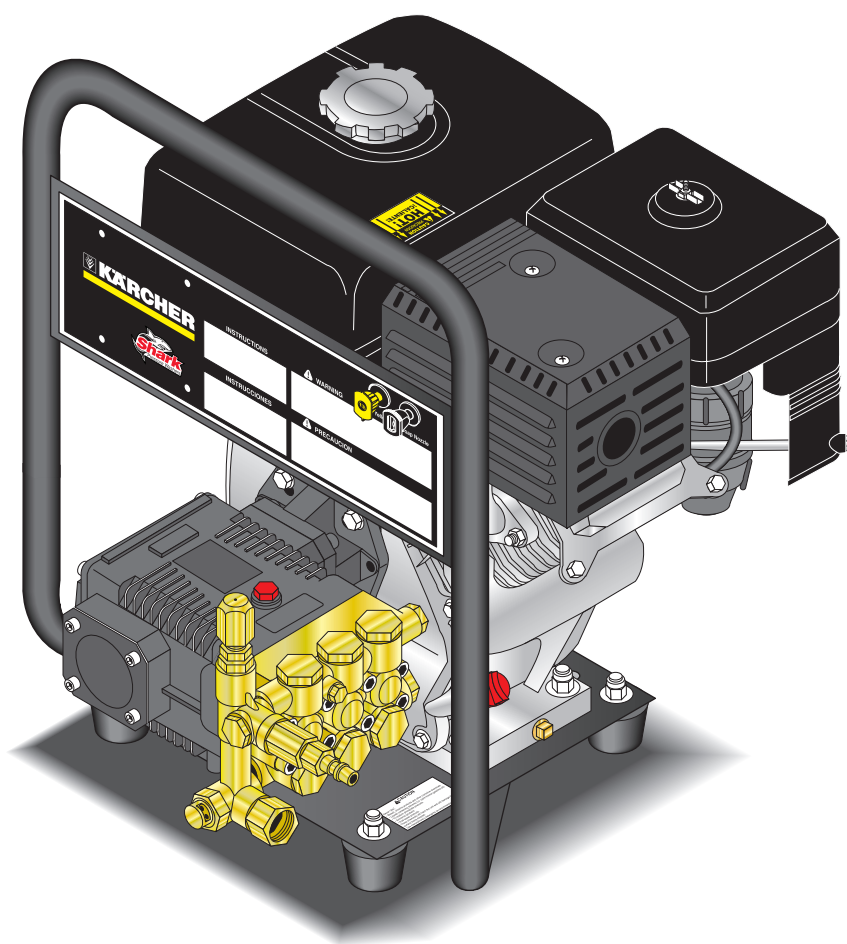




OPERATOR'S MANUAL



MODEL

HD 2.3/24 P / CD-232437

HD 2.3/23 P / CD-232336

ORDER

1.575-350.0

1.575-351.0

To locate your local Kärcher Shark Commercial Pressure Washer Dealer nearest you,
visit www.karchercommercial.com or www.karchershark.com

9.800-087.0

CONTENTS

Important Safety Information	4-5
Component Identification	6
Assembly Instructions.....	7
Operating Instructions.....	8-9
Applying Detergent and General Operating Techniques.....	10
Shut Down and Clean-Up	11
Storage	11
Troubleshooting	12-13
Preventative Maintenance	14
Oil Change Record	14
Hose and Spray Gun Assembly.....	15
Exploded View	16
Exploded View Parts List	17
KG.1 Pump Exploded View and Parts List.....	18-19
Pump Exploded View and Parts List.....	20
Pump, Piston View, Exploded View and Parts List.....	21
VBA35 Unloader Exploded View and Parts List	22
Warranty	

Model Number _____

Serial Number _____

Date of Purchase _____

The model and serial numbers will be found on a decal attached to the pressure washer. You should record both serial number and date of purchase and keep in a safe place for future reference.

INTRODUCTION & IMPORTANT SAFETY INFORMATION

Thank you for purchasing this Pressure Washer.
We reserve the right to make changes at any time without incurring any obligation.

Owner/User Responsibility:

The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using this pressure washer. Warning information should be emphasized and understood. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

Owner and/or user must study and maintain for future reference the manufacturers' instructions.

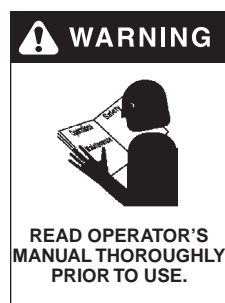
The operator must know how to stop the machine quickly and understand the operation of all controls. Never permit anyone to operate the engine without proper instructions.

This manual should be considered a permanent part of the machine and should remain with it if machine is resold.

When ordering parts, please specify model and serial number. Use only identical replacement parts.

This machine is to be used only by trained operators.

IMPORTANT SAFETY INFORMATION



WARNING: To reduce the risk of injury, read operating instructions carefully before using.

1. Read the owner's manual thoroughly. Failure to follow instructions could cause malfunction of the machine and result in death, serious bodily injury and/or property damage.
2. Know how to stop the machine and bleed pressure quickly. Be thoroughly familiar with the controls.
3. Stay alert — watch what you are doing.
4. All installations must comply with local codes. Contact your electrician, plumber, utility company or the selling distributor for specific details.



WARNING: Risk of asphyxiation. Use this product only in a well ventilated area.

5. Avoid installing machines in small areas or near exhaust fans. Exhaust contains poisonous carbon monoxide gas; exposure may cause loss of consciousness and may lead to death. It also contains

chemicals known, in certain quantities, to cause cancer, birth defects or other reproductive harm.



WARNING: Risk of fire. Do not add fuel when the product is operating.

WARNING: Risk of explosion — do not spray flammable liquids.

6. Do not place machine near flammable objects as the engine is hot.

WARNING: This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact: Local fire agencies for laws or regulations relating to fire prevention requirements.

7. Allow engine to cool for 1-2 minutes before refueling. If any fuel is spilled, make sure the area is dry before testing the spark plug or starting the engine. (Fire and/or explosion may occur if this is not done.)

Gasoline engines on mobile or portable equipment shall be refueled:

- a. outdoors;
- b. with the engine on the equipment stopped;
- c. with no source of ignition within 10 feet of the dispensing point; and
- d. with an allowance made for expansion of the fuel should the equipment be exposed to a higher ambient temperature.

In an overfilling situation, additional precautions are necessary to ensure that the situation is handled in a safe manner.

WARNING: Risk of injury. Disconnect battery ground terminal before servicing.

8. Transport/repair with fuel tank EMPTY or with fuel shut-off valve OFF.

IMPORTANT SAFETY INFORMATION

! WARNING



WARNING: Keep wand, hose, and water spray away from electric wiring or fatal electric shock may result.

9. Do not spray water on or near electrical components.

! WARNING



WARNING: Flammable liquids can create fumes which can ignite, causing property damage or severe injury.

WARNING: Risk of explosion — Do not spray flammable liquids.

10. Keep operating area clear of all persons.

WARNING: This machine exceeds 85 db appropriate ear protection must be worn.

! WARNING



! WARNING



WARNING: High pressure spray can cause paint chips or other particles to become airborne and fly at high speeds. To avoid personal injury, eye, hand and foot safety devices must be worn.

11. Eye, hand, and foot protection must be worn when using this equipment.

! WARNING



WARNING: Grip cleaning wand securely with both hands before starting. Failure to do this could result in injury from a whipping wand.

12. To reduce the risk of injury, close supervision is necessary when a machine is used near children. Do not allow children

to operate the pressure washer. **This machine must be attended during operation.**

! WARNING



WARNING: High pressure developed by these machines will cause personal injury or equipment damage. Keep clear of nozzle. Use caution when operating. Do not direct discharge stream at people, or severe injury or death will result.

13. Never make adjustments on machine while in operation.

14. Be certain all quick coupler fittings are secured before using pressure washer.

! WARNING



WARNING: Protect machine from freezing.

15. To keep machine in best operating conditions, it is important you protect machine from freezing. Failure to protect machine from freezing could cause malfunction of the machine and result in death,

serious bodily injury, and/or property damage. Follow storage instructions specified in this manual.

16. The best insurance against an accident is precaution and knowledge of the machine.

! WARNING



WARNING: Be extremely careful when using a ladder, scaffolding or any other relatively unstable location. The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.

17. Do not overreach or stand on unstable support. Keep good footing and balance at all times.

18. Do not operate this machine when fatigued or under the influence of alcohol, prescription medications, or drugs.

19. Inlet water must be clean fresh water and no hotter than 90°F.

20. Manufacturer will not be liable for any changes made to our standard machines or any components not purchased from us.

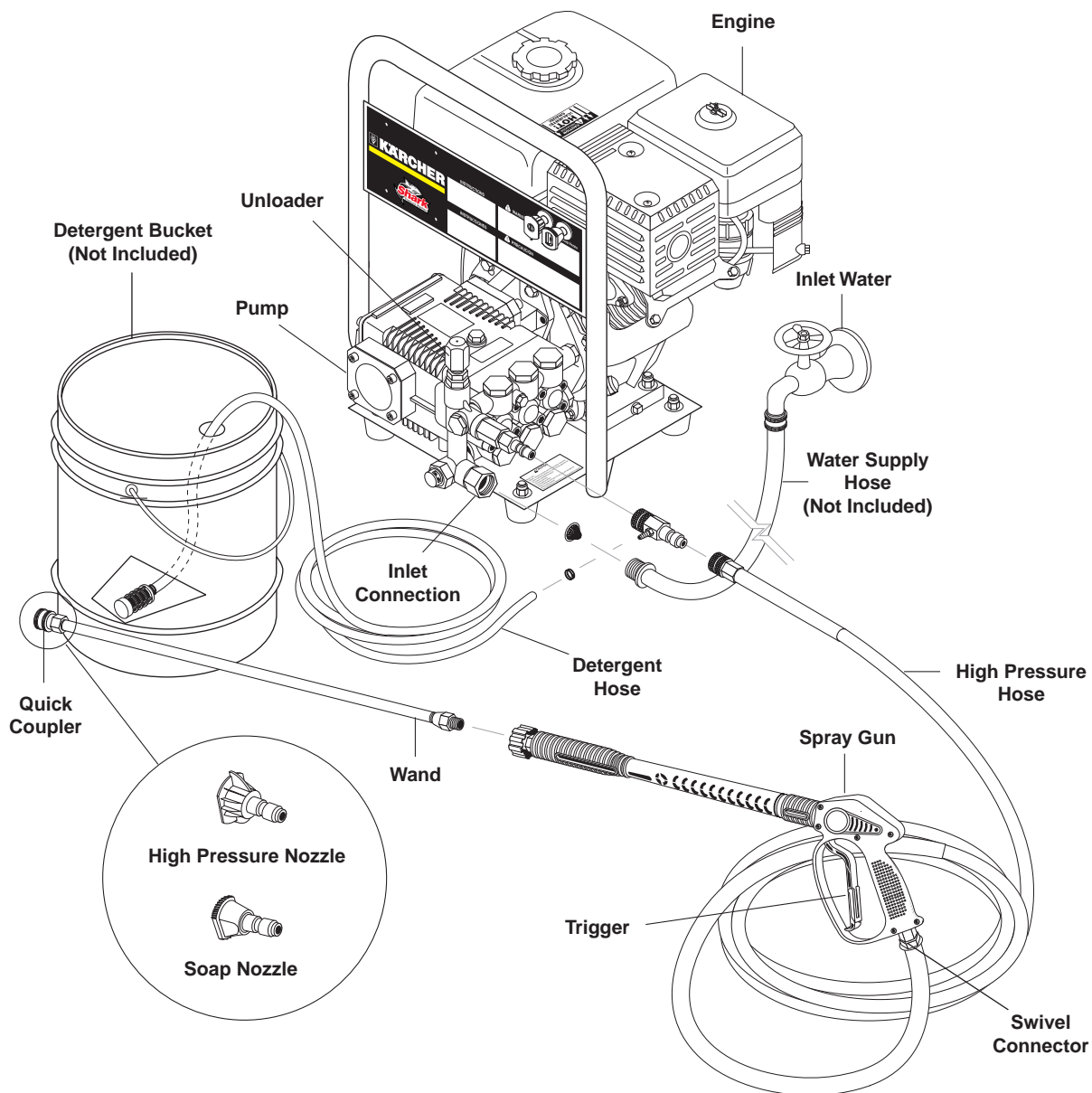
21. Do not allow acids, caustic or abrasive fluids to pass through the pump.

22. Never run pump dry or leave spray gun closed longer than 1-2 minutes.



Follow the maintenance instructions specified in the manual.

COMPONENT IDENTIFICATION



Detergent Injector - Allows you to siphon and mix detergents.

High Pressure Hose — Connect one end to water pump discharge nipple and the other end to spray gun.

Nozzle Quick Coupler -

Pump — Develops high pressure.

Starter Grip — Used for starting the engine manually.

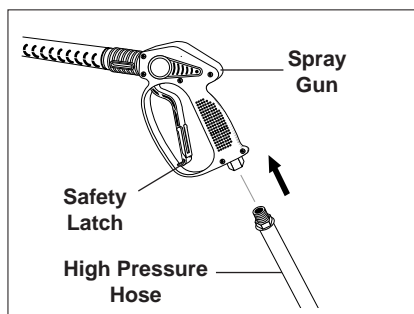
Spray Gun — Controls the application of water and detergent onto cleaning surface with trigger device. Includes safety latch.

Straight Through Wand — Must be connected to the spray gun.

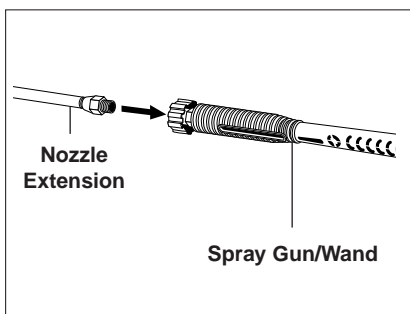
Swivel Connector - Allows free range of movement to avoid coiling hoses.

Note: If trigger on spray gun is released for more than 2 minutes, water will leak from valve. Warm water will discharge from pump protector onto floor. This system prevents internal pump damage.

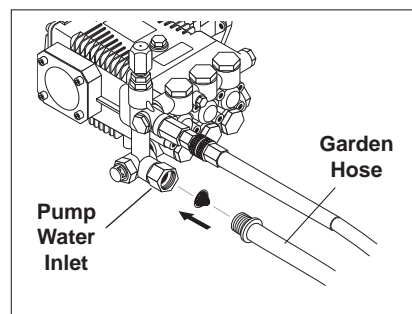
ASSEMBLY INSTRUCTIONS



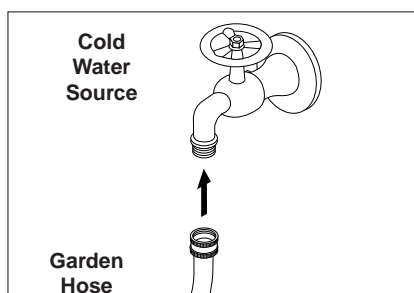
STEP 1: Attach the high pressure hose to the spray gun using teflon tape on hose threads.



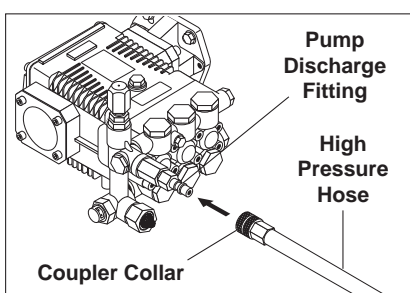
STEP 2: Attach nozzle extension to spray gun/wand. Tighten both by hand.



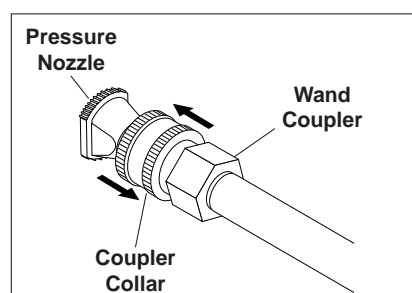
STEP 3: Connect the garden hose to pump water inlet. Inspect inlets. **CAUTION: Do not run the pump without water or pump damage will result.**



STEP 3: Connect garden hose to the cold water source. Before installing nozzle, turn on water supply and run machine allowing water to flush through the system until clear.

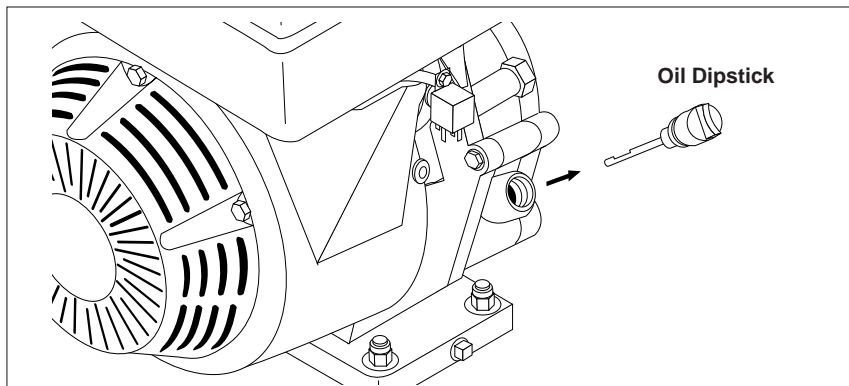


STEP 5: Connect the high pressure hose to the pump discharge fitting. Push coupler collar forward until secure.

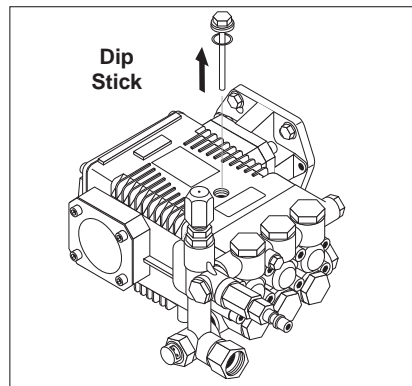


STEP 6: Pull the spring-loaded collar of the wand coupler back to insert your choice of pressure nozzle. Release the coupler collar and push the nozzle until the collar clicks. Pull the nozzle to make sure it is seated properly.

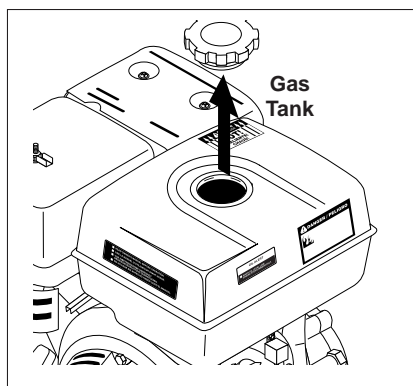
OPERATING INSTRUCTIONS



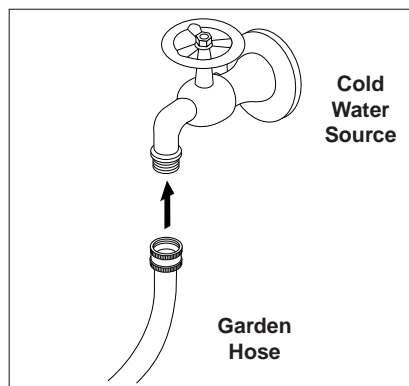
STEP 1: Check engine oil level. Oil level should be level with the bottom of the oil filler neck. Be sure the machine is level when checking the oil level. (Refer to the engine's operating manual included with machine.) We recommend that the oil be changed after the first 5 hours of use, then once every 50 hours. **Note:** Improper oil levels will cause low oil sensor to shut off engine. **IMPORTANT! Do not run engine with high or low oil levels as this will cause engine damage.**



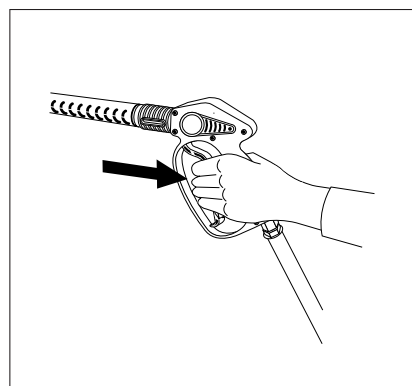
STEP 2: Remove shipping cap and install oil dipstick. Check pump oil level by using dipstick or observe oil level in oil window (if equipped). Use 30 wt. non detergent oil.



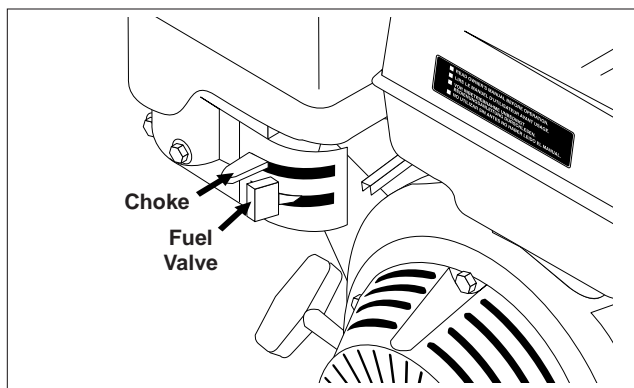
STEP 3: Fill gas tank with unleaded gasoline. Do not use leaded gasoline.



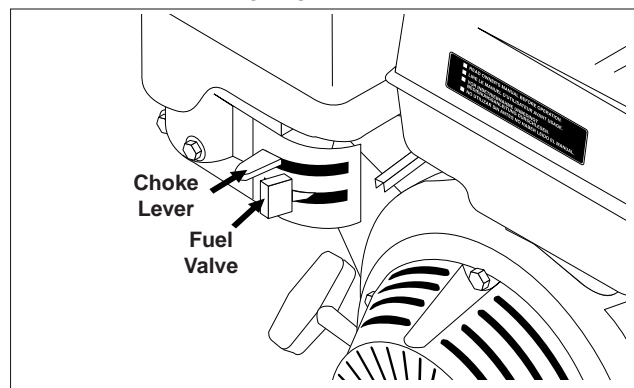
STEP 4: Connect garden hose to the cold water source and turn water on completely. Never use hot water.



STEP 5: Trigger the spray gun to eliminate trapped air then wait for a steady flow of water to emerge from the spray wand. Then install nozzle.

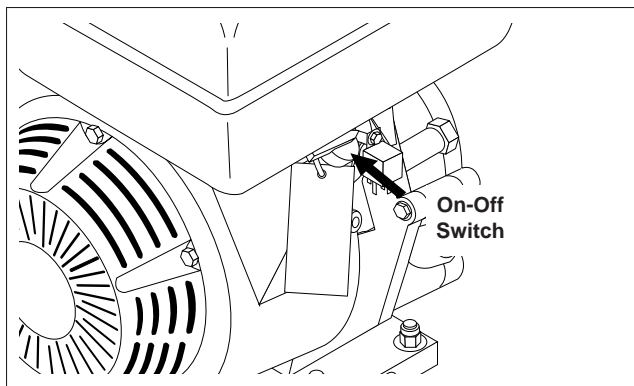


STEP 6: Rotate the fuel shut-off valve to the "On" position (fully counterclockwise on Briggs engines). Slide the fuel valve lever to the "ON" position (Honda engines). When the engine is not in use, leave the fuel valve in the "OFF" position.



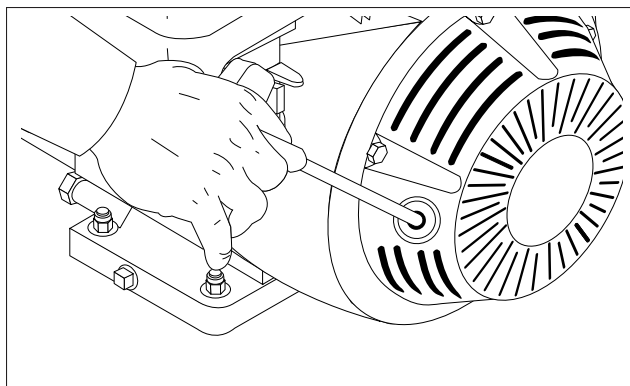
STEP 7: Move the choke lever to the "Choke" position (on a warm engine, leave the choke lever in the run position). On Honda engines, move the choke lever to the "Closed" position. To restart a warm engine, leave the choke lever in the "Open" position.

OPERATING INSTRUCTIONS



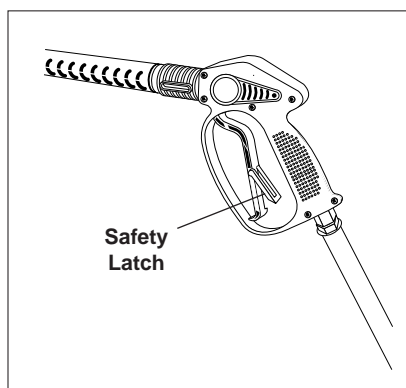
STEP 8: On Honda engines, turn the engine switch to "On" position.

On Briggs engines, move the throttle lever to "Fast" position, shown on engine as a rabbit.

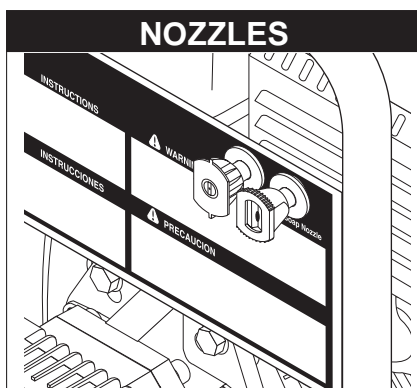


STEP 9: Pull the starter grip. If the engine fails to start after 2 pulls, squeeze the trigger gun to release pressure and repeat step. Return starter gently. After the engine warms up enough to run smoothly, move choke to run position and throttle to fast position.

CAUTION: Small engines may kick back. Do not hold pull starter grip tightly in hand.



⚠ WARNING! Never replace nozzles without engaging the safety latch on the spray gun trigger.



The two color-coded quick connect nozzles are easily accessible when placed in the convenient rubber nozzle holder, which is provided on the front of the machine.

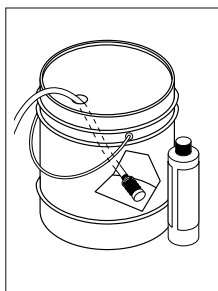
NOTE: To rinse, select the yellow. To apply detergent select the black nozzle.

DETERGENTS AND GENERAL OPERATING TECHNIQUES

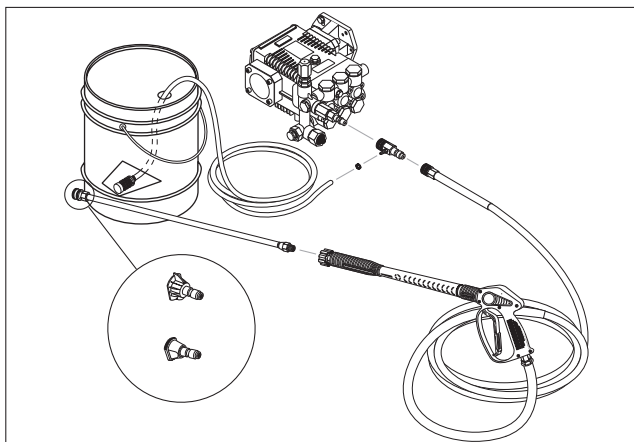
WARNING



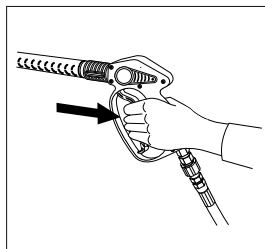
WARNING: Some detergents may be harmful if inhaled or ingested, causing severe nausea, fainting or poisoning. The harmful elements may cause property damage or severe injury.



STEP 1: Use detergent designed specifically for pressure washers. Household detergents could damage the pump. Prepare detergent solution as required by the manufacturer. Fill a container with pressure washer detergent. Place the filter end of detergent suction tube into the detergent container.



STEP 2: With safety latch on spray gun engaged, secure black detergent nozzle into quick coupler. **NOTE:** Detergent cannot be applied using the yellow nozzle.



STEP 3: With the engine running, pull trigger to operate machine. Liquid detergent is drawn into the machine and mixed with water. Apply detergent to work area. Do not allow detergent to dry on surface.

IMPORTANT: You must flush the detergent injection system after each use by placing the suction tube into a bucket of clean water, then run the pressure washer in low pressure for 1-2 minutes.

THERMAL PUMP PROTECTION

If you run the engine on your pressure washer for 3-5 minutes without pressing the trigger on the spray gun, circulating water in the pump can reach high temperatures. When the water reaches this temperature, the pump protector engages and cools the pump by dis-

charging the warm water onto the ground. This thermal device prevents internal damage to the pump.

CLEANING TIPS

Pre-rinse cleaning surface with fresh water. Place detergent suction tube directly into cleaning solution and apply to surface at low pressure (for best results, limit your work area to sections approximately 6 feet square and always apply detergent from bottom to top). Allow detergent to remain on surface 1-3 minutes. Do not allow detergent to dry on surface. If surface appears to be drying, simply wet down surface with fresh water. If needed, use brush to remove stubborn dirt. Rinse at high pressure from top to bottom in an even sweeping motion keeping the spray nozzle approximately 1 foot from cleaning surface. Use overlapping strokes as you clean and rinse any surface. For best surface cleaning action spray at a slight angle.

Recommendations:

- Before cleaning any surface, an inconspicuous area should be cleaned to test spray pattern and distance for maximum cleaning results.
- If painted surfaces are peeling or chipping, use extreme caution as pressure washer may remove the loose paint from the surface.
- Keep the spray nozzle a safe distance from the surface you plan to clean. High pressure wash a small area, then check the surface for damage. If no damage is found, continue to pressure washing.

CAUTION - Never use:

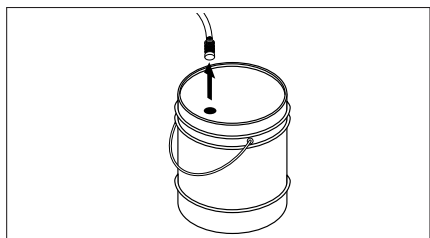
- Bleach, chlorine products and other corrosive chemicals
- Liquids containing solvents (i.e., paint thinner, gasoline, oils)
- Tri-sodium phosphate products
- Ammonia products
- Acid-based products

These chemicals will harm the machine and will damage the surface being cleaned.

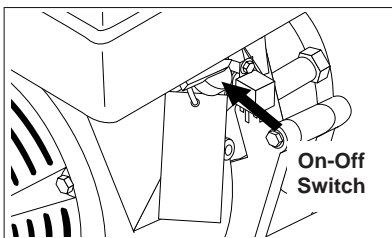
RINSING

It will take a few seconds for the detergent to clear. Apply safety latch to spray gun. Remove black soap nozzle from the quick coupler. Select and install the desired high pressure nozzle. **NOTE:** You can also stop detergent from flowing by simply removing detergent siphon tube from bottle.

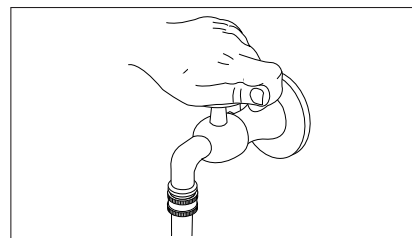
SHUTTING DOWN AND CLEAN-UP



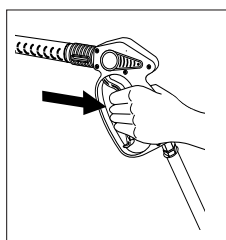
STEP 1: Remove detergent suction tube from container and insert into one gallon of fresh water. Slide nozzle forward for low pressure or to connect black detergent nozzle. Pull trigger on spray gun and siphon water for one minute.



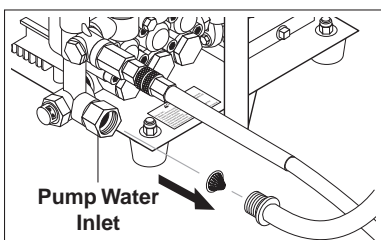
STEP 2: Move the throttle to stop the engine (Briggs Engine). Turn off the engine (Honda engines).



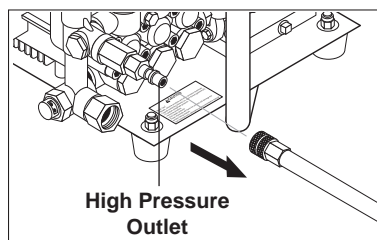
STEP 3: Turn off water supply.



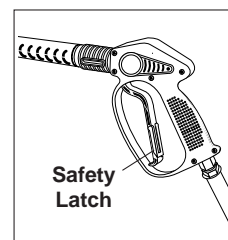
STEP 4: Press trigger to release water pressure.



STEP 5: Disconnect the garden hose from the water inlet on the machine.



STEP 6: Disconnect the high pressure hose from high pressure outlet.



STEP 7: Engage spray gun safety lock.

STORAGE

CAUTION: Always store your pressure washer in a location where the temperature will not fall below 32°F (0°C). The pump in this machine is susceptible to permanent damage if frozen. **FREEZE DAMAGE IS NOT COVERED BY WARRANTY.**

1. Stop the pressure washer, squeeze spray gun trigger to release pressure.
2. Detach water supply hose and high pressure hose.
3. Turn on the machine for a few seconds, until remaining water exits. Turn engine off immediately.
4. Drain the gas and oil from the engine.
5. Do not allow high pressure hose to become kinked.
6. Store the machine and accessories in a room which does not reach freezing temperatures.

CAUTION: Failure to follow the above directions will result in damage to your pressure washer.

When the pressure washer is not being operated or is being stored for more than one month, follow these instructions:

1. Replenish engine oil to upper level.
2. Drain gasoline from fuel tank, fuel line, fuel valve and carburetor.
3. Pour about one teaspoon of engine oil through the spark plug hole, pull the starter grip several times and replace the plug. Then pull the starter grip

slowly until you feel increased pressure which indicates the piston is on its compression stroke and leave it in that position. This closes both the intake and exhaust valves to prevent rusting of cylinder.

4. Cover the pressure washer and store in a clean, dry place that is well ventilated away from open flame or sparks. **NOTE:** The use of a fuel additive, such as STA-BIL®, or an equivalent, will minimize the formulation of fuel deposits during shortage. Such additives may be added to the gasoline in the fuel tank of the engine, or to the gasoline in a storage container.

After Extended Storage



CAUTION: Prior to restarting, thaw out any possible ice from pressure washer hoses, spray gun or wand.

Engine Maintenance

During the winter months, rare atmospheric conditions may develop which will cause an icing condition in the carburetor. If this develops, the engine may run rough, lose power and may stall. This temporary condition can be overcome by deflecting some of the hot air from the engine over the carburetor area. **NOTE:** Refer to the engine manufacturer's manual for service and maintenance of the engine.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
LOW OPERATING PRESSURE	Faulty pressure gauge	Install new gauge.
	Insufficient water supply	Use larger garden hose; clean filter washer at water inlet.
	Old, worn or incorrect spray nozzle	Match nozzle number to machine and/or replace with new nozzle.
	Plumbing or hose leak	Check plumbing system for leaks. Retape leaks with teflon tape.
	Faulty or misadjusted unloader valve (where applicable)	Adjust unloader for proper pressure. Install repair kit when needed. Note: Tampering with the factory setting may cause personal injury and/or property damage, and will void the manufacturer's warranty.
	Worn packing in pump	Install new packing kit.
	Fouled or dirty inlet or discharge valves in pump	Clean inlet and discharge valves.
	Worn inlet or discharge valves	Replace with valve kit.
	Slow engine RPM	Set engine speed per specifications (approximately 2800 RPM - 3400 RPM)
FLUCTUATING PRESSURE	Valves worn	Check and replace if necessary.
	Blockage in valve	Check and clean out if necessary.
	Pump sucking air	Check water supply and suction line for air seepage at joints.
	Worn piston packing	Check and replace if necessary.
PRESSURE LOW AFTER PERIOD OF NORMAL USE	Nozzle worn	Check and replace if necessary.
	Inlet or discharge valves blocked or worn	Check and clean or replace if necessary.
	Unloader valve seat worn	Check and replace if necessary.
PUMP NOISE	Air suction line	Check water supply and connections on suction line.
	Broken or weak inlet or discharge valve springs	Check and replace if necessary.
	Foreign matter in valves	Check and clean if necessary.
	Worn bearings	Check and replace if necessary.
	Excessive temperature of liquid	Reduce to below 180°F (75°C)

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
PRESENCE OF WATER IN PUMP OIL	Water sprayed at machine	Change oil. Direct spray away from machine.
	High humidity in air	Check and change oil twice as often.
	Piston packing worn. Oil seal worn	Check and replace if necessary.
ENGINE STRAINS UNDER LOAD	Engine governor misadjusted	Readjust governor on engine. Take to local engine representative for adjustment.
	Incorrect spray nozzle	Install proper nozzle size (See serial plate for proper size).
	Obstruction in spray nozzle	Remove obstruction.
	Misadjusted unloader valve	Contact local dealer or technical support.
	Engine low or out of oil	Check oil level.
	Pump low or out of oil	Check oil level.
	Obstruction in hose, fitting	Clean or replace hose, fitting.
	Gasoline engine altitude	The gasoline engine is preset for operation at altitudes below 1000 feet above sea level. If operated at higher altitudes, it may be necessary to install a high altitude main jet carburetor. Contact your local authorized engine sales and service center for details.
OIL SQUIRTS OUT OF OIL CAP ON PUMP	Pump overfilled with oil	Maintain oil level at red dot on sight glass at rear of pump or at top of notch on dipstick (where applicable).
ENGINE OPERATES FOR 15 MINUTES THEN STOPS	Not enough gas or engine oil	Fill tank with gas. Check oil level.
	Vapor lock developed by heat of day	Keep gas tank full to avoid vapor lock.
	Obstruction in fuel filter	Clean or replace fuel filter.
WATER DRIPPING FROM UNDER PUMP	Piston packing worn	Check and replace if necessary.
	O-ring plunger retainer worn	Check and replace if necessary.
	Cracked piston	Check and replace if necessary.
OIL DRIPPING	Oil seal worn	Check and replace if necessary.
EXCESSIVE VIBRATION IN DELIVERY LINE	Irregular functioning of the valves	Check and replace if necessary.
WATER LEAKING FROM PUMP PROTECTOR	Spray gun closed with machine running 5 minutes or longer.	Open spray gun or turn off machine.
	Excessive water supply pressure	Place a pressure regulator at end of 50' garden hose.

PREVENTATIVE MAINTENANCE

This pressure washer was produced with the best available materials and quality craftsmanship. However, you as the owner have certain responsibilities for the correct care of the equipment. Attention to regular preventative maintenance procedures will assist in preserving the performance of your equipment. Contact your dealer for maintenance. Regular preventative maintenance will add many hours to the life of your pressure washer. Perform maintenance more often under severe conditions.

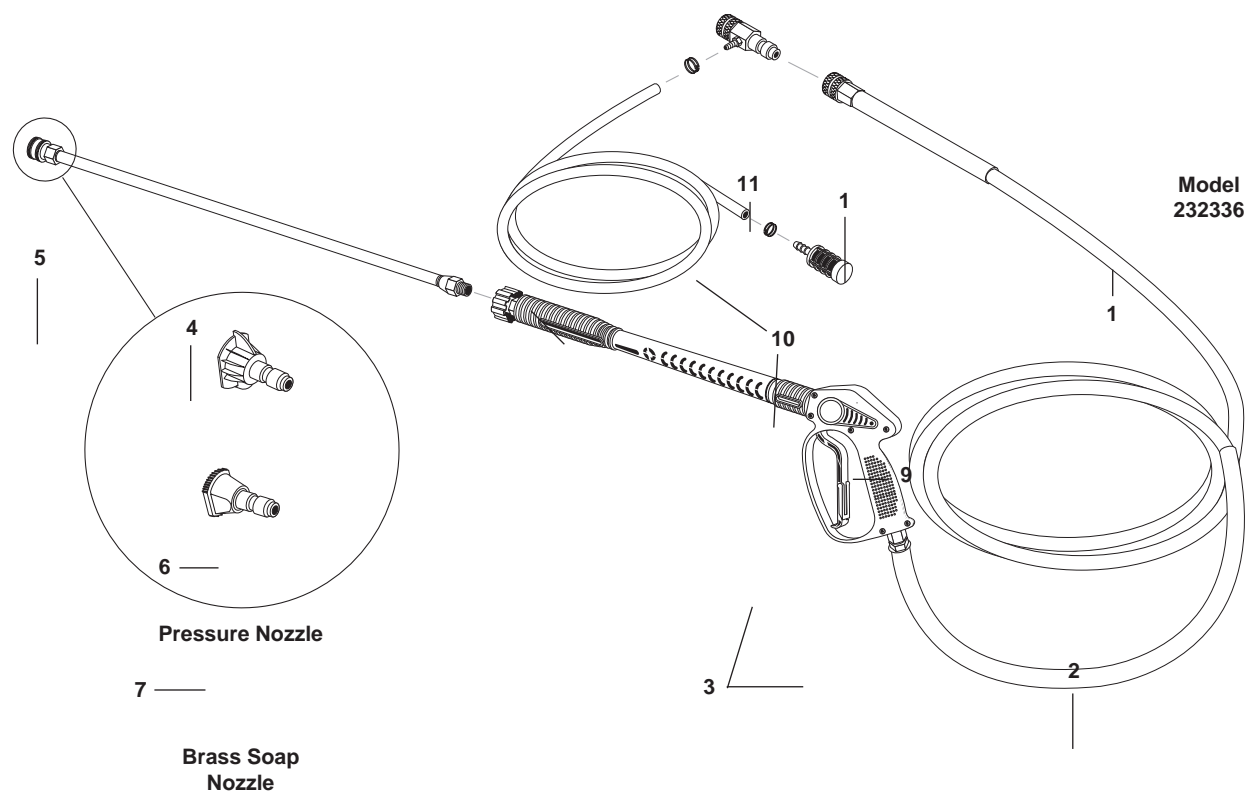
MAINTENANCE SCHEDULE		
Engine Oil	Inspect	Every 8 hours or daily
	Change	Every 50 hours or monthly
Air Cleaner/Filter	Inspect	Every 8 hours or daily
	Change	Every 50 hours or monthly
Fuel Tank Filter		Every 100 hours or yearly
Spark Plug Maintenance		Every 100 hours or yearly
Check Valve Clearance		Yearly
Water Filter	Check	Every 8 hours or daily
	Clean	Yearly
Pump Oil	Inspect	Every 25 hours or weekly
	Change	Yearly

OIL CHANGE RECORD

Check pump oil and engine oil level before first use of your new pressure washer.

Date Oil Changed Month/day/year	Estimated Operating Hours Since Last Oil Change	Date Oil Changed Month/day/year	Estimated Operating Hours Since Last Oil Change

HOSE & SPRAY GUN ASSEMBLY

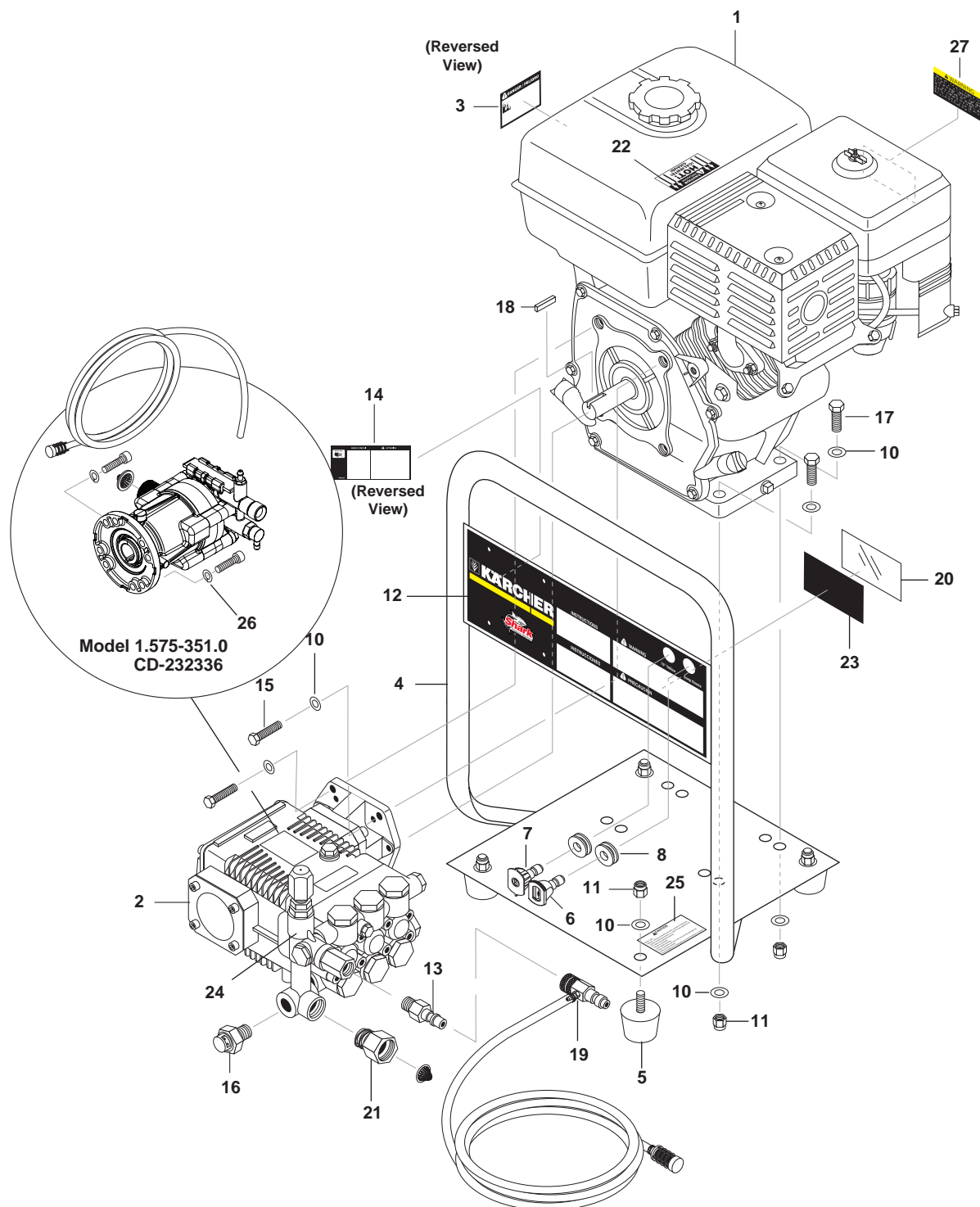


HOSE & SPRAY GUN ASSEMBLY PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1	9.802-166.0	Coupler, 3/8" Female (3500)	1
	9.802-100.0	▲ Quick Coupler O-Ring	1
	8.707-182.0	Coupler, Twist Connect, M22-F x 3/8" FNPT (3510)	1
2	8.739-124.0	Hose, 3/8" x 30', 1 Wire, Tuff-Flex	1
	8.739-148.0	HOSE, 3/8X50', 1W, TF,LEG, SOXSW, BU(3510)	1
3	9.802-223.0	Spray Gun, Shut-Off	1
4	9.802-220.0	Wand, Straight	1
5	9.802-164.0	Coupler, 1/4" Female	1
	9.802-096.0	Quick Coupler O-Ring	1
6	8.712-333.0	Nozzle, 3.0 15° Yellow	1
7	8.712-398.0	Nozzle, Brass Soap	1
8	9.802-251.0	Hose, 1/4" x 1/2" Clear Vinyl (3500)	6 ft.
9	8.707-057.0	Strainer, 1/4" Plastic (3500)	1
10	6.390-126.0	Clamp, Hose (3500)	2
11	9.802-216.0	Injector, Chem., Non-Adj, 3-5 GPM, .083 (3500)	1

▲ Not Shown

EXPLODED VIEW



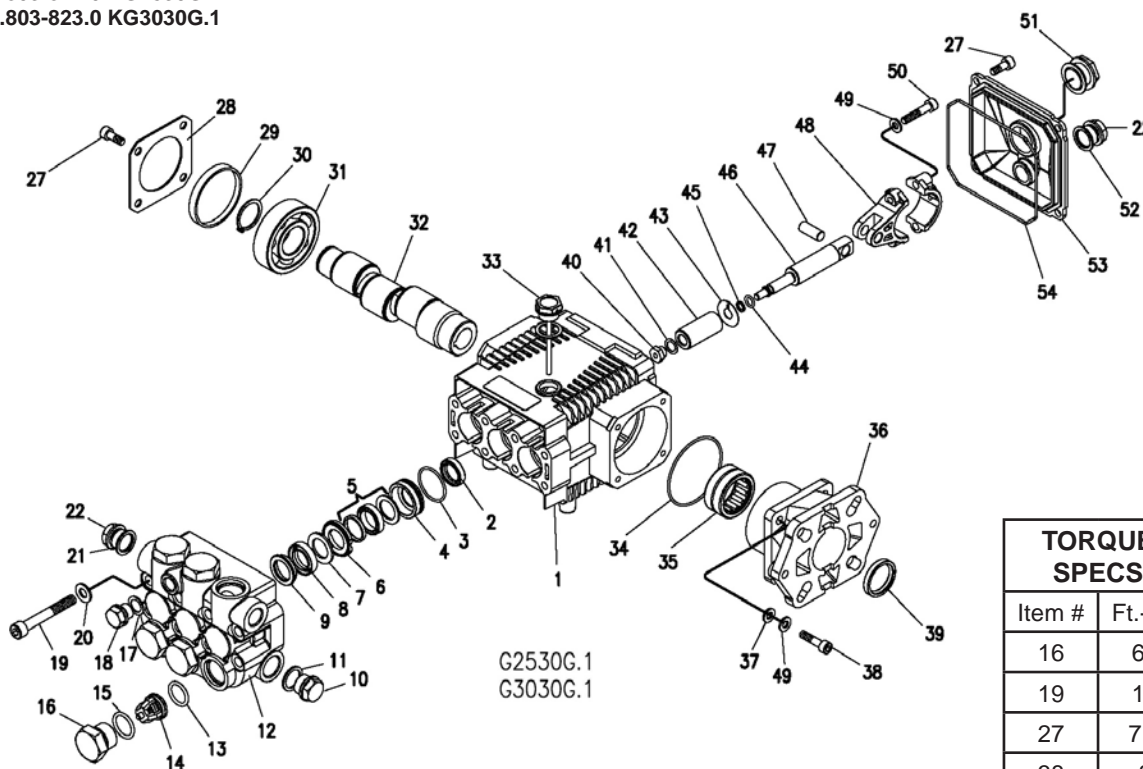
EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1	9.802-316.0	Engine, Honda, GX160K1QX2, 5.5 HP (3500)	1
	8.714-078.0	Engine, Honda, GC1601QHA, 5 HP (3510)	1
2	9.804-033.0	Pump, Kärcher KG2530G (3000)	1
	9.120-021.0	Pump (3510)	1
3	9.800-008.0	Label, Danger Cool Engine	1
4	9.802-873.0	Handle Assembly	1
5	9.802-063.0	Mount, Vibration, 5/16"-18 x 9/16" Stud, 30 Duro	4
6	See Page 15 For Nozzle Information		
7	See Page 15 For Nozzle Information		
8	9.802-064.0	Grommet, Rubber, Nozzle Holder	2
9	9.800-017.0	▲ Tag, Pump Plug/Dipstick (3500)	1
	9.800-095.0	▲ Tag, Pump Plug/Vented Cap (3510)	1
10	8.718-980.0	Washer, 5/16" Flat, SAE	16
11	9.802-776.0	Nut, 5/16", ESNA, NC	8
12	9.800-059.0	Label, Warning/Instructions	1
13	9.802-171.0	Nipple, 3/8" x 3/8" NPT ST Male	1
14	9.800-037.0	Label, French Warning	1
15	9.802-713.0	Bolt, 5/16" x 1-1/2" NC, HH (3510)	4
16	9.804-025.0	Pump Protector, 1/4" 145°(3500)	1
17	9.802-713.0	Bolt, 5/16" x 1-1/4", 145°	4
18	9.802-958.0	Key, Motor Shaft	1
19	9.802-225.0	Detergent Injector Assy 3-5 GPM 0.83(3500)	1
20	9.800-034.0	Label, Clear Lexan, 2-1/4" x 4"	1
21	9.802-146.0	Swivel, 1/2" MP x 3/4" GHF w/Strainer(3500)	1
22	9.800-006.0	Label, "Hot/Caliente", w/Arrows	1
23	8.932-968.0	Label, Intended For Outdoor Use	1
24	9.803.899.0	Unloader, VBA35(3500)	1
25	9.800-049.0	Label, Manufacturers Cleaning Solution	6 ft.
26	9.802-813.0	Lock Washer (3510)	4
27	8.917-015.0	LABEL, REGULATION 4442.6	1

▲ Not Shown

KG.1 PUMP EXPLODED VIEW

9.803-822.0 KG2530G.1
9.803-823.0 KG3030G.1



TORQUE SPECS	
Item #	Ft.-lbs
16	65
19	18
27	7.6
38	8
40	7
50	13

KG.1 PUMP EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1	9.803-938.0	Crankcase	1
2*	See Kit Below	Plunger Oil Seal	3
3*	See Kit Below	O-Ring Ø1.78 x 28.30	3
4*	See Kit Below	Pressure Ring, 15mm	3
5*	See Kit Below	U-Seal, 15mm	3
6*	See Kit Below	Intermediate Ring 15mm	3
7*	See Kit Below	Backup Ring 15mm	3
8*	See Kit Below	U-Seal, 15mm	3
9*	See Kit Below	Support Ring, 15mm	3
10	9.802-926.0	Brass Plug, 1/2"	1
11	9.803-199.0	Copper Washer 1/2"	1
12	9.803-946.0	Manifold Housing	1
13*	9.803-947.0	O-Ring Ø1.78 x 15.54	6
14*	See Kit Below	Valve Assembly	6
15*	9.803-948.0	O-Ring Ø2.62 x 18.77	6
16	9.803-949.0	Valve Plug	6
17	9.803-950.0	Washer, Copper	1
18	9.803-951.0	Brass Plug G1/4	1

ITEM	PART NO.	DESCRIPTION	QTY
19	9.803-952.0	Manifold Stud Bolt	8
20	9.802-884.0	Washer	8
21	9.803-198.0	Copper Washer 3/8"	1
22	9.802-925.0	Brass Plug 3/8"	2
27	9.802-939.0	Hexagonal Screw	9
28	9.803-953.0	Bearing Cover	1
29	9.803-954.0	Seal Bearing	1
30	9.802-914.0	Snap Ring	1
31	9.803-955.0	Ball Bearing	1
32	8.717-069.0	Crankshaft (2530G)	1
	8.717-070.0	Crankshaft (3030G)	1
33	9.803-957.0	Oil Dip Stick	1
34	9.804-581.0	O-Ring 3.53 x 55.56	1
35	9.804-582.0	Needle Roller Bearing	1
36	8.717-212.0	Engine Flange	1
37	9.803-210.0	Spring Washer	4
38	9.804-584.0	Flange Screw	4

KG.1 PUMP EXPLODED VIEW PARTS LIST (CONT)

ITEM	PART NO.	DESCRIPTION	QTY
39	9.804-585.0	Crankshaft Seal	1
40*	See Kit Below	Plunger Nut	3
41*	See Kit Below	Copper Spacer	3
42*	See Kit Below	Plunger, 15mm	3
43*	See Kit Below	Copper Spacer	3
44*	See Kit Below	O-Ring Ø1.78x5.28	3
45*	See Kit Below	Teflon Ring	3
46	9.803-964.0	Plunger Rod	3
47	9.803-965.0	Connecting Rod Pin	3
45	9.803-966.0	Connecting Rod	3
49	9.803-218.0	Spring Washer	6
50	8.933-020.0	Connecting Rod Screw	6
54	9.803-969.0	O-Ring 2.62 x 107.62	1
53	9.803-968.0	Crankcase Cover	1
52	9.803-197.0	Gasket, G3/4	1
51	9.803-202.0	Sightglass G3/4	1

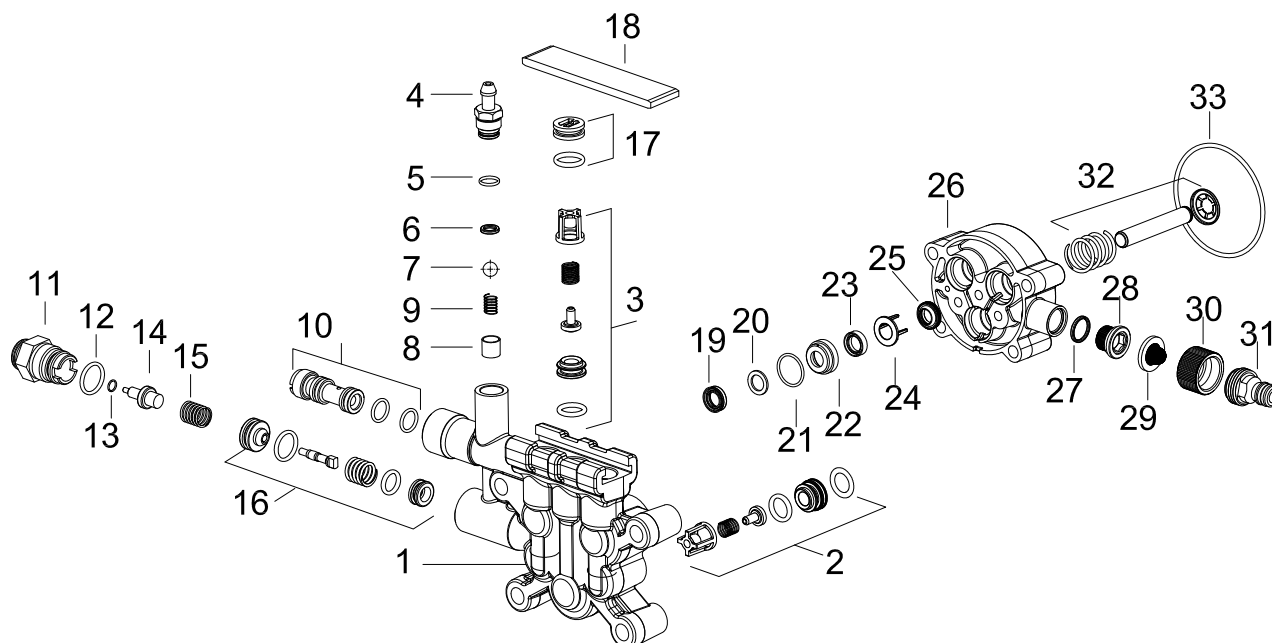
* Part available in kit (See below)

REPAIR KIT NUMBER	8.725-354.0	8.725-355.0	9.803-934.0	9.803-936.0	9.803-937.0
KIT DESCRIPTION	Plunger Seal 15mm	Complete Seal Packing 15mm	Plunger 15mm	Complete Valve	Plunger Oil Seals
ITEM NUMBERS INCLUDED	3, 5, 7, 8, 9	3, 4, 5, 6, 7, 8, 9	40, 41, 42, 43, 44, 45	13, 14, 15	2
NUMBER OF CYLIN- DERS KIT WILL SER- VICE	3	1	1	6	3

PUMP EXPLODED VIEW AND PARTS LIST

9.120-021.0

3-23326

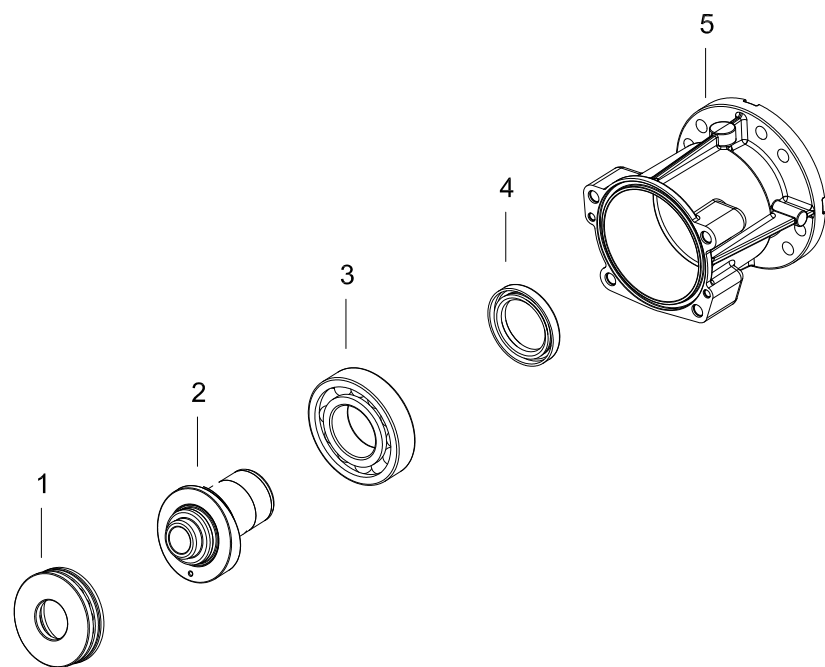


ITEM	PART NO.	DESCRIPTION	QTY
1	9.135-015.0	Cylinder Head	1
2	9.175-004.0	Valve Assy Horizontal	3
3	9.139-371.0	Spare Part List, Set 3	1
4	5.443-448.0	Nipple Chemistry	1
5	6.362-451.0	O-Ring Seal 8.0 x 1.0	1
6	6-362-634.0	O-Ring Seal, 5.28 x 1.78	1
7	7.401-909.0	Sphere 7 G40 - 1.4401	1
8	5.110-714.0	Sleeve	1
9	5.332-258.0	Helical Spring	1
10	9.139-372.0	Spare Part List Nozzle INS 020/021 PUMP	1
11	9.184-018.0	Outlet-Thermal Valve	1
12	6.362-480.0	O-Ring Seal, 12.42 x 1.78	1
13	7.362-507.0	O-Ring Seal 8 x 2 NBR 90	1
14	6.413-403.0	Thermo Valve Tin Coated	1

ITEM	PART NO.	DESCRIPTION	QTY
15	5.332-290.0	Helical Spring	1
16	9.175-005.0	Unloader Assembly	1
17	4.132-007.0	Drain Plug Replacement	1
18	5.003-062.0	Plate	1
19	9.177-301.0	Hich Pressure Seal	3
20	9.177-310.0	Back Ring	3
21	6.362-833.0	O-Ring Seal 12.5 x 1.73	3
22	9.155-011.0	Housing Low Pressure Seal	3
23	6.363-058.0	Grooved Ring	3
24	9.134-016.0	Spacer	3
25	6.365-393.0	Oil Sealing 12.20x4/6	3
26	9.133-007.0	Piston Guide	1
27	6.362-390.0	O-Ring Seal 15.6 x 1.8	1
28	9.134-019.0	Male Adapter	1
29	9.181-005.0	Filter Seal	1
30	9.155-013.0	Female House Conn	1
31	9.178-005.0	Adapter Garden	1
32	9.139-370.0	Spare Part List, Piston	1
33	6.362-471.0	O-Ring Seal 80.0x3.0 NBR70	1

PUMP EXPLODED VIEW PARTS LIST

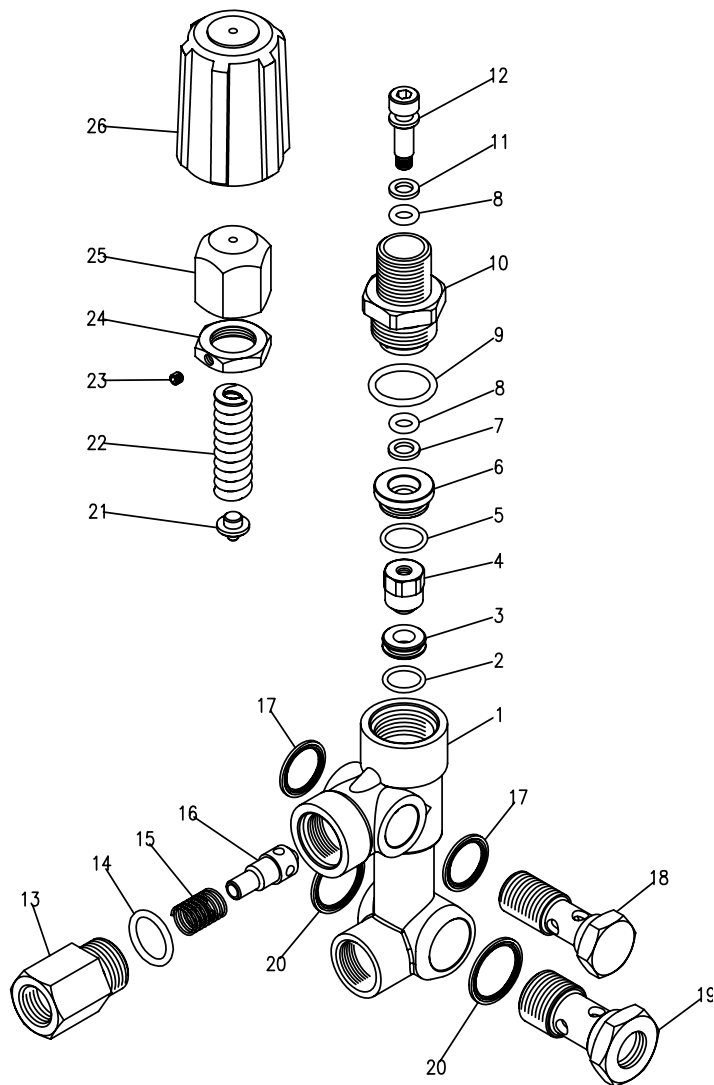
9.120-021.0 Housing View



ITEM	PART NO.	DESCRIPTION	QTY
1	9.166-016.0	Grooved Ball Bearing	1
2	9.135-018.0	Swash Plate Hor.	1
3	9.165-356.0	Ball Bearing No 6207	1
4	9.177-314.0	Radial Seal 35 x 52 x 7	1
5	9.135-016.0	Oil Housing	1

VBA35 UNLOADER EXPLODED VIEW

9.803-899.0 KG
25 LPM @ 240 BAR



VBA35 UNLOADER EXPLODED VIEW PARTS LIST

ITEM	PART #	DESCRIPTION	KIT	QTY	ITEM	PART #	DESCRIPTION	KIT	QTY
1	9.803-902.0	Body Valve (KG)		1	15	9.803-916.0	Spring	B	1
2	9.803-903.0	O-Ring	A, C	1	16	9.803-917.0	Poppet	B	1
3	9.803-904.0	Seat	C	1	17	9.802-893.0	Seal Washer 3/8		2
4	9.803-905.0	Ball, Sub-assy	C	1	18	9.803-920.0	Banjo Bolt, 3/8 w/ 1/8 Pilot		1
5	9.803-906.0	O-Ring	A	1	19	9.803-915.0	Banjo Bolt 1/2		1
6	9.803-907.0	Guide Bushing		1	20	9.803-921.0	Seal Washer 1/2		2
7	9.803-908.0	Teflon Ring	A	1	21	9.803-922.0	Plate	C	1
8	9.803-909.0	O-Ring	A	2	22	9.803-923.0	Spring	C	1
9	9.803-910.0	O-Ring	A	1	23	9.803-924.0	Set Screw		1
10	9.803-911.0	Connector		1	24	9.803-925.0	Nut		1
11	9.803-912.0	Teflon Ring	A	1	25	9.803-926.0	Brass Handle		1
12	9.803-913.0	Stem	C	1					
13	9.803-914.0	Connector, Female		1	Kit A	9.803-927.0	O-Ring Repair Kit		
14	9.803-191.0	O-Ring	A, B	1	Kit B	9.803-928.0	Outlet Kit		
					Kit C	9.803-929.0	Stem Repair Kit		

**LIMITED NEW PRODUCT
WARRANTY—COMMERCIAL
PRESSURE WASHERS**



Phone: 360-833-1600
Fax: 800-248-8409
www.karchercommercial.com

WHAT THIS WARRANTY COVERS

All Kärcher commercial pressure washers are warranted by Kärcher to the original purchaser to be free from defects in materials and workmanship under normal use, for the periods specified below. This Limited Warranty, subject to the exclusions shown below, is calculated from the date of the original purchase, and applies to the original components only. Any parts replaced under this warranty will assume the remainder of the pressure washer's warranty period.

FIVE YEAR PARTS AND ONE YEAR LABOR WARRANTY

Components manufactured by Kärcher, such as frames, handles, float tanks, fuel tanks, belt guards, and heating coils. Internal components on the oil-end of Kärcher axial pumps have a 5 year warranty. Period of warranty on axial pumps shall be one year. Kärcher crankshaft pumps have a 7 year warranty on non-wear parts. Heating coils are pro-rated at 25% after 2 years. Stainless steel coils have a 10 year warranty.

ONE YEAR PARTS AND ONE YEAR LABOR WARRANTY

All other components, excluding normal wear items as described below, will be warranted for one year on parts and labor. Parts and labor warranty on these parts will be for one year regardless of the duration of the original component manufacturer's part warranty.

WARRANTY PROVIDED BY OTHER MANUFACTURERS

Motors, generators, and engines, which are warranted by their respective manufacturers, are serviced through these manufacturers' local authorized service centers. Kärcher is not authorized and has no responsibility to provide warranty service for such components. Motors manufactured outside of the United States will be warranted by Kärcher.

WHAT THIS WARRANTY DOES NOT COVER

This warranty does not cover the following items:

1. Normal wear items, such as nozzles, spray guns, discharge hoses, wands, quick couplers, seals, filters, gaskets, O-rings, packings, pistons, pump valve assemblies, strainers, belts, brushes, rupture disks, fuses, pump protectors.
2. Any components or other devices incorporated into a Kärcher product that are not manufactured by Kärcher, including, but not limited to gasoline engines, pumps, etc.
3. Defects caused by improper or negligent operation or installation, accident, abuse, misuse, neglect, unauthorized modifications, repair or maintenance of the product by persons other than authorized representatives of Kärcher, including, but not limited to, the failure of the Customer to comply with recommended product maintenance schedules.
4. Kärcher products that have been returned by the original Customer and are ultimately re-sold by an Authorized Servicing Dealer or other sales or service outlet to another purchaser.
5. Kärcher products that are sold by any distributor or retailer that is not an official authorized dealer or retailer of Kärcher products.
6. Defects caused by acts of nature and disaster including, but not limited to, floods, fires, wind, freezing, earthquakes, tornadoes, hurricanes and lightning strikes.
7. Defects caused by water sediments, rust corrosion, thermal expansion, scale deposits or a contaminated water supply (such as water in the unit with chloride content higher than that of 80 mg/liter or use of chemicals not approved or recommended by Kärcher).
8. Defects caused by improper voltage, voltage spikes or power transients in the electrical supply.
9. Devices or accessories not distributed or approved by Kärcher.
10. Any cost of labor arising from the removal and reinstallation of the alleged defective part by Customer.
11. Transportation of the product to an Authorized Servicing Dealer, field labor, replacement rental and any freight charges.

Any components, accessories or other devices provided with the product but not manufactured by Kärcher (such as engines, pumps, etc.) are subject to warranties and service through their respective manufacturers authorized service centers and according to the applicable terms and conditions of such manufacturers warranties. Such components or other devices not manufactured by Kärcher should be referred by the Customer to an authorized service center or their respective manufacturers for repair or replacement.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OF ANY KIND, WHETHER ARISING BY LAW, CUSTOM OR CONDUCT. KÄRCHER MAKES NO ADDITIONAL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS OF EQUIPMENT FOR A PARTICULAR PURPOSE AND ANY SUCH WARRANTIES ARE EXPRESSLY DISCLAIMED. KÄRCHER FURTHER DISCLAIMS ANY WARRANTY THAT THE PRODUCT PURCHASED BY CUSTOMER WILL MEET ANY PARTICULAR REQUIREMENT OF CUSTOMER EVEN IF KÄRCHER HAS BEEN ADVISED OF SUCH REQUIREMENT.

THE RIGHTS AND REMEDIES PROVIDED UNDER THIS WARRANTY ARE EXCLUSIVE AND IN LIEU OF ANY OTHER RIGHTS OR REMEDIES OF CUSTOMER. KÄRCHER SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO ANY PERSON OR ENTITY INCLUDING, BUT NOT LIMITED TO, THE CUSTOMER OR ANY END USER OF THE PRODUCT FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR ECONOMIC LOSS, LOSS OF PROFITS OR LOSS OF USE OF THE PRODUCT, ARISING IN CONNECTION WITH THE SALE, DELIVERY, INSTALLATION, TRAINING OR USE OF PRODUCT. KÄRCHER'S LIABILITY, WHETHER IN CONTRACT OR IN TORT, ARISING OUT OF ANY WARRANTIES OR REPRESENTATIONS, INSTRUCTIONS OR DEFECTS FROM ANY CAUSE, SHALL BE LIMITED EXCLUSIVELY TO THE COST OF REPAIR OR REPLACEMENT PARTS UNDER AFORESAID CONDITIONS.

The purpose of the foregoing limitations on liability and Customer remedies is to protect Kärcher from unknown or undeterminable risks. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to the Customer.

Kärcher sales and service representatives are not authorized to waive or alter the terms of this warranty, or to increase the obligations of Kärcher under the warranty.

Kärcher reserves the right to make design changes in any of its products without prior notification to the Customer.

