JOHN DEERE

WORLDWIDE COMMERCIAL & CONSUMER
EQUIPMENT DIVISION

Pressure Washer
3300

OMM159748

OPERATOR'S MANUAL

Not for Reproduction

JOHN DEERE

WARNING

Failure to read and follow the Operator's Manual and all operating instructions could result in death, bodily injury, and/or property damage. Save this manual for future reference.

North American Edition
Litho in USA

INTRODUCTION

Read this manual carefully and become familiar with your pressure washer. Know its applications, its limitations and any hazards involved.

Thank You for Purchasing a John Deere Product

We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine.

Using Your Operator's Manual

This manual is an important part of your machine and should remain with the machine when you sell it.

Reading your operator's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine. Knowing how to operate this machine safely and correctly will allow you to train others who may operate this machine.

This manual contains information for a pressure washer that operates at 3,300 PSI (227.5 BAR) at a flow rate of 3.2 gallons (12.1 liters) per minute. This professional quality residential system features 10" (25.4 cm) wheels, triplex pump with stainless steel pistons, automatic cool down system, detergent siphoning system, variety of spray tips, heavy duty 35' (10.67 m) hose, and more.

This manual and safety signs on your machine may also be available in other languages (see your authorized dealer to order).

Sections in your operator's manual are placed in a specific order to help you understand all the safety messages and learn the controls so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions.

Special Messages

Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

This product is rated in accordance with PWMA standard PW101 (www.pwma.org). Actual pressure at the point of discharge may vary due to factors including: the inclusion or exclusion of a detergent injection system; variations in engine performance; and environmental conditions.

⚠ WARNING The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

⚠ 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.*

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Record Identification Numbers

Pressure Washer

If you need to contact an Authorized Dealer for information on servicing, always provide the product model and identification numbers.

You will need to locate the model, revision and serial number for the machine and record the information in the places provided below. You will also need the model, type and trim for the engine on your machine.

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

Product Identification Numbers

MODEL (**A**):

REVISION:

SERIAL NUMBER:

ENGINE (stamped on side of valve cover)

MODEL (**B**):

TYPE:

TRIM:

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Understanding The Machine Safety Labels

The machine safety label shown below is placed on your machine to draw attention to potential safety hazards.

⚠ WARNING

Failure to read and follow instructions in manual(s) could result in death, bodily injury, and/or property damage.

Running engines give off carbon monoxide, an odorless, colorless, poison gas. DO NOT run in enclosed area, even if windows and doors are open.

Fuel and its vapors are flammable and explosive. Turn engine off and let it cool at least 2 minutes before refueling.

Risk of explosion. DO NOT spray flammable liquids.

Hot parts and exhaust gases can exceed 150° F and cause burns. DO NOT touch hot parts and AVOID hot exhaust gases.

ALWAYS point gun in safe direction and squeeze spray gun trigger, to release pressure and avoid kickback each time, before starting engine. Rapid retraction of starter cord (kickback) will pull hand and arm toward engine faster than you can let go. Injury could result.
Gun kicks back - Hold with both hands.

Risk of fluid injection. Never spray people or animals, as injury could result. Spray gun traps high water pressure, even when engine is stopped and water is disconnected. ALWAYS point gun in safe direction and squeeze spray gun trigger, to release high pressure, every time you stop engine. Engage trigger lock when not in use.

Risk of eye injury. Spray can propel objects. Always wear safety goggles.

Risk of electrocution. Never spray near power source.

See reverse side for operating instructions.

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SAVE THESE INSTRUCTIONS

Important Safety Information

Safety Symbols and Meanings

Operator's Manual

Toxic Fumes

Electrical Shock

Slippery Surface

Fall

Fluid Injection

Fire

Explosion

Kickback

Projectile

Moving Parts

Flying Objects

Chemical Burn

Hot Surface

⚠ The safety alert symbol indicates a potential personal injury hazard. A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to designate a degree or level of hazard seriousness. A safety symbol may be used to represent the type of hazard. The signal word *NOTICE* is used to address practices not related to personal injury.

⚠ **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 address practices not related to personal 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.

⚠ **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.*

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

Breathing carbon monoxide could result in death, serious injury, headache, fatigue, dizziness, vomiting, confusion, seizures, nausea or fainting.

Some chemicals or detergents could be harmful if inhaled or ingested, resulting in death, serious injury, nausea, fainting or poisoning.

- Operate this product ONLY outdoors.
- Keep exhaust gas from entering a confined area through windows, doors, ventilation intakes, or other openings.
- DO NOT operate this product inside any building, carport, porch, mobile equipment, marine applications, or enclosure, even if windows and doors are open.
- Use a respirator or mask whenever there is a chance that vapors may be inhaled when using chemicals.
- Read all instructions with mask so you are certain the mask will provide the necessary protection against inhaling harmful vapors when using chemicals.

⚠ **WARNING** Use of pressure washer could create puddles and 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.
- The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.
- Be extremely careful if you must use the pressure washer from a ladder, scaffolding, or any other similar location.
- Firmly grasp spray gun with both hands when using high pressure spray to avoid injury when spray gun kicks back.

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⚠ WARNING Fuel and its vapors are extremely flammable and explosive which could cause burns, fire or explosion resulting in death, serious injury and/or property damage.

WHEN ADDING OR DRAINING FUEL

- Turn pressure washer engine 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.
- Check fuel lines, tank, cap and fittings frequently for cracks or leaks. Replace if necessary.
- DO NOT light a cigarette or smoke.

WHEN STARTING EQUIPMENT

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

WHEN OPERATING EQUIPMENT

- DO NOT operate this product inside any building, carport, porch, mobile equipment, marine applications, or enclosure.
- DO NOT tip engine or equipment at angle which causes fuel to spill.
- DO NOT spray flammable liquids.

WHEN TRANSPORTING, MOVING OR REPAIRING EQUIPMENT

- Transport/move/repair with fuel tank EMPTY or with fuel shutoff valve OFF.
- DO NOT tip engine or equipment at angle which causes fuel to spill.
- 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 could ignite fuel vapors.

⚠ 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.

⚠ WARNING Chemical Burn Hazard.

Chemicals could cause burns resulting in death, serious injury, and/or property damage.

- DO NOT use caustic liquid with pressure washer.
- Use ONLY pressure washer safe detergents/soaps. Follow all manufacturers instructions.

⚠ WARNING Starter cord 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 resulting in serious injury.

- NEVER pull starter cord without first relieving spray gun pressure.
- When starting engine, pull cord slowly until resistance is felt and then pull rapidly to avoid kickback.
- After each starting attempt, where engine fails to run, always point spray gun in safe direction, press red button and squeeze spray gun trigger to release high pressure.
- Firmly grasp spray gun with both hands when using high pressure spray to avoid injury when spray gun kicks back.

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

Contact with muffler area could cause burns resulting in serious injury.

- 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 pressure washer including overhead.
- 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.

  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.

⚠ WARNING Unintentional sparking could cause fire or electric shock resulting in death or serious injury.

WHEN ADJUSTING OR MAKING REPAIRS TO YOUR PRESSURE WASHER

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

WHEN TESTING FOR ENGINE SPARK

- Use approved spark plug tester.
- DO NOT check for spark with spark plug removed.

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⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which could result in serious injury.

- If cut by fluid, call physician immediately. DO NOT treat as a simple cut.
- DO NOT allow CHILDREN to operate pressure washer.
- NEVER repair high pressure hose. Replace it.
- NEVER repair leaking connections with sealant of any kind. Replace o-ring or seal.
- NEVER connect high pressure hose to nozzle extension.
- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction, press red button and squeeze spray gun trigger to release high pressure, every time you stop engine.
- NEVER aim spray gun at people, animals, or plants.
- DO NOT secure spray gun in open position.
- DO NOT leave spray gun unattended while machine is running.
- NEVER use a spray gun which does not have a trigger lock or trigger guard in place and in working order.
- Always be certain spray gun, nozzles and accessories are correctly attached.

⚠ WARNING Starter and other rotating parts could entangle hands, hair, clothing, or accessories resulting in serious injury.

- NEVER operate pressure washer without protective housing or covers.
- DO NOT wear loose clothing, jewelry or anything that could be caught in the starter or other rotating parts.
- Tie up long hair and remove jewelry.

⚠ WARNING Risk of eye or bodily injury. Spray could splash back or propel objects resulting in serious injury.

- Always wear indirect vented (chemical splash) safety goggles marked to comply with ANSI Z87.1 when using or in vicinity of this equipment.
- NEVER substitute safety glasses or dry-condition goggles for indirect vented safety goggles.
- Always wear protective clothing such as a long-sleeved shirt, long pants and close-toed shoes.
- NEVER operate pressure washer when barefoot or wearing sandals or shorts.

⚠ CAUTION Excessively high operating speeds could result in minor injury and/or pressure washer damage. Excessively low speeds impose a heavy load.

- DO NOT tamper with governor spring, links or other parts to increase engine speed. Pressure washer supplies correct rated pressure and flow when running at governed speed.
- DO NOT modify pressure washer in any way.

NOTICE High pressure spray could damage fragile items including glass.

- DO NOT point spray gun at glass when using red (0°) spray tip.
- NEVER aim spray gun at plants.

NOTICE Improper treatment of pressure washer could damage it and shorten its life.

- If you have questions about intended use, ask dealer or contact qualified service center.
- NEVER operate units with broken or missing parts, or without protective housing or covers.
- DO NOT by-pass any safety device on this machine.
- DO NOT tamper with governed speed.
- DO NOT operate pressure washer above rated pressure.
- DO NOT modify pressure washer in any way.
- Before starting pressure washer in cold weather, check all parts of the equipment to be sure ice has not formed there.
- NEVER move machine by pulling on hoses. Use handle provided on unit.
- This equipment is designed to be used with Briggs & Stratton Power Products authorized parts **ONLY**. If equipment is used with parts that DO NOT comply with minimum specifications, user assumes all risks and liabilities.

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ASSEMBLY

Your pressure washer requires some assembly and is ready for use after it has been properly serviced with the recommended oil and fuel.

If you have any problems with the assembly of your pressure washer, please call the pressure washer helpline at **(888) 228-3068**. If calling for assistance, please have the model, revision, and serial number from the identification label available.

Unpack Pressure Washer

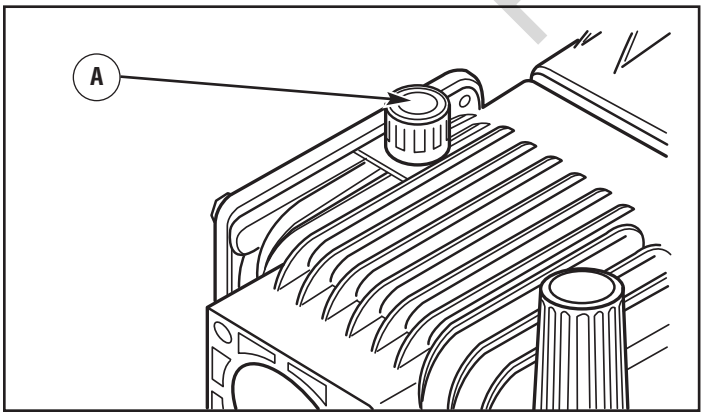
1. Remove the parts bag, accessories, and inserts included with pressure washer.
2. Open carton completely by cutting each corner from top to bottom.
3. Ensure you have all included items prior to assembly.

Items in the carton include:

- Main Unit
- Handle
- High Pressure Hose
- Spray Gun
- Nozzle Extension with Quick Connect Fitting
- Engine Oil Bottle
- Parts Bag (which includes the following):
  - Operator's Manual
  - Owner's Registration Card
  - Bag containing 5 Multi-Colored Quick Connect Spray Tips
  - Handle Fastening Hardware Kit (which includes):
    - Carriage Bolts (2)
    - Plastic Knobs (2)

To prepare your pressure washer for operation, you will need to perform these tasks:

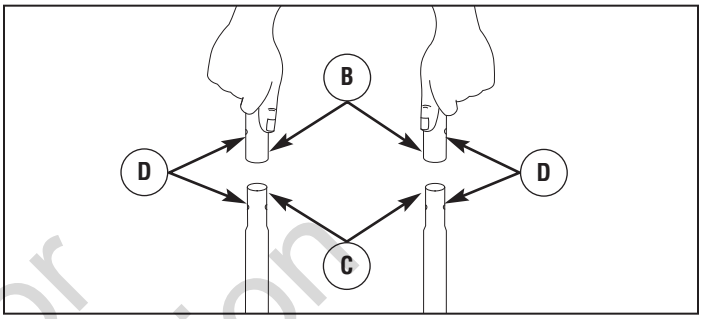
1. Fill out and send in registration card.
2. Verify oil dipstick (**A**) has been installed into pump.



3. Attach handle to main unit.
4. Add oil to engine crankcase.
5. Add fuel to fuel tank.
6. Connect high pressure hose to spray gun and pump.
7. Connect water supply to pump.
8. Attach nozzle extension to spray gun.
9. Select/attach quick connect spray tip to nozzle extension.

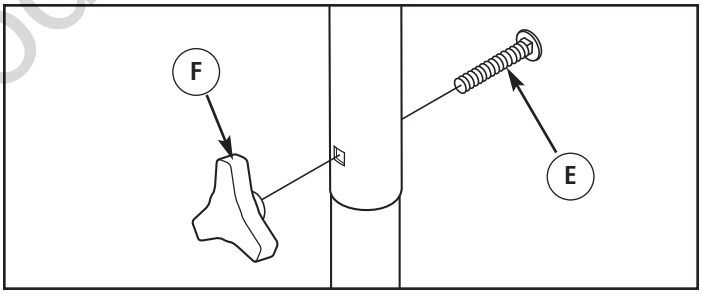
Attach Handle

1. Place handle (**B**) onto handle supports (**C**) connected to main unit. Make sure holes (**D**) in handle align with holes on handle supports.



NOTICE It may be necessary to move the handle supports from side to side in order to align the handle so it will slide over the handle supports.

2. Insert carriage bolts (**E**) through holes from outside of unit and attach a plastic knob (**F**) from inside of unit. Tighten by hand.



3. Insert multi-colored quick connect spray tips and other supplied accessories in spaces provided on handle.

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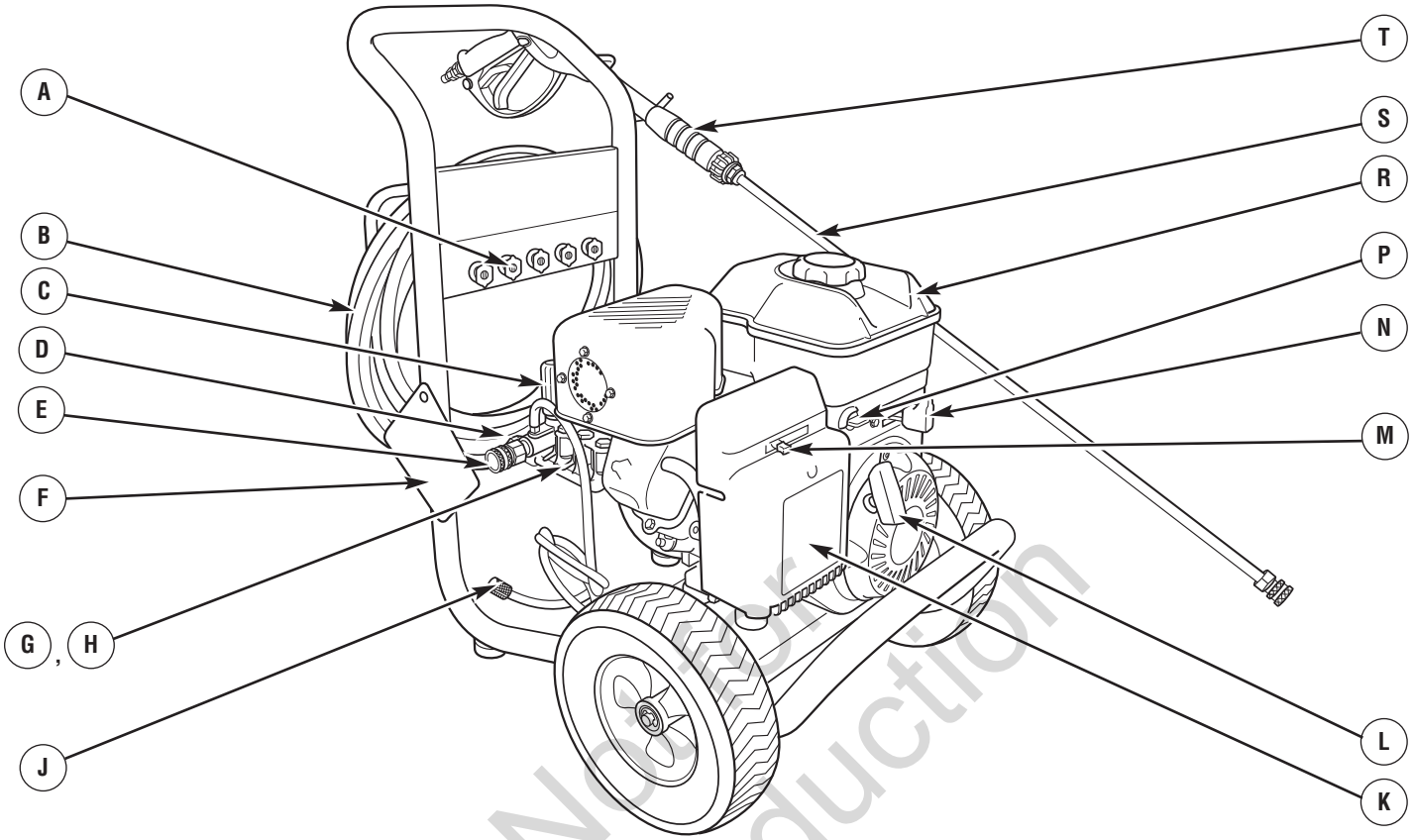
OPERATING

Read this operator's manual and safety rules before operating your pressure washer.

Compare the illustration with your pressure washer to familiarize yourself with the locations of various controls and adjustments. Save this manual for future reference.



A - Spray Tips — Detergent, 0°, 15°, 25° and 40°: for various high pressure cleaning applications.

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

C - Pressure Control Knob — Varies pressure of high pressure spray.

D - Water Inlet — Connection for garden hose.

E - High Pressure Outlet — Connection for high pressure hose.

F - Warning/Operating Instructions Tag — Identifies hazards and proper procedure to start/stop pressure washer.

G - Pump — Develops high pressure.

H - Automatic Cool Down System — Cycles water through pump when water reaches 125°-155°F (51°-68°C). Warm water will discharge from pump onto ground. This system prevents internal pump damage.

J - Detergent Siphoning Tube/Filter — Use to siphon pressure washer safe detergent into the low pressure stream.

K - Air Filter — Protects engine by filtering dust and debris out of intake air.

L - Recoil Starter — Used for starting the engine manually.

M- Choke Lever — Prepares a cold engine for starting.

N - Throttle Lever — Sets engine in starting mode for recoil starter.

P - Fuel Valve — Used to turn fuel supply on and off to engine.

R - Fuel Tank — Fill tank with regular unleaded fuel. Always leave room for fuel expansion.

S - Nozzle Extension with Quick Connect — Allows you to switch between five different spray tips.

T - Spray Gun with Quick Connect — Controls the application of water onto cleaning surface with trigger device. Includes trigger lock.

Items Not Shown:

Identification Label (near rear of base plate) — Provides model and serial number of pressure washer. Please have these readily available if calling for assistance.

Oil Fill Cap — Check and add engine oil here.

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Daily Operating Checklist

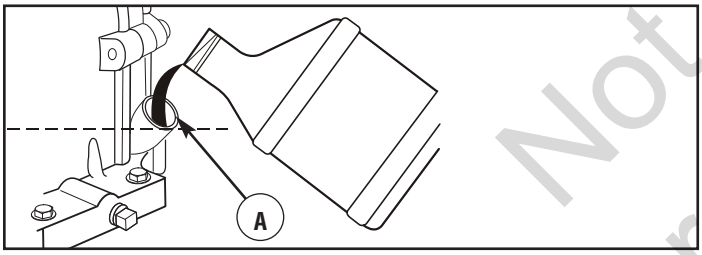
Review the unit's assembly to ensure you have performed all of the following.

1. Make sure handle is in place and secure.
2. Check that oil has been added to proper level in the engine crankcase.
3. Add proper fuel to fuel tank.
4. Check for properly tightened hose connections.
5. Check to make sure there are no kinks, cuts, or damage to high pressure hose.
6. Provide a proper water supply at an adequate flow.
7. Be sure to read the *Safety* section before using pressure washer.

If you have any problems operating your pressure washer, please call the pressure washer helpline at **(888) 228-3068**.

Add Engine Oil

1. Place pressure washer on a flat, level surface.
2. Clean area around oil fill and remove yellow oil fill cap.
3. Using oil funnel (optional), slowly pour contents of supplied oil into oil fill opening (**A**), frequently checking oil level. DO NOT OVERFILL.



NOTICE Improper treatment of pressure washer could damage it and shorten its life.

- DO NOT attempt to crank or start the engine before it has been properly serviced with the recommended oil. This could result in an engine failure.

4. Replace oil fill cap and fully tighten.

Add Fuel

Fuel must meet these requirements:

- Clean, fresh, unleaded gasoline.
- A minimum of 87 octane/87 AKI (91 RON). High altitude use, see *High Altitude*.
- Gasoline with up to 10% ethanol (gasohol) or up to 15% MTBE (methyl tertiary butyl ether) is acceptable.

NOTICE Avoid pressure washer damage.
Failure to follow Operator's Manual for fuel recommendations voids warranty.

- DO NOT use unapproved gasoline such as E85.
- DO NOT mix oil in gasoline.
- DO NOT modify engine to run on alternate fuels.

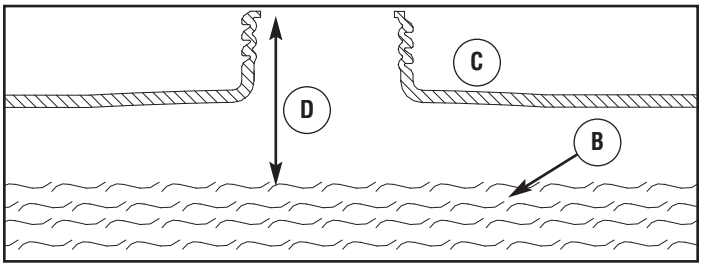
To protect the fuel system from gum formation, mix in a fuel stabilizer when adding fuel. See *Storage*. All fuel is not the same. If you experience starting or performance problems after using fuel, switch to a different fuel provider or change brands. This engine is certified to operate on gasoline. The emission control system for this engine is EM (Engine Modifications).

⚠ WARNING Fuel and its vapors are extremely flammable and explosive which could cause burns, fire or explosion resulting in death, serious injury and/or property damage.

WHEN ADDING FUEL

- Turn pressure washer engine OFF and let it cool at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Fill 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.
- Check fuel lines, tank, cap and fittings frequently for cracks or leaks. Replace if necessary.
- DO NOT light a cigarette or smoke.

1. Clean area around fuel fill cap, remove cap.
2. Slowly add regular unleaded fuel (**B**) to fuel tank (**C**). Be careful not to overfill. Allow about 1.5" (4 cm) (**D**) of tank space for fuel expansion.



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

High Altitude

At altitudes over 5,000 feet (1524 meters), a minimum 85 octane / 85 AKI (89 RON) gasoline 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 Briggs & Stratton dealer for high altitude adjustment information. Operation of the engine at altitudes below 2,500 feet (762 meters) with the high altitude kit is not recommended.

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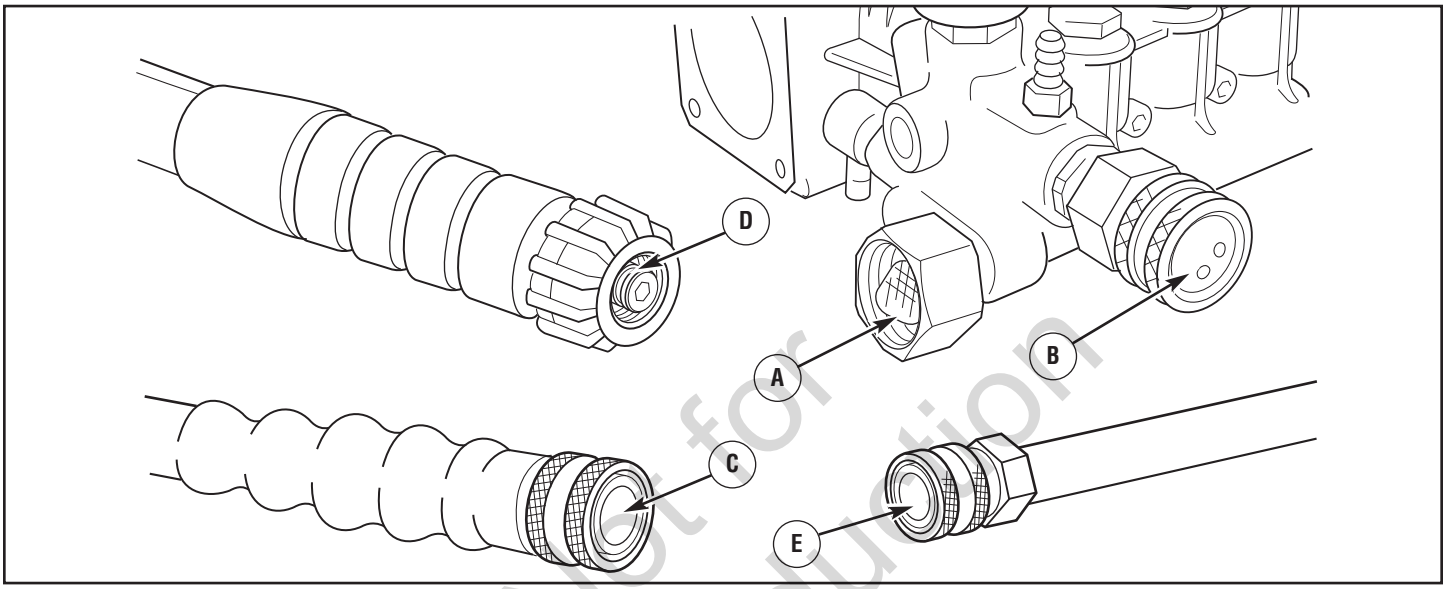
Lubricate O-Rings

Lubrication of o-rings is extremely important for installation and operation. The use of a lubricant (petroleum or synthetic grease) during assembly helps seat o-rings properly and provides an improved seal. It also helps protect the o-ring from damage by abrasion, pinching or cutting and extends the life of the o-ring.

NOTICE ALWAYS apply a small amount of lubricant on o-rings prior to assembling the garden hose to the pump inlet (**A**), high pressure hose to pump outlet (**B**), high pressure hose (**C**), spray gun (**D**), and nozzle extension (**E**).

Lubricate all connections shown below, following these instructions:

1. Inspect and clean connecting surfaces prior to lubrication and assembly.
2. Use lubricants sparingly during assembly; a light film is all that is required.
3. Use a small brush or cotton swab to apply grease directly to o-rings where they are not accessible (QC fitting, M22 fitting).



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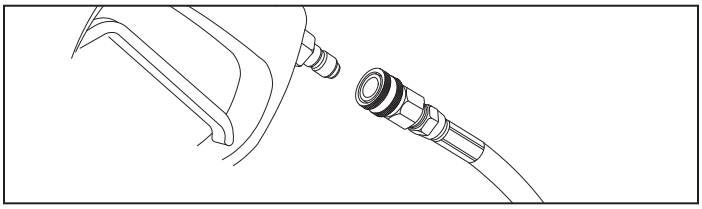
Connect Hose and Water Supply to Pump

NOTICE DO NOT run the pump without the water supply connected and turned on.

- Damage to equipment resulting from failure to follow this instruction will void warranty.

NOTICE Remove and discard the shipping caps from the pump's high pressure outlet and water inlet before attaching hoses.

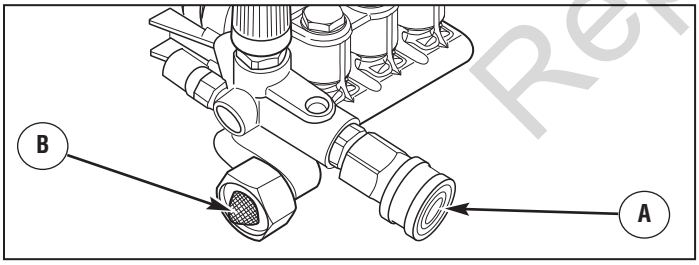
1. Uncoil high pressure hose and attach quick connect end of hose to base of spray gun. Pull down on collar of quick connect, slide onto spray gun and let go of collar. Tug on hose to be sure of tight connection.



⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

- NEVER connect high pressure hose to nozzle extension.
- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- Always be certain spray gun, nozzles and accessories are correctly attached.

2. Similarly, attach other end of high pressure hose to high pressure outlet (**A**) on pump. Pull down on collar of quick connect, slide onto pump and let go of collar. Pull on hose to be sure of tight connection.



3. Before connecting garden hose to water inlet, inspect inlet screen (**B**). Clean screen if it contains debris or have it replaced if damaged. DO NOT run pressure washer if inlet screen is damaged.
4. Run water through your garden hose for 30 seconds to clean out any debris.

NOTICE DO NOT siphon standing water for the water supply. Use ONLY cold water (less than 100°F (38°C)).

5. Connect the garden hose (not to exceed 50 feet (15.24 m) in length) to the water inlet. Tighten by hand.

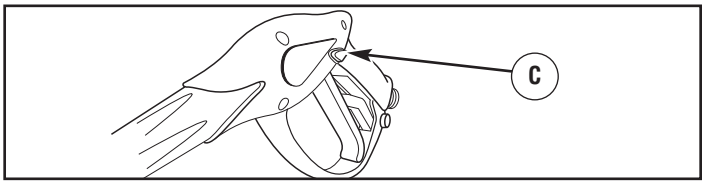
NOTICE Using a One Way Valve (vacuum breaker or check valve) at pump inlet could cause pump or inlet connector damage.

- There MUST be at least ten feet of unrestricted garden hose between the pressure washer inlet and any device, such as a vacuum breaker or check valve.
- Damage to equipment resulting from failure to follow this instruction will void warranty.

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

- Always wear indirect vented (chemical splash) safety goggles marked to comply with ANSI Z87.1 when using or in vicinity of this equipment.
- NEVER substitute safety glasses or dry-condition goggles for indirect vented safety goggles.

6. Turn ON the water, press red button (**C**) on the gun and squeeze the trigger to purge the pump system of air and impurities.



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Pressure Washer Location

Clearances and Air Movement

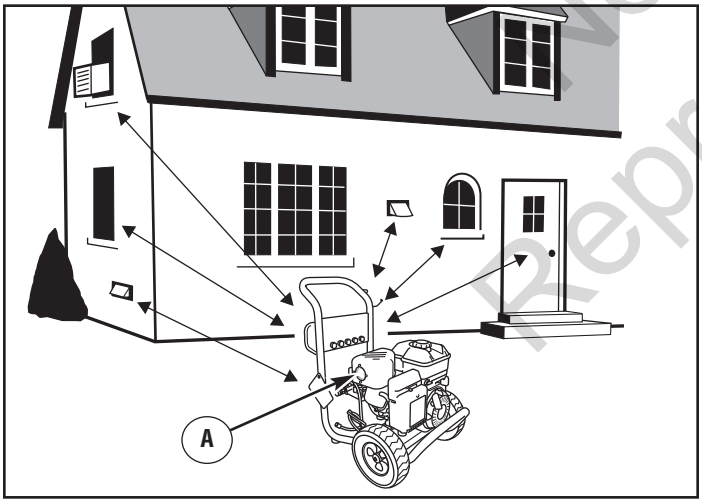
⚠ WARNING Exhaust heat/gases could ignite combustibles, structures or damage fuel tank causing a fire, resulting in death, serious injury and/or property damage.

- Keep at least 5 ft. (1.5 m) clearance on all sides of pressure washer including overhead.

Place pressure washer in a well ventilated area, which will allow for removal of deadly exhaust gas. Do not place pressure washer where exhaust gas could accumulate and enter inside or be drawn into a potentially occupied building. Ensure exhaust gas (**A**) is kept away from any windows, doors, ventilation intakes, or other openings that can allow exhaust gas to collect in a confined area. Prevailing winds and air currents should be taken into consideration when positioning pressure washer.

⚠ WARNING Running engine gives off carbon monoxide, an odorless, colorless, poison gas. Breathing carbon monoxide could result in death, serious injury, headache, fatigue, dizziness, vomiting, confusion, seizures, nausea or fainting.

- Operate this product ONLY outdoors.
- Keep exhaust gas from entering a confined area through windows, doors, ventilation intakes, or other openings.
- DO NOT operate this product inside any building, carport, porch, mobile equipment, marine applications, or enclosure, even if windows and doors are open.



How to Start Your Pressure Washer

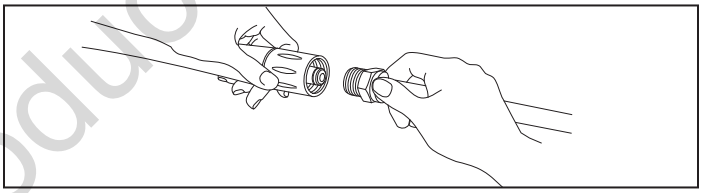
To start your pressure washer for the first time, follow these instructions step-by-step. This starting information also applies if you have let the pressure washer sit idle for at least a day.

1. Place pressure washer near an outside water source capable of supplying water at a flow rate greater than 4.2 gallons (15.9 liters) per minute and no less than 20 PSI (1.38 BARS) at pressure washer end of garden hose. DO NOT siphon supply water.
2. Check that high pressure hose is tightly connected to spray gun and pump. See *Assembly* section.
3. Make sure unit is in a level position.
4. Connect garden hose to water inlet on pressure washer pump.

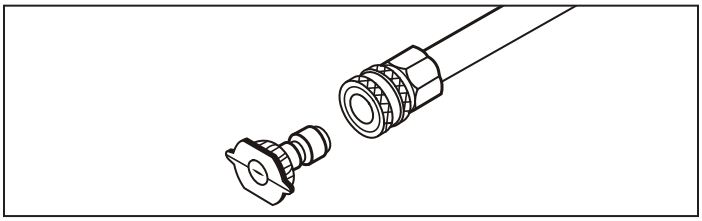
NOTICE DO NOT run the pump without the water supply connected and turned on.

- Damage to equipment resulting from failure to follow this instruction will void warranty.

5. Turn ON water, point gun in a safe direction, press the red button and squeeze trigger to purge pump system of air and impurities.
6. Attach nozzle extension to spray gun. Tighten by hand.



7. Choose desired spray tip, pull back nozzle extension collar, insert spray tip and release collar. Tug on spray tip to make sure it is securely in place. See *How to Use Spray Tips*.



NOTICE Before starting the pressure washer, be sure you are wearing safety goggles as described below.

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

- Always wear indirect vented (chemical splash) safety goggles marked to comply with ANSI Z87.1 when using or in vicinity of this equipment.
- NEVER substitute safety glasses or dry-condition goggles for indirect vented safety goggles.

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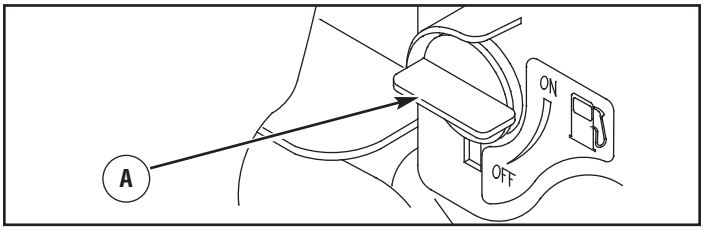
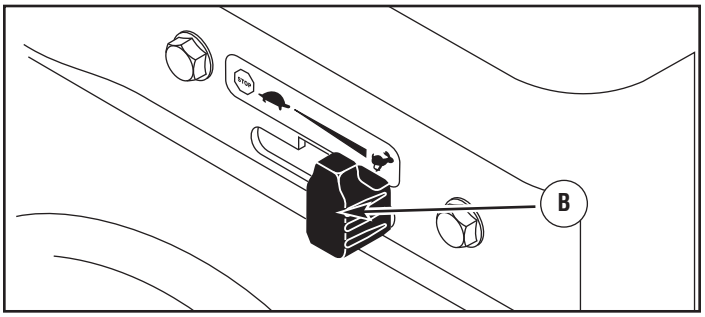
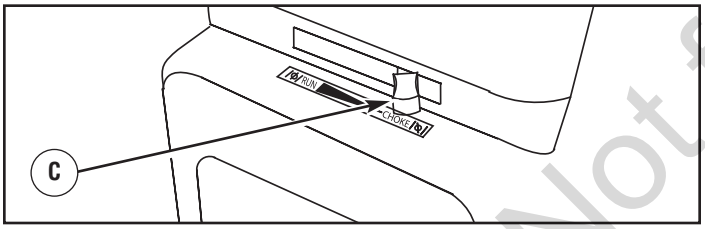
8. Rotate fuel shut-off valve to "**On**" position (**A**) (fully counter-clockwise).



9. Move throttle control lever (**B**) to "**Fast**" position, shown on engine as a rabbit .

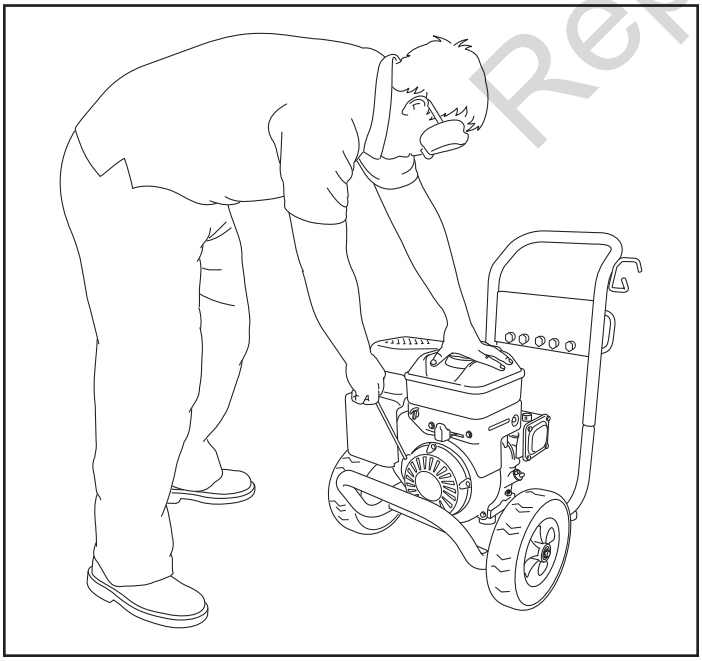


10. Move choke lever (**C**) to "**Choke**" position.



NOTICE For a warm engine, be sure the choke lever is in the "**Run**" position.

11. When starting engine, position yourself as recommended below and grasp starter grip handle and pull slowly until you feel some resistance. Then pull rapidly to start engine.



⚠ WARNING Starter cord 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 resulting in serious injury.

- NEVER pull starter cord without first relieving spray gun pressure.
- When starting engine, pull cord slowly until resistance is felt and then pull rapidly to avoid kickback.
- After each starting attempt, where engine fails to run, always point spray gun in safe direction, press red button and squeeze spray gun trigger to release high pressure.
- Firmly grasp spray gun with both hands when using high pressure spray to avoid injury when spray gun kicks back.

12. Return starter grip handle slowly. DO NOT let rope "snap back" against starter.
13. When engine starts, slowly move choke lever to "**Run**" position, as engine warms. If engine falters, move choke lever to "**Choke**" position, then to "**Run**" position.
14. After each starting attempt, where engine fails to run, always point gun in safe direction, press red button and squeeze spray gun trigger to release high pressure.
15. If engine fails to start after six pulls, move choke lever to "**Run**" position, and repeat steps 11 through 13.

NOTICE Always keep the throttle lever in the "**Fast**" position when operating the pressure washer.

⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which could result in serious injury.

- DO NOT allow CHILDREN to operate pressure washer.
- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- NEVER aim spray gun at people, animals, or plants.
- DO NOT secure spray gun in open position.
- DO NOT leave spray gun unattended while machine is running.
- NEVER use a spray gun which does not have a trigger lock or trigger guard in place and in working order.
- Always be certain spray gun, nozzles and accessories are correctly attached.

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

Contact with muffler area could cause burns resulting in serious injury.

- 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 pressure washer including overhead.
- 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.

  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.

How to Stop Your Pressure Washer

1. Release spray gun trigger and let engine idle for two minutes.
2. Move throttle control lever on engine to "**Stop**" (STOP) position.
3. ALWAYS point spray gun in a safe direction, press red button and squeeze spray gun trigger to release retained high water pressure.

⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which could result in serious injury.

- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction, press red button and squeeze spray gun trigger to release high pressure, every time you stop engine.

How to Use Spray Tips

The quick–connect on the nozzle extension allows you to switch between five different quick connect spray tips. Spray tips can be changed while pressure washer is running once spray gun trigger safety lock is engaged. The spray tips vary the spray pattern as shown below.

Follow these instructions to change spray tips:

1. Pull back collar on quick–connect and pull current spray tip off. Store spray tips in holder provided on the handle.

⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

- NEVER exchange spray tips without the trigger lock being engaged on the spray gun.
- DO NOT twist spray tips while spraying.

2. Select desired spray tip:
   - For gentle rinse, select white 40° or green 25° spray tip.
   - To scour surface, select yellow 15° or red 0° spray tip.
   - To apply detergent, select black spray tip.
3. Pull back on collar, insert new spray tip and release collar. Tug on spray tip to make sure it is securely in place.

Usage Tips

- For most effective cleaning, keep spray tip from 8 to 24 inches (20 to 61 cm) away from cleaning surface.
- If you get spray tip too close, especially using a high pressure spray tip, you may damage surface being cleaned.
- DO NOT get closer than 6 inches (15 cm) when cleaning tires.

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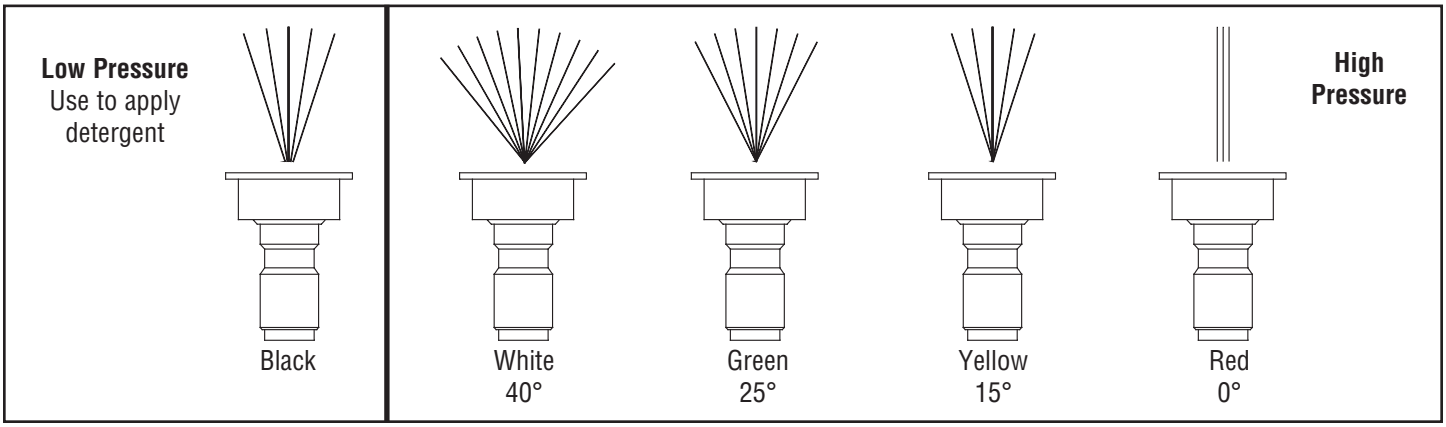


Cleaning and Applying Detergent

⚠ WARNING Chemical Burn Hazard.

Chemicals could cause burns resulting in death, serious injury, and/or property damage.

- DO NOT use caustic liquid with pressure washer.
- Use ONLY pressure washer safe detergents/soaps. Follow all manufacturers instructions.

To apply detergent, follow these steps:

1. Review use of spray tips.
2. Prepare detergent solution as required by job.
3. Place small filter end of detergent siphoning tube into detergent container.

NOTICE Make sure the filter is fully submerged in detergent while applying detergent.

NOTICE Contact with the hot muffler could damage detergent siphoning tube.

- When inserting the filter into a detergent solution bottle, route the tube so as to keep it from inadvertently contacting the hot muffler.

4. Make sure black spray tip is installed.

NOTICE Detergent cannot be applied with the high pressure spray tips (White, Green, Yellow or Red).

5. Make sure garden hose is connected to water inlet. Check that high pressure hose is connected to spray gun and pump. Turn on water.

NOTICE You must attach all hoses before you start the engine.

- Starting engine without all hoses connected and without water turned ON could damage pump.
- Damage to equipment resulting from failure to follow this instruction will void warranty.

6. Start engine following instructions *How to Start Your Pressure Washer*.
7. Apply detergent to a dry surface, starting at lower portion of area to be washed and work upward, using long, even, overlapping strokes.
8. Allow detergent to "soak in" for 3-5 minutes before washing and rinsing. Reapply as needed to prevent surface from drying. DO NOT allow detergent to dry on (prevents streaking).

NOTICE You must flush the detergent siphoning system after each use by placing the filter into a bucket of clean water, then run the pressure washer in low pressure for 1-2 minutes.

How to Rinse After Use

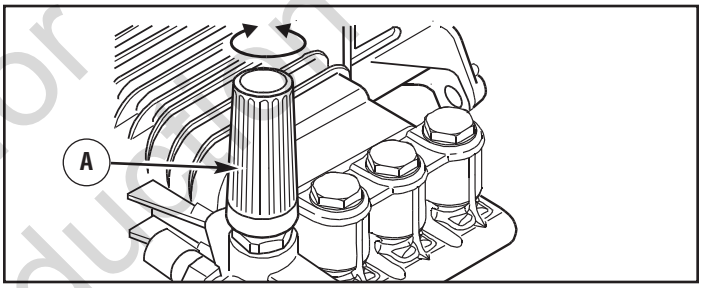
Pressure Washer Rinsing

1. Remove black spray tip from nozzle extension.
2. Select and install desired high pressure spray tip following instructions *How to Use Spray Tips*.
3. Keep spray gun a safe distance from area you plan to spray.

⚠ WARNING Kickback from spray gun could cause you to fall resulting in death or serious injury.

- Operate pressure washer from a stable surface.
- Be extremely careful if you must use the pressure washer from a ladder, scaffolding, or any other similar location.
- Firmly grasp spray gun with both hands when using high pressure spray to avoid injury when spray gun kicks back.

4. Increase (decrease) spray pressure by turning pressure control knob (**A**) clockwise (counterclockwise). Use lower pressure to wash items such as a car or boat. Use higher pressure to strip paint and degrease driveways.



5. Apply a high pressure spray to a small area and then check surface for damage. If no damage is found, you can assume it is okay to continue rinsing.
6. Start at top of area to be rinsed, working down with same overlapping strokes as you used for cleaning.

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Cleaning Detergent Siphoning Tube

If you used the detergent siphoning tube, you must flush it with clean water before stopping the engine.

1. Place detergent siphoning tube/filter in a bucket full of clean water.
2. Remove high pressure spray tip from nozzle extension.
3. Select and install black detergent spray tip following instructions *How to Use Spray Tips*.
4. Flush for 1-2 minutes.
5. Shut off engine following instructions *How to Stop Pressure Washer* and turn off water supply.
6. ALWAYS point spray gun in a safe direction, press red button and squeeze spray gun trigger to release retained high water pressure.

⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which could result in serious injury.

- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction, press red button and squeeze spray gun trigger to release high pressure, every time you stop engine.

Automatic Cool Down System (Thermal Relief)

If you run the engine on your pressure washer for 3-5 minutes without pressing the trigger on the spray gun, circulating water in the pump can reach temperatures above 125°F (51°C). The system engages to cool the pump by **discharging the warm water onto the ground.**

After Each Use

Water should not remain in the unit for long periods of time. Sediments or minerals can deposit on pump parts and freeze pump action. Follow these procedures after every use:

1. Flush detergent siphoning tube by placing the filter into a pail of clean water while running pressure washer in low pressure mode. Flush for one to two minutes.
2. Shut off engine, turn off water supply, point gun in a safe direction, press red button and squeeze trigger to relieve trapped pressure, and let engine cool.

⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which could result in serious injury.

- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction, press red button and squeeze spray gun trigger to release high pressure, every time you stop engine.

3. Disconnect hose from spray gun and high pressure outlet on pump. Drain water from hose, gun, and nozzle extension. Use a rag to wipe off the hose.
4. Place the spray gun, nozzle extension, spray tips and high pressure hose on the handle.
5. Empty pump of all pumped liquids by pulling recoil handle about six times. This should remove most liquid in pump.
6. Store unit in a clean, dry area.
7. If storing for more than 30 days, see *Long Term Storage*.

⚠ WARNING Fuel and its vapors are extremely flammable and explosive which could cause burns, fire or explosion resulting in death, serious injury and/or property damage.

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 could ignite fuel vapors.

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Service Literature

If you would like a copy of the Parts Catalog or Technical Manual for this machine call **(888) 228-3068** or contact your local dealer.

Please provide the model and serial numbers as recorded on the *Product Identification* page.

Parts

We recommend John Deere quality parts and lubricants, available at your John Deere dealer.

Part numbers may change - use part numbers listed below when you order. If a number changes, your dealer will have the latest number.

When you order parts, your John Deere dealer needs your machine model and revision number. He may also need your engine Model and serial number. These are the numbers that you recorded in *Product Identification*.

Part Numbers

PumpSaver 6039
O-Ring Maintenance Kit 196002GS
Water Inlet Screen B2384GS
John Deere Turf Gard Engine Oil . . . . . .Contact Dealer
Fuel Stabilizer 100002
Air Cleaner . . . . . .LG491588JD or 5043
Resistor Spark Plug M78543
Long Life Platinum Spark Plug 5066

(Part numbers are subject to change without notice. Part numbers may be different outside the U.S.A.)

Performance and reliability of this machine may be adversely affected by use of unauthorized accessories. The use of unauthorized accessories or other alterations to the machine voids the warranty.

Specifications

Engine Technical Information

This is a single cylinder, overhead valve (OHV), air cooled engine. It is a low emissions engine.

In the State of California, Model 150000 engines are certified by the California Air Resources Board to meet emissions standards for 250 hours. Such certification does not grant the purchaser, owner or operator of this engine any additional warranties with respect to the performance or operational life of this engine. The engine is warranted solely according to the product and emissions warranties stated elsewhere in this manual.

Power Ratings

The gross power rating for individual gas engine models is labeled in accordance with SAE (Society of Automotive Engineers) code J1940 (Small Engine Power & Torque Rating Procedure), and rating performance has been obtained and corrected in accordance with SAE J1995 (Revision 2002-05). Torque values are derived at 3060 RPM; horsepower values are derived at 3600 RPM. Net power values are taken with exhaust and air cleaner installed whereas gross power values are collected without these attachments. Actual gross engine power will be higher than net engine power and is affected by, among other things, ambient operating conditions and engine-to-engine variability. Given the wide array of products on which engines are placed, the gas engine may not develop the rated gross power when used in a given piece of power equipment. This difference is due to a variety of factors including, but not limited to, the variety of engine components (air cleaner, exhaust, charging, cooling, carburetor, fuel pump, etc.), application limitations, ambient operating conditions (temperature, humidity, altitude), and engine-to-engine variability. Due to manufacturing and capacity limitations, Briggs & Stratton may substitute an engine of higher rated power for this Series engine.

Pressure Washer Specifications

Outlet Pressure . . . . . .3300 PSI (227.5 BAR)*
Flow Rate . . . . . 3.2 GPM (12.1 liters/min)
Water Supply Temperature . . . . . .Not to exceed 100°F (38°C)
Pump Oil Capacity . . . . . .12 fl. oz. (355 ml)

Engine Specifications

Bore . . . . . 2.970 in. (75.44 mm)
Stroke . . . . . 2.200 in. (56 mm)
Displacement . . . . . 15.24 cu in (250 cc)
Spark Plug
  Type: . . . . . M78543 or 5066
  Set Gap To: . . . . . 0.030 in. (0.76 mm)
Armature Air Gap: . . . . . 0.010 - 0.014 in. (0.25 - 0.36 mm)
Valve clearance with valve springs installed and piston 1/4 in. (6 mm) past top dead center of compression stroke (check when engine is cold).
Intake . . . . . 0.004 - 0.006 in. (0.10 - 0.15 mm)
Exhaust . . . . . 0.009 - 0.011 in. (0.23 - 0.28 mm)
Oil Capacity . . . . . .20 Ounces (0.6 Liters)
Fuel Tank Capacity . . . . . .3.0 Qt. (2.84 Liters)

* This product is rated in accordance with PWMA standard PW101 (www.pwma.org). Actual pressure at the point of discharge may vary due to factors including: the inclusion or exclusion of a detergent injection system; variations in engine performance; and environmental conditions.

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Maintenance

Maintenance Schedule

Follow the hourly or calendar intervals, whichever occurs first. More frequent service is required when operating in adverse conditions noted below.

First 5 Hours
• Change engine oil
Every 8 Hours or Daily
• Check/clean water inlet screen[1]
• Check high pressure hose
• Check detergent siphoning hose/filter
• Check spray gun and assembly for leaks
• Clean debris
• Check engine oil level
Every 25 Hours or Yearly
• Service engine air cleaner[2]
Every 50 Hours or Yearly
• Change engine oil[2]
• Inspect muffler and spark arrester
Every 100 Hours or Yearly
• Service spark plug
• Clean cooling system[2]
Every 200 Hours or 3 Months
• Change pump oil[3]

1 Clean if clogged. Replace if perforated or torn.

2 Service more often under dirty or dusty conditions.

3 Change pump oil after the first (50) operating hours and then every 200 hours or 3 months thereafter.

General Recommendations

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

The pressure washer's warranty does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, the operator must maintain the pressure washer as instructed in this manual, including proper storage as detailed in *Winter Storage* and *Long Term Storage*.

NOTICE Should you have questions about replacing components on your pressure washer, please call **(888) 228-3068** for assistance.

Some adjustments will need to be made periodically to properly maintain your pressure washer.

All service and adjustments should be made at least once each season. Follow the requirements in the Maintenance Schedule chart.

NOTICE Once a year you should clean or replace the spark plug, clean or replace the air filter, and check the spray gun and nozzle extension assembly for wear. A new spark plug and clean air filter assure proper fuel-air mixture and help your engine run better and last longer.

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 the *Emissions Warranty*.

Before Each Use

1. Check engine oil level.
2. Clean debris.
3. Check water inlet screen for damage.
4. Check high pressure hoses for leaks.
5. Check detergent siphoning tube and filter for damage.
6. Check spray gun and nozzle extension assembly for leaks.
7. Rinse out garden hose to flush out debris.

Pressure Washer Maintenance

Clean Debris

Daily or before use, clean accumulated debris from pressure washer. Keep linkage, spring and controls clean. Keep area around and behind muffler free from any combustible debris. Inspect cooling air slots and openings on the pressure washer. These openings must be kept clean and unobstructed.

Pressure washer parts should be kept clean to reduce the risk of overheating and ignition of accumulated debris.

- Use a damp cloth to wipe exterior surfaces clean.

NOTICE Improper treatment of pressure washer could damage it and shorten its life.

- DO NOT insert any objects through cooling slots.

- Use a soft bristle brush to loosen caked on dirt, oil, etc.
- Use a vacuum cleaner to pick up loose dirt and debris.

Check and Clean Inlet Screen

Examine the screen on the pump's water inlet. Clean it if the screen is clogged or replace it if screen is damaged.

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Check High Pressure Hose

The high pressure hose can develop leaks from wear, kinking, or abuse. Inspect the hose each time before using it. Check for cuts, leaks, abrasions or bulging of cover, damage or movement of couplings. If any of these conditions exist, replace the hose immediately.

⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

- NEVER repair high pressure hose. Replace it.
- Replacement hose rating MUST equal or exceed maximum pressure rating of unit.

Check Detergent Siphoning Tube

Examine the filter on the detergent tube and clean if clogged. The tube should fit tightly on the barbed fitting. Examine the tube for leaks or tears. Replace the filter or tube if either is damaged.

Detergent Siphoning Check Ball

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

NOTICE Before performing this procedure, be sure you are wearing safety goggles as described below.

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

- Always wear indirect vented (chemical splash) safety goggles marked to comply with ANSI Z87.1 when using or in vicinity of this equipment.
- NEVER substitute safety glasses or dry-condition goggles for indirect vented safety goggles.

1. Shut off engine and turn off water supply.
2. ALWAYS point spray gun in a safe direction, press red button and squeeze spray gun trigger to release retained high water pressure.

⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.
Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which could result in serious injury.

- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction, press red button and squeeze spray gun trigger to release high pressure, every time you stop engine.

3. Remove detergent siphoning hose from barbed fitting on pump.
4. Using a firm, blunt object 7/64” in diameter or smaller, by at least 1” long, such as an Allen wrench, slowly insert the object into the barbed fitting until you meet resistance. This resistance is the check ball.
5. Slowly push down until you feel the ball move slightly, push no more than 1/8". Slight pressure may be required to free the ball.
6. Repeat steps 4 and 5 if necessary.
7. Reinstall detergent siphoning hose onto barb fitting.
8. Treat with PumpSaver as described in *Protecting the Pump* during storage to prevent reoccurrence.

Check Gun and Nozzle Extension

Examine the hose connection to the spray gun and make sure it is secure. Test the trigger by pressing the red button and making sure the trigger “springs back” into place when you release it. You should not be able to press the trigger without pressing the red button. Replace spray gun immediately if it fails any of these tests.

Nozzle Maintenance

A pulsing sensation felt while squeezing the spray gun trigger may be caused by excessive pump pressure. The principal cause of excessive pump pressure is a spray tip clogged or restricted with foreign materials, such as dirt, etc. To correct the problem, immediately clean the spray tip following these instructions:

1. Shut off engine and turn off water supply.
2. ALWAYS point spray gun in a safe direction, press red button and squeeze spray gun trigger to release retained high water pressure.

⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.
Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which could result in serious injury.

- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction, press red button and squeeze spray gun trigger to release high pressure, every time you stop engine.

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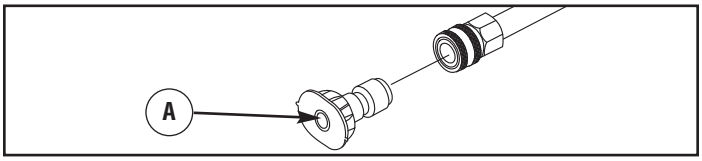
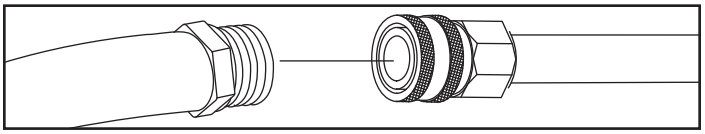
3. Remove spray tip from end of nozzle extension.
4. Use a small paper clip to free any foreign material clogging or restricting spray tip **(A)**.



5. Remove nozzle extension from spray gun.
6. Using a garden hose, remove additional debris by back flushing water through nozzle extension. Back flush between 30 to 60 seconds.



7. Reinstall spray tip into nozzle extension.
8. Reconnect nozzle extension to spray gun.
9. Make sure garden hose is connected to water inlet. Check that high pressure hose is connected to spray gun and pump. Turn on water.
10. Start engine following instructions *How to Start Your Pressure Washer*.
11. Test pressure washer by operating with each quick connect spray tip.

O-Ring Maintenance

Purchase an O-Ring/Maintenance Kit, Model 196002GS, by contacting the nearest authorized dealer. It is not included with the pressure washer. This kit includes replacement o-rings, rubber washer and water inlet filter. Refer to the instruction sheet provided in the kit to service your unit's o-rings.

⚠ WARNING The high pressure stream of water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

- NEVER repair leaking connections with sealant of any kind. Replace o-ring or seal.

Pump Oil Maintenance

Changing Pump Oil

NOTICE When changing pump oil, use only high quality SAE 30 weight oil. Use no special additives.

Change pump oil as follows:

1. Clean area around brass oil drain plug at bottom of pump.
2. Remove oil drain plug. Drain oil completely into an approved container.
3. When oil has completely drained, install oil drain plug and tighten firmly.
4. Clean area around pump oil dipstick. Remove dipstick and fill pump with recommended oil (approximately 12 oz. (355 ml)) to "**Full**" mark on dipstick.
5. Install pump oil dipstick.
6. Wipe up any spilled oil.

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Engine Maintenance

⚠ WARNING Unintentional sparking could cause fire or electric shock resulting in death or serious injury.

WHEN ADJUSTING OR MAKING REPAIRS TO YOUR PRESSURE WASHER

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

WHEN TESTING FOR ENGINE SPARK

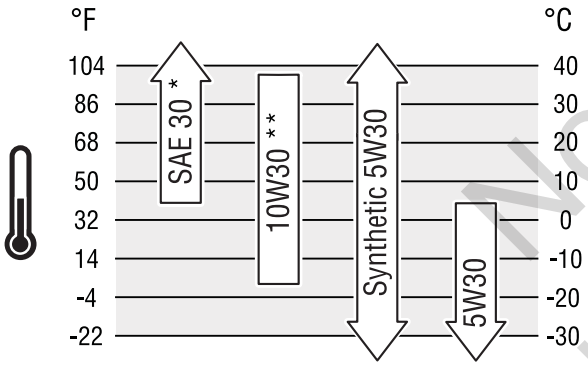
- Use approved spark plug tester.
- DO NOT check for spark with spark plug removed.

Oil

Oil Recommendations

We recommend the use of Briggs & Stratton 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.



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

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

NOTICE Synthetic oil meeting ILSAC GF-2, API certification mark and API service symbol with "SJ/CF ENERGY CONSERVING" or higher, is an acceptable oil at all temperatures. Use of synthetic oil does not alter required oil change intervals.

Checking Oil Level

Oil level should be checked prior to each use or at least every 8 hours of operation. Keep oil level maintained.

1. Make sure pressure washer is on a level surface.
2. Clean area around oil fill and remove oil fill cap.
3. Verify oil is at the point of overflowing at oil fill opening.
4. Replace and tighten oil fill cap.

Adding Engine Oil

1. Make sure pressure washer is on a level surface.
2. Check oil level as described in *Checking Oil Level*.
3. If needed, slowly pour oil into oil fill opening to the point of overflowing at oil fill.
4. Replace and tighten oil fill cap.

Changing Engine Oil

If you are using your pressure washer under extremely dirty or dusty conditions, or in extremely hot weather, change the oil more often.

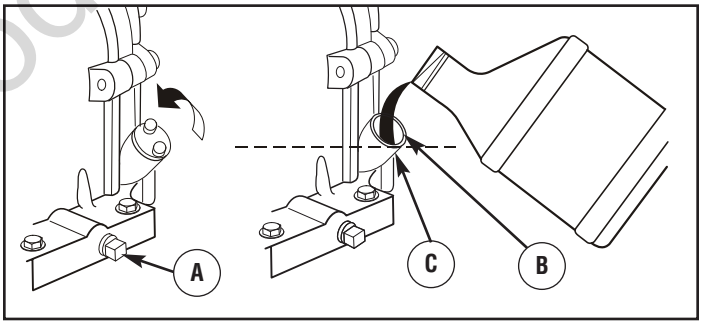
⚠ CAUTION Avoid prolonged or repeated skin contact with used motor oil.

- 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. DON'T POLLUTE. CONSERVE RESOURCES. RETURN USED OIL TO COLLECTION CENTERS.

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

1. Make sure unit is on a level surface.
2. Disconnect the spark plug wire from the spark plug and place the wire where it cannot contact spark plug.
3. Clean area around oil drain plug (**A**). The oil drain plug is located at base of engine, opposite carburetor.



4. Remove oil drain plug and drain oil completely into a suitable container.
5. Reinstall oil drain plug and tighten securely. Remove oil fill cap.
6. Slowly pour oil (about 20 oz.) into oil fill opening (**B**) to the point of overflowing (**C**) at oil fill cap. DO NOT overfill.
7. Reinstall oil fill cap. Finger tighten cap securely.
8. Wipe up any spilled oil.
9. Reconnect spark plug wire to spark plug.

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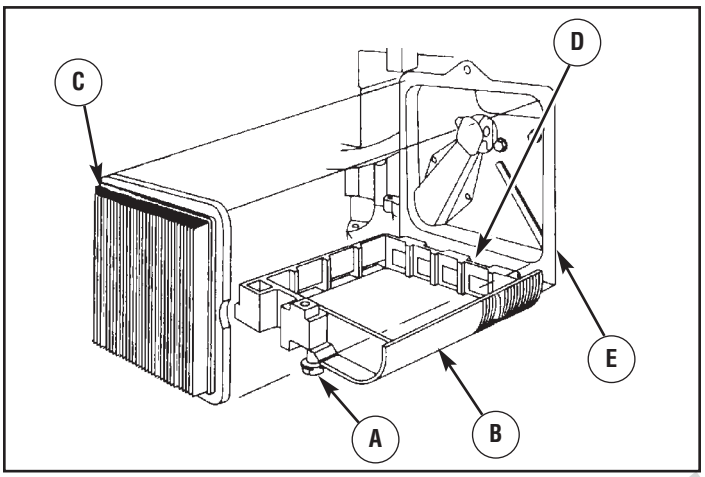
Service Air Cleaner

Your engine will not run properly and may be damaged if you run it with a dirty air cleaner. Service more often if operating under dirty or dusty conditions. The air cleaner cover is shown below in the open position.

To service the air cleaner, follow these steps:

1. Loosen screw (**A**) and tilt cover (**B**) down.

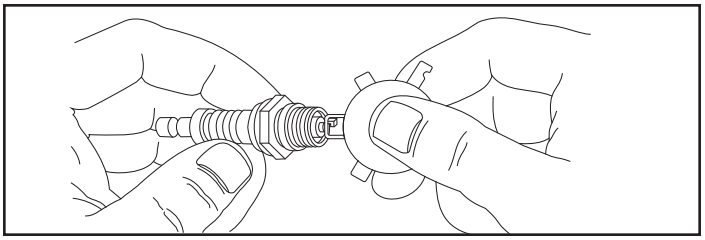


2. Carefully remove cartridge (**C**) assembly.
3. To clean cartridge, gently tap pleated paper side on a flat surface.
4. Reinstall clean or new cartridge assembly inside cover.
5. Insert cover's tabs (**D**) into slots in bottom of base (**E**).
6. Tilt cover up and tighten screw securely to base.

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. If replacement parts are required, make sure to use only original equipment replacement parts.

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

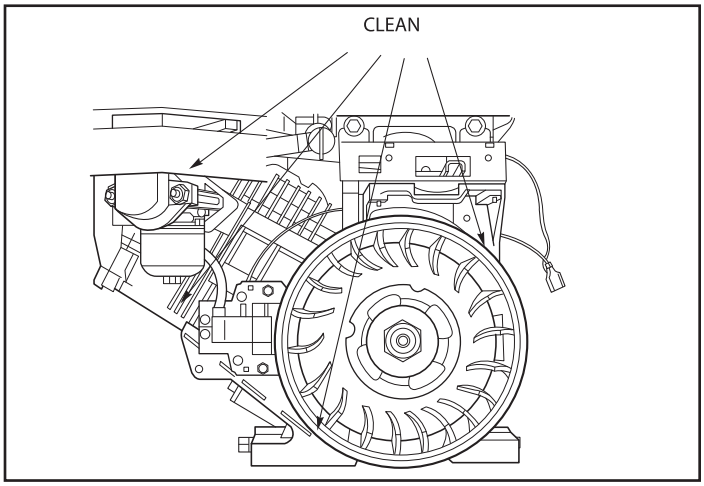
Contact with muffler area could cause burns resulting in serious injury.

- 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 pressure washer including overhead.
- 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.

  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.

Air Cooling System

Over time debris may accumulate in cylinder cooling fins and cannot be observed without partial engine disassembly. For this reason, we recommend you have a qualified service dealer clean the cooling system per recommended intervals (see *Maintenance Schedule* in beginning of *Maintenance* section). Equally important is to keep top of engine free from debris. See *Clean Debris*.



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Carburetor Adjustment

The carburetor on this engine is low emission. It is equipped with a non-adjustable idle mixture valve. Top speed has been set at the factory. If adjustment is required, see an authorized service dealer.

⚠ **CAUTION** Excessively high operating speeds could result in minor injury and/or pressure washer damage. Excessively low speeds impose a heavy load.

- DO NOT tamper with governor spring, links or other parts to increase engine speed. Pressure washer supplies correct rated pressure and flow when running at governed speed.
- DO NOT modify pressure washer in any way.

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TROUBLESHOOTING

Using Troubleshooting Chart

If you are experiencing a problem that is not listed in this chart, see your authorized dealer for service.

When you have checked all the possible cause listed and you are still experiencing the problem, see your authorized dealer.

Troubleshooting Chart

Problem	Cause	Correction
Pump has following problems: failure to produce pressure, erratic pressure, chattering, loss of pressure, low water volume.	1. Low pressure spray tip installed. 2. Inadequate water supply. 3. Inlet hose is kinked or leaking. 4. Clogged inlet hose screen. 5. Water supply is over 100°F (38°C). 6. High pressure hose is blocked or leaks. 7. Spray gun leaks. 8. Spray tip is obstructed. 9. Pump is faulty.	1. Replace with high pressure spray tip. 2. Provide adequate water flow. 3. Straighten inlet hose, patch leak. 4. Check and clean inlet hose screen. 5. Provide cooler water supply. 6. Clear blocks in outlet hose. 7. Replace spray gun. 8. Clean spray tip. 9. Contact local service facility.
Detergent fails to mix with spray.	1. Detergent siphoning tube is not submerged. 2. Detergent siphoning tube/filter is clogged or cracked. 3. High pressure spray tip installed. 4. Check ball stuck in detergent siphoning system.	1. Insert detergent siphoning tube into detergent. 2. Clean or replace filter/detergent siphoning tube. 3. Replace with low pressure spray tip. 4. Unstick check ball as described in *Detergent Siphoning Check Ball*.
Engine runs good at no-load but "bogs" when load is added.	Engine speed is too slow.	Move throttle control to FAST position. If engine still "bogs down", contact local service facility.
Engine will not start, starts and runs rough or shuts down during operation.	1. Low oil level. 2. Dirty air cleaner. 3. Out of fuel. 4. Stale fuel. 5. Spark plug wire not connected to spark plug. 6. Bad spark plug. 7. Water in fuel. 8. Excessively rich fuel mixture. 9. Flooded.	1. Fill crankcase to proper level. 2. Clean or replace air cleaner. 3. Fill fuel tank. 4. Drain fuel tank; fill with fresh fuel. 5. Connect wire to spark plug. 6. Replace spark plug. 7. Drain fuel tank; fill with fresh fuel. 8. Contact local service facility. 9. Wait 5 minutes and re-crank engine.
Engine lacks power.	Dirty air filter.	Replace air filter.

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Winter Storage

NOTICE You must protect your unit from freezing temperatures.

- Failure to do so will permanently damage your pump and render your unit inoperable.
- Freeze damage is not covered under warranty.

To protect the unit from freezing temperatures:

1. Follow steps 1-5 in the section *After Each Use*.
2. Use pump saver, Model 6039, to treat pump. This minimizes freeze damage and lubricates pistons and seals.
3. If pump saver is not available, connect a 3 ft. (1 meter) section of garden hose to water inlet adapter. Pour RV-antifreeze (antifreeze without alcohol) into hose. Pull recoil handle twice. Disconnect 3 ft. (1 meter) hose.
4. Store unit in a clean, dry area.

Long Term Storage

If you do not plan to use the pressure washer for more than 30 days, you must prepare the engine and pump for long term storage.

Protect Fuel System

Fuel Additive:

Fuel will become stale when stored over 30 days. Stale fuel causes acids and gum deposits to form in the fuel system or on essential carburetor parts. Prior to storage, if gasoline has not been treated with a fuel stabilizer, it must be drained from the engine into an approved container. Then run engine until it stops from lack of fuel.

When fuel stabilizers are used according to their instructions, there is no need to drain the gasoline from the engine prior to storage. Use Briggs & Stratton FRESH START® fuel stabilizer. Run the engine for a short time to circulate stabilizer throughout the fuel system. Engine and fuel can then be stored up to 24 months.

If gasoline is drained, the use of a fuel stabilizer in the storage container is still recommended to maintain freshness.

Change Engine Oil

While engine is still warm, drain oil from crankcase. Refill with recommended grade. See *Changing Engine Oil* in *Engine Maintenance*.

Protecting the Pump

To protect the pump from damage caused by mineral deposits or freezing, use PumpSaver, Model 6039, to treat pump. This prevents freeze damage and lubricates pistons and seals.

NOTICE PumpSaver is available as an optional accessory. It is not included with the pressure washer. Contact the nearest authorized dealer to purchase PumpSaver.

NOTICE You must protect your unit from freezing temperatures.

- Failure to do so will permanently damage your pump and render your unit inoperable.
- Freeze damage is not covered under warranty.

To use PumpSaver, make sure the pressure washer is turned off and disconnected from supply water. Read and follow all instructions and warnings given on the PumpSaver container.

Other Storage Tips

1. DO NOT store fuel from one season to another unless it has been treated as described in *Protect Fuel System*.
2. Replace fuel container if it starts to rust. Rust and/or dirt in fuel can cause problems if it's used with this unit.
3. Cover unit with a suitable protective cover that does not retain moisture.

⚠ WARNING Storage covers could cause a fire resulting in death, serious injury and/or property damage.

- DO NOT place a storage cover over a hot pressure washer.
- Let equipment cool for a sufficient time before placing the cover on the equipment.

4. Store unit in a clean and dry area.

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Warranties

California, U.S. EPA, and Briggs & Stratton Corporation Emissions Control Warranty Statement

Your Warranty Rights And Obligations

The California Air Resources Board, U.S. EPA, and Briggs & Stratton (B&S) are pleased to explain the emissions control system warranty on your Model Year 2011-2012 engine/equipment. In California, new small off-road engines and large spark ignited engines less than or equal to 1.0 liter must be designed, built, and equipped to meet the State's stringent anti-smog standards. B&S must warrant the emissions control system on your engine/equipment for the periods of time listed below provided there has been no abuse, neglect, or improper maintenance of your engine or equipment.

Your emissions control system may include parts such as the carburetor or fuel injection system, fuel tank, ignition system, and catalytic converter. Also included may be hoses, belts, connectors, sensors, and other emissions-related assemblies. Where a warrantable condition exists, B&S will repair your engine/equipment at no cost to you including diagnosis, parts, and labor.

Manufacturer's Warranty Coverage:

Small off-road engines and large spark ignited engines less than or equal to 1.0 liter are warranted for two years. If any emissions-related part on your engine/equipment is defective, the part will be repaired or replaced by B&S.

Owner's Warranty Responsibilities:

- As the engine/equipment owner, you are responsible for the performance of the required maintenance listed in your owner's manual. B&S recommends that you retain all receipts covering maintenance on your engine/equipment, but B&S cannot deny warranty solely for the lack of receipts or your failure to ensure the performance of all scheduled maintenance.
- As the engine/equipment owner, you should however be aware that B&S may deny you warranty coverage if your engine/equipment or a part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.
- You are responsible for presenting your engine/equipment to a B&S distribution center, servicing dealer, or other equivalent entity, as applicable, as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have any questions regarding your warranty rights and responsibilities, you should contact B&S at (414) 259-5262.

Briggs & Stratton Emissions Control Warranty Provisions

The following are specific provisions relative to your Emissions Control Warranty Coverage. It is in addition to the B&S engine warranty for non-regulated engines found in the Operator's Manual.

1. Warranted Emissions Parts
   Coverage under this warranty extends only to the parts listed below (the emissions control systems parts) to the extent these parts were present on the engine purchased.
   a. Fuel Metering System
      - Cold start enrichment system (soft choke)
      - Carburetor and internal parts
      - Fuel pump
      - Fuel line, fuel line fittings, clamps
      - Fuel tank, cap and tether
      - Carbon canister
   b. Air Induction System
      - Air cleaner
      - Intake manifold
      - Purge and vent line
   c. Ignition System
      - Spark plug(s)
      - Magneto ignition system
   d. Catalyst System
      - Catalytic converter
      - Exhaust manifold
      - Air injection system or pulse valve
   e. Miscellaneous Items Used in Above Systems
      - Vacuum, temperature, position, time sensitive valves and switches
      - Connectors and assemblies
2. Length of Coverage
   For a period of two years from date of original purchase, B&S warrants to the original purchaser and each subsequent purchaser that the engine is designed, built, and equipped so as to conform with all applicable regulations adopted by the Air Resources Board; that it is free from defects in material and workmanship that could cause the failure of a warranted part; and that it is identical in all material respects to the engine described in the manufacturer's application for certification. The warranty period begins on the date the engine is originally purchased.

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The warranty on emissions-related parts is as follows:

- Any warranted part that is not scheduled for replacement as required maintenance in the owner's manual supplied, is warranted for the warranty period stated above. If any such part fails during the period of warranty coverage, the part will be repaired or replaced by B&S at no charge to the owner. Any such part repaired or replaced under the warranty will be warranted for the remaining warranty period.
- Any warranted part that is scheduled only for regular inspection in the owner's manual supplied, is warranted for the warranty period stated above. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.
- Any warranted part that is scheduled for replacement as required maintenance in the owner's manual supplied, is warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part will be repaired or replaced by B&S at no charge to the owner. Any such part repaired or replaced under warranty will be warranted for the remainder of the period prior to the first scheduled replacement point for the part.
- Add on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non exempted add on or modified parts by the owner will be grounds for disallowing a warranty claim. The manufacturer will not be liable to warrant failures of warranted parts caused by the use of a non exempted add on or modified part.

3. Consequential Coverage

   Coverage shall extend to the failure of any engine components caused by the failure of any warranted emissions parts.

4. Claims and Coverage Exclusions

   Warranty claims shall be filed according to the provisions of the B&S engine warranty policy. Warranty coverage does not apply to failures of emissions parts that are not original equipment B&S parts or to parts that fail due to abuse, neglect, or improper maintenance as set forth in the B&S engine warranty policy. B&S is not liable for warranty coverage of failures of emissions parts caused by the use of add-on or modified parts.

Look For Relevant Emissions Durability Period and Air Index Information On Your Small Off-Road Engine Emissions Label

Engines that are certified to meet the California Air Resources Board (CARB) small off-road Emissions Standard must display information regarding the Emissions Durability Period and the Air Index. Briggs & Stratton makes this information available to the consumer on our emissions labels. The engine emissions label will indicate certification information.

The **Emissions Durability Period** describes the number of hours of actual running time for which the engine is certified to be emissions compliant, assuming proper maintenance in accordance with the Operating & Maintenance Instructions. The following categories are used:

Moderate:
Engine is certified to be emissions compliant for 125 hours of actual engine running time.

Intermediate:
Engine is certified to be emissions compliant for 250 hours of actual engine running time.

Extended:
Engine is certified to be emissions compliant for 500 hours of actual engine running time.

For example, a typical walk-behind lawn mower is used 20 to 25 hours per year. Therefore, the **Emissions Durability Period** of an engine with an **intermediate** rating would equate to 10 to 12 years. Briggs & Stratton engines are certified to meet the United States Environmental Protection Agency (USEPA) Phase 2 emissions standards. For Phase 2 certified engines, the Emissions Compliance Period referred to on the Emissions Compliance label indicates the number of operating hours for which the engine has been shown to meet Federal emissions requirements.

For engines less than 225 cc displacement.
Category C = 125 hours
Category B = 250 hours
Category A = 500 hours

For engines of 225 cc or more displacement.
Category C = 250 hours
Category B = 500 hours
Category A = 1000 hours

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WARRANTY

JOHN DEERE® PRESSURE WASHER OWNER WARRANTY POLICY

Effective November 1, 2009; replaces all undated Warranties and all Warranties dated before November 1, 2009.

LIMITED WARRANTY

JOHN DEERE, the leaping deer logo, and John Deere's green and yellow color scheme are registered trademarks of Deere & Company, and are used under license to Briggs & Stratton Power Products Group, LLC. Briggs & Stratton Power Products Group, LLC will repair or replace, free of charge, any part(s) of the pressure washer that is defective in material or workmanship or both. Read Other Exclusions below. Transportation charges on product submitted for repair or replacement under this warranty must be borne by purchaser. This warranty is effective for the time periods and subject to the conditions stated below. For warranty service, find the nearest Authorized Service Dealer in our dealer locator map at www.deere.com.

THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM PURCHASE, OR TO THE EXTENT PERMITTED BY LAW. ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW. Some states or countries do not allow limitations on how long an implied warranty lasts, and some states or countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state or country to country.

WARRANTY PERIOD

Consumer Use	**2 years**
Commercial Use	**90 days**

The warranty period begins on the date of purchase by the first retail consumer or commercial end user, and continues for the period of time stated above. "Consumer use" means personal residential household use by a retail consumer. "Commercial use" means all other uses, including use for commercial, income producing or rental purposes. Once equipment has experienced commercial use, it shall thereafter be considered as commercial use for purposes of this warranty.

NO WARRANTY REGISTRATION IS NECESSARY TO OBTAIN WARRANTY ON BRIGGS & STRATTON PRODUCTS. SAVE YOUR PROOF OF PURCHASE RECEIPT. IF YOU DO NOT PROVIDE PROOF OF THE INITIAL PURCHASE DATE AT THE TIME WARRANTY SERVICE IS REQUESTED, THE MANUFACTURING DATE OF THE PRODUCT WILL BE USED TO DETERMINE THE WARRANTY PERIOD.

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ABOUT YOUR WARRANTY

We welcome warranty repair and apologize to you for being inconvenienced. Any Authorized Service Dealer may perform warranty repairs. Most warranty repairs are handled routinely, but sometimes requests for warranty service may not be appropriate. For example, warranty service would not apply if equipment damage occurred because of misuse, lack of routine maintenance, shipping, handling, warehousing or improper installation. Similarly, the warranty is void if the manufacturing date or the serial number on the pressure washer or engine has been removed or the equipment has been altered or modified. During the warranty period, the Authorized Service Dealer, at its option, will repair or replace any part that, upon examination, is found to be defective under normal use and service. This warranty will not cover the following repairs and equipment:

- **Normal Wear:** Outdoor Power Equipment, like all mechanical devices, needs periodic parts and service to perform well. This warranty also does not cover normal maintenance such as air filters, adjustments, fuel system cleaning and obstruction (due to chemical, lime, dirt, and so forth).

- **Installation and Maintenance:** This warranty does not apply to equipment or parts that have been subjected to improper or unauthorized installation or alteration and modification, misuse, negligence, accident, overloading, overspeeding, improper maintenance, repair or storage so as, in our judgment, to adversely affect its performance and reliability. This warranty also does not cover normal maintenance such as air filters, adjustments, fuel system cleaning and obstruction (due to chemical, lime, dirt, and so forth).

- **Other Exclusions:** This warranty excludes wear items such as quick couplers, seals, o-rings, pumps that have been run without water supplied or damage or malfunctions resulting from accidents, abuse, modifications, alterations, or improper servicing or freezing or chemical deterioration. Accessory parts, such as guns, hoses, nozzle extensions (wands), and nozzles, are excluded from the product warranty. This warranty excludes used, reconditioned, and demonstration equipment and failures due to acts of God and other force majeure events beyond the manufacturers control.

202269E, Rev. D, 11/2/2009

BRIGGS & STRATTON POWER PRODUCTS GROUP, LLC
MILWAUKEE, WI, USA

John Deere Quality Continues with Quality Service

John Deere provides a process to handle your questions or problems, should they arise, to ensure that product quality continues with your John Deere dealer's parts and service support.

Follow the steps below to get answers to any questions you may have about your product.

1. Refer to your machine operator manuals.
2. Contact your nearest authorized dealer with unanswered questions.
3. In North America or Canada, call the John Deere Customer Service Center.
   - Call **(888) 228-3068** and provide product serial number and model number.

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Manual No. 208303GS Revision C