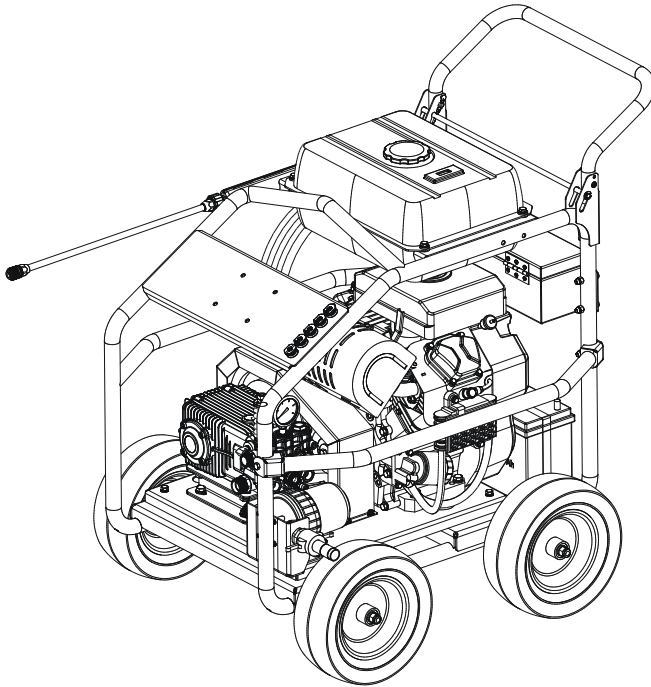




PETROL PRESSURE WASHER

OPERATOR'S MANUAL



POWERED by
HONDA

Part No: TM542-5000

Ver: 1.0



**TO PREVENT SERIOUS INJURY OR DAMAGE TO YOUR PRESSURE WASHER,
READ AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS BEFORE USE**



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LIMITED WARRANTY

Industrial Tool & Machinery Sales (hereinafter referred to as ITMS) will, within twelve (12) months from the original date of purchase, repair or replace any goods found to be defective in materials or workmanship.

This warranty is void if the item has been damaged by accident, neglect, improper service or other causes not arising out of defects in materials or workmanship. This warranty does not apply to machines and/or components which have been altered, changed, or modified in any way, or subjected to overloading or use beyond recommended capacities and specifications. Worn componentry due to normal wear and tear is not a warranty claim. Goods returned defective shall be returned prepaid freight to ITMS or agreed repair agent, which shall be the buyer's sole and exclusive remedy for defective goods. ITMS accepts no additional liability pursuant to this guarantee for the costs of travelling or transportation of the product or parts to and from ITMS or the service agent or dealer, such costs are not included in this warranty.

Our goods come with guarantees which cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

**THE MANUFACTURER RESERVES THE RIGHT TO MAKE IMPROVEMENTS AND
MODIFICATIONS TO DESIGN WITHOUT PRIOR NOTICE.**

PRODUCTS IMPORTED AND DISTRIBUTED NATIONALLY BY:



INDUSTRIAL TOOL & MACHINERY SALES
11 EASTERN SERVICE ROAD, STAPYLTON, QLD, 4207
T: 07 3287 1114 E: sales@industrialtool.com.au
W: www.itmtools.com.au

PRODUCT SPECIFICATIONS

Thank you for purchasing your ITM Pressure Washer. With an ever-reliable genuine Honda engine and Annovi Reverberi pump, steel braided abrasion & kink resistant high-pressure hoses, heavy duty steel frame and puncture proof wheels, this pressure washer is built to meet the rigorous demands of the trade professional or anyone who expects the most out their machine

Model Number	TM542-5000
Pump	Triplex
Max. Pressure	5000PSI / 345Bar
Flow Rate	25 L/min
Starting System	Electric Start
Soap Tank	Siphon Tube
Hose Length	15m
Nozzle	15°, 25°, 40°, Soap
Honda Engine	GX690
Displacement	688 cc
Engine Types	Single Cylinder 4-Stroke OHV
Fuel Type	87+ Octane Unleaded
Fuel Capacity	15.2L
Oil Type	10W30
Oil Capacity	1.9L
Pump Warranty	2 Year
Engine Warranty	3 Year

SAFETY

This Operating Manual has been designed to instruct you on the correct operation of your pressure washer. Your satisfaction with this product and its safe operation is our ultimate concern. Therefore, please take the time to read the entire manual, especially the safety symbols and instructions as they will help you to avoid potential hazards that may exist when working with this product. Every effort has been made to ensure that information in this manual is accurate and current. However, we reserve the right to change, alter, or otherwise improve the product and this document at any time without prior notice.

Safety Symbols and Warnings

⚠ DANGER: indicates a hazard which, if not avoided, will result in death or serious injury.









⚠ WARNING: indicates a hazard which, if not avoided, could result in death or serious injury.









⚠ CAUTION: indicates a hazard which, if not avoided, could result in minor or moderate injury.

NOTICE: Indicates information, or addresses practices that are important, but not related to personal injury.

Safety Symbols and Meanings

The following symbols will appear in this manual and on the product. For safe use of this product, be sure to study them and know their meanings.

	Safety Alert
	Read Operators Manual
	Asphyxiation Hazard
	Eye Protection
	Hot Surface
	Fluid Injection
	Kickback
	Moving Parts

	Fire
	Explosion
	Electrical Shock
	Projectile
	Chemical Burns
	Electrical Hazard
	Slippery Surface
	Fall

SAFETY

Operating Instructions and Precautions

DANGER: POISONOUS GAS HAZARD

Engine exhaust contains carbon monoxide, a poisonous gas that **WILL kill** you in minutes. You **CANNOT** smell it, see it, or taste it. Even if you do not smell exhaust fumes, you could still be exposed to carbon monoxide gas. Some chemicals or detergents could also be harmful if inhaled or ingested, resulting in death, serious injury, nausea, fainting or poisoning.

- Operate this product **ONLY** outside far away from windows, doors and vents to reduce the risk of carbon monoxide gas from accumulating and potentially being drawn towards occupied spaces.
- **DO NOT** run this product inside homes, garages, basements, crawlspaces, sheds, or other partially enclosed spaces, even if using fans or opening doors and windows for ventilation. Carbon monoxide can quickly build up in these spaces and can linger for hours, even after this product has been shut off.
- **ALWAYS** place this product downwind and point the engine exhaust away from occupied spaces.
- If you start to feel sick, dizzy, or weak while using this product, shut it off and get to fresh air **RIGHT AWAY**. See a doctor, as you may have carbon monoxide poisoning.

SAFETY

WARNING: READ AND UNDERSTAND ALL SAFETY INSTRUCTIONS

- Keep guards in place and in working order. Never operate this product with any guard or cover removed. Make sure **all** guards are intact and operating properly before each use.
- Remove adjusting tools and wrenches. If any adjustments or maintenance has been performed, make sure that **all** tools and adjusting wrenches are removed from product before use.
- To reduce the risk of injury, keep **all** children and visitors away from product when in use. **All** visitors should wear safety glasses and be kept a safe distance from work area.
- Keep the work area clear of **all** persons, particularly **small** children, and pets.
- Use product for its intended use. Don't force product or attachment to do a job it was not designed for. Do not use it for a purpose not intended. Use **only** recommended accessories with this product. The use of improper and or modified accessories may cause risk of injury.
- Use proper clothing. Wear long pants and long sleeves. Do not wear loose clothing, neckties, or jewelry. They can get caught and draw you into moving parts. Rubber gloves and nonskid footwear are recommended when working outdoors. Do not operate the equipment while barefoot or when wearing sandals or similar lightweight footwear. Also wear protective hair covering to contain long hair.
- Always wear proper eye protection with side shields marked to comply with ANSI Z87.1. Following this rule **will** reduce the risk of serious personal injury.
- Do not overreach or stand on a ladder, rooftop, or other unstable support structure whilst using your pressure washer. Keep proper footing and balance at **all** times.
- Never leave product running unattended. Turn power off. Don't leave product until it comes to a complete stop.
- Keep the engine and pump free of grass, leaves, oil, or grease to reduce the chance of a fire hazard.
- Keep the exhaust outlet free of foreign objects.
- Be completely knowledgeable with product controls. Know how to stop the product and bleed pressure quickly.
- Stay alert and exercise control. Watch what you are doing at **all** times 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 using product. Remove **all** objects such as rocks, broken glass, nails, wire, or string which can be thrown or become tangled in the product.
- Do not direct high pressure spray stream at any persons, animals and pets. Do not direct spray stream
- Never lift or carry the product or attempt to make adjustments while the engine is running or hot.
- Do not attempt to touch the spark plug or plug wire while the engine is running.
- Use only cold water with this product.
- For outdoor use only


SAFETY

 **WARNING:** Fire / Hot Surface Hazard



Exhaust could ignite combustibles, resulting in death or serious injury. Contact with muffler area could cause burns resulting in serious injury.

- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow equipment to cool before touching.
- Keep at least 5 feet (1.5 m) of clearance on all sides of pressure washer including overhead.
- Replacement part must be the same and installed in the same position as the original .

 **WARNING:** Slip or Fall Hazard



Use of pressure washer could create slippery surfaces causing you to fall resulting in death or serious injury.

- Kickback from spray gun could cause you to fall resulting in death or serious injury.
- Operate pressure washer from a stable surface.
- The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.
- Be extremely careful if you must use the pressure washer from a ladder, scaffolding, or any other similar location.
- Firmly grasp spray gun with both hands when using high pressure spray to avoid injury when spray gun kicks back.

 **WARNING:** Kickback Hazard



Starter cord kickback (rapid retraction) may pull your hand and arm toward engine faster than you can let go, which could cause fractures, bruises, or sprains resulting in serious injury.

- NEVER pull starter cord without first relieving spray gun pressure.
- When starting engine, pull cord slowly until resistance is felt and then pull rapidly to avoid kickback.
- After each starting attempt, where engine fails to run, always point spray gun in safe direction, disengage trigger lock and squeeze spray gun trigger to release high pressure.

SAFETY

 **WARNING:** Fire / Explosion Hazard



Fuel and its vapors are extremely flammable and explosive which could cause burns, fire or explosion resulting in death or serious injury. 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.

WHEN ADDING OR DRAINING FUEL

- Turn pressure washer engine OFF and let it cool at least 5 minutes before removing fuel cap. Loosen cap slowly to relieve any pressure remaining in tank.
- Fill or drain fuel tank outdoors.
- DO NOT overfill tank. Allow space for fuel expansion.
- If fuel spills, wait until it evaporates before starting engine.
- Keep fuel away from sparks, open flames, pilot lights, heat, and other ignition sources.
- Check fuel lines, tank, cap and fittings frequently for cracks or leaks. Replace if necessary.
- DO NOT light a cigarette or smoke.

WHEN STARTING EQUIPMENT

- Ensure spark plug, muffler, fuel cap, and air filter are in place.
- DO NOT crank engine with spark plug removed.

WHEN OPERATING EQUIPMENT


- DO NOT operate this product inside any building, carport, porch, mobile equipment, marine applications, or enclosure.
- DO NOT tip engine or equipment at angle which causes fuel to spill.
- DO NOT spray flammable liquids.

WHEN TRANSPORTING, MOVING OR REPAIRING EQUIPMENT

- Transport/move/repair with fuel tank EMPTY or with fuel shutoff valve OFF.
- DO NOT tip engine or equipment at angle which causes fuel to spill.
- Disconnect spark plug wire.

WHEN STORING FUEL OR EQUIPMENT WITH FUEL IN TANK

Store away from furnaces, stoves, water heaters, clothes dryers, or other appliances that have pilot light or other ignition source because they could ignite fuel vapors.

 **WARNING:** Fire and Electrical Shock



Unintentional sparking could cause fire or electric shock, resulting in death or serious injury.

WHEN ADJUSTING OR MAKING REPAIRS TO YOUR PRESSURE WASHER

- Disconnect the spark plug wire from the spark plug and place the wire where it cannot contact spark plug.

WHEN TESTING FOR ENGINE SPARK

- Use approved spark plug tester.
- DO NOT check for spark with spark plug removed.

SAFETY**⚠ WARNING: Fluid Injection**

The high-pressure water that this equipment produces could cut through skin and its underlying tissues, resulting in serious injury and possible amputation.

- Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which could result in serious injury.
- If cut by fluid, call physician immediately. DO NOT treat as a simple cut.
- DO NOT allow CHILDREN to operate pressure washer.
- NEVER repair high pressure hose. Replace it.
- NEVER repair leaking connections with sealant of any kind. Replace o-ring or seal.
- NEVER connect high pressure hose to nozzle extension.
- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction, disengage trigger lock and squeeze spray gun trigger to release high pressure, every time you stop engine.
- NEVER aim spray gun at people, animals, or plants.
- DO NOT secure spray gun in open position.
- DO NOT leave spray gun unattended while machine is running.
- NEVER use a spray gun which does not have a trigger lock or trigger guard in place and in working order.
- Always be certain spray gun, nozzles and accessories are correctly attached.

⚠ WARNING: Moving parts hazard

Starter and other rotating parts could entangle hands, hair, clothing or accessories, resulting in serious injury.

- NEVER operate pressure washer without protective housing or covers.
- DO NOT wear loose clothing, jewelry or anything that could be caught in the starter or other rotating parts.
- Tie up long hair and remove jewelry.

⚠ WARNING: Projectile hazard

Risk of eye or bodily injury. Spray could splash back or propel objects resulting in serious injury.

- Always wear safety goggles marked to comply with ANSI Z87.1 when using or in vicinity of this equipment.
- Always wear protective clothing such as a long-sleeved shirt, long pants and close-toed shoes.
- NEVER operate pressure washer when barefoot or wearing sandals.

**⚠ WARNING: Risk of Injection Injury
DO NOT direct discharge stream at persons.****⚠ CAUTION: Engine Speed**

Excessively high operating speeds could result in minor injury. Excessively low speeds impose a heavy load on engine.

- DO NOT tamper with governor spring, links or other parts to increase engine speed. Pressure washer supplies correct rated pressure and flow when running at governed speed.
- DO NOT modify pressure washer in any way.

SAFETY **WARNING: Electrical Shock**

Contact with power source could cause electric shock or burn resulting in death or serious injury.

- Never spray at or near an electric power source.

 **WARNING: Chemical Burn**

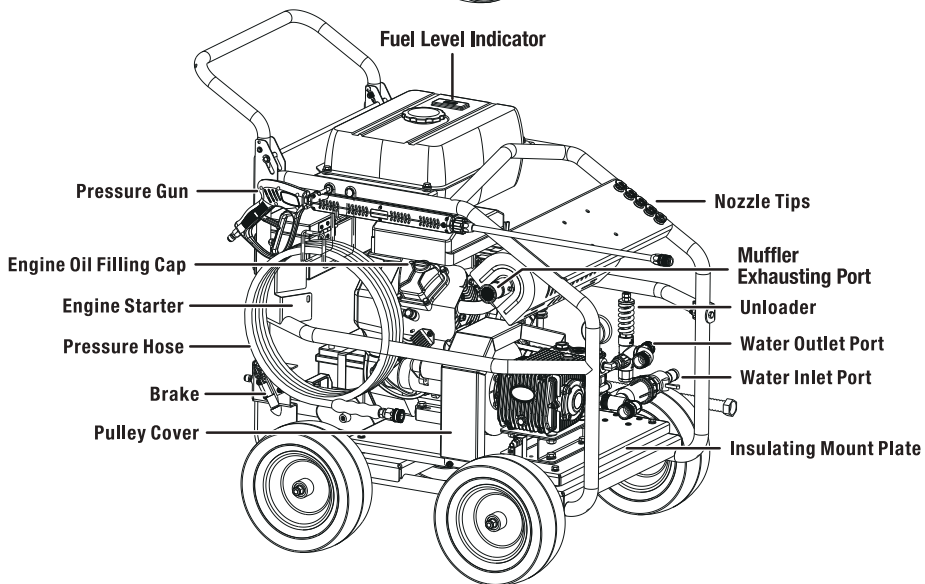
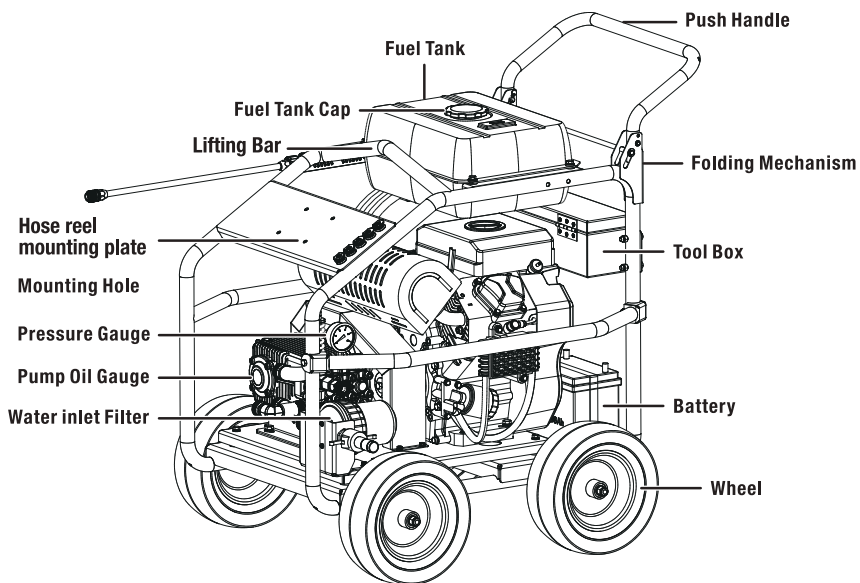
Chemicals could cause burns resulting in death or serious injury.

- DO NOT use caustic liquid with pressure washer.
- Use ONLY pressure washer safe detergents/soaps. Follow all manufacturer's instructions.

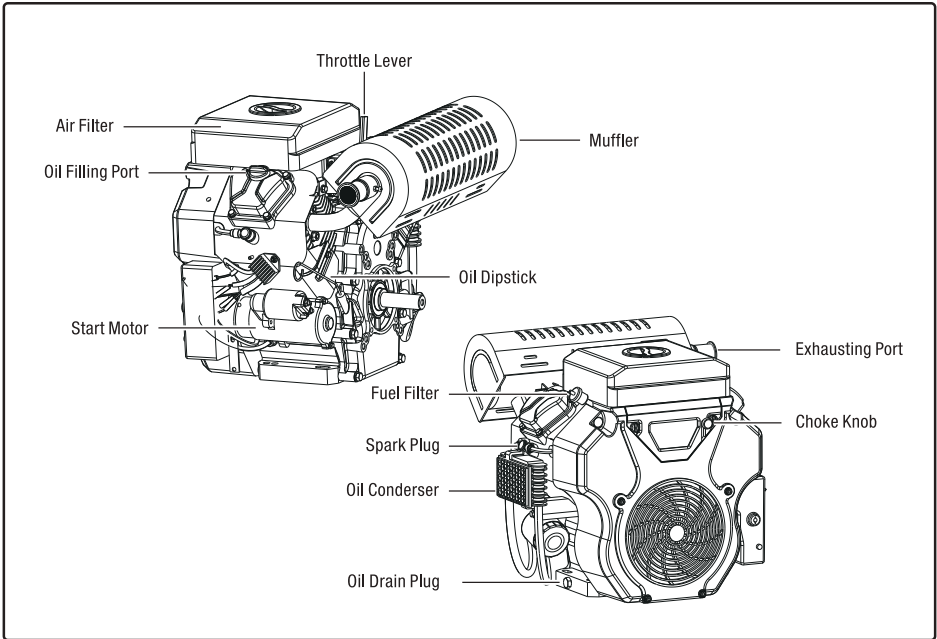
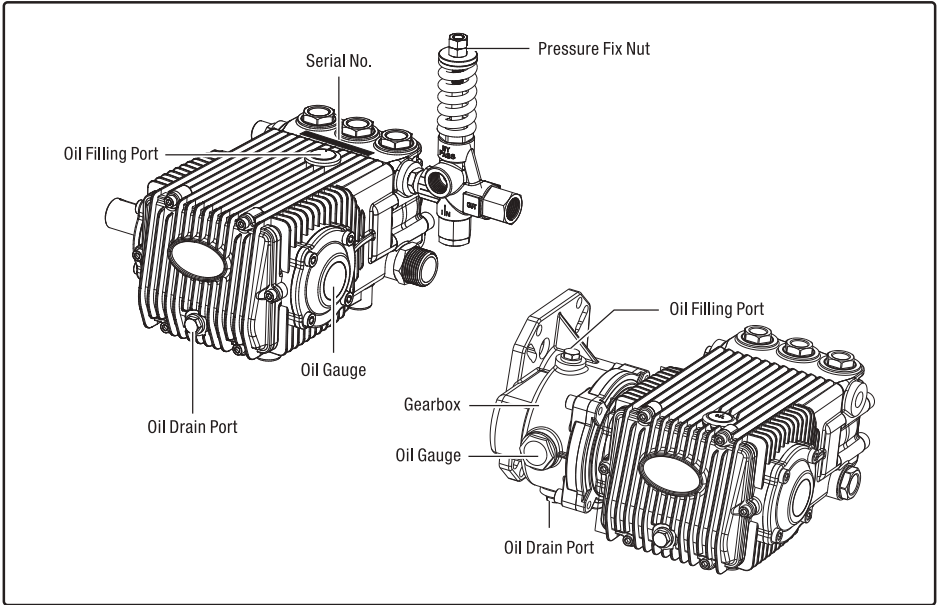
NOTICE: Improper treatment of pressure washer could damage it and shorten its life. If you have questions about intended use, please discuss with sales team member at your place of purchase.

- NEVER operate units with broken or missing parts, or without protective housing or covers.
- DO NOT by-pass any safety device on this machine.
- DO NOT tamper with governed speed.
- DO NOT operate pressure washer above rated pressure.
- DO NOT modify pressure washer in any way.
- Before starting pressure washer in cold weather, check all parts of the equipment to be sure ice has not formed there.
- NEVER move machine by pulling on hoses. Use handle provided on unit.
- This equipment is designed to be used with A-iPower authorized parts ONLY. If equipment is used with parts that DO NOT comply with minimum specifications, user assumes all risks and liabilities.

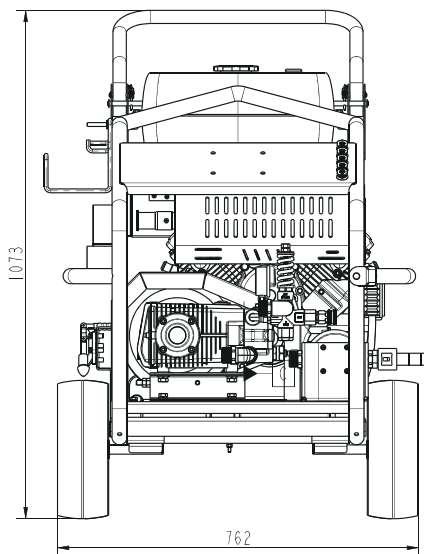
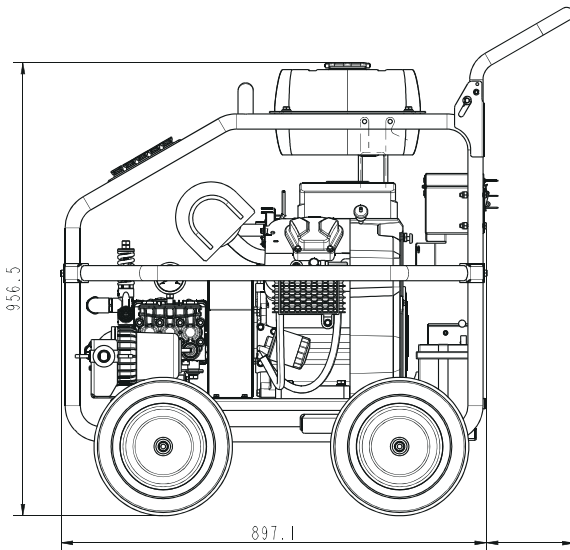
Parts Identification and Features



Parts Identification and Features (continued)



Machine Overall Size



Setting Up Before Use

1. Preparing Pressure Pump and Gearbox



WARNING

Operating the pump with no or low oil will cause permanent damage, check oil level before first start, and every time before use.

- 1.1 Check the oil glass on the end of pressure pump and gearbox to ensure oil is at 1/2 of the sight glass level
- 1.2 Add oil if level is below indicator on oil gauge. Use 30-weight non-detergent oil both for the pump and gearbox..
- 1.3 Outdoor temperatures determine the proper oil viscosity.
 - **Below 40 F (4 C) the use of SAE 30 will result in hard starting.
 - **Above 80 F (27 C) the use of 10W30 may cause increased oil consumption. Check oil level more frequently.

2. Connect the Water Supply to Unit

- 2.1 Push the water inlet hose (ID25mm) onto the hose barb and lock the hose with the hose hoop.
- 2.2 The water inlet feature a quick connect hook construct for easy installation.

3. Connect the High Pressure Hose to the Outlet

Push back the collar on the outlet quick connector, insert the plug of the high pressure hose into the socket, release the collar and pull back the hose to make sure it is firmly locked.

4. Connect Battery Cable

Connect the Positive (+) Cable onto the Start Solenoid Terminal as shown, and connect the Negative (-) Cable to an engine mounting bolt like frame bolt, or other good engine ground connection.



WARNING

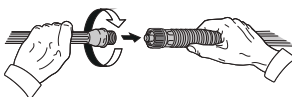
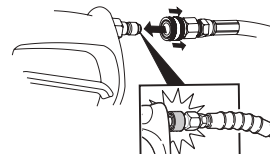
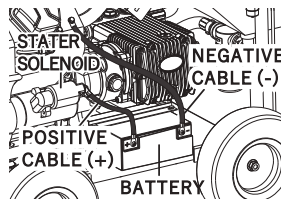
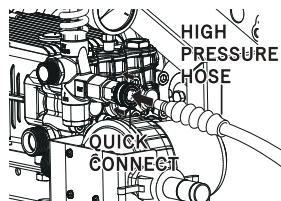
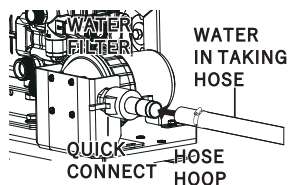
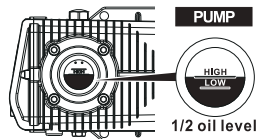
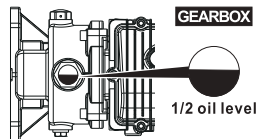
- A battery can explode if you do not follow the correct procedure,
- seriously injuring anyone nearby. Keep all sparks, open flames, and smoking materials away from the battery.

5. Attaching High Pressure Hose to Spray Gun

Push back the collar on the high pressure hose, insert the plug of the high pressure gun into the socket, release the collar and pull back the hose to make sure it is firmly locked.

6. Connecting Spray Wand to Spray Gun

Thread spray wand onto spray gun.



Setting Up Before Use (Continued)

7. Add Oil To The Engine

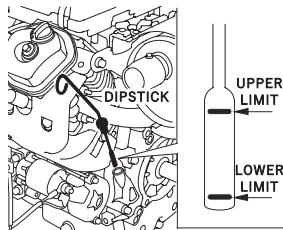
1. Place pressure washer on a flat, level surface.
2. Clean area around oil fill and remove yellow oil fill cap.
3. Using oil funnel (optional), slowly pour contents of provided oil bottle into oil fill opening.
4. Replace oil fill cap and fully tighten.



NOTICE

Improper treatment of pressure washer can damage it and shorten its life.

DO NOT attempt to crank or start the engine before it has been properly serviced with the recommended oil. This may result in an engine failure.



8. Add Fuel To The Engine



WARNING

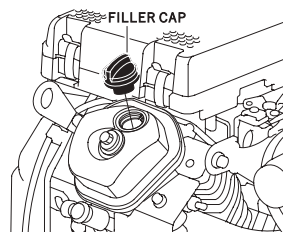
Failure to use fuel as recommended in this manual will void the warranty.

DO NOT use unapproved gasoline such as E85 (85% ethanol/15% gasoline).

DO NOT mix oil with gasoline.

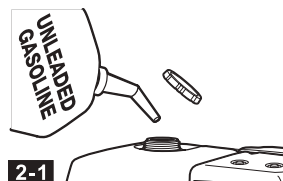
DO NOT modify engine to run on alternate fuels.

Mix in a fuel stabilizer when adding fuel to pressure washer to protect fuel system from forming gum deposits. If engine doesn't run properly after fueling, switch fuel brands. The engine is certified to run on gasoline. The emission control system for this engine is EM (Engine Modifications).



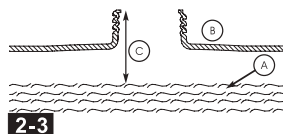
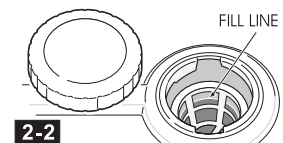
WARNING

Fuel and fuel vapor are extremely flammable and explosive. Fire or explosion from misuse of fuel can cause severe burns and even death.



WHEN ADDING FUEL TO PRESSURE WASHER, OBSERVE THE FOLLOWING STEPS:

1. Turn pressure washer **OFF** and let it cool for at least two minutes before removing fuel cap. Loosen fuel cap slowly to release pressure.
2. Fill fuel tank outdoors.
3. **DO NOT** overfill fuel tank. Leave room for fuel to expand.
4. Wait for spilled fuel to evaporate before cranking engine.
5. Keep fuel away from sparks, open flames, pilot lights, heat and other ignition sources.
6. **DO NOT** light a cigarette or smoke near open fuel tank or container.
7. Clean area around fuel fill cap and slowly remove cap to allow any pressure to escape.
8. Slowly add unleaded gasoline (A) to fuel tank (B). Use extreme caution not to fill fuel above baffle (C). This allows appropriate space for fuel expansion.
9. Install fuel cap and allow any spilled fuel to evaporate before starting engine.



Safe Working Environment

Pressure Washer Location

Clearances and Air Movement



WARNING

- **Exhaust heat/gases can ignite combustibles, structures or damage fuel tank causing a fire.**

Keep at least 5 ft. (1.5 m) clearance on all sides of pressure washer including overhead.



Place pressure washer in a well ventilated area, which will allow for removal of deadly exhaust gas. Do not place pressure washer where exhaust gas could accumulate and enter inside or be drawn into a potentially occupied building. Ensure exhaust gas (A) is kept away from any windows, doors, ventilation intakes, or other openings that can allow exhaust gas to collect in a confined area. Prevailing winds and air currents should be taken in



WARNING

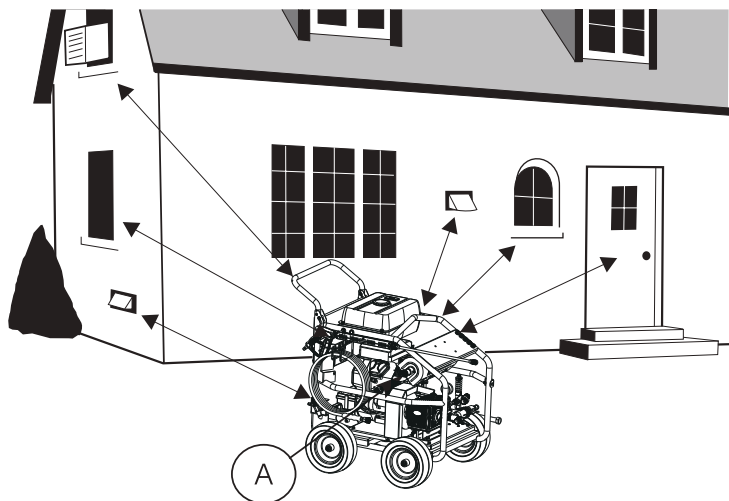


- **Running engine gives off carbon monoxide, an odorless, colorless, poison gas.**
- **Breathing carbon monoxide can cause headache, fatigue, dizziness, vomiting, confusion, seizures, nausea, fainting or death.**

Operate pressure washer **ONLY** outdoors.

Keep exhaust gas from entering a confined area through windows, doors, ventilation intakes, or other openings.

DO NOT start or run engine indoors or in an enclosed area, even if windows and doors are open.



Start Up and Stop Procedure

1. How to Start Your Pressure Washer

To start your pressure washer for the first time, follow these instructions step-by-step. This starting information also applies if you have let the pressure washer sit idle for at least a day.

- 1.1 Place pressure washer near an outside water source capable of supplying water at a flow rate at least 5 gallons per minute and no less than 20 PSI at pressure washer end of garden hose.
- 1.2 Check that high pressure hose is tightly connected to spray gun and pump.
- 1.3 Make sure unit is in a level position.
- 1.4 Uncoil high pressure hose completely before using pressure washer.
- 1.5 Connect garden hose to water inlet on pressure washer pump.
- 1.6 Turn ON water, point gun in a safe direction and squeeze trigger to purge pump system of air and impurities.

NOTICE

- **DO NOT run the pump without the water supply connected and turned on.**
- **Damage to equipment resulting from failure to follow this instruction will void warranty.**

- 1.7 Attach wand to spray gun. Tighten by hand.
- 1.8 Choose the nozzle you want to use, pull back on collar of quick connector, insert nozzle and release collar. Tug on nozzle to make sure it is securely in place.
- 1.9 Rotate fuel shut-off valve to "On" position.
- 1.10 To start a **cold engine**, pull the "Choke Knob" out to the **CLOSED** position.

NOTE: For a **warm engine**, be sure the choke lever is in the "OPEN" position.

- 1.11 Move the throttle lever away from the "MIN" position about 1/3 of the way toward the "MAX" position.

IMPORTANT: Before starting the pressure washer, be sure you are wearing adequate safety goggles.

- 1.12 Turn the engine switch to the "ON" position, and turn the key to "START" position and hold it there until the engine starts. If the engine fail to start within 5 seconds, release the key and wait at least 10 seconds before operating the starter again.

NOTE: Using the electric starter for more than 5 seconds at a time will overheat the starter motor and can damage it.

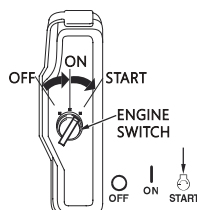
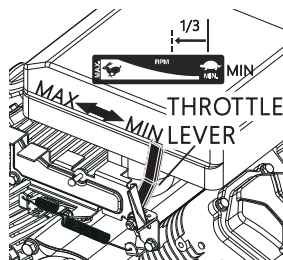
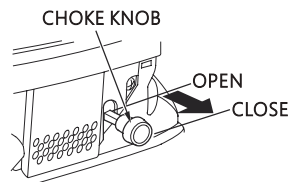
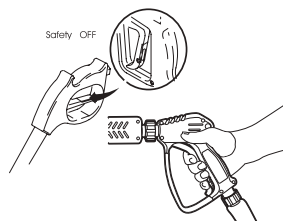
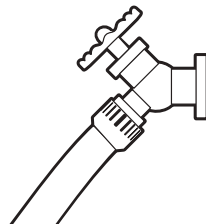
- 1.13 When engine starts, if the **Choke Knob** has been pulled to the "CLOSED" position, gradually push it to the "OPEN" position as the engine warms.
- 1.14 Position the **Throttle Lever** for the desired engine speed.

IMPORTANT: Allow the Engine to run at no load, low pressure for five minutes after each start-up so Engine can stabilize.

2. How to Stop Your Pressure Washer

- 2.1 Release spray gun trigger and let engine idle for two minutes.
- 2.2 Move throttle control lever on engine to "MIN" position.
- 2.3. **ALWAYS** point spray gun in a safe direction, turn the Engine Switch to and "OFF" position, and squeeze spray gun trigger to release retained high water pressure.

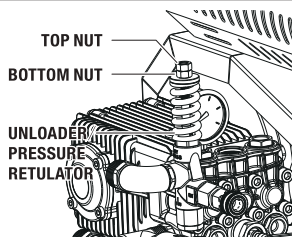
IMPORTANT: Spray gun traps high water pressure, even when engine is stopped and water is disconnected. Pull the trigger to release the pressure.



Adjusting Pump Pressure

1. Pressure Rinsing

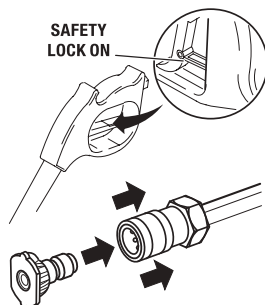
1. Use a 16mm open end spanner to turn the top nut "**Anticlockwise**" to loose the nut.
2. Use the same spanner to tun the bottom nut "**Clockwise**" to push the unloader spring down and to rinsing the pump pressure.
3. Hold the bottom nut with one spanner and tighten the top nut to fix the two nut in place to hold the pressure rate.



Using Nozzles

1. Attaching Pressure Nozzles to Spray Wand

1. Engage trigger lock on spray gun.
2. Pull slip ring on female quick-disconnect fitting of spray wand back.
3. Insert nozzle into female quick-disconnect socket on spray wand.
4. Release slip ring on female quick-disconnect and twist. Listen for "lick" to ensure both quick-disconnects are coupled.
5. Pull high pressure nozzle and spray wand in opposite direction to ensure they do not separate.



2. Nozzle Size Guide

The pressure washer comes with five spray nozzles. Each nozzle is color coded and delivers a specific spray pattern and pressure for a particular cleaning job. The size of the nozzle determines the size of the fan spray and the pressure out of the nozzle.

The are stored in receptacles on a panel mounted to the handle of the washer. Colors on the panel identify nozzle location and spray panel.



- Pressure washer produces fluid pressures and velocities high enough to penetrate human and animal flesh which could result in serious injury or amputation.
- Do not point pressure washer in direction of people or animals.
- High velocity fluid spray can cause objects to break, propelling particles at high speeds.

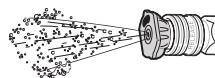
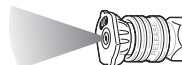
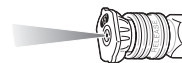
0° Nozzle - Red: This nozzle delivers a pinpoint stream of pressurized water and is extremely powerful. It covers only a small area of cleaning. This nozzle should only be directed at surfaces that can withstand high pressure such as metal or concrete. Do not use this nozzle to clean wood.

15° Nozzle - Yellow: This nozzle delivers a powerful 15 degree spray pattern for intense cleaning of small areas. This nozzle should only be used on areas and materials that can withstand high pressure.

25° Nozzle - Green: This nozzle delivers a 25 degree spray pattern for intense cleaning of larger areas. This nozzle should only be used on areas that can withstand pressure from this nozzle.

40° Nozzle - White: This nozzle delivers a 40 degree spray pattern and a less powerful stream of water. This nozzle can cover a wide area and should be used for most general cleaning jobs.

Chemical Nozzle - Black: This nozzle is used to apply special chemicals and cleaning solutions. This nozzle produces the weakest pressure stream of the five nozzles.



Maintenance

To ensure efficient operation and longer life of your pressure washer a routine maintenance schedule should be prepared and followed. If the equipment is used in unusual conditions such as high-temperature or dusty conditions more frequent maintenance checks will be required.

WARNING

Before performing any maintenance be aware that the equipment should be completely shutdown, depressurized and allowed to cool down. This will ensure that no injuries can be sustained by moving parts, water pressure or hot surfaces.

Engine contains flammable fuel do not smoke near or work near naked flames while maintaining this equipment. Please note: All repairs should be carried out by Dealer approved engineers. All replacement parts should be supplied or recommended by the Dealer. Any unapproved repairs or modifications will invalidate the warranty.

1. Engine:

Check the engine regularly, replace oil, clean spark plugs and maintain parts as required.

2. Pump Oil:

Change the pump oil regularly. Change the pump oil after the first 50 hours of work and successively every 200 hours. In either case ensure that the oil is changed at least once a year. Check with your nearest Dealer for advice on the best Pump Oil to use with this equipment if you are unsure.

NOTICE

Avoid prolonged or repeated skin contact with used motor oil.

Used motor oil has been shown to cause skin cancer in certain laboratory animals. Thoroughly wash exposed areas with soap and water.



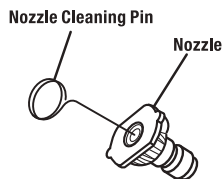
KEEP OUT OF REACH OF CHILDREN. DON'T POLLUTE. CONSERVE RESOURCES. RETURN USED OIL TO COLLECTION CENTERS.

3. Nozzle Tips:

If the nozzle becomes clogged with dirt and debris excessive pressure can build up. If the nozzle becomes partially clogged or restricted the pump pressure will fluctuate and can become harmful and dangerous.

Clean the nozzle immediately and follow these instructions:

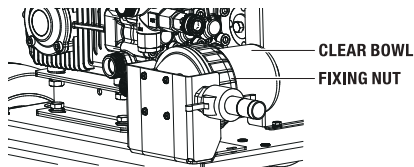
1. Shut-off the engine and turn off / disconnect the water supply.
2. Pull the trigger on the gun to relieve any water pressure.
3. Disconnect the lance from the gun.
4. Remove the nozzle from the lance - remove any obstructions with the nozzle cleaning tool and back flush with clean water.
5. Direct the water supply into the spray wand end to back flush loosened particles for 30 seconds.
6. Reassemble the nozzle onto the lance.
7. Reconnect the lance to the gun and turn on the water supply.
8. Start the washer pump and place the lance into the high pressure setting to test.



Maintenance (Continued)
4. Cleaning The Water Filter:

The water filter should be checked regularly and cleaned if necessary:

1. Turn the Fixing Nut of the water filter "Anticlockwise" and take out the strainer inside the clear bowl.
2. Clean the strainer and put back into the clear bowl, Re-install the filter and tighten the fixing nut.


5. High Pressure Hose:

Replace the high pressure hose when the hose have any of the below circumstance:

1. Cover damaged.
2. Burst.
3. Bubbles/blisters.
4. Kinked/collapsed.



The high pressure stream of water can cut through skin and its underlying tissues, leading to serious injury and possible amputation.



- Never repair high pressure hose. Replace it.
- Replacement hose rating **MUST** exceed maximum pressure rating of the unit.

6. Cleaning the Fuel Tank Filter:

The fuel tank filter should be removed and cleaned after every 150 hours of running or every 3 months using an environmentally friendly water-based de-greasing agent. Refit when clean.

7. Maintenance Schedule

Item	Task Description	Each Use	1st Month (20Hrs)	Frequency Each Season (50Hrs)	Every 6 Months (100Hrs)	Every YEAY (300Hrs)
Engine Oil	Oil Level Check	•				
	Replace		•		•	
Reduction Gear Oil (If applicable)	Oil Level Check	•				
	Replace		•		•	
Air Cleaner/filter	Check	•				
	Clean			*x	*x	
	Replace					•
Deposit Cup	Clean				•	
Spark Plug	Clean, Adjust				•	
	Replace					•
Spark Eliminator	Clean				•	
Idling	Check, Adjust					•
Valve Clearance	Check, Adjust					•
Fuel Tank & Filter	Clean					•
Fuel Supply Line	Check	Check with your Dealer for advice if any problem are detected				

Key:

* = Only for inside ventilating double core carburetors

** = Only for paper core cleaners

x = Repeat task more often than scheduled if equipment is used in dusty working environments

Δ = Maintenance to be carried out by Dealer approved technician

Storage

1. After General / Regular Use

1. Drain all water from the high pressure hose, coil it and hang on the cradle on the petrol washer frame. If chemicals where used ensure the pump and chemical hose are thoroughly cleaned out.
2. Drain all the water from the gun and lance by holding the gun in a vertical position with the nozzle end pointing down and squeeze the trigger. Store in the gun/hose holder.

2. Preparation for Winter and Long-term Storage

Note: It is recommended that you follow these steps to protect the internal seals of the pump when storing the equipment for more than 30 days and or when, freezing temperatures are expected.

1. Obtain a funnel, 200ml of antifreeze and approximately 1M of garden hose with a male hose connector attached to one end.
2. Disconnect the spark plug wire.
3. Connect the hose to water inlet on the pump.
4. Pour the antifreeze into the hose via the funnel.
5. Pull the engine starter cord slowly several times until antifreeze comes out of the high pressure water hose connection on the pump.
6. Remove the short hose from the water inlet on the pump.
7. Reconnect the spark plug wire.

3. Service After Storage

Before reusing the equipment after storage, you should carry out the following to keep the equipment in good condition.

Storage Time	Service Tank
Within one month	No service required
One - two months	Drain out the existing fuel out of the fuel tank and fresh fuel
Two months - one year	Drain out the existing fuel out of the fuel tank and fresh fuel Drain the fuel out of carburetor Empty the deposit cup
Over a year	Drain out the existing fuel out of the fuel tank and fresh fuel Drain the fuel out of carburetor Empty the deposit cup Close the FUEL VALVE and wait engine to stop

Key:

* = Unscrew the drain plug and drain out the fuel in the carburetor

** = Turn engine switch to the off position, disconnect the deposit cup and empty contents safely

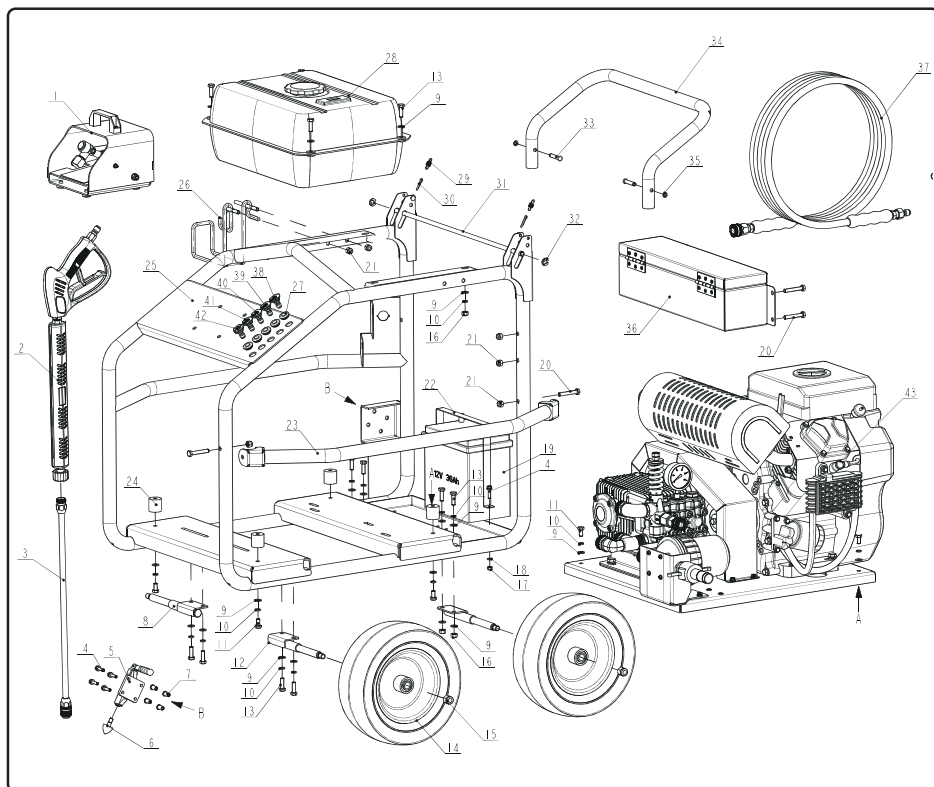
Note: Do not dump oil vessels or discarded engine oil onto the ground. Take all discarded engine oil in a closed container to your nearest recycling station.

Troubleshooting

PROBLEM	PROBABLE CAUSE	SOLUTION
Engine shuts down when running.	<ol style="list-style-type: none"> 1.Out of fuel. 2.Low Engine Oil 	<ol style="list-style-type: none"> 1.Fill fuel tank. 2. Add oil.
Engine will not start; or starts and runs rough.	<ol style="list-style-type: none"> 1.Rocker switch set to "OFF" position. 2.Fuel valve is in "OFF" position. 3.Dirty air cleaner 4.Out of fuel. 5.Stale fuel. 6.Spark plug wire not connected to spark plug. 7.Bad spark plug. 8.Water in fuel. 9.Flooded. 10.Excessively rich fuel/air mixture. 11.Intake valve stuck open or closed. 12.Engine has lost compression. 13.Low engine oil. 14.Wrong Fuel. 15.Engine is too hot 16.Chock is in wrong position 17.Pressure Builds up after 2 pulls on recoil starter or after initial use. 	<ol style="list-style-type: none"> 1.Set switch to "ON" position. 2.Turn fuel valve to "ON" position. 3.Clean or replace air cleaner 4.Fill fuel tank. 5.Drain fuel tank and carburetor; fill with fresh fuel. 6.Connect wire to spark plug. 7.Replace spark plug. 8.Drain fuel tank and carburetor; fill with fresh fuel. 9.Wait 5 minutes and re-crank engine. 10.Contact authorized service facility. 11.Contact authorized service facility. 12.Contact authorized service facility. 13.Add oil. 14.Use recommended fuel. 15.Allow engine to cool 16.Change choke position 17.Squeeze gun trigger to relieve pressure.
Engine "Hunts" or falters.	<ol style="list-style-type: none"> 1.Carburetor Is running too rich or too lean. 	<ol style="list-style-type: none"> 1.Contact authorized service facility.
Engine lacks power.	<ol style="list-style-type: none"> 1.Cylinder pressure is low. 2.Dirty air cleaner 	<ol style="list-style-type: none"> 1.Contact authorized service facility. 2.Replace air filter.
No pressure or Low pressure.	<ol style="list-style-type: none"> 1.Spray wand not set to high pressure. 2.Lower water supply. 3.Hose fitting leaks during high pressure. 4.Nozzle obstructed. 5.Water filter screen obstructed. 6.Defective thermal relief valve. 7.Air in hose. 8.Choke lever in choke position. 9.Throttle control lever is hot in fast position. 10.High pressure too long. 	<ol style="list-style-type: none"> 1.See "Using Spray Wand" section. 2.Water supply must be 5 GPM @ 20 psi. 3.Tighten hose fitting. Use thread sealant tape if necessary. 5.Remove and clean filter. 6.Call Customer Service: 7.Stop engine and water source. Disconnect water source from pump inlet and turn water source to ON to remove all air from hose. When steady stream of water is present, turn water source to OFF. Re-connect water source to pump inlet and turn on water source. Squeeze trigger to remove remaining air. 8.Move choke to NO CHOKE position. 9.Move throttle control lever from fast position. 10.Use High pressure hose under 100 ft (30M).

Troubleshooting (Continued)

PROBLEM	PROBABLE CAUSE	SOLUTION
Pump will not draw Chemicals	1.Spray wand not set to low pressure.. 2.Chemical filter clogged. 3.Chemical screen not in chemical. 4.Chemical solution too thick. 5.Pressure hose too long 6.Chemical build-up in chemical injector.	1. See "Using Spray Wand" section. 2. Clean Filter. 3. Ensure end of chemical hose is fully submerged into chemicals. 4. Dilute chemical. Chemical solutions should have same consistency as water. 5. Lengthen water supply hose instead of pressure hose. 6. Have parts cleaned or replaced by authorized dealer.
No or low pressure (after period of normal use).	1. Worn seal or packing. 2. Worn or obstructed valves. 3. Worn unloader piston. 4. Worn E-Z start valve.	Have parts cleaned or replaced by authorized dealer.
Water leaking at spray gun/spray wand connection.	1. Worn or broken O-ring. 2. Loose hose connection.	1. Check and replace O-ring. 2. Tighten hose connection.
Water leaking at pump.	1. Loose connections. 2. Piston packings worn. 3. Worn or broken O-rings. 4. Pump head or tubes damaged from freezing.	1. Check and replace O-ring 2. Tighten hose connection. 1. Tighten connections. 2. Have parts cleaned or replaced by authorized dealer. 3. Have parts cleaned or replaced by authorized dealer. 4. Have parts cleaned or replaced by authorized dealer.
Oil leaking at pump	1. Oil seals worn. 2. Loose drain plug. 3. Worn drain plug O-ring. 4. Worn fill plug O-ring. 5. Pump overfilled. 6. Incorrect oil used. 7. Vent plug clogged.	1. Have parts cleaned or replaced by authorized dealer. 2. Tighten drain plug. 3. Inspect and replace O-ring. 4. Inspect and replace O-ring. 5. Check for correct amount. 6. Drain and refill with correct type and amount of oil. 7. Clean vent plug. Use air hose to free it of blockage. If problem persists, replace vent plug.
Pump pulsates	Nozzle obstructed.	See "Using Spray Wand" section.

Pressure Washer Exploded View & Parts List

NO. DESCRIPTION

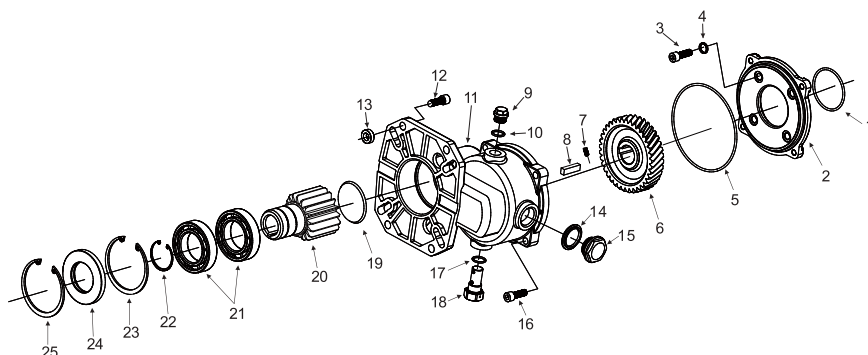
- 1 Foot Actuated Penal (Drain Jetting Only)
- 2 High Pressure Gun
- 3 High Pressure Wand
- 4 Bolt M6x25
- 5 Brake Body
- 6 Brake Head
- 7 Nut
- 8 Wheel Axle (Right Side)
- 9 Plain Washer
- 10 Spring Washer
- 11 Bolt M8x16
- 12 Wheel Axle (Left Side)
- 13 Bolt M8x25
- 14 13" Pneumatic Wheel

NO. DESCRIPTION

- 15 Nut M12
- 16 Nut M8
- 17 Nut M6
- 18 Plain Washer
- 19 Battery
- 20 Bolt M8x50
- 21 Nut M8
- 22 Battery Fixing Bar
- 23 Side Handle
- 24 Anti-vebration Feet M8x30
- 25 Frame
- 26 Hook (Right)
- 27 Nozzle Grommet
- 28 Fuel Tank

NO. DESCRIPTION

- 29 Spring
- 30 Open End Pin
- 31 Push Barb
- 32 Open Washer
- 33 Axle
- 34 Handle
- 35 Open Washer
- 36 Tool Box
- 37 High Pressure Hose
- 38 0 Degree Nozzle
- 39 15 Degree Nozzle
- 40 25 Degree Nozzle
- 41 40 Degree Nozzle
- 42 Black Soap Nozzle
- 43 Pump, Engine and Base Plate Assy

Gearbox Exploded View & Parts List

NO. DESCRIPTION

- 1 O-Ring
- 2 Mounting cover
- 3 Blot
- 4 Washer
- 5 O-Ring
- 6 Pump gear
- 7 Set screw
- 8 Key

NO. DESCRIPTION

- 9 Oil drain plug
- 10 O-Ring
- 11 Case
- 12 Blot
- 13 Washer
- 14 Gasket
- 15 Sight gauge
- 16 Blot

NO. DESCRIPTION

- 17 O-Ring
- 18 Venting plug
- 19 Blocking flake
- 20 Engine gear
- 21 Bearing
- 22 Snap ring
- 23 Snap ring
- 24 Oil seal
- 25 Snap ring