



Gasoline Powered Pressure Washer

Operating Instructions and Parts List

PW2515

Please record Model No. and Serial No. for use when contacting the manufacturer:

Model No. _____ **Purchase date** _____

Serial No. _____ **Purchase place** _____

For Information About This Product, call 1-800-330-0712



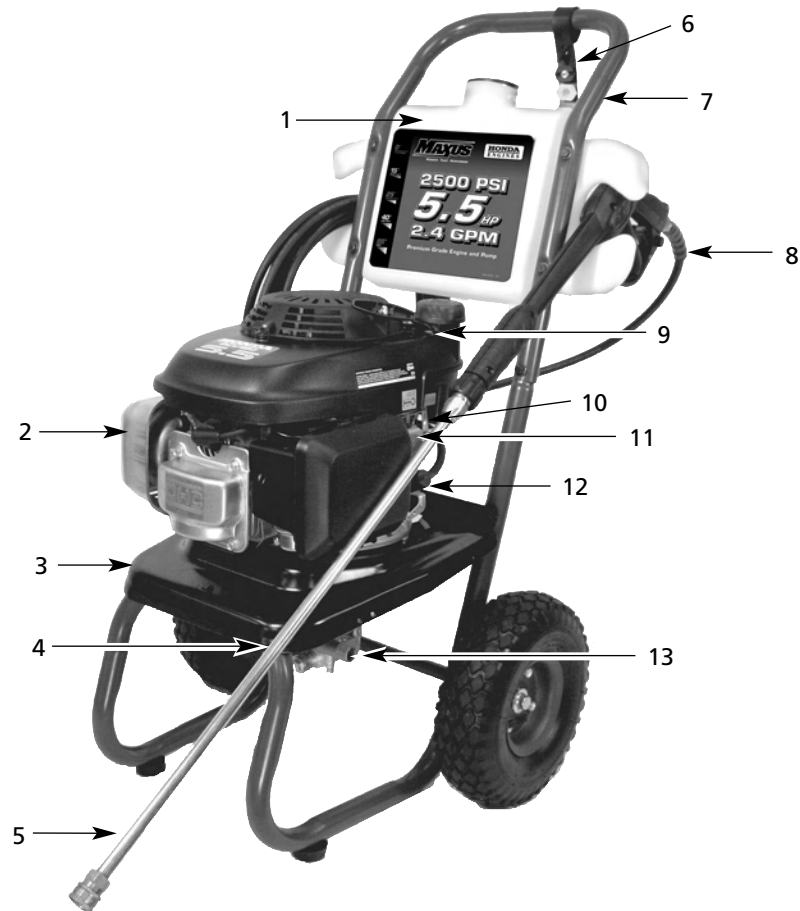
Model PW2515

Contents	Page
Getting To Know Your Pressure Washer .....	.2
Frequently Asked Questions .....	.3
Safety and Warning Information .....	.4
Pre-Operation .....	.5 - 6
Operation .....	.6 - 9
Maintenance and Technical Information .....	.10
Service Record .....	.11
Replacement Parts Lists	
• Pump .....	.12
• Cart .....	.13
Troubleshooting Chart .....	.14
Warranty .....	.16

Carefully read and understand these instructions before operating your pressure washer.

REMINDER: Keep your dated proof of purchase for warranty purposes! Attach it to this manual or file it for safekeeping.

Getting To Know Your Pressure Washer



PW2515

- | | |
|---|--|
| 1 Detergent Tank | 9 Fuel Tank |
| 2 Muffler | 10 Choke |
| 3 Location of Serial Number/Product Decal | 11 Engine switch - On/Off |
| 4 (Pump) Inlet Connection for Garden Hose | 12 Fuel Valve - On/Off |
| 5 Lance with Quick Connect | 13 (Pump) Outlet Connection for High Pressure Hose |
| 6 Tip Holder with Spray Tips | |
| 7 Handle | |
| 8 Gun with trigger | |

Frequently Asked Questions

How do I start my pressure washer?

1. Make sure you have gas and oil in the engine. The engine DOES NOT COME FILLED WITH OIL.
2. Turn the water on, then trigger the gun to make sure the water will flow smoothly out of the tip.
3. Open the fuel shutoff valve by turning the knob counterclockwise until it stops.
4. Close the choke (if engine is cold) by moving the choke ring fully to the right.
5. Set the shut off switch to "ON."
6. Pull the trigger (to relieve any back pressure in the pump) while pulling the starter cord.

What type of oil do I use?

ENGINE DOES NOT COME FILLED WITH OIL: See Page 10 for engine oil types, quantities, and oil changing instructions.

Pump: The pump comes filled with the correct amount of oil and should not need changing or filling.

Why don't I have any water pressure?

- Is the water hose attached to the pressure washer?
- Is the water turned on?
- Check for any kinks, leaks, or blockage in the hoses, fittings, or the nozzle.
- Is the 15° (yellow) spray tip inserted into the end of the lance (See Page 8)?
- Is the inlet filter screen free of debris? Check and remove debris if needed.

How do I get high pressure?

- For high pressure, insert the 15° (yellow) spray tip into the end of the lance (See Page 8).

How do I get the soap suction to work?

1. Connect the clear plastic chemical suction tube to the plastic hose barb on detergent tank.
2. Fill the detergent tank with detergent formulated for use with pressure washers.
3. To spray soap, insert the 65° (black) soap spray tip into the end of the lance (see page 8).

Why doesn't the pressure washer apply detergents with high pressure?

Detergents "bounce" off cleaning surfaces as fast as they are applied. The pressure washer's features allow for a detergent to be drawn while in low pressure mode only. By applying detergent at low pressure, the effect of "bouncing" is reduced. Also, detergents are only effective when time is allowed for them to work on the surface of whatever is being cleaned. After applying the detergent, wait 1-3 minutes while it works, and then proceed to rinse the surface with high pressure.

What maintenance do I need to perform on my pressure washer?

1. After turning off the pressure washer and the water, depressurize the hose by triggering the gun.
2. Remove the garden hose and high pressure hose from the pump.
3. Pull the start rope slowly five times to purge water from the pump. This will help protect the pump from damage.
4. Do not store your pressure washer in an area where the temperature will drop below 32° F.
5. Follow proper storage and winterizing instructions found on page 9.

What do I do if I'm missing a part?

Call Campbell Hausfeld at 1-800-330-0712 and we will promptly replace your missing parts. **DO NOT RETURN THE PRESSURE WASHER TO THE RETAILER!**

Where can I buy accessories for my pressure washer?

- If you can't find accessories at the store where you purchased your pressure washer, call Campbell Hausfeld at 1-800-330-0712 or visit our website at www.chpower.com.

Who do I call if I have questions or problems?

**Call Campbell Hausfeld at
1-800-330-0712 (U.S.A.)**

Safety and Warning Information

Safety Guidelines

This manual contains information that is very important to know and understand. This information is provided for SAFETY and to PREVENT EQUIPMENT PROBLEMS. To help recognize this information, observe the following symbols.

⚠ DANGER

Danger indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

⚠ WARNING

Warning indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

⚠ CAUTION

Caution indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.

NOTICE

Notice indicates important information, that if not followed, may cause damage to equipment.

NOTE: Information that requires special attention.

Important Safety Instructions

SAVE THESE INSTRUCTIONS

⚠ WARNING

When using this product, basic precautions should always be followed, including the following:

1. Read all instructions before using the product.
2. To reduce the risk of injury, close supervision is necessary when the product is used near children.
3. Follow all safety codes as well as the Occupational Safety and Health Act (OSHA).
4. Ensure safety devices are operating properly before each use. DO NOT remove or modify any part of the gun or unit.
5. Know how to stop this product and bleed pressure quickly. Be thoroughly familiar with the controls.
6. Stay alert – watch what you are doing.
7. Do not operate the product when fatigued or under the influence of alcohol or drugs.
8. Keep operation area clear of all persons.
9. Do not overreach or stand on unstable support. Keep good footing and balance at all times.
10. Follow the maintenance instructions specified in the manual.

⚠ WARNING

Risk of injection or severe injury. Keep clear of nozzle. Do not discharge streams at persons. This product is to be used only by trained operators. Always remove lance from gun before cleaning debris from tip.

- Keep clear of nozzle. NEVER direct high pressure spray at a person, animal, or yourself.
- Always wear safety glasses or goggles and protective equipment (hearing protection, gloves, rubber boots, protective clothing) when operating or performing maintenance.
- Never put hand or fingers over the spray tip while operating the unit.
- Never try to stop or deflect leaks with any body part.
- Always engage the trigger safety latch in the safe position when spraying is stopped even if only for a few moments.

- Always follow detergent manufacturer's label recommendations for proper use of detergents. Always protect eyes, skin, and respiratory system from detergent use.

⚠ WARNING

Do not use pressure that exceeds the operating pressure of any of the parts (hoses, fittings, etc.) in the pressurized system. Ensure all equipment and accessories are rated to withstand the maximum working pressure of the unit.

⚠ WARNING

Explosion hazard.

- NEVER spray flammable liquids or use pressure washer in areas containing combustible dust, liquids, or vapors.
- Never operate this machine in a closed building or in or near an explosive environment.
- Do not remove fuel tank cap or fill fuel tank while engine is hot or running (allow engine to cool two minutes before refueling). Always fill the tank slowly.
- Never disconnect the high pressure discharge hose from the machine while the system is pressurized. To depressurize machine, turn power and water supply off, then press the gun trigger 2-3 times.
- Never permanently engage the trigger mechanism on the gun.
- Never operate the machine without all components properly connected to the machine (handle, gun/wand assembly, nozzle, etc.).

NOTICE

Equipment damage.

- ALWAYS turn water supply "ON" before turning pressure washer "ON." Running pump dry causes serious damage.
- Do not operate the pressure washer with the inlet water screen removed. Keep screen clear of debris and sediment.
- NEVER operate pressure washer with broken or missing parts. Check equipment regularly and repair or replace worn or damaged parts immediately.
- Use only the nozzle supplied with this machine.
- Never leave the wand unattended while the machine is running.
- Never tamper with the engine governor or attempt to alter factory settings. Altering factory settings could damage the unit and will void the warranty.
- Always hold gun and wand firmly when starting and operating the machine.
- NEVER allow the unit to run with the trigger released (off) for more than one minute. Resulting heat buildup will damage the pump.
- NEVER store the pressure washer outdoors or where it could freeze. Freezing temperatures can seriously damage the pump.
- Release the trigger when changing from high to low pressure modes. Failure to do so could result in damage to the nozzle.

⚠ CAUTION

Keep hose away from sharp objects. Bursting hoses may cause injury. Examine hoses regularly and replace if damaged. Do not attempt to mend a damaged hose.

Pre-Operation

UNPACKING

Remove the equipment and all parts from the carton. The carton should contain the following.

- One pressure washer (pump, engine, cart base)
- One cart handle assembly
- One detergent tank
- One spray gun
- One lance
- One tip holder with 2 spray tips.
Additional tips available for purchase, see Page 13
- One high pressure hose
- One pack of nuts, bolts, and manuals
- One bottle of engine oil

If any parts are missing, **DO NOT RETURN THE UNIT TO THE RETAILER**. Know the unit's model number (located on the serial number tag on the pressure washer frame) and call 1-800-330-0712 for replacement parts.

After unpacking the product, inspect it carefully for any damage that may have occurred during transit. Make sure to tighten fittings and bolts before using the pressure washer.

⚠WARNING

Do not operate the unit if it's damaged during shipping, handling, or use. Damage could result in bursting and cause injury or property damage.

ASSEMBLY

Use two adjustable or 7/16" wrenches to assemble the pressure washer.

1. Slide the handle assembly over the lower legs of the cart base. Use the supplied nuts and bolts to secure the handle to the legs. See Figure 1.



Figure 1 - Assemble Handle

2. Attach detergent tank to backside of handle. Use the 4 hex bolts with flat washer under hex head and 4 nuts provided.
3. Slide clear plastic hose attached to leg onto plastic hose barb of detergent tank (see Figure 3).
4. **Brass Swivel Adapter** (See Figure 2). If it's not already attached to the pump inlet, assemble the brass swivel adapter and attach it to the pump inlet (See Figure 4 and Figure 5). Be

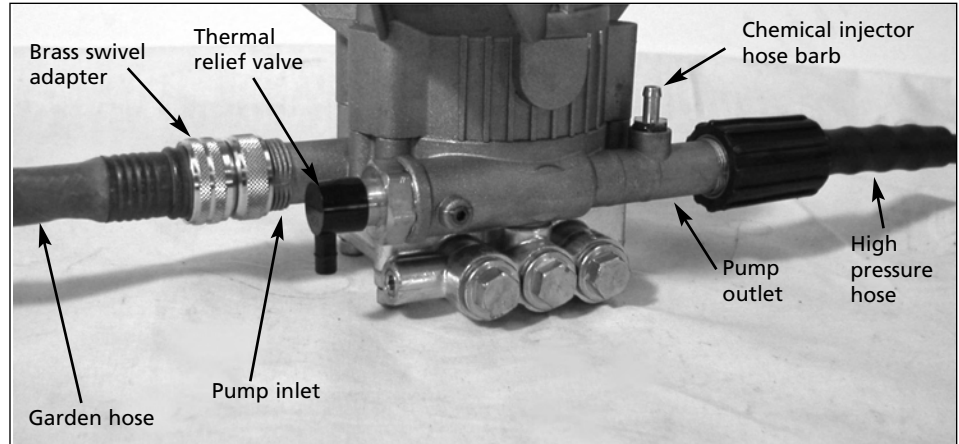


Figure 2 - Pump hook up



Figure 3 - Attach suction tube to barb fitting

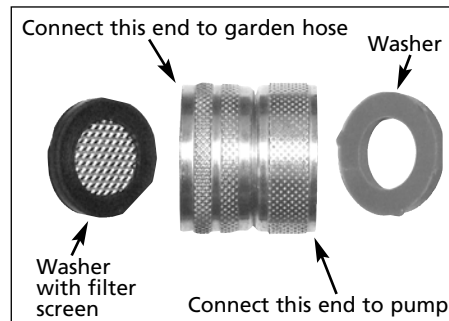


Figure 4 - Brass swivel adapter

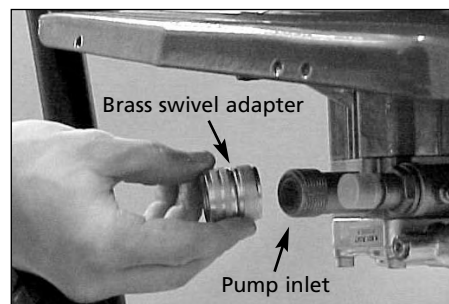


Figure 5 - Connect the brass swivel to the pump

- sure to connect the correct side of the brass swivel adapter to the pump.
5. Secure garden hose (not included) to the inlet connection on pump.

Pre-Operation (Continued)

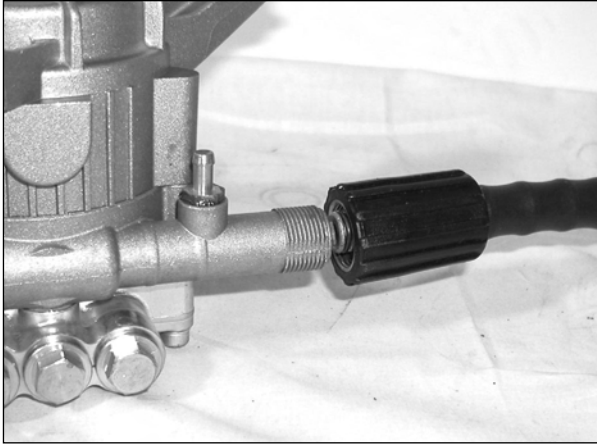


Figure 6 – Connect high pressure hose to pump

- 6. Connect the high pressure hose to the pump outlet (See Figures 2 and 6).
- 7. Attach the lance to the gun (see Figure 7).

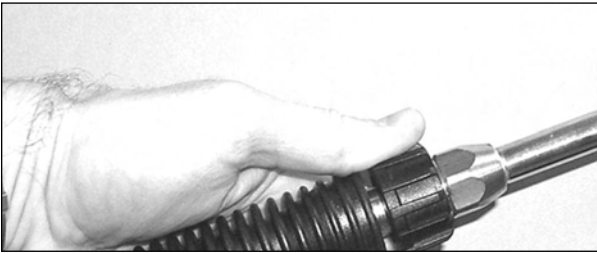


Figure 7– Attach lance to gun

- 8. Install quick connect tip by pulling back on collar and pressing in tip. Release collar, make sure it completely returns to its forward position and tip is secure (see Figure 8).

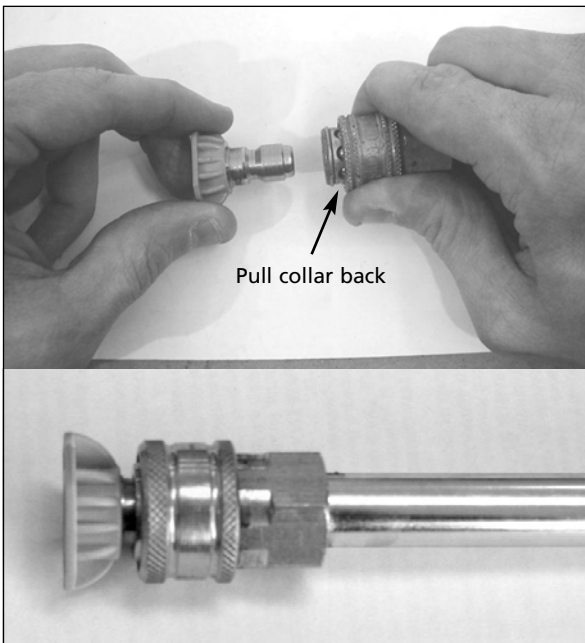


Figure 8 - Installing Quick Connect Tip

- 9. Install quick connect tips to tip holder and secure to the pressure washer handle. See Figure 9.

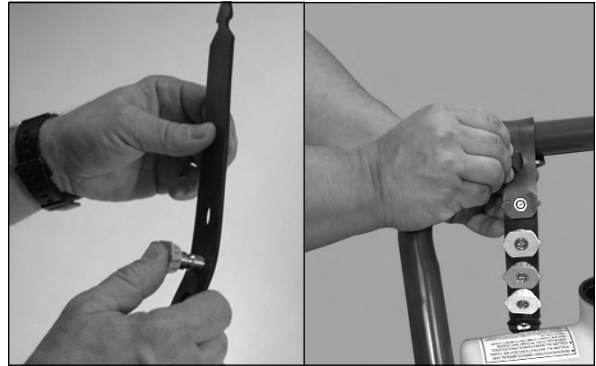
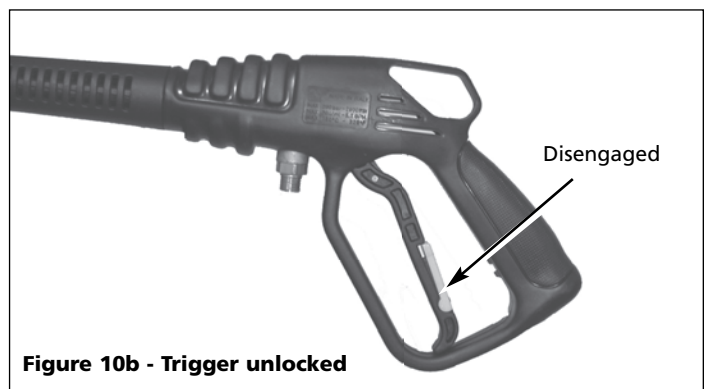
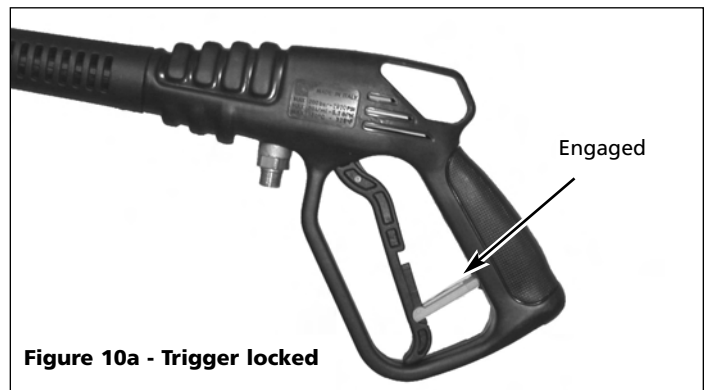


Figure 9 - Insert spray tips into the rubber tip holder

TRIGGER SAFETY LATCH

In the engaged position, the trigger safety latch prevents the gun from being triggered accidentally. Push the latch fully up to engage it (See Figure 10).

Always engage the trigger safety latch when the unit is not in use.



Operation

1. Surface Preparation

The following cleaning procedure will help you organize your cleaning task and ensures that you will achieve the best results in the shortest amount of time. Remember to use the spraying / cleaning techniques mentioned in the following section.

Before starting a pressure washer cleaning job, prepare the surface you intend to clean. Clear furniture from the area and make sure that all windows and doors are closed tightly. Also, protect all plants and trees near the cleaning area with a drop cloth. A covering ensures that your plants won't be sprayed by the detergents.

2. Start Up

ALWAYS use the following start up procedure to ensure that the unit is started safely and properly.

NOTICE

If water has frozen in the pressure washer, thaw the pressure washer in a warm room before starting. DO NOT pour hot water on or into the pump; internal parts will be damaged.

1. Check engine oil levels. Add oil as necessary.
2. Check fuel level. Add unleaded gasoline (rated 86 octane or higher) as required

⚠WARNING

DO NOT refuel a hot engine. Refueling a hot engine could cause a fire. Use only fresh, clean regular or unleaded gasoline. Close the fuel shutoff valve during refueling.

3. Attach a garden hose to the inlet side of the pump and connect it to the water supply. Use a hose with an internal diameter (I.D.) of 5/8" (1.58 cm) and a length of 50 ft. (15 m) or less.

NOTICE

Some local plumbing codes require backflow prevention when connecting to a fresh water supply. Install a backflow preventer upstream from the pump if necessary.

- a. If inlet water pressure is over 100 psi, install a regulating water valve at the garden hose connection.
- b. Do not exceed 100° F (38° C) inlet water temperature.

NOTE: The inlet water supply must have a minimum flow rate of 5 gpm (19 lpm).

4. Turn the water supply ON.

NOTICE

Never run the unit dry. Be sure the water supply is completely turned on before operating the unit.

5. Trigger the gun until water sprays smoothly from the tip indicating that all air is purged from the system. Lock the trigger safety latch.
6. Open the fuel valve by turning the knob counterclockwise until it stops. Close the choke (if engine is cold) by moving the choke ring fully to the right. Turn the ignition switch to "ON".
7. Start the engine (See Figure 10). Unlock the trigger safety latch on the gun. Grasp the starter rope and brace one foot on the chassis. Point the gun in a safe direction. While squeezing

the trigger on the gun, pull the starter rope rapidly and firmly (See Figure 11). Continue holding the rope as it returns. Repeat these steps until the engine starts.



Figure 11 - Start the engine

⚠CAUTION

When pulling the starter rope, make sure to keep your hand and arm clear of the engine and cart components.

NOTICE

Never let the starter rope return by itself. Doing so could jam the recoil system.

8. If the engine does not start after two or three pulls or if the rope is hard to pull, squeeze the gun trigger to release the pressure that has built up in the high pressure hose. Repeat Steps 7 and 8 until the engine starts.

3. Initial High Pressure Rinse

Spray the cleaning surface with water to clear off any dirt or grime that may have collected on the surface. Doing so allows the detergent to attack the deep down dirt that has worked its way into the cleaning surface.

ANGLE TO THE CLEANING SURFACE

When spraying water against a surface, you can generate maximum impact by striking the surface head on. However, this type of impact can cause dirt particles to embed in the surface and can prevent the desired cleaning action.

The optimum angle for spraying water against a cleaning surface is 45 degrees (see Figure 12).

Spray water against a surface at a 45 degree angle to achieve the most beneficial impact force and to efficiently remove debris.

Operation (Continued)



Figure 12 - Optimum angle to cleaning surface

DISTANCE FROM CLEANING SURFACE

The distance between the spray tip and the cleaning surface is another factor that affects the impact force of the water. The impact force of the water increases as the spray tip is moved closer to the surface.

HOW TO AVOID DAMAGING SURFACES

Damage to cleaning surfaces occurs because the impact force of the water exceeds the durability of the surface. You can vary the impact force by controlling the spray tip angle to the cleaning surface and the distance from the cleaning surface and by changing the spray tip. NEVER use a narrow high impact stream on a surface that is susceptible to damage. Avoid spraying windows with a narrow high impact stream. Doing so may break the window. The most sure way to avoid damaging surfaces is to follow these steps:

1. Before triggering the gun, make sure the quick connect tip you are using is appropriate for the application.
2. Place the spray tip approximately 4-5 feet (1,22-1,52 m) away from the cleaning surface. Then hold the lance and spray tip at a 45 degree angle to the cleaning surface. Trigger the gun.
3. Vary the fan pattern spray angle and the distance to the cleaning surface until optimum cleaning efficiency is achieved without damaging the surface.

The color of the tip shows what spray angle it is:

Red – 0° – Maximum Duty*

Yellow – 15° – Heavy Duty

Green – 25° – General Duty*

White – 40° – Light Duty*

Black – 65° – Low Pressure Detergent

* = Not Included

4. Detergent Application

NOTE: Use only detergents formulated for pressure washers. Test detergent in an inconspicuous area before use.

DETERGENTS

The use of detergents can dramatically reduce cleaning time and assist in the removal of difficult stains. Many detergents are customized for pressure washer use on specific cleaning tasks. Pressure washer detergents are as thick as water. Using thicker detergents – like dish soap – will clog the chemical injection system and prevent the application of the detergent.

Once applied to a cleaning surface, detergents take time to break down dirt and grime. Detergents work best when applied at low pressure.

You can effectively clean surfaces by combining the chemical action of detergents with high pressure rinses. On vertical surfaces, apply the detergent starting at the bottom and work your way upward. This method prevents the detergent from sliding down and causing streaks. Begin high pressure rinsing at the bottom and work your way upward. On particularly tough stains, use a brush in combination with detergents and high pressure rinsing.

1. Follow manufacturer's label directions for mixing correct concentrations of soap/detergents. The soap detergent to water ratio through the pump is approximately 12% (1 to 8).
2. Pour detergent into the detergent tank. The tank capacity is 1.5 gallons.
3. Install 65° (Black) Low Pressure Detergent Tip in the quick connect fitting on the end of the lance.

⚠ WARNING NEVER replace quick connect tip when gun is triggered. Always engage trigger lock on gun before removing or installing quick connect tips.

GENERAL CLEANING TIPS

1. Apply the detergent so that it thoroughly covers the cleaning surface. Apply the detergent from bottom to top to prevent the detergent from sliding down and streaking. Wait a couple of minutes for the detergent to break down the dirt and grime. Use a brush to lightly scrub heavily soiled areas. Never allow the detergent to dry on the cleaning surface.
2. Replace black 65° quick connect tip with the yellow 15° tip and complete final rinse.

⚠ WARNING NEVER replace quick connect tip when gun is triggered. Always engage trigger lock on gun before removing or installing quick connect tips.

3. NOTE: After using detergents, flush the suction system by rinsing out tank with clean water and running unit with black 65° tip flushing clean water from tank through the pump.

Operation (Continued)

5. Cleaning Power

The easiest way to regulate the cleaning power of your pressure washer is by changing the distance from the surface you are cleaning. Begin spraying while standing several feet from the surface. Slowly move closer to the object you are cleaning until you find the most effective cleaning technique.

6. Final Rinse

The final rinse should start at the bottom and work upward. Make sure that you thoroughly rinse the surface and that you remove all detergent.

7. Pressure Relief Procedure

To reduce the risk of bodily injury or property damage, always follow this procedure whenever spraying is stopped, when work is completed, and before checking or repairing any part of the system.

1. Engage the trigger safety latch.
2. Turn the unit off.
3. Shut off the water supply.
4. Disengage the trigger safety latch and trigger the gun to relieve pressure.
5. Re-engage the trigger safety latch.
6. When checking or repairing unit, remove the ignition cable from the spark plug.
7. Before overnight storage, long term storage, or transporting unit, disconnect the water supply and turn off the fuel supply valve.

8. Shutdown

1. Be sure all detergent is flushed from system.
2. Turn the engine OFF.
3. Turn the water supply OFF.
4. After the engine and water supply are turned off, trigger the gun to depressurize the system.

NOTICE NEVER turn the water supply off before turning the enginemotor off. Serious damage could occur to the pump and/or enginemotor.

CAUTION NEVER disconnect the high pressure discharge hose from the machine while the system is pressurized. To depressurize, turn enginemotor off, turn water supply off and squeeze gun trigger 2-3 times.

5. After each use, wipe all surfaces of the pressure washer with a clean, damp cloth.
- Do not store the pressure washer outdoors.
- Do not store the pressure washer where it might freeze

9. Storage

unless it has been properly winterized.

LONG TERM STORAGE INSTRUCTIONS (MORE THAN 30 DAYS IN STORAGE)

1. Remove fuel from the tank and run the pressure washer in a normal operating mode until the engine stops from a lack of fuel. Normal operating mode means actually spraying water from the gun while the engine is running.
Alternate method – Add fuel stabilizer to gas in the tank and run in normal operating mode for at least five minutes.
2. Stop the engine, turn off the water supply, and trigger the gun to release pressure in the high-pressure hose.
3. Disconnect the water supply and high pressure hose from the pump.
4. Allow the engine to cool.
5. Disconnect the spark plug wire and remove the spark plug.
6. Pour 1/2 oz. of engine oil into the spark plug hole.

WARNING Never pull the starter rope on the engine when the spark plug is removed unless the spark plug hole is covered. Fuel vapor from the hole can ignite by a spark.

7. Place a rag over the spark plug hole and slowly pull the starter rope several times to distribute the oil.

WINTERIZING INSTRUCTIONS

1. Follow and complete the Long Term Storage Instructions above.
2. Disconnect the spark plug wire.
3. Disconnect the high pressure hose from the pump.
4. Insert a 12" to 14" piece of garden hose into the pump inlet.
5. Place a funnel in the other end of the garden hose.

NOTICE Read the manufacturer's instructions for safe handling and disposal of RV antifreeze.

6. Pour approximately 6 oz. of RV antifreeze into the funnel.
7. Pull the starter rope several times until the RV antifreeze comes out of the pump outlet.
8. Disconnect the high pressure hose from the gun and drain the hose. Hold the gun and lance in a vertical position and squeeze the trigger to drain the water out.

TIPS FOR EXTENDING THE LIFE OF YOUR PRESSURE WASHER

1. Never operate the unit without water.
2. Your pressure washer is not meant to pump hot water. Never connect your pressure washer to a hot water supply as it will significantly reduce the life of the pump.
3. Running the unit for more than one minute without spraying water causes heat to build up in the pump. Running the unit without spraying water can damage pump components.

Maintenance

Observe regular maintenance intervals to ensure maximum performance and life from the pressure washer. Refer to the schedule for recommended maintenance. If you operate the pressure washer in dusty conditions, perform maintenance checks more often.

ENGINE OIL CHANGING INSTRUCTIONS

CAUTION

Before tipping the engine or equipment to drain oil, drain fuel from the fuel tank.

NOTE: Change oil while the engine is cool.

1. Disconnect the spark plug wire from the spark plug.
2. Locate and remove the engine oil drain plug (See Figure 13).
3. Drain old oil.
4. Replace the drain plug and set the unit upright.
5. Refill the unit with new oil of a recommended type and quantity. Fill the unit to the proper level shown on the dipstick.

PUMP OIL CHANGING INSTRUCTIONS

Changing or refilling the oil in the pump requires removal of the pump from the engine and should not be required unless oil has leaked out due to worn or damaged oil seals in the pump. If oil has leaked out of the pump, bring the pressure washer to a certified Campbell Hausfeld service center for repair.

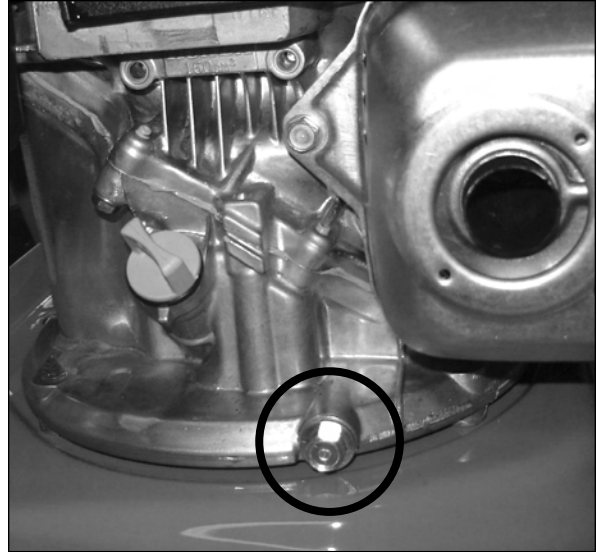


Figure 13 - Oil Drain Location

Maintenance Schedule

Maintenance Schedule	Action needed
Daily	<ul style="list-style-type: none"> • Check water inlet screen and filter. • Check engine oil levels. Fill as necessary. • Check gasoline level. Fill as necessary.
After first 5 hours of operation	<ul style="list-style-type: none"> • Change engine break-in oil. Use SAE30 or 10W-30 detergent oil.
Every 25 hours of operation	<ul style="list-style-type: none"> • Change oil if operating under heavy load or high ambient temperature. • Clean or replace paper air cleaner cartridge. Tap gently to remove dirt.
Every 50 hours of operation	<ul style="list-style-type: none"> • Change oil. • Replace spark plug.
Each 100 hours of operation or every 3 months	<ul style="list-style-type: none"> • Replace paper air cleaner cartridge. • Change engine oil.

Technical and Consumer Information

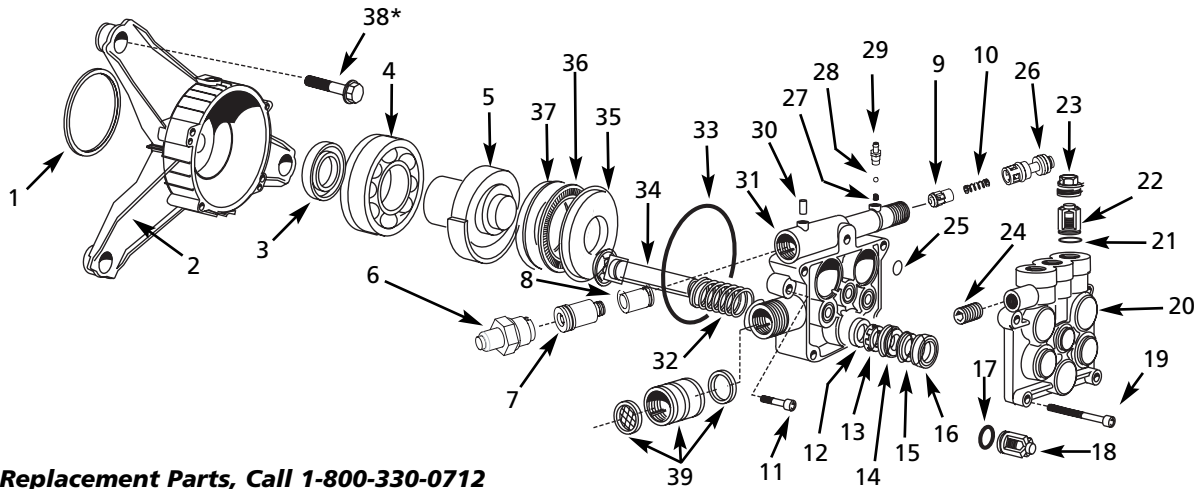
Vertical Oriented Pressure Washers	
Engine Oil Type	SAE 10W-30 SAE 30W (Above 60° F)
Engine Oil Capacity	Honda engines 18.5 fl. oz.
Engine Fuel Capacity	Honda engines 0.29 gal
Pump Oil Type	Wobble pumps SAE20W or SAE30W non-detergent oil
Pump Oil Capacity	Vertical wobble pumps 4.0 fl. oz.
Pump Detergent Suction	Water to detergent ratio 8 to 1 (12% detergent)
Water Supply Requirements	
Minimum inlet pressure	20 psi
Maximum inlet pressure	100 psi
Maximum inlet temperature	100° F
Minimum inlet flow rate	5 gpm
Inlet garden hose size	5/8" I.D.
Maximum inlet garden hose length	50 ft

Service Record

Date	Maintenance performed	Replacement components required

Replacement Parts List — Pump

PM341000SJ



For Replacement Parts, Call 1-800-330-0712

Address parts correspondence to:
Campbell Hausfeld
Attn: Customer Service
100 Mundy Memorial Drive
Mt. Juliet, TN 37122

Please provide following information:
- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Ref. No.	Description	Part Number	Qty.
1	Dust ring	■	-
2	Pump housing	■	-
3	Oil seal ring	■	-
4	Bearing	■	-
5	Wobble plate	■	-
6	Thermal relief valve	PM005405SV	1
7	Unloader valve body assembly	●	-
8	Body guide assembly	●	-
9	Check valve body assembly	●	-
10	Check valve spring	●	1
11	Screw	PM007500SV	2
12	Oil seal	◆	-
13	Oil seal spacer	▼	-
14	Seat seal ring	▼	-
15	Anti-extrusion ring	▼	-
16	Water seal	▲	-
17	O-ring	△□	-
18	Suction valve	△	-
19	Head bolt	PM025100SV	4
20	Head, 12 mm	PM255240SV	1

Ref. No.	Description	Part Number	Qty.
21	O-ring	★□	-
22	Outlet valve assembly	★	-
23	Valve cap	◇	-
24	Plug	PM064301SV	1
25	O-ring	PM041870SV	1
26	Chemical injector assembly	PM341015SV	1
27	Spring	○	-
28	Ball	○	-
29	O-ring and hose barb	○	-
30	Screw	PM064302SV	1
31	Piston body	PM341020SV	1
32	Piston spring	▽	-
33	O-ring, 85 x 2.5	□	-
34	Piston	▽	-
35	Thrust shoe	☆	-
36	Needle bearing	☆	-
37	Bearing disk	☆	-
38*	Bolt	MJ101211AV	3
39	Brass swivel assembly	PM041360SV	1

SERVICE KITS	PART NUMBER	QTY.
■ Housing assembly (Includes one each of items 1-5)	PM255230SV	1
● Unloader assembly (Includes one each of items 7-10 and 26)	PM344900SV	1
◆ Oil seal kit (Includes three each of item 12)	PM256500SV	1
▼ Piston guide kit (Includes three each of items 13-15)	PM344905SV	1
▲ Water seal kit (Includes three each of item 16)	PM344910SV	1
★ Outlet valve kit (Includes three each of items 21 and 22)	PM064304SV	1
△ Inlet valve kit (Includes three each of items 17 and 18)	PM064740SV	1
◇ Valve cap kit (Includes three each of item 23)	PM064750SV	1
□ O-ring kit (Includes three each of items 17 and 21 and one each of items 25 and 33)	PM058000SV	1
○ Detergent injector kit (Includes one each of items 27-29)	PM064305SV	1
▽ Piston kit (Includes three each of items 32 and 34)	PM344920SV	1
☆ Needle bearing kit (Includes one each of items 35-37)	PM041840SV	1

TORQUE SPECIFICATIONS (in-lbs)		
Ref. No.	Description	Torque
6	Thermal relief valve	110
11	Screw	96
19	Head bolt	96
23	Valve cap	240

Notes

* Available Separately
Oil capacity: 4 fl. oz.
Oil type: SAE 30W (non-detergent)

Replacement Parts List — Vertical Shaft Pressure Washer

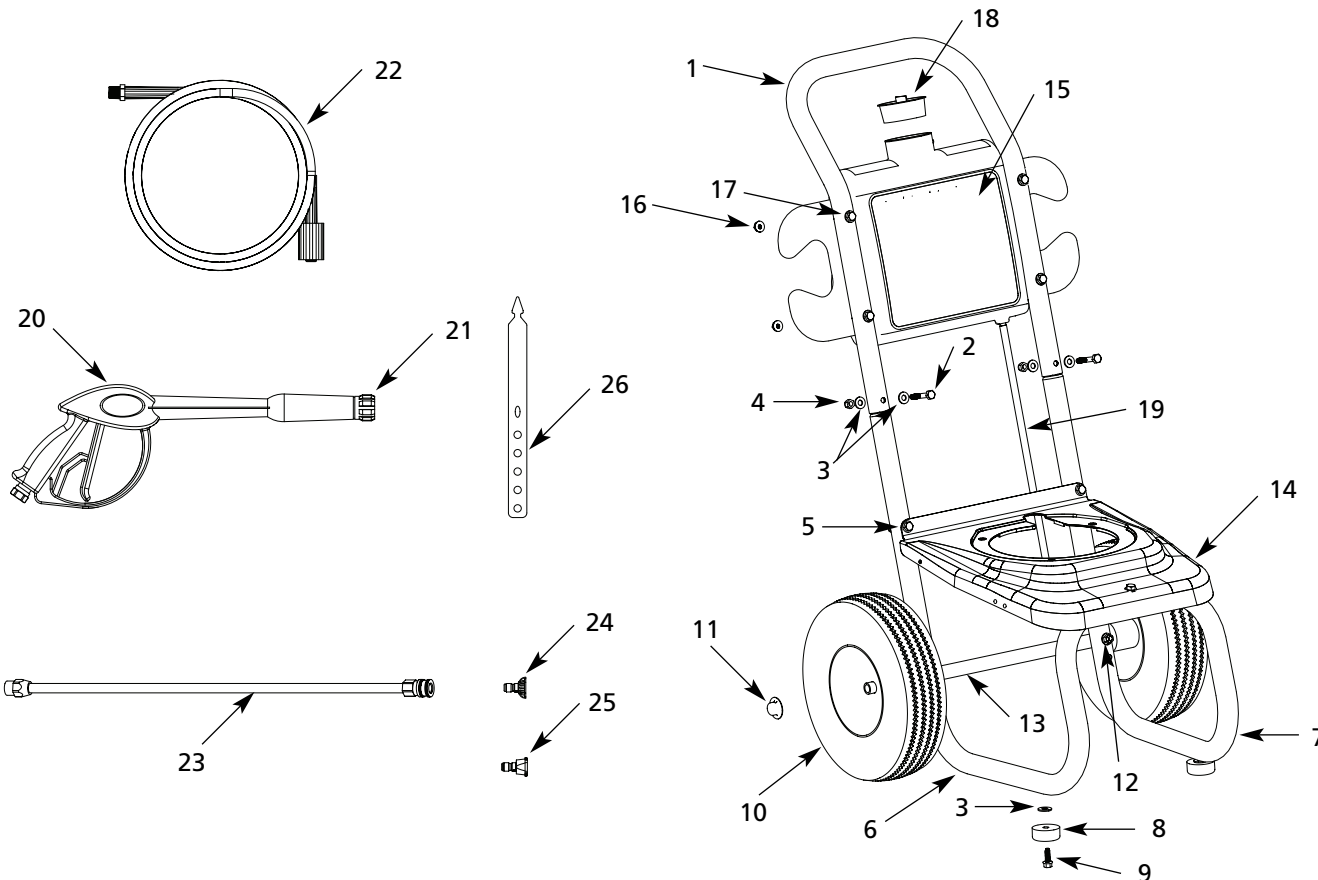
For Replacement Parts, Call 1-800-330-0712

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Campbell Hausfeld
 Attn: Customer Service
 100 Mundy Memorial Drive
 Mt. Juliet, TN 37122



Ref No.	Description	Product Number	Qty
1	Handle tube	PM344830BH	1
2 *	1/4" - 20 Bolt (handle)	PM001903AV	2
3 *	Flat washer	PM002000AV	18
4 *	1/4" - 20 Nylon lock nut	ST073808AV	7
5 *	1/4" - 20 Bolt (base)	PM001902AV	3
6	Left leg	PM344828BH	1
7	Right leg	PM345100BH	1
8	Rubber bumper	AL062300AV	2
9 *	1/4" - 20 x 3/4 Self tapping screw	MJ102100AV	2
10	Wheel	WA005600AV	2
11	Pushnut	PM066300AV	2
12 *	1/4" - 20 Bolt (axle)	PM001904AV	2
13	Axle	PM344831BH	1
14	Baseplate	PM345520AV	1
15	Detergent tank assembly	PM252000SJ	1
16	1/4" - 20 Serrated nut (tank)	PM031101AV	4
17	1/4" - 20 Bolt, (tank)"	MJ101104AV	4

Ref No.	Description	Product Number	Qty
18	Cap	PM252450AV	1
19	Detergent tube	PM013700SV	1
20	Gun	PM243000AV	1
21	O-ring (gun)	PM245800SV	1
22	Hose	PM344301AV	1
23	Lance	PM035120AV	1
24	Tip, 15° (yellow)	PM039880AV	1
25	Tip, 65° (black)	PM039820AV	1
26	Holder, QC Tip	PM344304AV	1
*	Item available at local hardware store		

**Tip Accessories Available for PW2515:
 (Not supplied with unit)**

Tip, 0° (Red)	PM039870AV
Tip, 25° (Green)	PM039890AV
Tip, 40° (White)	PM039900AV

Pressure Washer

Troubleshooting Chart - Gasoline Powered Pressure Washers Only

Symptom	Possible Cause(s)	Corrective Action(s)
Engine will not start or is hard to start	<ol style="list-style-type: none"> No gasoline in fuel tank or carburetor Low oil Start/Stop switch in stop position Water in gasoline or old fuel Dirty air cleaner filter Spark plug dirty, wrong gap or wrong type Spray gun closed Other causes 	<ol style="list-style-type: none"> Fill the tank with gasoline, open fuel shut off valve. Check fuel line and carburetor Check oil level. Fill if necessary Move switch to start position Drain fuel tank and carburetor. Use new fuel and dry spark plug Remove and clean or replace Clean, adjust the gap, or replace Trigger spray gun See engine owner's manual
Engine misses or lacks power	<ol style="list-style-type: none"> Partially plugged air cleaner filter Spark plug dirty, wrong gap or wrong type 	<ol style="list-style-type: none"> Remove and clean or replace Clean, adjust the gap, or replace
Low pressure and/or pump runs rough	<ol style="list-style-type: none"> Worn or wrong size tip Inlet filter on pump clogged Worn water seals, abrasives in water, or natural wear Fouled or dirty inlet or discharge valves Restricted inlet Worn inlet or discharge valves Leaking high pressure hose Pump drawing in air Unloader valve seat faulty or worn 	<ol style="list-style-type: none"> Replace with tip of proper size Clean. Check more frequently Check filter. Replace water seals. See service center Clean inlet and discharge valve assemblies. Check filter Check garden hose, may be collapsed or kinked. Check inlet water flow Replace worn valves Replace high pressure hose Ensure hoses and fittings are tight Check and replace
Water leakage from under pump manifold	Worn water seals	Install new water seals. See service center
Water in pump crankcase (milky oil)	<ol style="list-style-type: none"> Humid air condensing inside crankcase Oil seals leaking 	<ol style="list-style-type: none"> Change oil as specified in maintenance schedule Install new oil seals. See service center
Frequent or premature failure of the pump water seals	<ol style="list-style-type: none"> Scored damaged or worn plungers Abrasive material in the fluid Inlet water temperature too high Overpressurizing pump Excessive pressure due to partially plugged or damaged tip Pump running too long without spraying Pump running dry 	<ol style="list-style-type: none"> Install new plungers. See service center Install proper filtration on pump inlet plumbing Check water temperature; may not exceed 100° F. Do not modify any factory set adjustments. Clean or replace tip. Never run pump more than 2 minutes without spraying Do not run pump without water
Strong surging at the inlet and low pressure	Foreign particles in the inlet or discharge valve or worn inlet and/or discharge valves	Clean or replace valves. See service center
Oil leakage between the engine and the pump	Worn oil seals and/or o-ring	Replace oil seals and/or o-ring. See service center
Fluctuating pressure	<ol style="list-style-type: none"> Valve worn, dirty or stuck Pump drawing in air Tip clogged 	<ol style="list-style-type: none"> Check and replace Ensure hoses and fittings are tight. Purge air from garden hose Check or replace
Pressure drops after period of normal use	<ol style="list-style-type: none"> Worn pump water seals Nozzle worn Valve worn, dirty or stuck Unloader valve seat worn or dirty 	<ol style="list-style-type: none"> Check and replace Check and replace Check, clean or replace Check, clean or replace
Pump noisy / pump runs rough	<ol style="list-style-type: none"> Pump drawing in air/low water supply Valves dirty or worn Worn bearings Water too hot 	<ol style="list-style-type: none"> Ensure fittings are tight. Increase water pressure Check, clean or replace Check and replace Reduce temperature below 100° F
Pressure washer will not spray detergent	<ol style="list-style-type: none"> Nozzle not pushed up far enough Clog, kink, or hole in detergent suction hose Hose length too long Lance not functioning properly 	<ol style="list-style-type: none"> Push nozzle forward as far as it will go. If clean, unkink or replace hose. Use only hose length provided with initial purchase of pressure washer. Detergent suction will not function if more than one section of hose is attached to unit. Remove lance from gun. If detergent is dispensed through gun, the lance must be replaced. If no detergent is dispensed through gun, remove 1" tapered detergent barb from pump. Clean the barb, and make sure that ball and spring are properly aligned with tapered portion of the spring facing the ball. The ball should be on top of the spring.

Limited Warranty

1. DURATION: From the date of purchase by the original purchaser as follows: Two Years
2. WHO GIVES THIS WARRANTY (WARRANTOR): Campbell Hausfeld / Scott Fetzer Company, 100 Mundy Memorial Drive, Mount Juliet, TN 37122, Telephone: (800) 330-0712
3. WHO RECEIVES THIS WARRANTY (PURCHASER): The original purchaser (other than for purposes of resale) of the Campbell Hausfeld pressure washer.
4. WHAT PRODUCTS ARE COVERED UNDER THIS WARRANTY: Any Campbell Hausfeld Pressure Washer supplied or manufactured by the Warrantor.
5. WHAT IS COVERED UNDER THIS WARRANTY: Substantial defects on material and workmanship which occur within the duration of the warranty period with the exceptions noted below.
6. WHAT IS NOT COVERED UNDER THIS WARRANTY:
 - A. Implied warranties, including those of merchantability and FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED FROM THE DATE OF ORIGINAL PURCHASE AS STATED IN THE DURATION. If this pressure washer is used for commercial, industrial or rental purposes, the warranty will apply for ninety (90) days from the date of purchase. Some States do not allow limitation on how long an implied warranty lasts, so the above limitations may not apply to you.
 - B. ANY INCIDENTAL, INDIRECT, OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE, OR MALFUNCTION OF THE CAMPBELL HAUSFELD PRESSURE WASHER. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
 - C. Any failure that results from shipping damage, accident, purchaser's abuse, neglect or failure to install and operate pressure washer in accordance with instructions provided in the owner's manual(s) supplied with product.
 - D. Pre-delivery service, i.e. assembly, oil or lubricants and adjustment.
 - E. Items or service normally required to maintain the pressure washer.
 - F. Gasoline engine and components are expressly excluded from coverage under this limited warranty. Such components should be returned by the purchaser to the original manufacturer or to its authorized repair stations for service.
 - G. Additional items not covered under the warranty:
 1. Normal wear items such as high pressure hoses, water and oil seals, o-rings, valves, lances and spray tips.
 2. Motor brushes (Electric models only).
 3. Cosmetic defects that do not interfere with functionality.
 4. Rusted components.
 5. Pump wear or valve damage caused by using improper oil, oil contamination or by failure to follow proper oil maintenance guidelines.
7. RESPONSIBILITIES OF WARRANTOR UNDER THIS WARRANTY: Repair or replace, at Warrantor's option, pressure washer or component which is defective, has malfunctioned and/or failed to conform within duration of the warranty period.
8. RESPONSIBILITIES OF PURCHASER UNDER THIS WARRANTY:
 - A. Provide dated proof of purchase and maintenance records.
 - B. Deliver or ship the Campbell Hausfeld pressure washer or component to nearest Campbell Hausfeld Authorized Service Center. Freight costs, if any, must be borne by the purchaser.
 - C. Use reasonable care in the operation and maintenance of the pressure washer as described in the owner's manual(s).
9. WHEN WARRANTOR WILL PERFORM REPAIR OR REPLACEMENT UNDER THIS WARRANTY: Repair or replacement will be scheduled and serviced according to the normal work flow at the servicing location, and depending on the availability of replacement parts.

This Limited Warranty applies in the U.S., Canada and Mexico only and gives you specific legal rights. You may also have other rights which vary from state to state or country to country.