

# POWER STROKE™

## CUSTOMER SERVICE SERVICIO AL CLIENTE

USA: 1-877-617-3501

Mexico: 01 800 843 1111

[www.powerstroketools.com](http://www.powerstroketools.com)

## OPERATOR'S MANUAL

### MANUAL DEL OPERADOR

## 3100 PSI PRESSURE WASHER

### LAVADORA A PRESIÓN DE 3 100 PSI

## PS80310E

To register your POWERSTROKE product, please  
visit: <http://register.powerstroketools.com/>

Para registrar su producto de POWERSTROKE, por  
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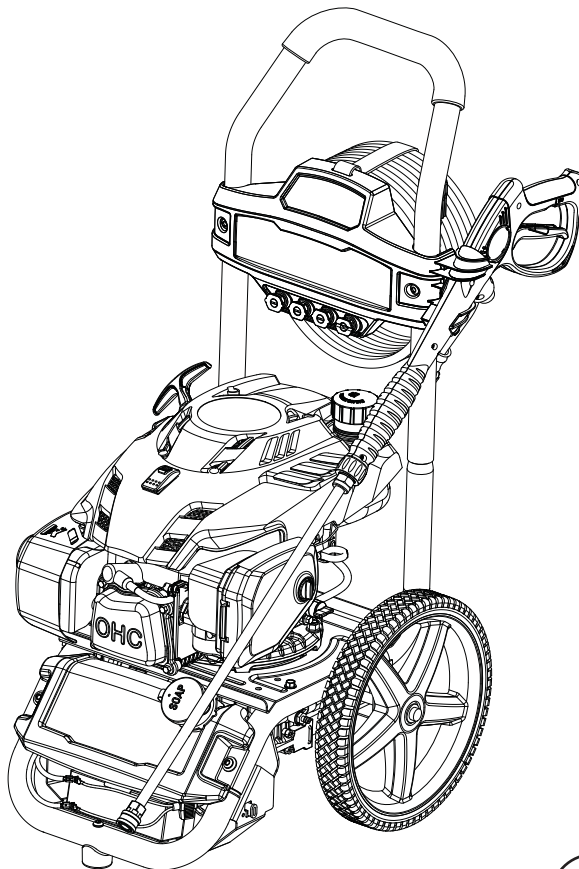
#### NOTICE

#### AVISO

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



No utilice combustibles E15 o E85 con este producto. Esto  
constituye una violación a la ley federal, dañará la unidad y  
anulará la garantía. Use únicamente gasolina sin plomo con  
un contenido de hasta 10 % de etanol.



Your pressure washer has been engineered and manufactured to our high standard for dependability, ease of operation, and operator safety. When properly cared for, it will give you years of rugged, trouble-free performance.



**WARNING:** To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

Thank you for your purchase.

## SAVE THIS MANUAL FOR FUTURE REFERENCE

Su lavadora de presión ha sido diseñada y fabricada de conformidad con las estrictas normas para brindar fiabilidad, facilidad de uso y seguridad para el operador. Con el debido cuidado, le brindará muchos años de sólido y eficiente funcionamiento.



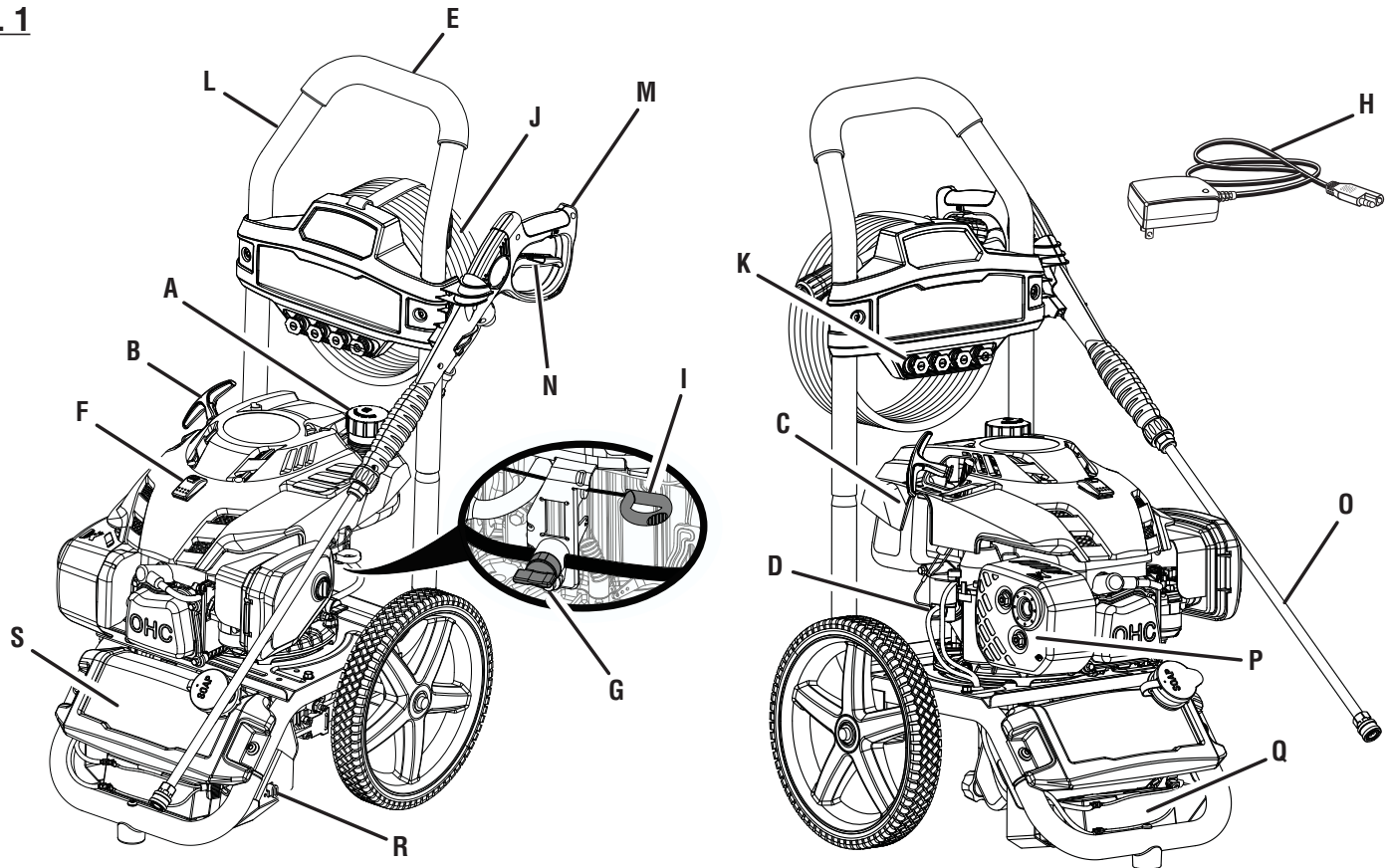
**ADVERTENCIA:** Para reducir el riesgo de lesiones, el usuario debe leer y comprender el manual del operador antes de usar este producto.

Le agradecemos su compra.

## GUARDE ESTE MANUAL PARA FUTURAS CONSULTAS

**See this fold-out section for all of the figures  
referenced in the operator's manual.**  
**Consulte esta sección desplegable para ver todas las figuras  
a las que se hace referencia en el manual del operador.**

**Fig. 1**

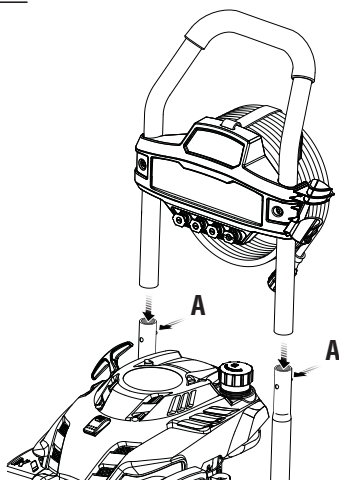


A - Fuel cap (tapa del combustible)  
B - Starter grip and rope (mango del arrancador con cuerda)  
C - Fuel tank (tanque de combustible)  
D - Oil cap/dipstick (tapa del aceite con varilla de nivel)  
E - Gripping surface (superficie de sujeción)  
F - Engine switch (interruptor del motor)

G - Fuel valve (válvula de combustible)  
H - Battery maintainer charger (cargador mantenedor de la batería)  
I - Choke (anegador)  
J - High pressure hose (manguera de alta presión)  
K - Nozzle storage (boquillas y compartimientos para boquillas)  
L - Handle (mango)

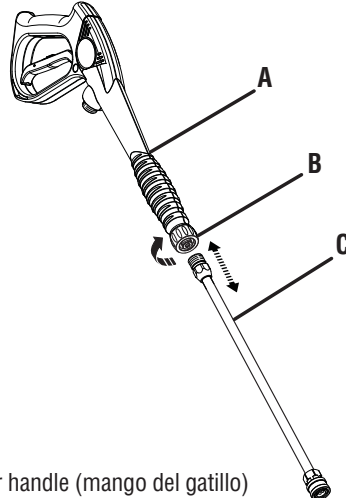
M - Trigger handle (mango del gatillo)  
N - Trigger with lock out (gatillo con seguro)  
O - Spray wand (tubo de rociado)  
P - Muffler (silenciador)  
Q - Battery (batería)  
R - Maintainer input (entrada del mantenedor)  
S - Soap tank (tanque de jabón)

**Fig. 2**



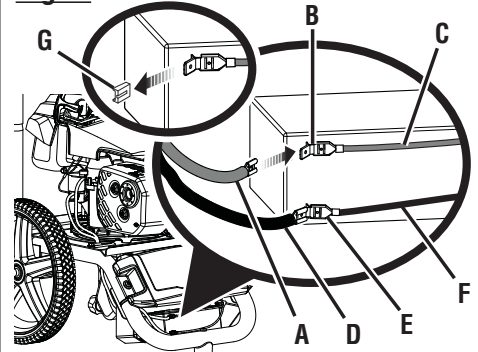
A - Push to insert (tapa de aseguramiento del mango)

**Fig. 3**



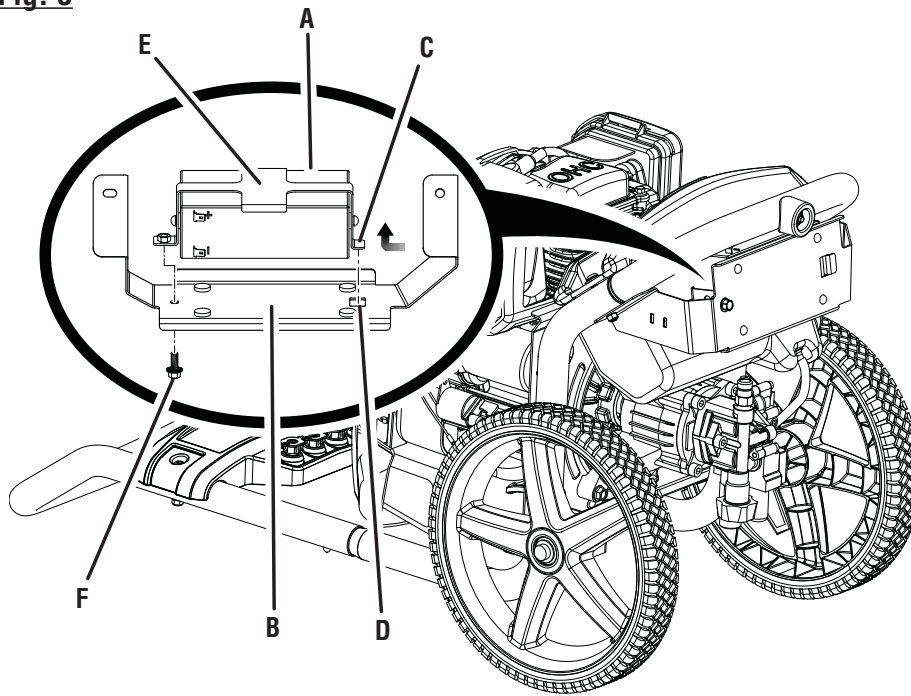
A - Trigger handle (mango del gatillo)  
B - Connector (conector)  
C - Spray wand (tubo de rociado)

**Fig. 4**



A - Red female wire (+) [cable hembra rojo (+)]  
B - Positive (+) terminal [terminal positiva (+)]  
C - Red male wire (+) [cable macho rojo (+)]  
D - Black female wire (-) [cable hembra negro (-)]  
E - Negative (-) terminal [terminal negativa (-)]  
F - Black male wire (-) [cable macho negro (-)]  
G - Cap (tapa)

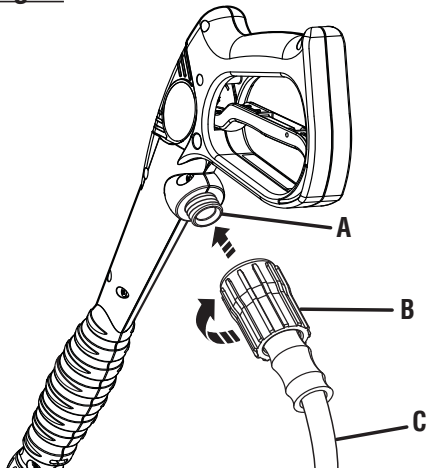
**Fig. 5**



A - Battery (batería)  
B - Battery bracket (soporte de la batería)  
C - Tab (lengüeta)

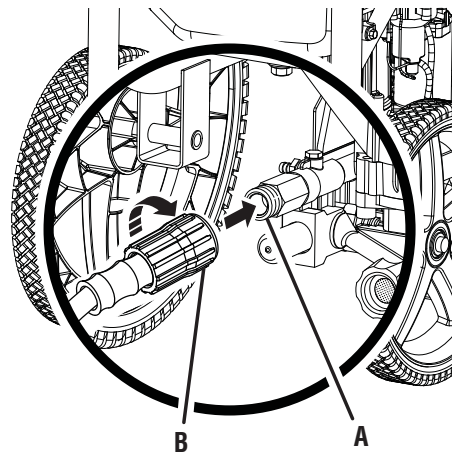
D - Opening (abertura)  
E - Battery holder (porta de la batería)  
F - Bolt (perno)

**Fig. 6**



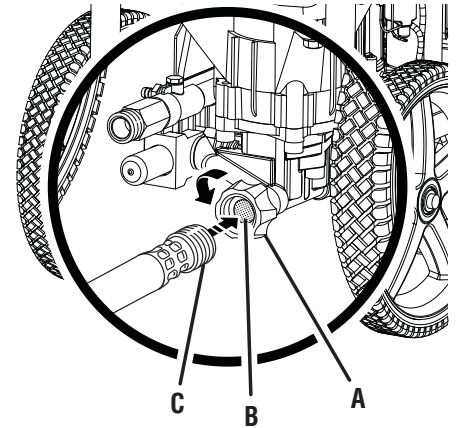
A - Inlet coupler (acoplador de entrada)  
B - Collar (casquillo)  
C - High pressure hose (manguera de alta presión)

**Fig. 7**



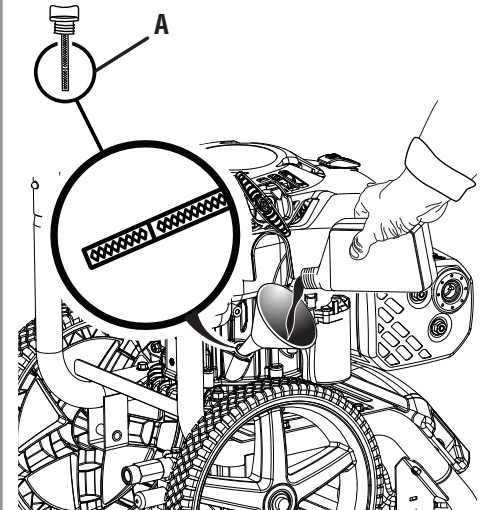
A - Threaded nipple (conexión roscada)  
B - Collar (casquillo)

**Fig. 8**



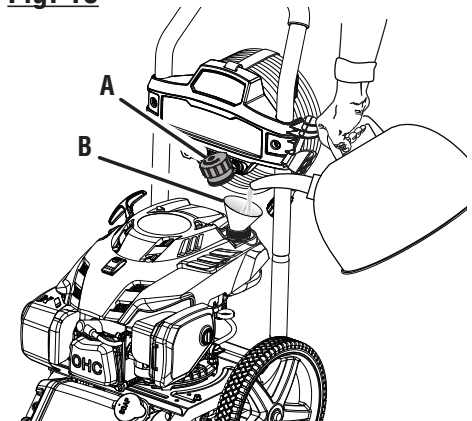
A - Water intake (entrada de agua)  
B - Screen (cedazo)  
C - Garden hose (manguera de jardín)

**Fig. 9**



A - Oil cap/dipstick (tapa del aceite con varilla de nivel)

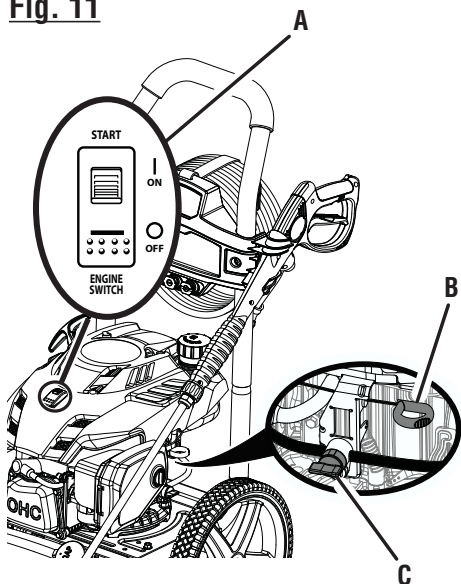
**Fig. 10**



A - Fuel cap (tapa del tanque de combustible)  
B - Funnel (embudo)

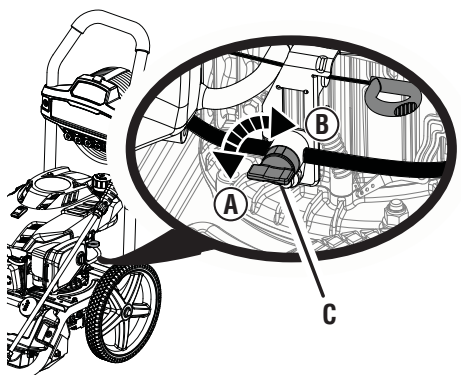


**Fig. 11**



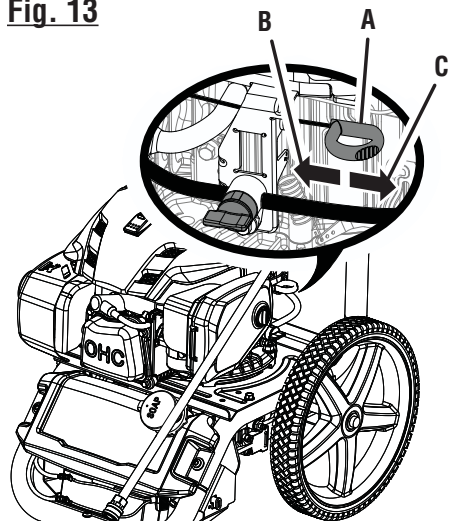
- A - Engine switch (interruptor del motor)  
B - Choke (anegador)  
C - Fuel valve (válvula de combustible)

**Fig. 12**



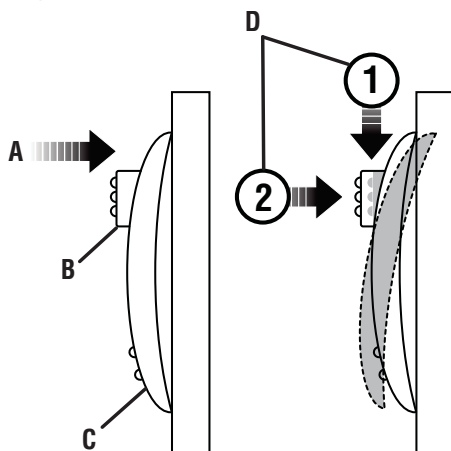
- A - OPEN position (posición ABIERTO)  
B - CLOSED position (posición CERRADO)  
C - Fuel valve (válvula de combustible)

**Fig. 13**



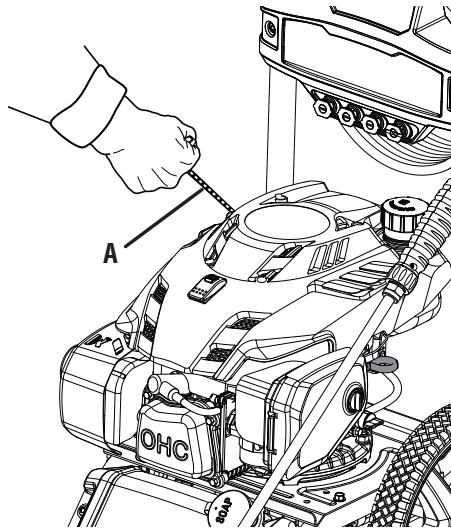
- A - Choke (anegador)  
B - RUN position (posición MARCHA)  
C - START position (posición ARRANQUE)

**Fig. 14**



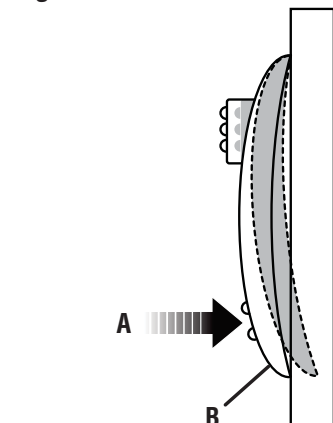
- A - ON position (posición ENCENDIDO)  
B - Lock button (botón del seguro)  
C - Engine switch (interruptor del motor)  
D - START position (posición ARRANQUE)

**Fig. 14**



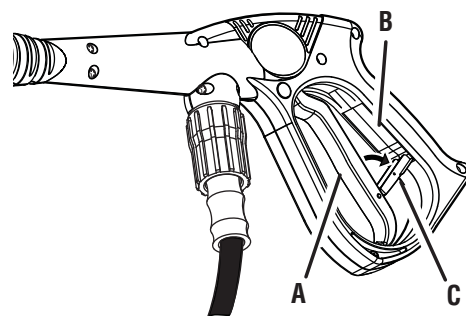
- A - Starter grip and rope (mango del arrancador con cuerda)  
B - Engine switch (interruptor del motor)

**Fig. 15**



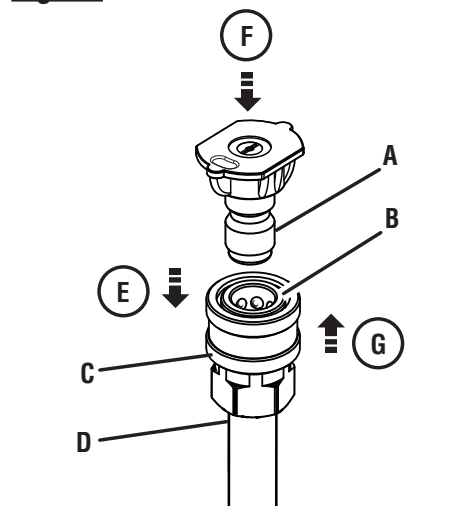
- A - OFF position (posición APAGADO)  
B - Engine switch (interruptor del motor)

**Fig. 16**



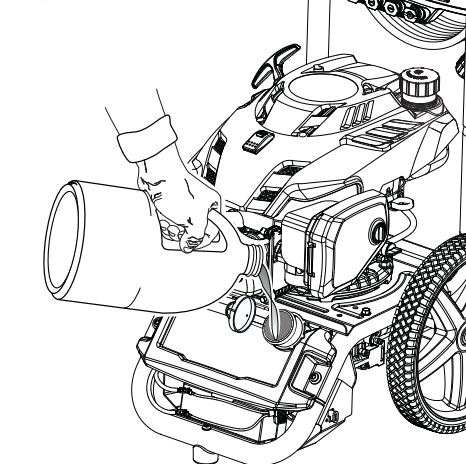
- A - Trigger (gatillo)  
B - Slot (ranura)  
C - Lock out (seguro)

**Fig. 17**



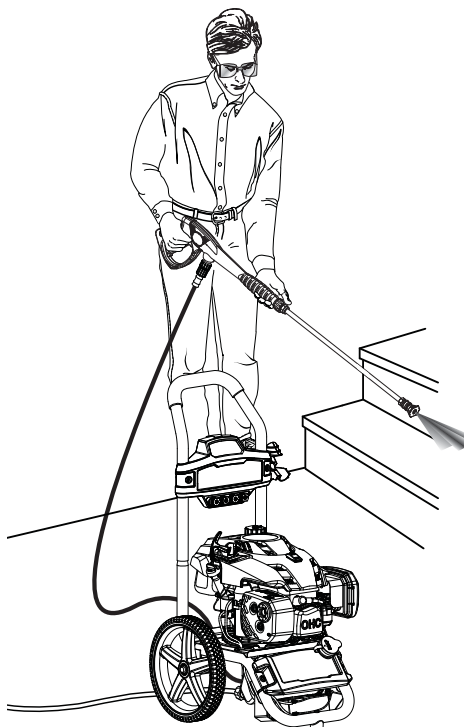
- A - Nozzle (boquilla)  
B - "Click" (hasta que trabe)  
C - Quick-connect collar (casquillo de conexión rápida)  
D - Spray wand (tubo de rociador)  
E - Pull back the quick-connect collar (tire del collar de conexión rápida)  
F - Push the nozzle into place (introduzca la boquilla en su lugar)  
G - Push the collar forward (empuje del collar adelante)

**Fig. 18**

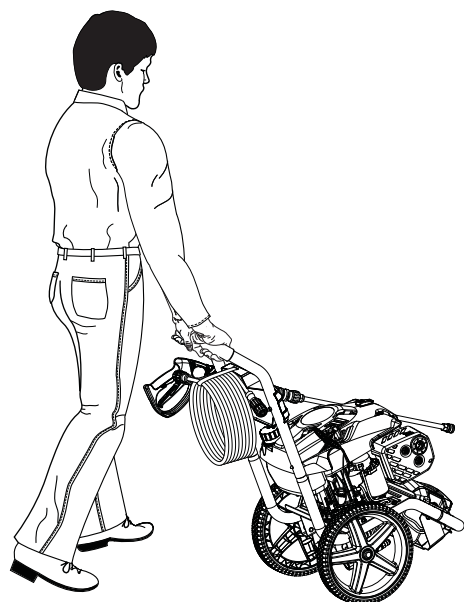




**Fig. 19**

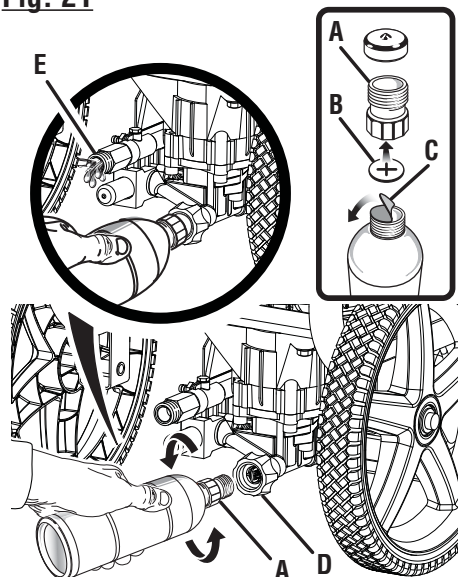


**Fig. 20**



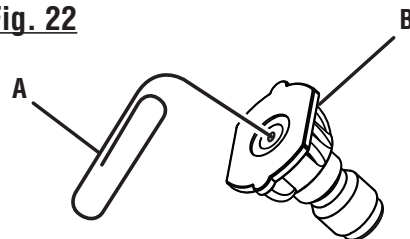
**TO MOVE THE MACHINE  
PARA MOVER LA MÁQUINA**

**Fig. 21**



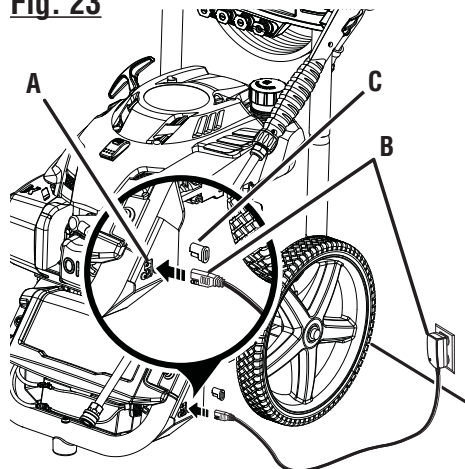
A - Threaded top (parte superior roscada)  
B - Rubber seal (sello de goma)  
C - Paper seal (sello de papel)  
D - Water intake (entrada de agua)  
E - Pump outlet (orificio de descarga de la bomba)

**Fig. 22**



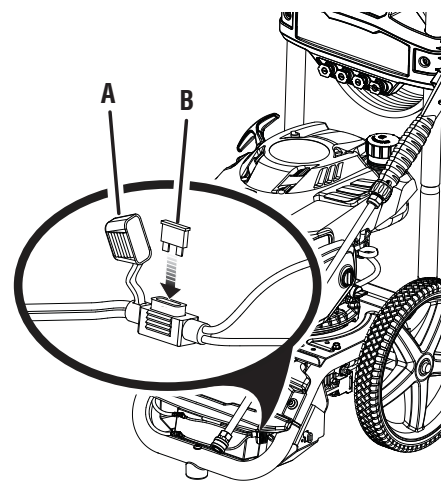
A - Paper clip (clips de papel)  
B - Nozzle (boquilla)

**Fig. 23**



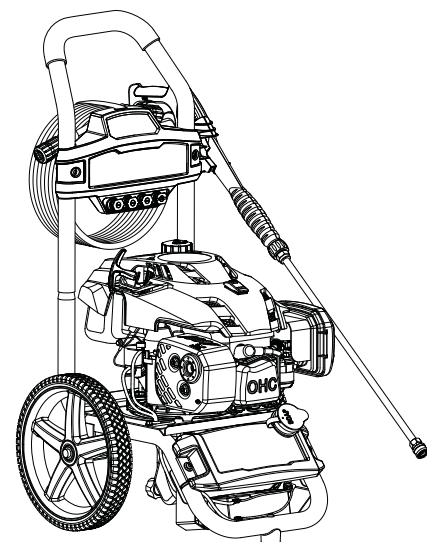
A - Maintainer input (entrada del mantenedor)  
B - Battery maintainer charger (cargador mantenedor de la batería)  
C - Cover (cubierta)

**Fig. 24**



A - Fuse holder (portafusibles)  
B - Fuse (fusible)

**Fig. 25**



**TO STORE THE MACHINE  
PARA GUARDAR LA MÁQUINA**

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## INTRODUCTION

## INTRODUCCIÓN

This product has many features for making its use more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.

\* \* \*

Este producto ofrece numerosas características para hacer más agradable y placentero su uso. En el diseño de este producto se ha conferido prioridad a la seguridad, el desempeño y la fiabilidad, por lo cual se facilita su manejo y mantenimiento.

# IMPORTANT SAFETY INSTRUCTIONS



## DANGER:

**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.



## WARNING:

**Read and understand all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or carbon monoxide poisoning which will cause death or serious personal injury.

## READ ALL INSTRUCTIONS

- **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.
- **Remove adjusting keys and wrenches.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- **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.
- **Keep the area of operation clear of all persons,** particularly small children, and pets.
- **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 defective switches 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.**
- **WARNING: Risk of injection or injury** – Do not direct discharge stream at persons.






## SPECIFIC SAFETY RULES









- **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).
- **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.
- **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 and other engine parts become very hot; use caution.
- **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.**
- **When battery pack is not in use, keep it away from other metal objects** like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- **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.

# SYMBOLS

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






SYMBOL	SIGNAL	MEANING
	<b>DANGER:</b>	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	<b>WARNING:</b>	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	<b>CAUTION:</b>	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	<b>NOTICE:</b>	(Without Safety Alert Symbol) Indicates important information not related to an injury hazard, such as a situation that may result in property damage.

Some of the following symbols may be used on this product. Please study them and learn their meaning for safe operation of this product.

SYMBOL	NAME	EXPLANATION
	Safety Alert	Indicates a potential personal injury hazard.
	Read 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 eye protection with side shields marked to comply with ANSI Z87.1.
	Wet Conditions Alert	Never direct a water stream toward any electrical device.
	Hot Surface	To reduce the risk of injury or damage, avoid contact with any hot surface.
	Risk of Injections	To reduce the risk of injection or injury, never direct a water stream 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.

## SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning for safe operation of this product.

SYMBOL	NAME	EXPLANATION
	Toxic Fumes	Gas products emit carbon monoxide, an odorless, colorless, poison gas. Breathing carbon monoxide can cause nausea, fainting, or death.
	Kickback	To reduce the risk of injury from kickback, hold the spray wand securely with both hands when the machine is on.
	Electric Shock	Failure to use in dry conditions and to observe safe practices can result in electric shock.
	Chemical Burns	To reduce the risk of injury or damage, DO NOT USE ACIDS, ALKALINES, BLEACHES, SOLVENTS, FLAMMABLE MATERIAL, OR INDUSTRIAL GRADE SOLUTIONS in this product.
	Recycle Symbol	This product uses lead acid (Pb) batteries. Local, state or federal laws may prohibit disposal of batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.

## FEATURES

### PRODUCT SPECIFICATIONS

Fuel Tank Capacity .....	0.31 gal.
Maximum Pounds Per Square Inch Pressure* .....	3,100 psi
Maximum Gallons Per Minute* .....	2.4 gpm
Maximum Inlet Water Temperature .....	104°F

\*Max. rating determined by PWMA Standard 101

### KNOW YOUR PRESSURE WASHER

See Figure 1.

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.

### 189cc OHC ENGINE

This engine enables the pressure washer to achieve 3,100 psi (pounds per square inch) at a rate of 2.4 gpm (gallons per minute).

### AUTOMATIC SOAP INJECTION SYSTEM

Pour pressure washer detergent into the soap tank to apply detergent quickly and easily to your cleaning project. Use of the soap nozzle will activate the soap injector at a 20:1 dilution ratio.

### BATTERY MAINTAINER CHARGER

When storing the pressure washer, connect the battery maintainer charger to keep the battery fully charged and ready for use. If the battery's charge is depleted, the Electric Start feature will not function.

**NOTE:** The pressure washer engine does not charge or maintain the battery as it runs.

### ENGINE SWITCH

The engine switch is used either alone or in combination with the recoil starter grip to start the pressure washer.

### FUEL TANK

This fuel tank has a maximum capacity of 0.31 gal. Use unleaded automotive gasoline in the engine.



## FEATURES

### HOSE STORAGE

Once the high pressure hose is rolled, hang it on the back of the machine using the hook-and-loop strap to secure in place.

### SOAP NOZZLE

The blue soap nozzle is used to apply detergent at low pressure only.

### STARTER GRIP AND ROPE

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

### THERMAL RELIEF VALVE

This pump feature will prevent water temperatures from reaching harmful levels by releasing a small amount of water. Once the water has drained, the thermal relief valve will reset itself.

### 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.

## ASSEMBLY

### UNPACKING

This product requires assembly.

- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.

**NOTE:** This tool is heavy. To avoid back injury, lift with your legs, not your back, and get help when needed.



#### **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.

- Inspect the tool 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 tool.
- If any parts are damaged or missing, please call 1-877-617-3501 for assistance.

### PACKING LIST

Pressure Washer  
25 ft. High Pressure Hose  
Trigger Handle  
Spray Wand  
Quick-Connect Nozzles (4)  
4-Cycle Engine Lubricant (SAE 30 or SAE 10W30)  
Disposable Funnel  
Handle  
Battery Maintainer Charger  
Operator's Manual



#### **WARNING:**

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



#### **WARNING:**

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

# ASSEMBLY

## **WARNING:**

To prevent accidental starting that could cause serious personal injury, always disconnect the engine spark plug wire from the spark plug when assembling parts.

## **INSTALLING THE HANDLE**

See Figure 2.

## **CAUTION:**

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

Push and hold the push-pin button on the side of the handle as you slide the handle onto the frame.

**NOTE:** Before use, pull the handle up until the push-pin button snaps through the locking slots to secure the handle in place.

## **CONNECTING THE SPRAY WAND TO THE TRIGGER HANDLE**

See Figure 3.

- Place the threaded end of the spray wand in the connector on the end of the trigger handle.
- Turn the connector clockwise until it stops. This secures the spray wand in place.

## **CONNECTING/DISCONNECTING BATTERY**

See Figures 4 and 5.

## **WARNING:**

To reduce the risk of electric shock or explosion, do not short circuit the battery terminals or charge in a sealed container. Keep sparks and flame away. Do not use metal tools for connections and keep metal objects away from the battery terminals. Metal objects can make a connection from one terminal to another. Shorting the battery terminals together can cause sparks, burns, or a fire.

The battery terminal design does not require the use of tools when installing or removing battery wires. All battery wires must be connected before the electric start feature of the pressure washer can be operated.

### **To connect the battery:**

- Remove the cap from the positive (+) terminal.
- Connect the red female wire to the red male wire on the positive (+) terminal.

**NOTE:** The black male, black female, and red male wires have been preinstalled.

### **To replace the battery:**

- Drain lubricant and fuel from the pressure washer into containers approved for lubricant and gasoline.
- Disconnect the black wires from the battery's negative (-) terminal, first the female then the male wire.
- Disconnect the red wires from the battery's positive (+) terminal, first the female then the male wire.
- Carefully lay the pressure washer down so that it rests on its handle.

**NOTE:** Do not attempt to access the battery by tilting the unit as this may allow the pressure washer to fall unexpectedly.

- Using a 10 mm wrench, remove the retaining bolt securing the battery holder to the battery bracket. Lift and slide the battery holder to the left until it disengages from the bracket.
- Remove the old battery and dispose of according to local and state regulations. Always abide by the safety warnings provided with the battery.
- Put the battery holder on top of the new battery, then place the new battery on the bracket in the same orientation as the old one.
- Insert the battery holder's tab into the opening on the battery bracket. Gently press down on the battery holder while pushing it to the right to lock it into position.
- Install the retaining bolt and return the pressure washer to its upright position.
- Connect the red wires to the battery's positive (+) terminal, first the male then the female wire.
- Connect the black wires to the battery's negative (-) terminal, first the male then the female wire.

**NOTE:** Be careful not to short across the terminals when installing. Shorting the terminals together can cause sparks, damage to the battery or pressure washer, or even burns or explosions.

## **CONNECTING HIGH PRESSURE HOSE TO TRIGGER HANDLE**

See Figure 6.

- Screw the collar on the high pressure hose into the trigger handle inlet coupler by turning the hose collar clockwise. Tighten securely.

**NOTE:** Be careful to avoid cross-threading, which can cause the trigger handle to leak during use.

- Pull on the hose to be certain it is properly secured.

## ASSEMBLY

### CONNECTING THE HIGH PRESSURE HOSE TO THE PUMP

See Figure 7.

- Completely uncoil and straighten the high pressure hose to prevent kinks.

**NOTE:** See **Using The High Pressure Hose in Operation** for more information about using the high pressure hose.

- Align the collar on the hose to the threaded outlet on the pump.
- Insert the high pressure hose collar onto the threaded outlet.
- Turn the collar clockwise to tighten the hose securely to the pump.

**NOTE:** Be careful to avoid cross-threading, which can cause the hose to leak during use.

- Pull on the hose to be certain it is properly secured.

### CONNECTING THE GARDEN HOSE TO THE PRESSURE WASHER

See Figure 8.

#### NOTICE:

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 backflow preventer is usually permitted.

The water supply must come from a water main. NEVER use hot water or water from pools, lakes, etc. Before connecting the garden hose to the pressure washer:

- 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.

#### To connect the garden hose to the machine:

- Completely uncoil the garden hose or remove completely from reel to prevent kinks.

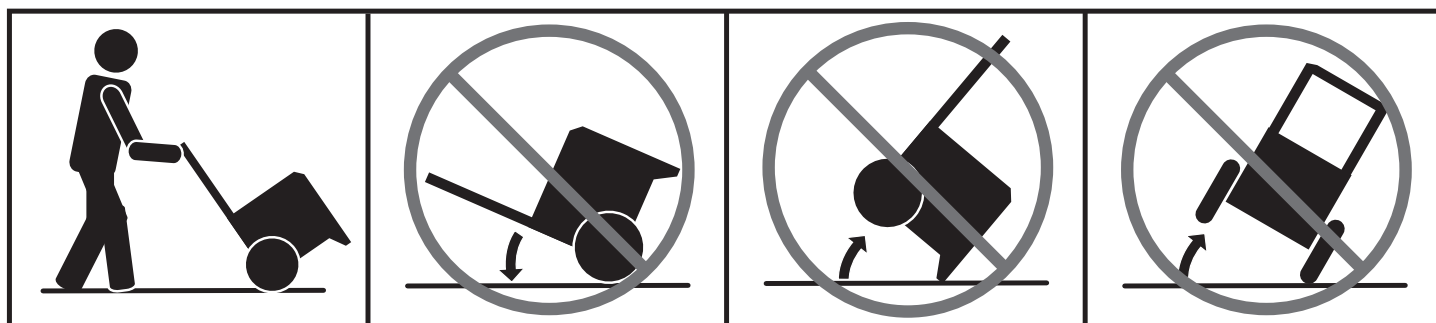
**NOTE:** There must be a minimum of 10 feet of unrestricted hose between the pressure washer intake and the hose faucet or shut off valve (such as a “Y” shut off connector).

- With the hose faucet turned completely off, attach the end of the garden hose to the water intake. Tighten by hand.

#### NOTICE:

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.

## DO NOT OVERTILT THE UNIT!



## OPERATION

#### ⚠ 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.

#### ⚠ 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.



# OPERATION

## **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.

## **WARNING:**

Never direct a water stream toward people or pets, or any electrical device including the pressure washer's battery and maintainer input. Failure to follow these instructions could result in serious injury, electric shock, or death.

## **NOTICE:**

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.

## **NOTICE:**

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.

*\*Always test in an inconspicuous area first.*

## ADDING/CHECKING ENGINE LUBRICANT

See Figure 9.

**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.**

## **NOTICE:**

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 counter-clockwise.
- 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 the oil cap/dipstick and securely tighten.

### To check engine lubricant level:

- Set pressure washer on a flat surface. Do not tilt.
- Unscrew the oil cap/dipstick by turning counterclockwise.
- Wipe dipstick clean and re-seat in hole; do not rethread.
- Remove dipstick again and check lubricant level. Lubricant level should fall within the hatched area on the dipstick.
- If level is low, add engine lubricant until the fluid level rises to the upper portion of the hatched area on the dipstick.
- Replace and secure the oil cap/dipstick.

## **NOTICE:**

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

## OXYGENATED FUELS

### **NOTICE:**

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

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

## ADDING GASOLINE TO THE FUEL TANK

See Figure 10.

## **DANGER:**

**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.

# OPERATION

## **WARNING:**

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.

## **WARNING:**

Always shut off engine before fueling. Never remove fuel cap or add fuel to a machine with a running or hot engine. Make sure the unit is sitting on a flat, level surface and only add fuel outdoors. If the engine is hot, let the unit cool for at least five minutes before adding fuel. After fueling, immediately replace fuel cap and tighten securely. 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.

## **WARNING:**

Check for fuel leaks. A leaking fuel cap, tank, or lines are a fire hazard and must be replaced immediately. If you find any leaks, correct the problem before using the product. Failure to do so could result in a fire that could 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.

## **PUMP LUBRICANT**

The pressure washer pump has been filled with sufficient lubricant at the factory. You do not need to check or add lubricant to the pump.

## **ELECTRIC START**

This pressure washer model is provided with both electric start and recoil start capabilities. Avoid prolonged cranking, as it can damage the engine.

The battery provided is a nominal 12 volt sealed rechargeable lead-acid battery and can be operated in any position without leakage. It complies with non-spillable battery regulations.

**NOTE:** Brand new pressure washers are shipped with the red female wire (+) disconnected. The cap must be removed and the red female wire (+) must be connected to the positive (+) terminal on the battery before the Electric Start feature will work.

For initial battery connection, see **Connecting/Disconnecting Battery**.

## **STARTING AND STOPPING THE PRESSURE WASHER**

See Figures 11 - 15.

### **NOTICE:**

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 the battery.
- 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 (lubricant and gas).
- Turn on the garden hose then pull the trigger to relieve air pressure; hold the trigger until a steady stream of water appears.

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

### **To start the engine:**

- Turn the fuel valve to the **OPEN** position.
- Pull the choke out to the **START** position.

**NOTE:** If engine is warm or the temperature is above 50°F, push the choke in to the **RUN** position.
- Push in at the top of the engine switch to put it in the **ON** position.
- Slide down and hold the lock button while pushing the engine switch to the **START** position.

**NOTE:** The battery may require charging before the pressure washer can be started using only the engine switch. The pressure washer can be started by pulling the starter grip and rope.

# OPERATION

- The pressure washer can also be started by pulling the starter grip and rope until the engine runs.

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

- Allow the engine to run for 5 seconds, then push the choke in to the **RUN** position.

## **NOTICE:**

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 engine switch in the **OFF** position by pushing in at the bottom of the switch.

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



## **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 16.



## **WARNING:**

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.

## **To engage the lock out:**

- Push up on the lock out until it clicks into the slot.

## **To disengage the lock out:**

- Push the lock out down and into its original position.
- 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.

## **SELECTING THE RIGHT NOZZLE FOR THE JOB**

See Figure 17.

Each of the nozzles has a different spray pattern. Before starting any cleaning job, determine the best nozzle for the job. Refer to the **Nozzle Selection Guide** for more information about which nozzle to choose.



## **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 connect a nozzle to the spray wand:**

- 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 up on the lock out until it clicks into the slot.
- Pull back the quick-connect collar.
- Push the nozzle into place in the spray wand.
- Push the collar forward so that the nozzle is secured properly. Check to see that the nozzle is secure.

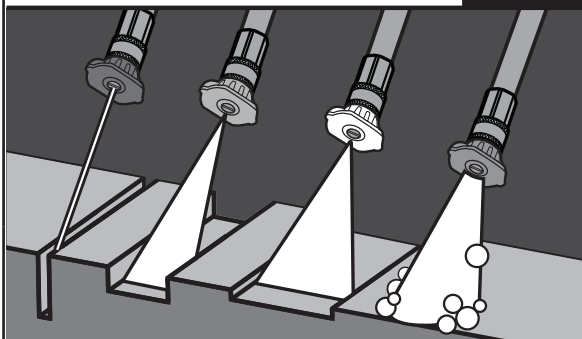




## **To disconnect a nozzle from the spray wand once the cleaning job is complete:**

- 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 up on the lock out until it clicks into the slot.
- Pull back and hold the quick-connect collar.
- Remove the nozzle by pulling it from the quick-connect collar. Place nozzle in the nozzle storage area on the top of the machine.



# OPERATION

## NOZZLE SELECTION GUIDE

<div>0°25°40°SOAP</div> <div></div> <div>ABRASIVEGENTLE</div>				HIGH PRESSURE (NO SOAP WHEN USING THESE NOZZLES)			LOW PRESSURE (FOR SOAP OR GENTLE RINSE)
				0° Red ↓	25° Green ▼	40° White ▼	Blue Soap Nozzle ●●●
Concrete, Brick, Masonry <div></div>				✓	✓	✓	✓
Siding, Gutters, House <div></div>					✓	✓	✓
Fencing, Deck, Patio <div></div>					✓	✓	✓
Lawn Equipment, Boat, RV <div></div>					✓	✓	✓
				✓ Recommended Nozzle   ✓ Use With Caution for Certain Applications			

### USING THE HIGH PRESSURE HOSE

#### WARNING:

Injection hazard. Fully unwrap and straighten high pressure hose prior to and during each use and do not allow it to become kinked. The high pressure hose features an outer covering that provides strength to the hose. If the outer covering becomes damaged, stop using the hose and replace it immediately. A kinked or damaged hose can develop a high pressure leak and result in a possible injection or other serious personal injury.

#### To prevent damage to the outer covering:

- Inspect the hose before every use.
- Fully unwrap and straighten the hose before use.
- Do not allow the high pressure hose to be kinked.
- Keep the hose away from hot surfaces and sharp edges.
- Do not pull the unit by the high pressure hose.
- Do not allow the hose to be crushed or wrapped around objects.

### WASHING WITH DETERGENT

See Figures 18 - 19.

As sold, this unit is designed for use with “downstream” pressure washer detergents. To convert for use with “upstream” detergents, contact customer service or a qualified service center for more information.

#### NOTICE:

**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 soap 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 blue soap nozzle on the spray wand.

# OPERATION

- 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 soap tank with clean water.
- Spray the clear water through the spray wand until the tank is empty.
- If any detergent 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

- 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 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 soap nozzle in the nozzle storage area on 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

*See Figure 20.*

**NOTE:** Never lift or carry this product using the handle and never place the unit in any position other than upright on its wheels.

- 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.

## USING PUMP PROTECTOR

*See Figure 21.*

Regular use of a commercially available pump protector prolongs the life of the pressure washer by removing hard water mineral deposits, lubricating pump seals and pistons, and preventing freeze damage. Pump protector should be added to the unit after every use and before storage. Pump protector can be purchased at the retailer where you purchased your pressure washer, or by calling customer service.

The instructions that follow are typical for adding pump protector but you should always verify the specific instructions provided by the manufacturer of the pump protector used.

- Turn off the pressure washer engine and shut off the water supply. **Pull trigger to release water pressure.**
- Disconnect garden hose and high pressure hose.
- Unscrew threaded top from pump protector bottle and remove paper seal from bottle. Reinstall top on bottle and tighten securely.  
**NOTE:** The rubber seal should remain inside the threaded top. If it comes out, be sure to replace before reinstalling the top.
- Remove bottle cap and attach threaded end of bottle securely to pressure washer pump water intake.
- Squeeze bottle to inject contents into pump.
- With engine switch in the **OFF** position, pull starter grip and rope to cycle pump, then squeeze bottle again to guarantee complete coverage.
- Pump is protected when the protector fluid exits the pump outlet.

# MAINTENANCE

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 an authorized service center; please contact customer service for assistance.

## **WARNING:**

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

## **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.

## **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.

## **NOTICE:**

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.

## **NOTICE:**

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.

## **WARNING:**

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 pre-operation steps:

- Check that all bolts, nuts, etc., are securely tightened.
- Make sure the air filter is clean.
- Check both the engine lubricant 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 22.

Excessive pump pressure (a pulsing sensation felt while pulling 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.

## **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.

# MAINTENANCE

- Using a straightened paper clip or nozzle cleaning tool (not provided), free any foreign materials clogging or restricting the nozzle.
- 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.

## PUMP MAINTENANCE

Routinely make a visual inspection of the pump. If you notice any leaking of lubricant around the pump oil seals, take the pressure washer to an qualified service center for repair.

There are no user serviceable parts to the pressure washer pump. Any attempt to service or alter the pump may damage the pressure washer and void your product warranty.

## USING THE BATTERY MAINTAINER CHARGER

See Figure 23.

When storing the pressure washer, connect the battery maintainer charger to keep the battery fully charged and ready for use.

**NOTE:** The battery maintainer charger provided should only be used with the 12V 4.5Ah/20HR sealed lead acid battery model RT1245B supplied with this pressure washer.

- Plug the battery maintainer charger into a standard household 120V receptacle. Make sure the household power supply is 120V, 60 Hz, AC only.
- Remove the input cover and connect the battery maintainer charger to the pressure washer's maintainer input. The light on the battery maintainer charger will illuminate red while the battery is charging.
- The battery will become slightly warm to the touch while charging. This is normal and does not indicate a problem. When battery is fully charged, the red light will turn green.  
**NOTE:** If the light does not illuminate, the battery maintainer fuse may need to be replaced. Check the fuse and replace if needed.
- Disconnect the battery maintainer charger before operating the pressure washer. Place the cover over the the pressure washer's maintainer input when not in use.

## CHANGING BATTERY MAINTAINER FUSE

See Figure 24.

### NOTICE:

Do not use a higher rated fuse other than the specified amperage. This could cause damage to the product.

- Open the fuse holder and remove the old fuse.
- Insert new 7.5 amp fuse and close the fuse holder.

## STORING THE PRESSURE WASHER

See Figure 25.

**NOTE:** Regular use of fuel stabilizer and pump protector will give you better performance of the unit and increase the life of the pump. See the Replacement Parts List for available sizes and part numbers of these items and call customer service to order.



### WARNING:

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.

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 soap tank 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 the fuel valve is in the **CLOSED** position.
- Disconnect both the high pressure hose and the garden hose from the pump.
- Empty the pump by pulling on the starter grip and rope about 6 times. This should remove most of the liquid from the pump.

### NOTICE:

The use of a pump protector is required after each use and before storing to prevent cold weather and seal damage during storage. Failure to use pump protector will void your warranty.

- Drain the lubricant and replace with fresh, clean lubricant as described in **Adding/Checking Engine Lubricant** in the *Operation* section of this manual.
- Disconnect spark plug wire and remove the spark plug. Pour about a teaspoon of clean, air-cooled, four-cycle lubricant 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.



# MAINTENANCE

- Reinstall the spark plug, but leave the spark plug wire disconnected.
- Clean the air filter.
- Extend the starter grip and rope to check its condition. If the rope is frayed, have it replaced immediately by a qualified service center.
- Remove all hoses. Coil the hoses and store as shown. Do not allow the hose to become kinked.
- For short-term storage, connect the charging cable and allow the battery to charge. For long-term storage, disconnect the cable and coil it neatly.
- 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.

## PREPARING FOR USE AFTER STORAGE

- Pull the starter grip and rope three or four times to clean lubricant from the combustion chamber.
- Remove spark plug from the cylinder. Wipe lubricant 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.

## BATTERY REMOVAL AND PREPARATION FOR RECYCLING

### **WARNING:**

To reduce the risk of electric shock or explosion, do not short circuit the battery terminals. Keep sparks and flame away. Do not use metal tools for connections and keep metal objects away from the battery terminals. Metal objects can make a connection from one terminal to another. Shorting the battery terminals together can cause sparks, burns, or a fire.



To preserve natural resources, please recycle or dispose of batteries properly.

This product uses lead acid batteries. Local, state or federal laws may prohibit disposal of batteries in ordinary trash.

Consult your local waste authority for information regarding available recycling and/or disposal options.

### **WARNING:**

Upon removal, cover the battery's terminals with heavy-duty adhesive tape. Do not attempt to destroy or disassemble battery or remove any of its components. Lead acid batteries must be recycled or disposed of properly. Also, never touch both terminals with metal objects and/or body parts as short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

# MAINTENANCE

## 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 instead of the maintenance information listed below.

Maintenance Items	Each use	Weekly	25 hrs	50 hrs	200 hrs
Check for water leaks under manifold, into crankcase	X				
Plumbing		X			
Clean engine and check nuts and bolts	X				
Check and refill engine lubricant	X				
Change engine lubricant (initial change) <sup>1</sup>	X				
Check water inlet filter placement <sup>2</sup>	X				
Add fuel stabilizer	X				
Add pump protector	X				
Change engine lubricant				X	
Check spark plug				X	
Clean air filter			X		
Replace air filter element					X
Clean and adjust spark plug and electrodes				X	
Replace spark plug					X

<sup>1</sup> Initial lubricant change should be performed after first 20 hours of operation. Thereafter, change lubricant every 100 hours.

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

**NOTE:** If you are not sure how to perform any of the maintenance items listed above, take the unit to a qualified service center to have the maintenance item performed.

# TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Engine fails to start	No fuel in tank	Fill tank
	Water pressure in hose	Squeeze trigger to relieve water pressure
	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
Engine hard to start	Ignition inoperative	Contact a qualified service center
	Water in gasoline	Drain entire system and refill with fresh fuel
Engine lacks power	Weak spark at spark plug	Contact a qualified service center
Electric Start feature not working	Dirty air filter	Clean or replace air filter
Detergent fails to mix with spray	Battery is not charged	Charge the battery using the battery maintainer charger
	Battery wires disconnected	Connect the battery wires.
Pump doesn't produce pressure	Soap tank is empty	Add detergent to soap tank
	High pressure nozzle attached	Use blue soap nozzle to apply detergent
Machine doesn't reach high pressure	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
	Nozzle is clogged	Clean nozzle
	Air in line	Pull trigger on trigger handle to remove air from line
	Hose is leaking	Replace hose
	Kink in hose	Eliminate kinks in hose
	Choke in <b>START</b> position	Push choke in to the <b>RUN</b> 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

If problem persists after trying the above solutions, contact customer service or a qualified service center for assistance.

## NOTICE:

As the equipment owner, you are responsible for the performance of the required maintenance listed in the *Maintenance* section. It is recommended that you retain all receipts covering maintenance on your equipment. Neglecting or failing to perform the required maintenance may increase emissions, decrease fuel efficiency, degrade performance, cause irreversible engine damage and/or void your warranty.

# WARRANTY

## LIMITED NON-ENGINE WARRANTY STATEMENT

OWT Industries, Inc., (the Company) warrants to the original retail purchaser that this PowerStroke Product is free from defects in material and workmanship and agrees to repair or replace, at the Company's discretion, any defective Product free of charge within these time periods from the date of purchase:

- Three years, if the Product is used solely for personal, family, or household use;
- 90 days, if the Product is used for business or commercial use.

This warranty applies only to Products sold within the United States of America, the District of Columbia, Canada, Mexico, the Commonwealth of Puerto Rico, the Virgin Islands, or Guam.

This warranty is not transferable and does not cover damage resulting from defects other than in material or workmanship, or damage caused by unreasonable use, including the failure to provide reasonable and necessary maintenance.

### Other items not covered under this warranty include:

- Transportation charges for sending the product to the Company or its authorized service representative for warranty service, or for shipping repaired or replacement products back to the customer; these charges must be borne by the original retail purchaser.
- Damages caused by abuse, accident, misuse, neglect, alteration, modification, the effects of corrosion, erosion, normal wear and tear or repairs by other than the Company or its authorized service representative.
- In addition this warranty does not cover:
  - Tune-ups – Spark Plugs, Carburetor, Carburetor Adjustments, Ignition, Filters, Oil Change
  - Wear items – Hoses, Connector Fittings, Spray Nozzles, Trigger Handle, Spray Wand, Wheels

Warranty is voided if the customer fails to install, maintain and operate the product in accordance with the instructions and recommendations of the Company as set forth in the Product's operator's manual or if the Product is used as rental equipment.

The Company will not pay for repairs or adjustments to the Product, or for any costs or labor, performed without the Company's prior authorization.

**IMPORTANT: Some components not covered under this warranty may still be covered by a separate warranty issued by the engine manufacturer. Please see the Engine Manufacturer Warranty (if any) supplied with this product for further details.**

### SAVE YOUR SALES SLIP

Proof of purchase in the form of your dated sales receipt, cash register slip, etc., will be required before the Company and/or its authorized service representatives can perform warranty service on the Product.

### EXCLUSIONS AND LIMITATIONS

**THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES.** ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE, APPLICABLE TO THIS PRODUCT, SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY. THE WARRANTY SERVICE DESCRIBED ABOVE IS THE EXCLUSIVE REMEDY UNDER THIS WARRANTY. THE COMPANY SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

SOME STATES DO NOT ALLOW A LIMITATION ON THE DURATION OF IMPLIED WARRANTIES, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL, OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

### HOW TO OBTAIN WARRANTY SERVICE

**For warranty service: Call toll free 1-877-617-3501, or write to OWT Industries, Inc., P.O. Box 35, Hwy. 8, Pickens, SC 29671.**

**For warranty service outside the USA, please contact your local PowerStroke dealer.**



## BATTERY CHARGER FCC COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.



### **WARNING:**

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## CUMPLIMIENTO DE LAS NORMAS DE LA FCC PARA CARGADOR DE BATERÍAS

Este dispositivo cumple con la Parte 15 de las Reglas de la FCC. El uso depende de las siguientes dos condiciones: 1) Este dispositivo no puede causar interferencias perjudiciales y 2) este dispositivo debe admitir cualquier interferencia recibida, incluidas las que pudieran causar un funcionamiento no deseado.



### **ADVERTENCIA:**

Los cambios o modificaciones hechos a esta unidad sin la autorización expresa del responsable del cumplimiento de la norma podrían anular la autoridad del usuario para manejar el equipo.

**NOTA:** Se ha verificado y determinado que este equipo cumple con los límites correspondientes a los dispositivos digitales de Clase B, de acuerdo con la Parte 15 de las Normas de la FCC. Estos límites están establecidos para proporcionar una protección razonable contra la interferencia dañina en las instalaciones residenciales. Este equipo genera, utiliza y puede irradiar energía de frecuencia de radio, y si no se instala y emplea de conformidad con las instrucciones, puede causar interferencia dañina a las radiocomunicaciones. No obstante, no hay garantía de que no ocurrirá ninguna interferencia en cada instalación en particular. Si este equipo causa interferencia dañina en la recepción de radio o televisión, lo cual puede determinarse apagando y luego encendiendo el equipo, se exhorta al usuario a tratar de corregir la interferencia tomando una o más de las siguientes medidas:

- Cambiar la orientación o ubicación de la antena receptora.
- Aumentar la separación entre el equipo y el aparato receptor.
- Conectar el equipo en una toma de corriente de un circuito diferente al que esté conectado el aparato receptor.
- Consultar al concesionario o a un técnico experimentado de radio y TV para que le brinden ayuda.