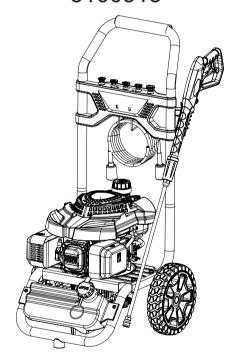
# **POWERWORKS®**

# 3100 PSI PRESSURE WASHER 5100313



Owner's Manual

**TOLL-FREE HELPLINE: 1-855-470-2181** 

www.powerworkstools.com



# **CONTENTS**

Contents	2
Product specifications	2
Safety information	3
Symbols	7
Know your pressure washer	9
Packing list	10
Assembly	11
Operation	16
Maintenance	25
Troubleshooting	29
Warranty	30
Exploded View	31
Parts List	32
PRODUCT SPECIFICATIONS	
Fuel Tank Capacity	0.264gal.

Max. Pounds Per Square Inch Pressure3100psiRated Gallons Per Minute2.3 GPMMaximum Inlet Water Temperature104°FNet weight25.3 Kg







# GENERAL SAFETY RULES READ ALL INSTRUCTIONS CAREFULLY

# **A** D A N G E R

Risk of fire and serious burns: Never remove fuel cap when unit is running. Shut off engine and allow the unit to cool at least five minutes. Remove cap slowly.

# AWARNING

- Know your tool. Read the operator's manual carefully. Learn the machine's applications and limitations as well as the specific potential hazards related to this tool.
- Keep guards in place and in working order. Never operate the tool with any guard or cover removed. Make sure all guards are operating properly before each use.
- To reduce the risk of injury, keep the area of operation clear of all persons, particularly small children, and pets. All visitors should wear safety glasses and be kept a safe distance from work area.
- Do not start or operate the engine in a confined space, building, near open windows, or in other unventilated space where dangerous carbon monoxide fumes can collect. Carbon monoxide, a colorless, odorless, and extremely dangerous gas, can cause unconsciousness or death.
- Use right tool. Don't force tool or attachment to do a job it was not designed for. Don't use it for a purpose not intended.
- Dress properly. Wear long pants and long sleeves. Do not wear loose clothing, neckties, or jewelry that can get caught and draw you into moving parts. Rubber gloves and nonskid footwear are recommended when working outdoors. Also wear protective hair covering to contain long hair.
- Do not operate the equipment while barefoot or when wearing sandals or similar lightweight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces.
- · Exercise caution to avoid slipping or falling.
- 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.
- Don't overreach or stand on a ladder, rooftop, or other unstable support. Keep proper footing and balance at all times.
- Use only recommended accessories. The use of improper accessories may cause risk of injury.
- Follow the maintenance instructions specified in this manual.
- Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged must be properly repaired or replaced by a qualified service center to avoid risk of personal injury.

- Never leave tool running unattended. Turn power off. Don't leave tool until it comes to a complete stop.
- Keep the engine free of grass, leaves, or grease to reduce the chance of a fire hazard.
- · Keep the exhaust pipe free of foreign objects.
- Follow manufacturer's recommendations for safe loading, unloading, transport, and storage of machine.
- Be thoroughly familiar with controls. Know how to stop the product and bleed pressure quickly.
- Keep tool dry, clean, and free from lubricant and grease. Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any solvents to clean tool.
- Stay alert and exercise control. Watch what you are doing and use common sense. Do not operate tool when you are tired. Do not rush.
- Do not operate the product while under the influence of drugs, alcohol, or any medication.
- 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 use tool if switch does not turn it off. Have switch replaced by a qualified service center.
- Before cleaning, repairing, or inspecting, shut off the engine and make certain all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
- Avoid dangerous environment. Don't use in damp or wet locations or expose to rain. Keep work area well lit.
- Never use in an explosive atmosphere. Normal sparking of the motor could ignite fumes.
- Do not operate while smoking or near an open flame.
- Do not operate around dry brush, twigs, cloth rags, or other flammable materials.
- Use caution when positioning the pressure washer for use. Warm air from the engine could cause discolored spots on grass.
- Never direct a water stream toward people or pets, or any electrical device.
- Before starting any cleaning operation, close doors and windows. Clear the area to be cleaned of debris, toys, outdoor furniture, or other objects that could create a hazard.
- Never pick up or carry a machine while the engine is running.
- Never start the machine if ice has formed in any part of the equipment.
- Do not use acids, alkalines, solvents, flammable material, bleaches, or industrial grade solutions in this product. These products can cause physical injuries to the operator and irreversible damage to the machine.
- Always operate the machine on a level surface. If the engine is on an incline, it could seize
  due to improper lubrication (even at the maximum lubricant level).

# **AWARNING**

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.

- Hold the trigger handle securely with both hands. Expect the trigger handle to move when the trigger is pulled due to reaction forces. Failure to do so could cause loss of control and injury to yourself and others.
- Never attempt to make any adjustments while the engine (motor) is running (except where specifically recommended by the manufacturer).
- Protective covers must always cover rotating parts when the engine is running.
- Keep cooling air intake (starter grip and rope area) and muffler side of the engine at least 3 feet away from buildings, obstructions, and other combustible objects.
- Keep the engine away from flammables and other hazardous materials.
- Keep away from hot parts. The muffler, exhaust gases, and other engine parts become very hot. Do not touch the muffler or place any body parts in the path of hot exhaust gases, which can cause burns and other serious personal injuries.
- Do not touch the spark plug and ignition cable when starting and operating the engine.
- · Check fuel hoses and joints for looseness and fuel leakage before each use.
- Check bolts and nuts for looseness before each use. A loose bolt or nut may cause serious engine problems.
- · Always refuel outdoors. Never refuel indoors or in a poorly ventilated area.
- Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers, and the like.
- If the fuel tank has to be drained, do this outdoors into a container approved for gasoline and away from all ignition sources.
- To reduce the risk of fire and burn injury, handle fuel with care. It is highly flammable.
- Do not smoke while handling fuel.
- Add fuel before starting the engine. Never remove the cap of the fuel tank or add fuel while
  the engine is running or when the engine is hot.
- · Loosen fuel cap slowly to release pressure and to keep fuel from escaping around the cap.
- Replace all fuel tank and container caps securely.
- Wipe spilled fuel from the unit. Move 30 feet away from refueling site before starting engine.
- If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.
- Never attempt to burn off spilled fuel under any circumstances.
- Before storing, allow the pressure washer to cool for 30 minutes and drain fuel from the unit.
- Store fuel in a cool, well-ventilated area, safely away from spark and/or flame-producing equipment.
- Store fuel in containers specifically designed for this purpose.
- Empty fuel tank and restrain the unit from moving before transporting in a vehicle.
- When servicing use only recommended or equivalent replacement parts. Use of any other parts may create a hazard or cause product damage.
- · ONLY use cold water.

- Make sure minimum clearance of 3 feet is maintained from combustible materials.
- Never spray close to the surface to be cleaned as you can damage the surface.
- After stopping the engine, always pull the trigger on the trigger handle to relieve stored pressure in the high pressure hose. Failure to do so could result in serious personal injury.
- Ensure the high pressure hose is properly connected before using the product.
- · For outdoor use only.
- Save these instructions. Refer to them frequently and use them to instruct other users. If you loan someone this tool, loan them these instructions also.

# AWARNING (PROPOSITION 65)

Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- · Lead from lead-based paints,
- · Crystalline silica from bricks and cement and other masonry products,
- · Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies depending on how often you do this type of work. To reduce your exposure to these chemical: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

# **SYMBOLS**

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
A	Safety Alert	Indicates a potential personal injury hazard.
<b>③</b>	Read The Operator's Manual	To reduce the risk of injury user must read and understand operator's manual before using this product.
	Eye Protection	Always wear safety glasses with side shields that are marked to comply with ANSI Z87.1.
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	Hot Surface	To reduce the risk of injury or damage, avoid contact with any hot surface.
	Risk of Injection	To reduce the risk of injection or injury, never direct a water system towards people or pets or place any body part in the stream. Leaking hoses and fittings are also capable of causing injection injury. Do not hold hoses or fittings.
	Risk of Explosion	Do not spray flammable liquids. Flammable liquids, fuel, and their vapors are explosive and can cause severe burns or death.
	Risk of Fire	Fuel and its vapors are extremely flammable and explosive. Fire can cause severe burns or death.
	Kickback	To reduce the risk of injury from kickback, hold the spray wand securely with both hands when the machine is on.
	Chemical Burn	To reduce the risk of injury or damage, DO NOT USE ACIDS, ALKALINES, BLEACHES, SOLVENTS, FLAMMABLE MATERIAL, OR INDUSTRIAL GRADE SOLUTIONS in this product.
	Toxic Fumes	Gas products emit carbon monoxide, an odorless, colorless, poison gas. Breathing carbon monoxide can cause nausea, fainting, or death.
ブ	Electric Shock	Failure to use in dry conditions and to observe safe practices can result in electric shock.

# **SYMBOLS**

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

SYMBOL	SIGNAL	MEANING
A	DANGER	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	IC: ATTICON	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
		(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

#### **SERVICE**

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.

# A WARNING

To avoid serious personal injury, do not attempt to use this product until you have read this Owner's Manual thoroughly and understand it completely. If you do not understand the warnings and instructions in this Owner's Manual, do not use this product. Call the Toll-free Helpline (1-855-470-2181) for assistance.

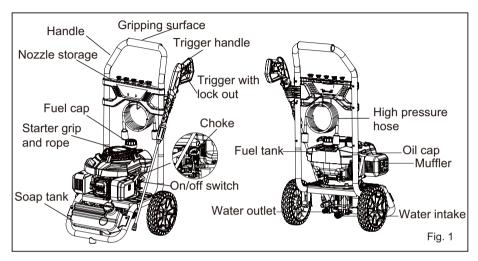
# AWARNING



The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and, when needed, a full face shield. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

# KNOW YOUR GAS PRESSURE WASHER

The safe use of this product requires an understanding of the information on the tool and in this operator's manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules. (See Figure 1.)



#### Fuel tank

This fuel tank has a maximum capacity of 0.264 gal. Use unleaded automotive gasoline in the engine.

#### Hose storage

A convenient hose hook stores the high pressure hose when the pressure washer is not in use.

#### On/off switch

The on/off switch is used in combination with the starter grip and rope to start the engine. It is also used to turn the engine off.

#### Starter grip and rope

The starter grip and rope is pulled to start the machine.

#### Trigger handle

The trigger handle has a gripping surface that provides added control of the spray wand and helps reduce fatigue.

#### Trigger with lock out

Pulling the trigger releases a stream of water for high pressure cleaning. The lock out provides protection against unauthorized use.

#### Water intake

Attach the garden hose to the water intake.

#### Water outlet

Attach the High Pressure Hose to the water outlet.

# PACKING LIST

PART NAME	ERP NO.	FIGURE	PART NO.
Pressure Washer	5100313		1
Upper Handle Assembly	333002582		1
Front panel assembly	311022582		1
Trigger Assembly	311112582		1
Spray Wand	311011380	E)	1
Gun Holder	333011936		1
Hose Hook	333011936	J.	1
High Pressure Hose	311311635AB	Sin Carlo	1
Spray Tip Cleaning Tool	33201671	<b>○</b>	1
Screw	322011628	Î	4
Screw	322011635	Î	2
Lubrication	37902607		1
Scket wrench assy.			1
Operator's Manual	388002582		1
Quick Start Guide	388003582	PA PARTIES AND	1

## **ASSEMBLY**

#### UNPACKING

This product requires assembly.

- Carefully remove the product and any accessories from the box. Make sure that all the contents from the packaging list are included.
- · Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.
- If any parts are damaged or missing, please call 1-855-470-2181 for assistance.

#### A WARNING

Do not use this product if any parts on the Packing List are already assembled to your product when you unpack it. Parts on this list are not assembled to the product by the manufacturer and require customer installation. Use of a product that may have been improperly assembled could result in serious personal injury.

## A WARNING

If any parts are damaged or missing do not operate this product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

# A WARNING

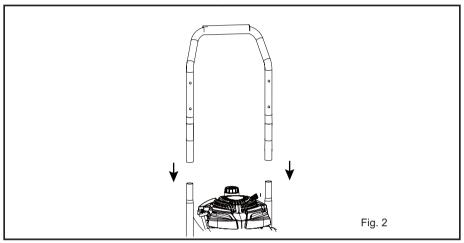
Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a harzardous condition leading to possible serious personal injury.

#### INSTALLING THE HANDLE See Figure 2.

# ACAUTION

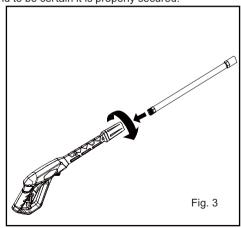
Be careful to avoid pinching your fingers or hands when installing the handle onto the frame.

• Push and hold the button on the handle as you slide the handle into the holes in the frame.



#### ASSEMBLING THE SPRAY WAND See Figure 3.

- Push the end of the spray wand into the trigger handle and rotate clockwise to secure.
- Pull on the spray wand to be certain it is properly secured.



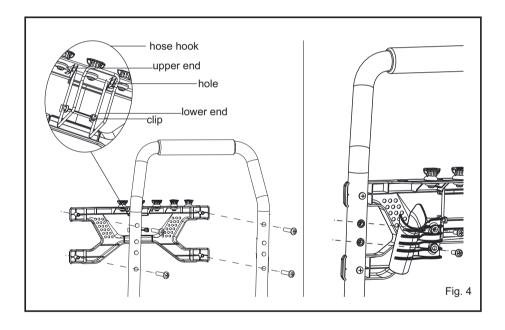
# **ASSEMBLY**

#### ASSEMBLING THE FRONT PANEL AND GUN HOLDER See Figure 4.

- Line up the screw sleeves with the holes in the upper handle and push through.
- Insert the screw and turn clockwise with a phillips head screw driver (not included) until the screw is tight.

#### ASSEMBLING THE HOSE HOOK See Figure 4.

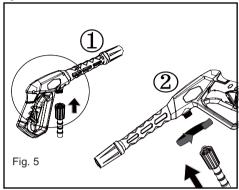
- Line up the hose hook upper end with the holes on the back of the front panel
- Insert the hose hook end into the hole and push through.
- Press the hose hook lower end into the clip on the back of the front panel.



# **ASSEMBLY**

#### CONNECTING HIGH PRESSURE HOSE TO TRIGGER HANDLE See Figure 5.

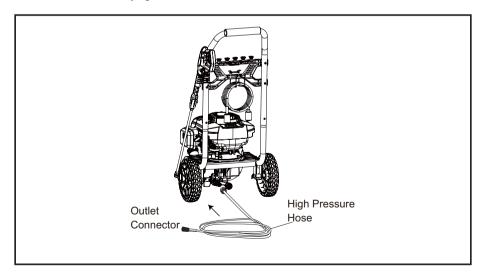
- Align the pressure hose with the trigger handle and push up and into position.
- With hose pushed into position on the trigger handle, secure in place by turning the hose lock clockwise until fully tightened.



**NOTE:** For easier installation of the hose to the unit or trigger it is suggested to add pressure washer or dish detergent to the rubber seal at each end of the hose. This will allow for easier installation and a snug fit.

#### CONNECTING THE HIGH PRESSURE HOSE TO WATER OUTLET See Figure 6.

- Remove the hose connector cap.
- Connect the other end of the hose to the hose connector, secure in place by turning the hose lock clockwise until fully tightened.

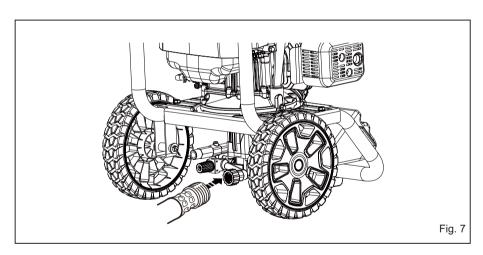


#### CONNECTING THE GARDEN HOSE See Figure 7.

## A C A U T I O N

Always observe all local regulations when connecting hoses to the water main. Some areas have restrictions against connecting directly to public drinking water supply to prevent the feedback of chemicals into the drinking water supply. Direct connection through a receiver tank or back flow preventer is usually permitted.

- · Uncoil the garden hose.
- Run water through the hose for 30 seconds to clean any debris from the hose.
- · Inspect the screen in the water intake.
- If the screen is damaged, do not use the machine until the screen has been replaced.
- If the screen is dirty, clean it before connecting the garden hose to the machine.
- With the hose faucet turned completely off, attach the end of the garden hose to the water intake. Tighten by hand only.



# A WARNING

Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

# A WARNING

Always wear eye protection with side shields marked to comply with ANSI Z87.1. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

# A WARNING

Do not use any attachments or accessories not recommended by the manufacturer of this tool. The use of attachments or accessories not recommended can result in serious personal injury.

#### A WARNING

Never direct a water stream toward people or pets, or any electrical device. Failure to heed this warning could result in serious injury.

# ANOTICE

This product is not equipped with a spark arrestor and cannot be used on U.S. forest lands; in addition, product users must comply with Federal, State, and local fire prevention regulations. Check with appropriate authorities. Refer to accompanying engine manual for maintenance and replacement parts.

# ANOTICE

Before each use, inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced. Please contact customer service or a qualified service center for assistance.

#### **APPLICATIONS**

You may use this tool around the house for cleaning most small to large horizontal or vertical exterior surfaces, smaller exterior objects and structures, and outdoor equipment and tools.\* You can:

- Clean or remove mold and mildew from weathered decks, driveways, patios, walkways, sidewalks, etc.
- Remove dirt from various exterior vertical surfaces such as house exteriors, siding, fences, brick, concrete or stone walls, etc.
- Wash boats, outdoor furniture, powered or non-powered garden equipment, gutters, window screens, grills, playground equipment, etc.

#### **ADDING/CHECKING ENGINE LUBRICANT** (See Figure 8)

NOTE: This machine has been shipped with approximately 2 oz. of lubricant in the engine from testing. You must add lubricant to the engine before starting it the first time.

# ANOTICE

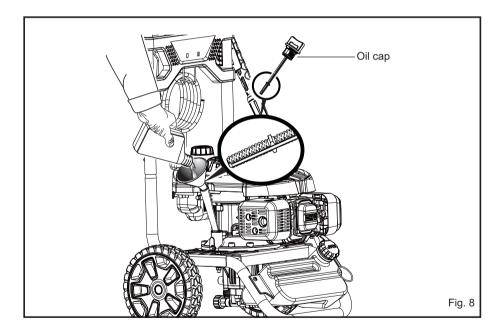
Any attempt to start the engine without adding lubricant will result in engine failure.

#### To add engine lubricant:

- · Place pressure washer on a flat, level surface. Do not tilt.
- Unscrew the oil cap/dipstick by turning counterclockwise.
- Before first use, squeeze the entire contents of the lubricant container provided into the oil reservoir. After initial use, add 4-stroke engine lubricant (SAE 30 or SAE 10W30) until the fluid level rises to the upper portion of the hatched area on the dipstick. Do not overfill.
- Replace and secure the oil cap/dipstick.

# ANOTICE

Do not overfill. Overfilling the crankcase may cause excessive smoke and engine damage.



#### OXYGENATED FUELS

#### ANOTICE

Do not use E15 or E85 fuel in this product. Only use unleaded gasoline containing up to 10% ethanol. It is a violation of federal law and will damage the unit and void your warranty.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentage of oxygenates stated below are not covered under warranty.

ADDING GASOLINE TO THE FUEL TANK (See Figure 9)

#### **A** D A N G E R

Risk of fire and serious burns: Never remove fuel cap when unit is running. Shut off engine and allow the unit to cool at least five minutes. Remove cap slowly.

#### **AWARNING**

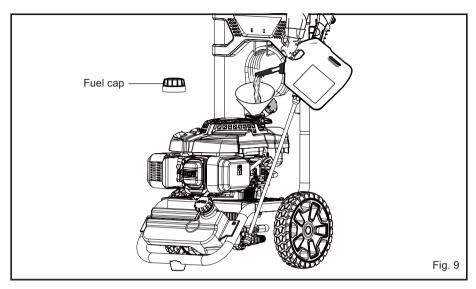
Gasoline and its vapors are highly flammable and explosive. To prevent serious personal injury and property damage, handle gasoline with care. Keep away from ignition sources, handle outdoors only, do not smoke while adding fuel, and wipe up spills immediately.

# **AWARNING**

Always shut off engine before fueling. Never remove fuel cap or add fuel to a machine with a running or hot engine. When adding gas to the pressure washer, make sure the unit is sitting on a flat, level surface and only add fuel outdoors. If the engine is hot, let the pressure washer cool for at least five minutes before adding gas. Immediately replace fuel cap after fueling and tighten until the cap "clicks." Move at least 30 ft. from refueling site before starting engine. Do not smoke and stay away from open flames and sparks! Failure to follow these instructions could result in a fire and cause serious personal injury.

NOTE: This is a 4-cycle engine. DO NOT mix fuel and lubricant together.

- · Mix fuel stabilizer with gasoline according to fuel stabilizer manufacturer's directions.
- Before removing the fuel cap, clean the area around it. Remove the fuel cap.
- Insert a clean funnel into the fuel tank then slowly pour gasoline into the tank. Fill tank to approximately 1-1/2 in. below the top of the tank neck (this allows for fuel expansion).
- Replace fuel cap and tighten until the cap "clicks".
- Clean up any spills before starting the engine.



#### ADDING GASOLINE TO THE FUEL TANK (See Figure 10)

# ANOTICE

Do not run the pressure washer without water supply connected and turned on, as this may damage the high pressure seals and decrease pump life. Completely unwind the hose from its reel or coil and make sure the hose is not being restricted by tires, rocks, or any other objects that may lessen or prevent water flow to the pressure washer.

#### Before starting the engine:

· Connect all hoses.

NOTE: Make sure the pressure washer's water intake screen is in place and unclogged before connecting garden hose.

- · Check all fluids (oil and gas).
- Turn on the garden hose then squeeze the trigger to relieve air pressure; hold the trigger until a steady stream of water appears.

#### To start the engine:

- Put the on/off switch in the ON position.
- Place choke in the closed (START) position.

NOTE: Make sure the faucet is turned on fully and that there are no kinks or leaks in the hose.

- Grasp the starter grip and pull slowly until resistance is felt. Give the starter grip a short, brisk pull to start the engine.
- Pull choke out to the open (RUN) position.

NOTE: Do not allow the starter grip and rope to snap back after starting; return it gently to its original place.

## ANOTICE

Routinely make a visual inspection of the pump and engine during use. If you notice any lubricant leaking around the pump or engine seals, stop using the pressure washer immediately. Contact customer service or a qualified service center for repair. Failure to do so may cause property damage.

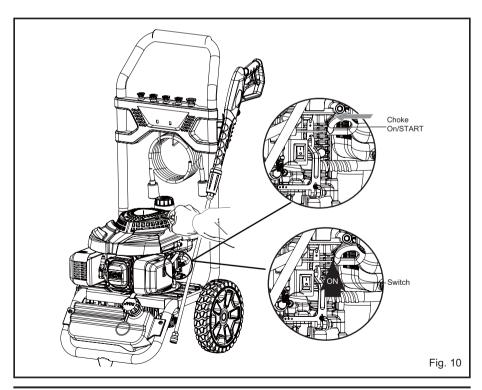
#### To stop the engine:

• Put the on/off switch in the OFF position.

NOTE: Shutting off the engine will not relieve pressure in the system. Pull trigger to release water pressure.

## A WARNING

While operating and storing, keep at least 3 feet of clearance on all sides of this product, including overhead. Allow a minimum of 30 minutes of "cool down" time before storage. Keep all body parts, clothing, combustible materials, and hoses away from the muffler. Heat created by muffler and exhaust gases could be hot enough to cause serious burns, ignite combustible objects, and/ or damage high pressure hoses that can result in an injection injury.



#### **USING THE SPRAY WAND TRIGGER** (See Figure 11)

#### **AWARNING**

Hold the trigger handle securely with both hands. Expect the trigger handle to move when the trigger is pulled due to reaction forces. Failure to do so could cause loss of control and injury to yourself and others.

- Pull back and hold the trigger to operate the pressure washer.
- Release the trigger to stop the flow of water through the nozzle.

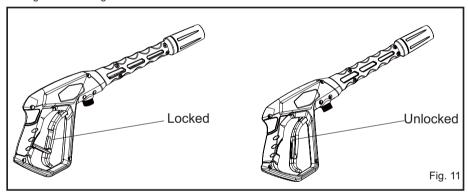
#### a. To engage the lock out:

• Push the lock out down until it clicks into the slot.

#### b. To disengage the lock out:

• Push the lock out up and into its original position.

NOTE: Start with the nozzle 1-2 ft. away from the cleaning surface and carefully approach the surface just until the desired level of cleaning is achieved. If the spray is too close it can damage the cleaning surface.

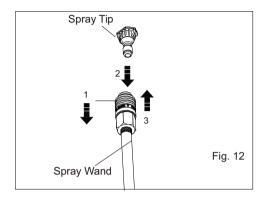


#### **USING THE SPRAY TIPS** (See Figure 12)

Each of the spray tips has a different spray pattern. Before starting any cleaning job, determine the best spray tip for the job. The following chart offers some general guidelines to help you choose the best spray tip for your application.

NOTE: Always try spray tip in an inconspicuous area first.

- Turn off the pressure washer and shut off the water supply. Pull trigger to release water pressure.
- Engage the lock-out on the trigger handle by pushing the trigger lock button to the right.
- Pull out the desired spray tip from the tip storage on the handle.
- Pull back the quick-connect collar on the spray wand.
- · Push the spray tip into place in the spray wand.
- Push the collar forward so that the spray tip is secured properly. Check to see that the spray tip is secure.



- 1-Pull back the quick-connect collar
- 2-Push the spray tip into place
- 3-Push the collar forward

SPRAY TIP	APPLICATION
0.	Red - Stream tip (0°)  The red 0 degree tip provides a straight line of spray. It provides the highest amount of pressure. It is best used for removing hard, stuck-on grime or dirt.
<b>W</b>	Yellow - Narrow fan tip (15°)  ■ The yellow pressure washer tip provides high versatility with its 15 degree angle tip. Referred to as the washing tip, because it provides adequate pressure to remove dirt from surfaces, but is designed to not damage many surfaces. This pressure washer tip is designed for "sweeping" foliage or debris. This tip is versatile due to its wide area of cleaning and strong pressure application.
<b>V</b> 25°	Green - Narrow fan tip (25°)  The green pressure washer tip provides high versatility with its 25 degree angle tip. Referred to as the washing tip, because it provides adequate pressure to remove dirt from surfaces, but is designed to not damage many surfaces. This pressure washer tip is designed for "sweeping" foliage or debris. This tip is versatile due to its wide area of cleaning and strong pressure application.
40'	White - Wide fan tip (40°)  The white 40 degree tip, referred to as the "fan" tip creates the widest area of cleaning with relatively low pressure. This pressure washer tip is best used for light or delicate cleaning applications. It is recommended for light cleaning on wood decks and other soft or delicate surfaces.
SOAP	Black - Soap spray tip  ■ The black soap spray tip, is used for soap application. Soap is applied under low pressure high volume for optimum performance. Soap cannot be applied under high pressure with this machine.

#### **WASHING WITH DETERGENT** (See Figure 13)

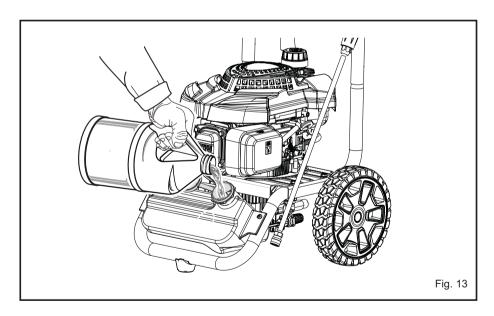
#### **AWARNING**

**USE ONLY DETERGENTS DESIGNED FOR PRESSURE WASHERS.** Do not use household detergents, acids, alkalines, bleaches, solvents, flammable material, or industrial grade solutions, which can damage the pump or cause property damage. Many detergents may require mixing prior to use. Prepare cleaning solution as instructed on the solution bottle. Always test in an inconspicuous area before beginning.

• Remove the cap from the detergent tank and pour pressure washer detergent in the tank. Replace cap on tank.

NOTE: The machine setting of this unit is 20:1, which usually allows the use of 1 gallon pressure washer detergent without further dilution. Check your detergent instructions to be sure additional dilution is not necessary.

- Install the soap nozzle on the spray wand.
- Squeeze the trigger and wait approximately 5 seconds for the detergent to appear.
- Spray the detergent on a dry surface using long, even, overlapping strokes. To prevent streaking, do not allow detergent to dry on the surface.



#### Before shutting off the engine:

- · Fill the detergent tank with clean water.
- · Spray the clear water through the spray wand until the tank is empty.
- If any soap remains in the spray, repeat with a second tank of clean water.

· Shut off the engine.

NOTE: Shutting OFF the engine will not relieve pressure in the system. Pull trigger to release water pressure.

#### RINSING WITH THE PRESSURE WASHER

- Engage the lock out on the trigger handle by pushing up on the lock out until it clicks into the slot.
- Remove the soap nozzle by placing hand over nozzle then pulling back the quick-connect collar. Place the soap nozzle in the nozzle storage area on the top of the machine.
- Select the right nozzle for the job. See the chart on the previous page for selecting the appropriate nozzle.
- Start at the top of the area to be rinsed and work down, overlapping the strokes.

#### MOVING THE PRESSURE WASHER

NOTE: Never lift or carry this product using the handle.

- · Turn the pressure washer off.
- Tilt the machine toward you slightly until it balances on the wheels then roll the machine to the desired position. Do not tilt forward or sideways when moving.
- DO NOT attempt to move the unit by pulling on any of the hoses.

Normal maintenance, replacement or repair of emission control devices and systems may be performed by any qualified repair establishment or individual with original or equivalent parts. Warranty and recall repairs must be performed by a authorized service center; please contact customer service for assistance.

#### A WARNING

When servicing, use only recommended or equivalent replacement parts. Use of any other parts could create a hazard or cause product damage.

#### **AWARNING**

Always wear eye protection with side shields marked to comply with ANSI Z87.1. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

#### A WARNING

Before inspecting, cleaning or servicing the machine, shut off engine, wait for all moving parts to stop, and disconnect spark plug wire and move it away from spark plug. Failure to follow these instructions can result in serious personal injury or property damage.

#### ANOTICE

Periodically, inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced. Please contact customer service or a qualified service center for assistance.

#### **GENERAL MAINTENANCE**

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

# AWARNING

Do not at any time let brake fluids, gasoline, petroleum based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which could result in serious personal injury.

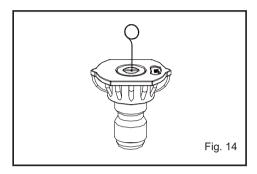
Before running the engine, perform the following preoperation steps:

- · Check that all bolts, nuts, etc., are securely tightened.
- · Make sure the air filter is clean.
- Check both the engine oil level and the fuel tank level; refill as needed.
- Inspect the work area for hazards.
- · If there is excessive noise or vibration, stop the unit immediately.

#### NOZZLE MAINTENANCE (See Figure 14)

Excessive pump pressure (a pulsing sensation felt while squeezing the trigger) may be the result of a clogged or dirty nozzle.

- Turn off the pressure washer and shut off the water supply. Pull trigger to release water pressure.
- · Remove the nozzle from the spray wand.
- Using the spray tip cleaning tool provided, free any foreign materials clogging or restricting the spray tip opening. (See Figure 14)



# WARNING

NEVER remove nozzles without first turning off the engine, relieving the water pressure in the trigger handle, and locking the lock out on the trigger handle. NEVER point the nozzle at your face or at others. The quick-connect feature contains small springs that could eject the nozzle with some force. Failure to follow these instructions could result in an eye injury or other serious personal injury.

- To free any foreign materials clogging or restricting the nozzle, blow out or remove debris with a straightened paper clip or fine needle.
- Using a garden hose, flush debris out of nozzle by back flushing (running the water through the nozzle backwards or from the outside to the inside).
- · Reconnect the nozzle to the spray wand.
- · Turn on the water supply and start the engine.

#### STORING THE PRESSURE WASHER

# 🛕 W A R N I N G

While storing, keep at least 3 feet of clearance on all sides of this product, including overhead. Allow a minimum of 30 minutes of "cool down" time before storage. Heat created by muffler and exhaust gases could be hot enough to ignite combustible objects.

Excessive pump pressure (a pulsing sensation felt while squeezing the trigger) may be the result of a clogged or dirty nozzle.

Store in a dry, covered area where the weather can't damage it. It is important to store this product in a frost-free area. Always empty water from all hoses, the pump, and the detergent bucket before storing.

• Drain the fuel tank completely by running the pressure washer until the gas runs out. Stored gas can go stale in 30 days.

NOTE: Make sure the water supply is connected and turned on when allowing the pressure washer engine to run.

- Make sure the engine switch is in the OFF position and fuel valve is in the CLOSED position.
- Disconnect both the high pressure and low pressure water connections.
- Empty the pump by pulling on the starter grip and rope about 6 times. This should remove most of the liquid from the pump.
- Drain the lubricant and replace with fresh, clean lubricant as described in the engine manual.
- Disconnect spark plug wire and remove the spark plug. Pour about a teaspoon of clean, air-cooled, four-cycle oil through the spark plug hole into the combustion chamber.
- Leaving the spark plug out, pull the starter grip and rope two or three times to coat the inside
  of the cylinder wall.
- Inspect the spark plug and clean or replace, as necessary.
- Reinstall the spark plug, but leave the spark plug wire disconnected.
- · Clean the air filter.
- Extend the starter grip and rope rope to check its condition. If the rope is frayed, have it replaced immediately by a qualified service center.
- Store the unit and accessories in an area that does not reach freezing temperatures. Do not store near furnace or other sources of heat that could dry out the pump seals.

#### FOR USE AFTER STORAGE

- Pull the starter grip and rope grip three or four times to clean lubricant from the combustion chamber.
- Remove spark plug from the cylinder. Wipe oil from the spark plug and return it to the cylinder.
- · Reconnect the spark plug wire.
- Refuel the machine as described earlier in the operator's manual.

#### PERIODIC MAINTENANCE SCHEDULE TABLE

NOTE: If a separate engine manual is provided for this pressure washer, please follow the maintenance schedule provided in the engine manual for all engine maintenance items instead of the maintenance information listed below.

or the mantenance i	monnation ii	otoa bolow.				
Maintenance Items	Each use	Every 8 hrs	Every 20hrs	Every 50hrs	Every 100hrs	Before Storage
Clean engine & check bolts & nuts		X				
Check engine lubricant	Х					
Change engine lubricant <sup>1</sup>			X			
Check water inlet filter placement <sup>2</sup>	Х					
Add fuel stabilizer <sup>3</sup>						X
Add pump protector <sup>3</sup>	Ì					X
Replace spark plug	Ì				X	
Clean air cleaner			Х			
Replace air cleaner element					Х	

<sup>&</sup>lt;sup>1</sup> Initial lubricant change should be performed after the first 20 hours of operation. Do not pour old lubricant down sewage drains, into garden soil, or into open streams. Your local zoning or environmental regulations will give you more detailed instruction on proper disposal.

<sup>&</sup>lt;sup>2</sup> If water inlet filter is missing or damaged, it must be replaced. See Replacement Parts List for part number to order.

<sup>&</sup>lt;sup>3</sup>Fuel stabilizer and pump protector are available at your local retailer. For further assistance, call customer service at 188-470-2181. Too add, follow the instructions provided by the manufacturer.

# **TROUBLESHOOTING**

PROBLEM	POSSIBLE CAUSE	SOLUTION
Engine fails to start	No fuel in tank	Fill tank
	Spark plug shorted or fouled	Replace spark plug
	Spark plug is broken (cracked porcelain or electrodes broken)	Replace spark plug
	Ignition lead wire shorted, broken, or disconnected from spark plug	Replace lead wire or attach to spark plug
	Ignition inoperative	Contact a qualified service center
	Engine switch in off position	Set engine switch to ON position.
Engine hard to	Water in gasoline	Drain entire system and refill with fresh fuel
start	Weak spark at spark plug	Contact a qualified service center
Engine lacks	Dirty air filter	Clean or replace air filter
power	Choke in close position	Pull choke to open position.
Detergent fails to	High pressure nozzle attached	Use blue soap nozzle to apply detergent
mix with spray	Detergent tank is empty	Add detergent to detergent tank
	Low pressure nozzle installed	Replace with high pressure nozzle
	Inadequate water supply	Provide adequate water flow
	Trigger handle or spray wand leaks	Check connections and / or replace trigger handle or spray wand
Pump doesn't	Nozzle is clogged	Clean nozzle
produce pressure	Air in line	Squeeze trigger on trigger handle to remove air from line
	Hose is leaking	Replace hose
	Kink in hose	Eliminate kinks in hose
	Choke in ON (START) position	Move choke to OFF (RUN) position
	Pump is faulty	Contact a qualified service center
	Diameter of garden hose is too small	Replace with 3/4 in. garden hose
Machine doesn't reach high pressure	Water supply is restricted	Check garden hose for kinks, leaks, and blockages
	Not enough inlet water	Open water source full force
	Wrong nozzle is attached	Attach the high pressure nozzle

# **POWERWORKS®**



POWERWORKS™ hereby warranties this product, to the original purchaser with proof of purchase, for a period of one (1) years against defects in materials, parts or workmanship. POWERWORKS™, at its own discretion will repair or replace any and all parts found to be defective, through normal use, free of charge to the customer. This warranty is valid only for units which have been used for personal use that have not been hired or rented for industrial commercial use, and that have been maintained in accordance with the instructions in the owners' manual supplied with the product from new.

#### ITEMS NOT COVERED BY WARRANTY:

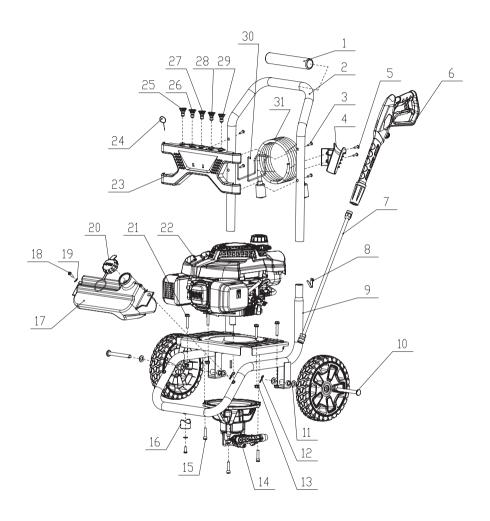
- Any part that has become inoperative due to misuse, abuse, neglect, accident, improper maintenance, or alteration.
- The unit, if it has not been operated and/or maintained in accordance with the owner's manual.
- 3. Normal wear, except as noted below.
- 4. Routine maintenance items such as lubricating or sharpening.
- 5. Normal deterioration of the exterior finish due to use or exposure.

#### **POWERWORKS HELPLINE (1-855-470-2181):**

Warranty service is available by calling our toll-free helpline at 1-855-470-2181.

#### TRANSPORTATION CHARGES:

Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. It is the purchaser's responsibility to pay transportation charges for any part submitted for replacement under this warranty unless such return is requested in writing by **POWERWORKS**.



# PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	349011936	Foam grip	1
2	333002582	Upper handle	1
3	322011628	Screw	4
4	333011936	Gun holder	1
5	322011635	Screw	2
6	311112582	Trigger handle assy	1
7	311011380	Trigger wand assy	1
8	33306847	Spring button	2
9	333012582	Lower frame	1
10	311301936AD	10" wheel	2
11	32908301A	Flat washer	4
12	3320643	Ring	2
13	322002582	Nut	4
14	311082582	Pump assy	1
15	322022582	Screw	3
16	342002582	Foot pad	1
17	34106847C	Soap tank	1
18	322011635	Screw	3
19	32913847	Flat washer	3
20	34107847	Soap tank cover	1
21	322012582	Screw	4
22	311072582	Engine assy	1
23	311022582	Spray tip panel assy	1
24	33201671	Spray tip cleaning tool	1
25	312002582	0 degree nozzle	1
26	312012582	15 degree nozzle	1
27	312022582	25 degree nozzle	1
28	312032582	40 degree nozzle	1
29	34108847	Soap nozzle	1
30	333011936	Hose hook	1
31	311311635AB	High pressure hose assy.	1

# **POWERWORKS®**

Powerworks PO Box 1238 Mooresville, NC 28115

**TOLL-FREE HELPLINE: 1-855-470-2181** 

Rev: 00 (10-18-17) Printed in China on 100% Recycled Paper