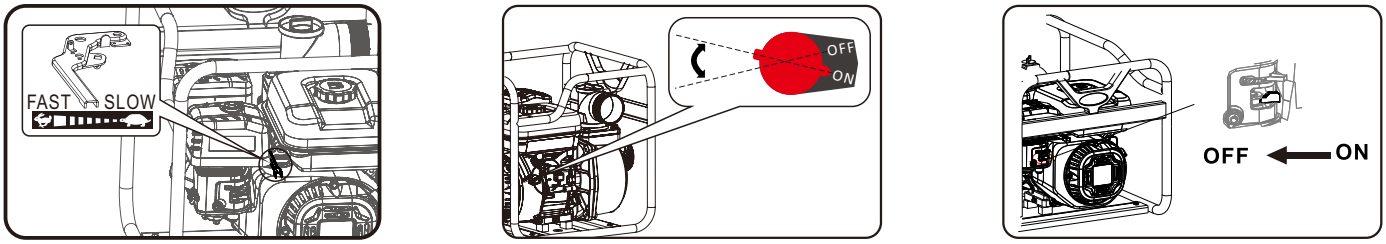


FIG 9

CAUTION! **Slide the fuel valve to the “OFF” postion whenever engine is not running to prevent carburetor flooding and fuel leakage.**

Draining Pump Chamber (See Fig 10)

- Remove Drain Plug and drain Pump Chamber.
- Remove Filler Cap and flush Pump Chamber with clean, fresh water.
- Let Pump Chamber drain again.
- Reinstall Filler Cap.
- Reinstall Drain Plug.

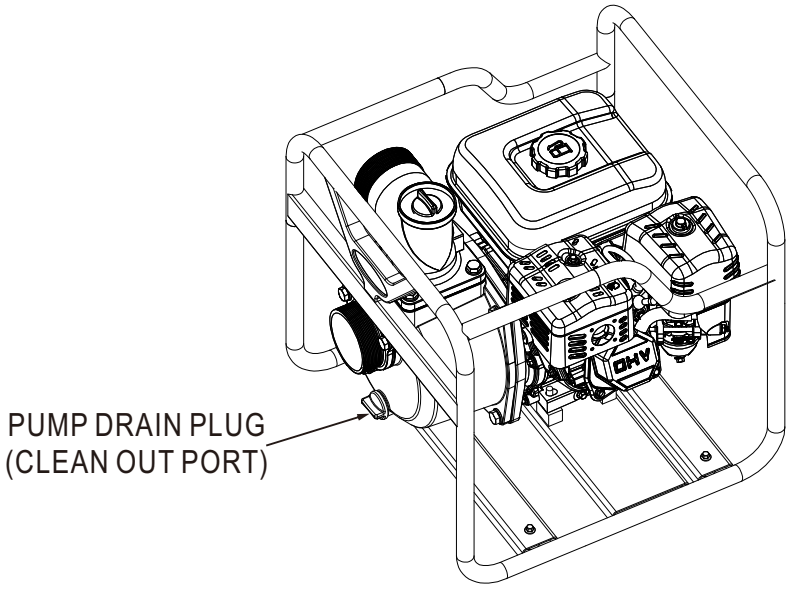


FIG 10

MAINTENANCE

This section of the manual includes a maintenance schedule, routine inspection procedures, and basic maintenance procedures using basic hand tools. Some complex service procedures require special tools and are best handled by a qualified service technition. Regular maintenance will extend the life of this water pump and improve its performance. The warranty does not cover items that result from operator negligence, misuse, or abuse. To receive full value from the warranty, operator must maintain the water pump as instructed in this manual, including proper storage.

WARNING! **Before inspecting or servicing this machine, make sure the engine is off and no parts are moving. Disconnect the spark plug wire and move it away from the spark plug.**

Pre-operation Steps

Before starting the engine, perform the following pre-operation steps:

- Check engine oil level and the fuel tank level.
- Make sure the air filter is clean. Remove any debris that has collected on the water pump.
- Check all gaskets and hoses for kinks and damage. Make sure all hose connections are secure.
- Provide any necessary maintenance.
- Inspect the work area for hazards.

Remove Debris

- Clean any debris that has collected around or behind the muffler, recoil starter, and controls.
- Use a damp cloth to wipe exterior surfaces. If dirt is caked on, use a soft bristle brush.

After Each Use

Follow the following procedure after each use:

- Shut off engine.
- Drain Pump Chamber
- Store unit in a clean and dry area.

Maintenance Schedule

After First 5 Hours	Change Oil
After Each Use	Clean Debris
	Check Engine Oil Level
	Check Air Cleaner
Annually (20 hr Use)	Change Engine Oil (Service more often under dirty or dusty conditions)
Annually (50 hr Use)	Check and Clean Air Cleaner
	Check muffler
Annually (100 hr Use)	Service Spark Plug
	* Clean fuel tank and filter
Anually (300 hr Use)	Replace Spark Plug
	* Check Valve Clearance
	* Check Idle Speed
Every 2 yrs (500 hr Use)	* Clean Combustion Chamber
	* Check Fuel Tube

(*) Items should be performed by your certified Ford power Equipment technician.

MAINTENANCE

Changing Engine Oil (See Fig 11)

Engine oil will drain better if the engine is still warm, but not hot.

- Shut off engine.
- Clean the area around the oil fill cap / dipstick to keep out debris then remove oil fill cap / dipstick.
- Place an oil pan on the ground to catch oil. Remove oil plug and completly empty out the oil from the crankcase.
- Once oil is completely drained, replace oil plug and refill with new oil as instructed earlier in this manual under Adding / Checking Oil (See pg 9).
- Reinstall oil fill cap / dipstick.

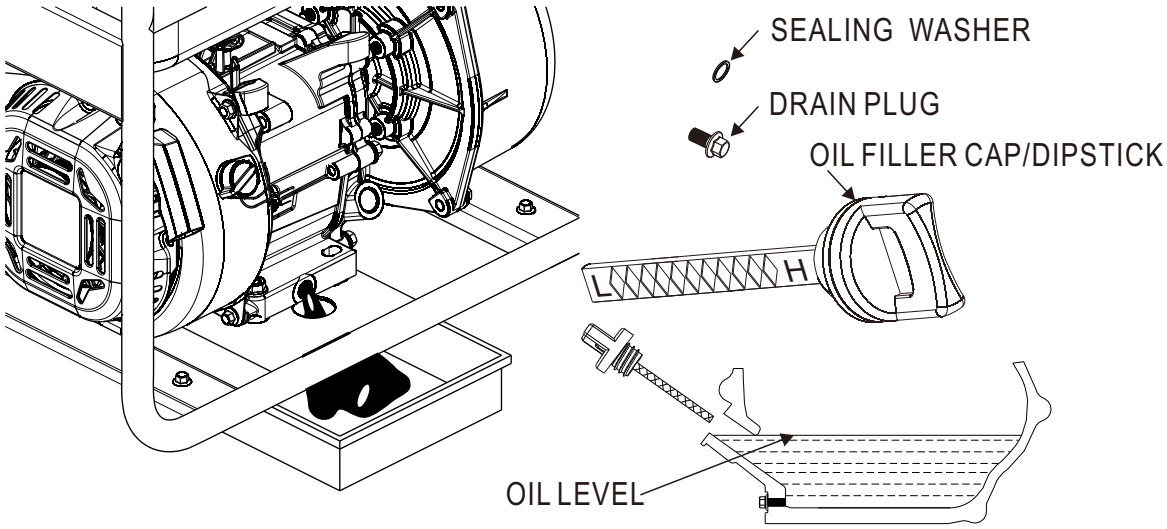


FIG 11

Engine Oil Recommendations (See Fig 12)

- Use SAE 10W-30 for general use. Other viscosities may be used based on the average temperature chart as shown.

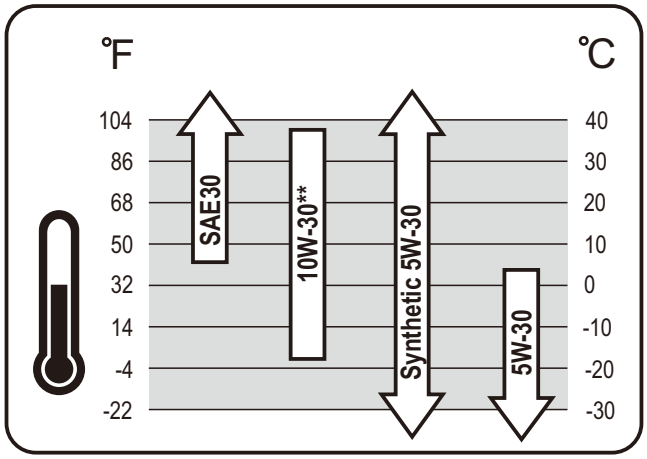


FIG 12

*Note: *Below 40˚F (4˚C) the use of SAE 30 will result in hard starting. **Above 80˚F (27˚C) the use of SEA 10W−30 may cause increased oil consumption. Check oil level more frequently.*

MAINTENANCE

Air Cleaner (See Fig 13)

A dirty air filter will reduce the life span of the engine, make starting the engine difficult, and reduce the unit's performance. If operating pump in dusty conditions, clean air filter more frequently then specified in the maintenance schedule.

- To clean, remove the air cleaner cover.
- Carefully pull the air cleaner out by lifting up along the edges.
- Remove dirt from filter by tapping on it or having it blown out.
- Wipe air cleaner base and cover with a damp rag. Be careful that dirt does not enter air duct leading to the carburetor.
- Reinstall air cleaner so that it seals and replace air cleaner cover.

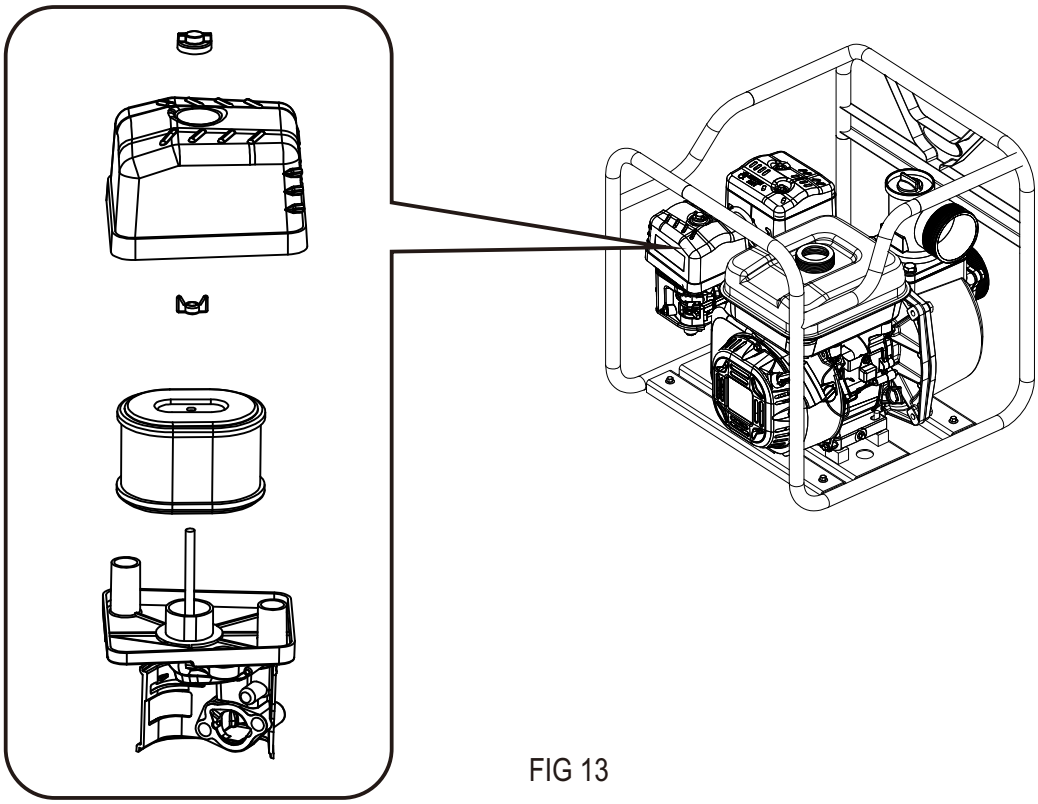


FIG 13

CAUTION! **Operating Pump without an air filter or with a damaged air filter can cause dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by the warranty.**

MAINTENANCE

Checking Spark Plug (See Fig 14)

- Disconnect the spark plug cap from the spark plug.
- Before removing the spark plug, clean the area around its base to prevent debris from entering the engine.
- Remove the spark plug with a comerically available13/16 spark plug wrench
- Inspect spark plug. Replace if electrodes are worn or if the insulator is cracked or chipped.
- Clean carbon deposits off the electrode with a wire brush.
- Check the electrode gap with a suitable gauge and slowly adjust to 0.7 - 0.8 mm if necessary.
- Reinstall spark plug and tighten to Torque 22.0 – 26.9 Nm (16-20 ft-lb).
- Reconnect spark plug cap.
- If spark plug is worn replace only with an equivalent replacement part. **Recommended spark plug: F7TC / F7RTC.**
- Spark plug should be replaced annually.

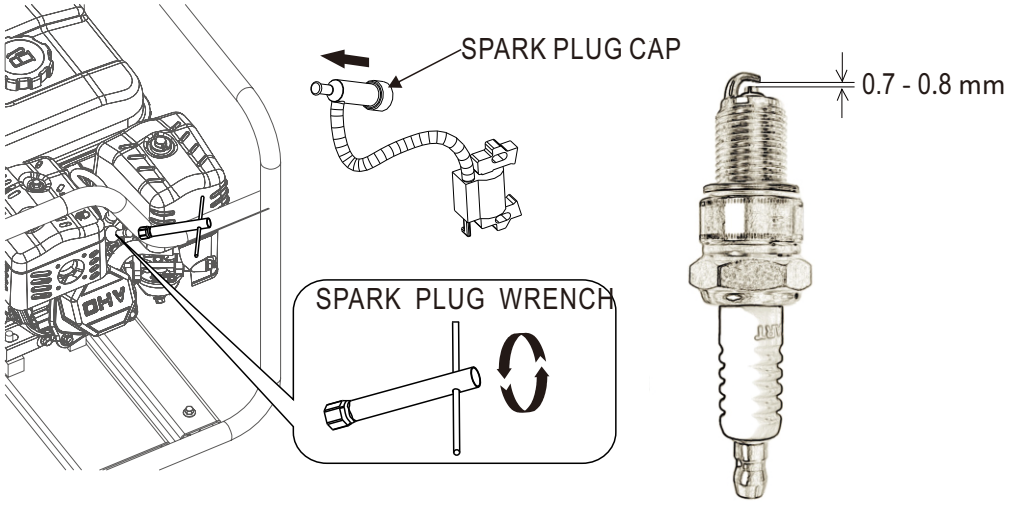


FIG 14

CAUTION! **A spark plug that is too loose can overheat and damage engine. A spark plug that is too tight can damage threads of the cylinder head.**

STORAGE

Storing Water pump

Proper storage prevents the development of rust and corrosion which affects the pumps performance and appearance. Proper storage also makes it easier to start the engine when using the pump again. If storing water pump for 30 days or more follow the below procedures:

⚠ CAUTION!	If pump has been running, allow engine to cool for at least 30 minutes before taking the steps mentioned below to avoid damage to pump.

Clean Pump

- If pump has been running, allow engine to cool to avoid damage to engine.
- Hand wash pump and engine. Keep water from areas difficult to dry, from controls, and from muffler or air cleaner openings. Avoid using a garden hose or pressure washer as it could cause water to enter the air filter or muffler and can damage the cylinder and filter.
- Wipe dry all accessible surfaces to prevent rust.

Fuel Stabilizer

- For short term storage (30-90 days) add a fuel stabilizer to the gasoline to keep gasoline from going stale and to prevent gum deposits from forming on the carburetor. Run engine for about 10 minutes to circulate the fuel stabilizer.
- If fuel stabliizer is not used, drain fuel tank and carburetor (See pg. 19).

⚠ WARNING!	Warranty does not cover engine damage caused by failing to properly store pump. Gasoline can deteriorate in months. Failure to drain fuel or use a fuel stabilizer may require you to service or replace the carburetor or other fuel system components.

Flush Pump (See Fig 15)

- Place the pump outdoors on a level surface.
- Fill the pump with fresh, clean water and start the engine. Let pump run several minutes to allow the external water to evaporate.
- Once the engine is warm, turn engine off and allow it to cool.
- Remove Drain Plug and flush pump with fresh, clean water.
- Let water drain from the pump chamber then reinstall Drain Plug.

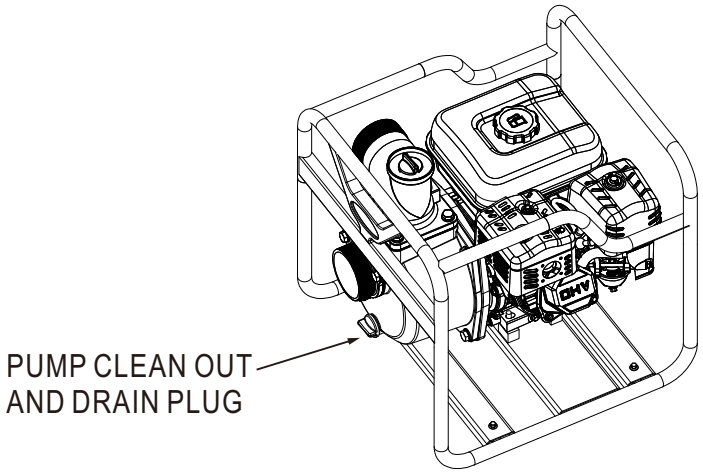


FIG 15

STORAGE

Lubercate Pump

Coat areas of pump that might rust, such as areas with damaged paint, with a light film of oil. Use a silicone spary lubricant and lightly lubricate controls.

Drain Fuel Tank and Carburetor

- For long term storage (over 90 days) drain fuel from fuel tank and carburetor.
- Place a funnel and a leak proof gasoline container under the carburetor to avoid spills.
- Remove carburetor drain bolt and sediment cup.
- Slide the Fuel Valve lever to the “ON” position.
- Once all the fuel has drained, reinstall drain bolt and sediment cup. Tighten securely.

Drain Fuel Tank and Carburetor (See Fig 16)

- For long term storage (over 90 days) drain fuel from fuel tank and carburetor.
- Place a funnel and a leak proof gasoline container under the carburetor to avoid spills.
- Remove carburetor drain bolt and sediment cup.
- Slide the Fuel Valve lever to the “ON” position.
- Once all the fuel has drained, reinstall drain bolt and sediment cup. Tighten securely.

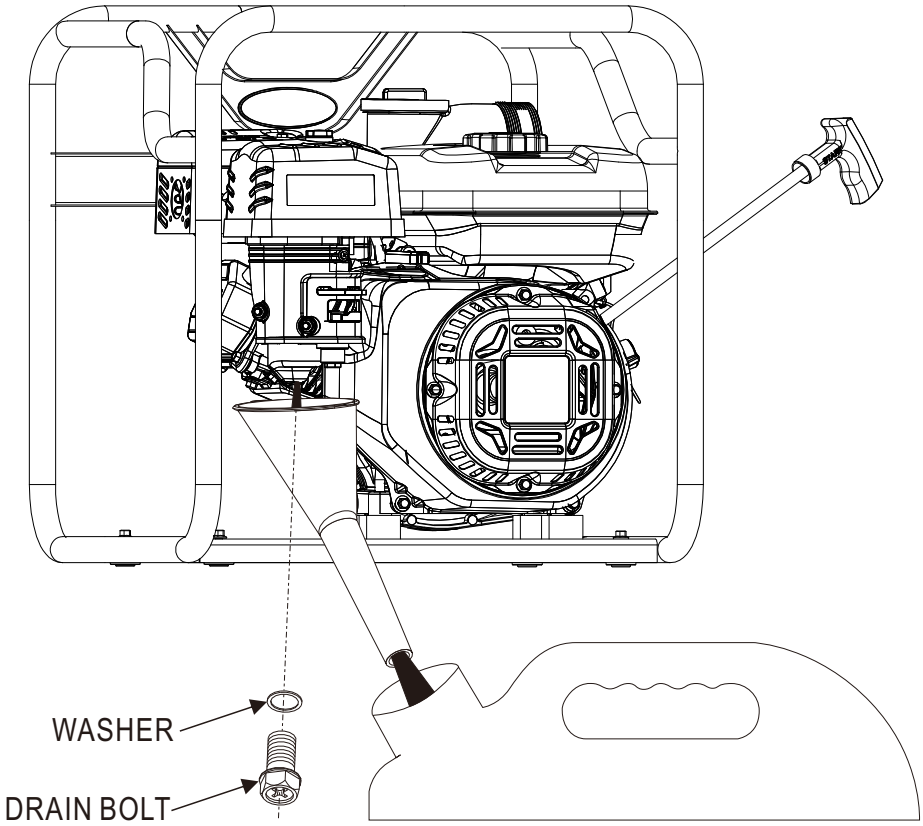


FIG 16

STORAGE

Engine Oil (See Fig 17)

- For long term storage (over 90 days) change engine oil (See pg 15)
- Remove spark plug (See pg 17) and pour 1 tablespoon of clean engine oil into cylinder.
- To distribute oil in the cylinder, pull the recoil starter several times.
- Reinstall spark plug (See pg 17)
- Slowly pull recoil starter grip until the the top hole of the recoil starter cover aligns with the notch on the pulley. This keeps the valve closed during storage so that moisture cannot enter the engine cylinder.

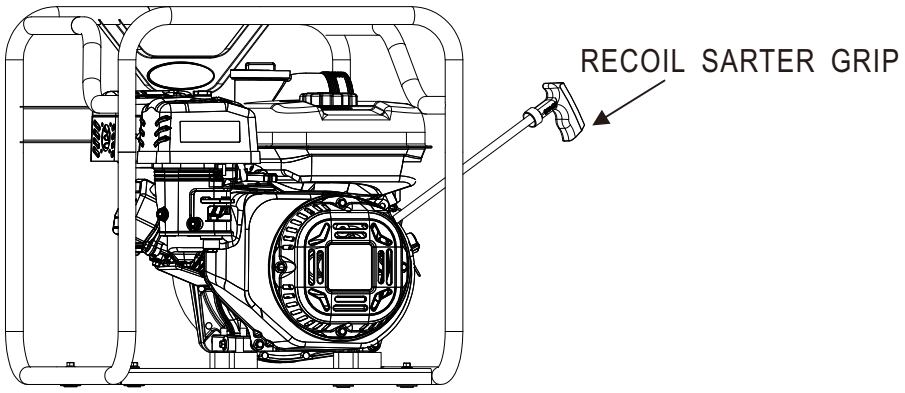


FIG 17

Storage Location

- If pump is stored with gasoline, store pump in a well-ventilated area away from anything that operates with an open flame or generates sparks. To prevent leakage, store pump on a level surface with the Fuel Valve lever in the “OFF” position.
- To prevent rust, avoid storing pump in areas with high humidity.
- To protect from dust, cover with a tarp or plastic sheet.

WARNING!	**Storage cover could be flammable. Let engine cool before covering pump.**

Remove from Storage

See pg 10 Pre-Operation Checklist

Transporting Pump

- Turn the fuel valve to the “OFF” postion.
- To prevent fuel leakage, keep pump level while transporting.

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Engine Does Not Start		
Check controls	OFF/ON switch is in the “OFF” position	Turn OFF/ON switch to the “ON” position
	Fuel valve in “OFF” position	Turn Fuel valve to “ON” position
	Choke is in “RUN” position	Turn Choke to “Choke” position
Check fuel	Out of fuel	Fill fuel tank
	Stale fuel or water in fuel	Drain fuel tank and carburetor. Replace with fresh fuel.
Faulty spark plug	Spark plug wire disconnected from spark plug	Connect spark plug wire
	Spark plug wet from fuel (flooded)	Remove and dry spark plug. Reinstall spark plug and start engine with throttle lever in the fastest setting.
	Spark plug incorrectly gapped	Correct spark plug gap
	Bad spark plug	Replace spark plug
	Spark plug wire has shorted	Contact service center
Check Engine Oil	Engine oil low	Add engine oil
Contact service center	Ignition inoperative	Contact service center
Engine Lacks Power		
Check air filter	Air filter is dirty	Clean air filter
Check Fuel	Stale fuel or water in fuel	Drain fuel tank and carburetor. Replace with fresh fuel.
Check Fuel filter	Clogged fuel filter	Replace fuel filter
Contact service center	Carburetor or ignition malfunction	Contact service center
	Valve stuck	Contact service center
Engine Quits During Operation		
Check fuel	Out of fuel	Fill fuel tank

TROUBLESHOOTING

No Pump Output

Check Pump Chamber	Pump was not primed	Prime pump
	Hose is kinked or damaged	Unkink hose, replace damaged hose
	Strainer is clogged	Remove debris to unclog strainer
	Strainer is not submerged underwater	Completely submerge strainer
	Gasket is damaged	Replace Gasket
	Wing nut and hose clamp are loose	Tighten wing nut and hose clamp
Measure Suction & Discharge Head	Head distance is excessive	Relocate pump and / or hoses to shorten head.
Check Engine	Engine Lacks Power	See pg 21

Low Pump Output

Check Suction Hose	Hose is too long or diameter to small	Replace hose
	Hose is kinked or damaged	Unkink hose, replace damaged hose
	Strainer is clogged	Remove debris to unclog strainer
	Gasket is damaged	Replace Gasket
	Wing nut and hose clamp are loose	Tighten wing nut and hose clamp
Check Discharge Hose	Hose is too long or diameter to small	Replace hose
	Hose is kinked or damaged	Unkink hose, replace damaged hose
Measure Suction & Discharge Head	Head distance is excessive	Relocate pump and / or hoses to shorten head.
Check Engine	Engine Lacks Power	See pg 21

MODIFICATIONS

High Altitude Operation

If operating pump regularly at altitudes over 5,000 feet, the carburetor's air-fuel mixture will be too rich and emmissions may increase. On Engines not built for the United States the carburetor can be adjusted to operate under this condition. The carburetor should be returned to its normal setting if regular operation becomes less than 5,000 feet. Contact your service center to modify the carburetor.

Oxygenated Fuels

To help reduce emissions, the following oxygenated fuels may be used if unleaded and meets the minimum octane rating requirment.

Ethanol - gasoline which contains up to 10% ethanol by volume, also called "Gasohol".
MTBE - gasoline which contains up to 15% MTBE by volume.
Methanol - gasoline which contains up to 5% methanol may be used, but it is not recommended as it can damage the fuel system, affect performance, and make it difficult to start the engine.

WARNING! **Damage to fuel system caused by the use of oxygenated fuels is not covered under the warranty**

Emissions Control System

The emissions control system for this water pump is compliant with all standards set by the Environmental Protection Agency. To keep emissions from exceeding the legal limit, do not alter or remove any part of the emissions system including the intake, fuel, or exhaust systems. Contact your service center if the engine stalls or is hard to start, idles rough, misfires, or backfires.

WARNING! **Never operate this unit if there are any broken or missing parts and only use Ford replacement parts specifically designed for this unit.**

- Improper treatment of water pump can damage the unit and shorten it's life.
- Always repair this unit as specified in this manual. If you have any questions contact your dealer or consult a qualified service center.
- Never modify governed speed.

WARRANTY

Ford Power Equipment Limited 1 Year Warranty:
From the date of original purchase, Ford Power Equipment warrants to the original purchaser, that each water pump sold, shall be free from defect in material and workmanship, for the items and time period set forth below. Ford Power Equipment, at its discretion, agrees to repair or replace any defective part that upon examination, inspection, and testing by a Ford Power Equipment authorized service dealer, is found to be detective within the original warranty period. Ford Power Equipment will also decide upon the use of new or rebuilt parts or comparable product. Any part or product that is replaced will be retained by Ford Power Equipment. This warranty period shall not be extended and any repaired product shall be warranted for the remaining period of the original warranty. The consumer is responsible, and shall prepay all transportation costs, including returning items to the factory or warehouse. This warranty is not transferable and proof of purchase must be presented for requesting warranty service. If a proof-of-purchase receipt is not provided, the product's shipping date by the manufacture will be used to determine the warranty period.

Length of Warranty:
Personal use applications of this water pump are warranted for one (1) years. Proof of purchase and of maintenance must be provided.

- Year 1 - Limited comprehensive coverage on all water pump components and labor.

"Personal use" means personal residential household use or recreational use by the retail consumer. "Commercial use" means all other uses including commercial, construction, or other income producing purposes. Once a water pump has been used for commercial purposes, it shall thereafter be considered as a "commercial use" water pump for the purposes of this warranty. Any water pump used for commercial use or as rental equipment will not be covered under this warranty.

Consumer Responsibilities:

- Consumer is responsible for carefully reading and following all instructions in the owner's manual. Any product that is damaged due to misuse or abuse will not be covered by this warranty.
- Consumer is responsible for all transportation costs to an authorized Ford Power Equipment Service Center. Unless otherwise requested, ground shipping will be applied for part shipment and customer will pay any additional charges for expedited shipments.
- Consumer is responsible for labor costs associated with warranted repairs twelve (12) months after the purchase date. Labor rates will only be based on normal working hours.
- Consumer is responsible for maintaining water pump as specified in the owner's manual. Documentation of this maintenance may be required to cover warranty requests.
- Consumer is responsible for presenting any problems with the water pump to an authorized Ford Power Equipment Service Center as soon as the problem exists. Warranted repairs will be completed in a reasonable period of time, not to exceed 30 days.

WARRANTY

What this Warranty Does Not Cover:

- **Normal wear:** This warranty excludes normal wear items such as hoses, connector fittings, filters, spark plugs, or gaskets unless under normal use, the original equipment is defective in material or workmanship and needs to be replaced prior to the first replacement interval.
- **Maintenance:** This warranty does not apply to tune-ups or routine maintenance and does not cover any adjustments or repairs not performed by an authorized repair facility.
- **Misuse:** This warranty does not apply if your product has failed due to abuse, misuse, neglect, using incorrect fuels or lubricants, contaminated water supply, use of chemicals or detergents not approved or recommended by Ford Power Equipment, improper maintenance, improper storage, unapproved modifications, or has been operated in any way contrary to the instructions found in the products owner's manual.
- **Adverse conditions:** This warranty does not apply if your product has failed due to freezing, accident, or natural disasters.
- **Product Shipment:** This warranty does not apply to damage resulting from shipping, handling, or warehousing: Any damage claims to this product caused by shipment must be filed with freighter.
- **Other exclusions:** This warranty does not apply if your product has been sold "as is" or where the factory applied serial number has been removed. Refurbished used, demonstration or floor models are not covered by this warranty.

Where Warranty is Valid:

For warranty coverage, this product must be purchased from an authorized Ford Power Equipment dealer and the warranty only extends to the original purchaser in Canada. Refurbished used, demonstration, or floor models are not covered by this warranty. Products purchased from on-line auction websites, such as ebay, are not covered under this warranty. Products used for commercial use are not covered under this warranty.

How to Obtain Warranty Service:

Take the original receipt and product to the place of purchase or mail the original receipt and product to the address found on the web site if purchased on-line. You can also locate your nearest Ford Power Equipment dealer for service or warranty questions by calling toll free at 1-888-863-7589. Ford Power Equipment recommends you retain all of your receipts covering the purchase and maintenance of your water pump, but will not deny you warranty coverage as long as proof of purchase or service can be obtained.

FORD POWER EQUIPMENT'S OBLIGATION UNDER THIS WARRANTY IS EXCLUSIVELY LIMITED TO PRODUCT REPAIR OR REPLACEMENT AND SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO THE EXPENSE OF DELIVERING PRODUCT TO AND FROM REPAIR CENTER, LOSS OR DAMAGE TO PERSONAL PROPERTY, LOSS OF REVENUE, TELEPHONE CHARGES, LOSS OF TIME, OR INCONVENIENCE. SOME STATES, PROVINCES, OR JURISDICTIONS DO NO ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE OR PROVINCE TO PROVINCE.