

PW3000 STEEL

INDUSTRIAL TRASH PUMP

OPERATOR'S MANUAL



WARNING

It is extremely important to read and understand the entire contents of this operator's manual before attempting to operate the product. This equipment is potentially hazardous and could cause physical injury or even death if improperly used.

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Important Safety Warning Signals

Do not operate equipment until reading and understanding operator’s manual.



Read Operator’s Manual



Electric Shock



Fire



Ground Generator



Hot Surfaces



Keep Dry



Level



No Smoking



Proper Clearance



Proper Lifting



Store in Dry Place



Toxic Fumes



Wear Eye Protection

REVIEW THIS MANUAL THOROUGHLY

Follow all instructions provided within this manual. This equipment can cause serious injury to people and animals and severe damage to property if operated negligently or incorrectly. Pay particular attention to all safety instructions, warnings and notices.



The signal words and meanings are intended to explain the level of risk associated with this product.



Indicates a hazard which, if not avoided WILL result in death or serious injury.



Indicates a hazard which, if not avoided, could result in death or serious injury.



Indicates a hazard which, if not avoided, could result in minor or moderate injury.

Important Safety Operation Information



Manufacturer shall not be responsible for any consequences resulting from improper use of this equipment. **Read and completely understand entire contents of this operator's manual and become familiar with the unit before attempting to start using this equipment! It is your responsibility to know its applications, limitations, and hazards!** If the operator does not completely understand the instructions and all of the hazards of operating this unit after reading this manual, operator must call the factory to answer these questions to operator's complete satisfaction before proceeding 1-800-845-4141.



A minimum of three (3) feet of clearance on all sides is required.

- This unit is only to be used for its intended purpose; any other applications could void warranty;
- User, accepts responsibility for injuries and/or damage resulting from other applications.

FOR OUTDOOR USE ONLY



Never use this unit inside of any building, enclosure or a recreation vehicle (RV).

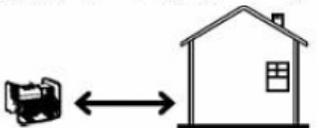
No modifications will eliminate the danger of possible carbon monoxide poisoning, fire or explosion.



DANGER Using equipment indoors WILL KILL YOU IN MINUTES. Exhaust contains carbon monoxide, a poison gas you cannot see or smell.



NEVER use in the home or in partly enclosed areas such as garages.



ONLY use outdoors and far from open windows, doors, and vents.

- Inspect the entire system for leakage, weaknesses, damage or deterioration before each use.
- Follow ALL codes for the safe operation of this equipment, both local and federal (United States occupational safety and health - OSHA).



Only people that are well acquainted with the rules of safe operation should use this equipment.

- KEEP children away from the unit.



Wear safety glasses and hearing protection.

- Do not stand on the unit or attempt to use it as a hand hold.



Replace or repair any defective parts before using.

- Do not fill gas tank if engine is hot. Do NOT fill the gas tank indoors.
- The engine governor is preset. Do not tamper with the setting. Excessively fast speeds will severely shorten the life of the engine and may be hazardous.

WARNINGS AND CAUTIONS

In this manual and/or decals and tags on the unit are not all inclusive. It would be impossible to anticipate every circumstance that might involve a hazard handling.



WARNING Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual before set up or use of this product.



WARNING CALIFORNIA PROPOSITION

65 WARNING: Engine exhaust from this product contains chemicals and battery posts, terminals and related accessories are known to the state of California to cause cancer, birth defects and other reproductive harm.

Important Safety

Equipment Specific Warnings



Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual before set up or use of this product.

! WARNING

Your Pressure Washer, Model TY-4000 is a gasoline operated device that converts residential water pressure into extremely high pressure. The unit is portable and mobile. The gasoline engine makes it possible to use the unit in remote areas that are void of electrical power if needed.

Pressure washer cleaning solvents can be mixed into the pressurized stream to make the cleaning even more powerful.

The powerful spray is capable of causing damage to wooden surfaces, glass, automobile paint and trim and delicate objects such as flowers or shrubs. Check the item to be cleaned before directing the pressurized spray. Adjust the stream to accommodate the item to be washed.

- The following safety precautions **must** be observed at all times because the pressure washer and components make up a high system.
- Follow all codes for the safe operation of this equipment both local and federal (United States occupational safety and health OSHA).
- Only people that are well acquainted with the rules of safe operation should use the unit.
- Read and understand all manuals and instructions included with the pressure washer before attempting to use it.
- To reduce the risk of injury, keep children and visitors away. All visitors should wear safety glasses and be kept a safe distance from work area.
- **Always wear eye protection with side shields marked to comply with ANSI Z87.1.** Following this rule will reduce the risk of serious personal injury.

- Do **not** stand on the unit or attempt to use it as a hand hold.
- Do **not** make adjustments to washer while engine is running. This pump is designed to handle nonvolatile, nonflammable liquids and non-corrosive liquids.
- **Dress properly.** Do not wear loose clothing, gloves, neckties, or jewelry. They can get caught and draw you into moving parts. Rubber gloves and nonskid footwear are recommended. Also wear protective hair covering to contain long hair.
- **Hold the handle and wand securely with both hands.** Expect the trigger handle to kick back when the trigger is pulled due to reactive forces. Failure to hold securely can cause loss of control and injury.
- Inspect the entire system for leakage, weaknesses, damage or deterioration before each use.
- **Do not operate the product while under the influence of drugs, alcohol, or any medication.**
- Replace or repair any defective parts before using.
- Check all fasteners regularly.
- Check the work area before each use. Remove all objects such as rocks, broken glass, nails, wire, or string which can be thrown or become entangled in the machine.
- Do not touch hot surfaces.
- Shut off The pressure washer immediately if it begins to vibrate excessively.
- Do **not** fill the gas tank indoor. Wipe any spilled gas before attempting to start the pressure washer.
- Stop engine before leaving the area. Never leave a running unit unattended.
- **Always relieve pressure after engine has stopped!**

- Remove spark plug wire while inspecting unit to keep the unit from inadvertently restarting.
- Allow unit to completely cool before storing.
- Do not operate washer without proper water supply.

⚠ WARNING High pressure jets can be dangerous if subject to

misuse. The jet must not be directed at persons, animals, electrical devices, or the machine itself.

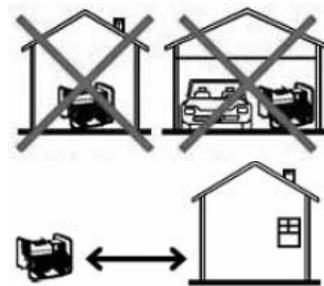
- The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury and possible amputation.
- The trigger gun traps high water pressure, even when engine is stopped. Relieve trapped water pressure in the pump, hose and trigger gun by squeezing the trigger AFTER the engine has completely stopped.
- 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-rings and seals.
- Never connect high pressure hose to the extension wand.
- NEVER try to disconnect any water connections without first turning the unit OFF, turning the inlet water OFF and relieving all trapped pressure!
- Store indoors.

Always point spray gun in safe direction and squeeze spray gun trigger to release high pressure every time you stop engine.

- Never aim spray gun at people, animals, electrical devices or plants.
- Do not secure spray gun in open position.
- Do not leave machine unattended.

- Never use a spray gun which does not have a trigger lock OR trigger guard in place and in working order.
- Always assure spray gun, nozzles and accessories are correctly attached.
- Do NOT spray electrical devices with water.
- For outdoor use only.
- Empty fuel tank and restrain the pressure washer from moving prior to transporting in a vehicle.

⚠ DANGER Using equipment indoors WILL KILL YOU IN MINUTES. Exhaust contains carbon monoxide, a poison gas you cannot see or smell.



NEVER use in the home or in partly enclosed areas such as garages.

ONLY use outdoors and far from open windows, doors, and vents.

⚠ WARNING The trigger gun traps high water pressure, even when engine is stopped. Relieve trapped water pressure in the pump, hose and trigger gun by squeezing the trigger AFTER the engine has completely stopped.

NOTICE! Engine references are given in this manual, these are generic guidelines. For specific instructions on the engine provided with your unit, please see the engine operator's manual supplied with your pressure washer or visit the manufacturer's website.



Inspect Before Start Up

Inspect your pressure washer attachment carefully for any damage that may have occurred during transit. Be sure to inspect and tighten all bolts, screws, and fittings before attempting to use the unit.

Do not attempt to operate a damaged unit. It may cause serious injury or property damage.

Before Each Use

Check the engine oil and gasoline level. Check all hose connections before attempting to start the engine. Do not run the engine on low oil.

Operating the unit with the water supply turned off will result in equipment damage. Never allow the unit to run more than one (1) minute without pulling the trigger for water to flow through the pump and eject heated water from the pump.

Lubrication

- Check the oil prior to each operation per the engine manual.

Before Start-Up

Your pressure washer comes preset with the pressure at its maximum. If you require less pressure, you can adjust the pressure down by adjusting the pressure as shown above. #1 and #3

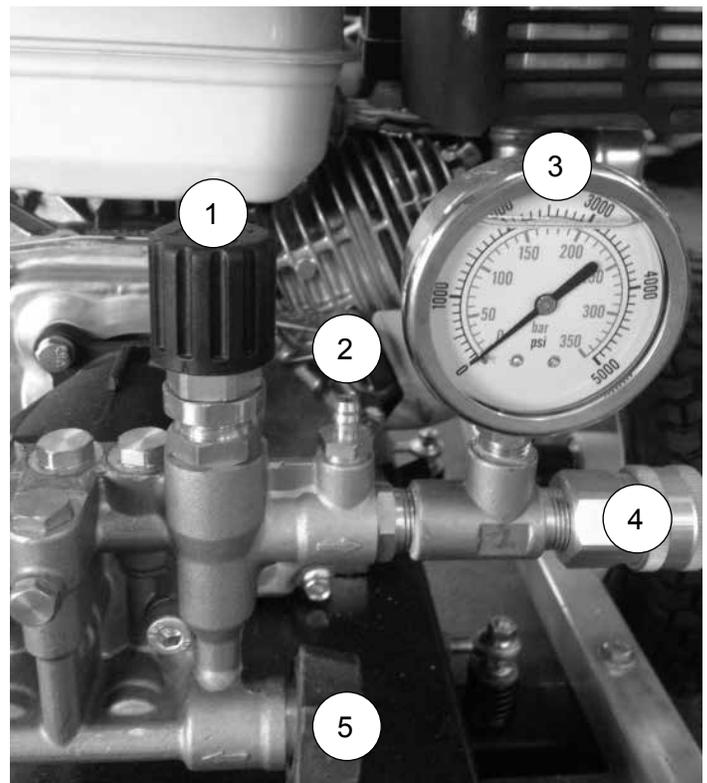
- Properly fill engine with gas and oil. See *engine Manual*.
- If desired, connect the soap line to the soap intake connection and place hose end in soap supply. #2
- Connect the water supply to the water intake. #5
- Connect the high pressure hose to the trigger gun and pump. #4 **Per figure 2**
- Choose the correct nozzle for the application per **table 1**.
- Install the nozzle per **figure 1**.

- Turn the inlet water hose fully to the “ON” position. Assure there are no kinks in the hoses.
- Before starting the engine, squeeze the trigger to allow the water to fill the pump.

⚠ WARNING The trigger gun traps high water pressure, even when engine is stopped. Relieve trapped water pressure in the pump, hose and trigger gun by squeezing the trigger **AFTER** the engine has completely stopped.

⚠ WARNING NEVER direct water stream toward people, pets, or any electrical device.

⚠ WARNING Do not use any attachments or accessories not recommended by the manufacturer. The use of attachments or accessories that are NOT recommended can result in serious injury or damage to the equipment.



Starting the Unit with Manual Start

- Rotate the fuel valve to the “on” position. **(figure 4 or 5)**
- Move the choke to the “closed” or “start” position. **(figure 5 or 8 depending on the type of engine. Consult your engine manual)**
- Assure the throttle is pushed to the left. **(figure 7)**
- Turn key to the “on” position. **See figure 6.**
- Pull starter grip slowly until resistance is felt.
- Pull cord briskly
- Return starter cord gently into the recoil housing.
- If the engine does NOT start, release the built up pressure by pointing the high pressure gun in a safe direction and squeezing the trigger.
- Repeat pulling the starter cord.
- Once engine starts, move choke to the “open” or run position.

Stopping the engine

- Rotate key counterclockwise to the **off** position.
- Rotate the fuel valve to the closed position for storage, maintenance or transportation.
- Disconnect battery for storage or maintenance.

Maintenance Schedule				
D=DAILY; M=MONTHLY	D	M	3 M	6 M
Check Air Filter	x			
Check For Oil Leaks	x	x		
Replace Air Filter				x
Change Oil			x	

Operation

Test Spray on Inconspicuous Area First

High pressure spray is capable of causing damage and abrasion to most surfaces including wood, automobile paint, trim, and severe damage to plants and landscaping. Inspect the surrounding area of the item to be sprayed before directing the pressurized spray. Always test this equipment in an inconspicuous area.

Adjusting the Pressure

- To increase pressure, rotate the knob clockwise.
- To decrease the pressure, rotate the knob counterclockwise. **See figure 9.**

CAUTION If the engine does not start, after each pull of the recoil starter squeeze the trigger to relieve trapped pressure before attempting to start the engine.

WARNING NEVER point the wand toward anyone while removing or inserting nozzles. The quick-connect feature contains small springs that have the potential to eject the nozzle with some force. Failure to heed this warning could cause personal injury.

WARNING NEVER change nozzles without turning off the pressure washer, relieving all system pressure and locking the lock out on the trigger handle.



FIGURE 9

NOTICE: All pressure and flow ratings are per PWMA PW101-1998.

Figures

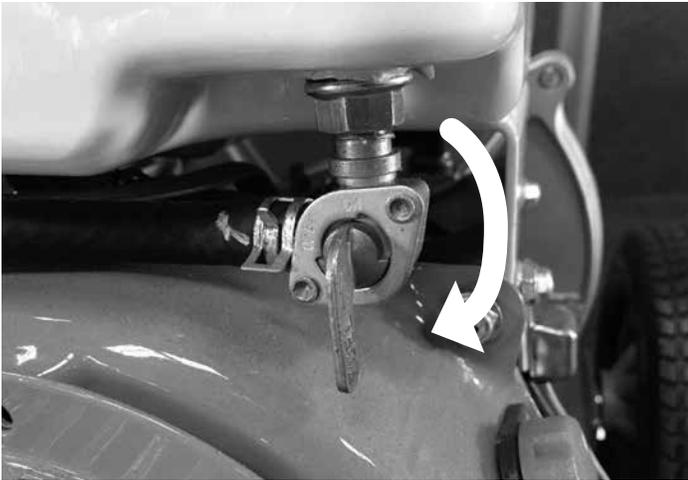


FIGURE 1

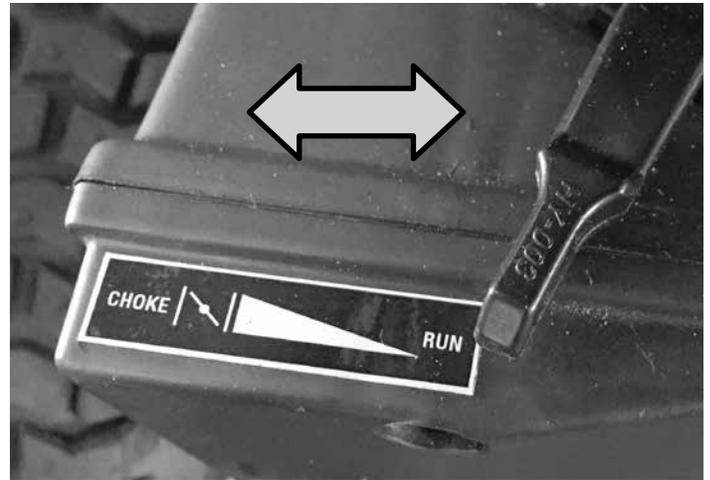


FIGURE 2

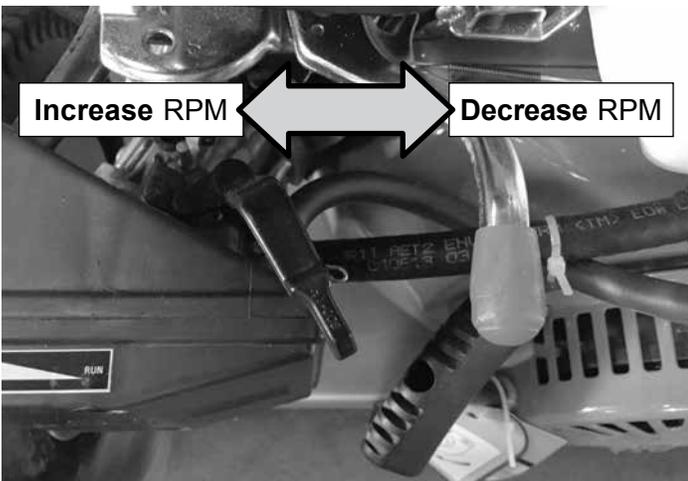


FIGURE 3



FIGURE 4

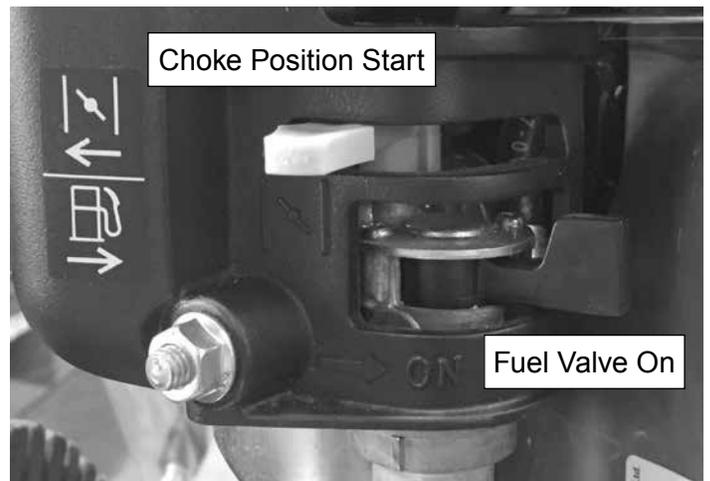


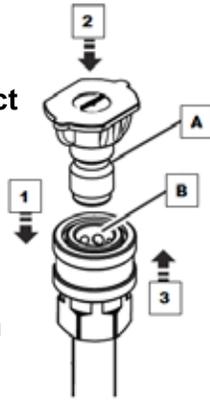
FIGURE 5

Nozzle and Hose Assembly

A- Quick Connect (QC) Nozzle

B- Spray Wand with Quick Connect coupling

1. Pull the collar back on the QC.
2. Push nozzle into place.
3. Push the collar back into place on the QC.
4. Pull on nozzle to assure that it is locked into place.



Nozzle Disassembly

Relieve trapped water pressure in the pump, hose and trigger gun by squeezing the trigger AFTER the engine has completely stopped.

To disassemble the hose and nozzle, pull collar back and remove hose or nozzle.

! WARNING The water source must be turned off and ALL pressure released from the system prior to disconnecting the hose.

! DANGER The trigger gun traps high water pressure, even when engine is stopped. Relieve trapped water pressure in the pump, hose and trigger gun by squeezing the trigger AFTER the engine has completely stopped.



FIGURE ???
do we need figure #



Nozzle Maintenance

If the spray pattern of the washer becomes distorted or uneven, it may require you to remove debris within the nozzle.

Before performing any maintenance, stopping or storing the machine the residual pressure MUST be released from the trigger gun.

Relieve residual pressure per the instructions.

1. Remove the nozzle by reversing the procedure in **Figure 1**.
2. Using a nozzle cleaning tool or paperclip, remove the obstruction as shown below.
3. The obstruction should be removed from the tip of the tool.
4. It is important that the garden hose screen be used and kept clean at all times to prevent damage to the pump and prevent the nozzle from becoming clogged.

Relieving residual pressure from the system.

- Turn **OFF** pressure washer.
- Turn **OFF** garden hose supplying pressure washer.
- Point trigger gun in a safe direction away from people, pets or electrical devices.
- Squeeze trigger gun handle until water flow stops.

! DANGER The trigger gun traps high pressure even when the engine is stopped. Failure to relieve residual pressure prior to performing any maintenance WILL result in injury. ALWAYS relieve the pressure when the engine is stopped.

Table 1	
NOZZLE	APPLICATION
0° Red	<ul style="list-style-type: none"> Spot cleaning of high, hard-to-reach areas Removing heavy mud from heavy construction, farm, or lawn equipment Cleaning overhead areas Removing rust from steel and oxidation from aluminum or small overhead surfaces.
15° Yellow	<ul style="list-style-type: none"> Removing heavy mildew stains. Removing marine growth or algae from boats and similar equipment. Removing rust from steel. Removing grease or dirt from equipment. Removing paint from wood, masonry or metal.
25° Green	<ul style="list-style-type: none"> For general purpose or large surfaces. General cleaning of dirt, mud, and grime. Cleaning gutters, and downspouts. Removing light mildew stains. Rinsing surfaces in preparation for painting.
40° White	<ul style="list-style-type: none"> For wide-angle rinsing. Light cleaning and washing. Washing and rinsing of painted surfaces and boats. Cleaning windows, patios, and driveways.
Soap nozzle	<ul style="list-style-type: none"> For all detergent applications and for gentle rinsing.

Using Detergent

- Use only detergents designed for pressure washers; household detergents, acids, bleaches, caustic solutions, solvents or flammable liquids WILL damage the pumps.
- Connect the soap injection tube to the soap injector on the pump.
- Pour soap solution in the soap tank, replace cap.
- OR place the injector hose directly into the soap bottle. This machine will automatically mix the soap solution at a 20:1 ratio.
- Spray the detergent on a dry surface using long overlapping strokes. Do not allow soap to dry on the surface.
- Follow the instructions provided with the cleaning solution.
- Before storage, place injector filter in a clean bucket of water and flush soap from the pump for 1 to 2 minutes.

Rinsing

- Select the proper nozzle per table 1.
- Start at the top of the surface and work your way down the surface using long overlapping strokes.
- To adjust the pressure of the unit, see **figure 9**.

⚠ WARNING NEVER change nozzles without turning off the pressure washer, relieving all system pressure and locking the lock out on the trigger handle.

⚠ DANGER The trigger gun traps high water pressure, even when engine is stopped. Relieve trapped water pressure in the pump, hose and trigger gun by squeezing the trigger AFTER the engine has completely stopped.

NOTICE: All pressure and flow ratings are per PWMA PW101-1998.

Storage

1. Allow engine and pump parts to cool. Clean and wipe down entire unit.
2. Disconnect hose and wand and hang with open end down to allow liquid to drain.
3. Before storing, the use of a pressure washer pump conditioner - winterizer is recommended.
4. Do not allow pump to freeze with water inside the pump.
5. Use of fuel stabilizer is **HIGHLY** recommended.
6. Drain the fuel per the engine manufacturer's recommendations.
7. Engine and pressure washer parts may be hot even if the unit is not running.

⚠ DANGER Fuel tank should never be filled indoors. Avoid spilling fuel on hot engine and allow engine to cool completely before fueling. Never fill fuel tank when engine is running or when hot. Do not light a cigarette or smoke when filling the fuel tank. Gasoline vapors are highly explosive.

Relieve trapped pressure from the system by squeezing the trigger prior to performing any adjustments or maintenance to the unit.

Carbon Monoxide (CO) gas is odorless, colorless and is lethal. It is emitted by all internal combustion engines. NEVER operate this unit inside a building, garage or near windows and doors.

Engine and pressure washer parts may be hot even if the unit is not running.

NEVER direct water stream toward people, pets, or any electrical device.

The trigger gun traps high water pressure, even when engine is stopped. Relieve trapped water pressure in the pump, hose and trigger gun by squeezing the trigger AFTER the engine has completely stopped.

Limited Warranty

American Fab equipment is warranted to be free from defects in material and workmanship

for a period of ONE year after date of purchase. The engine is warranted for a period of two years.

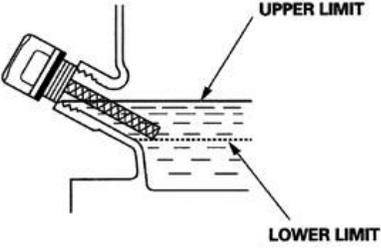
See engine manual for details.

Throttle Control System

The automated throttle control system spontaneously shifts from full engine speed to a low idle (RPM) upon release of the spray trigger. This allows for a long-lasting, efficiently running, and quiet transaction.

Troubleshooting		
PROBLEM	CAUSE	SOLUTION
Engine is running but no water is flowing.	<ol style="list-style-type: none"> 1. Water is turned off. 2. Hose is kinked. 3. Inlet filter is stopped up. 4. Nozzle is plugged. 5. Pump seals are damaged. 	<ol style="list-style-type: none"> 1. Turn supply water “on”. 2. Unwind hose and remove kinks. 3. Remove garden hose from pump; clean the stainless steel mesh screen. 4. Unclog nozzle per instructions. 5. Replace pump. 6. Contact CUSTOMER SERVICE 1-800-845-4141.
Engine runs good until loads are connected, then bogs down.	<ol style="list-style-type: none"> 1. Nozzle is plugged. 2. Defective pump. 3. Engine speed is too slow. 	<ol style="list-style-type: none"> 1. Unclog nozzle per instructions. 2. Contact CUSTOMER SERVICE 1-800-845-4141 3. Increase engine speed per engine manual.
Engine will not start or engine starts but runs rough.	<ol style="list-style-type: none"> 1. On/off switch is turned “off”. 2. Dirty air cleaner. 3. Out of fuel. 4. Stale fuel. 5. Not enough speed or force is used for recoil start. 6. Water in fuel. 7. Speed control is not set to “run”. 8. Low oil level. 9. Engine has lost compression. 10. Clogged carburetor. 	<ol style="list-style-type: none"> 1. Turn on/off switch to “on” 2. Clean air filter 3. Fill fuel tank 4. Drain fuel tank into an approved container and refill with fresh fuel. 5. Read and follow directions 6. Drain fuel tank into an approved container and refill with fresh fuel. 7. Move speed control to the “run” position. 8. Add oil to the proper level 9. Contact CUSTOMER SERVICE 1-800-845-4141. 10. Clean carburetor.
Engine shuts down during operation.	<ol style="list-style-type: none"> 1. Out of fuel. 2. Fault in engine. 3. Low oil level. 	<ol style="list-style-type: none"> 1. Fill fuel tank. 2. Contact CUSTOMER SERVICE 1-800-845-4141. 3. Add oil to proper level.
Pump leaks water	<ol style="list-style-type: none"> 1. Thermal Release Valve leaks water. 2. Pump seals or valves are worn. 	<ol style="list-style-type: none"> 1. The water temperature inside the pump has exceeded the set limit; squeeze the trigger to allow cool water to flow thru the pump. Do not allow pressure washer to idle for extended periods. 2. Replace pump. 3. Contact CUSTOMER SERVICE 1-800-845-4141.

Operation

CHECK AND FILL OIL	CHECK AND FILL FUEL	CHECK/REPLACE FILTER
<p>⚠ CAUTION</p>	<p>⚠ WARNING</p>	<p>⚠ CAUTION</p>
<p>Do not attempt to start the engine before checking oil.</p> <ol style="list-style-type: none"> Place pump on a level surface. Clean area around oil fill opening. Remove the dipstick. Wipe the dipstick clean. Reinsert dipstick and check oil level. DO NOT OVERFILL. CLOSE OIL CAP. Change oil as published.* 	<p>Do not overfill! Leave room for fuel expansion. Never fill fuel indoors. Never fill fuel when engine is hot or running. Do not smoke or fill.</p> <ol style="list-style-type: none"> Fill with gasoline fuel only. Clean area around fuel cap. Remove fuel cap. Add fuel to fuel tank. DO NOT overfill. Do not fill above the red plug inside the fuel tank filter (this allows for fuel expansion). Replace fuel cap. Wipe up any spilled fuel. <p>⚠ DANGER Fuel tank should never be filled indoors. Avoid spilling fuel on hot engine and allow engine to cool completely before fueling. Never fill fuel tank when engine is running or when hot. Do not light a cigarette or smoke when filling the fuel tank. Gasoline vapors are highly explosive.</p>	<p>Do not clean air filter with any type of detergent.</p> <ol style="list-style-type: none"> Remove cover panel. Loosen wing nut and remove air filter cover. Never wash air cleaner with any kind of detergent or cleaning solvent. Air filter should be changed if engine performance decreases or color of exhaust changes. Never run engine without air filter. This will cause rapid engine wear.



*The first oil change should take place after the initial run time of five hours. After the initial five-hour runtime, the oil is to be changed every 30 hours.

FAQ

The unit will not START.

Check gasoline supply. Check spark plug. Check engine oil. Assure battery is charged. **See engine Manual**

How can I apply soap or chemicals?

The wand must be in the low pressure setting. Chemical hose must be attached to the pump and fully submerged in the chemical supply. *See Page 6

Do I have enough water?

Water supply must provide a minimum of 8 gallons per minute at 40 p.s.i. Check all hoses for kinks or leaks. The spray nozzle could be blocked or partially obstructed.

What soaps or chemicals can I use?

Only products designed for pressure washer use.

Do not use household detergents, acids, bleaches, caustic solutions, solvents or flammable liquids!

How can I safely fill the fuel tank?

Only add gasoline to a cool engine. If the unit has been in operation, it should be allowed to sufficiently cool and assure the unit is outdoors with adequate ventilation.

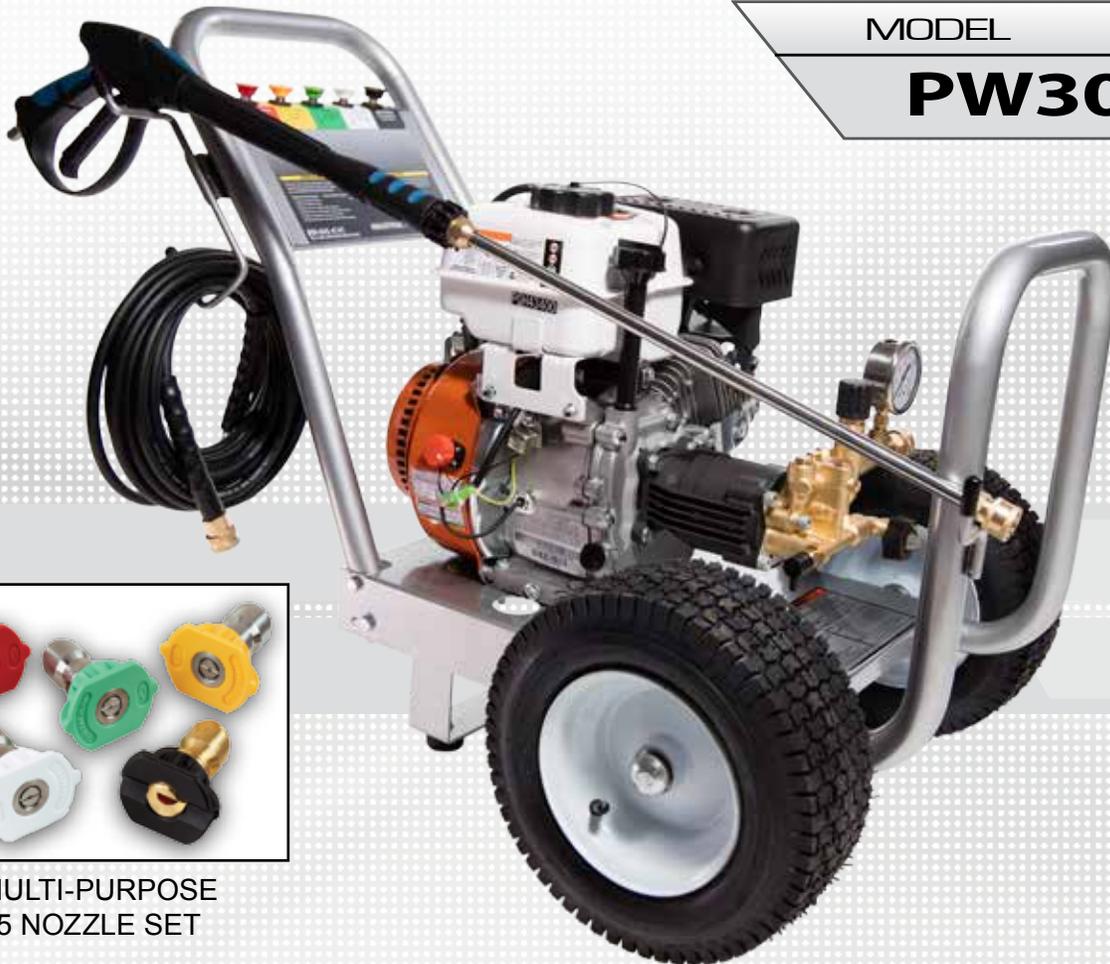
What should I do if spray penetrates my skin?

Do not treat it as a simple cut. Amputation, blindness or other serious injury could result. Consult a physician immediately. Be sure to inform the physician if soap or a chemical solution was used. Take the label on the chemical solution to the physician if possible to aid in proper diagnosis.

⚠ CAUTION Assure the pressure washer has a continuous flow of water at all times. Hoses must be a minimum diameter of 3/4" and a maximum length of 50 feet.

PW3000

PRESSURE WASHER



MODEL

PW3000



MULTI-PURPOSE
5 NOZZLE SET

Features

- 208cc - Gasoline Engine
- Manual Start
- Suction Side Soap Pickup
- Rugged Construction
- Low Oil Shutdown
- One Year Equipment Warranty
- Two Year Engine Warranty

Specifications

Gallons Per Minute	2.5
RPM	3850 +/- 150
Fuel	86 Octane or Higher
Size	L-36", W- 23", H-27"
Net Weight	76 Lbs.

Manufactured by:
American Fab of SC, LLC

P.O. Box 879
Travelers Rest, SC 29690