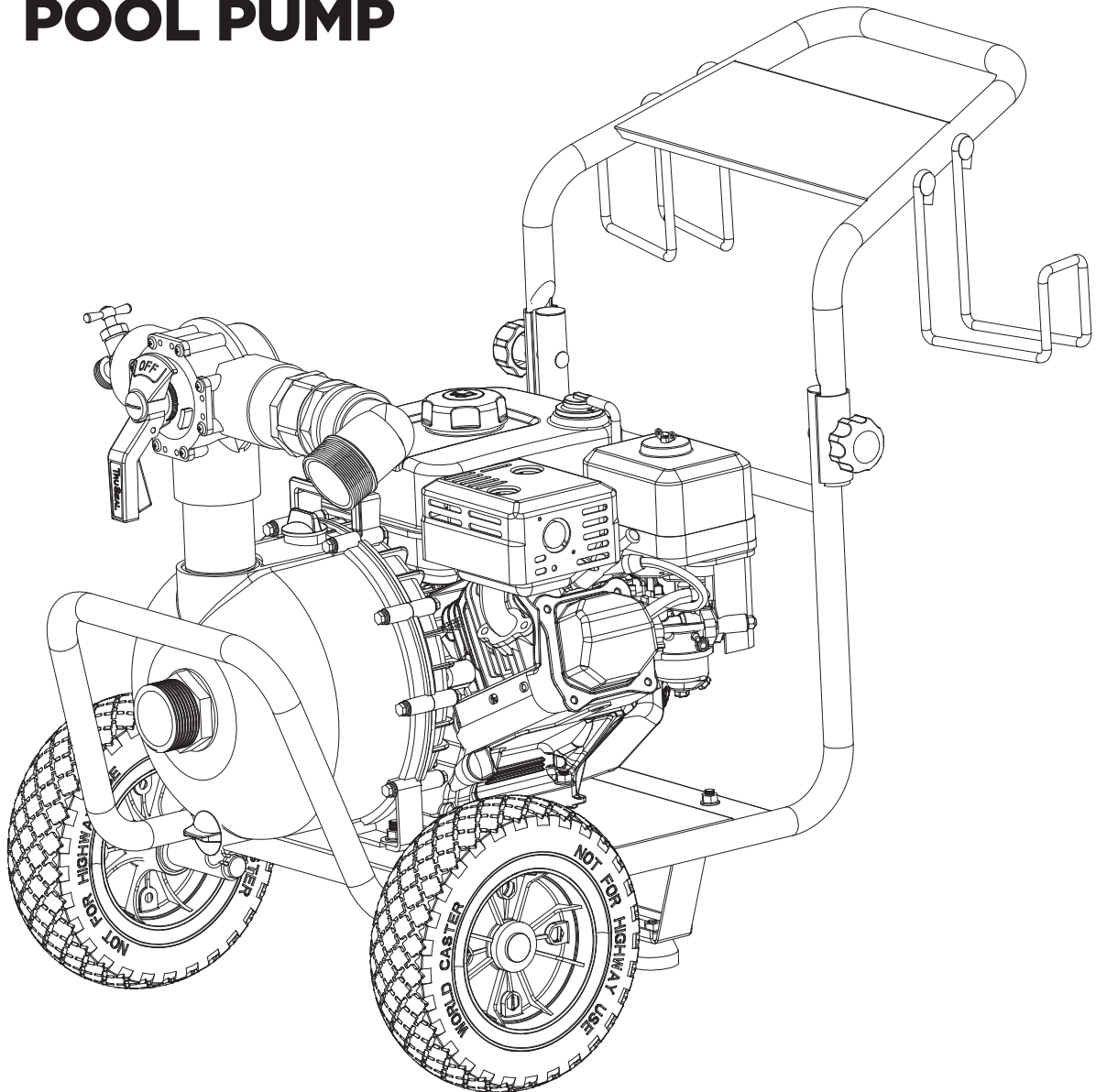


# FIRE BOSS™

## 2" FIRE PREVENTION \* POOL PUMP

Model PAPFP20



Read and understand all provided literature before use. Failure to do so could result in serious injury.

Warning: The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

\* CAUTION: Not Intended for Fighting Active Fire.

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## Introduction

Thank you for choosing the Fire Boss Fire Prevention Pool Pump. This operator's manual provides instruction on how to operate and use your this product safely and correctly; be sure to read and understand this operator's manual before using your product. ANY questions, please phone 800-636-8866 M-F BEFORE using your product.

All details and images in this operator's manual are believed to be accurate at the time of publication.

Fire Boss reserves the right to make updates to this manual at any time.

Please contact AquaPlanet at **800-636-8866** or **theaquaplanet.com** for the latest updates.

This operator's manual is a permanent part of your product. If this product is resold, kindly include this operator's manual with the fire pump.

## Safety Warnings and Notices

### WARNING: Save This Operator's Manual for Future Reference

This operator's manual contains important information regarding the safety, operation, maintenance, and storage of this product. Before use, read carefully and understand all cautions, warnings, instructions, and product labels. Failure to do so could result in serious personal injury and/or property damage.

## Safety Definitions

The words DANGER, WARNING, CAUTION, and NOTICE are used throughout this manual to highlight important information. Make sure that the meaning of this safety information is known to all who operate, perform maintenance on, or are near the product.

 This safety alert symbol appears with most safety statements. It means to pay attention and be alert, your safety is involved! Please read and abide by the message that follows the safety alerts symbol.

### DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

### WARNING

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

### CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

### NOTICE

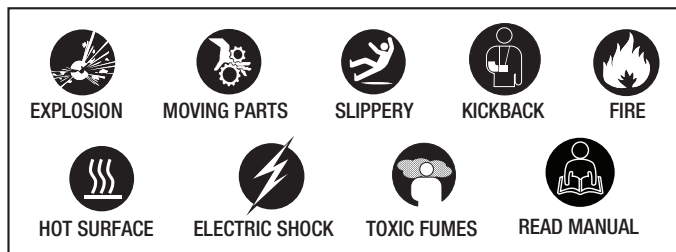
Failure to follow the instruction may result in the damage to your product and other property.

## Safety Symbols

Follow all safety information contained in this operator's manual and on the product.

# Safety Warnings and Notices

## HAZARD SYMBOLS AND MEANINGS



## ⚠ WARNING



Use of fire pump can create puddles and slippery surfaces.

- Operate fire pump from a stable surface.
- Ovoid operating the fire pump on slippery surfaces.
- Place safe distance from the edge of pool.

## ⚠ WARNING



Running engine gives off carbon monoxide, an odorless, colorless, poison gas.

Breathing carbon monoxide can cause headache, fatigue, dizziness, vomiting, confusion, seizures, nausea, fainting or death.

- Operate fire pump **ONLY** outdoors.
- Keep exhaust gas from entering a confined area through windows, doors, ventilation intakes, or other openings.
- **DO NOT** start or run engine indoors or in an enclosed area, even if windows and doors are open.

## ⚠ WARNING



### When Adjusting or Making Repairs to Your Fire Pump

- Disconnect the spark plug wire from the spark plug and place the wire where it cannot contact the spark plug.

### When Testing for Engine Spark

- Use approved spark plug tester.
- **DO NOT** check for spark with spark plug removed.
- Unintentional sparking can result in fire or electric shock.

## ⚠ WARNING



Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death.



### When Adding or Draining Fuel

- Turn fire pump **OFF** and let it cool at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Fill or drain fuel tank outdoors.
- **DO NOT** overfill tank. Allow space for fuel expansion.
- If fuel spills, wait until it evaporates before starting engine.
- Keep fuel away from sparks, open flames, pilot lights, heat, and other ignition sources.
- **DO NOT** light a cigarette or smoke, vape anything.

## ⚠ WARNING



Operation of this equipment may create sparks that can start fires around dry vegetation.

This unit is equipped with a spark arrester to prevent discharge of hot particles from the engine. In some areas, it is illegal to operate an engine without a spark arrester.

## ⚠ WARNING



Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death.



### When Starting Equipment

- Ensure spark plug, muffler, fuel cap, and air filter are in place.
- **DO NOT** crank the engine with the spark plug removed.

### When Operating Equipment

- **DO NOT** pump flammable liquids, such as fuel or fuel oils.
- **DO NOT** tip engine an angle this may cause a fuel spill.
- Secure fire pump. Forces produced by hoses may cause unit to tip over.

### When Transporting or Repairing Equipment

- Transport/repair with fuel tank **EMPTY**.
- Disconnect spark plug wire.

### When Storing Fuel or Equipment with Fuel in Tank

- Store away from furnaces, stoves, water heaters, clothes dryers, or other appliances that have pilot light or other ignition source because they can ignite fuel vapors.

## Safety Warnings and Notices

### WARNING



Starter cord kickback (rapid retraction) can result in bodily injury. Kickback will pull hand and arm toward the engine faster than you can let go.

Broken bones, fractures, bruises, or sprains could result. Keep hands and body clear from discharge of pump.

- When starting engine, pull cord slowly until resistance is felt and then pull rapidly to avoid kickback.
- Close the discharge nozzle before starting engine to avoid hose from whipping.

### WARNING



Contact with muffler area can result in serious burns. Exhaust heat/gases can ignite combustibles, structures or damage fuel tank causing a fire.



- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow equipment to cool before touching.
- Keep at least 5 feet (1.5 m) of clearance on all sides of fire pump including overhead.

### WARNING



Recoil starter and other rotating parts can entangle hands, hair, clothing, or accessories.

- NEVER place hands or body parts inside of running fire pump or hoses.
- Never operate fire pump without protective factory housing or covers.
- DO NOT wear loose clothing or anything that may be caught in the recoil starter or other rotating parts.
- Tie up long hair and remove jewelry.
- Use safety goggles when using the fire pump.

### CAUTION

Excessively high operating speeds increase risk of injury and damage to fire pump.

Excessively low speeds impose a heavy load.

- DO NOT tamper with the governor speed.
- DO NOT modify the fire pump.
- DO NOT allow unqualified persons or children to operate or service fire pump.

### NOTICE

**Improper treatment of fire pump can damage it and shorten its life.**

- If you have questions about intended use, ask dealer or contact AquaPlanet.
- Be sure pump chamber is filled with water “Primed” before starting the engine.

#### **NEVER RUN FIRE PUMP WITHOUT PRIMING.**

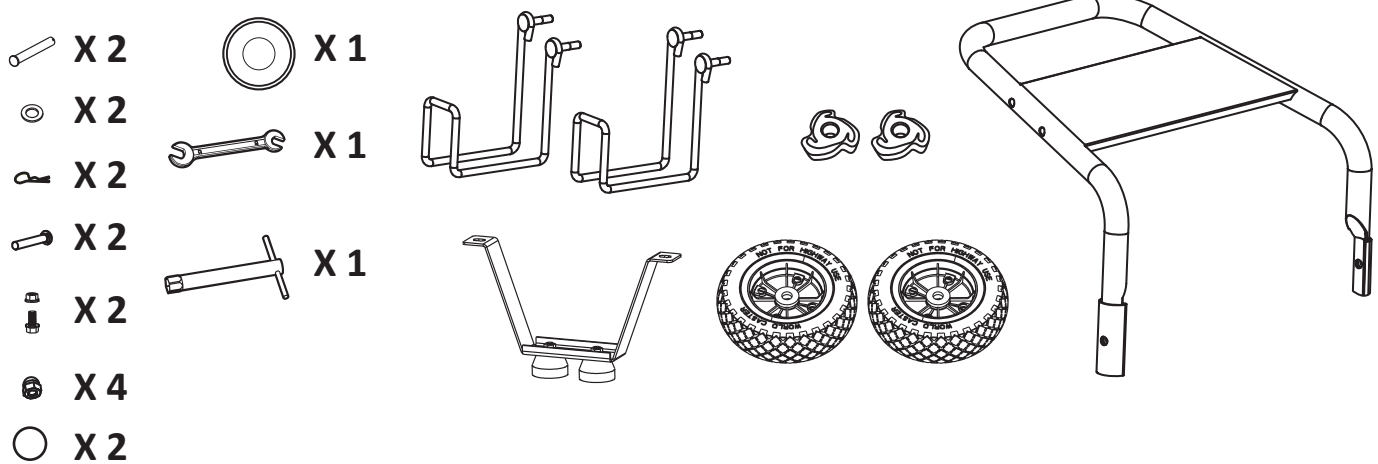
- Use a non-collapsible hose on the suction side of the pump.
- Use fire pump only for intended applications.
- Pumping sea water, beverages, acids, chemical solutions, or any other liquid that promotes corrosion can damage the pump.
- Ensure all connections are water tight.
- DO NOT obstruct, or crimp the suction or discharge hose in any way.
- NEVER operate fire pump without foot valve connected to end of suction hose.
- NEVER allow vehicles to drive over hoses.
- Secure fire pump to avoid equipment movement.
- Keep equipment away from edge of river or lake where it could cause the bank to collapse.
- NEVER operate a fire pump with broken or missing parts, or without protective housing or covers.
- NEVER by-pass any safety device on this fire pump.
- NEVER move fire pump by pulling on hoses.
- Check fuel system for leaks or signs of deterioration, such as chafed or spongy hose, loose or missing clamps, or damaged tank or cap. Correct all defects before operating fire pump.

### WARNING

**NEVER direct nozzle discharge at any living thing!**

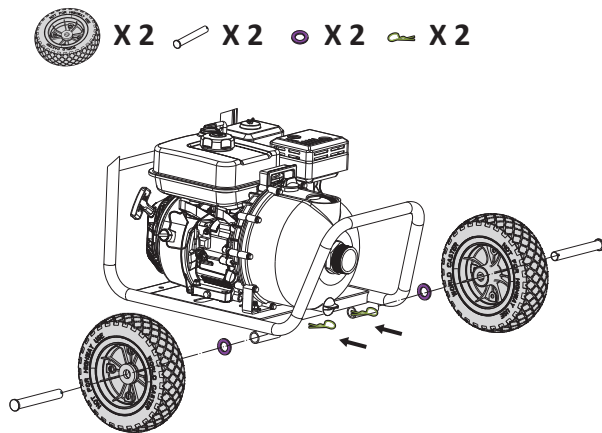
# Assembly

## Parts Included



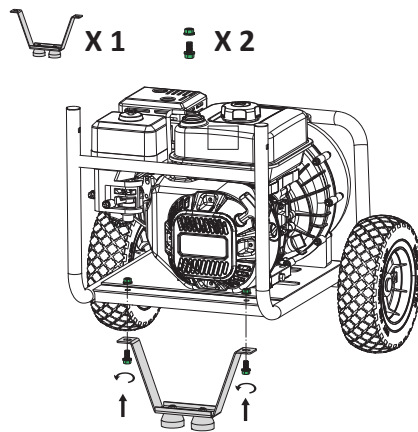
## Step One

### Wheel Assembly



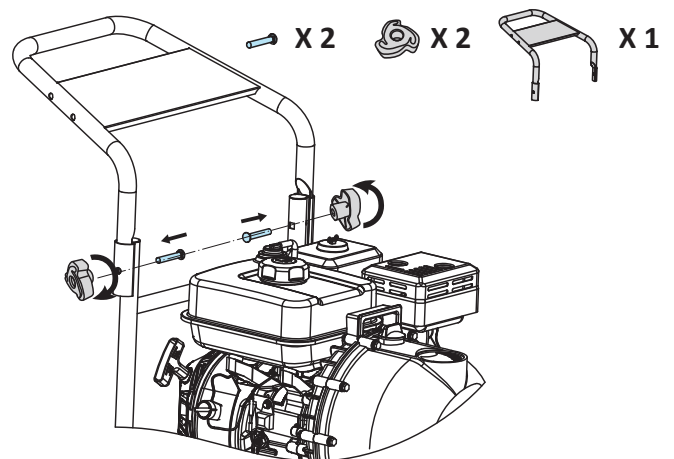
## Step Two

### Foot Assembly



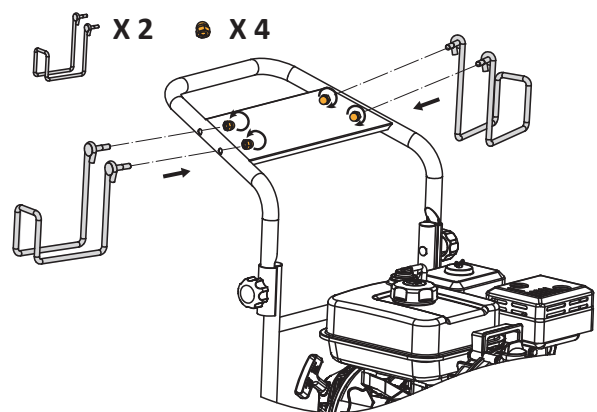
## Step Three

### Upper Frame Assembly



## Step Four

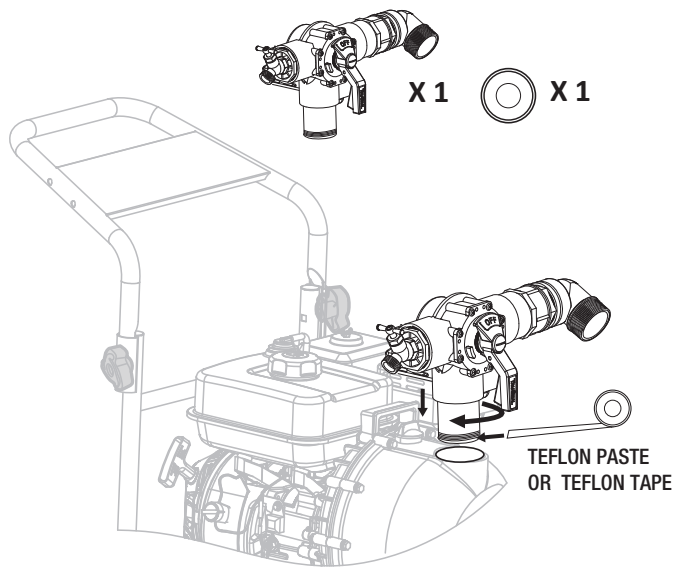
### Hose Hooks Assembly



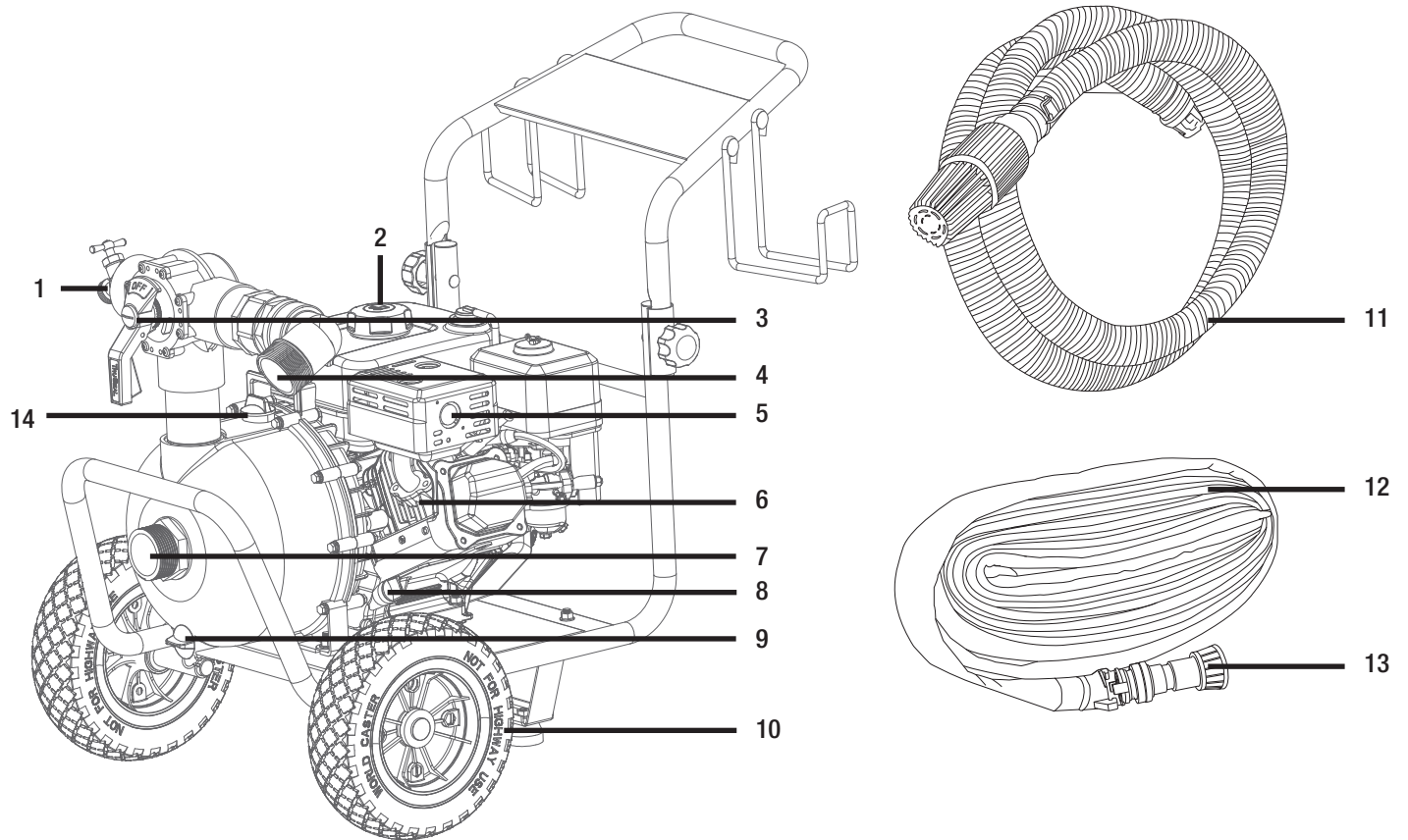
# Assembly

## Step Five

### Discharge Assembly



## Part Identification



1. Garden Hose Bib (For Garden Hose and Fire Retardant Attachment)
2. Gas Tank (1 Gallon Capacity)
3. Bypass Valve
4. 2 Inch Output
5. Spark Arrestor
6. 223cc Engine
7. 2 Inch Input
8. Oil Fill Plug

9. Pump Drain Cap
10. 10 Inch Pneumatic Wheels
11. 2 Inch, 12 Foot Suction Hose
12. 2 Inch, 50 Foot Discharge Hose
13. Fire Nozzle
14. Priming Port

# Operation

## Preparation

This fire pump ships from our factory without oil; the engine must be properly filled with oil before operating.

## Add Engine Oil

### ⚠ CAUTION

DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the fire pump from failing to follow these instructions will void your warranty.

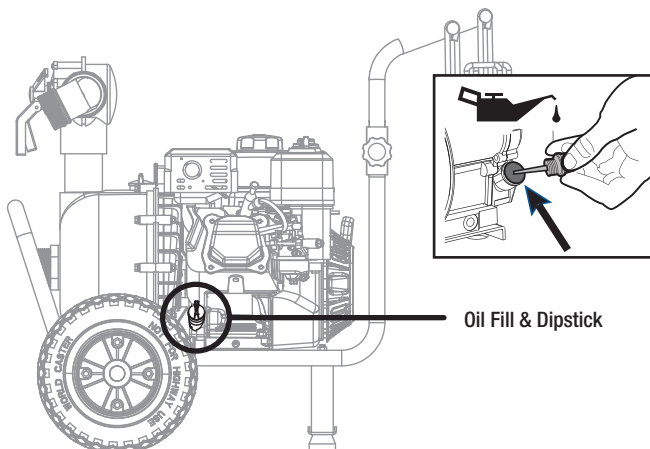
### NOTICE

Failure to follow this instruction may result in the damage to your fire pump and other property.

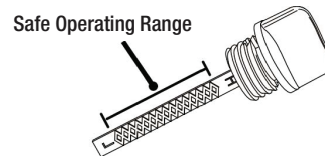
If running the fire pump in extreme temperatures, refer to the following chart for recommended oil type.

| Recommended Engine Oil Type |       |       |      |     |      |      |      |      |  |
|-----------------------------|-------|-------|------|-----|------|------|------|------|--|
|                             |       |       |      |     |      |      |      |      |  |
|                             |       |       |      |     |      |      |      |      |  |
|                             |       |       |      |     |      |      |      |      |  |
|                             |       |       |      |     |      |      |      |      |  |
|                             |       |       |      |     |      |      |      |      |  |
| °F                          | -20   | 0     | 20   | 40  | 60   | 80   | 100  | 120  |  |
| °C                          | -28.9 | -17.8 | -6.7 | 4.4 | 15.6 | 26.7 | 37.8 | 48.9 |  |
| Ambient temperature         |       |       |      |     |      |      |      |      |  |

1. Place the fire pump on a solid, flat, level surface.
2. On the right side of the fire pump you find the oil fill & dipstick



5. Check engine oil level before each use, and add as needed.



### NOTICE

Residual oil from the factory may remain in the engine, add oil slowly to prevent overfilling of the engine.

Once the oil has been added, oil level should appear 1-2 threads below the fill hole. DO NOT screw in the dipstick while checking.

### NOTICE

Check oil level often during the break-in period.

### ⚠ CAUTION

This engine is equipped with a low oil shut-off and will stop when the oil level in the crankcase falls below a critical level.

### NOTICE

The first 5 hours of run time are the break-in period for the fire pump. After the 5-hour break-in period, change the oil.

### NOTICE

Synthetic oil may be used after the 5-hour initial break-in period. Using synthetic oil does not extend the recommended oil change interval. Full synthetic 5w-30 oil will aid in starting in cold < 41° F (5° C) temperatures.

# Operation

## Add Gasoline

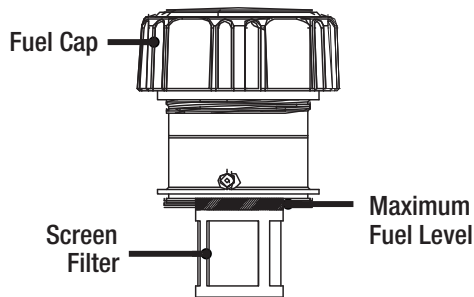
### ⚠ WARNING



TO PREVENT SERIOUS INJURY FROM FIRE:

Fill the gasoline 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 gasoline. Do not smoke, vape anything.

1. Make sure the fire pump is on a solid, flat, level surface.
2. Unscrew the fuel cap and set it aside.
3. Slowly add gasoline to the fuel tank. Be careful not to overfill.



4. Replace the fuel cap and wipe up any spilled gasoline with a dry cloth then remove the cloth from the area.

### ⚠ DANGER

Do not overfill the gasoline tank. Overfilling can result in a fire, explosion, or death.

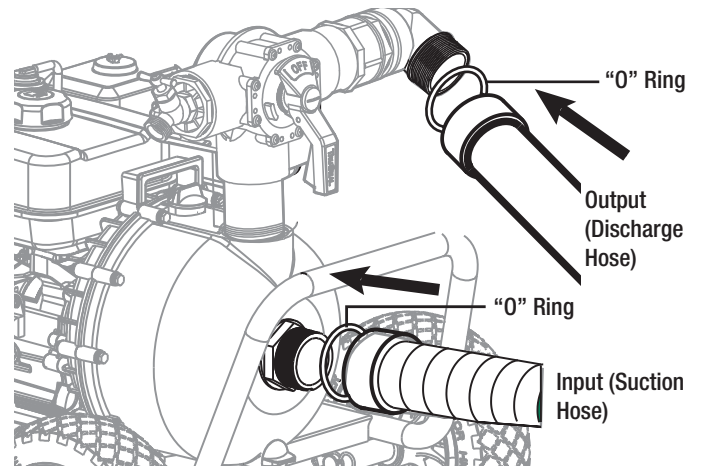
### ⚠ WARNING

Gasoline can expand. Do not fill the gasoline tank to the top. Leave a minimum of 1.5 inches of open space. Gasoline fumes are explosive. Do not fill the tank near an open flame. Immediately clean up any gasoline spills, before starting the engine.

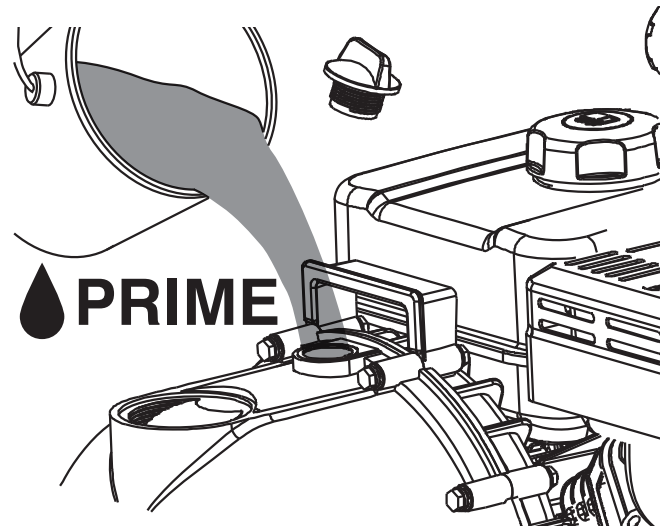
- To ensure that the fire pump runs smoothly use only FRESH GASOLINE.
- Never use old gasoline.
- Avoid getting dirt or water in the gasoline tank.
- Gasoline WILL age in the tank and make it hard to start the fire pump in the future.
- Never store fire pump for extended periods of time with gasoline in the tank.

## Starting the Fire Pump

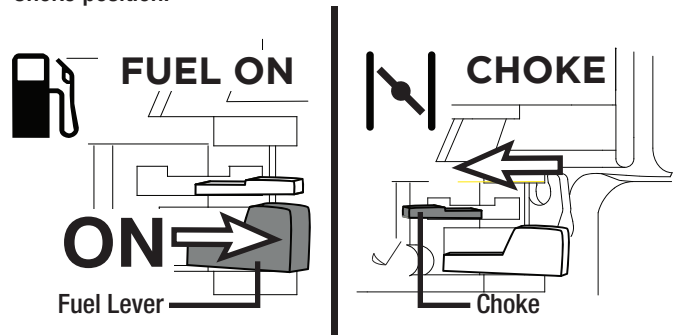
Connect the output hose and the input hose to the fire pump.



Remove the Priming Cap on top of the fire pump as shown below. Fill with clean water.

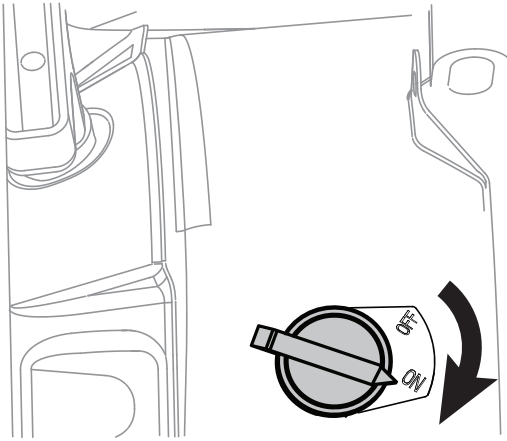


Turn Fuel Lever to the On Position and Put Choke Lever on Choke position.

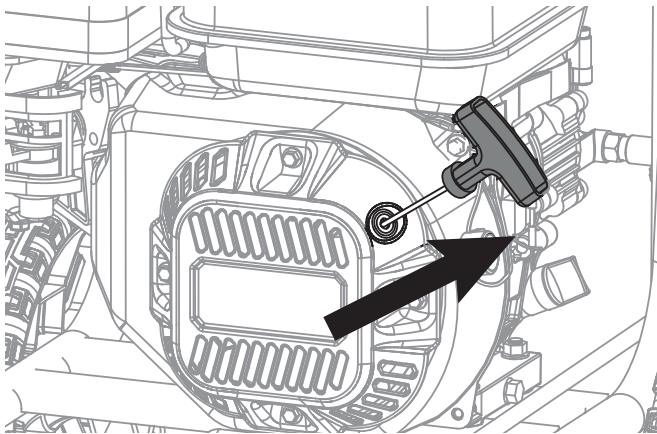


## Operation

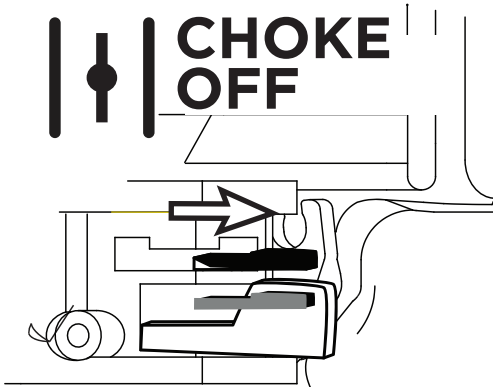
Set the On/Off Switch to "ON"



When starting engine, pull cord slowly until resistance is felt and then pull swiftly to avoid kickback; repeat until engine starts.

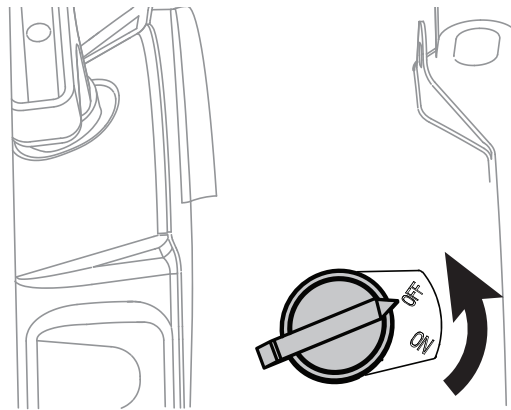


After the engine has been running for a few seconds slowly put the Choke Lever on the OFF position.

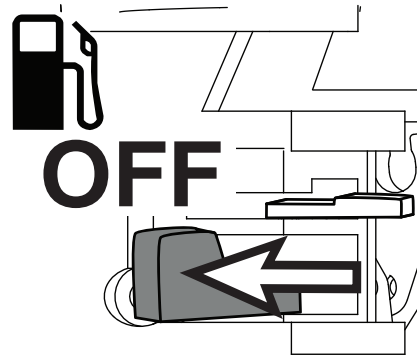


## Turning the Fire Pump OFF.

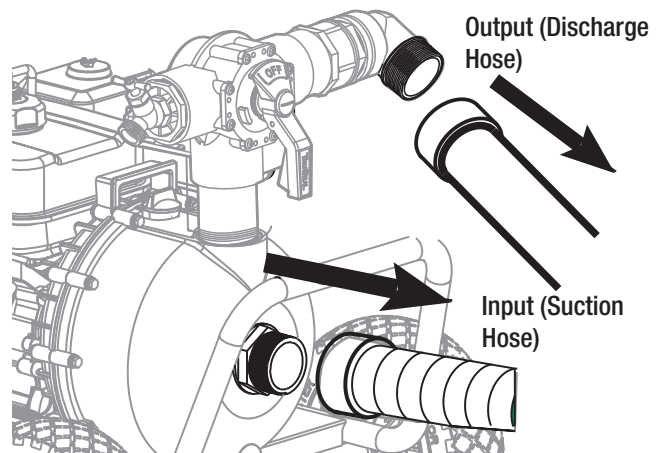
Set the On/Off Switch to "Off"



Move Fuel Lever Off.



Disconnect the output hose and the input hose.



# Operation

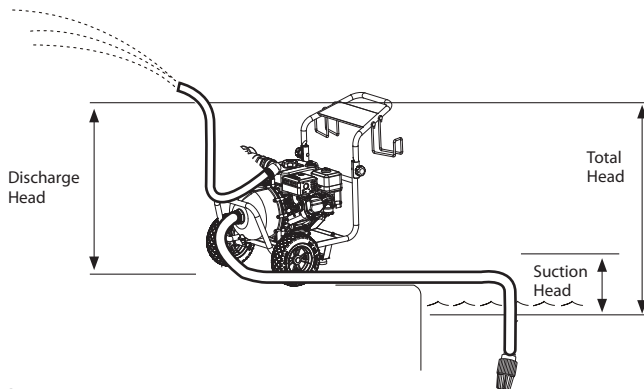
## What is “Suction Head”?

Suction Head is the vertical distance between the center of the fire pump and the surface of the liquid on the suction side of the fire pump. This may also be referred to as “suction lift”. The atmospheric pressure of 14.7 PSI at sea level limits suction head to be less than approximately 26 feet for any pump.

Discharge Head is the vertical distance between the fire pump’s discharge port and the point of discharge or is the liquid surface if the hose is submerged or pumping into the bottom of a tank. Total Head is the sum of the suction head value plus the discharge head value.

As the water suction height increases, pump discharge height decreases proportionally. The length, type, and size of the suction and discharge hoses can also significantly affect pump output.

It is important for the suction height to be as short as possible. This will decrease the priming time and improve pump performance by increasing the discharge head.



## Operating Location

For best pump performance, locate the fire pump on a flat, level surface reasonably close to the water to be pumped. Secure fire pump to avoid tipping over.

## NOTICE

NEVER direct the water discharge at walls, windows, doors, electrical apparatus, or motor vehicles. To soak your roof, direct the water discharge upward at an angle and allow it to fall on your roof. NEVER direct high pressure water at your roof.

## WARNING



Fuel and its vapors are extremely flammable and explosive.



Fire or explosion can cause severe burns or death.

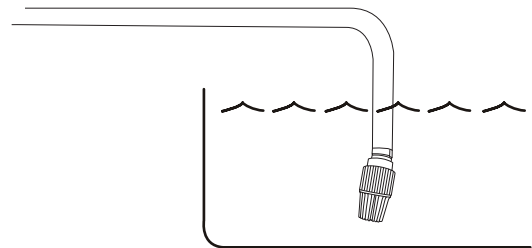
- This water pump is not for use in mobile equipment or marine applications.
- To prevent fuel spillage, or engine damage, NEVER tip the engine or equipment at an angle.
- Secure water pump. Forces produced by hoses may cause unit to tip over.

## NOTICE

Improper treatment of fire pump can damage it and shorten its life.

- Be sure pump is filled with water before starting the engine.
- NEVER run fire pump without priming.

Place foot valve into water to be pumped. Foot valve must be fully submerged.



## NOTICE

- NEVER operate pump without foot valve connected to the end of the suction hose.
- Keep strainer out of sand or silt.
- DO NOT let pump run dry or damage can occur.

Once your suction hose is in the water you can start the fire pump as per the starting instructions in the previous pages.

**IMPORTANT:** It may take a few seconds for the fire pump to begin pumping water.

## Operation

### WARNING

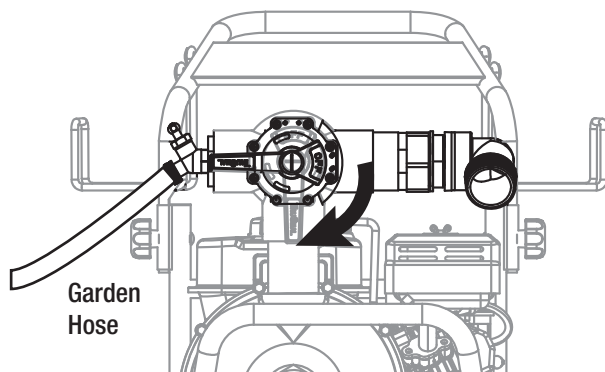


Contact with muffler area can result in serious burns. Exhaust heat/gases can ignite combustibles, structures and other things.

- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow equipment to cool before touching.
- Keep at least 5 feet (1.5 m) of clearance on all sides of fire pump including overhead.

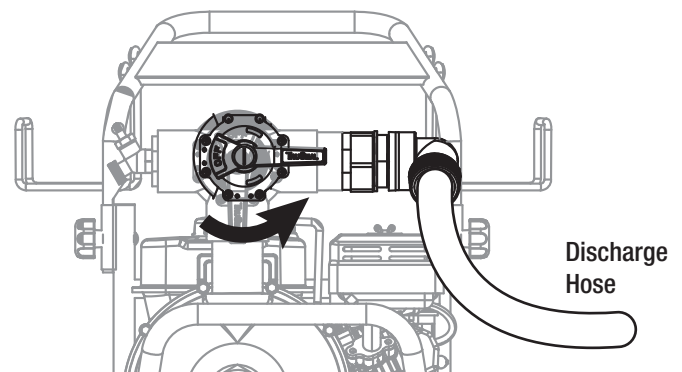
### Bypass Valve

To use the Garden Hose Bib, connect your garden hose to the hose bib, and rotate the Bypass Valve clockwise, to 9 o'clock position "In-line with the garden hose bib."

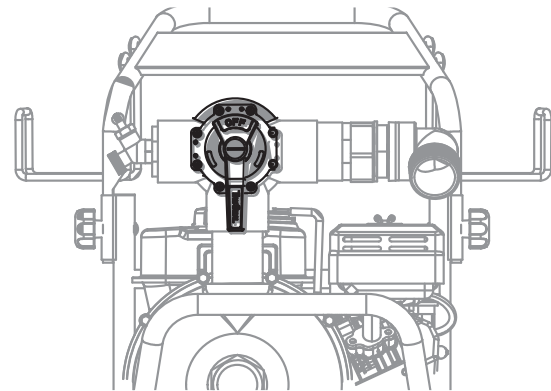


To use the Discharge Hose;

1. Start with the engine Off.
2. Connect the discharge hose per previous instructions.
3. Rotate the Bypass handle clockwise to the 3 o'clock position. "In-line with discharge port"
4. Completely unroll the discharge hose in a straight line.
5. Remove all kinks and folds, and make sure the nozzle is completely closed.
6. Connect the suction hose, and fully submerge in water, per previous instructions.
7. Prime the pump per previous instructions.
8. Start the engine per previous instructions.
9. Slowly open the Choke, and allow the engine to stabilize, "less than a minute"



After use, rotate the Bypass Valve to the 6 o'clock Off Position.



After use, shut the fire pump off per previous instructions.

### NOTICE

Remove drain plug, flush pump with clean water, and drain all water from pump.

It is recommended that the fire pump is started and tested quarterly ( every 3 months) to ensure the engine and the pump remain fully operational and ready for use at all times.

## Specifications

---

|                         |             |
|-------------------------|-------------|
| Engine Size             | 223cc       |
| Fuel Capacity           | 1 Gallon    |
| Start                   | Recoil      |
| Max Flow                | 164 GPM     |
| Max Pressure            | 65 PSI      |
| Total Lift              | 74 ft.      |
| Suction Lift            | 25 ft.      |
| Pump Type               | Centrifugal |
| Low Oil Shutdown        | Yes         |
| Suction Connection      | 2" MNPT     |
| Discharge Connection    | 2" MNPT     |
| Weight                  | 120 lbs     |
| Spark Arrestor Equipped | Yes         |

# Maintenance

## Schedule

In order to keep the fire pump operating properly, periodic service and engine adjustment must be performed. Follow the maintenance schedule below:

|                                 |                 | Each Use                                               | First Month<br>or 20hrs | Each<br>Season or<br>50hrs | Every 6<br>Months or<br>100hrs | Every Year<br>or 300hrs |
|---------------------------------|-----------------|--------------------------------------------------------|-------------------------|----------------------------|--------------------------------|-------------------------|
| Engine Oil                      | Oil Level Check | ⊙                                                      |                         |                            |                                |                         |
|                                 | Replace         |                                                        | ⊙                       |                            | ⊙                              |                         |
| Air Cleaner                     | Check           | ⊙                                                      |                         |                            |                                |                         |
|                                 | Clean           |                                                        |                         | ⊙                          | ⊙                              |                         |
|                                 | Replace         |                                                        |                         |                            |                                | ⊙                       |
|                                 |                 |                                                        |                         |                            |                                |                         |
| Spark Plug                      | Clean/Adjust    |                                                        |                         |                            | ⊙                              |                         |
|                                 | Replace         |                                                        |                         |                            |                                | ⊙                       |
| Spark Arrester                  | Clean/Adjust    |                                                        |                         |                            | ⊙                              |                         |
|                                 | Replace         |                                                        |                         |                            |                                | ⊙                       |
| Idling                          | Check/Adjust    |                                                        |                         |                            | ⊙                              |                         |
| Valve Clearance                 | Check/Adjust    |                                                        |                         |                            | ⊙                              |                         |
| Fuel Tank & Filter              | Clean           |                                                        |                         |                            | ⊙                              |                         |
| Fuel Supply Line                | Check           | Every 50 hours (Replacement if Necessary)              |                         |                            |                                | *                       |
| Cylinder Head &<br>Piston Crown | Remove Carbon   | Every 125 hours, or, when reduced performance is noted |                         |                            |                                | *                       |

\*These items should be serviced by our authorized servicing dealer, unless you have the proper tools and are mechanically competent.