

PRESSURE WASHER TERMINOLOGY

- PSI: Pounds per Square Inch. The unit of measure for water pressure. Also used for air pressure, hydraulic pressure, etc.
- PSI*: Pounds per Square Inch. The unit of measure for water pressure. Also used for air pressure, hydraulic pressure, etc.
- GPM*: Gallons per Minute. The unit of measure for the flow rate of water.

* Rated Pressure and Rated Water Flow is within manufacturing tolerance of (+/- 10%).

Bypass Mode: Allows water to re-circulate within the pump when the gun trigger is not pulled. This feature allows the operator to release the trigger gun and reposition themselves without having to turn the engine off in between cleaning actions.

WARNING: Do not allow the unit to run for more than two minutes without the gun trigger being pulled. This could cause overheating and damage to the pump. When the temperature inside the pump rises too high, the thermal relief valve will open and release a spray of water from the pump to lower the internal temperature. The valve will then close.

- Thermal Relief Valve (P, Fig. 5): When the temperature inside the 5 P pump rises too high, this valve will open and release a gush of water in an effort to lower the temperature inside the pump. The valve will then close.

NOTE: Thermal relief valve location will vary depending on the pump type.

- Detergent Injection System: Mixes cleaners or cleaning solvents with the water to improve cleaning effectiveness.
- Water Supply: All pressure washers must have a source of water. The minimum requirements for a water supply are 20 PSI and 5 Gallons Per Minute. If your water source is a well, the garden hose length can only be 30 ft. (9 m) max.

WARNING: To reduce the possibility of contamination always protect against backflow when connected to a potable water system.

PRESSURE WASHER OPERATING FEATURES

PRESSURE ADJUSTMENTS

The pressure setting is preset at the factory to achieve optimum pressure and cleaning. If you need to lower the pressure, it can be accomplished by these methods.

- 1. Back away from the surface to be cleaned. The further away you are, the less the pressure will be on the surface to be cleaned.
- 2. Change to the 40° nozzle (white). This nozzle delivers a less powerful stream of water and a wider spray pattern. Refer to How To Use Spray Wand.

NOTICE: DO NOT attempt to increase pump pressure. A higher pressure setting than the factory set pressure may damage pump.

HOW TO USE SPRAY WAND (IF EQUIPPED WITH QC NOZZLES)

The nozzles for the spray wand are stored in the nozzle holder on the panel assembly. Colors on the panel identify nozzle location and spray pattern. Refer to the following chart to choose the correct nozzle for the job to be performed.

CHANGING NOZZLES ON SPRAY WAND (FIG. 6)

DANGER: Risk of fluid injection. Do not direct discharge stream toward persons, unprotected skin, eyes or any pets or animals. Serious injury will occur.

WARNING: Flying objects could cause risk of serious injury. Do not attempt to change nozzles while pressure washer is running. Turn engine off before changing nozzles.

- 1. Pull quick-connect coupler (E) back and insert nozzle (K).
- 2. Release quick-connect coupler and twist nozzle to make sure it is secure in coupler.

WARNING: Flying object could cause risk of serious injury. Ensure nozzle is completely inserted in quickconnect socket and quick-connect collar is fully engaged (forward) before squeezing gun trigger.

HOW TO USE SPRAY WAND (IF EQUIPPED WITH 5N1 NOZZLE)

There are five spray pattern settings located on the 5n1 Multi-tip Nozzle. To select a spray pattern, rotate the spray selector to the desired setting. Refer to the following chart to choose the correct nozzle for the job to be performed.

DANGER: Risk of fluid injection. Do not direct discharge stream toward persons, unprotected skin, eyes or any pets or animals. Serious injury will occur.

WARNING: Flying objects could cause risk of serious injury. Do not attempt to change nozzles while pressure washer is running. Turn engine off before changing nozzles.

HOW TO APPLY CHEMICALS/CLEANING SOLVENTS (FIG. 7)

Applying chemicals or cleaning solvents is a low pressure operation. NOTE: Use only soaps and chemicals designed for pressure washer use. Do not use bleach.

To Apply Chemicals:

- 1. (if equipped) Ensure detergent siphon hose (F, Figure 7A) is attached to barbed fitting location near high pressure hose connection of pump as shown. Place other end of detergent siphon hose with filter on it into container holding chemical/cleaning solution.

NOTE: The barbed fitting location will vary depending on the pump type.

- 2. (if equipped) Remove the cap from the detergent tank (Q, Figure 7B) and fill the detergent tank with cleaning solvent. Replace cap on detergent tank.

NOTE: For every 7 gallons of water pumped 1 gallon of chemical/cleaning solution will be used.

- 3. Install low pressure (black) nozzle into quick connect fitting of spray wand OR select the SOAP setting on the 5n1 Multi-tip Nozzle. See How To Use Spray Wand paragraph in this section.
- 4. After use of chemicals, place detergent siphon hose into container of clean water and draw clean water through chemical injection system to rinse system thoroughly. If chemicals remain in the pump, it could be damaged. Pumps damaged due to chemical residue will not be covered under warranty.

NOTE: Chemicals and soaps will not siphon if the black soap nozzle is not installed on the spray wand OR if the soap nozzle is not selected on the 5n1 Multi-tip Nozzle.

STARTING (FIG. 8–11)

WARNING: To reduce the risk of injury, read the pressure washer instruction manual and the engine instruction manual before starting pressure washer.

DANGER: Risk of fluid injection and laceration. When using the high pressure setting, DO NOT allow the high pressure spray to come in contact with unprotected skin, eyes, or with any pets or animals. Serious injury will occur.

- Your washer operates at fluid pressures and velocities high enough to penetrate human and animal flesh, which could result in amputation or other serious injury. Leaks caused by loose fittings or worn or damaged hoses can result in injection injuries. DO NOT TREAT FLUID INJECTION AS A SIMPLE CUT! See a physician immediately!

DANGER: Carbon Monoxide. Using an engine indoors can kill you in minutes. Engine exhaust contains high levels of carbon monoxide (CO), a poisonous gas you cannot see or smell. You may be breathing CO even if you do not smell engine exhaust.

- Breathing exhaust fumes will cause serious injury or death! Engine exhaust contains carbon monoxide, an odorless and deadly gas.
- Operate pressure washer in a well-ventilated area. Avoid enclosed areas such as garages, basements, etc.
- Never operate unit in or near a location occupied by humans or animals.

WARNING: Risk of Fire, Asphyxiation and Burn. Never fill fuel tank when engine is running or hot. Do not smoke when filling fuel tank.

- Never fill fuel tank completely. Fill tank to 1/2" (12.7 mm) below bottom of filler neck to provide space for fuel expansion. Wipe any fuel spillage from engine and equipment before starting engine.
- DO NOT let hoses come in contact with very hot engine muffler during or immediately after use of your pressure washer. Damage to hoses from contact with hot engine surfaces will NOT be covered by warranty

NOTICE: Risk of property damage. Never pull water supply hose to move pressure washer. This could damage hose and/or pump inlet.

- DO NOT use hot water, use cold water only.
- Never turn water supply off while pressure washer engine is running or damage to pump will result.
- DO NOT stop spraying water for more than two minutes at a time. Pump operates in bypass mode when spray gun trigger is not pressed. If pump is left in bypass mode for more than two minutes internal components of the pump can be damaged. If you do not understand these precautions, please contact our customer service department at www.simpsoncleaning.com Prior to starting, refer to your engine manual for proper starting procedure.
 - 1. In a well ventilated outdoor area add fresh, high quality, unleaded gasoline with a pump octane rating of 86 or higher. Do not overfill. Wipe up spilled fuel before starting the engine. Refer to Engine Owner's Manual for correct procedure. **NOTICE:** Use of fuels with greater than 10% ethanol are not approved for use in this product per EPA regulations and will damage the unit and void the warranty.
 - 2. Check engine oil level. Refer to Engine Owner's Manual for correct procedure.
 - 3. Connect the water hose to the water source. Turn the water source on to remove all air from the hose. When a steady stream of water is present, turn the water source off.
 - 4. Verify the filter screen (M) is in water inlet of pump. NOTE: Convex side faces out.
 - 5. Connect water source (N) to pump inlet (J). NOTE: Water source must provide a minimum of 5 gallons per minute at 20 PSI.
 - 6. Connect high pressure hose (C) to pump outlet (I).

WARNING: To reduce the possibility of contamination always protect against backflow when connected to a potable water system.

- 7. Choose the correct nozzle for the job to be performed. See How To Use spray Wand instructions in this section.

NOTE: If applying a chemical or cleaning solution, see How To Apply Chemicals/Cleaning Solvents instructions in this section.

- 8. Turn water source on. **NOTICE:** Risk of property damage. Failure to do so could cause damage to the pump.
- 9. Remove all air from the pump and high pressure hose by depressing trigger until a steady stream of water is present.
- 10. Start engine. See Engine Owner's Manual for correct procedure.

WARNING: Risk of unsafe operation. If engine does not start after two pulls, squeeze trigger of gun to relieve pump pressure. Pull starter cord slowly until resistance is felt. Then pull cord rapidly to avoid kickback and prevent hand or arm injury.

NOTE: If the oil level in the engine is low, the engine will not start. If the engine does not start, check the oil level and add oil as needed.

- 11. Depress trigger on gun to start water flow.

WARNING: Risk of unsafe operation. Stand on a stable surface and grip gun/spray wand firmly with both hands. Expect the gun to kick when triggered.

- 12. Release trigger to stop water flow.

WARNING: Do not allow the unit to run for more than two minutes without the gun trigger being pulled. This could cause overheating and damage to the pump. When the temperature inside the pump rises too high, the thermal relief valve will open and release a spray of water from the pump to lower the internal temperature. The valve will then close.

WARNING: Risk of injury from spray. Always engage 11 O the trigger lock (O) when gun is not in use. Failure to do so could cause accidental spraying.

Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.