

This manual contains **IMPORTANT WARNINGS** and **INSTRUCTIONS READ AND RETAIN FOR REFERENCE**

HYDRA-CLEAN® MONARK, PRESIDENT Pressure Washer

HYDRA-CLEAN® 5:1 MONARK – CART MOUNTED
P/N 800-412, Series A

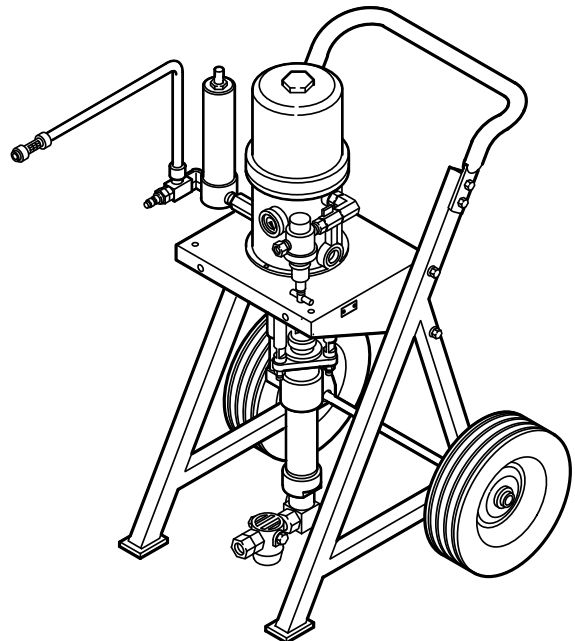
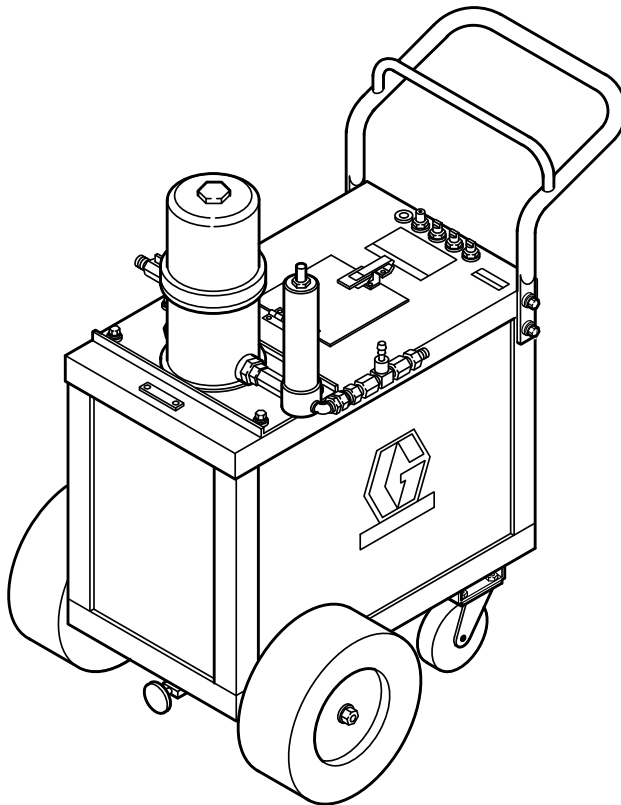
900 psi (62 bar) MAXIMUM WORKING PRESSURE
2.5 gpm (10 lpm) MAXIMUM FLOW RATE

HYDRA-CLEAN® 10:1 PRESIDENT – CART MOUNTED
P/N 800-413, Series A

1800 psi (124 bar) MAXIMUM WORKING PRESSURE
3.0 gpm (11 lpm) MAXIMUM FLOW RATE

HYDRA-CLEAN® 10:1 PRESIDENT – PORTABLE TANK MOUNTED
P/N 800-295, Series A

1800 psi (124 bar) MAXIMUM WORKING PRESSURE
3.0 gpm (11 lpm) MAXIMUM FLOW RATE



GRACO INC. P.O. Box 1441 MINNEAPOLIS, MN 55440-1441

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WARNING

**HIGH PRESSURE SPRAY CAN CAUSE SERIOUS INJURY.
FOR PROFESSIONAL USE ONLY. OBSERVE ALL WARNINGS.**

Read and understand all instruction manuals before operating equipment.

FLUID INJECTION HAZARD

General Safety

This pressure washer generates very high fluid pressure. Spray from the gun, leaks or ruptured components can inject fluid through your skin and into your body and cause extremely serious bodily injury including the need for amputation. Also, fluid injected or splashed into the eyes or on the skin can cause serious damage.

NEVER point the spray gun or wand at anyone or at any part of the body. *NEVER* put hand or fingers over the spray tip.

ALWAYS follow the **Pressure Relief Procedure**, *before* cleaning or servicing any part of the sprayer.

NEVER try to stop or deflect leaks with your hand or body.

Be sure equipment safety devices are operating properly before each use.

Medical Treatment

If any fluid appears to penetrate your skin, get **EMERGENCY MEDICAL TREATMENT AT ONCE. DO NOT TREAT AS A SIMPLE CUT.** Tell the doctor exactly what fluid was injected.

NOTE TO PHYSICIAN: *Injection in the skin is a traumatic injury. It is important to treat the injury surgically as soon as possible. Do not delay treatment to research toxicity. Toxicity is a concern with some exotic coatings injected directly into the bloodstream. Consultation with a plastic surgeon or reconstructive hand surgeon may be advisable.*

Pressure Relief Procedure

To reduce the risk of serious bodily injury, including fluid injection and splashing in the eyes, or on the skin, always follow this procedure whenever you stop spraying for more than 10 minutes, when shutting down, and before checking or repairing any part of the system.

1. Engage the trigger safety latch.
2. Turn the air supply off.
3. Disconnect the air supply.
4. Shut off the water supply.
5. Disengage the trigger safety latch and trigger the gun to relieve pressure, and then engage the trigger safety latch again.
6. Before long-term (overnight) storage or transporting of the unit, disconnect the water supply and disconnect the air supply.

Spray Gun Safety Devices

Be sure all gun safety devices are operating properly before each use. Do not remove or modify any part of the gun; this can cause a malfunction and result in serious bodily injury.

SAFETY LATCH: Whenever you stop spraying for a moment, always set the gun safety latch in the engaged or "safe" position, making the gun inoperative. Failure to properly set the safety latch can result in accidental triggering of the gun.

SPRAY TIP SAFETY : Use extreme caution when cleaning or changing spray tips. If a spray tip clogs while spraying, engage the gun safety latch immediately. *ALWAYS* follow the **Pressure Relief Procedure** and then remove the spray tip to clean it.

EQUIPMENT MISUSE HAZARD

General Safety

Any misuse of the pressure washer or accessories, such as overpressurizing, modifying parts, using incompatible chemicals and fluids, or using worn or damaged parts, can cause them to rupture and result in fluid injection, splashing in the eyes or on the skin, or other serious bodily injury, fire, explosion or property damage.

NEVER alter or modify any part of this equipment; doing so could cause it to malfunction.

CHECK all spray equipment regularly and repair or replace worn or damaged parts immediately.

ALWAYS wear protective eyewear and appropriate clothing. If using a chemical injector, read and follow the

chemical manufacturer's literature for recommendations on additional protective equipment, such as a respirator.

System Pressure

This sprayer can develop high operating pressures. Be sure that all spray equipment and accessories are rated to withstand the maximum working pressure of this sprayer. *DO NOT* exceed the maximum working pressure of any component or accessory used in the system.

Chemical Compatibility

BE SURE that all chemicals used in the chemical injector are compatible with the wetted parts of the hose, gun, wand and tip, as given in the Technical Data (inside back cover). Always read the chemical manufacturer's literature before using any chemical in this pressure washer.

HOSE SAFETY

High pressure fluid in the hoses can be very dangerous. If the hose develops a leak, split or rupture due to any kind of wear, damage or misuse, the high pressure spray emitted from it can cause a fluid injection injury or other serious bodily injury or property damage.

ALL FLUID HOSES MUST HAVE STRAIN RELIEFS ON BOTH ENDS. The strain reliefs help protect the hose from kinks or bends at or close to the coupling, which can result in hose rupture.

TIGHTEN all fluid connections securely before each use. High pressure fluid can dislodge a loose coupling or allow high pressure spray to be emitted from the coupling.

NEVER use a damaged hose. Before each use, check entire hose for cuts, leaks, abrasion, bulging cover, or damage or movement of the hose couplings. If any of these conditions exist, replace the hose immediately. *DO NOT* try to recouple high pressure hose or mend it with tape or any other device. A repaired hose cannot contain the high pressure fluid.

HANDLE AND ROUTE HOSES CAREFULLY. Do not pull on hoses to move the pressure washer. Do not use chemicals which are not compatible with the inner tube and cover of the hose. *DO NOT* expose Graco hose to temperatures above 200° F (93° C) or below -40° F (-40° C).

MOVING PARTS HAZARD

Moving parts can pinch or amputate fingers or other body parts. *KEEP CLEAR* of moving parts when starting or operating the pressure washer.

NEVER operate the pressure washer without all guards and interlocks installed and functioning. Follow the **Pressure Relief Procedure** before checking or servicing the pressure washer to prevent discharging high pressure fluid from the gun.

TERMS

WARNING: Alerts user to avoid or correct conditions that could cause bodily injury.

NOTE: Identifies helpful procedures and information.

CAUTION: Alerts user to avoid or correct conditions that could cause damage to or destruction of equipment.

IMPORTANT

United States Government safety standards have been adopted under the Occupational Safety and Health Act. These standards—particularly the General Standards, Part 1910, and the Construction Standards, Part 1926—should be consulted.

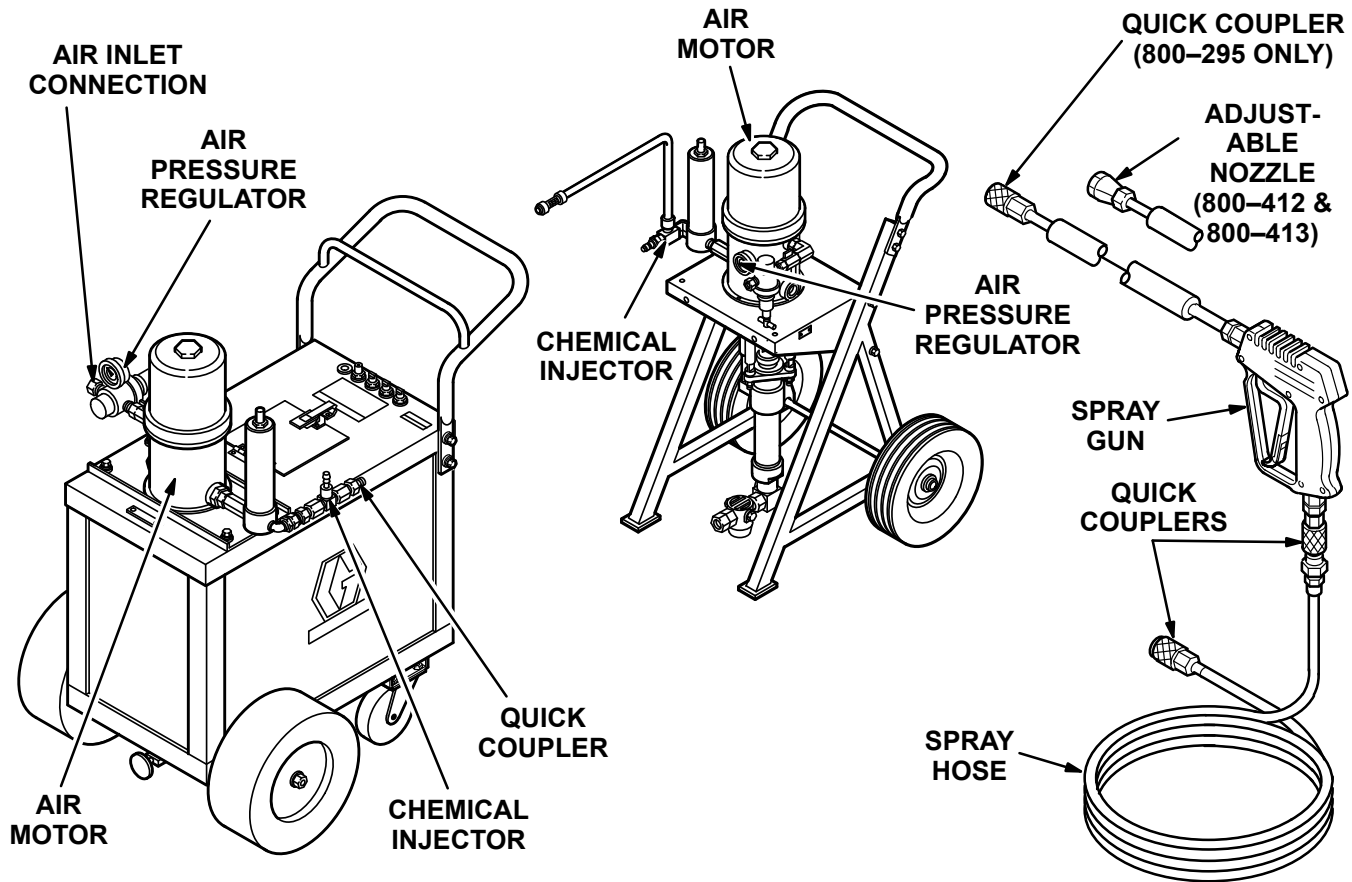


Figure 1

Check for Shipping Damage

The unit should be checked for any damage that may have occurred in shipping. Any damage should be noted and the **carrier notified immediately**.

Set Up

Connect the high pressure hose between the pump outlet and the gun inlet. Both of these connections are made with quick couplers.

CAUTION

Up to 100 ft (30 m) of high pressure hose may be used. Longer hoses may affect sprayer performance, and chemical injector performance.

Install the appropriate spray tip on the wand (800-295 only). See *Installing and Changing Spray Tips*.

Connect to Water Supply

CAUTION

Before attaching to the water supply, check your local plumbing code regarding cross-connection to the water supply. A backflow preventer P/N 801-133 is available to prevent backflow of contaminated water into the fresh water supply. Install it upstream from the pump (800-412 & 800-413 only).

CAUTION

If inlet water pressure is over 60 psi (4.1 bar) a regulating water valve P/N 800-258 must be installed at the garden hose connection (800-412 & 800-413 only).

Do not exceed 20 °F (93 °C) inlet water temperature.

Connect a hose with at least a 3/4 inch (19 mm) ID from the water supply to the unit's 3/4 inch garden hose inlet. The supply hose should not be more than 50 ft (15 m) long.

NOTE: The water source at the unit *must* have a minimum flow rate equal to that of the unit (see *Technical Data*, inside back cover).

Connect to Air Supply

Be sure that the air supply has a minimum flow rate equal to the air consumption of the motor and that the pressure is less than the maximum allowed (see *Technical Data*, inside back cover).

STARTUP

Use this procedure whenever starting the pressure washer to help insure that the unit is ready to operate and starting is done safely.

1. Turn on the water supply.

CAUTION

Never run the unit dry. Costly damage to the pump will result. Always be sure the water supply is completely turned on before operating.

2. Turn on the air supply.
3. Trigger the gun to start.
4. *ALWAYS* engage the gun's trigger safety latch whenever you stop spraying, even for a moment, to reduce the risk of fluid injection or splashing in the

eyes or on the skin if the gun is bumped or triggered accidentally.

5. *ALWAYS* observe the following **CAUTIONS** to avoid costly damage to the pressure washer.

CAUTION

DO NOT run the pump dry, which will quickly damage the pump. Be sure the water supply is fully turned on before starting the pump.

DO NOT operate the pressure washer with the inlet water screen removed. This screen helps keep abrasive sediment out of the pump, which could clog or scratch the pump. Keep this screen clean.

DO NOT pump caustic materials; such materials may corrode the pump components.

OPERATION

Two factors control the flowrate and spray pressure of Graco air-powered pressure washers: the orifice size of the spray tip and the air inlet pressure. Adjust these factors to get the desired flowrate and spray pressure, but never allow the pump to exceed 60 cpm. To increase the flowrate, increase the spray tip orifice or the air inlet pressure. Both factors will increase the pump speed, but the larger tip orifice will reduce the spray pressure. To increase the spray pressure, increase the air inlet pressure.

Adjustable Nozzle (800-412 & 800-413)

Insert the chemical filter (attached with the clear tubing to the chemical injector) into the container of chemical. Turn the control ring on the adjustable nozzle clockwise. This causes a drop in pressure that actuates the chemical injector. Closing the adjustable nozzle deactivates the chemical injector and produces high pressure for rinsing. The flow rate of the chemical may be regulated by turning the chemical adjustment knob on the injector. Maximum chemical flow is at a full two turns counterclockwise from the closed (clockwise) position.

WARNING

DO NOT attempt to open or close the adjustable nozzle when the spray gun is in use. *BE SURE* that the trigger safety latch on the gun is in the "ON" position before adjusting to avoid serious bodily injury or fluid injection.

Changeable Spray Tips (800-295 only)

Insert the chemical filter (attached with the clear tubing to the chemical injector) into the container of chemical. Install the large orifice chemical tip (see Installing and

Changing Spray Tips). This causes a drop in pressure that actuates the chemical injector. Changing back to a small diameter spray tip deactivates the chemical injector and produces high pressure for rinsing. The flow rate of the chemical may be regulated by turning the chemical adjustment knob on the injector. Maximum chemical flow is at a full two turns counterclockwise from the closed (clockwise) position.

Cleaning

No more than 100 feet (30 m) of spray hose may be used between the chemical injector and the spray gun when the operator is at the same level as the chemical injector. If the operator is over 25 feet above the chemical injector, no more than 50 feet (15 m) may be used.

Check the distance that you will need to hold the spray nozzle from the surface by test spraying on a scrap of similar material. For soft surfaces, such as wood, hold the nozzle about 3 ft (1 m) from the surface and gradually bring it closer, checking to see if the high pressure spray is damaging the surface.

Mist wet the surface with cleaning solution, moving from bottom to top. Let it soak briefly, then use the high pressure rinse to "chisel" off the soil, moving from top to bottom. Keep the nozzle angled to the surface and at a distance determined to be best for the surface. If some soil remains, repeat the procedure, letting the chemical soak a little longer. Stubborn soil can be cleaned off better with a stronger, heated cleaning solution.

Protect surfaces that might be damaged by the cleaning solution or high pressure spray. Rinse the solution before it dries.

Trigger Safety Latch

WARNING

To reduce the risk of serious bodily injury including fluid injection, splashing in the eyes or on the skin, **ALWAYS** engage the trigger safety latch whenever spraying stops, even for a moment.

In the engaged position, the trigger safety latch prevents the gun from being triggered accidentally by hand or if it is dropped or bumped. Be sure the latch is pushed fully down when engaging it or it cannot prevent the gun from being triggered. See Figure 2.

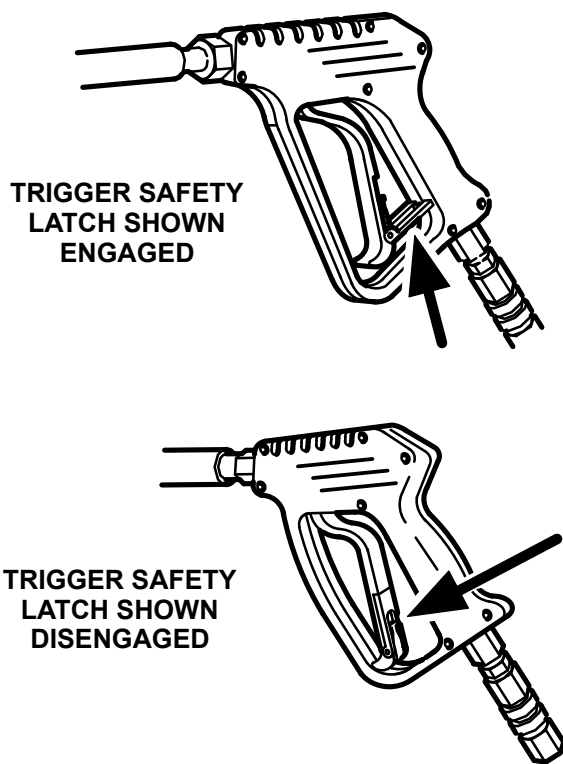


Figure 2

Installing and Changing Spray Tips (800–295 only)

WARNING

To reduce the risk of serious bodily injury, including fluid injection or splashing in the eyes or onto the skin, use extreme caution when changing spray tips. If a spray tip clogs while spraying, engage the gun safety latch immediately. **ALWAYS** follow the procedure below.

1. Follow the **Pressure Relief Procedure**.
2. Point the gun and wand away from yourself and anyone else.
3. Without holding your hand over the spray tip (A), pull back the quick coupler ring (B). Remove the old tip and install a new one, and then release the ring. See Figure 3.
4. Be sure the tip is secure before starting to spray again.
5. Tip holding holes are provided on the chassis.

CAUTION

To avoid blowing the o-ring out of the quick coupler, due to the high pressure in the system, never operate the pressure washer without a tip securely mounted in the quick coupler.

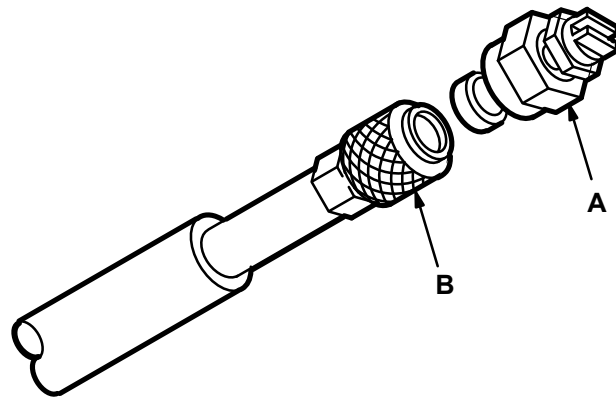


Figure 3

SHUTDOWN, FLUSHING AND STORAGE

WARNING

Pressure Relief Procedure

To reduce the risk of serious bodily injury, including fluid injection and splashing in the eyes, or on the skin, always follow this procedure whenever you stop spraying for more than 10 minutes, when shutting down, and before checking or repairing any part of the system.

1. Engage the trigger safety latch.
2. Turn the air supply off.
3. Disconnect the air supply.
4. Shut off the water supply.
5. Disengage the trigger safety latch and trigger the gun to relieve pressure, and then engage the trigger safety latch again.
6. Before long-term (overnight) storage or transporting of the unit, disconnect the water supply, and disconnect the air supply.

1. If the pressure washer will be exposed to freezing temperatures, drain all water out of the pump. If it must be stored in freezing temperatures, flush the unit with a 50% anti-freeze solution. Relieve pressure. Flush the pressure washer before using it again to remove the anti-freeze.

CAUTION

If water does freeze in the pressure washer, thaw it in a warm room before trying to start it. **DO NOT** pour hot water on or into the pump!

2. After each use, wipe all surfaces of the pressure washer with a clean, damp cloth.
3. Perform the appropriate maintenance. See maintenance chart.

MAINTENANCE

Observing regular maintenance intervals helps ensure that you get maximum performance and life from the pressure washer.

WARNING

To reduce the risk of serious bodily injury, including fluid injection, splashing in the eyes or on the skin, or injury from moving parts, always follow the **Pressure Relief Procedure Warning** before proceeding.

Interval	What to do
Daily	Clean water inlet screen and filter. Lubricate air motor (if there is not automatic oiling) by placing 15 drops of light machine oil in the pump air inlet.
Each 40 hours of operation	Check that the packing nut is tight. Tighten snug. Overtightening will damage packings. See the appropriate pump Instruction-Parts List.

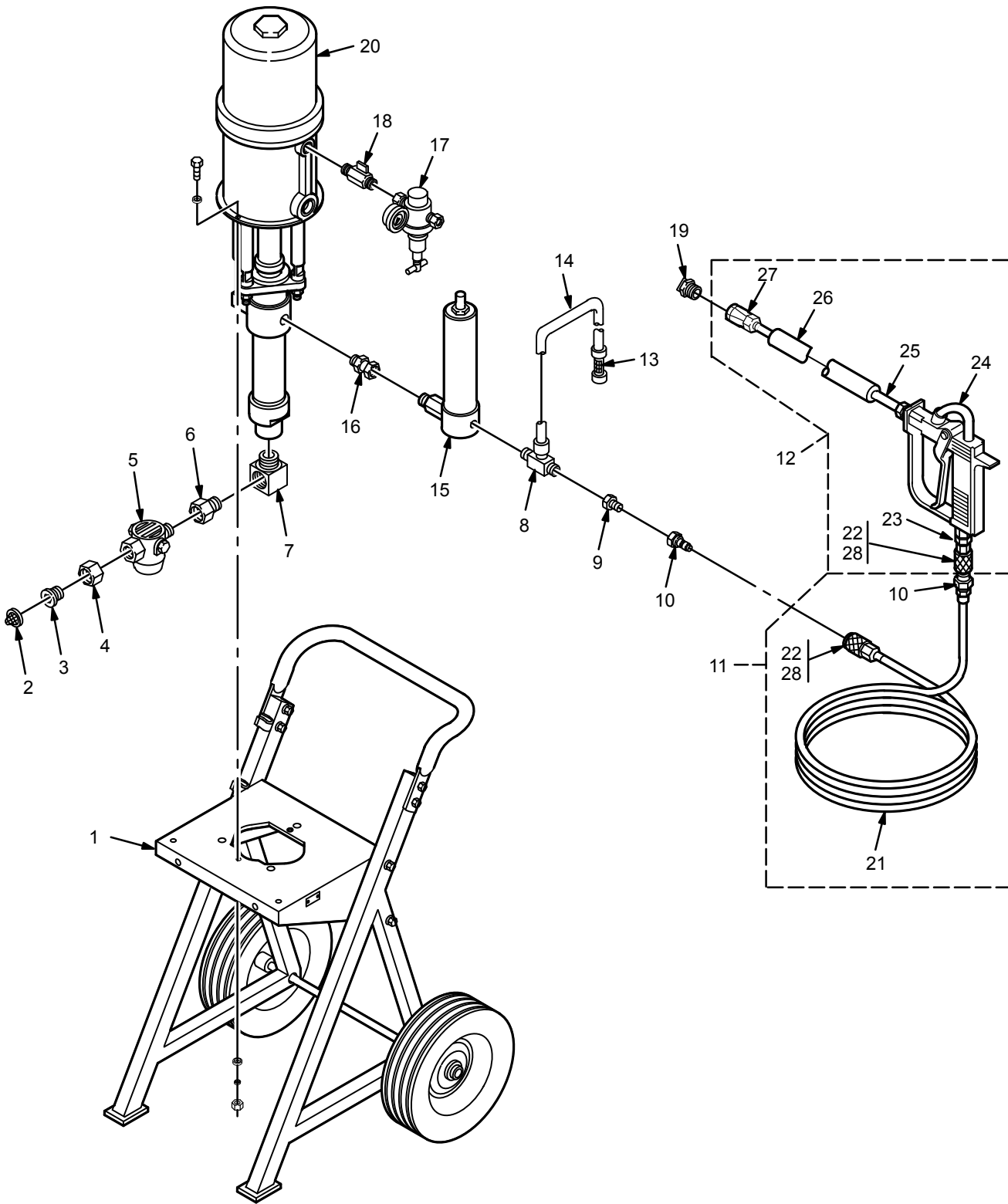
TROUBLESHOOTING CHART

WARNING

To reduce the risk of serious bodily injury, including fluid injection, splashing in the eyes or on the skin, or injury from moving parts, always follow the **Pressure Relief Procedure Warning** before proceeding.

Problem	Cause	Solution
Pump does not operate or no water flow	Loose or broken pump parts. Restricted line or inadequate air supply. Exhausted water supply. Clogged fluid hoses. Fluid intake or piston valves need adjustment. Damaged air motor.	Disassemble, check, repair. Clear, increase. Refill. Clean or replace. Adjust. See separate air motor Instruction Manual.
Pump operates but output is low	Insufficient air supply. Exhausted water supply. Obstructed gun or tip. Damaged pump packings. Piston or intake valve worn or held open.	Increase. Refill. Clear. Replace. Repair. See separate pump Instruction Manual.
Frequent or premature failure of the packings	Running pump dry. Abrasive material in the fluid being pumped. Inlet water temperature too high. Overpressurizing pump or excessive cycle rate.	Do not run pump without water. Install proper filtration on pump inlet plumbing. Check water temperature; may not exceed 200° F Check inlet air pressure. Adjust regulator if necessary.
Erratic or accelerated operation	Exhausted water supply. Fluid intake or piston valve worn.	Refill. Repair. See separate pump Instruction Manual.

PARTS DRAWING
800-412 5:1 Monark (Cart Mounted) Hydra-Clean® Pressure Washer

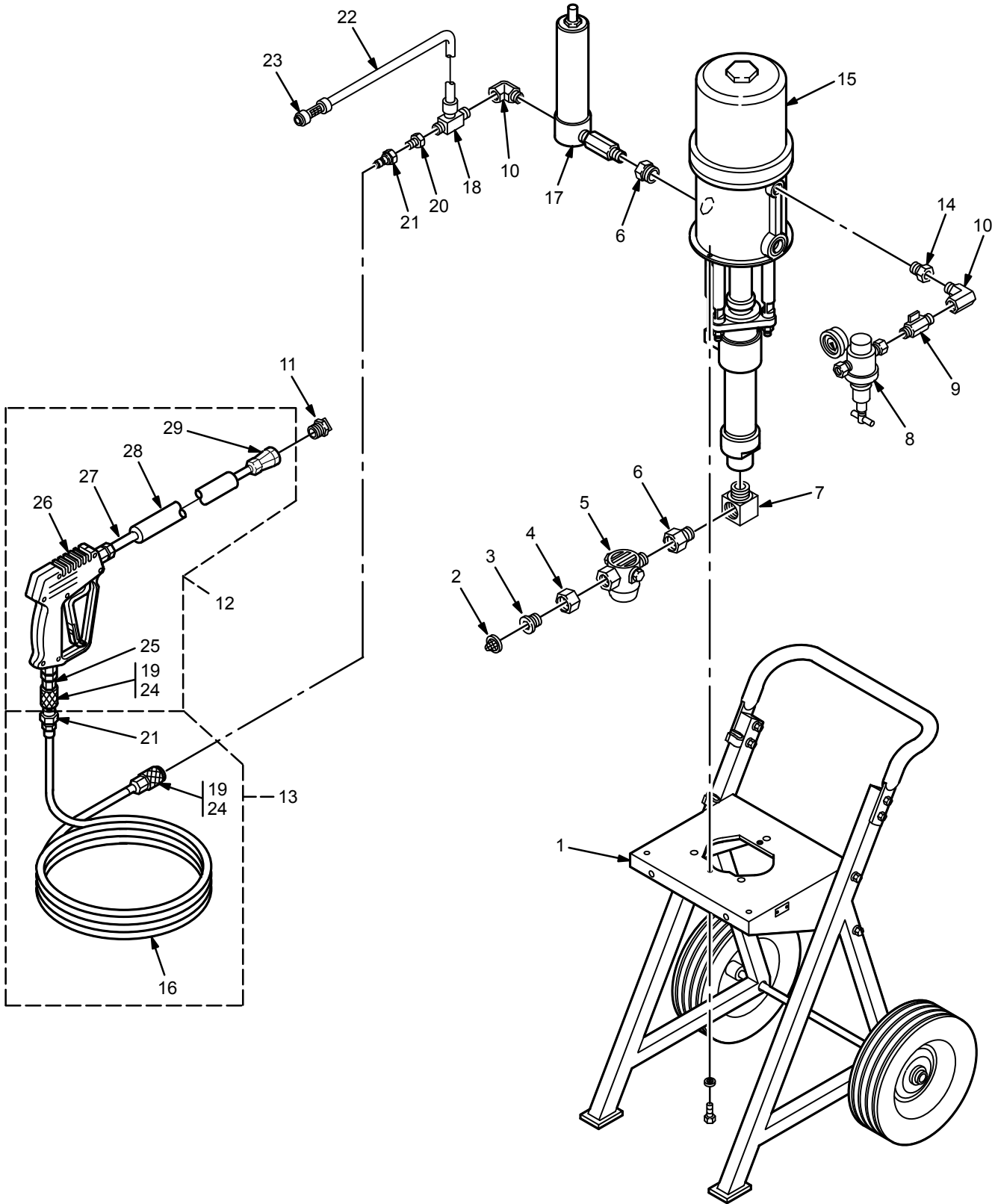


PARTS LIST**800-412 5:1 Monark (Cart Mounted) Hydra-Clean® Pressure Washer**

REF NO.	PART NO.	DESCRIPTION	QTY
1	224-044	CART (see instruction manual 308-136)	1
2	801-112	STRAINER, Garden Hose	1
3	801-110	ADAPTER, Garden Hose	1
4	801-111	NUT, Garden Hose	1
5	800-113	FILTER	1
6	100-896	BUSHING, Hex 3/4 X 1/2	2
7	176-393	ELBOW, Street 3/4 X 90°	1
8	803-473	INJECTOR, Chemical	1
9	150-287	ADAPTER, Reducing 3/8 X 1/4	1
10	801-090	QUICK COUPLER, Male 1/4	2
11	800-374	HOSE ASSEMBLY, w/Quick Couplers (incl. 10,21,22)	1
12	800-417	GUN AND WAND ASSEMBLY (incl. 22,23,24,25,26,27,28)	1
13	801-683	STRAINER, Chemical	1
14	803-059	TUBING, Chemical 5/16 ID	8 ft
15	207-278	ACCUMULATOR (see instruction manual 306-933)	1
16	803-446	FITTING, Swivel 1/2 X 1/2	1
17	202-156	REGULATOR ASSEMBLY (see instruction manual 307-204)	1
18	208-393	VALVE, Ball 3/8 x 3/8 (see instruction manual 307-068)	1
19	802-048	TIP, Spray 15 Degree	1
20	208-470	PUMP, 5:1 Monark (see instruction manuals 306-800, 307-043)	1
21	801-007	HOSE, High Pressure 50'	1
22	801-009	QUICK COUPLER, Female 1/4 (incl. 28)	2
23	801-103	NIPPLE, Hex 3/8 X 1/4	1
24	208-008	GUN, Spray (see instruction manual 307-010)	1
25	801-935	WAND, 20"	1
26	801-957	SLEEVE, 18"	1
27	800-118	NOZZLE, Adjustable	1
28	801-202	O-RING, Quick Coupler, female 1/4	2

PARTS DRAWING

800-413 10:1 President (Cart Mounted) Hydra-Clean® Pressure Washer

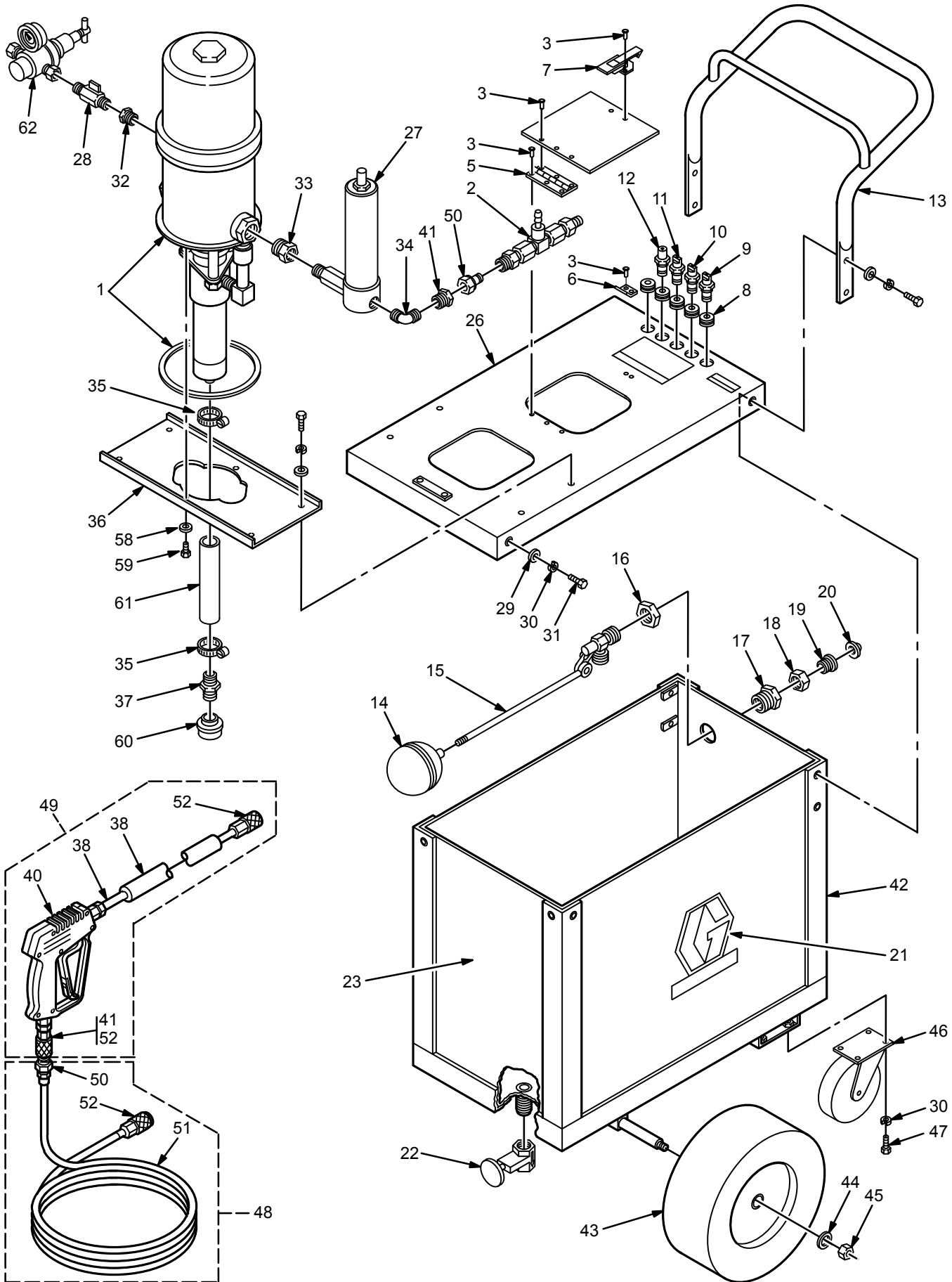


PARTS LIST**800-413 10:1 President (Cart Mounted) Hydra-Clean® Pressure Washer**

REF NO.	PART NO.	DESCRIPTION	QTY
1	224-044	CART (see instruction manual 308-136)	1
2	801-112	STRAINER, Garden Hose	1
3	801-110	ADAPTER, Garden Hose	1
4	801-111	NUT, Garden Hose	1
5	800-113	FILTER	1
6	100-896	BUSHING, Hex 3/4 X 1/2	2
7	176-393	ELBOW, Street 3/4 X 90°	1
8	202-156	REGULATOR ASSEMBLY 3/8 X 3/8 (see instruction manual 307-204)	1
9	208-393	VALVE, Ball 3/8 X 3/8 (see instruction manual 307-068)	1
10	155-899	ELBOW, Street 3/8 X 90°	2
11	801-700	TIP, Spray 15 Degree	1
12	800-396	GUN & WAND ASSEMBLY (incl. 19,25,26,27,28,29)	1
13	800-374	HOSE ASSEMBLY W/QUICK COUPLERS (incl. 16,19,21)	1
14	100-081	BUSHING, Hex 3/8 X 1/2	1
15	206-842	PUMP, 10:1 President (see instruction manuals 306-816, 306-982)	1
16	801-007	HOSE, High Pressure 50 ft	1
17	207-278	ACCUMULATOR (see instruction manual 306-933)	1
18	803-473	INJECTOR, Chemical	1
19	801-009	QUICK COUPLER, Female 1/4 (incl. 24)	2
20	150-287	ADAPTER, Reducing 3/8 X 1/4	1
21	801-090	QUICK COUPLER, Male 1/4	1
22	803-059	TUBING, Chemical 5/16 ID	8 ft
23	801-683	STRAINER, Chemical	1
24	801-202	O-RING, Quick Coupler, female 1/4	2
25	801-103	NIPPLE, Hex 3/8 X 1/4	1
26	803-350	GUN, Spray (see instruction manual 308-511)	1
27	801-935	WAND, 20"	1
28	801-957	SLEEVE, 18"	1
29	800-118	NOZZLE, Adjustable	1

PARTS DRAWING

800-295 10:1 President (Tank Mounted) Hydra-Clean® Pressure Washer



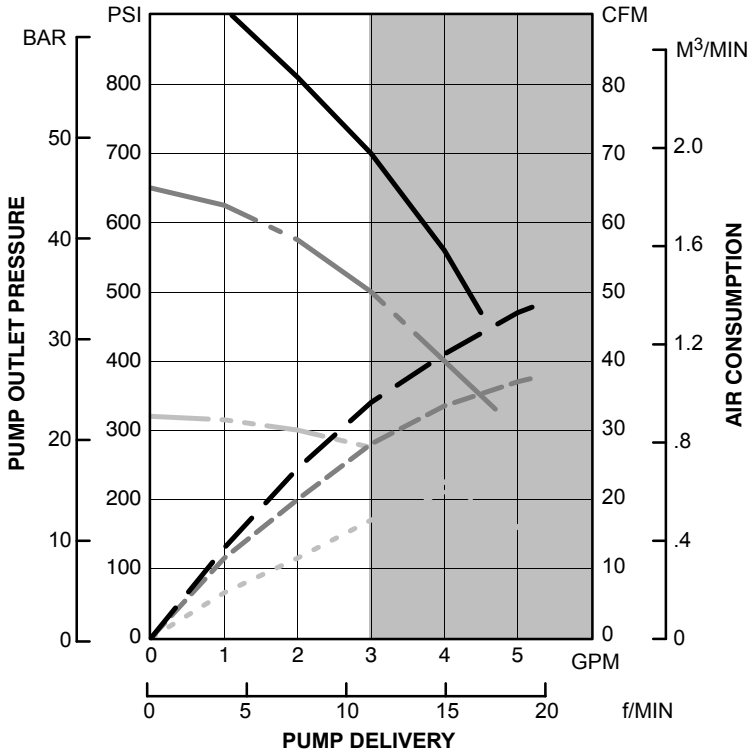
PARTS LIST

800-295 10:1 President (Tank Mounted) Hydra-Clean® Pressure Washer

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	206-842	PUMP, 10:1 President (see instruction manuals 306-816, 306-982)	1	32	100-081	BUSHING, Hex 3/8 X 1/2	1
2	800-139	CHEMICAL INJECTOR KIT (see instruction manual 308-513)	1	33	801-795	BUSHING, Hex 1/2 X 3/4	1
3	802-652	RIVET, Pop	10	34	155-699	ELBOW, Street 3/8 X 90°	1
4	803-119	COVER, Access	1	35	801-123	CLAMP, Hose	2
5	803-130	HINGE, Stainless Steel	1	36	803-110	BRACKET, Pump Support	1
6	801-702	CATCH	1	37	801-788	HOSE BARB 3/4 X 1/2	1
7	801-703	LATCH, Over Center	1	38	801-957	SLEEVE, 18"	1
8	801-012	GROMMET, Rubber	5	39	801-935	WAND, 20"	1
9	800-317	TIP ASSEMBLY, 40 Degree (incl. 54, 50)	1	40	803-350	GUN, Spray (see instruction manual 308-511)	1
10	800-316	TIP ASSEMBLY, 25 Degree (incl. 55, 50)	1	41	801-103	NIPPLE, Hex 3/8 X 1/4	2
11	800-315	TIP ASSEMBLY, 15 Degree (incl. 56, 50)	1	42	800-318	CHASSIS	1
12	800-314	TIP ASSEMBLY, 0 Degree (incl. 57, 50)	1	43	802-651	WHEEL & TIRE ASSEMBLY	2
13	803-129	HANDLE	1	44	801-612	WASHER, Flat 7/16	2
14	801-807	BALL, Float	1	45	801-020	NUT, Lock 1/2-13	2
15	801-806	VALVE, Float	1	46	803-133	WHEEL, Caster	2
16	176-295	NUT, Hex	1	47	801-940	SCREW, Cap, hex hd 5/16-18 X 3/4	8
17	803-131	FITTING, Bulkhead	1	48	800-374	HOSE ASSEMBLY, w/Quick Couplers (incl. 50,51,52)	1
18	801-111	NUT, Garden Hose	1	49	800-394	GUN & WAND ASSEMBLY (incl. 38,39,40,41,52)	1
19	801-110	ADAPTER, Garden Hose	1	50	801-090	QUICK COUPLER, Male 1/4	6
20	801-112	STRAINER, Garden Hose	1	51	801-007	HOSE, High Pressure, 50'	1
21	802-641	DECAL, Graco G	2	52	801-009	QUICK COUPLER, Female 1/4 (incl. 53)	3
22	801-805	VALVE, Gate	1	53	801-202	O-RING, Female, coupler	3
23	803-117	TANK, Stainless Steel	1	54	803-109	TIP, Spray 40 Degree	1
24	801-417	LABEL, Relieve Pressure	1	55	803-108	TIP, Spray 25 Degree	1
25	176-250	LABEL, Warning	1	56	803-107	TIP, Spray 15 Degree	1
26	803-118	COVER, Tank	1	57	803-106	TIP, Spray 0 Degree	1
27	207-278	ACCUMULATOR (see instruction manual 306-933)	1	58	100-016	WASHER, Lock 1/4	2
28	208-393	VALVE, Ball 3/8 X 3/8 (see instruction manual 307-068)	1	59	803-264	SCREW, Cap, hex hd 1/4-20 X 5/8	2
29	100-023	WASHER, Flat 5/16	10	60	803-005	STRAINER	1
30	100-214	WASHER, Lock 5/16	18	61	801-570	TUBING, 3/4 ID	6"
31	801-941	SCREW, Cap, hex hd 5/16-18 X 1	10	62	202-156	REGULATOR ASSEMBLY, 3/8 X 3/8 (see instruction manual 307-204)	1

PERFORMANCE CHART

10:1 PRESIDENT

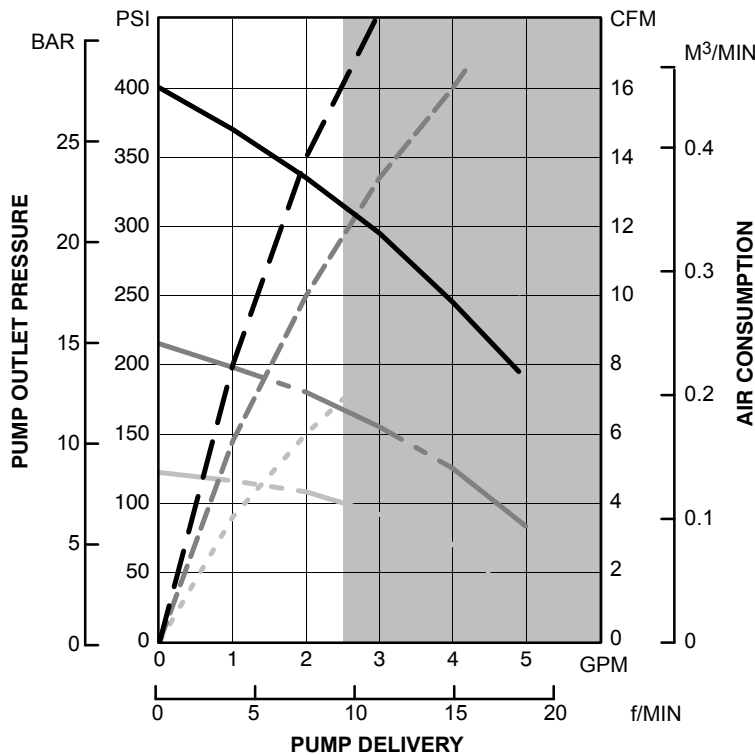


Pumps may be operated continuously to shaded area.

LEGEND

- Outlet Pressure**
At 100 Lbs. Air Pressure
- Outlet Pressure**
At 70 Lbs. Air Pressure
- Outlet Pressure**
At 40 Lbs. Air Pressure
- Air Consumption**
At 100 Lbs. Air Pressure
- Air Consumption**
At 70 Lbs. Air Pressure
- Air Consumption**
At 40 Lbs. Air Pressure

5:1 MONARK



Pumps may be operated continuously to shaded area.

LEGEND

- Outlet Pressure**
At 100 Lbs. Air Pressure
- Outlet Pressure**
At 70 Lbs. Air Pressure
- Outlet Pressure**
At 40 Lbs. Air Pressure
- Air Consumption**
At 100 Lbs. Air Pressure
- Air Consumption**
At 70 Lbs. Air Pressure
- Air Consumption**
At 40 Lbs. Air Pressure

TECHNICAL DATA

	5:1 MONARK (Cart Mounted)	10:1 PRESIDENT (Cart Mounted)	10:1 PRESIDENT (Tank Mounted)
Air Pressure	40 to 180 psi (3 to 12 bar)	40 to 180 psi (3 to 12 bar)	40 to 180 psi (3 to 12 bar)
Maximum Air Pressure To Regulator	300 psi (21 bar)	300 psi (21 bar)	300 psi (21 bar)
Maximum Pump Air Pressure	180 psi (12 bar)	180 psi (12 bar)	180 psi (12 bar)
Maximum Working Pressure	900 psi (62 bar)	1800 psi (124 bar)	1800 psi (124 bar)
Maximum Flow Rate (Continuous Duty)	2.5 gpm (10 lpm)	3.0 gpm (11 lpm)	3.0 gpm (11 lpm)
Pump Cycles/Displacement	28 cycles/gallon (8.0 cycles/liter)	20 cycles/gallon (5.3 cycles/liter)	20 cycles/gallon (5.3 cycles/liter)
Maximum Air Consumption	25 cfm (94 lpm)	40 cfm (151 lpm)	40 cfm (151 lpm)
Unit Weight	97 lbs (44 kg)	108 lbs (49 kg)	172 lbs (78 kg)
Overall Dimensions			
Length	29 in. (737 mm)	29 in. (737 mm)	36 in. (914 mm)
Width	27 in. (686 mm)	27 in. (686 mm)	25 in. (635 mm)
Height	46 in. (1168 mm)	46 in. (1168 mm)	43 in. (1092 mm)
Maximum Inlet Water Temperature	200° F (93° C)	200° F (93° C)	200° F (93° C)
Inlet Hose Connection	3/4 in. garden hose (f)	3/4 in. garden hose (f)	3/4 in. garden hose (f)
Wetted Parts	Acrylonitrile and Buna-N cover and tube		
High Pressure Hose	Anodized aluminum, Aluminum or bronze alloys, Brass Copper, Nylon- PTFE composite, Viton®, Buna-N, Cotton phenolic, 303, 304, and 316 Stainless steel, Polyimide-12 thermoplastic, PTFE®, Carbon steel, Zinc with or without yellow chromate plate		
Pressure Washer (including fittings)	PTFE and Viton® are tradenames of the DuPont Company.		

ACCESSORIES

(Must be purchased separately)

Air Line Filter 106-149

(1/2 npt inlet and outlet)
250 psi (17 bar) maximum working pressure.

Air Line Lubricator 214-848

(1/2 npt inlet and outlet)
250 psi (17 bar) maximum working pressure.

Bleed Type Master Valve (Required) 107-142

(1/2 npt inlet and outlet)
300 psi (21 bar) maximum working pressure.

Pump Runaway Valve 215-362

(3/4 npt inlet and outlet)
180 psi (12 bar) maximum working pressure. Shuts off air to the pump automatically if it senses that the pump is running too fast, a condition caused by a depleted water supply.

Grounding Wire 208-950

25 ft. (7.6 m) 12 ga wire

Grounding Clamp 103-538

Backflow Preventer 801-133

Prevents the backup of contaminated water into the fresh supply. Installs upstream of the pump.

Inlet Pressure Regulator 800-258

Regulates inlet water pressure to 60 psi (4 bar) maximum.

Wall Mount Bracket 206-220

Foamer 207-640

TSL-Throat Seal Liquid

Non evaporating solvent for wet cup

206-995 1 Quart (.9 Liter)

206-996 1 Gallon (3.8 Liter)

THE GRACO WARRANTY

WARRANTY AND DISCLAIMERS

Graco warrants all equipment manufactured by it and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. As purchaser's sole remedy for breach of this warranty, Graco will, for a period of twenty four months from date of sale, repair or replace any part of the equipment proven defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for, any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility with Graco equipment of structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective for examination by Graco to verify the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor and transportation.

DISCLAIMERS AND LIMITATIONS

THE TERMS OF THIS WARRANTY CONSTITUTE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AND ARE IN LIEU OF ANY OTHER WARRANTIES (EXPRESS OR IMPLIED), INCLUDING WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY NON-CONTRACTUAL LIABILITIES, INCLUDING PRODUCT LIABILITIES, BASED ON NEGLIGENCE OR STRICT LIABILITY. EVERY FORM OF LIABILITY FOR DIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OR LOSS IS EXPRESSLY EXCLUDED AND DENIED. IN NO CASE SHALL GRACO'S LIABILITY EXCEED THE AMOUNT OF THE PURCHASE PRICE. ANY ACTION FOR BREACH OF WARRANTY MUST BE BROUGHT WITHIN THREE (3) YEARS OF THE DATE OF SALE.

EQUIPMENT NOT COVERED BY GRACO WARRANTY

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motor, switches, hose, etc.) are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

IMPORTANT PHONE NUMBERS

TO PLACE AN ORDER, contact your Graco distributor, or call this number to identify the distributor closest to you: **1-800-328-0211 Toll Free**

FOR TECHNICAL ASSISTANCE, service repair information or assistance regarding the application of Graco equipment: **1-800-543-0339 Toll Free**

Factory Branches: Atlanta, Chicago, Dallas, Detroit, Los Angeles, West Caldwell (N.J.)
Subsidiary and Affiliate Companies: Canada; England; Switzerland; France; Germany; Hong Kong; Japan

GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441

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