



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

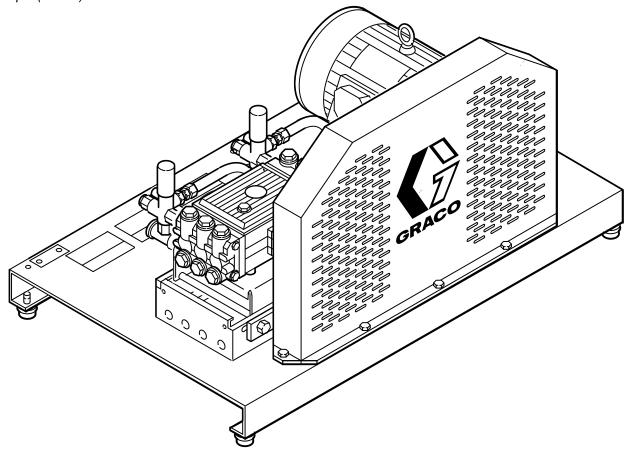
# HYDRA-CLEAN® 735, 740, 1035, 1040 Pressure Washers

Model 800–906, Series A 230/460 Volt, 3 Phase, 35 GPM Model 800–908, Series A 230/460 Volt, 3 Phase, 40 GPM

700 psi (48 bar) OPERATING PRESSURE 1100 psi (75 bar) MAXIMUM WORKING PRESSURE

Model 800–907, Series A 230/460 Volt, 3 Phase, 35 GPM Model 800–909, Series A 230/460 Volt, 3 Phase, 40 GPM

1000 psi (69 bar) OPERATING PRESSURE 1300 psi (91 bar) MAXIMUM WORKING PRESSURE



Water supply tank, gun & wand assembly, hose assembly and motor starter are not included.

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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 sprayer off.
- 3. Disconnect the electrical 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, disconnect the water supply and disconnect the electricity.

#### **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.

## GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This equipment is equipped with a cord having an equipment–grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

## **GROUND FAULT CIRCUIT INTERRUPTER PROTECTION**

To comply with the National Electrical Code (NFP A 70) and to provide additional protection from the risk of electric shock, connect this pressure washer to a circuit that is protected by a ground–fault circuit–interrupter (GFCI).

#### 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.

#### - DANGER ·

Improper connection of the equipment– grounding conductor can result in the risk of electrocution. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded.

#### **System Pressure**

This sprayer can develop high operating pressure. 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 HA VE 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.

#### 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

#### TERMS

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

**CAUTION:** Alerts user to avoid or correct conditions that could cause damage to the equipment.

*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.

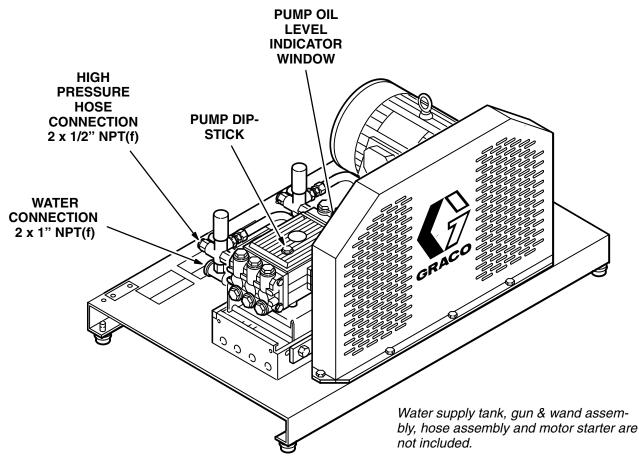
**HANDLE AND ROUTE HOSES CAREFULL Y.** Do not pull on hoses to move the pressure washer. Do not use chemicals which are not compatible with the inner tube and cover of the hose. *DO NOT* expose Graco hose to temperatures above 200° F (93° C) or below  $-40^{\circ}$  F ( $-40^{\circ}$  C).

**Pressure Relief Procedure** before checking or servicing the pressure washer to prevent discharging high pressure fluid from the gun.

NOTE: Identifies helpful procedures and information.

## 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**

Check the unit for any damage that may have occurred in shipping. Notify the carrier immediately if there is any damage.

#### Set Up

Before connecting the unit, be sure the electrical service matches the specification in Technical Data (inside back cover) and the voltage label on the unit. With the unit off, connect the power supply cord to a grounded, GFCI–protected circuit.

If you are using a downstream chemical injector, install it between the pump unloader and the high pressure hose.

Connect the high pressure hose between the pump outlet and the gun inlet.

#### - CAUTION

Up to 100 ft (30 m) of high pressure hose may be used. Longer hoses may af fect sprayer performance, and chemical injector performance, if used. Install the appropriate spray tip on the wand. See Installing and Changing Spray T ips. If you are using a sandblaster kit, see its separate manual for installation instructions.

#### **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.

Install a regulating water valve, P/N 800–258, if inlet water pressure is over 60 psi (4.1 bar).

Do not exceed 160  $^\circ$   $\,$  F (70  $^\circ$   $\,$  C) inlet water temperature.

**NOTE:** The water source for the unit *must* have a minimum 100 gallon float valve controlled water holding tank.

## 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. Check the oil level.

Pump: Add SAE 20 or 30 weight non-detergent oil as necessary.

2. 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.

- 3. Trigger the gun until water sprays from the tip indicating that the air is purged from the system.
- 4. Start the unit.
- 5. *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.

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

#### - CAUTION -

*DO NOT* allow the pressure washer to idle for more than 10 minutes. Doing so may cause the recirculating water to overheat and seriously damage the pump. T urn of f the pressure washer if it will not be spraying or cleaning at least every 10 minutes. If heated inlet water is used, reduce this time further.

*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* pump caustic materials; such materials may corrode the pump components.

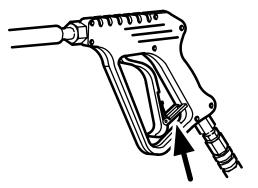
7. See the chemical injector or sandblaster kit manual for detailed cleaning information if these accessories are used.

#### Trigger Safety Latch

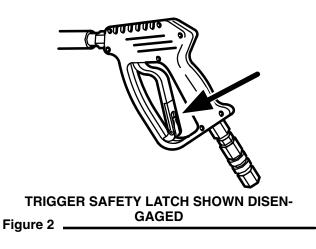
#### - WARNING ·

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.



#### TRIGGER SAFETY LATCH SHOWN ENGAGED



## Installing and Changing Spray Tips

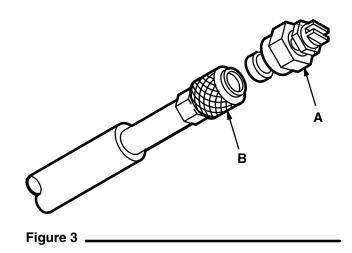
#### - WARNING

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. *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 tip 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.



#### - 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 sprayer off.
- 3. Disconnect the electrical 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, disconnect the water supply and disconnect the electricity.

#### MAINTENANCE

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

There is a break-in period for the pump. After changing the oil initially, the interval between required changes is longer.

#### – 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.  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; it may crack the ceramic plungers!

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

Interval	What to do
Daily	Clean water inlet screen and filter. Check pump oil level. Fill as necessary.
After first 50 hours of operation	Change pump break-in oil. Use SAE 20 or 30 non-detergent oil.
Each 500 hours of operation or 6 months	Change pump oil. Use SAE 20 or 30 non-detergent oil.

## 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		
Low pressure and/or	Worn or wrong size tip.	Replace with tip of proper size.		
pump runs rough	Inlet filter clogged.	Clean. Check more frequently.		
	Worn packings, abrasives in water or natural wear.	Check filter. Replace packings. See PUMP SERVICE.		
	Inadequate water supply.	Check water flow rate to pump. Unit must have a minimum 55 gallon float valve controlled water holding tank.		
	Belt slippage.	Tighten or replace.		
	Fouled or dirty inlet or discharge valves. Even a small particle can cause the valve to stick.	Clean inlet and discharge valve assemblies. Check filter.		
	Restricted inlet.	Check garden hose, may be collapsed or kinked.		
	Worn inlet or discharge valves.	Replace worn valves.		
	Leaking high pressure hose.	Replace high pressure hose.		
Water leakage from Worn packings. under pump manifold		Install new packings. See PUMP SERVICE.		
Water in pump	Humid air condensing inside crankcase.	Change oil as specified in MAINTENANCE.		
	Worn packings.	Install new packings. See PUMP SERVICE.		
	Oil seals leaking.	Install new oil seals. See PUMP SERVICE.		
Frequent or	Scored, damaged or worn plungers.	Install new plungers. See PUMP SERVICE.		
premature failure of the packings	Abrasive material in the fluid being pumped.	Install proper filtration on pump inlet plumbing.		
ino puokingo	Inlet water temperature too high.	Check water temperature; may not exceed 160°F.		
	Overpressurizing pump.	Do not modify any factory-set adjustments. See EQUIPMENT MISUSE HAZARD.		
	Excessive pressure due to partially plugged or damaged tip.	Clean or replace tip. See Installing and Changing Spray Tips.		
	Pump running too long without spraying.	Never run pump more than 10 minutes without spraying.		
	Running pump dry.	Do not run pump without water.		
Strong surging at the inlet and low pressure on the discharge side valves.		Clean or replace valves. See PUMP SERVICE.		
Unit will not start	Unit not plugged in.	Check power cord.		
	Electrical service off/GFCI activated.	Check fuse/circuit breaker. Check for proper grounding.		
	Thermal overload has tripped.	Press reset button on motor for 1 phase units. Press stop button on the motor starter for 3 phase units.		

#### - 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.

- **NOTE:** The following metric wrenches are needed: M10, M13 and M30. Repair kits are available. Refer to the individual repair sections and the pump parts page for more details. For the best results, use all parts in the kits.
- **NOTE:** There are two dif ferent tool kits to aid in servicing the pump. P/N 800–298 is used to ease installation of packings. P/N 800–271 includes the items in 800–298 and tools to aid in the removal of packing retainers.

#### Valves

- NOTE: For a set of six valves, order P/N 803–664 or 803–666.
- 1. Remove the hex plug from the manifold using an M30 wrench.
- 2. Examine the o-ring under the hex plug and replace it if it is cut or distorted.
- 3. Remove the valve assembly from the cavity; the assembly may come apart.
- 4. Install the new valve. Install the o-ring and hex plug; torque to 75 ft-lb (103 Nm).
- **NOTE:** Retorque the plug after 5 hours of operation.

#### **Pumping Section**

- 1. Remove the eight capscrews and lockwashers from the manifold using an M13 wrench.
- 2. Carefully separate the manifold from the crankcase.
- **NOTE:** It may be necessary to tap the manifold lightly with a soft mallet to loosen.

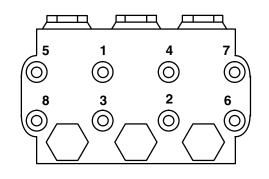
#### - CAUTION

Keep the manifold properly aligned with the ceramic plungers when removing to avoid damage to the plunger or seals.

3. Carefully examine each plunger for any scoring or cracking and replace as necessary.

#### Servicing the Plungers

- **NOTE:** Plunger repair kit, P/N 803–677 is available to replace retainers, o–rings, washers and backup rings for three cylinders.
- 1. Loosen the plunger retaining screw five to six turns, using an M10 wrench. Push the plunger towards the crankcase to separate the plunger and retaining screw.
- 2. Remove the screw from the plunger and examine the o-ring, backup ring and copper bearing/gasket washer. Replace these parts, if necessary, using kit 801–474.
- 3. Remove the plunger and flinger from the plunger shaft. Clean, examine and replace parts as necessary.
- Inspect the plunger shaft for oil leakage from the crankcase. If leaking is obvious, replace the oil seals. Otherwise, DO NOT remove these seals as they cannot be reused. An oil seal kit is available to replace the seals.
- 5. Lightly grease the oil seal, if it is being replaced, and the flinger and replace them on the plunger shaft. Then install the plunger.
- 6. Lightly grease the retaining screw and the outer end of the plunger. Place the washer, o-ring and backup ring around the screw and install the screw through the plunger. Torque to 14.4 ft-lb (19.5 Nm).
- **NOTE:** If you plan to replace the packings, refer to Servicing the V–Packings.
- 7. Lubricate the outside of each plunger . Slide the manifold onto the crankcase, being careful not to damage the seals.
- 8. Install the capscrews and washers finger-tight. Torque the screws to 21.7 ft-lb (29 Nm) following the tightening pattern (Figure 4). Uneven tightening may cause the manifold to bind or jam.





#### Servicing the V–Packings

- **NOTE:** There are two types of packing kits: one is packings only, the other includes the packings, rings and retainers.
- 1. Remove the manifold as outlined in the Pumping Section.
- Carefully pull the packing retainer from the manifold. Examine the o-ring and replace it if it is cut or damaged.
- Remove the v-packing and head ring. Pull out the intermediate retainer ring. Remove the second v-packing and second head ring.
- 4. Inspect all parts and replace as necessary.

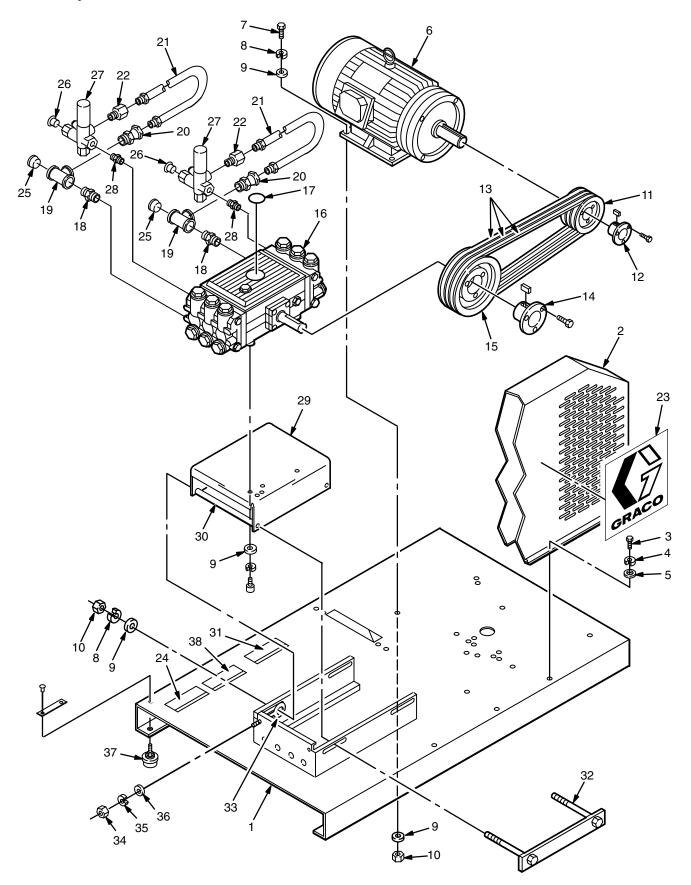
- 5. Thoroughly clean the packing cavities and examine for debris and damage.
- Lightly grease the packing cavities and then replace the packings in the following order: head ring, v-packing, intermediate ring, head ring, v-packing and packing retainer with the o-ring installed in the retainer groove.

#### - CAUTION -

Install the parts in the proper order and facing the correct direction. Improperly installed parts will cause a malfunction.

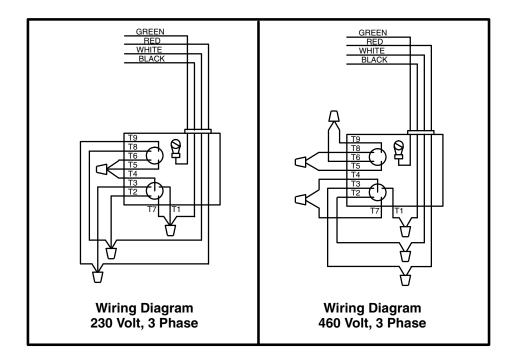
7. Reassemble the manifold as instructed in Servicing the Plungers.

#### PARTS DRAWING 800–906 Hydra–Clean® 735 Pressure Washer 800–907 Hydra–Clean® 1035 Pressure Washer

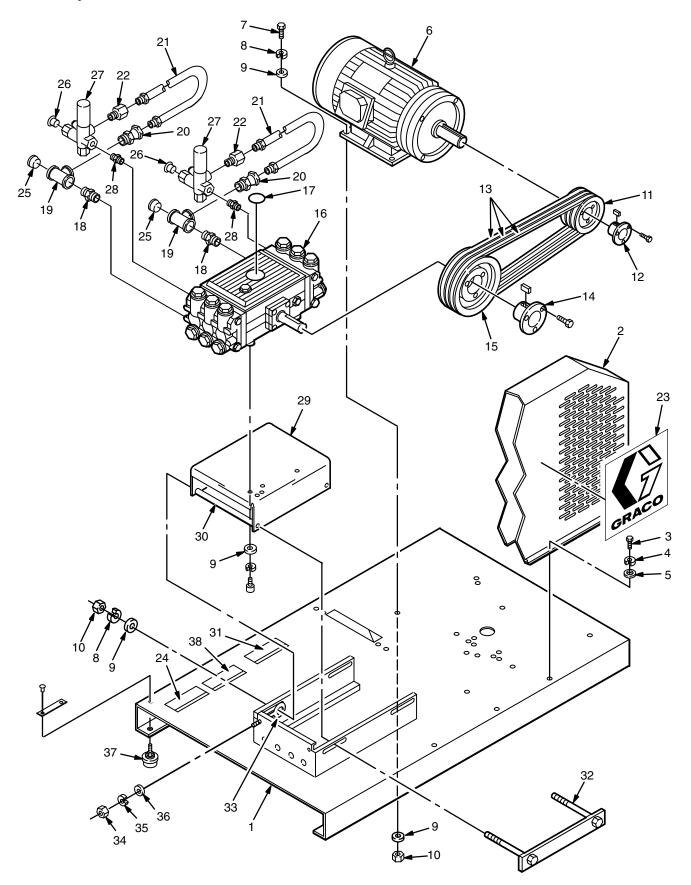


#### PARTS LIST 800–906 Hydra–Clean® 735 Pressure Washer 800–907 Hydra–Clean® 1035 Pressure Washer

REF	PART			REF	PART		
NO.	NO.	DESCRIPTION	QTY	NO.	NO.	DESCRIPTION	QTY
1	800–643	CHASSIS	1	17	803–517	LABEL, Keep From Freezing	1
2 3		BELT GUARD	1	18		NIPPLE, Hex, 1	2
3	801–940	SCREW, Cap, hex hd.,		19	803–586	TEE, 1	2
		5/16–18 x 1	5	20		SWIVEL, 1 x 3/4	2
4	100–214	WASHER, Lock, 5/16	5 5 5	21	214–956	HOSE, Bypass	2 2 2 2 2 2
5	100–023	WASHER, Flat, 5/16	5	22	168–595	ADAPTER, Hex, 1/2 x 3/4	2
6	801–817	MOTOR, 20 hp, TEFC,		23	803–872	LABEL, Graco G	1
		3 phase (for 800–906 only)	1	24	803–396	LABEL, Warning	1
	803–792	MOTOR, 25 hp, TEFC,		25		PLUG, 1	2 2
		3 phase (for 800–907 only)	1	26		PLUG, 1/2	2
7		SCREW, Cap, hex hd., 1/2–13	4	27	800–687	UNLOADER, 700 PSI	
8 9		WASHER, Lock, 1/2	6			(for 800–906 only)	2
9		WASHER, Flat, 1/2	14		800–688	ÚNLOADER, 1000 PSI	
10		NUT, Hex, 1/2–13	6			(for 800–907 only)	2
11	801–822	SHEAVE, Motor		28		NIPPLE, Hex, 3/4 x 1/2	2 2 1
		(for 800–906 only)	1	29		BRACKET, Pump	
	803–804	SHEAVE, Motor		30		SUPPORT, Pump Bracket	2
		(for 800–907 only)	1	31		LABEL, Warning, chassis	1
12	801–823	HUB, Motor, 20 hp		32		STIFFENER, Rail	1
		(for 800–906 only)	1	33		BOLT, Eye	2 2 2 2 4
	803–807	HUB, Motor, 25 hp		34		NUT, Hex, 3/8–16	2
		(for 800–907 only)	1	35		WASHER, Lock, 3/8	2
13		BELT, Drive	3	36		WASHER, Flat, 3/8	2
14		HUB, Pump	1	37		FOOT, Rubber	4
15		SHEAVE, Pump, 35 gpm	1	38	172–981	LABEL, Warning, chassis	1
16		PUMP, 35 GPM (see page 16)	1			-	
		,					

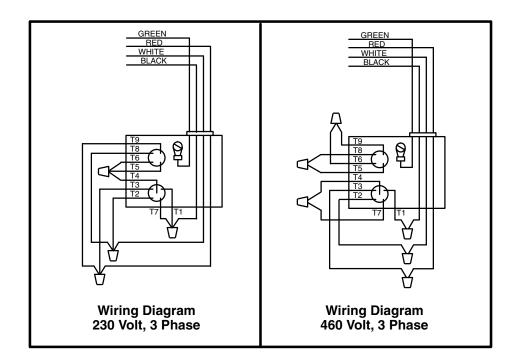


#### PARTS DRAWING 800–908 Hydra–Clean® 740 Pressure Washer 800–909 Hydra–Clean® 1040 Pressure Washer

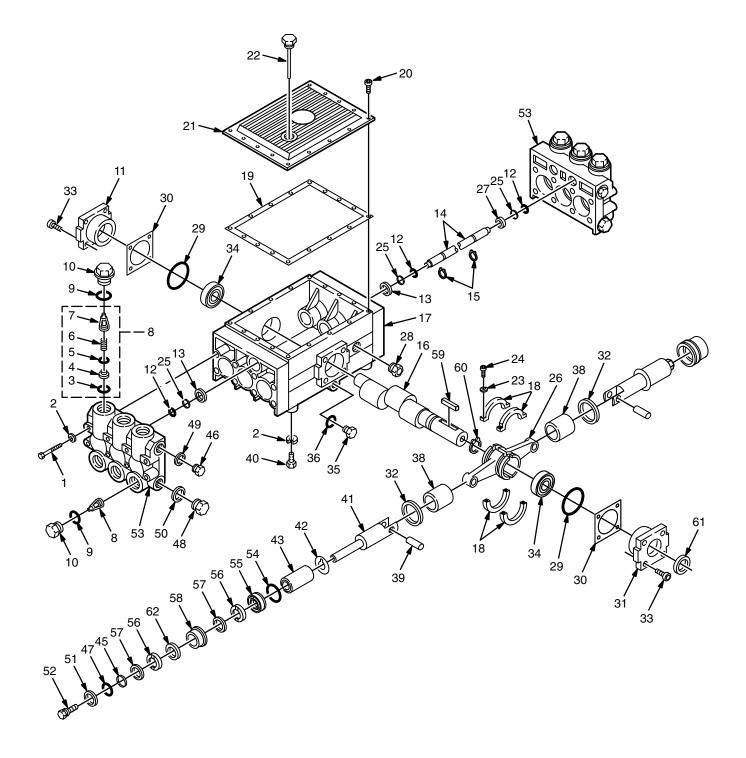


# PARTS LIST 800–908 Hydra–Clean® 740 Pressure Washer 800–909 Hydra–Clean® 1040 Pressure Washer

REF	PART		REF	PART	
NO.	NO. DESCRIPTION	QTY	NO.	NO. DESCRIPTION	QTY
1	800–643 CHASSIS	1	20	202–965 SWIVEL, 1 x 3/4	2
2 3	803–788 BELT GUARD	1	21	214–956 HOSE, Bypass	2
3	801–940 SCREW, Cap, hex hd.,		22	168–595 ADAPTER, Hex, 1/2 x 3/4	2
	5/16–18 x 1	5	23	803–872 LABEL, Graco G	1
4	100–214 WASHER, Lock, 5/16	5	24	803–396 LABEL, Warning	1
5	100–023 WASHER, Flat, 5/16	5	25	803–599 PLUG, 1	2 2
6	803–792 MOTOR, 25 hp, TEFC,		26	803–598 PLUG, 1/2	2
	3 phase (for 800–908 only)	1	27	800–687 UNLOADER, 700 PSI	
	803–793 MOTOR, 30 hp, TEFC,			(for 800–908 only)	2
	3 phase (for 800–909 only)	1		800–688 ÚNLOADER, 1000 PSI	
7	803–592 SCREW, Cap, hex hd., 1/2–1	34		(for 800–909 only)	2
8	802–784 WASHER, Lock, 1/2	6	28	157–191 NIPPLE, Hex, 3/4 x 1/2	2
9	803–591 WASHER, Flat, 1/2	14	29	803–787 BRACKET, Pump	1
10	100–321 NUT, Hex, 1/2–13	6	30	803–781 SUPPORT, Pump Bracket	2
11	803–805 SHEAVE, Motor	1	31	176–250 LABEL, Warning, chassis	1
12	803–807 HUB, Motor	1	32	800–642 STIFFENER, Rail	1
13	803–813 BELT, Drive	3	33	803–817 BOLT, Eye	2
14	803–575 HUB, Pump	1	34	100–307 NUT, Hex, 3/8–16	2 2 2 2 4
15	803–803 SHEAVE, Pump, 40 gpm	1	35	100–133 WASHER, Lock, 3/8	2
16	803-816 PUMP, 40 GPM (see page 16		36	100–132 WASHER, Flat, 3/8	2
17	803–517 LABEL, Keep From Freezing	໌ 1	37	802–845 FOOT, Rubber	4
18	803–585 NIPPLE, Hex, 1	2	38	172–981 LABEL, Warning, chassis	1
19	803–586 TEE, 1	2			



#### PARTS DRAWING 803–815 Pump Assembly, 35 GPM 803–816 Pump Assembly, 40 GPM



#### PARTS LIST 803–815 Pump Assembly, 35 GPM 803–816 Pump Assembly, 40 GPM

REF	PART			REF	PART		
NO.	NO.	DESCRIPTION	QTY	NO.	NO.	DESCRIPTION	QTY
1	803–659		16	31		CRANKCASE	1
2		WASHER, Lock	20	32	KIT 44		
3	KIT 43	O-RING		33		SCREW, Cap, socket hd.	8
4	KIT 43	SEAT, Valve		34	803–637		2
5	KIT 43	PLATE, Valve		35	801–484		1
6	KIT 43	SPRING, Valve		36	802–344		1
7	KIT 43	GUIDE, Valve		38		SLEEVE	6
8	KIT 43	VALVE ASSEMBLY		39		PIN, Wrist	6
9	803–631		12	40	803–658		4 6 6
10		CAP, Valve	12	41		GUIDE, Piston	6
11		COVER, Crankshaft	1	42		WASHER, Slinger	
12	803–852		4	43		PLUNGER, Ceramic	6
13		SEAL, Oil	4	45	KIT 74	RING, Backup	
14		TUBE, Connecting	1	46	803–647		3
15		RING, Snap	2	47	KIT 74	O–RING	
16		CRANKSHAFT, 40 GPM	1	48	803–649	CAP	2
		CRANKSHAFT, 35 GPM	1	49		WASHER, Flat	2 3 2
17		CRANKCASE	1	50		WASHER, Flat	2
18		RING, Connecting Rod	6	51	KIT 74	,	
19	803–847	GASKET, Cover	1	52	KIT 74	SCREW, Piston	
20		SCREW, Cap, socket hd.	16	53		MANIFOLD, Pump	2
21	803–846	COVER, Crankcase	1	54	KIT 80	O–RING	
22		DIPSTICK	1	55	KIT 80	RETAINER, Packing	
23	803–279	SCREW, Cap, socket hd.	12	56	KIT 79, 80	OPACKING	
24	803–278	WASHER, Lock	12	57	KIT 80	RING, Head	
25	803–853	RING, Backup	4	58	KIT 80	Ring, Intermediate	
26	803–844	ROD, Connecting	3	59	803–636	KEY	1
27	803–850	CAP	3 2	60	802–357	RING, Retaining	1
28	802–345	GAUGE, Sight	1	61	KIT 32	SEAL, Oil	
29	802–353	O–RING	2 2	62	KIT 79, 80	0RING, Back up	
30	803–628	SHIM	2			-	

Kit No.	Repair Kit Part No.	Ref No.	Description	Qty. Incl.
32	<b>803–660</b> Crankshaft Seal	61	SEAL, Oil	2
43	<b>803–664</b> Valve	8	ASSEMBLY, Valve	6
44	<b>803–665</b> Oil Seal	32	SEAL, Oil	3
74	<b>803–667</b> Piston Retainer	45 47 51 52	RING, Backup O–RING WASHER, Flat SCREW, Piston	3 3 3 3

Kit	Repair Kit	Ref	Description	Qty.
No.	Part No.	No.		Incl.
79	<b>803–668</b>	56	PACKING	6
	Packing	62	RING, Backup	6
80	<b>803–669</b> Packing & Retainer	54 55 56 57 58 62	O–RING RETAINER, Packing PACKING RING, Head RING, Intermediate RING, Backup	1 1 2 2 1 1

#### ACCESSORIES

(Must be purchased separately)

#### DOWNSTREAM CHEMICAL INJECTOR KIT 800–117 BRASS UP TO 5.5 GPM (21 LPM) 800–425 BRASS 5.6 TO 10.8 GPM (21 TO 41 LPM)

**800–649 STAINLESS STEEL UP TO 5.5 GPM (21 LPM)** For injecting harsh cleaning chemicals downstream from the pump.

#### **INLET PRESSURE REGULATOR 800–258**

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

#### HOSE ASSEMBLY WITH QUICK COUPLERS 800-375

3/8" diameter x 50 foot x 4000 psi (276 bar) permanently coupled hose with 801–568 and 801–569 3/8" quick couplers.

#### **BACKFLOW PREVENTOR 801–133**

Prevent back–up of contaminated water into fresh supply. Install upstream of pump.

# GUN & WAND ASSEMBLY 800–392

Includes 803–350 spray gun, 32" spray wand and quick couplers for hose and spray tip connections. **800–398** 

Includes 803–350 spray gun, 32" spray wand, quick coupler for hose connection and adjustable nozzle. **800–042** 

Includes 800–222 stainless steel spray gun, 32" stainless steel spray wand and stainless steel threaded connections for hose and spray tip.

	Model 800–906	Model 800–907	Model 800-908	Model 800–909			
Motor (Totally Enclosed Fan Cooled)	20 hp, 3 phase	25 hp, 3 phase	25 hp, 3 phase	30 hp, 3 phase			
Electrical Service	230 volt/50 amp/ 3 phase or	230 volt/65 amp/ 3 phase or	230 volt/65 amp/ 3 phase or	230 volt/75 amp/ 3 phase or			
	460 volt/25 amp/ 3 phase	460 volt/35 amp/ 3 phase	460 volt/35 amp/ 3 phase	460 volt/40 amp/ 3 phase			
Water Pump Maximum Working Pressure	700 psi (48 bar)	1000 psi (69 bar)	700 psi (48 bar)	1000 psi (69 bar)			
Water Pump Maximum Flow	35 gpm (132 lpm)	35 gpm (132 lpm)	40 gpm (151 lpm)	40 gpm (151 lpm)			
Unit Weight	560 lbs (254 kg)	583 lbs (264 kg)	583 lbs (264 kg)	604 lbs (274 kg)			
Dimensions Length Width Height	48 in (1219 mm) 30 in (762 mm) 25 in (635 mm)	48 in (1219 mm) 30 in (762 mm) 25 in (635 mm)	48 in (1219 mm) 30 in (762 mm) 25 in (635 mm)	48 in (1219 mm) 30 in (762 mm) 25 in (635 mm)			
Maximum Inlet Water Temperature	160° F (70° C)	160° F (70° C)	160° F (70° C)	160° F (70° C)			
Inlet Hose Connection	2 x 1 in NPT (f)	2 x 1 in NPT (f)	1 in NPT (f)	2 x 1 in NPT (f)			
Outlet Hose Connection	2 x 1/2 NPT (f)	2 x 1/2 NPT (f)	2 x 1/2 NPT (f)	2 x 1/2 NPT (f)			
Wetted Parts High Pressure Hose	Acrylonitrile and Buna–N cover and tube						
Bypass Hose	Synthetic yarn and EPDM						
Pressure Washer (including fittings)	Anodized aluminum, Aluminum or Bronze alloys, Brass, Copper, Nylon-PTFE® composite, Ceramic, Buna–N, Cotton Phenolic, 303, 304, and 316 Stainless Steel, Polymide–12 Thermoplastic, PTFE®, Carbon Steel, Zinc with or without Yellow Chromate Plate						
	PTFE						

#### 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 W ARRANTY CONSTITUTE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AND ARE IN LIEU OF ANY OTHER W ARRANTIES (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 . EVER Y 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 W ARRANTY, AND DISCLAIMS ALL IMPLIED W ARRANTIES OF MERCHANTABILITY AND FITNESS FOR A P ARTICULAR PURPOSE, WITH RESPECT T O 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 ASSIST ANCE, 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; Korea

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