

POWER EQUIPMENT

HOT WATER PRESSURE WASHER



OPERATOR'S MANUAL



INDUSTRIAL RESERVED



TABLE OF CONTENTS

INTRODUCTION	
Introduction & Identification Numbers	3
IMPORTANT SAFETY WARNINGS	
Safety Overview	4
Pressure Washer Cooling System	
SET-UP	
Fuel and Oil Types	9
Unit Overview	
Assembly	11
OPERATION	
Pre-Operation	
Motor Start/Stop Procedure	
Hot Water Start/Stop Procedure	
Operation	
MAINTENANCE	
Pump Maintenance	17
Maintenance Schedule	
Pump & Coil Saver Tool	
Storage	19
UNIT BREAKDOWNS	
Components Diagram HW152EA	20
Parts Reference List HW152EA	
Components Diagram HW205EBA	
Parts Reference List HW205EBA	23
TROUBLESHOOTING	
Troubleshooting Table	24
WARRANTY	
Warranty Statement	26



ATTENTION: Read through the complete manual prior to the initial use of your pressure washer.

INTRODUCTION & IDENTIFICATION NUMBERS



Congratulations on your purchase of a BE Power Equipment pressure washer. You can be confident that this pressure washer is constructed and tested with optimum performance and quality in mind.

Reading this manual will help get you the best results for set-up, operation, maintenance and avoid personal injury or damage to your machine. By knowing how best to operate this machine, you will be better positioned to show others who may also operate the unit.

All the information in this manual is based on the latest product information available at the time of printing. BE Power Equipment reserves the right to make changes at any time without notice or incurring any obligation.

Owner/Operator Responsibility

The owner/operator must have a thorough understanding of the operation, maintenance and dangers associated with using this machine. It must be understood that it is ultimately up to the owner/operator to safely use this machine as outlined in this manual.

This manual is considered a part of the machine and needs to be kept in a safe location. If the machine is resold or given to someone else, this manual needs to be included.

Product Registration

Please register your product online to get the maximum benefit from your warranty. Use the QR code below or register online at: bepowerequipment.com/product-registration



It is recommended that you record the product identification numbers in this manual. These numbers are important to have on hand if you need to contact technical support (1-866-850-6662). The model and serial number can be found on the box and on decal on the machine.

PRODUCT IDENTIFICATION

Model Number:		
Serial Number:		
Seriai Number.		
Date of Purchase:		
Dealer Name:		





SAVE THESE INSTRUCTIONS - SAFETY RULES



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

The safety alert symbol () is used with a signal word (DANGER, CAUTION, WARNING), a pictorial and a safety message to alert you to hazards.

DANGER indicates a hazard that, if not avoided, will result in death or serious injury. **WARNING** indicates a hazard that, if not avoided, could result in death or serious injury. **CAUTION** indicates a hazard that, if not avoided, might result in minor or moderate injury. **NOTICE** indicates a situation that could result in equipment or property damage.

IMPORTANT SAFETY INSTRUCTIONS

WARNING – When using this product, the following precautions should always be observed and adhered to.

- 1. Read all instructions before using the product.
- 2. Know how to stop the product and release pressures quickly. Be thoroughly familiar with the controls.
- Stay alert. Watch what you are doing.
- 4. Do not operate the product when fatigued or under the influence of alcohol or drugs.
- 5. Keep operating area clear of other people, especially children and animals.
- 6. Do not overreach or stand on unstable support. Instead, keep solid footing and balance at all times.
- 7. Follow the maintenance instructions specified in the manual.

IMPORTANT WARNINGS

Failure to observe warnings will void the warranty or cause injury.

- Do not let the pressure washer overheat. Excess heat will cause serious damage (see page 8 for details).
- 2. Never run the unit without water. Running the pump dry will cause it to fail quickly.
- 3. Do not let the unit freeze. Frozen water in the pump can cause severe damage.
- 4. Always wear eye protection when operating the unit.
- 5. High-pressure spray can cause serious bodily injury or damage to soft material. Use with caution.
- 6. Never adjust the unloader to exceed the preset pressure. Premature wear, equipment failure, or injury may occur.

PERSONAL SAFETY

WARNING - Always wear correct personal protection equipment because the high-pressure spray can launch debris at high velocity creating a risk of injury or damage.

- **ALWAYS** wear safety goggles for eye protection. Other protective equipment such as hearing protection, steel toe boots, safety apparel, work gloves and face shield are all recommended.
- NEVER pressure wash without closed-toe foot protection in case of accidental spray.
- ALWAYS be aware of where the spray gun is pointing and your environment
- NEVER point it at people or animals.
- **DO NOT** let children or unqualified people operate this machine.
- **DO NOT** use the machine when fatigued or under the influence of alcohol or drugs.

SAFETY OVERVIEW



GENERAL PRESSURE WASHER SAFETY

A DANGER – High-Pressure Spray

- NEVER point the gun at yourself, anyone else, or animals.
- The high-pressure water stream can cut through clothing, skin and underlying tissues leading to serious injury.
- If this type of injury occurs, DO NOT TREAT AS A SIMPLE CUT. SEEK EMERGENCY MEDICAL ATTENTION IMMEDIATELY. If you are using cleaning detergents, be prepared to tell the physician exactly what kind.
- Spray guns can have significant kickback. **ALWAYS** brace yourself and have firm footing when
- NEVER attempt to repair high-pressure hose, fittings or gun. Always replace parts if they are
- **NEVER** bypass the trigger assembly. This is an important safety feature of the system.
- NEVER leave a running machine unattended.
- Use **CAUTION** even when the machine has been turned off. Pressure can be trapped in the pump and hose assembly and still inflict injury or damage. After turning the machine off, always squeeze the trigger to release any trapped pressure.
- ALWAYS ensure all component connections and fittings are securely fastened. High-pressure water can turn loose fittings or spray nozzles into projectiles causing injury or damage.
- **NEVER** look directly into the gun or high-pressure hose.
- **NEVER** place your hand in front of the spray nozzle to test pressure.

A DANGER - ELECTROCUTION

- **NEVER** spray near electric power source or cords.
- **NEVER** let run-off water pool and flow into power sources or cords.
- **NEVER** replace the GFCI plug with a standard plug. The GFCI is an important safety feature.

WARNING – GENERAL SAFETY

- **ONLY** use cold water to feed into the machine. Unless specifically instructed that the machine can use hot water.
- Check the work area to make sure it is clear of hazards and debris which can be thrown by pressure spray causing injuries or damage.
- **ALWAYS** be aware of surfaces that will become wet and may become slippery.
- ALWAYS have a secure grip of the gun and stable footing.
- ALWAYS ensure proper drainage to avoid water flooding into unwanted areas.
- **NEVER** operate machinery that is damaged or missing components.
- NEVER modify the machine in any way.
- DO NOT move the machine by pulling on the hoses or cords. Instead, use the handle on the frame to move the machine when needed.
- Use CAUTION when spraying soft materials such as plants or wood because the high-pressure spray can damage them quickly.
- Use **CAUTION** when spraying brittle materials such as glass, that may break apart, creating dangerous projectiles.
- ALWAYS unplug the machine before engaging in any maintenance.
- Use only recommended accessories. DO NOT force or modify parts to fit.
- NEVER attempt to maintain the machine while it is operating. Moving parts and pressure can cause serious injuries.
- Keep machine out of the rain and elements.
- **ALWAYS** operate the machine on a level surface. It may seize if operated at an angle.



WARNING – CHEMICAL DETERGENTS/SOAPS

- **ALWAYS** use detergents explicity designed for a pressure washer.
- **NEVER** use any flammable, corrosive or acidic solutions.
- **NEVER** modify the chemical injector system.
- ALWAYS flush the system after using a detergent. Run the machine for at least two minutes with clean water to prevent detergent from drying and building up residue. If residue builds up, it may cause the chemical injector system to fail.
- ALWAYS BE PREPARED for an emergency involving detergents. Know exactly what the detergent contains. If an emergency occurs and a physician needs this information, Safety Data Sheets (SDS) are available and should be easily accessible.
- ALWAYS keep detergents away from children and animals.
- Keep an eyewash kit available in case of emergency.

DANGER – TOXIC FUMES

- **ALWAYS** operate the machine outdoors in well-ventilated spaces.
- The emissions from the diesel burner includes poisonous particulates that are known to irrate eyes and lungs and can cause wheezing, difficulty to breath, dizziness, headaches and nausea.
- Exposure can lead to increase risk of cancer.
- · At the first sign of any symptoms, IMMEDIATELY shut off the machine and move into a wellventilated area and seek medical attention.
- · NEVER position the machine where the exhaust can go through windows, doors, ventilation or other access points that lead indoors or to confined areas.
- The use of proper personal proctective will reduce of injury. Use the proper respirators and wear clothes that cover your skin from exposure from fumes and soot.

DANGER – FUEL RELATED FIRE AND EXPLOSIONS

- Fuel and its vapors are highly flammable and explosive.
- Fire and explosion can cause severe burns and death.
- **NEVER** fill the fuel tank while the unit is running.
- **ALWAYS** fill or drain the fuel tank outdoors.
- **DO NOT** overfill the tank. Leave an airspace in the neck of the fuel tank to allow it to breathe and for fuel expansion.
- **ALWAYS** drain the fuel tank when transporting or putting the unit into storage.
- Never store fuel near any ignition source or hot surface.

A CAUTION – HOT SURFACES

- The motor will heat up rapidly and can cause severe burns if touched.
- The heater coil exhaust will be hot and can cause burns to people and objects.
- Keep flammables away from the muffler.
- Keep at least a five-foot clearance from the exhaust to prevent damaging other surfaces such as house siding and vehicles.
- The pump will also become hot during operation and should be avoided.
- After the pressure washer has been started, DO NOT touch any part of the pressure washer other than the on/off switch, handle, hose and gun.

SAFETY OVERVIEW



ELECTRIC PRESSURE WASHER SAFETY

A DANGER - RISK OF ELECTROCUTION

- **NEVER** spray an electric pressure washer, its cord, or power source.
- NEVER leave the machine exposed to rain or the elements.
- NEVER modify the plug or cord.
- **NEVER** use an adapter so the plug will fit into a different outlet.
- NEVER touch the cord or plug with wet hands or when standing in water.
- ALWAYS replace damaged components, including plug and cord. DO NOT attempt to repair.
- ALWAYS ensure power source matches the pressure washers' requirements.
- ALWAYS use a licensed electrician if any electrical work needs to be done.
- ALWAYS unplug the motor from the power source before attempting repairs or maintenance.

A DANGER - GROUNDING

- This product must be grounded. If this machine malfunctions, grounding provides a path of least resistance for electric current, reducing the risk of electrocution.
- Ensure the plug has all three prongs it came with and is plugged into an appropriate outlet that is grounded in accordance with local regulations.



- If your machine is equipped with a Ground Fault Circuit Interrupter (GFCI), DO NOT remove or alter it. Replace if damaged.
- If the GFCI is dropped or damaged, be certain to test it to make sure it is still working correctly.

A WARNING – EXTENSION CORDS

- The use of extension cords is not recommended.
- If the use of an extension cord is unavoidable, then it must be plugged into a GFCI found in circuit boxes or protected receptacles
- **ALWAYS** use a 3-wire extension cord that has three prongs for proper grounding.
- DO NOT yank or pull on extension cords.
- ALWAYS replace if damaged.
- The extension cord gauge **MUST** be adequate for the power demands of the pressure washer to prevent stalling, overheating or short-circuiting.

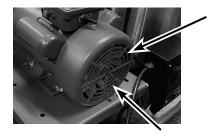


PRESSURE WASHER COOLING SYSTEM

DO NOT OVERHEAT YOUR MACHINE

Do not let your machine overheat. Failure to do so will result in damage, void warranty, or cause injury.

Electric motors are air-cooled. Always ensure that the machine is operated in a well-ventilated area where it can draw a steady supply of fresh air. If the motor overheats, it may shut down, and result in component failure. The arrows below show an example of locations for air intake on a motor.



Pumps are cooled on the front end by having fresh water run into the pump, then spray out of the gun wand. To maintain the water flow, keep the trigger of the gun squeezed to keep spraying out water. Do not let the machine run for more than 30 seconds without pressing down on the trigger. If the pump is left to overheat (not spraying water), it may experience thermal shock when cold water is introduced to the system once water is sprayed out again. This thermal shock can result in multiple component failures.



Triplex Pump

Most pumps are protected by a thermal valve. The thermal valve releases water if a pump starts to run too hot. It will prevent catastrophic heat failure. However, the pump may have suffered damage and need maintenance, repair, or replacement. The thermal valve may need to be replaced once it is triggered.



Threaded into the pump or unloader

Leaks water to prevent overheating

The back end of the pump is cooled by maintaining the proper level and quality of pump oil. Always check the oil level on the back of the pump by using the dipstick or sight gauge. Use 30w non-detergent oil if it needs to be added or replaced.

FUEL AND OIL TYPES



PUMP OIL TYPE

For pressure washer pumps, use only SAE 30W non-detergent oil. Never use motor oil in your pressure washer pump because it will damage the seals.

Never overfill the pump.

- If your pump has a sight glass, then fill halfway up to the middle of the red dot.
- If your pump has a dipstick, then fill to the mark on the dipstick.

BURNER FUEL TYPE

- The fuel tank for the burner is the black plastic container located under the motor.
- **ONLY** use No.1 or No.2 diesel or kerosene in the black plastic fuel tank.
- NEVER put gasoline in the burner fuel tank. Using gasoline is extremely dangerous and will lead
 to component failures.
- **DO NOT** let the fuel get completely used up before refilling. Running the fuel dry is hard on all the components and may lead to more difficult startups.

MODEL	BURNER FUEL TANK CAPACITY	FUEL TYPE
HW152EA	22.7 L / 6 US GAL	No.1 or No.2 Diesel or Kerosene
HW205EBA	22.7 L / 6 US GAL	No.1 or No.2 Diesel or Kerosene

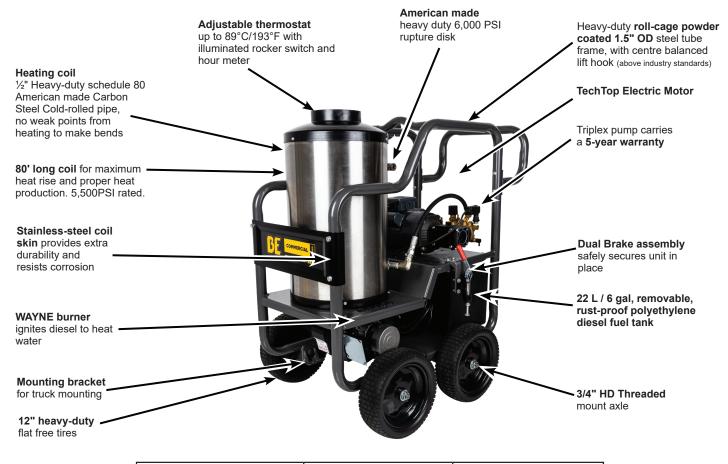
HOW TO CONTROL PRESSURE

- The pressure washer is preset at the factory to deliver the optimum performance for its set up.
- Do not adjust the unloader.
- Adjusting the unloader can lead to failures, including poor performance, motor stalling, and breaking internal parts of the pump and unloader.
- The primary method of controlling pressure is by the distance between the nozzle and the surface. Always start far away and slowly move closer to the surface.
- The angle of spray to the surface will also influence pressure. For example, coming at the surface at a 90° angle will have more impact force than a shallow angle.
- Pressure can also be controlled by the type of nozzle that is put into the tip. The wider the spray, the less pressure directly impacting the surface.
- Pressure can also be decreased by using nozzles with a larger orifice size.
- Be careful when cleaning any soft surface like wood or anything that can crack or break apart, like glass or paint.



PRODUCT FEATURES & COMPONENTS

Image breakdown: HW152EA



DESCRIPTION	HW152EA HW205EBA	
Series	Commercial Industrial	
Max PSI	1,500	2,000
GPM	2.0	3.5
Motor	TECHTOP 2.0 HP	TECHTOP 5.0HP
Voltage	120	240
Amp Draw	20	30
Drive System	Direct	Belt
Pump Model	AR JRV2G25E	AR RCA35G25N
Pump Unloader	Built-in	External
Soap Injector	Built-in Fixed	External, Adjustable
Burner Type	Wayne 120v Wayne 24	
Max Temperature	89°C/193°F	89°C/193°F
BTU	172,000	189,000
Burner Fuel Type	Diesel/Kerosene	Diesel/Kerosene
Burner Fuel Tank	6 Gallon	6 Gallon
Burner Fuel Consumption	1.23 GPH 1.35 GPH	
Double Wire Braided Hose	50' x 3/8" 50' x 3/8	
Spray Nozzles Included	0°,15°,25°,40°, Soap 0°,15°,25°,40°,	
Spray Gun Wand	36" Insulated 36" Insulated	

ASSEMBLY



Your pressure washer will require some assembly. If you have any trouble with this process, please call our tech support department (1-866-850-6662) with your model number.

Unpack your pressure washer

- Remove all the components, including bags and manuals.
- Inspect components to make sure there is no visible damage.

ATTACH HANDLE

1. Remove any plastic coverings that may be on the handle. Place handle onto frame by lining up the holes and using the provided nuts and bolts to secure it on the frame.



NOTE: These diagrams are intended for general reference. As a result, they may not fully reflect the appearance of your product.

- 2. Insert the bolts through holes using washers. Thread on the bolts on the end and fasten tight.
- 3. Insert colored quick connect spray nozzles, high-pressure hose, gun wand assembly into the spaces provided.



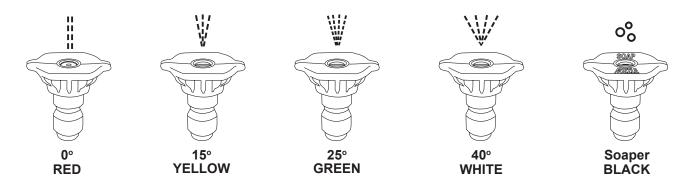
- 4. If needed, attach the provided detergent siphoning hose to brass barb coming out of the pump near the high-pressure outlet. (Do not attach to the black plastic thermal relief valve barb.)
- 5. Assemble the gun wand. The trigger assembly will be threaded onto the wand. Hand tighten only. Plug the gun into the hose by pulling back on the sleeve of the quick connect fitting before inserting the plug.



HOSE CONNECTIONS

- Quick connect fittings: pull back the collar of the coupler, insert plug, and release the collar. Tug on fittings to confirm a secure lock.
- **Spray Nozzles:** To attach a spray nozzle to the end of the wand, pull back on the collar of the brass fitting. Insert the spray nozzle and release the collar. Tug on the nozzle to make sure it is secure. If it is loose, the high-pressure water will launch it out and may cause injury or damage.

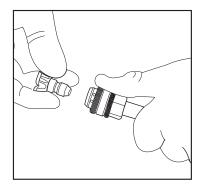
Your pressure washer will come with several colored spray nozzles that will have different spray patterns and abilities.



0° Nozzle (Red)	Concentrated stream to break apart baked-on mud or dirt. Use with caution.
15° Nozzle (Yellow)	Narrow spray pattern that is aggressive and best used on hard surface to remove tough dirt.
25° Nozzle (Green)	General purpose spray pattern. Slightly wider, but still fairly aggressive.
40° Nozzle (White)	Wider spray pattern for large areas or softer surfaces.
Black Soaper Nozzle	Low pressure nozzle. This is the only nozzle that can be used with the chemical injector system.

TO CHANGE SPRAY NOZZLES:

1. Pull back collar on quick—connect coupler and pull the current spray tip off. Store the spray tips in the holder provided on the handle. Storing nozzles in the designated holder will help prevent any debris from clogging the tip.



PRE-OPERATION



- 1. Before operating the pressure washer, ensure you are familiar with all the warnings and safety recommendations.
- 2. Wear proper clothing and eye protection.
- 3. Always setup the machine where
 - 3.1 It is on a level surface. If the machine is not level, it may not start or cause failures.
 - 3.2 There is sufficient ventilation.
 - 3.3 There are no signs of oil or fuel leaks, including fuel vapors.
 - 3.4 The machine is not exposed to rain, snow or freezing temperatures. These harsh conditions can lead to component failure causing damage or injury
- 4. Ensure that oil level for the pump are correct. Use 30W non-detergent oil to the pump if needed.
- 5. If the pump has an oil cap dipstick, make sure it is the breathing oil cap instead of the sealed travel oil cap. If the sealed travel oil cap is left in, the pump will over pressurize and blow it out.
- 6. Inspect the overall condition of the unit. Make sure there are no fuel or oil leaks or damaged parts. If any leaks or damaged parts are detected DO NOT start the pressure washer until it is fixed.
- 7. Connect the high-pressure hose to the pump and the gun wand assembly to the other end of the hose.
- Connect the garden hose to the pump. NEVER run without water.
 Ensure the inlet filter on the pump is present, intact, and clean before connecting the garden hose.

WATER SUPPLY MUST BE SUFFICIENT TO SUPPLY THE PUMP ADEQUATELY.

Every pressure washer has a Gallons Per Minute (GPM)/ Liters Per Minute (LPM) rating that must be adhered to. If the pump does not get enough water, it will cavitate (starve for water). This will cause internal damage and pending failure.

To measure your water source GPM/ LPM, you will need a container that you know the exact size such as a 5-gallon/20-Liter bucket. When you're ready, start filling it from your water source while timing it for one minute. The amount of water in the 5-gallon/20-liter bucket after one minute is the GPM/LPM rating.

The water source GPM/ LPM should exceed the GPM/ LPM rating of the machine by one GPM/ LPM to account for any fluctuations from the water source.

The water source should have 20 to 60 PSI/1.38 to 4.1 BAR pressure going into the pump. Do not use a hose longer than 50ft/15m to the water source.

PRIME THE PUMP WITH WATER

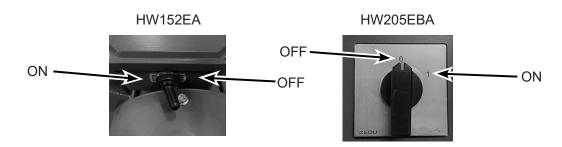
Once all the hoses are connected, turn on your water supply and hold down the spray gun's trigger. Let water flow through it until all the air bubbles are worked through, and there is a constant stream of water coming out the nozzle.

Insert the color spray nozzle that you plan to use. Make sure the nozzle is clean with no damage or blockages.

START UP PROCEDURE

ELECTRIC MOTOR START PROCEDURE

- 1. Review all the safety warnings at the beginning of the manual. Turn the motor to the off position.
- 2. Follow all the pre-operation steps before starting.
- 3. Connect pressure washer to a power source that matches the unit's requirements. It is critically important to have the pressure washer connected to the correct power source, including volt, amp, phase, and circuit breaker capacity. Using a wrong power source will prevent start up, or damage the motor causing it to fail.
- 4. Hold the spray gun, point it in a safe direction and squeeze the trigger.
- 5. Locate the ON/OFF switch on the pressure washer. Brace yourself for possible kickback from the spray wand, and turn machine on.



ELECTRIC MOTOR STOP PROCEDURE

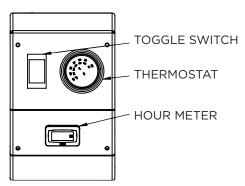
- 1. Keep the spray gun trigger squeezed and pointing in a safe direction.
- 2. Turn the motor to the off position.
- 3. Keep trigger squeezed to make sure all the pressure is released and it is only garden hose pressure.
- 4. Unplug machine (if applicable, some may be hard wired).
- 5. Disconnect and drain hoses.

HOT WATER BURNER START/STOP PROCEDURE



- 1. Fill the black fuel tank with Diesel or Kerosene (No.1 or No.2 grade)
- 2. Once the motor is running, push the burner toggle switch to the ON position and adjust the thermostat to the desired temperature.

CONTROL PANEL



NOTICE

Once the heater has been started, the water will begin heating up in about 20 seconds. It will reach maximum temperature within 2.5 minutes of continuous spraying through the gun. The burner will not fire when the trigger is released.

A WARNING

The water temperature can become extremely hot during operation.

Use caution when operating the spray gun.

HOT WATER BURNER STOP PROCEDURE

- 1. To turn off, push the burner toggle switch to the OFF position.
- 2. Once the heater is off, squeeze the trigger and discharge the water for three minutes to cool the heat exchanger and high pressure hose. Insufficient cool-down periods for the high pressure hose will cause excessive wear and eventual rupture of the hose
- 3. Once water temperature has been lowered, the electric motor can be switched off as well.



GENERAL PRESSURE WASHER OPERATION TECHNIQUES

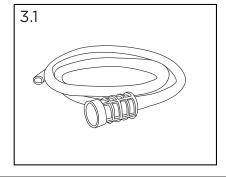
- 1. Always follow safety practices as outlined.
- 2. Always begin spraying at a safe distance from the intended surface and move closer until the desired cleaning effect can be observed.
- 3. Generally, do not use a 90° spray angle. Instead, it is usually more effective to use a shallower angle so that the reflecting spray can be directed in a safe and controlled direction.
- 4. Holding down the trigger, move the wand side-to-side to clean the surface. Once you get a feel for how the cleaning performance behaves you will naturally find your rhythm.
- 5. Always be aware of what you are spraying and take greater care on fragile surfaces such as wood or glass to prevent damage.
- 6. Always remember to squeeze the trigger once every 30 seconds to flush the pump with cool water to prevent overheating.
- 7. If you have to stop washing for more than a few minutes, you should turn off the machine.

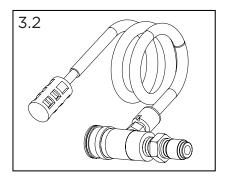
CLEANING WITH DETERGENTS

NOTICE

This feature is designed for use with mild detergents only. DO NOT use corrosives as they will cause extensive damage as well as pose a considerable safety hazard.

- 1. The black soaper nozzle must be installed on the spray wand. It is the only nozzle that will draw detergent through the pressure washer system.
- 2. Prepare detergent solution according to label directions. Never pump acids, alkaline, abrasive fluids or solvents through the unit. Due to the unknown and often corrosive characteristics of many detergents commonly used in the pressure washer cleaning industry, it is recommended to use only mild detergents with this unit.
- 3. Connect the detergent pick-up tube assembly to the pump. There are two types: **Image 3.1** connect plastic tube to the brass barb on the pump. **Image 3.2** Insert the plug into the pump outlet and then connect the high-pressure hose to the other end of the fitting.
- 4. Fully immerse the detergent strainer end of the pick-up tube into the detergent solution.
- 5. To apply solution, squeeze trigger and begin spraying. You will be able to see the detergent move through the pick-up tube and then spray out the nozzle.
- 6. Start spraying the lower portion of the surface being cleaned and move up, using long overlapping strokes. Applying from the bottom up helps avoid streaking and gives the detergent a chance to soak in and begin to breakdown the dirt.
- 7. Be careful to not let the detergent solution to dry on the surface. This may result in damaged surfaces. Avoid working on hot surfaces or in direct sunlight.
- 8. To rinse, lock the trigger gun in the "OFF" position. Then remove the black nozzle and replace with the green or white nozzle. It will take about 30 seconds to purge all the detergent from the system. For best rinsing results, start at the top and work down.
- 9. When done with the detergent system, always flush the system by siphoning clean water through the detergent pick-up tube while spraying for at least one minute. This helps prevent detergent from building up or causing corrosion from causing mechanical problems.





MAINTENANCE



PUMP MAINTENANCE

PUMP: Change the pump oil after the first 50 hours of operation. After the initial change, every 12 months or 500 hour intervals are recommended. If oil appears dirty or milky, changes may be required in greater frequency. **Use SAE 30W non-detergent pump oil** and fill only to the center of the oil sight glass. **DO NOT** overfill.

PUMP MAINTENANCE SCHEDULE			
Oil Condition Inspect before every use			
First oil change 50 hours			
Then Change after Every 500 hours of use, 12 months. Inspection shows oil is dirty			

If oil is milky in color, then water has leaked into the crankcase. Further inspections will be needed, including pump seals and ceramics plungers.

NOZZLE: Water flow through the spray nozzle will erode the orifice over time, making it larger. This will result in a reduction of pressure. Nozzles should be replaced whenever pressure is less than 85% of the maximum. The frequency of replacement will depend upon such variables as mineral content in the water and number of hours the nozzle is used. Every 3-6 months tends to be a standard interval for replacement.

HEATER COIL: After every use flush with cold water to cool the coils down. Then flush out all the water with the coil saver tool as described on Page 19. This will minimize scale build up.

Scale build-up in the coil results when the water is 'hard', which means it has calcium, magnesium and other dissolved minerals. The heating and cooling process of will cause these minerals to solidfy and bind to the inside of the coils. Left too long, the minerals will turn to scale and restrict water flow. Excessive scale build up will need to be removed with a coil cleaner solution.

Do not expose to rain or excessive moisture.

HOSES AND SPRAY WAND: Drain of water after every use. Store in a safe, dry location.

FITTINGS: Inspect for leaks and damage. Replace parts as needed.

WATER INLET FILTER ON PUMP

- 1. Inspect before every use
- 2. Rinse clean when dirty
- 3. Replace when damaged or leaking



MAINTENANCE SCHEDULE

PROCEDURE		DAILY	3 MONTHS	6 MONTHS	9 MONTHS	12 MONTHS
Check water pump oil level		Х				
Change water pump oil	**					Х
Oil leak inspection		Х				
Fuel leak inspection		Х				
Water leak inspection		Х				
Hose inspection		Х				
Water inlet screen inspection		Х				
Check diesel fuel filter		Х				
Replace diesel fuel filter				Х		
Inspect belts (if applicable)			Х			
Replace high pressure nozzle	***		Х			
Inspect fuel pump filter	*					Х
Replace fuel nozzle	*					Х
Check burner air adjustment			Х			
Check burner electrodes	*					Х
Test water pressure	*		X			
Test fuel pressure	*		Х			
Test water temperature	*		X			
Descale coil	****					Х

^{*} Must be performed by an authorized service technician.

^{**} The pump oil must be changed after the first 50 hours of operation and then every 500 hours or 12 months, whichever comes first.

^{***} High pressure nozzle should be replaced whenever pressure drops to less than 85%.

^{****} Scale build-up will vary with mineral content in the water and amount of usage. Descaling can range from weekly to yearly maintenance.

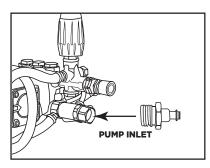
MAINTENANCE



PRESSURE WASHER PUMP & COIL SAVER TOOL

This tool utilizes compressed air to clear any remaining water from the pump and hot water coil in your pressure washer. To use the Pump & Coil Saver Tool, ensure your air compressor's regulator is set to a maximum pressure of 60 PSI. Leave your hose and gun connected to your pressure washer, but remove the nozzle from the end of the wand. For hot water pressure washers, it is recommended that all water be removed from the pump and coil after every use. This will prolong their life and prevent possible freezing damage in cold weather. Follow the steps below to use the Pump and Coil Saver Tool:

- 1. Thread the blow out tool into the inlet of the pump
- 2. Ensure air compressor regulator is set to 60 PSI or less
- 3. Connect air line from air compressor to blow out tool
- 4. Hold trigger of pressure washer gun open
- 5. (If applicable) squeeze bypass hose several times to help remove water from the unloader bypass system
- 6. Once there is no more water coming out of the tip of the gun, disconnect the airline from the blow out tool, squeeze trigger of the pressure washer gun to relieve any remaining air pressure



STORAGE

Improper storage of the pressure washer will lead to failures that are not covered by warranty.

In general, cover the pressure washer and store it in a clean and dry location. Wipe off any dirt or water.

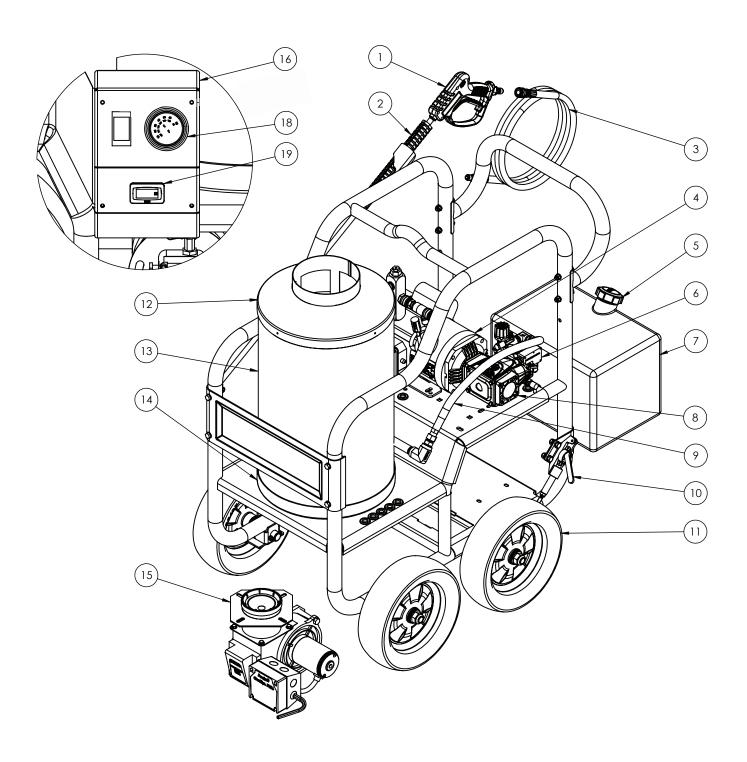
WATER – FREEZING WARNING

Leaving water in the pump, coil or accessories can result in damage if the water freezes. Water will expand when it turns to ice. The resulting force will cause ruptures and crack brass fittings, valves, and seals requiring complete replacements (not warrantable).

- 1. When the unit is not in use, drain all the hoses and spray gun assembly.
- 2. If the unit is going to be stored for a extended period, or if there is any chance the pressure washer will be exposed to freezing temperatures, then plumbing/RV anti-freeze must be cycled through the pumps water ways.
- 3. We recommend using BE Power Equipment Pump Saver Anti-Freeze. It has a specially designed cap to thread right onto the garden hose fitting of the pump. (Part number 85.490.046, contact your local dealer).
- 4. To apply, first ensure the motor is unplugged and is in the OFF position.
- 5. Thread the bottle onto the garden hose fitting of the pump and open the valve on the cap. It is recommended to squeeze the bottle to force the anti-freeze into the pump if needed. Continue until it comes out of the high-pressure hose fitting. At this point, anti-freeze is protecting all the internal water chambers of the pump.
- 6. The best defense against freezing is to store the pressure washer in a warm location that will not be exposed to freezing temperatures.
- 7. Remove water from coil with the Coil Saver Tool as describe above.



MODEL: HW152EA



PARTS REFERENCE LIST

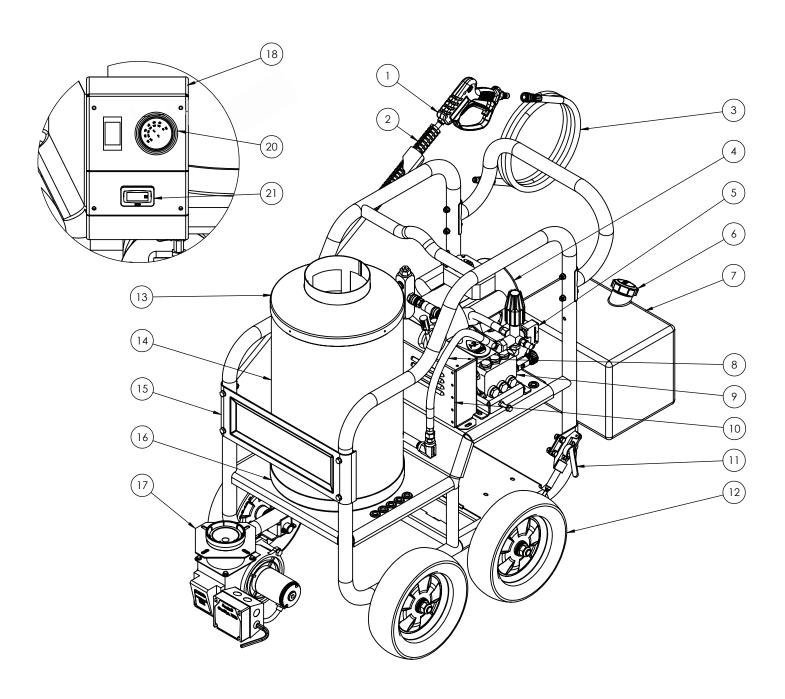


MODEL: HW152EA

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	85.202.109	SPRAY GUN	1
2	85.202.026	SPRAY WAND	1
1 & 2	85.205.026	SPRAY GUN AND WAND ASSEMBLY	1
3	85.238.251	HOSE, 50' X 3/8" DOUBLE WIRE BRAIDED	1
4	72.301.002	TECHTOP 2HP MOTOR	1
5	59.400.008	FUEL TANK CAP	1
6	85.300.082	PRESSURE SWITCH	1
7	85.601.044	6 GALLON FUEL TANK	1
8	85.129.083H	PUMP ASSEMBLY - AR JRV2G25E-F8	1
9	85.238.020J	HOSE, 20" X 3/8"	1
10	85.604.104	BRAKE ASSEMBLY	2
11	85.660.054BF	12" FLAT FREE WHEEL	4
12	59.000.303	TOP INSULATION	1
13	59.000.300	COIL ASSEMBLY	1
14	59.000.304	BOTTOM INSULATION	1
15	59.120.001	BURNER ASSEMBLY	1
16	59.400.013	CONTROL BOX	1
18	85.400.071	THERMOSTAT WITH INNER PROBE	1
19	59.000.026	HOUR METER	1
NOT SHOWN	59.000.104	DIESEL IN LINE FUEL FILTER	1
NOT SHOWN	59.000.128	RUPTURE DISC	1



MODEL: HW205EBA



PARTS REFERENCE LIST



MODEL: HW205EBA

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	85.202.109	SPRAY GUN	1
2	85.202.026	SPRAY WAND	1
1 & 2	85.205.026	SPRAY GUN AND WAND ASSEMBLY	1
3	85.238.251	HOSE, 50' X 3/8" DOUBLE WIRE BRAIDED	1
4	72.301.005	TECHTOP 5HP MOTOR	1
5	85.300.083	PRESSURE SWITCH	1
6	59.000.123	FUEL TANK CAP	1
7	85.601.044	6 GALLON FUEL TANK	1
8	85.238.020J	HOSE, 20" X 3/8"	1
9	85.129.065H	PUMP ASSEMBLY - AR RCA35G25N-SX	1
10	85.602.254	BELT GUARD	1
11	85.604.104	BRAKE ASSEMBLY	2
12	85.660.054BF	12" WHEEL	4
13	59.000.303	TOP INSULATION	1
14	59.000.300	COIL ASSEMBLY	1
15	85.600.252BK	FRAME	1
16	59.000.304	BOTTOM INSULATION	1
17	59.120.002	WAYNE 240V BURNER	1
18	59.400.013	CONTROL BOX	1
20	85.400.071	THERMOSTAT WITH INNER PROBE	1
21	59.000.206	HOUR METER	1
NOT SHOWN	59.000.104	DIESEL IN LINE FUEL FILTER	1
NOT SHOWN	59.000.128	RUPTURE DISC	1
NOT SHOWN	47.002.028	BELT	2
NOT LISTED	AL607	PUMP UNLOADER	1



TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	REMEDY
Motor will not start	Various motor problems	Refer to the Motor Manual accompanying your unit.
	Unit components are frozen.	Allow to thaw. If any part of the unit becomes frozen; excessive pressure may build up in the unit. This can cause the unit to burst, resulting in possible serious injury to the operator or bystanders.
No discharge at nozzle when trigger mechanism is squeezed.	Inadequate water supply.	Ensure hose is 5/8" diameter and incoming water supply is turned on. Ensure the water is turned all the way on.
Low or fluctuating	Kink in water inlet hose.	Remove kink.
pressure.	Water inlet screen obstructed.	Remove screen, clean, or replace.
	Pump sucking air. (Prime eliminated)	Tighten all water intake connections Eliminate leaks in intake line.
	Incorrect nozzle installed on gun.	Insert high pressure nozzle.
	Obstructed or worn spray nozzle.	Remove, clean or replace.
	Damaged or obstructed valve assy. on pump.	Remove, clean or replace.
	Pump packings worn.	Replace packings.
	Unloader/bypass valve not operating correctly.	Repair or replace.
Water is leaking at	Unloader malfunction.	Detect and correct unloader problem.
safety relief valve.	Safety relief valve is defective.	Replace safety relief valve. NEVER run unit without safety relief valve. Doing so can cause an explosion!
Oil appears milky or foamy.	Water in oil.	Change pump oil. Fill to proper level.
Oil leaking from unit.	Worn seals or o-rings.	Consult customer service.
Detergent will not siphon	Detergent strainer is not completely submerged in detergent solution.	Check, submerge if necessary.
	Detergent strainer obstructed.	Inspect, clean, or replace.
	Detergent hose cut, obstructed or kinked.	Inspect, clean, or replace.
	Detergent adjusting knob turned to closed position.	Open adjusting knob. Refer to "Cleaning with Detergents".
	Nozzle assembly is plugged.	Clean or replace.
Water flows back into detergent container.	Ball & spring in Venturi reversed, missing, or corroded.	Remove, clean, or replace.
Water flows from the nozzle when the trigger gun is locked in the "OFF" position	Trigger gun is malfunctioning.	Repair or replace.
Blower motor will	Burner/Blower motor malfunction.	Repair or replace.
not run. (Burner will not ignite without	Belt or flex coupling broken or slipping	Replace
blower running)	Fuel pump siezed	Replace





SYMPTOM	PROBABLE CAUSE	REMEDY
Blower runs, but burner will not ignite.	Thermostat knob is OFF.	Check thermostat knob position.
	Out of fuel.	Refuel.
	Gun trigger is closed/not pressed.	Press down on gun trigger.
	No voltage.	Consult Service Department.
	Fuel pump sucking air.	Tighten all fuel intake connections. Eliminate leaks in intake line.
	Poor or improper fuel supply.	Check fuel to ensure it is correct. Drain tank and filter if necessary and refill with proper fuel.
	Dirty or clogged fuel filter	Replace as necessary.
	Low fuel pump pressure.	Check fuel pump pressure, adjust or replace as necessary.
	Fuel pump inoperative.	Check pressure, replace if necessary.
	Flexible coupler broken.	Replace.
	Fuel solenoid valve failure.	Replace.
	Dirty or clogged fuel nozzle.	Replace fuel nozzle.
	Improper burner air adjustment.	Adjust.
	Faulty ignition module.	Repair or replace. Consult Customer Service.
	Ignition electrodes damaged or worn.	Adjust or replace electrodes. Consult Customer Service.
Burner runs erratically.	Water in the fuel.	Drain fuel filter/water separator. Drain fuel tank, and replace with clean fuel.
	Dirty fuel filter	Replace element.
	Dirty fuel nozzle.	Replace.
	Improper air adjustment setting.	Adjust.
	Fuel pump malfunctioning.	Replace.
Blower runs, burner	Thermostat knob is OFF.	Check thermostat knob position.
ignites but will not heat.	Poor or improper fuel supply.	Check fuel to ensure it is correct. Drain tank and replace filter if necessary and refill with proper fuel.
	Dirty or clogged fuel filter or fuel water separator.	Drain or replace as necessary.
	Low fuel pump pressure.	Check fuel pump pressure, adjust or replace if needed.
	Dirty or clogged fuel nozzle.	Replace fuel nozzle.
Blower runs, burner ignites but will not heat.	Improper burner air adjustment setting.	Adjust the setting.
	Scale build up in heat exchanger coil.	Consult Customer Service.
Burner discharges	Low on fuel.	Refuel. If white smoke persists, consult Customer Service.
white smoke.	Excessive air supply.	Adjust air flow.
Burner discharges black smoke.	Insufficient air supply.	Adjust to ensure air flow is sufficient.



BE Power Equipment Inc. warrants the original retail purchaser that this pressure washer is free from defects in material and workmanship for the periods set forth below. If defects are found in BE Power Equipment products within the limitations outlined in this warranty statement, BE Power Equipment, at its sole discretion, will repair or replace the product free of charge.

The warranty coverage begins on the date of purchase by the end-user. Valid proof of purchase must be presented with the warranty claim.

TECHTOP Motor: 2 Years
Triplex Pumps: 5 Years
Electrical 1 Year
Burner: 18 Months
Coil: 3 Years
Accessories: 90 Days
Frame: Lifetime

This warranty is limited to defects that occurred during regular operational use.

This warranty does not cover failures due to lack of service, negligence, abuse or misuse. Including, but not limited to, freezing damage, alterations, chemical deterioration, scale build-up, rust, corrosion, thermal shock, thermal expansion, transportation damage, oil changes, valve adjustments, fuel system maintenance or using incorrect repair parts. Furthermore, Using the wrong fuel, water or power supply is considered a form of misuse.

This warranty also does not cover normal wearing such as O-rings, valves, seals, filters, sparkplugs or packings. These are considered to be maintenance items.

BE Power Equipment expressly disclaims liability for injuries to persons or property or for incidental damages, rental loss, time loss, transportation costs, or consequential damages. It is the buyer's responsibility to ensure the correct installation and application of the product purchased.

THE WARRANTY CONTAINED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OR FITNESS FOR A PARTICULAR PURPOSE. BE Power Equipment does not authorize any of its dealers, service centers, agents, employees or any other party to expand, extend or modify the scope of this warranty in any manner on behalf of BE Power Equipment.

To obtain warranty, the claimant must take the product, with their original proof of purchase, to an authorized BE Power Equipment service center. These service centers are located on the website:

https://www.bepowerequipment.com/service-centers

If you cannot resolve the warranty claim satisfactorily, contact the BE Power Equipment Warranty Department (1-866-850-6662). Be prepared with details of the defect, proof of purchase, model, and the pressure washer's serial number.

NOTES	<u> </u>

DO NOT RETURN TO THE STORE NE RETOURNEZ PAS AU MAGASIN NO LO DEVUELVA A LA TIENDA



WE WILL BE GLAD TO ASSIST YOU WITH ANY TECHNICAL SUPPORT, WARRANTY, OR OTHER QUESTIONS ABOUT THIS UNIT

NOUS SERONS HEUREUX DE VOUS AIDER AVEC TOUT SUPPORT TECHNIQUE, GARANTIE OU AUTRES QUESTIONS CONCERNANT CET APPAREIL.

ESTAREMOS ENCANTADOS DE AYUDARLE EN CUALQUIER SOPORTE TÉCNICO, GARANTÍA U OTRAS PREGUNTAS SOBRE ESTA UNIDAD.

1-866-850-6662

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