WARNING - PRESSURE WASHER SAFETY

Any piece of equipment can be dangerous if not operated properly. **YOU** are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface, or render inoperable any of the safety devices or warnings on this equipment. **IF** any safety devices or warnings have been removed, defeated, defaced, or rendered inoperable, **DO NOT USE THIS EQUIPMENT!!!**

WARNING: Operating, servicing and maintaining this equipment can expose you to chemicals including engine exhaust, carbon monoxide and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize your exposure, avoid breathing exhaust, do not idle the engine except as necessary, operate and service your equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing your equipment. For more information go to www.P65warnings.ca.gov

HIGH PRESSURE SPRAY CAN CAUSE EXTREMELY SERIOUS INJURY. THE PRESSURE STREAM CAN PIERCE SKIN, DAMAGE EYES, BURST EAR DRUMS. USE EXTREME CAUTION

NEVER TOUCH A LEAKING HOSE, IT CAN PIERCE SKIN. SHUT THE UNIT DOWN BEFORE HANDLING IT.

Use extreme caution whenever operating, moving, loading or unloading this equipment. During and after operation the Muffler & other components are Extremely Hot and will cause Serious Burns.

Provide adequate ventilation when operating this equipment. Internal combustion engines consume oxygen & give off deadly carbon monoxide gas.

PRE-OPERATION CHECK: Before starting your pressure washer:

- 1. Check pump oil level. Dip stick for pump is located on the top of the pump.
- 2. 5/8" Cold water supply with a minimum of 3 GPM (Gallons Per Minute), 20 PSI (Pounds per Square Inch).
- 3. Hose, wand & nozzle are securely attached.
- 4. Open spray gun to relieve pressure before starting.
- 5. Check engine oil (SAE 10W-40).

OPERATION PROCEDURES: How to safely operate your pressure washer:

- 1. Attach a 5/8" garden hose to inlet connector. Min. flow of water to the pressure washer should be 3 GPM.
- 2. Turn on water at faucet & squeeze spray gun trigger, allowing water to flow until a steady stream comes out the wand.
- 3. Turn engine fuel lever and switch to the "on" position. Then choke engine and pull rope to start. After engine is started, turn off choke.
 - **CAUTION**: Small engines may kick back. Do not hold pull rope tightly in hand.
- 4. With spray nozzle pointed away from you & anybody else, pull trigger on spray gun to obtain pressurized spray.

SHUTDOWN PROCEDURES: How to safely shut down your pressure washer:

- 1. If a chemical injector was used, rinse all lines with clean water, to remove soap residue.
- 2. Turn off engine.
- 3. Squeeze gun trigger to relieve any pressure.
- 4. Disconnect water supply hose from washer.

CAUTION: Do not allow pump to run without water. Disconnect all hoses to allow water to drain.

5. Protect the unit from freezing.

WASHING TECHNIQUES: Tips on how to power wash more effectively:

- 1. Test pressure & spray pattern on a hard surface (i.e., cement) to gauge distance & impact of water spray.
- 2. Hold spray nozzle about one foot from the surface being cleaned. For the best surface cleaning action, spray at a slight angle.
- 3. To change spray nozzle, turn off motor & squeeze gun trigger to release hose pressure. Pull back on the quick connect at the end of the wand, & exchange nozzle. Make sure nozzle is seated securely. Restart engine.
- 4. Use the chemical injector to apply detergent (see "Chemical Injector Use" list below). Wash from the bottom & work up. Allow the chemical to set 5-10 minutes on the surface. Then rinse from the top down.

NOTE: If the pressure washer is running & not being used for more than 5 minutes, turn off engine.

CHEMICAL INJECTOR USE: How to properly operate the chemical injector:

- 1. Attach chemical injector between the pressure washer and the high-pressure hose.
- 2. Place black soap nozzle into coupler at end of wand.
- 3. Place chemical pick-up tube in chemical container.
- 4. Turn on unit (See "Operation Procedures").
- 5. Squeeze gun trigger. The detergent is automatically siphoned at a rate of 15 to 1.
- 6. After washing, rinse by releasing the gun trigger removing the soap nozzle & placing a high-pressure nozzle in the coupler at the end of the wand.

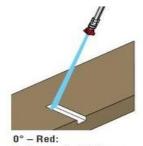
NOTE: The chemical injector will not siphon with the high-pressure nozzle at the end of the wand.

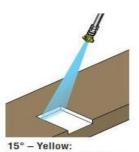
SAFETY CHECKLIST: Tips for pressure washer operation safety:

- 1. Always read the warning labels on the equipment, & operating instructions.
- 2. Eye safety devices & foot protection should be worn when using this equipment. High pressures from these units can cause bodily harm.
- 3. Allow the engine to cool for at least two minutes before refueling. If any fuel is spilled, make sure the area is dry before testing the spark plug or starting the engine.
- 4. Always turn off the unit when making adjustments, such as changing the nozzle or adding accessories.
- 5. Inspect the condition of the high-pressure hose, spray gun, & wand before using.
- 6. Do not operate a pressure washer near or above power lines or fatal electrical shock may result.
- 7. Pressure washers have a number of inherent warnings, including:
- Operate non-electrical pressure washers outdoors. Flammable liquids can create fumes which can ignite or hinder breathing.
- High pressure spray can cause paint chips or other particles to fly at high speeds.
- Keep water spray away from electric wiring or fatal electric shock may result.
- 8. Exercise care when using this equipment.
- 9. Never point the gun at anyone else or any part of your body.
- 10. Do not put hands or fingers in front of gun.
- 11. Never allow children or unauthorized personnel to handle washer.
- 12. Wear proper attire: waterproof coveralls, heavy rubber shoes, safety glasses & insulated gloves.
- 13. Be sure gun is held securely by operator. Water produced by this washer can cause burns and tears. If skin is hit by sprayed liquid, seek medical attention immediately.
- 14. Do not alter pressure washer in any manner. If repairs are necessary, contact A Tool Shed immediately.
- 15. Do not leave washer under pressure unattended at any time.

Quick disconnect pressure washer nozzles

This coupler contains an O-ring to facilitate a tight seal. All quick disconnect female couplers in a pressure washing system contain these O-rings. It's important that pressure washer nozzles snap tightly into the female coupler. An improperly seated nozzle can become a projectile causing damage or injury, at the very least it can result in a lost nozzle.









40° - White:

The red tip is the zero-degree nozzle - these pressure washer nozzles produce a pencil point pattern, there is no fan created so this is not the tip to use when cleaning coverage is desired. The red tip does deliver the highest impact as it concentrates the pressure into the smallest area. Avoid damaging wood or other fragile surfaces. This is an ideal tool for cleaning under the deck of a lawnmower, removing caked on mud from equipment, cleaning stains from concrete, masonry, steel & aluminum even removing the grass from cracks in the sidewalk.

The yellow tip creates a 15-degree fan pattern. These pressure washer nozzles are referred to as chiseling tips. Held at a 45-degree angle you can use it like a scraper to remove peeling paint or mildew. It is also used for other tasks where breaking the bond is harder than average. Of your different pressure washer nozzles, you will find yourself using this one the most often when the task is tough. This is the only situation I know where you'll find that when the going gets tough the tough gets yellow.

The green tip produces a 25-degree fan pattern. This is a wash tip. These pressure washer nozzles are the ones to use when breaking the bond between the grime & substrate is reasonably easy. These can also be used for sweeping leaves or debris from flat surfaces or curbing. These pressure washer nozzles have the widest variety of applications as the fan degree allows for good impact pressure *and* cleaning coverage.

The white tip is the 40-degree fan tip. The wider dispersion of the impact pressure limits these pressure washer nozzles to rinsing & delicate washing. These are the tips to use for washing/rinsing glass or washing vehicles. These are great tips for wooden decks & all delicate substrates.



The black tip is for chemical application. These pressure washer nozzles are used with downstream chemical injectors. Downstream means that the chemical is introduced to the water stream AFTER it leaves the pump. In this way chemicals that may damage the pump are never introduced to the interior of the pump. This is not a high-pressure tip. These pressure washer nozzles have the largest orifice. These tips apply the chemical/water mixture in a wide low-pressure spray. These nozzles create a siphoning action, which allows the chemical injector to siphon chemical & introduce it to the water flow. The biggest complaint about chemical injectors is when they won't siphon the chemical. This can almost always be traced back to using high pressure washer nozzles instead of the black pressure washer nozzles

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. **IF** there is any doubt as to the operation or safety of the equipment,

<u>DO NOT USE!! CALL A TOOL SHED IMMEDIATELY!!!</u>
FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH