

H•E•R•O

Industries

Pressure Washers

PW2424-LD



H.E.R.O. Industries

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WARRANTY

This product is warranted to be free from defects in materials and workmanship under normal use and service, for a period of 90 ninety days from the date of purchase, when operated and maintained in accordance with the Maintenance and Operation Instructions supplied with the unit. The warranty does not cover misuse or negligence.

This warranty is extended only to the original purchaser. Hoses, spray guns, wands and other accessories are warranted for 30 days. Warranty is void if repairs are attempted by anyone other than an Authorized Service Center.

H.E.R.O. Industries liability under warranty is limited to repair of product and /or replacement of parts, and is given to the purchaser in lieu of all other remedies including incidental and consequential charges. There are no expressed warranties other than those specified herein.

IMPORTANT SAFETY PRECAUTIONS

This book has important information for the use and safe operation of this machine.
Read and understand all warnings before you start working.

WARNING - WHEN USING THIS MACHINE:

- Read all the instructions before using machine
- To reduce risk of injury, close supervision is necessary when the machine is used near children
- Know how to stop the machine and bleed pressure quickly. Be quite familiar with the controls.
- Stay alert! Watch what you are doing.
- Keep operating area clear of all persons.
- Follow the maintenance instructions specified in the manual.
- Do not operate the machine when fatigued or under the influence of alcohol or drugs.
- Do not overreach or stand on unstable support. Keep good footing and balance at all times.
- To prevent fire hazard, do not use with or near inflammables such as; gasoline, grain dust, solvents and thinners.
- Never add gasoline to a hot engine as this can result in a fire or explosion.
- Never direct spray at pressure washer unit.

IMPORTANT OPERATION / MAINTENANCE PRECAUTIONS

- Change oil in pump after the first 50 hours, then every 500 hours.
Use SAE30 Non-Detergent Motor oil.
- Change engine oil as specified by the Honda. See Honda owners manual.
- Do Not run washer longer than 3 minutes with gun closed, as this can result in damage to the seals. Heat generated by the re-circulating water can damage seals.
- Avoid *freezing* pump. Drain unit prior to storage, or run an antifreeze solution through pump. Ensure the pump and hoses are completely bleed of all liquid.

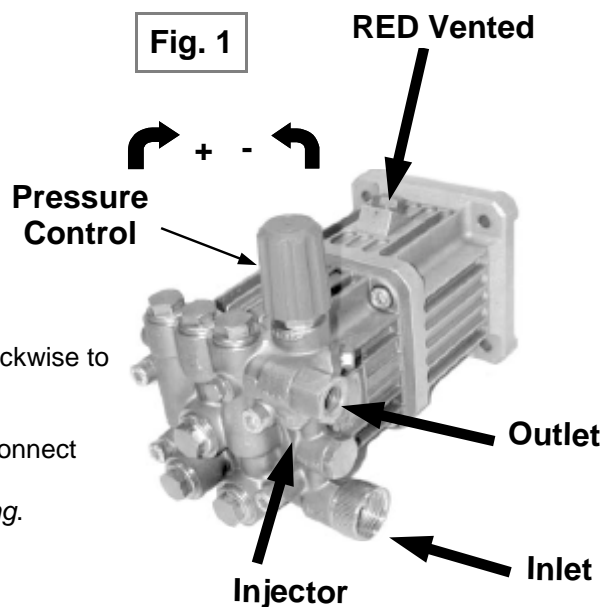
Warning

Risk of injection or injury.

Do not direct discharge stream at persons or animals. The high pressure water stream can cause injury or death!

START-UP AND OPERATION INTRODUCTION

1. Verify that the RED vented plug is installed in pressure washer pump as shown in Fig 1.
2. Before first use, check engine and pump oil levels.
Note: **For shipping purposes, engine oil has not been added.**
Before each use, check engine oil level by unscrewing the oil dipstick. Add motor oil (consult Honda manual for correct oil grade) as required to bring to proper level, approximately mid-way on dipstick.
3. Check water supply volume. To operate correctly, the unit requires a water supply 25% greater than the units output.
(i.e. Model 3000 = 5 GPM, 2700 = 3 GPM, 2500 = 4.5 GPM, 2000 = 3.75 GPM of water flow).
To test water supply output;
 - a) Turn water flow to full maximum output.
 - b) Place a 5 gallon pail or container under water flow for exactly 1 minute (60 seconds).
 - c) Measure contents to determine water flow.
4. Connect a standard garden hose to the water inlet or bottom connection on the pump head (Female hose connector). Fig. 2.
5. Connect the high pressure hose to the water "Outlet" or upper connection on the pump head.
(Male quick connect nipple). Fig. 2.
6. Turn the unloader knob on top of the pump head counter-clockwise to reduce the pressure prior to starting the machine.
7. Select the desired tip for the job. Insert tip into wand (quick-connect fittings). See page 6.
RED—0°, **Narrow Fan, Direct or Concentrated Cleaning.**
YELLOW—15°, **Medium Fan, General Use.**
WHITE—40°, **Wide Fan, Soft Pattern, For Rinsing.**
BLACK—65°, **Chemical Injector Tip. Must be used when operating chemical injector**
8. If using injector system, insert BLACK spray tip and connect the detergent/chemical suction **line to the** fitting marked "Chem" and place the filter end into the chemical/detergent jug.
9. Turn on the water supply and trigger the spray gun to purge all air from the system, **BEFORE** starting engine.
10. Start the engine by following this procedure:
 - a. Turn the ON/OFF switch to ON.
 - b. Turn the GAS to ON.
 - c. Turn the CHOKE to FULL.
 - d. Push the THROTTLE lever to the ON position.
 - e. Pull the STARTING cord.
 - f. Once the engine has started, reduce the CHOKE until it is OFF, and open the THROTTLE to full ON. *Use these instructions in conjunction with instructions provided in the Honda manual.*



START-UP AND OPERATION INTRODUCTION

11. At this point, the gun is triggered to evacuate any remaining air in the system. Then trigger the gun and begin turning the red unloader knob in a clockwise direction as far as it will turn. You should now have full pressure.
12. To introduce chemicals/detergent to the spray, do the following;
 - a. Install "Black" injector tip.
 - b. Attach the chemical / detergent line to the fitting marked "Chem" and place the filter end into the chemical or detergent container.
 - c. Trigger the SPRAY GUN and chemical / detergent should start to flow out of gun.

SHUTTING DOWN THE MACHINE AFTER USE

1. Trigger the spray gun and reduce the pressure by turning the unloader knob counter-clockwise.
2. Turn engine switch to the OFF position.
3. Turn the throttle and gas levers to the OFF or Closed positions.
4. Shut OFF the water.
5. Trigger gun to remove any remaining pressure in the system.
6. Disconnect hose.

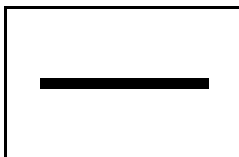
NOZZLE SELECTION

For your convenience, we have provided a selection of nozzles to choose from.
Your machine is equipped with a 0°, 15°, 40°, and a chemical nozzle.

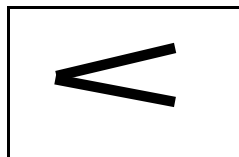
If you require a different cleaning action, we suggest selecting the correct tip for the job.

1. RED = 0° Angle - High impact, solid stream.
2. YELLOW = 15° Angle - Narrow width spray pattern.
3. WHITE = 40° Angle - Wide width spray pattern.
4. BLACK = Chemical Injector

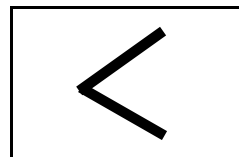
0° Angle



15° Angle



40° Angle



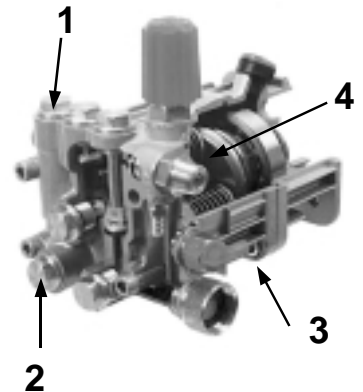
TROUBLE SHOOTING

FAULT	CAUSE	REMEDY
Pump running normally but pressure does not achieve rated pressure.	Pump sucking air. Valves worn or dirty. Insufficient water flow. Unloader valve packing worn. Nozzle incorrect or worn. Worn piston packing.	Check that hoses and fittings are air tight. Check, clean or replace. Increase water supply. Check and replace. Check and replace. Check and replace.
Fluctuating pressure	Valves worn, dirty or stuck. Pump sucking air. Worn piston packing. Insufficient water flow.	Check, clean or replace. Check that hoses and fittings are air tight. Check and replace. Increase water supply. May require new water supply source.
Pressure drops after period of normal use.	Nozzle worn. Valves worn, dirty or stuck. Unloader valve packing worn. Worn piston packing.	Check and replace. Check, clean or replace. Check, clean or replace. Check and replace.
Pump noisy	Pump sucking air. Valves dirty or worn. Worn bearings.	Check that hoses and fittings are air tight. Check, clean or replace. Check and replace if necessary.
Presence of water in oil	High humidity in air.	Check and change oil twice as often.
Water dripping from under pump.	Piston packing worn. The O-rings of piston guide or retainer worn.	Check and replace. Check and replace. Check and replace.
Oil dripping.	Oil seal worn.	Check and replace.
Engine will not start.	Low fuel level. Low oil level. Worn spark plug or gap.	Add fuel. Add oil. Replace.

PUMP SERVICE

TORQUE SETTING CHART
COMET AXD2524G

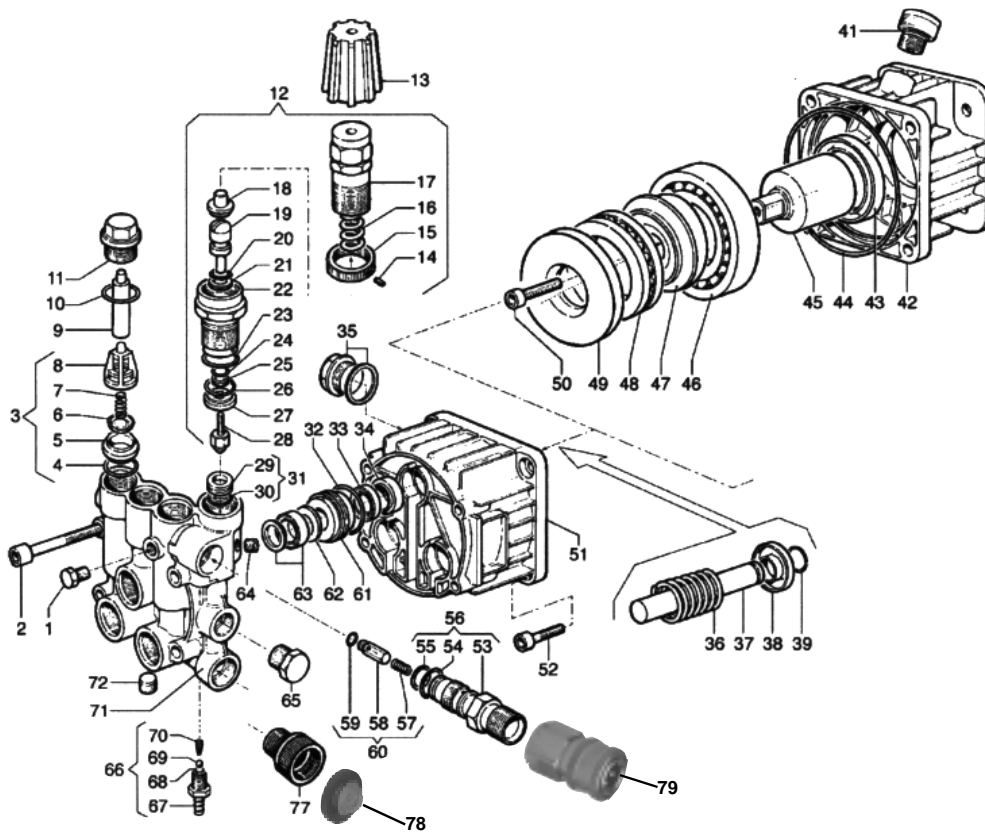
POSITION #	TORQUE SETTING	FLUID TO BE USED
1	18 FT/LB	
2	33 FT/LB	LOCTITE 243
3	18 FT/LB	
4	18 FT/LB	LOCTITE 243



PUMP PARTS REFERENCE

PART # PW-2070 COMET AXD2524G

**THIS SHOULD ONLY BE USED AS A REFERENCE ONLY
IT IS MORE ECONOMICAL TO REPLACE ENTIRE PUMP THAN TO REPAIR**



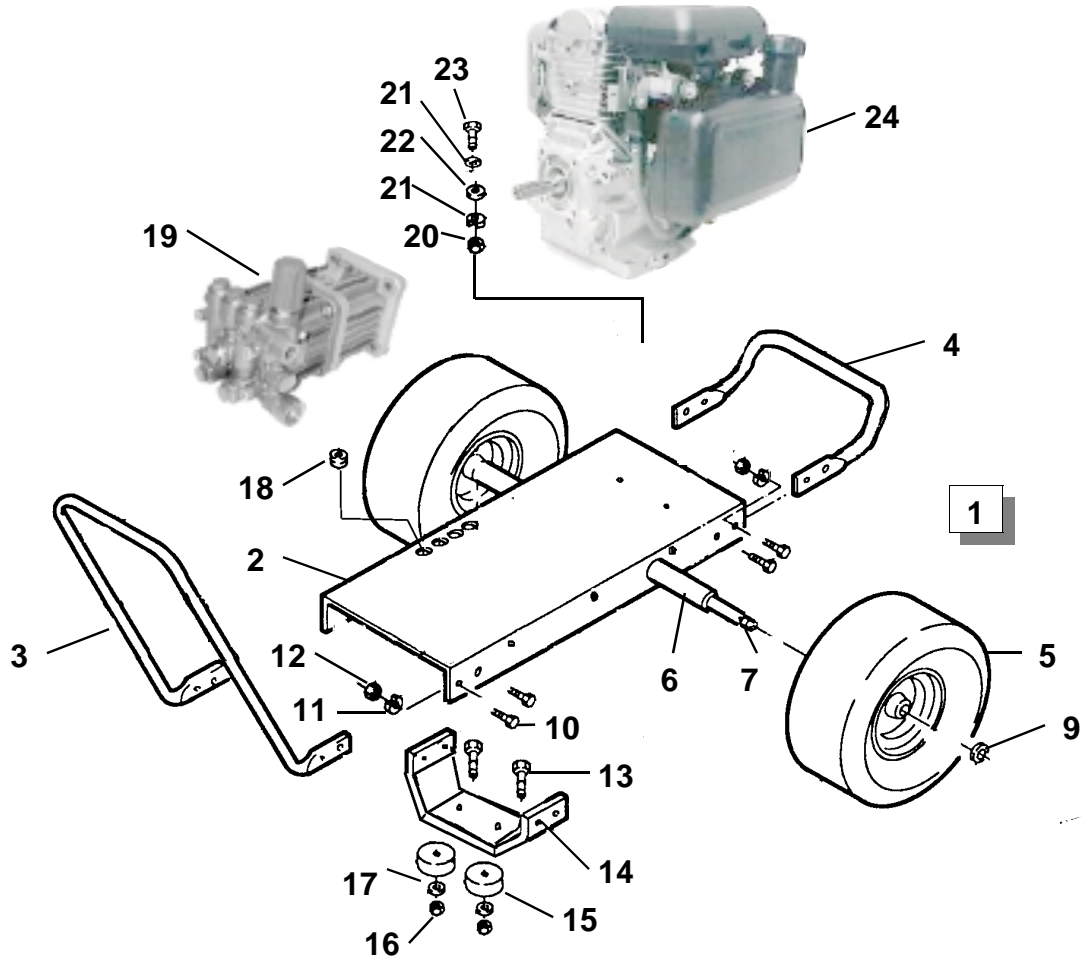
Item #	Part #	Description	Kit #	Qty
1	PW-3202001800	CAP, 1/8"		1
2	PW-3609015600	SCREW, M8 X 55		4
3	PW-1220004500	VALVE KIT		6
4	PW-1210004900	O-RING,	A-D	6
5	PW-3009012900	VALVE SEAT	A	6
6	PW-3604002800	SUC./DEL VALVE		6
7	PW-1802019200	SPRING	A	6
8	PW-1205003300	VALVE CAGE	A	6
9	PW-0601027300	SPACER		2
10	PW-1210015100	O-RING	A-D	6
11	PW-3202023600	PLUG		6
12	PW-1215027100	UNLOADER KIT		1
13	PW-1817005300	KNOB		1
14	PW-3622003000	STOP ADJUSTABLE NUT M4X4	E	1
15	PW-1227002200	NUT	E	1
16	PW-1802018200	SPRING	E	1
17	PW-0204004600	ADJUSTABLE KNOB	E	1
18	PW-0009020700	SEAT	E	1
19	PW-2409007700	PISTON ROD	E-F	1

Item #	Part #	Description	Kit #	Qty
20	PW-1210040600	O-RING	E-F	1
21	PW-0009020600	RING	E-F	1
22	PW-0204004500	HOUSING	E	1
23	PW-1210040700	O-RING	E-F	1
24	PW-1210040500	O-RING	E-F	1
25	PW-0009020500	RING	E-F	1
26	PW-1210040400	O-RING	E-F	1
27	PW-0009020400	RING	E-F	1
28	PW-3002050800	HOUSING WITH BALL	E-F	1
29	PW-3009012200	SEAT	E-F	1
30	PW-1210040300	O-RING	E-F	1
31	PW-3009001300	VALVE SEAT		1
32	PW-1210035600	O-RING	B-D	3
33	PW-1241005000	PISTON SEAL	B	3
34	PW-0019010300	SEALING RING	D	3
35	PW-3201001800	OIL LEVEL PLUG		1
36	PW-1802015300	SPRING		3
37	PW-2409008900	PISTON	C	3
38	PW-0009022100	RING	C	3

PUMP PARTS REFERENCE CONTINUED

Item #	Part #	Description	Kit #	Qty
39	PW-0009022000	RING	C	3
41	PW-3200007100	PLUG		1
42	PW-3200052200	SUPPORT		1
43	PW-0019003400	SEALING RING 40X55X7	D	1
44	PW-1210042900	O-RING	D	1
45	PW-0001039500	ECCENTRIC SHAFT 3/4"		1
46	PW-0438007600	BALL BEARING 40X80X18mm		1
47	PW-0001041700	ECCENTRIC SHAFT 8 deg		1
48	PW-0436001600	AXIAL BEARING		1
49	PW-2816002500	THRUST BEARING		1
50	PW-3609000500	SCREW M8X20		1
51	PW-0403013500	PUMP CRANKCASE		1
52	PW-3609000500	SCREW M8X20		4
53	PW-3410029800	INJECTOR BODY 3/8 NPT	E	1
54	PW-1210004900	O-RING	D-E-F	1
55	PW-1210004000	O-RING	E-F	1
56	PW-3410030300	INJECTOR BODY KIT 3/8 NPT		1
57	PW-1802019700	SPRING	E	1
58	PW-2409008600	CHECK VALVE	E	1
59	PW-1210039700	O-RING	E-F	1
60	PW-2409009100	CHECK VALVE KIT		1
61	PW-0009021900	RING		3
62	PW-0009023000	RING	B	3
63	PW-1241005500	PISTON SEAL	B	3
64	PW-3200001700	PLUG 1/8 X 8		1
65	PW-3200000700	PLUG 3/8 GAS OT58		1
66	PW-2803043500	INJECTOR KIT		1
67	PW-2803042500	HOSE BARB FITTING		1
68	PW-2812006700	O-RING		1
69	PW-3003002600	BALL		1
70	PW-1802018000	SPRING		1
71	PW-3218029900	PUMP VALVE CHAMBER		1
72	PW-3200001700	PLUG 1/8 X 8		1
77	PW-2800008100	GARDEN HOSE INLET		1
78	PW-1060	INLET FILTER WITH WASHER		1
79	PW-1050	3/8" FEMALE SOCKET		1

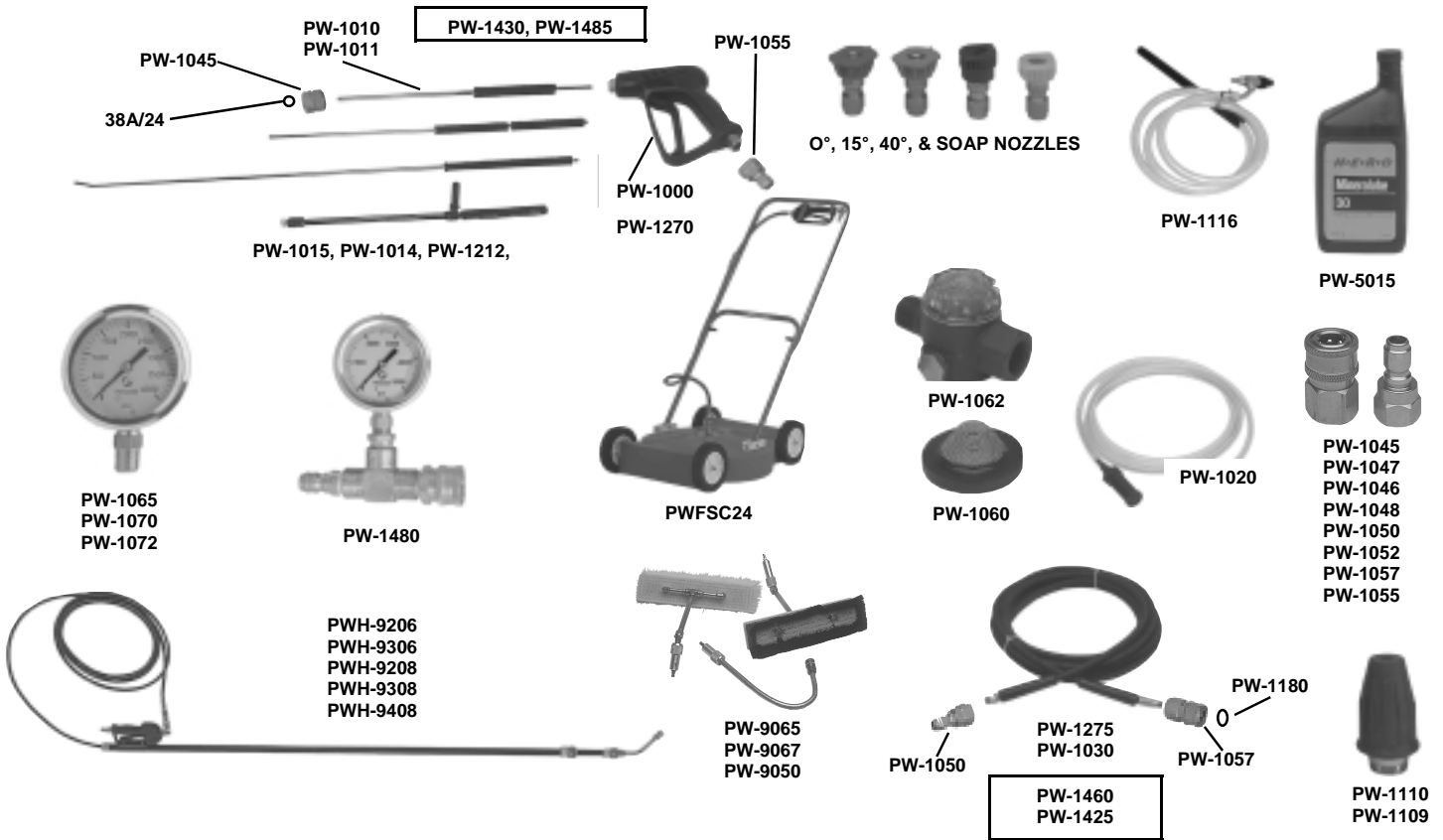
CHASSIS AND DRIVE ASSEMBLY



Item #	Part #	Description	Qty
1	PW-4380	CART WITH WHEELS, REF	1
2	PW-4360	CART BASE, PW2424 ONLY	1
3	PW-4355	LONG HANDLE	1
4	PW-4210	SHORT HANDLE	1
5	67/16A	PNEUMATIC WHEEL, 10"	2
6	PW-4305	AXLE WHEEL SPACER	2
7	PW-4275	AXLE	1
8	PW-4280	AXLE BRACKET (NOT SHOWN)	2
9	HW6088	AXLE CAP, 5/8"	2
10	PW-14301241	CARRIAGE BOLT, 1/4" - 20 X 1"	8
11	HW-5040P	LOCK WASHER, 1/4	8
12	HW4020P	HEX NUT, 1/4" NC	8

13		CARRIAGE BOLT,	2
14	PW-4240	LEG	1
15	67/14A	FOOT PAD	2
16	HW4030P	HEX NUT, 5/16"	2
17	HW5052P	FENDER WASHER, 5/16"	2
18	PW-4075	TIP HOLDING GROMMET	5
19	PW-2070	PUMP ASSEMBLY, PW2424 ONLY	1
20	HW4030P	HEX NUT, 5/16"	4
21	HW5060P	LOCK WASHER, 5/16"	4
22	HW5050P	FLAT WASHER, 5/16"	8
23	HW1080P	CAPSCREW, HEX HD, 5/16"	4
24	PW-2000	ENGINE, HONDA, GC160 5.0HP	1

ACCESSORIES



Part #	Description
PW-1485	Light duty, pressure wash gun & wand assembly with fittings, PW-2424-LD only
PW-1270	Light duty, pressure wash gun, less fittings
PW-1011	Light duty, wand, less insulator
PW-1000	Heavy duty pressure wash gun, 3000 psi
PW-1430	Heavy duty pressure wash gun & 36" wand assembly with fittings, 3000 psi
PW-1010	Wand, with insulator, 36',
PW-1012	Wand, with insulator, 48',
PW-1014	Wand, with insulator, 79',
PW-1015	Wand, twin-lance, less fittings,
PW-1020	Chemical suction tube and strainer
PW-1415	Assembly, chemical injector hose, c/w brass fitting
PW-1045	Body, quick-disconnect, 1/4 brass, female
PW-1046	Body, quick-disconnect, 1/4 brass, male
PW-1047	Plug, quick-disconnect, 1/4 steel, male
PW-1048	Plug, quick-disconnect, 1/4 steel, female
PW-1050	Body, quick-disconnect, 3/8 brass, female
PW-1052	Body, quick-disconnect, 3/8 brass, male
PW-1055	Plug, quick-disconnect, 3/8 steel, male
PW-1057	Plug, quick-disconnect, 3/8 steel, female
PW-1180	3/8" Q.D body o-ring
38A/24	1/4" Q.D body o-ring
PW-1065	Gauge, 0-3000 psi

Part #	Description
PW-1480	0-4000 psi pressure washer pump test gauge kit
PW-1062	Inline filter, use with PW-1060
PW-1060	Inlet filter washer
PW-1116	Sandblast kit, 2500 psi
PW-5015	Pump oil, 1 Liter
PW-1100-6540	Black, soap nozzle, all models
PW-1100-0003	Red, 0° degree nozzle, 2424-LD models only
PW-1100-1503	Yellow, 15° degree nozzle, 2424-LD models only
PW-1100-4003	White, 40° degree nozzle, 2424-LD models only
PW-11000-30	Nozzle Kit, contains 1 each red, white, yellow & soap nozzle
PW-1416	Chemical injector assembly, 3000 psi
PWH-9206	6ft to 12ft Telescopic wand, 2 6ft poles
PWH-9306	6ft to 18ft Telescopic wand, 3 6ft poles
PWH-9208	8ft to 16ft Telescopic wand, 2 8ft poles
PWH-9308	8ft to 24ft Telescopic wand, 3 8ft poles
PWH-9408	8ft to 32ft Telescopic wand, 4 8ft poles
PW-9065	12" Internal low pressure, two jet, hard surface brush
PW-9067	12" Internal high pressure, two jet, hard surface brush
PW-9050	Stainless steel, gutter cleaner
PW-1275	Pressure washer hose, 25' x 3/8", w/o couplers, 3000 psi
PW-1460	Pressure washer hose, 25' x 3/8", c/w couplers, 3000 psi
PW-1425	Pressure washer hose, 50' x 3/8", c/w couplers, 3000 psi
PW-1030	Pressure washer hose, 50' x 3/8", less couplers, 3000 psi

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