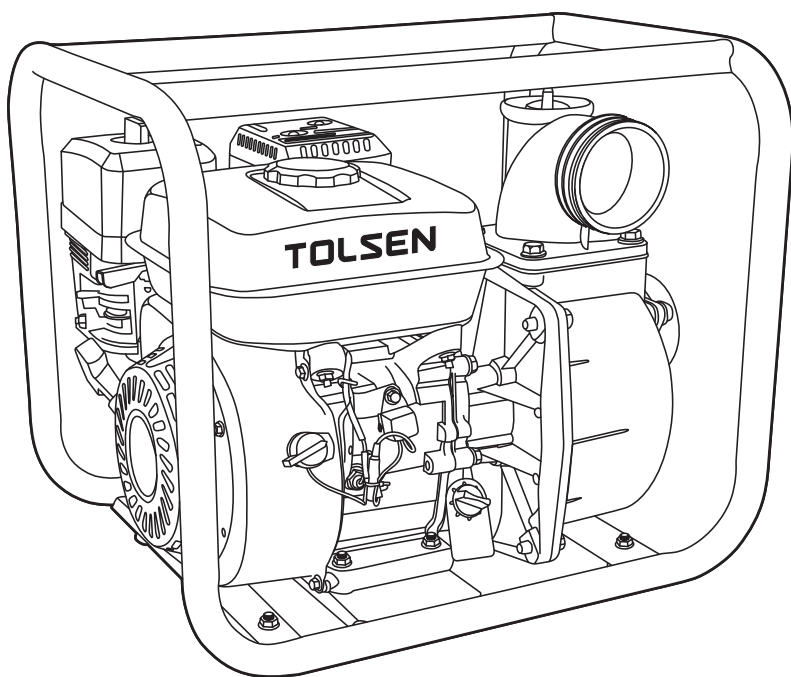


# TOLSEN **FORCE XPRESS**

## 79981/79982

# GASOLINE WATER PUMP

### INSTRUCTION MANUAL



**SAVE THIS MANUAL !**

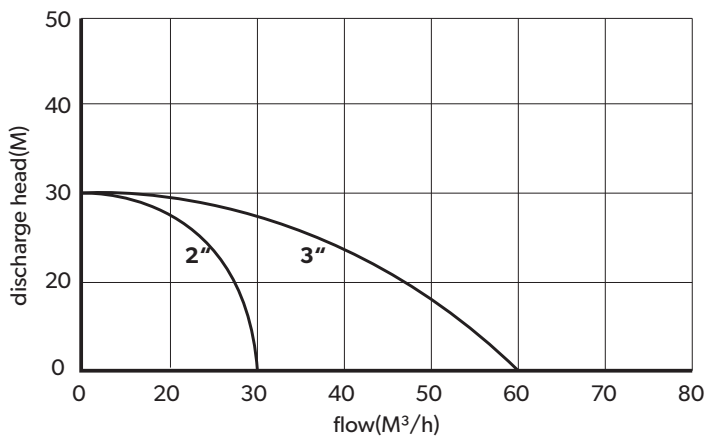
You will need this manual for safety instructions, operating procedures and warranty.  
Put it and the original sales receipt in a safe dry place for future reference.

SPECIFICATIONS

Pump	
Suction & Discharge Size	2''(79981) ; 3''(79982)
Maximum Flow	500L/min(79981) ; 1000L/min(79982)
Maximum Head Lift at 0 Flow	30M
Mechanical Seal	Ceramic
Included Accessories	Intake Strainer, Hose Clamps, Spark Plug Wrench

Engine		
Displacement	212cc	
Engine Type	Horizontal Single Cylinder 4 stroke OHV	
Cooling System	Forced air cooled	
Fuel	Type	87+ octane stabilizer-treated unleaded gasoline
	Capacity	3.6L
Engine Oil	Type SAE	10W-30 above 32° F 5W30 at 32° F or below
	Capacity	0.6L
Run Time @ 50% Load with full tank	3 hr	
Sound Level at 22 feet	100dB	
Bore x Stroke	70 x 54	
No Load Speed	3,800 ±100 RPM	

PERFORMANCE CURVE



## IMPORTANT SAFETY INFORMATION




### **WARNING!** Read all instructions.

Failure to follow all instructions listed below may result in fire, serious injury and/or DEATH. The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator

## Set up precautions

1. Gasoline fuel and fumes are flammable, and potentially explosive. Use proper fuel storage and handling procedures. Do not store fuel or other flammable materials nearby.
2. Have multiple ABC class fire extinguishers nearby.
3. Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.
4. Set up and use only on a flat, level, well-ventilated surface.
5. Use only lubricants and fuel recommended in the Specifications chart of this manual.
6. Wear ANSI-approved safety goggles, heavy-duty work gloves, and dust mask/respirator during set up.
7. Do not use any reducer on the inlet or discharge port. However, if any reducers were included as part of this pump, they may be used.

## Operating Precautions

1.  **CARBON MONOXIDE HAZARD** Using an engine indoors **CAN KILL YOU IN MINUTES**. Engine exhaust contains carbon monoxide. This is a poison you cannot see or smell.



NEVER use inside a home or garage, EVEN IF doors and windows are open.



Only use OUTSIDE and far away from windows, doors, and vents.

2. Keep children away from the equipment, especially while it is operating.
3. Do not touch Pump engine during use.

4. Never store fuel or other flammable materials near the Pump engine.
5. Do not leave the equipment unattended when it is running.  
Turn off the equipment (and remove safety keys, if available) before leaving the work area.
6. Engine can produce high noise levels. Prolonged exposure to noise levels above 85 dBA is hazardous to hearing. Always wear ear protection when operating or working around the gas engine while it is operating.
7. Use only accessories that are recommended by TOLSEN Tools for your model. Accessories that may be suitable for one piece of equipment may become hazardous when used on another piece of equipment.
8. Do not operate in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Gasoline-powered engines may ignite the dust or fumes.
9. Stay alert, watch what you are doing and use common sense when operating this piece of equipment. Do not use this piece of equipment while tired or under the influence of drugs, alcohol or medication.
10. Do not overreach. Keep proper footing and balance at all times. This enables better control of the equipment in unexpected situations.
11. Dress properly. Do not wear loose clothing or jewelry. Keep hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
12. Parts, especially exhaust system components, get very hot during use. Stay clear of hot parts.
13. Do not cover the engine or equipment during operation.
14. Keep the equipment, engine, and surrounding area clean at all times.
15. Do not smoke, or allow sparks, flames, or other sources of ignition around the equipment, especially when refuelling.
16. Use the equipment, accessories, etc., in accordance with these instructions and in the manner intended for the particular type of equipment, taking into account the working conditions and the work to be performed. Use of the equipment for operations different from those intended could result in a hazardous situation.
17. Do not operate the equipment with known leaks in the engine's fuel system.
18. Keep hands and feet away from moving parts. Do not reach over or across equipment while operating.
19. Before use, check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the equipment's operation. If damaged, have the equipment serviced before using. Many accidents are caused by poorly maintained equipment.
20. Use the correct equipment for the application. Do not modify the equipment and do not use the equipment for a purpose for which it is not intended.

## Service precautions

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1. Before service, maintenance, or cleaning:
  - a. Turn the engine switch to its "OFF" position.
  - b. Allow the engine to completely cool.
  - c. Then, remove the spark plug cap from the spark plug.
2. Keep all safety guards in place and in proper working order. Safety guards include muffler, air cleaner, mechanical guards, and heat shields, among other guards.
3. Do not alter or adjust any part of the equipment or its engine that is sealed by the manufacturer or distributor. Only a qualified service technician may adjust parts that may increase or decrease governed engine speed service.
4. Maintain labels and nameplates on the equipment. These carry important information. If unreadable or missing, contact TOLSEN Tools for a replacement.
5. Have the equipment serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the equipment is maintained. Do not attempt any service or maintenance procedures not explained in this manual or any procedures that you are uncertain about your ability to perform safely or correctly.
6. Store equipment out of the reach of children.

### Refueling:

1. Do not refill the fuel tank while the engine is running or hot.
  2. Do not smoke, or allow sparks, flames, or other sources of ignition around the equipment, especially when refuelling.
  3. Do not fill fuel tank to the top. Leave a little room for the fuel to expand as needed.
  4. Refuel in a well-ventilated area only.
  5. Wipe up any spilled fuel and allow excess to evaporate before starting engine.
- To prevent FIRE, do not start the engine while the smell of fuel hangs in the air.

## Set Up

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Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.



### WARNING

#### TO PREVENT SERIOUS INJURY:

Operate only with proper spark arrester installed.

Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrester may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

## High Altitude Operation Above 3000 feet

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 **WARNING** To prevent serious injury from fire:

Follow instructions in a well-ventilated area away from ignition sources.

If the engine is hot from use, shut the engine off and wait for it to cool before proceeding. Do not smoke.

**NOTICE** Warranty void if necessary adjustments are not made for high altitude use.

At high altitudes, the engine's carburetor, governor (if so equipped), and any other parts that control the fuel-air ratio will need to be adjusted by a qualified mechanic to allow efficient high-altitude use and to prevent damage to the engine and any other devices used with this product. The fuel system on this engine may be influenced by operation at higher altitudes. Proper operation can be ensured by installing an altitude kit at altitudes higher than 3000 ft. above sea level. At elevations above 8000 ft, the engine may experience decreased performance, even with the proper main jet. Operating this engine without the proper altitude kit installed may increase the engine's emissions and decrease fuel economy and performance. The kit should be installed by a qualified mechanic.

1. Turn off the engine.
2. Close the fuel valve.
3. Place a bowl under the fuel cup to catch any spilled fuel.

**CAUTION!** Carburetor bowl may have gas in it which will leak upon removing the bolt.

4. Unthread the bolt holding the fuel cup.
5. Remove the bolt, Bolt Seal, fuel cup, Fuel Cup Seal and Main Jet from the body of the carburetor assembly. A carburetor screwdriver (not included) is needed to remove and install the Main Jet.

**Note:** The mixing tube is held in place by the Main Jet and might fall out when it is removed. If it falls out, replace it in the same orientation before replacing the Main Jet.

6. Replace the Main Jet with the replacement Main Jet needed for your altitude range .

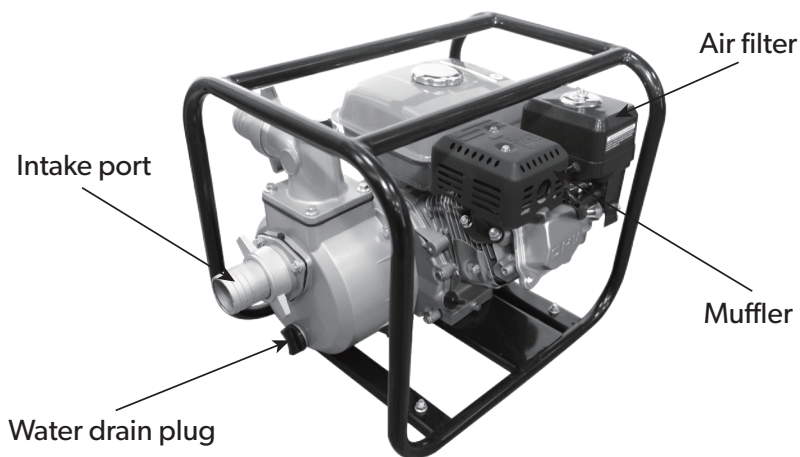
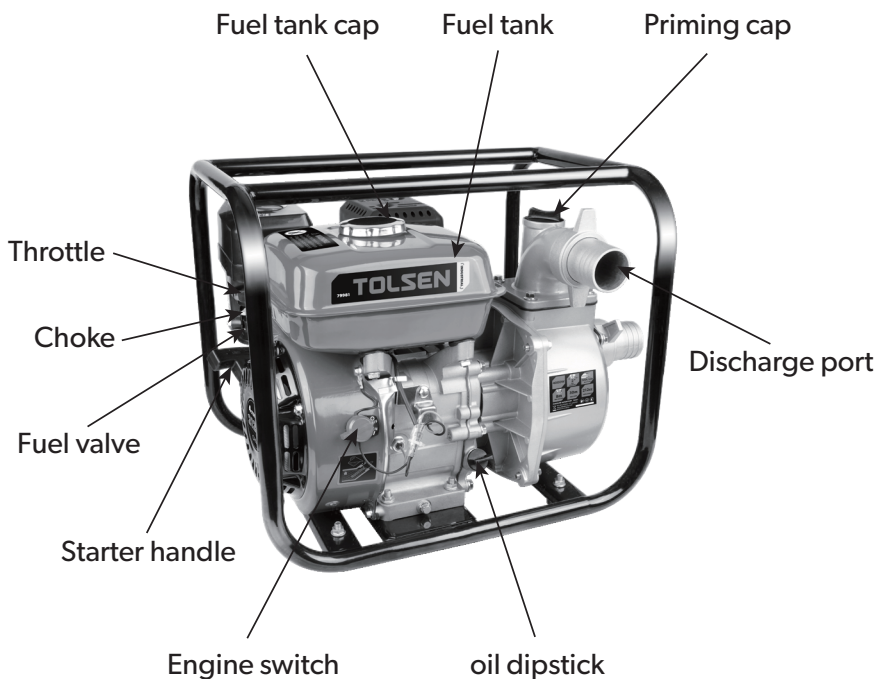
**Note:** The Fuel Cup Seal and Bolt Seal may be damaged during removal and should be replaced with the new ones from the kit.

7. Replace the Fuel Cup Seal , fuel cup, Bolt Seal , and bolt. Tighten in place.

**NOTICE:** Do not cross thread bolt when tightening. Finger tighten first and then use a wrench to make sure the bolt is properly threaded.

8. Wipe up any spilled fuel and allow excess to evaporate before starting engine. To prevent FIRE, do not start the engine while the smell of fuel hangs in the air.

### Controls



## Connecting Hoses

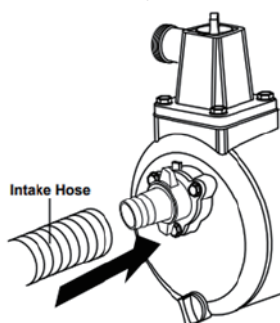
**Note:** Hoses not included.

**NOTICE:** Do not use any reducer on the inlet or discharge port. However, if any reducers were included as part of this pump, they may be used.

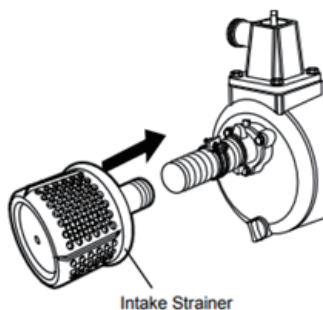
**Note:** The Intake Hose (not included) **MUST** be reinforced with non-collapsible construction. Match hose diameter to port diameters. Do not reduce hose diameter size.

1. Thread intake hose onto Intake Port.

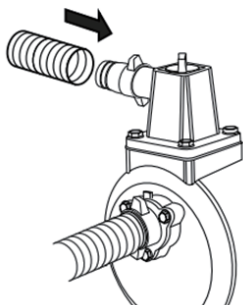
**NOTICE:** Use only a non-collapsible intake hose.



2. Slide the Intake Strainer into the end of the intake hose. Tighten until secure.



3. Thread discharge hose onto Discharge Port. Tighten until secure.

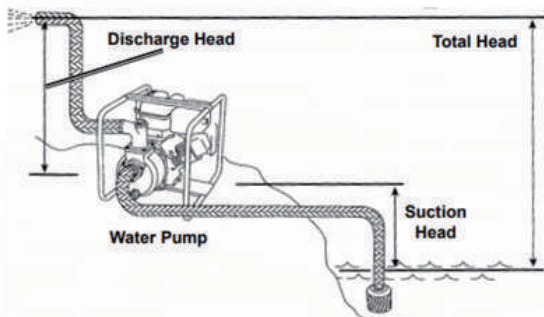




## Locating the Water Pump

Locate the Water Pump on a flat, level, sturdy surface capable of supporting the weight of the Pump.

1. For best Pump performance, place the Pump near the water level and use hoses that are no longer than necessary. See diagram below.

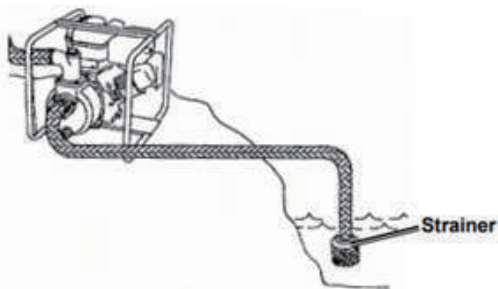


As the head (pumping height) increases, pump output decreases. A non-collapsible suction hose must be used. The length, type, and size of the suction and discharge hoses can significantly affect Pump output. Discharge head capability is always greater than suction head capability. This means pumping height for the Intake Hose (suction head) should be shorter than the pumping height for the Discharge Hose. Minimizing suction head (placing the Pump closer to the water level) will also help make it easier to prime the pump (fill it with water).

2. Route the Intake Hose with the Intake Strainer fully immersed in the water supply source.
3. Place Strainer into water to be pumped.

**NOTICE:** Immerse strainer fully in water. Do not operate Pump without Strainer connected to end of suction hose. Keep Strainer out of sand or silt by placing Strainer in a bucket or on stones.

**NOTICE:** Air leaks must not appear in the suction line. If there is an air leak in the suction line, you will not be able to prime the pump. Use a thread sealant to seal air leaks.



4. Secure the Intake Hose in place to keep it from moving once the Pump is turned on. The Intake Hose should be as short as possible for more efficient operation.
5. Route the discharge hose to the desired discharge location. If necessary, connect additional discharge hoses to direct the discharge to the desired location. Make sure to secure the discharge hose in place to keep it from moving once the Water Pump is turned on. The discharge hose should be kept as short as possible for more efficient operation.

## OPERATION



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

### Prime the Pump

Before starting the engine, fill the Pump with water. To do this:

1. Unthread the Priming Water Filler Cap by turning it counterclockwise.
2. Fill the unit with clean water up to the top of the opening. Replace the Priming Water Filler Cap and tighten securely.

**IMPORTANT!** Always check for water in the Pump Housing before each use. Never attempt to run the Water Pump without the Pump Housing FULL of water. Running the Water Pump without water for an extended period of time will damage the Water Pump and void the Warranty.

Checking and Filling Engine Oil

**NOTICE:** Your Warranty is VOID if the engine's crankcase is not properly filled with oil before each use. Before each use, check the oil level. Engine will not start with low or no engine oil.

3. Make sure the engine is stopped and is level.
4. Close the Fuel Valve.
5. Clean the top of the Dipstick and the area around it. Remove the Dipstick by turning it counterclockwise, and wipe it off with a clean, lint free rag.
6. Full level Full level Reinsert the Dipstick without threading it in and remove it to check the oil level. The oil level should be up to the full level as shown above.
7. If the oil level is at or below the low mark add the appropriate type of oil until the oil level is at the proper level. SAE 10W-30 oil is recommended for general use.
8. Thread the dipstick back in clockwise.

**NOTICE:** Do not run the engine with too little oil.

Engine will shut off if engine oil level is too low.

Checking and Filling Fuel

**WARNING! TO PREVENT SERIOUS INJURY FROM FIRE:**

Fill the fuel tank in a well-ventilated area away from ignition sources. If the engine is hot from use, shut the engine off and wait for it to cool before adding fuel. Do not smoke.

1. Clean the Fuel Cap and the area around it.
2. Unscrew and remove the Fuel Cap.

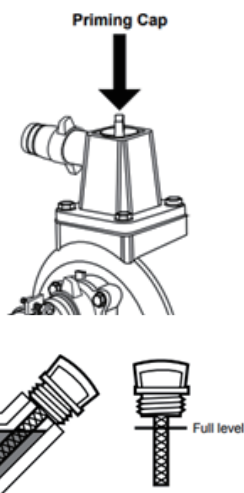
**Note:** Do not use gasoline containing more than 10% ethanol (E10). Do not use E85 ethanol. Add fuel stabilizer to the gasoline or the Warranty is VOID.

**Note:** Do not use gasoline that has been stored in a metal fuel container or a dirty fuel container. It can cause particles to enter the carburetor, affecting engine performance and/or causing damage.

3. If needed, fill the Fuel Tank to about 1 inch under the fill neck of the Fuel Tank with 87 octane or higher unleaded gasoline that has been treated with a fuel stabilizer additive. Follow fuel stabilizer manufacturer's recommendations for use.

4. Then replace the Fuel Cap.

5. Wipe up any spilled fuel and allow excess to evaporate before starting engine. To prevent FIRE, do not start the engine while the smell of fuel hangs in the air.



## Starting the Engine



### Before Starting the Engine

- a. Inspect the equipment and engine.
- b. Fill the engine with the proper amount and type of both stabilizer-treated unleaded gasoline and oil.
1. To start a cold engine, move the Choke to the START position. To restart a warm engine, leave the Choke in the RUN position.
2. Open the Fuel Valve.
3. mSlide the Throttle to 1/3 away from the SLOW position (the "turtle").
4. Turn the Engine Switch on.

**Note:** If engine does not start, check engine oil level. Engine will not start with low or no engine oil.

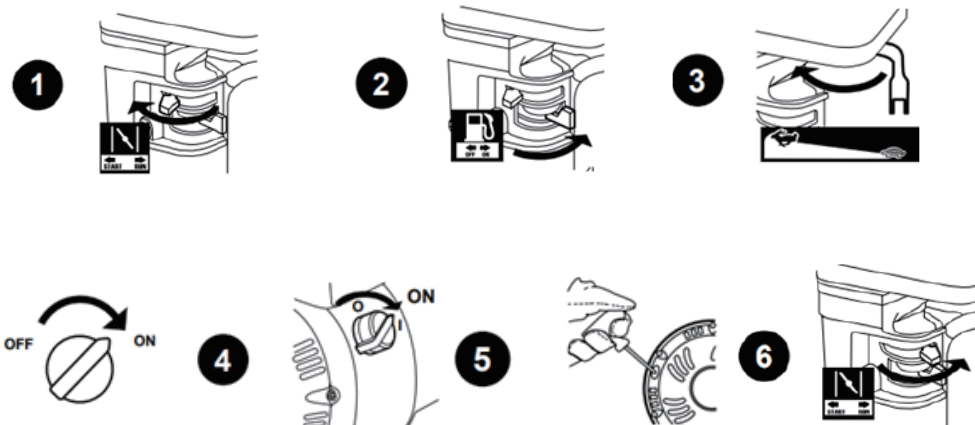
5. Grip the Starter Handle of the Engine loosely and pull it slowly several times to allow the gasoline to flow into the Engine's carburetor. Then pull the Starter Handle gently until resistance is felt. Allow Cable to retract fully and then pull it quickly. Repeat until the engine starts.

**Note:** Do not let the Starter Handle snap back against the engine. Hold it as it recoils so it doesn't hit the engine.

6. Allow the Engine to run for several seconds. Then, if the Choke lever is in the START position, move the Choke Lever very slowly to its RUN position.

**Note:** Moving the Choke Lever too fast could stall the engine.

**IMPORTANT:** Allow the engine to run at no load for five minutes with no load after each start-up so that the engine can stabilize.



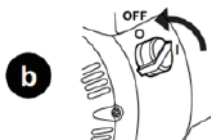
7. Adjust the Throttle as needed.
8. Break-in Period:
  - a. Breaking-in the engine will help to ensure proper equipment and engine operation.
  - b. The operational break-in period will last about 3 hours of use. During this period:
    - Do not apply a heavy load to the equipment.
    - Do not operate the engine at its maximum speed.
  - c. The maintenance break-in period will last about 20 hours of use. After this period:
    - Change the engine oil. Note: Failure to change the oil regularly may damage the engine and void the warranty.

Under normal operating conditions subsequent maintenance follows the schedule explained in the **MAINTENANCE AND SERVICING** section.

## Stopping the Engine

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1. To stop the engine in an emergency, turn the Engine Switch off.
2. Under normal conditions, use the following procedure:
  - a. Slide the Throttle to SLOW (the "turtle")
  - b. Turn the Engine Switch off.



## MAINTENANCE



### WARNING

**TO PREVENT SERIOUS INJURY FROM ACCIDENTAL STARTING:** Turn the Combination Switch of the equipment to its "OFF" position, wait for the engine to cool, and disconnect the spark plug cap before performing any inspection, maintenance, or cleaning procedures. **TO PREVENT SERIOUS INJURY FROM EQUIPMENT FAILURE:** Do not use damaged equipment. If abnormal noise, vibration, or excess smoking occurs, have the problem corrected before further use. Follow all service instructions in this manual. The engine may fail critically if not serviced properly.



Many maintenance procedures, including any not detailed in this manual, will need to be performed by a qualified technician for safety. If you have any doubts about your ability to safely service the equipment or engine, have a qualified technician service the equipment instead.

## Cleaning, Maintenance, and Lubrication Schedule

**NOTE:** This maintenance schedule is intended solely as a general guide. If performance decreases or if equipment operates unusually, check systems immediately. The maintenance needs of each piece of equipment will differ depending on factors such as duty cycle, temperature, air quality, fuel quality, and other factors.

**NOTE:** The following procedures are in addition to the regular checks and maintenance explained as part of the regular operation of the engine and pump.

procedure	Before Each use	Monthly or every 8 hr. of use	Every 3 mo. or 50 hr. of use	50 hr. of use Every 6 mo. or 100 hr. of use	yearly or every 300 hr. of use	Every 2 years
Brush off outside of engine	✓	✓	✓	✓	✓	✓
Check engine oil level	✓	✓	✓	✓	✓	✓
Check air filter	✓		✓	✓	✓	✓
Change engine oil				✓	✓	✓
Clean/replace air cleaner			✓*	✓	✓	✓
Check and clean spark plug				✓	✓	✓
1. Check/adjust idle speed 2. Check/adjust valve clearance 3. Clean fuel tank, strainer and carburetor 4. Clean carbon build-up from combustion chamber					✓**	✓**
Replace fuel line if necessary						✓**

\*Service more frequently when used in dusty areas.

\*\*These items should be serviced by a qualified technician.

## PUMP TROUBLESHOOTING

problem	possible Causes	probable Solutions
Pump overheats	<ol style="list-style-type: none"> <li>1. Incorrect lubrication or not enough lubrication.</li> <li>2. Worn parts.</li> </ol>	<ol style="list-style-type: none"> <li>1. Lubricate using recommended oil or grease according to directions.</li> <li>2. Have qualified technician inspect internal mechanism and replace parts as needed.</li> </ol>
Unit stalls	<ol style="list-style-type: none"> <li>1. Low engine speed.</li> <li>2. Severely clogged air filter.</li> <li>3. Improper lubrication.</li> </ol>	<ol style="list-style-type: none"> <li>1. Qualified technician should increase no load speed to <math>3,800 \pm 100</math> RPM by adjusting pressure switch.</li> <li>2. Clean air filter.</li> <li>3. Check for proper oil level.</li> </ol>
Pump does not pump water	<ol style="list-style-type: none"> <li>1. Pump is not primed.</li> <li>2. Intake Strainer clogged.</li> <li>3. Air leak at intake connector.</li> <li>4. Hose leaks.</li> <li>5. Suction hose has collapsing wall.</li> <li>6. Hose has too small diameter.</li> <li>7. Pump is too high above water surface.</li> </ol>	<ol style="list-style-type: none"> <li>1. Prime Pump.</li> <li>2. Clean Intake Strainer or replace if damaged.</li> <li>3. Replace Coupling Gasket or tighten clamp.</li> <li>4. Replace hose.</li> <li>5. Use hose with non-collapsible wall.</li> <li>6. Use hose with diameter 2" or greater.</li> <li>7. Locate Pump at a lower level so it doesn't have to work so hard to lift the water</li> </ol>
Low Pump Output	<ol style="list-style-type: none"> <li>1. Suction hose collapsed, damaged, too long or diameter is too small.</li> <li>2. Air leak at connector.</li> <li>3. Strainer clogged.</li> <li>4. Discharge hose damaged, too long or diameter too small.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace or adjust suction hose.</li> <li>2. Replace Coupling Gasket or tighten Clamp.</li> <li>3. Clean Strainer.</li> <li>4. Replace or adjust Discharge Hose.</li> </ol>

### ENGINE TROUBLESHOOTING

problem	possible Causes	probable Solutions
Engine will not start	<b>FUEL RELATED:</b> <ol style="list-style-type: none"> <li>1. No fuel in tank or fuel valve closed.</li> <li>2. Choke not in START position, cold engine.</li> <li>3. Gasoline with more than 10% ethanol used. (E15, E20, E85, etc.)</li> <li>4. Low quality or deteriorated, old gasoline.</li> <li>5. Carburetor not primed.</li> <li>6. Dirty fuel passageways.</li> <li>7. Carburetor needle stuck. Fuel can be smelled in the air.</li> <li>8. Too much fuel in chamber. This can be caused by the carburetor needle sticking.</li> <li>9. Clogged Fuel Filter.</li> </ol>	<b>FUEL RELATED:</b> <ol style="list-style-type: none"> <li>1. Fill fuel tank with fresh 87+ octane stabilizertreated unleaded gasoline and open fuel valve. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.).</li> <li>2. Move Choke to START position.</li> <li>3. Clean out ethanol rich gasoline from fuel system. Replace components damaged by ethanol. Use fresh 87+ octane stabilizertreated unleaded gasoline only. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.).</li> <li>4. Use fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.).</li> <li>5. Pull on Starter Handle to prime.</li> <li>6. Clean out passageways using fuel additive. Heavy deposits may require further cleaning.</li> <li>7. Gently tap side of carburetor float chamber with screwdriver handle.</li> <li>8. Turn Choke to RUN position. Remove spark plug and pull the start handle several times to air out the chamber. Reinstall spark plug and set Choke to START position.</li> <li>9. Replace Fuel Filter.</li> </ol>
	<b>IGNITION (SPARK) RELATED:</b> <ol style="list-style-type: none"> <li>1. Spark plug cap not connected securely.</li> <li>2. Spark plug electrode wet or dirty.</li> <li>3. Incorrect spark plug gap.</li> <li>4. Spark plug cap broken.</li> <li>5. Incorrect spark timing or faulty ignition system.</li> </ol>	<b>IGNITION (SPARK) RELATED:</b> <ol style="list-style-type: none"> <li>1. Connect spark plug cap properly.</li> <li>2. Clean spark plug.</li> <li>3. Correct spark plug gap.</li> <li>4. Replace spark plug cap.</li> <li>5. Have qualified technician diagnose/ repair ignition system.</li> </ol>
	<b>COMPRESSION RELATED:</b> <ol style="list-style-type: none"> <li>1. Cylinder not lubricated. Problem after long storage periods.</li> <li>2. Loose or broken spark plug. (Hissing noise will occur when trying to start.)</li> <li>3. Loose cylinder head or damaged head gasket. (Hissing noise will occur when trying to start.)</li> <li>4. Engine valves or tappets mis-adjusted or stuck.</li> </ol>	<b>COMPRESSION RELATED:</b> <ol style="list-style-type: none"> <li>1. Pour tablespoon of oil into spark plug hole. Crank engine a few times and try to start again.</li> <li>2. Tighten spark plug. If that does not work, replace spark plug. If problem persists, may have head gasket problem, see #3.</li> <li>3. Tighten head. If that does not remedy problem, replace head gasket.</li> <li>4. Have qualified technician adjust/ repair valves and tappets.</li> </ol>
	<b>ENGINE OIL RELATED:</b> <ol style="list-style-type: none"> <li>1. Low engine oil.</li> <li>2. Engine mounted on slope, triggering low oil shutdown.</li> </ol>	<b>ENGINE OIL RELATED:</b> <ol style="list-style-type: none"> <li>1. Fill engine oil to proper level. Check engine oil before EVERY use.</li> <li>2. Operate engine on level surface. Check engine oil level.</li> </ol>

## PUMP TROUBLESHOOTING

problem	possible Causes	probable Solutions
Engine misfires	<ol style="list-style-type: none"> <li>1. Spark plug cap loose.</li> <li>2. Incorrect spark plug gap or damaged spark plug.</li> <li>3. Defective spark plug cap.</li> <li>4. Old or low quality gasoline.</li> <li>5. Incorrect compression.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check cap and wire connections.</li> <li>2. Re-gap or replace spark plug.</li> <li>3. Replace spark plug cap.</li> <li>4. Use only fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.).</li> <li>5. Diagnose and repair compression. (Use Engine will not start: COMPRESSION RELATED section.)</li> </ol>
Engine stops suddenly	<ol style="list-style-type: none"> <li>1. Fuel tank empty or full of impure or low quality gasoline.</li> <li>2. Low oil shutdown.</li> <li>3. Defective fuel tank cap creating vacuum, preventing proper fuel flow.</li> <li>4. Faulty magneto.</li> <li>5. Disconnected or improperly connected spark plug cap.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.).</li> <li>2. Fill engine oil to proper level. Check engine oil before EVERY use.</li> <li>3. Test/replace fuel tank cap.</li> <li>4. Have qualified technician service magneto.</li> <li>5. Secure spark plug cap.</li> </ol>
Engine stops when under heavy load	<ol style="list-style-type: none"> <li>1. Dirty air filter</li> <li>2. Engine running cold.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean element.</li> <li>2. Allow engine to warm up prior to operating equipment.</li> </ol>
Engine knocks	<ol style="list-style-type: none"> <li>1. Old or low quality gasoline.</li> <li>2. Engine overloaded.</li> <li>3. Incorrect spark timing, deposit buildup, worn engine, or other mechanical problems.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.).</li> <li>2. Do not exceed equipment's load rating.</li> <li>3. Have qualified technician diagnose and service engine.</li> </ol>
Engine backfires  After sudden impact, engine will run, but equipment will not operate	<ol style="list-style-type: none"> <li>1. Impure or low quality gasoline.</li> <li>2. Engine too cold.</li> <li>3. Intake valve stuck or overheated engine.</li> <li>4. Incorrect timing.</li> </ol> <p>Shaft key or other shear pin broken by impact to disconnect engine and limit damage.</p>	<ol style="list-style-type: none"> <li>1. Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.).</li> <li>2. Use cold weather fuel and oil additives to prevent backfiring.</li> <li>3. Have qualified technician diagnose and service engine.</li> <li>4. Check engine timing.</li> </ol> <p>Have qualified technician check and replace broken shaft key or other shear pins.</p>



# CE DECLARATION OF CONFORMITY

WE  
SUZHOU TOLSEN TOOLS CO.,LTD.  
198 HUASHAN ROAD, ZHANGJIAGANG,  
JIANGSU, CHINA

Declare that the product  
79981/79982 Gasoline water pump

Complies with the essential health and safety requirements of the following

Directices:  
EC Council Directive 2006/42/EC  
Machinery

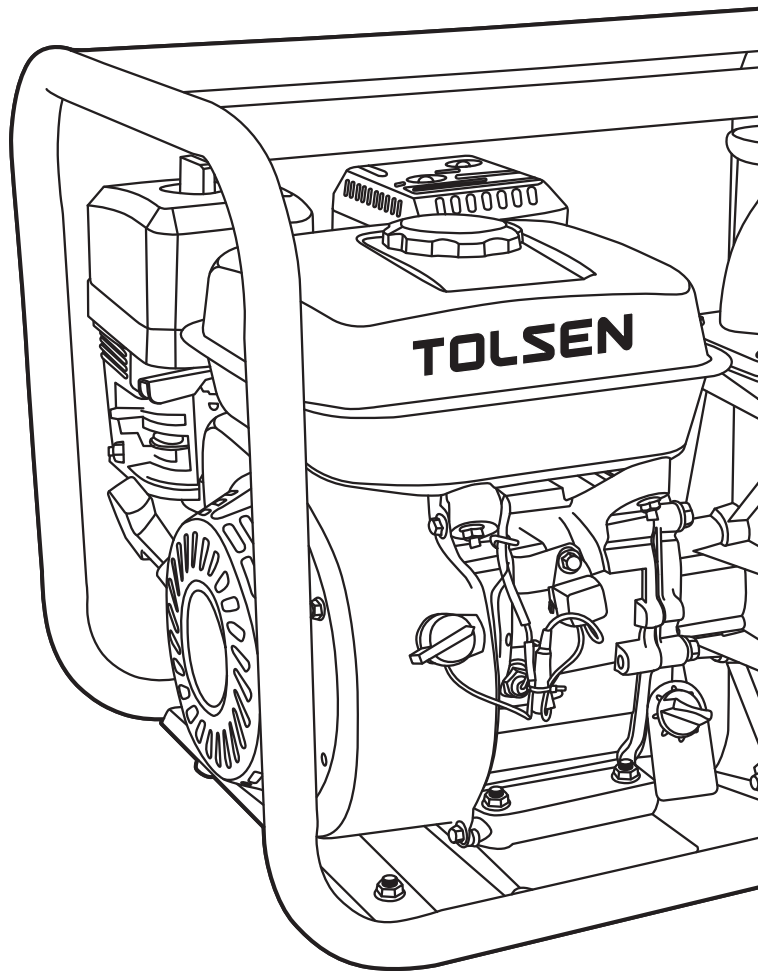
Standards and technical specifications referred to:  
EN 809:1998+A1:2009; EN 809:1998+A1/AC  
Pumps and pump units for liquids - Common safety requirements

Authorised Signatory and technical file holder

Signed for and on behalf of:  
SUZHOU TOLSEN TOOLS CO.,LTD.  
198 HUASHAN ROAD, ZHANGJIAGANG,  
JIANGSU, CHINA  
ZHANG XINGYU  
Group Quality Director

on:26/05/2020





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TOOLS CO.,LTD.**

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