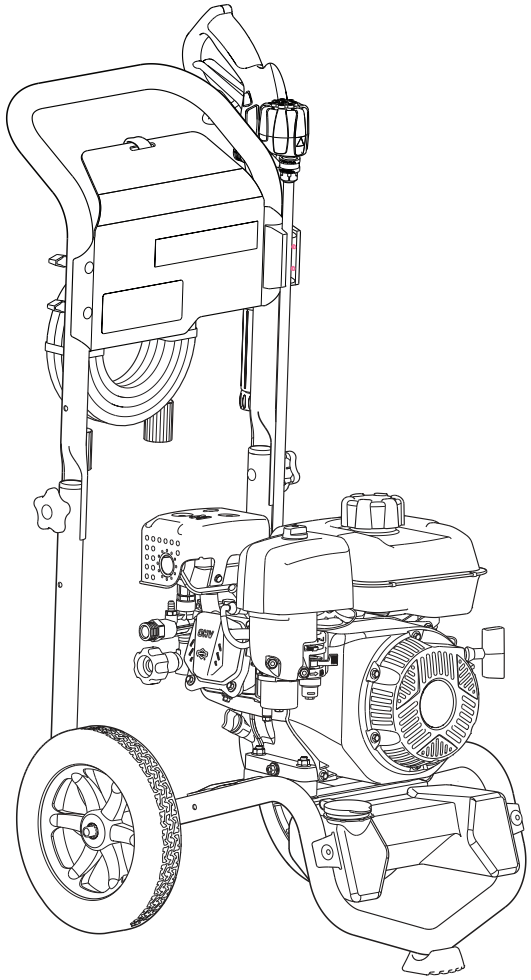
MURRAY®

## Pressure Washer

# Operator's Manual



Model Number _____

Revision _____

Serial Number _____

Date Purchased _____

www.refurbproductsupport.com

Manual No. 0031 Rev C

# Table of Contents



### Register Your Product

register your product online at
www.refurbproductsupport.com

# Symbols and Meanings

| Signal | Meaning |
|---|---|
| **DANGER** | Indicates a hazard which, if not avoided, *will* result in death or serious injury. |
| **WARNING** | Indicates a hazard which, if not avoided, *could* result in death or serious injury. |
| **CAUTION** | Indicates a hazard which, if not avoided, *could* result in minor or moderate injury. |
| ***NOTICE*** | Indicates information considered important, but not hazard-related. |

| Symbol | Name | Explanation |
|---|---|---|
|  | Safety Alert Symbol | Indicates a potential personal injury hazard. |
|  | Read Operator's Manual | Failure to follow warnings, instructions and operator's manual could result in death or serious injury. |
|  | Toxic Fumes | Engine exhaust contains carbon monoxide, a poisonous gas that could kill you in minutes. You cannot smell it or see it. |
|  | Fire | Fuel and its vapors are extremely flammable which could cause burns or fire resulting in death or serious injury.<br>Engine exhaust could cause fire resulting in death or serious injury. |

| Symbol | Name | Explanation |
|---|---|---|
|  | Fluid Injection | High-pressure water could cut through skin resulting in serious injury and possible amputation. |
|  | Spray, Flying Objects | Risk of eye injury. Spray could splash back or propel objects resulting in serious injury. |
|  | Hot Surface | Contact with muffler area could cause burns resulting in serious injury. |
|  | Electric Shock | Contact with power source could cause electrical shock resulting in death or serious injury. |
|  | Kickback | Recoil starter kickback will pull hand and arm toward engine faster than you can let go which could cause broken bones, sprains or bruises resulting in serious injury. |
|  | Chemical Burn | Chemicals could cause burns resulting in death or serious injury. |
|  | Slippery Surface/Fall | Slippery wet surfaces could cause you to fall resulting in death or serious injury. |
|  | Fall | Kickback from spray gun could cause you to fall resulting in death or serious injury. |

**WARNING!** This product can expose you to chemicals including gasoline engine exhaust, which is known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**WARNING!** This product contains lead and lead compounds, known to the state of California to cause birth defects or other reproductive harm. Wash your hands after handling this product. Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

# Equipment Description

Read this manual carefully and become familiar with your product. Know its applications, its limitations, and any hazards involved. Save these original instructions for future reference.

To aid in outdoor cleaning projects, this engine-driven, high-pressure cleaning machine uses a 7-in-1 nozzle and detergent.

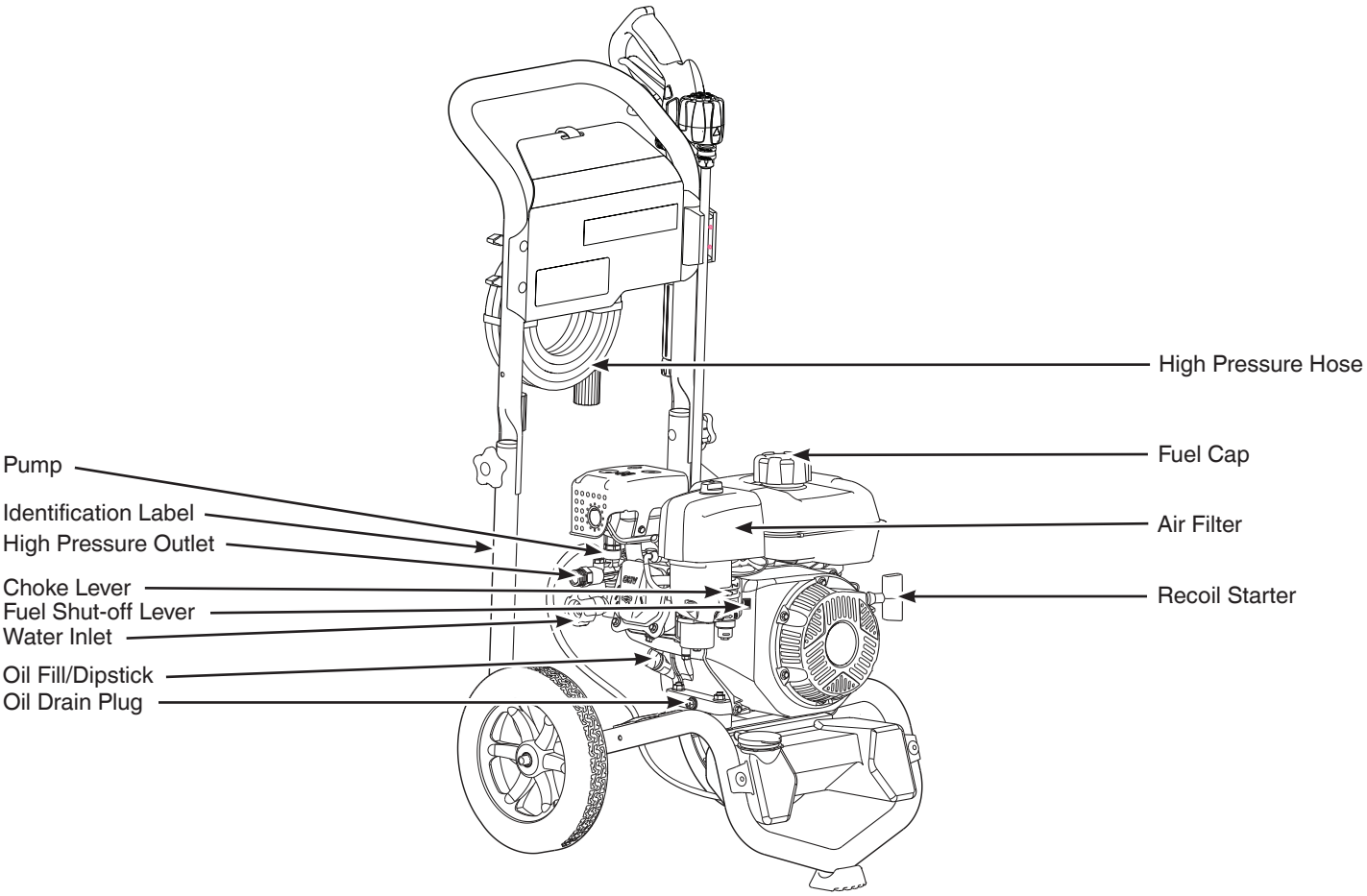
Know how to stop the product and reduce pressure quickly. Keep operating area clear and do not allow children to operate pressure washer.

Stay alert—watch what you are doing. Do not operate pressure washer when fatigued or under the influence of alcohol or drugs.

Every effort has been made to ensure that information in this manual is accurate and current. However, we reserve the right to change, alter, or otherwise improve the product and this document at any time without prior notice.

***NOTICE*** If you have questions about intended use, contact an authorized service dealer. This equipment is designed to be used with authorized parts only.

This spark ignition system complies with the Canadian Standard CAN ICES-2/NMB-2.




Air Filter — Filters engine intake air.

Choke Lever — Prepares a cold engine for starting.

Fuel Cap — Add unleaded fuel here.

Fuel Shut-off Lever— Used to turn fuel supply on and off to engine.

High Pressure Hose — Connect one end to water pump and the other end to spray gun.

High Pressure Outlet — Connection for high pressure hose.

Identification Label — Provides model and serial number of pressure washer.

Oil Drain Plug — Drain engine oil here.

Oil Fill/Dipstick — Check and fill oil here.

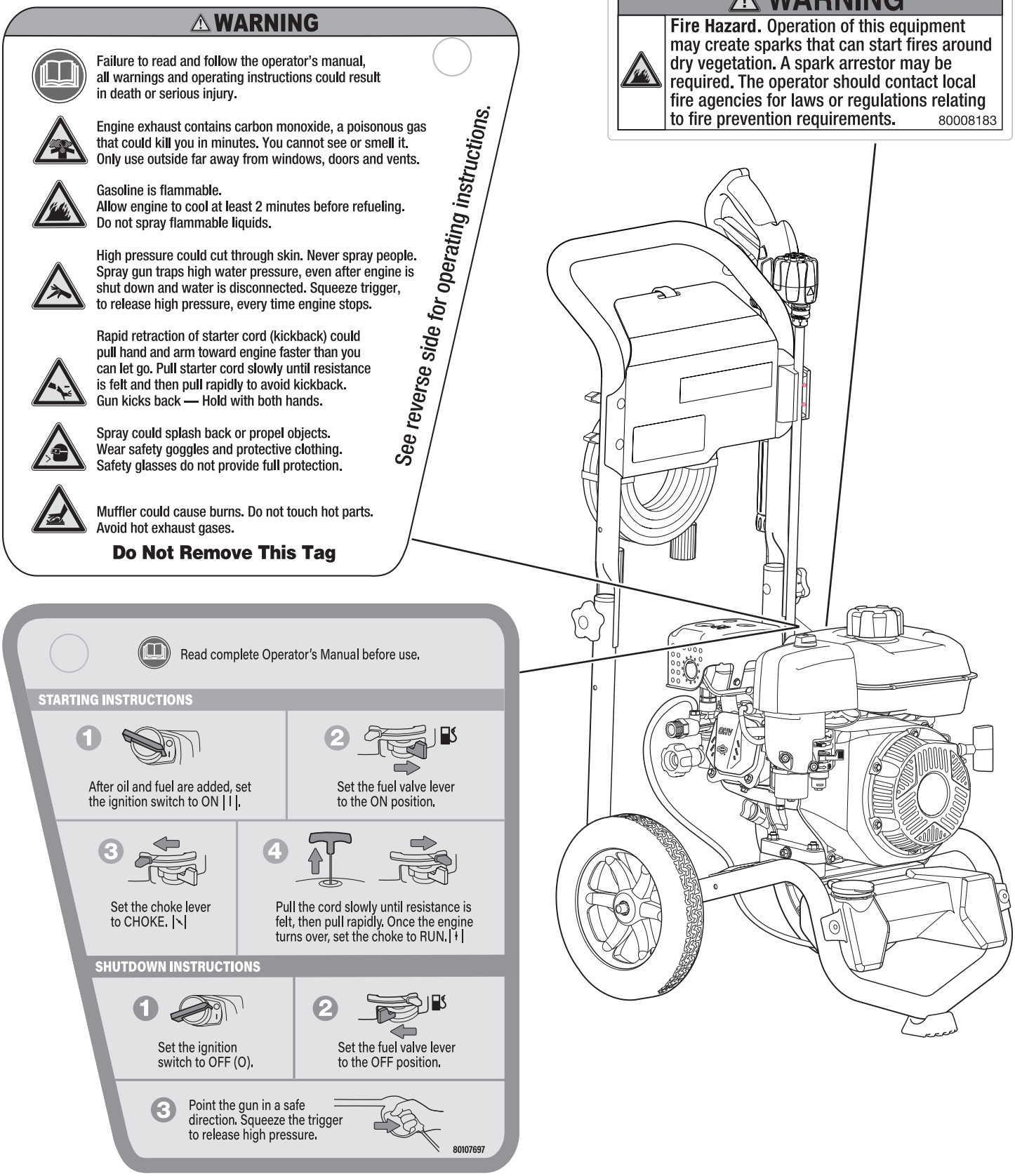
Pump — Stainless steel piston, axial cam pump that develops high pressure.

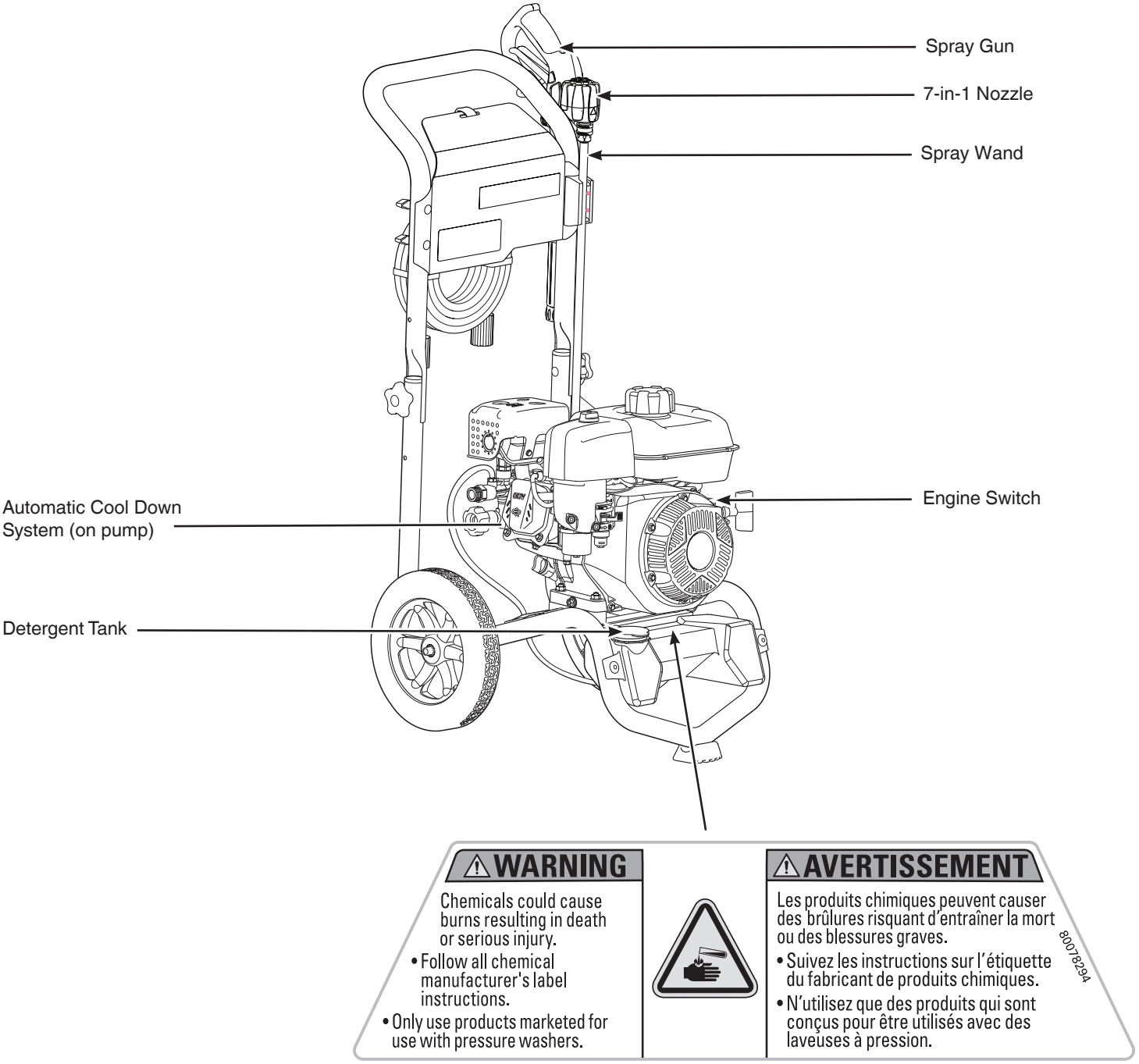
Recoil Starter — Used to start the engine.

Water Inlet — Connection for garden hose.

# Features and Controls

Compare the illustrations with your pressure washer to familiarize yourself with the locations of various controls and product warnings.






7-in-1 Nozzle — Multiple patterns for various cleaning applications.

Automatic Cool Down System — Prevents internal pump damage by discharging warm water to the ground.

Detergent Tank — Holds pressure washer safe detergent.

Engine Switch — Set switch to ON (I) before starting engine. Set switch to OFF (0) to shut off engine.

Spray Wand — Allows you to switch between nozzles and optional accessories.

Spray Gun — Controls spray using trigger. Includes trigger lock.

# Operation

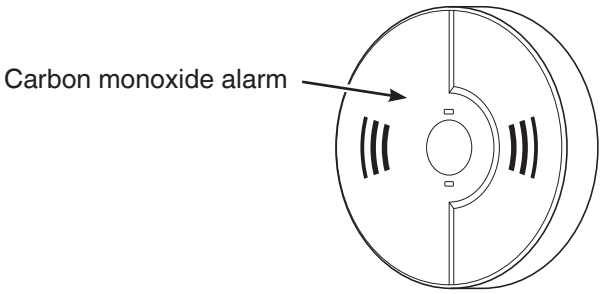
## Step 1: Safe Location

Before starting the pressure washer, there are two equally important safety concerns regarding carbon monoxide poisoning and fire that must be addressed.

**Operation Location to Reduce the Risk of Carbon Monoxide Poisoning**

The engine exhaust of all fossil fuel burning equipment, such as a pressure washer, contains carbon monoxide, a poisonous gas that could kill you in minutes. You cannot smell it, see it, or taste it. Even if you do not smell exhaust fumes, you could still be exposed to carbon monoxide gas.

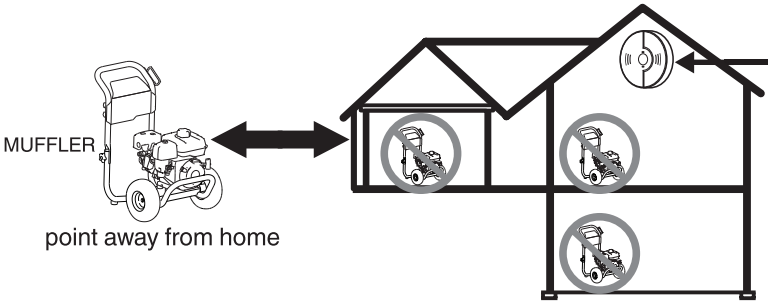
By law, it is required in many states to have a carbon monoxide alarm in operating condition in your home. A carbon monoxide alarm is an electronic device that detects hazardous levels of carbon monoxide. When there is a buildup of carbon monoxide, the alarm will alert the occupants by flashing a visual indicator light and an alarm. Smoke alarms cannot detect carbon monoxide gas.




**WARNING!** Engine exhaust contains carbon monoxide, a poisonous gas that could kill you in minutes. You cannot smell it, see it, or taste it. Even if you do not smell exhaust fumes, you could still be exposed to carbon monoxide gas.

- Operate this product only outdoors, far away from windows, doors and vents to reduce the risk of carbon monoxide gas accumulating and the potential of being drawn towards occupied spaces.
- Install battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up according to the manufacturer's instructions. Smoke alarms cannot detect carbon monoxide gas.
- Do not run this product inside homes, garages, basements, crawlspaces, sheds, or other partially-enclosed spaces even if using fans or opening doors and windows for ventilation. Carbon monoxide can quickly build up in these spaces and can linger for hours, even after this product has shut off.
- Point exhaust away from all homes and occupied spaces.
- If you start to feel sick, dizzy, or weak while using this product, get to fresh air right away. See a doctor. You may have carbon monoxide poisoning.

**USE OUTDOORS - AVOID CARBON MONOXIDE POISONING**



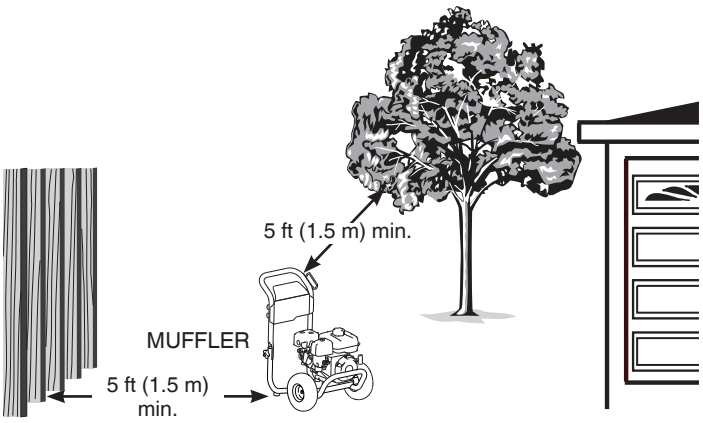

**CARBON MONOXIDE ALARM(S)**

Install carbon monoxide alarms inside your home. Without working carbon monoxide alarms, you may not realize you are getting sick and dying from carbon monoxide poisoning.

**Operation Location to Reduce the Risk of Fire**

**WARNING!** Exhaust heat/gases could ignite combustibles, structures or damage fuel tank causing a fire, resulting in death or serious injury.

- Pressure washer must be at least 5 ft. (1.5 m) from any structure, overhang, trees, windows, doors, and any wall opening, shrubs, or vegetation over 12 in. (30.5 cm) in height.
- Do not place pressure washer under a deck or other type of structure that may confine airflow. Smoke alarm(s) must be installed and maintained indoors according to the manufacturer's instructions /recommendations.
- Carbon monoxide alarms cannot detect smoke.
- It is a violation of California Public Resource Code Section 4442, to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the exhaust system is equipped with a spark arrester, as defined in Section 4442, maintained in effective working order. Other states or federal jurisdictions may have similar laws, reference Federal Regulation 36 CFR Part 261.52.
- Contact the original equipment manufacturer, retailer, or dealer to obtain a spark arrester designed for the exhaust system installed on this engine.
- Replacement parts must be the same and installed in the same position as the original parts.

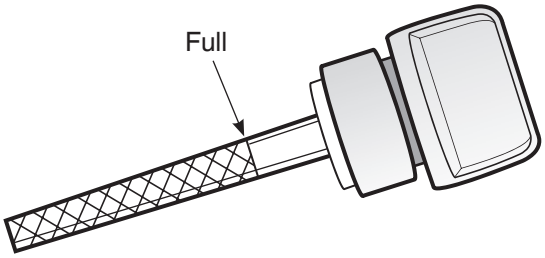



## Step 2: Oil and Fuel

**Check Oil Level**

**CAUTION!** Avoid prolonged or repeated skin contact with used motor oil. Used motor oil has been shown to cause skin cancer in certain laboratory animals. Thoroughly wash exposed areas with soap and water.

1. Make sure pressure washer is on a level surface.
2. Clean the oil fill area of any debris.
3. Remove oil dipstick and wipe dipstick with clean cloth. Replace and tighten dipstick. Remove and check oil level.




4. Verify oil is at full mark on dipstick. Replace and tighten dipstick.
5. If needed, see *Maintenance* section for instructions to add oil.

**Add Fuel**

Fuel must meet these requirements:

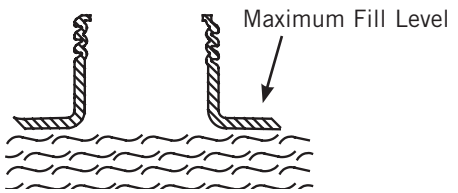
- Clean, fresh, unleaded fuel with a minimum of 87 octane.
- Gasoline with an ethanol content up to 10% is acceptable.


***NOTICE*** Do not mix oil in fuel or modify engine to run on alternate fuels. Unapproved fuels could damage engine. See *High Altitude* for operation above 5,000 ft. (1524 m).

**WARNING!** Fuel and its vapors are extremely flammable which could cause burns or fire resulting in death or serious injury.

- Do not refuel during operation.
- Do not smoke during refueling.
- Turn engine off and let it cool at least 2 minutes before removing fuel cap.
- Fill fuel tank outdoors. Keep fuel away from ignition sources.

1. Slowly remove fuel cap to relieve pressure in tank.
2. Slowly add fuel to fuel tank. Do not fill above bottom of fuel tank neck to allow for fuel expansion.




3. Install fuel cap and let any spilled fuel evaporate before starting engine.

**High Altitude**

At altitudes over 5,000 ft (1524 m), a minimum 85 octane fuel is acceptable. To remain emissions compliant, high altitude adjustment is required. Operation without this adjustment will cause decreased performance, increased fuel consumption, and increased emissions.

See an authorized dealer for high altitude adjustment information. Operation of the engine at altitudes below 2,500 ft (762 m) with the high altitude kit is not recommended.

**Transporting**

When transporting equipment with a vehicle or trailer, move fuel shutoff lever to OFF (⬅) position. Do not tip engine or equipment at an angle which causes fuel to spill.

## Step 3: Set Up

**Clean Debris**

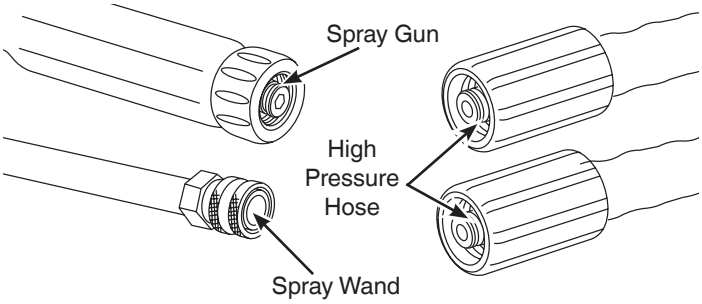
Clean any accumulated debris. Keep area around muffler free from any debris.

- Use a soft bristle brush to loosen caked on dirt or oil.
- Use a damp cloth to wipe exterior surfaces clean.

**Lubricate O-rings**

Lubricate all connections shown to extend the life of the o-rings.

1. Inspect and clean connecting surfaces prior to lubrication and assembly. Replace o-rings that are damaged or missing. See *Common Service Parts.*

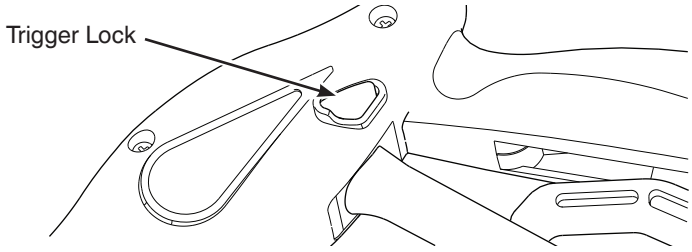



***NOTICE*** Never repair leaking connections with sealant of any kind. Replace o-ring.

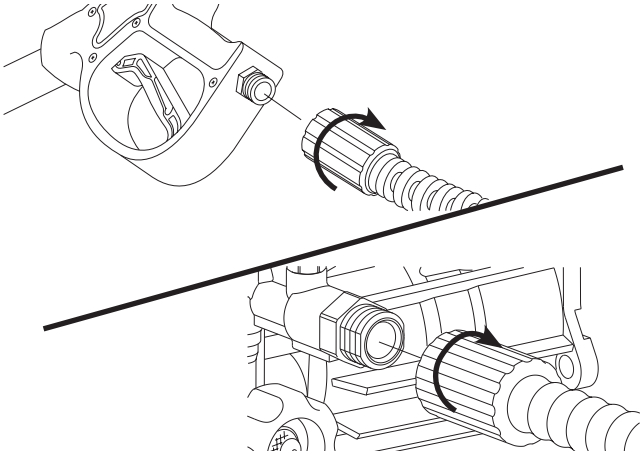
2. Use a small brush or cotton swab to apply a light coating of grease directly to o-rings.

**Check / Connect Gun and Hose**

1. If spray gun trigger depresses without pressing trigger lock or if spray gun remains depressed when released, replace spray gun immediately.



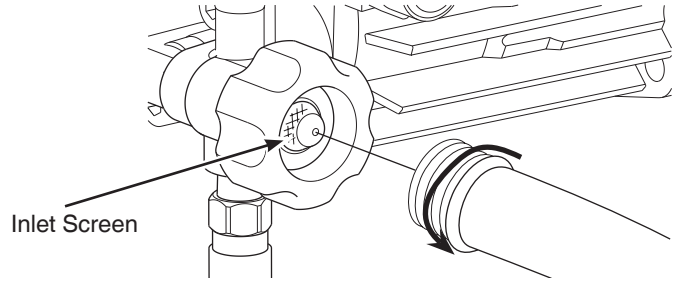

2. If high pressure hose is damaged, exposing inner mesh, replace immediately.
3. Attach high pressure hose to spray gun and high pressure outlet on pump. Tighten by hand.



**WARNING!** The high pressure fluid could cut through skin and its underlying tissues, resulting in serious injury and possible amputation. Never attach spray wand directly to high pressure hose.

**Check Water Inlet Screen / Connect Garden Hose**

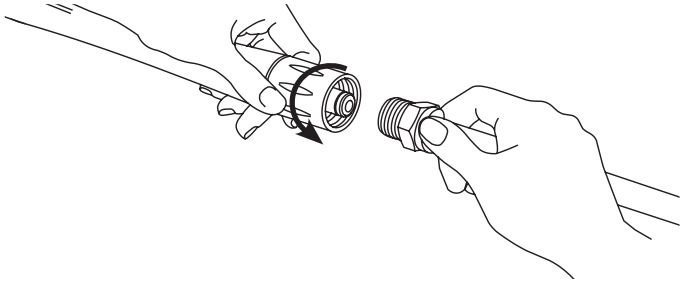
1. Inspect inlet screen. Remove debris or replace if damaged.




2. Run water through garden hose (not to exceed 50 ft (15 m) to clean out debris, then connect to water inlet.

***NOTICE*** There must be at least 10 ft (3 m) of unrestricted garden hose between the pressure washer inlet and any device, such as a vacuum breaker, to prevent pump damage.

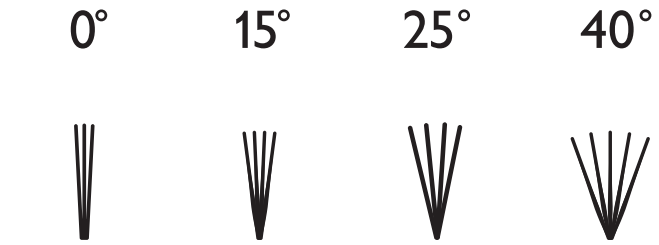
3. Turn on water, point spray gun in safe direction, press trigger lock and depress trigger to purge pump system of air.
4. Attach spray wand to spray gun. Tighten by hand.



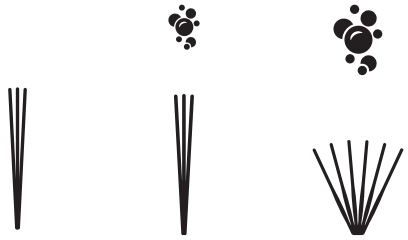
## Step 4: 7-in-1 Nozzles

1. Select desired nozzle setting on 7-in-1 nozzle:

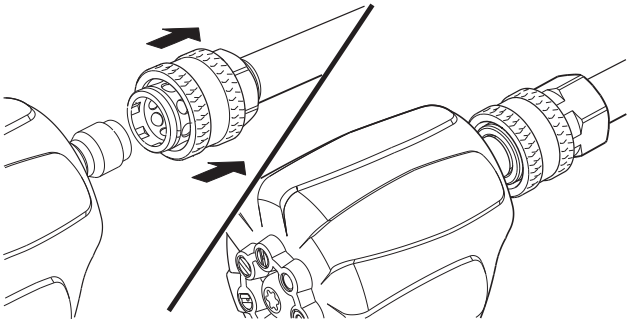
**High Pressure:**




**Low Pressure:**



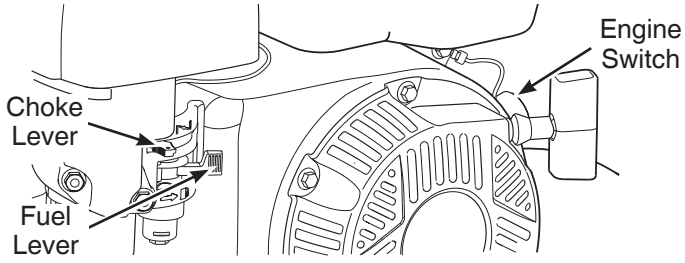
2. Pull spray wand quick connect collar back, insert 7-in-1 nozzle and release. Tug nozzle to ensure it is secure.



## Step 5: Start Up

***NOTICE*** Do not start engine without water supply connected and turned on.

1. Level product before starting.
2. Turn engine switch to ON (I) position.




3. Move fuel shut-off lever (⛽) to ON (➞) position.
4. Move choke lever (|↘|) to CHOKE (⬅) position.

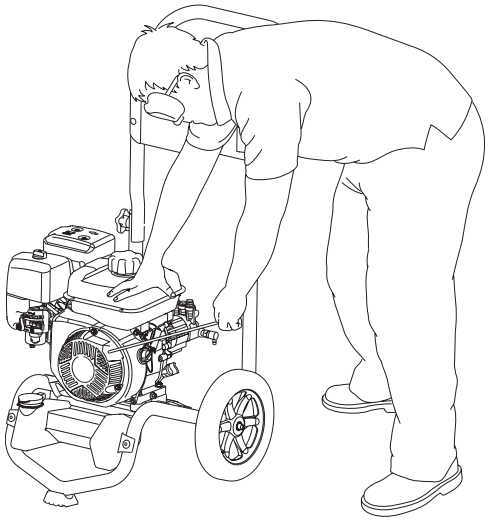
***NOTICE*** For a warm engine, be sure choke lever is in RUN (➞) position.

**WARNING!** Risk of eye injury. Spray could splash back or propel objects, resulting in serious injury.

- Always wear indirect vented (chemical splash) safety goggles when using or near this product. (Safety glasses do not provide full protection).
- Always wear protective clothing such as long-sleeved shirts, long pants and closed-toed shoes.

**WARNING!** Recoil starter kickback (rapid retraction) will pull hand and arm toward engine faster than you can let go, which could cause broken bones, fractures, bruises, or sprains and result in serious injury.

5. Position yourself as shown below, grasp recoil starter and pull slowly until you feel some resistance. Then pull rapidly to start engine.



6. Return recoil starter slowly. Do not let rope “snap back” against starter.

***NOTICE*** If engine fails to start after two attempts, move choke lever to RUN (➞) position and repeat steps 5 and 6.

7. When engine starts, move choke lever to RUN (➞) position.

***NOTICE*** If engine starts but fails to run, see Low Oil Shutdown in *Features and Controls.*

**WARNING!** High-pressure water could cut through skin resulting in serious injury and possible amputation.

***NOTICE*** Pressure washer may be equipped with an automatic idle control. The idle control will lower engine speed when spray gun trigger is released.

- Do not direct discharge at self or others.
- Call physician immediately if cut by fluid. Do not treat as a simple cut.
- Do not touch 7-in-1 nozzle while spraying.

**WARNING!** Use of pressure washer could create slippery surfaces causing you to fall, resulting in death or serious injury. Kickback from spray gun could cause you to fall resulting in death or serious injury. Operate pressure washer from a stable surface.

8. Firmly grasp spray gun with both hands, point spray gun in safe direction, press trigger lock and depress trigger to begin spraying.

9. Apply high pressure spray to a small area first, then check the surface for damage. If no damage is found, it is okay to continue cleaning.

**WARNING!** Risk of electrocution. Contact with power source could cause electric shock or burn resulting in death or serious injury. Never spray near power source.

**Usage Tips**

- For most effective cleaning when in high pressure, keep 7-in-1 nozzle 8 to 24 in (20 to 61 cm) away from cleaning surface.
- Do not use high pressure 7-in-1 nozzle, especially a high pressure spray pattern nozzle, closer than 6 in (15 cm) to prevent damage to the cleaning surface.
- Start at the top of the area to be rinsed, working down with long, even, overlapping strokes.

## Step 6: Applying Detergent

**WARNING!** Chemicals could cause burns resulting in death or serious injury.

- Follow chemical manufacturer's label instructions for proper use and handling of the chemical.
- Only use products marketed for use with pressure washers.
- Never spray acids or flammable liquids.

**Check Detergent Siphoning Tube/Tank**

Clean detergent tube if clogged or replace if leaking.

**To apply detergent, follow these steps:**

1. Prepare detergent per pressure washer detergent manufacturer's instructions.
2. Remove cap from detergent tank and fill with detergent solution. Replace cap.
3. Select desired soap setting on 7-in-1 nozzle. See *7-in-1 Nozzle*.
4. Apply per manufacturer's instructions.

***NOTICE*** Detergent cannot be applied with non soap nozzle setting.

## Step 7: Shut Down

1. Release spray gun trigger and let engine idle for one minute.
2. Move fuel shut-off lever to OFF (⬅) position.
3. Turn engine switch to OFF (0) position.

**WARNING!** Spray gun traps high water pressure, even after engine shut down and water disconnection, which could result in serious injury.

4. Point spray gun in safe direction. Press trigger lock and depress trigger to relieve high water pressure.

## Step 8: Clean Up

1. Turn off water and purge system.
2. Disconnect and drain all hoses, spray gun and spray wand.
3. Empty pump of all liquids by pulling recoil handle about six times.

***NOTICE*** If storing in freezing temperatures or more than 30 days, *see Storage.*

# Maintenance

## Maintenance Schedule

Follow the hourly or calendar intervals, whichever occurs first.

| **Every 8 Hours or Daily *(see Operation Section)*** |
|---|
| Check engine oil level |
| Clean debris |
| Lubricate o-rings |
| Check spray gun |
| Check high pressure hose |
| Check / clean water inlet screen |
| Check detergent siphoning tube |
| **Every 25 Hours or Yearly** |
| Clean engine air filter[1] |
| **Every 50 Hours or Yearly** |
| Change engine oil |
| Service exhaust system |
| **Yearly** |
| Replace spark plug |
| Replace engine air filter[1] |
| Service cooling system[1, 2] |

[1] Service more often under dirty or dusty conditions.
[2] See any authorized dealer for service.

### General Recommendations

Regular maintenance will improve the performance and extend the life of the pressure washer. See any authorized dealer for service.

### Emissions Control

Maintenance, replacement, or repair of the emissions control devices and systems may be performed by any non-road engine repair establishment or individual. However, to obtain ”no charge” emissions control service, the work must be performed by a factory authorized dealer. See *Emissions Warranty*.

The emissions control system for carbureted engines is EM (Engine Modifications). The emissions control systems for engines with electronic fuel injection are ECM (Engine Control Module), MPI (Multi Port Injection), and if equipped an O2S (Oxygen Sensor).

### Pump Oil

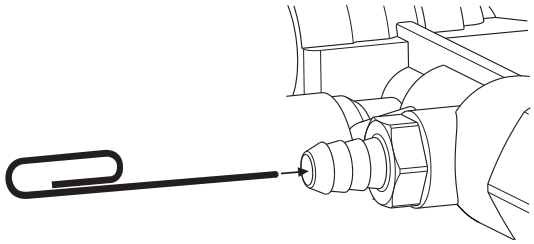
Do not attempt any oil maintenance on this pump. The pump is pre-lubricated and sealed from the factory, requiring no additional maintenance for the life of the pump.

### Detergent Siphoning Check Ball

The check ball in detergent siphoning system may become stuck from dried soap or minerals in water. The check ball can be freed by performing the following:

**WARNING!** Chemical Burn Hazard. Chemicals could cause burns resulting in death or serious injury. Follow chemical manufacturer’s label instructions for proper use and handling of the chemical. Following *Shut Down*, remove detergent siphoning hose from barbed fitting on pump.

1. Insert paper clip, or similar device, into barbed fitting on pump and push down until ball moves.



2. Reinstall detergent siphoning hose.

### 7-in-1 Nozzle Maintenance

Clean an obstructed nozzle to correct a pulsing sensation when squeezing the spray gun trigger.

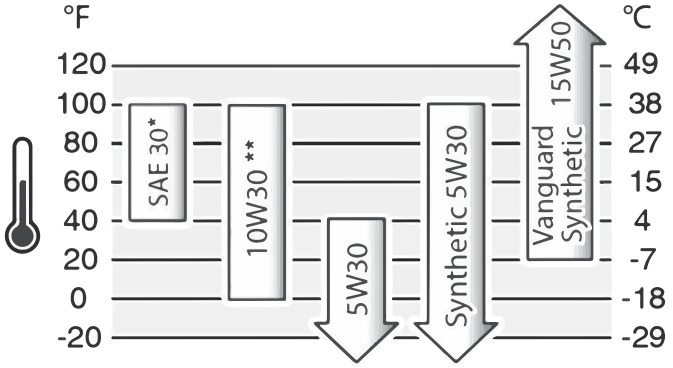
1. Following *Shut Down*, remove 7-in-1 nozzle from spray wand.
2. Use a paper clip, or similar device, to free foreign material.

## Engine Maintenance

### Oil Recommendations

We recommend the use of Warranty Certified oils for best performance. Other high-quality detergent oils are acceptable if classified for service SF, SG, SH, SJ or higher. Do not use special additives.

Outdoor temperatures determine the proper oil viscosity for the engine. Use the chart to select the best viscosity for the outdoor temperature range expected. Engines on most outdoor power equipment operate well with 5W30 Synthetic oil. For equipment operated in hot temperatures, Vanguard® 15W50 Synthetic oil provides the best protection.

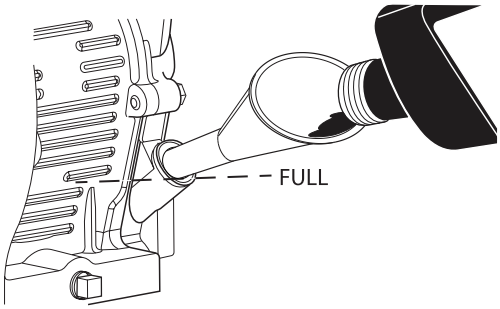



* Below 40°F (4°C) the use of SAE 30 will result in hard starting.

** Above 80°F (27°F) the use of 10W30 may cause increased oil consumption. Check oil level more frequently.

### Add Engine Oil

1. Place pressure washer on level surface.
2. Clean area around oil fill and remove yellow oil fill cap/dipstick.
4. Using an oil funnel, slowly pour contents of oil bottle into oil fill opening. Checking oil level frequently, fill to point of overflowing. Pause to permit oil to settle.




4. Replace and tighten dipstick.
5. Wipe up any remaining oil.

***NOTICE*** Do not attempt to start engine before it has been properly serviced with oil. This could result in engine failure.

**CAUTION!** Avoid prolonged or repeated skin contact with used motor oil. Used motor oil has been shown to cause skin cancer in certain laboratory animals. Thoroughly wash exposed areas with soap and water.

KEEP OUT OF REACH OF CHILDREN. DO NOT POLLUTE. CONSERVE RESOURCES. RETURN USED OIL TO COLLECTION CENTERS.

### Changing Engine Oil

Change oil while engine is still warm from running, as follows:

1. Make sure unit is on a level surface.
2. Disconnect spark plug wire and keep it away from spark plug.
3. Clean area around oil drain plug. The oil drain plug is located at base of engine.
4. Remove oil drain plug and drain oil completely into a suitable container.
5. Reinstall oil drain plug and tighten securely.
6. Add recomended oil as described in *Add Engine Oil*.
7. Reconnect spark plug wire to spark plug.

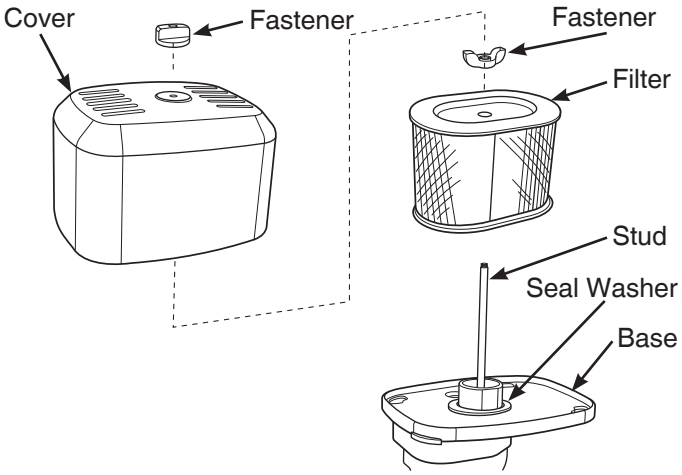
### Service Air Filter

**WARNING!** Fuel and its vapors are extremely flammable, which could cause burns or fire, resulting in death or serious injury.

- Do not start and run engine with air filter removed.

Your engine will not run properly and may be damaged if you run it with a dirty or missing air cleaner.

1. Remove fastener and cover.

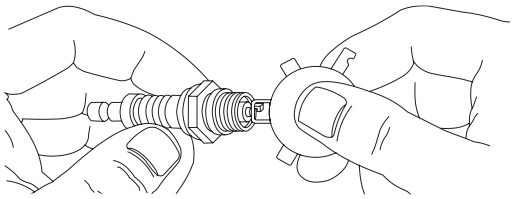



2. Remove fastener and filter.
3. To loosen debris, gently tap filter on a hard surface. If filter is excessively dirty, replace with a new filter.
4. Install seal washer and filter into base and onto stud. Make sure filter is properly assembled into base and secure with fastener.
5. Install cover and secure with fastener. Make sure fastener is tight.

### Service Spark Plug

Changing the spark plug will help your engine to start easier and run better.

1. Clean area around spark plug.
2. Remove and inspect spark plug.
3. Replace spark plug if electrodes are pitted, burned or porcelain is cracked. Use the recommended replacement plug. See *Specifications*.
4. Check electrode gap with wire feeler gauge and reset spark plug gap to recommended gap if necessary (see *Specifications*).



5. Install spark plug and tighten firmly.

### Inspect Muffler and Spark Arrester

Inspect the muffler for cracks, corrosion, or other damage. Remove the spark arrester, if equipped, and inspect for damage or carbon blockage. Clean if carbon blockage is found using brush and commercial solvent or replace if damaged.

**WARNING!** Contact with muffler area could cause burns resulting in serious injury. Do not touch hot parts.

### Common Service Parts

Pump Saver™ . . . . . .6039

O-ring Maintenance Kit . . . . . 705001

Water Inlet Screen . . . . . .B2384GS

Air Filter . . . . . 594146

Spark Plug . . . . . 798615

Engine Oil Bottle . . . . . 100005 or 100028

Contact an authorized service dealer or JDNA.com for a full list of parts and diagrams.

## Storage

**WARNING!** Fuel and its vapors are extremely flammable, which could cause burns or fire, resulting in death or serious injury. Do not store fuel near ignition source.

1. Empty detergent tank as follows:
   a. Place suitable container under barbed fitting on detergent tank and and remove detergent tube. Remove the tanks cover, tip pressure washer forward slightly and empty tank contents into container.
   b. Reconnect hose to barbed fitting on tank.
   c. Add 1 pint (0.5 liter) of clean fresh water to detergent tank and close tanks cover.
2. Flush detergent tank by running pressure washer with the soap setting. Flush until tank is empty.

**Protecting Fuel System**

3. Treat or drain fuel from pressure washer as fuel can become stale when stored over 30 days.

Each time you fill the container with fuel, add STA-BIL 360°® PROTECTION™ to the fuel as specified by the manufacturer's instructions. This keeps fuel fresh and decreases fuel-related problems or contamination in the fuel system.

It is not necessary to drain fuel from the engine when STA-BIL 360°® PROTECTION™ is added as instructed. Before storage, turn the engine ON for 2 minutes to move the fuel and stabilizer through the fuel system.

If fuel in the engine has not been treated with STA-BIL 360°® PROTECTION™, it must be drained into an approved container. Then run the engine until it stops from lack of fuel.

**Protecting the Pressure Washer**

4. Turn off water and purge system.
5. Disconnect and drain all hoses, spray gun and spray wand.
6. Empty pump of all liquids by pulling recoil handle about six times.

***NOTICE*** Store spray gun indoors and keep from freezing.

**Protecting the Pump**

7. Treat pump with Pump Saver.

Use Pump Saver to protect pump from damage caused by mineral deposits and freezing. It also lubricates pistons and seals. See *Common Service Parts.*

Read and follow all Pump Saver warnings and instructions.

If Pump Saver is not available, connect a 3 ft. (1 m) section of garden hose to water inlet. Pour RV-antifreeze (antifreeze without alcohol) into hose. Pull recoil handle twice. Disconnect hose.

***NOTICE*** You must protect your product from freezing temperatures. Failure to do so will permanently damage your pump and spray gun rendering your product inoperable.

8. Store unit in a clean and dry area.

**WARNING!** Storage covers could cause a fire resulting in death or serious injury. Do not place a storage cover over a hot pressure washer. Let product cool before installing cover.

# Troubleshooting

| Problem | Cause | Correction |
|---|---|---|
| **Pump has following problems: failure to produce pressure, loss of pressure, low water volume.** | 1. Inadequate water supply.<br>2. Clogged inlet hose screen.<br>3. 7-in-1 nozzle is obstructed.<br>4. Connections leak.<br>5. High pressure hose or spray gun leaks. | 1. Provide adequate water flow.<br>2. Check and clean inlet hose screen.<br>3. Clean nozzles. See *7-in-1 Nozzle Maintenance*.<br>4. Tighten connections or replace o-rings.<br>5. Replace. |
| **Detergent fails to mix with spray.** | 1. High pressure or high flow without soap nozzle is selected.<br>2. Check ball stuck in detergent siphoning system.<br>3. Detergent siphoning tube is clogged or cracked. | 1. Select a soap nozzle setting (indicated with bubbles).<br>2. Free check ball. See *Detergent Siphoning Check Ball*.<br>3. Clean or replace detergent siphoning tube. |
| **Engine will not start; starts and runs rough or shuts down when running.** | 1. Engine switch set to off (0) position.<br>2. Fuel shut-off lever is in off position.<br>3. Low oil level.<br>4. Dirty air cleaner.<br>5. Out of fuel.<br>6. Spark plug wire not connected to spark plug.<br>7. Flooded with fuel. | 1. Set switch to on (I) position.<br>2. Move fuel shut-off lever to on position.<br>3. Fill crankcase to proper level or place pressure washer on level surface.<br>4. Clean or replace air cleaner.<br>5. Fill fuel tank.<br>6. Connect wire to spark plug.<br>7. Wait 5 minutes and re-crank engine. |
| **Idle control (if equipped) not functioning.** | Idle control cable is loose. | Contact local service facility. |

**For all other issues, see an authorized dealer.**

# Specifications

40° . . . . . 3000 PSI (207 bar) @ 2.5 GPM (9.5 L/min)*
25° . . . . . 3000 PSI (207 bar) @ 2.5 GPM (9.5 L/min)*
15° . . . . . 3000 PSI (207 bar) @ 2.5 GPM (9.5 L/min)*
0° . . . . . 3200 PSI (220 bar)* @ 2.4 GPM (9.1 L/min)
Water Supply Temperature . . . . . 41°F (5°C) - 100°F (38°C)
min Water Supply Flow Rate . . . . . 3.5 GPM (13.25 L/min)
min Water Supply Pressure . . . . . 20 PSI (1.38 bar)
Engine Displacement . . . . . 12.69 $in^3$ (208 cc)
Spark Plug Gap. . . . . 0.030 in. (0.76 mm)
Oil Capacity . . . . . 20 oz (0.6 L)

*This pressure washer is rated in accordance to the Pressure Washer Manufacturers' Association (PWMA) standard PW101-2018 (Testing and Rating Performance of Pressure Washers).