

Allied Specialized Products

1102 East Cherry St.
Vermillion, SD 57069

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1.800.658.3977



Cold Water Operating Manual

Model No.

Serial No.

“We Operate in an Atmosphere of Concerned Courtesy.”

Dear Customer,

Enclosed you will find a copy of our limited warranty. There are a few things we would like to clarify in our policy in regard to this warranty and our warranty procedure.

1. In Paragraph number 3 “Our obligation under this warranty is expressly limited, at our option to the replacement or repair at **Allied Manufacturing Co., 1322 East Cherry St., Vermillion, SD** to such part or parts as inspection shall disclose to have been defective.
 - a. We do reserve the right to replace or repair.
 - b. This service and decision will be made when the part or machine has been returned to the main plant in Vermillion, SD.

2. Any part or machine which is to be considered for warranty must be sent back prepaid to the main plant. (Returned items sent collect will be refused)
 - A) No machine or part will be accepted unless it has a RGA (Returned Goods Authorization) attached and properly filled out.
 1. Enclosed you will also find a sample form, and additional forms will be sent upon request.
 - a. The RGA is an easy form to fill out. State why you feel the part is not working properly. Be sure to include Model No. and Serial No. on a machine warranty.

 - B) The decision on whether to grant warranty will be delayed if the item has to be sent back to the supplier for warranty configuration.

3. Our dealers and distributors should carry an adequate inventory to be able to replace most parts which need replacing. The returned part when proven defective will either be replaced or repaired at ALLIED’S option and then returned to you.

Sincerely,

Allied Specialized Products

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IMPORTANT SAFETY INSTRUCTIONS! WARNING:

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

1. Read all the instructions before using the product.
2. When operating, use basic protective clothing.
3. To reduce risk of injury, close supervision is necessary when the product is used near children.
4. Be thoroughly familiar with the controls and know how to stop the product.
5. Stay alert – and closely pay attention to the work at hand.
6. **Do Not** operate the product when fatigued or under the influence of alcohol or certain prescription drugs.
7. Keep the operating area clear of all persons not helping/using the product.
8. **Do Not** over reach or stand on unstable ground. Keep good footing and balance at all times.
9. Follow the maintenance instructions specified by the manual
10. Consult the factory before changing the basic design or operating procedure of this machine.
11. Have trained and qualified technicians connect your machine.
12. For a grounded or double insulated products rated 250volts or less: “This product is provided with a ground fault circuit interrupter built into the power cord plug. If replacement of the plug or cord is needed, use only identical replacement parts.”
13. For grounded or double insulated products rated more than single phase, or over 250volts: “This product should only be connected to the power supply. Receptacle is protected by a ground fault circuit interrupter.”

Warning: Because of Risk of Injury: Do Not Direct Discharge Stream at Persons!!

Limited Warranty

Allied warrants each new machine manufactured by us to be free from material or workmanship defects for a period of one year from date of service; however, the one year warranty excludes the following:

1. Stuck check valves
2. Pump packing, and/or seals
3. Hose
4. Fuel pump damage due to moisture(pertains to hot water machines only)
5. Clogged filters and screens
6. Nozzles and orifices
7. Paint
8. Gauges
9. Damage caused by improper use of chemicals.

Components warranted by other manufacturers should be referred to their manufacturers nearest factory service center for repair or replacement. Conditions resulting from misuse, negligence, alterations, accident, or improper repair are not covered under warranty. Our obligation under this warranty is expressly limited, at our option, to the replacement or repair at Allied Manufacturing Co., 1322 East Cherry St., Vermillion, SD 57069, to such part or parts as inspection shall disclose to have been defective.

A mileage charge, coupled with a minimum fee, is many times assessed for local warranty consideration at your place of business. The fee, if assessed, is up to the local distributor.

Thank you for purchasing a quality Allied pressure washer.

Pre Set Up

1. Please examine machine carefully for shipping damage.
2. Assemble pressure gun and hose.
3. Position the machine for easy access from all sides for use.
4. Always protect machine from freezing.
5. Place the machine on a solid level surface.
6. Protect the machine from external damage

Set Up

1. Have only trained and qualified person connect and service your machine.
2. Connect the machine to a water supply with a capacity of 1 ½ times the GPM output of the machine.
3. Connect the machine to the proper electrical supply. Comply with all national, state, and local codes. **Make sure that the machine is properly grounded.**

Start Up

Note: The first time that the machine is operated after setup or any repairs: always run the machine for a few minutes with the water spray tip removed to flush out the system.

1. Turn on water.
2. Turn on electricity.
3. Start the pump.
4. If equipped, set temperature control to desired temperature.
5. When a steady stream of water flows from the gun, start the burner.
6. Adjust the soap metering valve as required.
7. Open the “vari-head” (turn counter clockwise) on end of wand to lower pressure on units equipped with low pressure chemical application(down stream chemical injection)

Shut Down

1. Turn off the soap valve.
2. Stop the burner.
3. When the water flowing from the gun has cooled and is free of soap, stop the pump.

Troubleshooting:

<u>Problem:</u>	<u>Possible Cause:</u>	<u>Solution:</u>
Low Pressure	Loose belt on pump	Tighten pump.
	Leak in water system	Tighten all fittings.
	Insufficient water	Increase water supply or line size.
	Faulty motor.	Replace motor.
	Worn out or wrong spray tip.	Replace tip.
	Pump seal worn out.	Replace seals.
Pressure is too high	Partly blocked or wrong spray tip	Clean or replace.
	Chemical injector partly blocked.	Clean.
No Chemical Pick Up	Stuck check valve.	Clean or replace.
	Plugged screen.	Clean.
	Vari-head not open.	Open.
Motor Overloading	Partly blocked or wrong spray tip.	Clean or replace.
	Too long of an extension.	Replace with a shorter or heavier cord.
	Motor getting weak.	Replace motor.

Periodic Maintenance

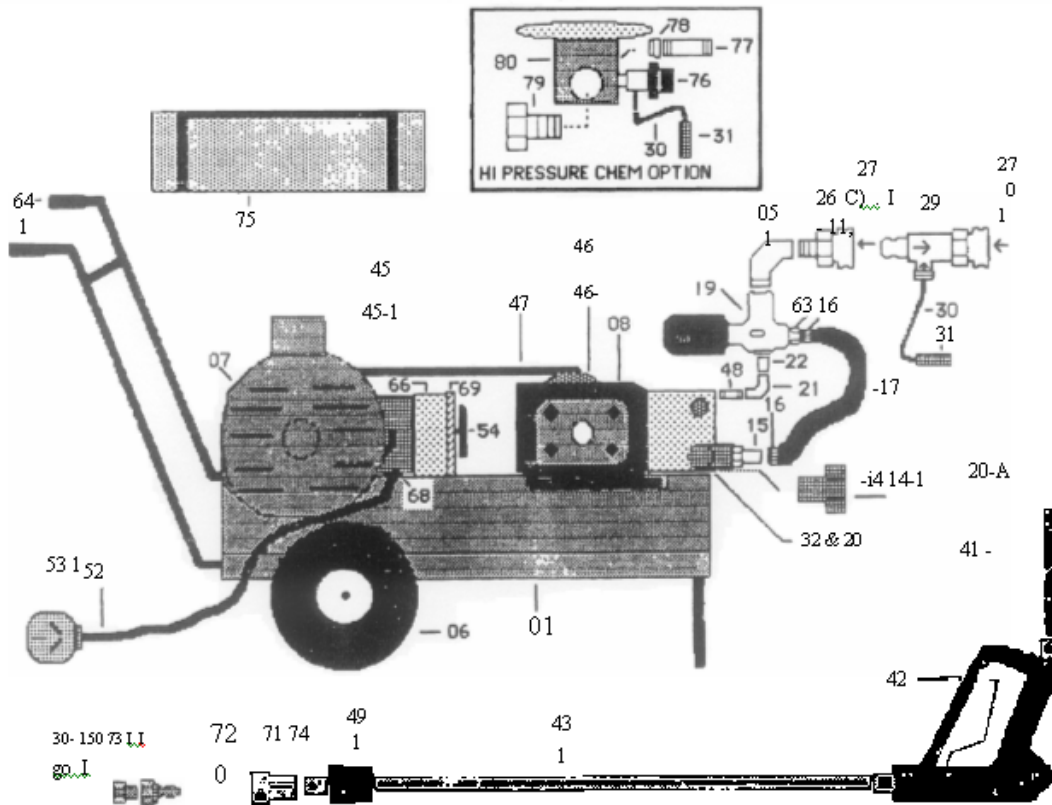
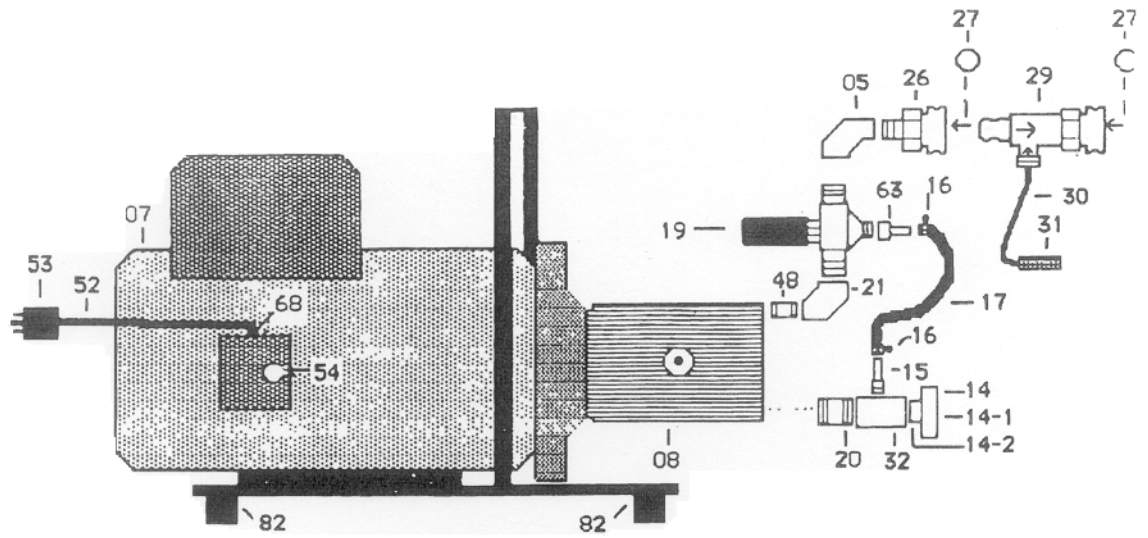
1. Always keep belts tight and in proper alignment.
2. Change oil at 50 hours the first time; and every 200 hours, or when oil becomes discolored, afterwards. Use only pump manufacturer's recommended oil.
3. Inspect hoses periodically for worn or cut spots that may burst and cause injury to operator or damage to equipment.
4. Maintain engine (if equipped) in accordance with engine operator's manual.
5. Check water spray tip for blockage, wear, or damage that may cause improper functioning of the machine.

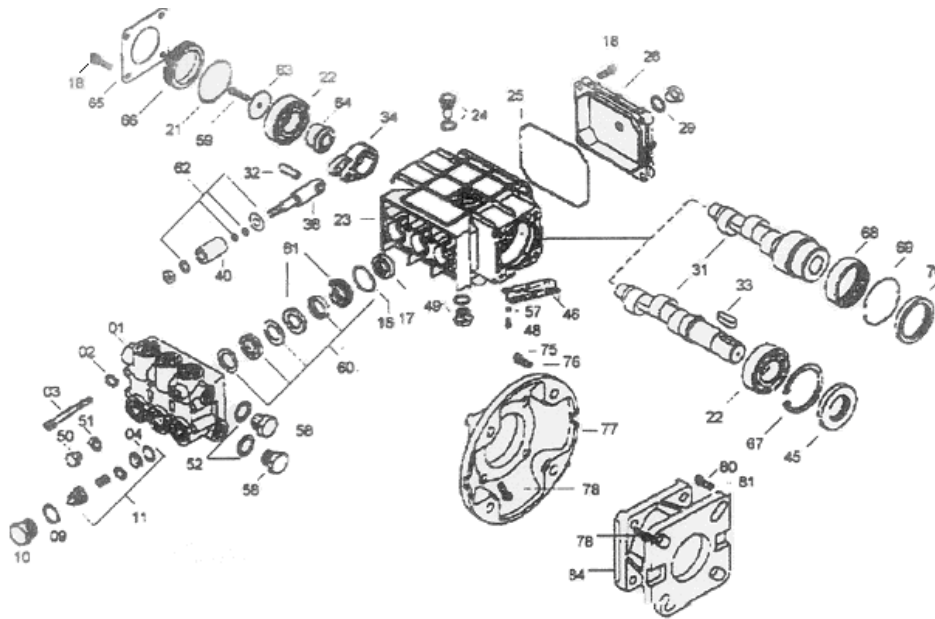
Winter Use and Storage

If machine is to be stored in temperatures that are below freezing, the following steps are necessary: 50/50 anti-freeze solution.

1. Turn off and disconnect water supply.
2. Empty float tank if equipped.
3. Remove water spray tip.
4. Using a short length of hose, with screen attached, pump the antifreeze from a 5 gallon pail. Circulate through the machine until you observe the mixture coming back to the 5 gallon pail.
5. Activate the trigger gun to get anti-freeze into the by pass lines and the unloader.
6. Recover anti-freeze by blowing machine out with compressed air.

(The following pages consist of mechanical diagrams of the machines and the parts necessary to order in case replacement or repair are necessary)





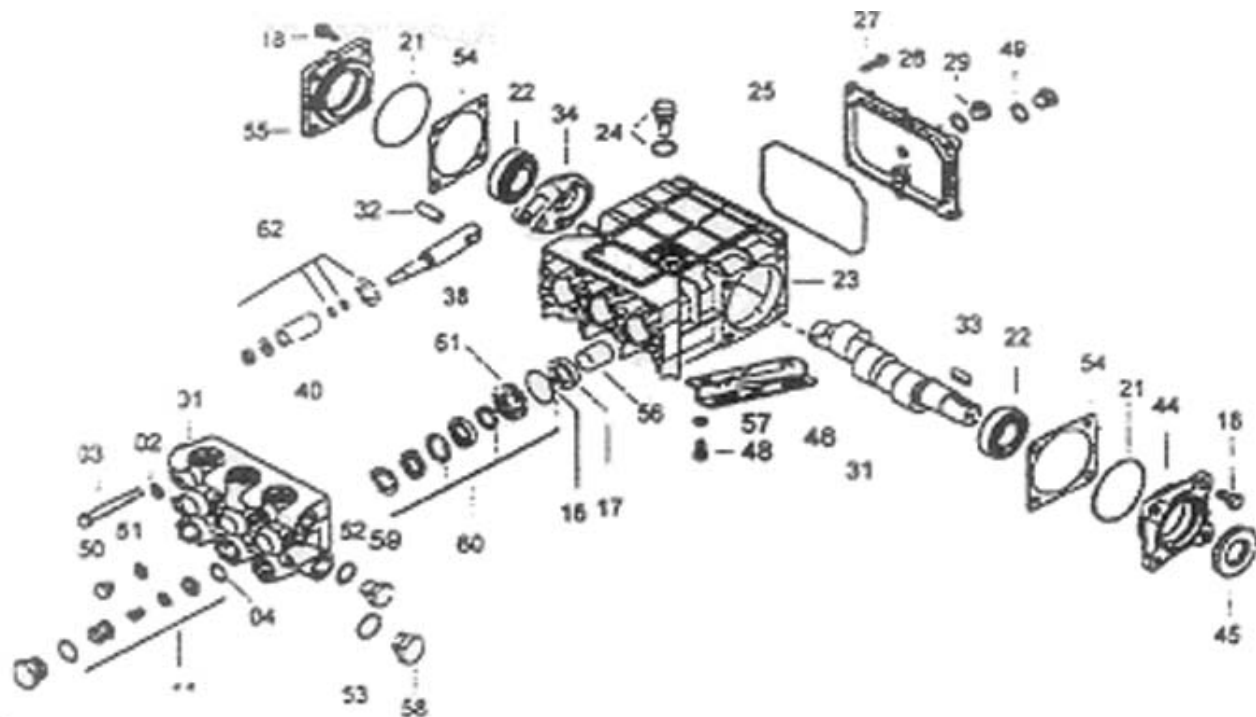
08-01301(PD3.0/22-S)

08-01302(PD2.0/22-Z)

08-01303(PD3.0/22-Z)

08-01307(PL3.0/22-Z)

REF	Part #	Quan	Description	REF	Part #	Quan	Description
1	08-45101	1	Head, brass	48	08-45148	4	Bolt, rail mnt
2	08-44235	8	Washer, Head bolt	49	08-45149	1	Plug, oil drain
3	08-45103	8	Head bolt	50	18-45150	1	Plug, head
4	08-45104	6	O-ring, check valve	51	08-45454	1	Seal, headplug
9	08-45109	6	O-ring, valve cap	52	08-45452	2	Seal, 3/8" plug
10	08-45110	6	Cap, check valve	57	02-20105	4	Washer, Rail mounting
11	08-45111	6	check valve	58	08-45158	2	Head side plud, 3/8"
16	18-45116	3	O-ring, seal retainer	59	08-45159	1	Bolt, crankshaft ret.
17	08-45117	3	Oil seal, plunger	60	08-45191	1	Seal kit, plunger rod
18	08-44127	4	Bolt, seal retainer	61	08-45190	3	Brass retainer kit
21	08-45121	1	O-ring, crank retainer	62	08-45192	3	Seal kit, plunger rod
22	08-45122	2	Bearing, crankshaft	63	08-45163	1	Washer, crank retain
23	08-45123	1	Crankcase	64	08-45164	1	Bushing, crank retain
24	08-45124	1	Dipstick with Gasket	65	08-45165	1	Retainer, crank cap
25	08-45125	1	O-ring, rear cover	66	08-45166	1	Cap, crankshaft
26	08-45126	1	Rear cover	67	08-45167	1	Snap ring, crank brg
29	08-45129	1	Oil sight glass	68	08-45168	1	Bearing, crankshaft
31	08-45131	1	Crankshaft, 08-01302	69	08-45169	1	Snap ring, crank brg
31	08-45231	1	Crankshaft, 08-01303	70	08-45170	1	Seal, crankshaft oil
31	08-45331	1	Crankshaft, 08-01301	75	02-20330	4	Bolt, flange to motor
31	08-45431	1	Crankshaft, 08-10307	76	02-20205	4	Washwer, flange/motor
32	08-45132	3	Wrist pin	77	08-45177	1	Flange, electric(56C)
33	08-45133	1	Key, crankshaft	78	08-45178	4	Bolt, flange to pump
34	08-45134	3	Connecting rod	80	02-20231	4	Bolt, flange/engine
38	08-45138	3	Plunger push rod	81	02-20205	4	Washer, flange/engine
40	08-45140	3	Plunger, ceramic	84	08-45184	1	Flange, gas engine DD
46	08-45146	2	Rail, mouting				



10 09

08-03121(MC 12.20/S)

08-01325 (MC 18.20/S)

Ref	Part #	Quan	Description	Ref	Part #	Quan	Description
1	08-45201	1	Brass head	40	08-45240	3	Plunger, ceramic, 08-10321
2	08-45202	8	Washer, head bolt	40	08-45440	3	Plunger, ceramic, 08-10325
3	08-45203	8	Head bolt	44	08-45244		Bearing ret, drive end
4	08-45104	6	O-Ring, check valve	45	08-45245		Seal, oil, crankshaft
9	08-45109	6	O-Ring, valve cap	46	08-45146	2	Rail, mounting
10	08-45210	6	Check valve cap	48	08-45248	4	Bolt, rail mounting
11	08-45211	6	Check valve with o-ring	49	08-45149		Plug & seal, oil drain
16	08-44116	3	O-Ring, packing retainer	50	08-45150		Plug, head
17	08-45217	3	Oil seal, plunger	51	08-45151	1	Seal, head plug
18	08-45218	8	Bolt, crank BRG retain	52	08-45152	1	Gasket, side plug 3/8"
			O-Ring, crank BRG				
21	08-45221	2	retain	53	08-45253	1	Gasket, side plug, 1/2"
22	08-44222	2	Crankshaft bearing	54	08-45254	2	Shim, Crankshaft Ret
23	08-45223	1	Crankcase	55	08-45255	1	Bearing ret, closed end
24	08-45124	1	Crankcase Vent W/GSKT	56	08-45256	3	Guide, plunger rod
25	08-45225	1	O-Ring, rear cover	57	08-20105	4	Washer, rail mounting
26	08-45226	1	Cover, rear crankcase	58	08-45258	6	Head plug, side, 1/2"
27	08-45227	5	Bolt, rear cover	59	08-45158		Head plug, side, 3/8"
29	08-45129	1	Oil sight glass w/seal	60	08-45291		Seal kit, plunger, 08-01321
31	08-45631	1	Crankshaft, 08-03121	60	08-45391		Seal kit, plunger, 08-01325
31	08-45731	1	Crankshaft, 08-01325	61	08-45290	3	Brass parts, plung, 08-01321
32	08-45232	3	Wrist pin	61	08-45390	3	Brass parts, plung, 08-01325
33	08-45233	1	Key, crankshaft	62	08-45292	3	Seal Kit, plunger rod
34	08-45234	3	Connecting rod				
38	08-45238	3	Plunger Rod				

Parts List

REF	DESCRIPTION	2.2-1200GBE	3-1000GBE	3-1000G	3-1500GBE	3-1500G	3-2500G
01	Chassis	18-54120	18-54120	18-40130	18-54120	18-40130	18-40140
05	Pipe Elbow	01-16140	01-16140	01-16140	01-16140	01-16140	01-16220
06	Tire and Wheel	NA	NA	17-10100	NA	17-10100	17-10100
06-1	Axle Cap	NA	NA	02-21250	NA	02-21250	02-21250
07	Electric Motor	11-10135	11-10135	11-10135	11-10169	11-10175	11-10169
08	Water Pump	08-01400	08-01430	08-01430	08-01405	08-01430	08-01320
14	Garden Hose Adap.	01-10101	01-10101	01-10101	01-10101	01-10101	01-10103
14-1	Washer Screen	02-72110	02-72110	02-72110	02-72110	02-72110	02-72110
14-2	Spring, Hose Adapt	01-10100	01-10100	01-10100	01-10100	01-10100	01-10100
15	Hose Barb	01-12200	01-12200	01-12200	01-12200	01-12200	01-12280
16	Hose Clamp	02-10100	02-10100	02-10100	02-10100	02-10100	02-10100
17	By-Pass Hose	09-50125	09-50125	09-50125	09-50125	09-50125	09-50125
19	Unloader	06-17112	06-17112	06-17112	06-17112	06-17112	06-17125
20	Pipe Nipple	01-17105	01-17105	01-17105	01-17105	01-17105	01-17170
21	Pipe Elbow	01-16140	01-16140	01-16140	01-16140	01-16140	01-16220
22	Pipe Nipple	NA	NA	NA	NA	NA	01-17165
26	Quick Coupler	01-07217	01-07217	01-07217	01-07217	01-07217	01-07217
27	O Ring	01-07420	01-07420	01-07420	01-07420	01-07420	01-07420
28	Quick Plug	01-07197	01-07197	01-07197	01-07197	01-07197	01-07197
29	Chemical Injector	06-12220	06-12230	06-12230	06-12230	06-12230	06-12230
30	Chemical Hose	09-00160*	09-00160*	09-00160*	09-00160*	09-00160*	09-00160*
31	Chemical Screen	06-18730	06-18730	06-18730	06-18730	06-18730	06-18730
32	Pipe Tee	01-20100	01-20100	01-20100	01-20100	01-20100	01-20100
41	Pressure Hose	09-20325	09-20325	09-20350	09-20325	09-20350	09-20350
42	Trigger Gun	14-10100	14-10100	14-10100	14-10100	14-10100	14-10100
43	Wand, 1/4	14-61431	14-61431	14-61431	14-61431	14-61431	14-61431
44	Insulator, Wand	14-50100	14-50100	14-50100	14-50100	14-50100	14-50100
45	Motor Pulley	NA	NA	NA	NA	NA	05-24230
45-1	Hub, Motor Pulley	NA	NA	NA	NA	NA	NA
46	Pump Pulley	NA	NA	NA	NA	NA	05-24282
46-1	Hub, Pump Pulley	NA	NA	NA	NA	NA	05-23105
47	Drive Belts	NA	NA	NA	NA	NA	05-40128
48	Pipe Nipple	01-17170	01-17170	01-17170	01-17170	NA	NA
49	Vari-Head Tip Hold	14-62100	14-62100	14-62100	14-62100	14-62100	14-62100
50	Water Spray Tip	14-40111	14-40131	14-40131	14-40116	14-40116	14-40131
50-1	Water Spray Tip	NA	NA	NA	NA	NA	14-40130
52	Power Cord	04-00520	04-00520	04-00520	04-00305*	04-00305*	04-003050*
53	Power Plug	With Cord	With Cord	With Cord	04-00550	04-00550	04-00550
54	Power Switch	04-74120	04-74120	04-74120	04-74120	04-74170	04-74150
63	Hose Barb	01-12422	01-12422	01-12422	01-12422	01-12230	01-12230
64	Handle Grip	NA	NA	18-00100	NA	18-00100	18-00100
66	Switch Box	NA	NA	NA	NA	NA	04-73204
68	Box Connector	04-71121	04-71121	04-71121	04-71120	04-71121	04-71143
69	Switch Box Cover	NA	NA	NA	NA	NA	04-73206
71	Quick Coupler	NA	NA	NA	NA	NA	01-07214
72	O-Ring	NA	NA	NA	NA	NA	01-7410
73	Quick Plug	NA	NA	NA	NA	NA	01-07203
74	Pipe Nipple	NA	NA	NA	NA	NA	01-17125
75	Belt Guard	NA	NA	NA	NA	NA	18-10121
76	Chemical Metering Valve	NA	NA	06-18176	NA	06-18176	06-18176
77	Pipe Nipple	NA	NA	01-17110	NA	01-17110	01-17175
78	Pipe Bushing	NA	NA	NA	NA	NA	01-14110
79	Garden Hose Adap. HI PSI Chemical (optional)	NA	NA	01-10101	NA	01-10101	01-10101
82	Rubber Feet	02-80110	02-80110	NA	02-80110	NA	NA

Sold by the foot, measure length may vary, measure not applicable

NA

Parts List

Ref	Description	4-2000G	5-1500G	5-2000G	4-3000G	5-3000G
01	Chasis	18-40140	18-40140	18-40150	18-40150	18-40150
05	Pipe elbow	01-16220	01-16220	01-16220	01-16220	01-16220
06	Tire and wheel	17-10100	17-10100	17-10100	17-10100	17-10100
06-1	Acle cap	02-21250	02-21250	02-21250	02-21250	02-21250
07	Electric motor	11-10169	11-10175	11-10190	11-10190	11-10252
08	Water pump	08-01320	08-01324	08-01324	08-01320	08-01324
14	Garden hose adap	01-10103	01-10103	01-10103	01-10103	01-10103
14-1	Washer screen	02-72110	02-72110	02-72110	02-72110	02-72110
14-2	Spring, hose adapt	01-10100	01-10100	01-10100	01-10100	01-10100
15	Hose barb	01-12280	01-12280	01-12280	01-12280	01-12280
16	Hose clamp	02-10100	02-10100	02-10100	02-10100	02-10100
17	By-pass hose	09-50125	09-50125	09-50125	09-50125	09-50125
19	Unloader	06-17125	06-17125	06-17125	06-17125	06-17125
20	Pipe nipple	01-17170	01-17170	01-17170	01-17170	01-17170
21	Pipe elbow	01-16220	01-16220	01-16220	01-16220	01-16220
22	Pipe nipple	01-17165	01-17165	01-17165	01-17165	01-17165
26	Quick coupler	01-07217	01-07127	01-07217	01-07217	01-07217
27	O ring	01-07420	01-07420	01-07420	01-07420	01-07420
28	Quick plug	01-07197	01-07197	01-07197	01-07197	01-07197
29	Chemical injector	06-12230	06-12240	06-12240	06-12230	06-12240
30	Chemical hose	09-00160*	00160*	00160*	00160*	00160*
31	Chemical screen	06-18730	06-18730	06-18730	06-18730	06-18730
32	Pipe tee	01-20110	01-20110	01-20110	01-20110	01-20110
41	Pressure hose	09-20350	09-20350	09-20350	09-20350	09-20350
42	Trigger gun	14-10100	14-10100	14-10100	14-10100	14-10100
43	Wand, 1/4"	14-61431	14-61431	14-61431	14-61431	14-61432
44	Insulator, wand	14-50100	14-50100	14-50100	14-50100	14-50100
45	Motor pulley	05-24739	05-24240	05-24751	05-24751	05-28062
45-1	Hub, motor pulley	NA	05-23160	NA	NA	05-23170
46	Pump pulley	05-24210	05-24240	05-24260	05-24260	05-28060
47	Drive belts	05-40126	05-40130	05-40130	05-40130	05-41032
48	Pipe nipple	NA	NA	NA	NA	NA
49	Vari-head tip holder	14-62100	14-62100	14-62100	14-62100	14-62100
50	Water spray tip	14-40125	14-40145	14-40140	14-40115	14-40125
50-1	Water spray tip	14-40126	14-40146	14-40141	14-40116	14-40126
52	Power cord	04-00486*	00486*	00486*	00486*	00486*
53	Power plug	04-00550	04-00550	04-00550	04-00550	04-00550
54	Power switch	04-74150	04-74150	04-74165	04-74165	04-74165
63	Hose barb	01-12230	01-12230	01-12230	01-12230	01-12230
64	Handle grip	18-00100	18-00100	18-00100	18-00100	18-00100
66	Switch box	04-73204	04-73210	04-73210	04-73212	04-73212
68	Box connector	04-71143	04-71143	04-71143	04-71143	04-71143
69	Switch box cover	04-73211	04-73211	04-73213	04-73213	04-73212
71	Quick coupler	01-07214	01-07214	01-07214	01-07214	01-07214
72	O-ring	01-07410	01-07410	01-07410	01-07410	01-07410
73	Quick plug	01-07203	01-07203	01-07203	01-07203	01-07203
74	Pipe nipple	01-17125	01-17125	01-17125	01-17125	01-17125
75	Belt guard	18-10121	18-10121	18-10121	18-10121	18-10121
76	Chemical Metering Valve	06-18176	06-18176	06-18176	06-18176	06-18176
77	Pipe Nipple	01-17175	01-17175	01-17175	01-17175	01-17175
78	Pipe bushing	14-14110	01-14110	01-14110	01-14110	01-14110
79	Garden hose adap Hi psi	01-10101	01-10101	01-10101	01-10101	01-10101
80	chemical(optional)	06-18360	06-18360	06-18360	06-18360	06-18360
82	Rubber feet	NA	NA	NA	NA	NA

* Sold by the foot, measure
 ** Length may vary, measure
 NA Not Applicable