


# INSTRUCTIONS-PARTS LIST

 801-765  
Rev A

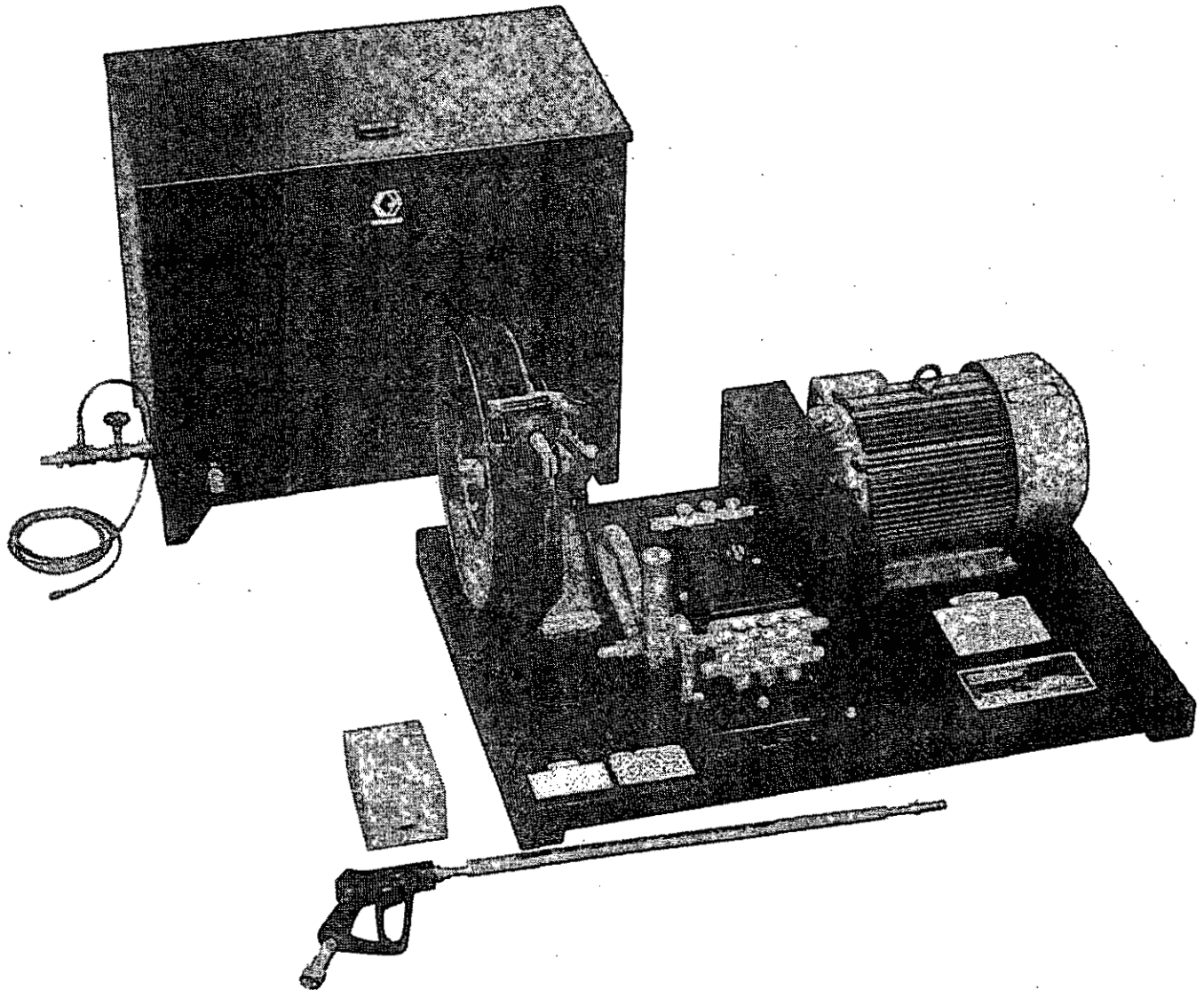
This manual contains **IMPORTANT**  
**WARNINGS** and **INSTRUCTIONS**  
READ AND RETAIN FOR REFERENCE

## **HYDRA-CLEAN® 1020E** **Pressure Washer**

**P/N 800-076 SERIES B**

*2500 psi (172 bar) OPERATING PRESSURE*

*3400 psi (234 bar) MAXIMUM WORKING PRESSURE*



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

Read and understand all instruction manuals before operating equipment.

**INJECTION HAZARD**

Fluids under high pressure from spray or leaks can penetrate the skin and cause extremely serious injury, including the need for amputation.

*NEVER* point the spray gun at anyone or any part of the body.

*NEVER* put hand or fingers over the spray tip.

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

**MEDICAL TREATMENT**

If any fluid appears to penetrate your skin, get **EMERGENCY MEDICAL CARE AT ONCE.**  
**DO NOT TREAT AS A SIMPLE CUT.**

Tell the doctor exactly what fluid was injected. For treatment instructions have your doctor call the **NATIONAL POISON CENTER NETWORK**  
**(412) 681-6669**

**AVOID COMPONENT RUPTURE**

Even after you shut off the electric motor, there is high pressure in the pump, hose and gun until you relieve it by triggering the gun. So before removing the spray tip or servicing the unit, *always* shut off the unit *and* trigger the gun to release pressure.

Be sure that all accessory items and system components will withstand the pressure developed. *NEVER* exceed the pressure rating of any component in system. *NEVER* alter or modify equipment—your personal safety, as well as the function of the equipment, is at stake.

Before each use, check hose for weak, worn or damaged conditions caused by traffic, sharp corners, pinching or kinking. Tighten all fluid connections securely before each use. Replace any damaged hose.

Do not use chemicals or agents which are not compatible with Buna-N, Viton, PVC, or neoprene cover of hose.

Do not leave a pressurized unit unattended. Shut off the unit and relieve pressure before leaving.

**FIRE**

Do not spray flammable liquids. Do not operate the unit where combustible fumes or dust may be present.

**GENERAL**

*NEVER* run the unit with the belt guard removed. Keep clear of moving parts when the unit is running.

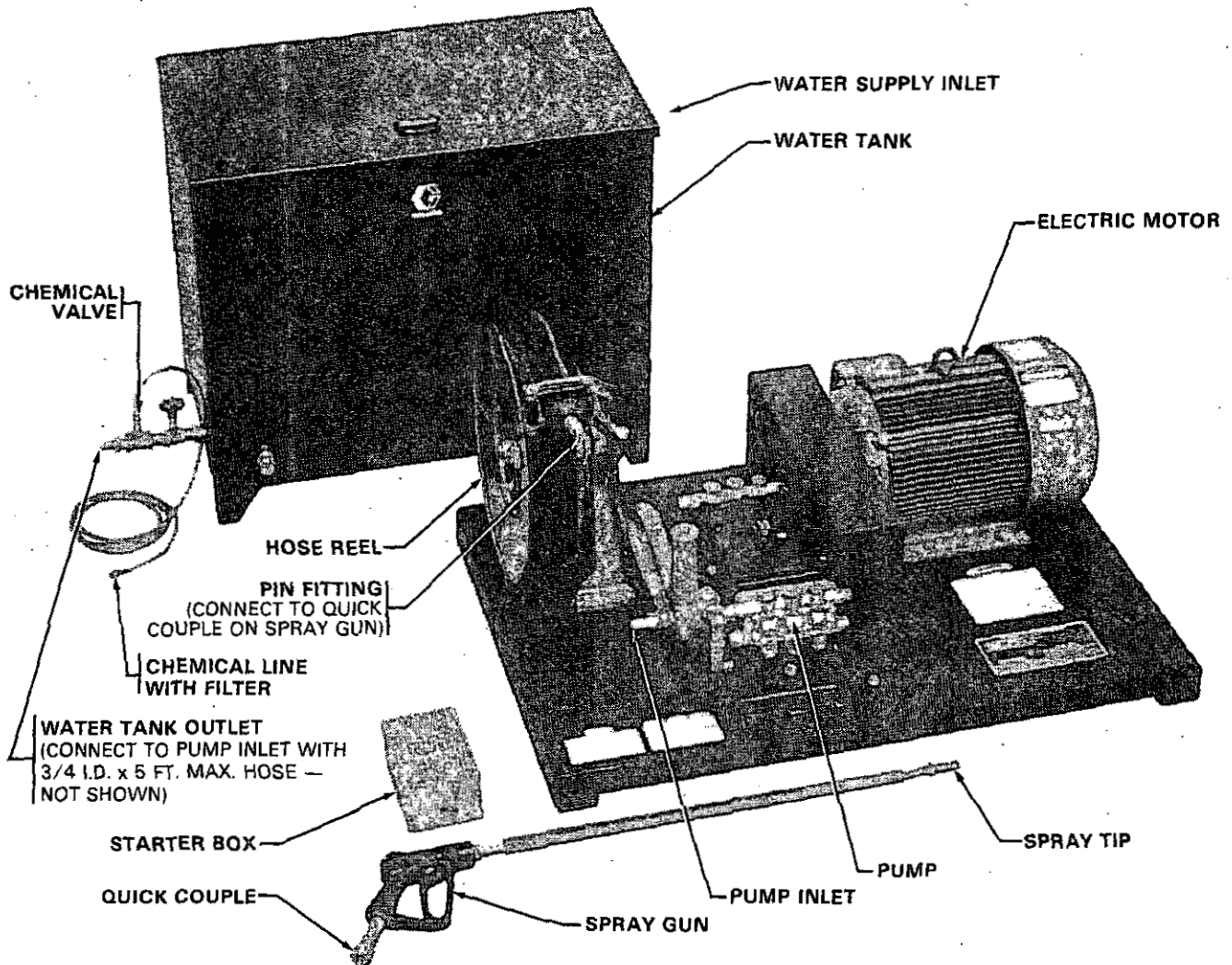
Observe detergent manufacturer's safety precautions. Avoid getting detergent or other liquids in your eyes. Follow the directions on the container regarding contact with eyes, nose, and skin, breathing fumes, etc. Always wear full goggles to protect your eyes from the spray as well as any debris dislodged by the spray. If necessary, wear gloves or other protective clothing. If antidotes or treatment are recommended, be prepared to use them.

*Don't* spray toxic chemicals such as insecticide or weed killer.

**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 in connection with your use of airless spray equipment.

## INSTALLATION



### CHECK FOR DAMAGE

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

### ELECTRICAL SERVICE

The 1020E model comes with an electric starter box which is not attached to the unit. It is up to the installer to wire the motor to the starter and the starter to the power source.

The electrical service required for the 1020E is 230V / 60 cycle / 50 Amp / 3 phase. An optional 460V / 60 cycle / 25 Amp / 3 phase service may be used with special instructions from manufacturer.

Refer to instruction manual for the wiring diagram on page 4. Be sure that all wiring is properly grounded and according to all local and national electrical codes.

### INSTALL SPRAY GUN

Connect the spray hose to the spray gun by inserting the pin fitting at the end of the hose into the quick coupler on the gun.

### CONNECT TO WATER SUPPLY

Refer to Parts Drawing on page 9.

#### CAUTION

Before attaching to the water supply, check local plumbing code regarding cross-connection to water supply.

Do not exceed 160°F (70°C) water temperature to the pump in a direct supply system.

Attach lid to tank by drilling four holes in tank and use screws, bolts and washers provided.

Connect a hose with at least 3/4 in. (19 mm) I.D. from your water supply to the 3/4 in. garden hose fitting on the water tank.

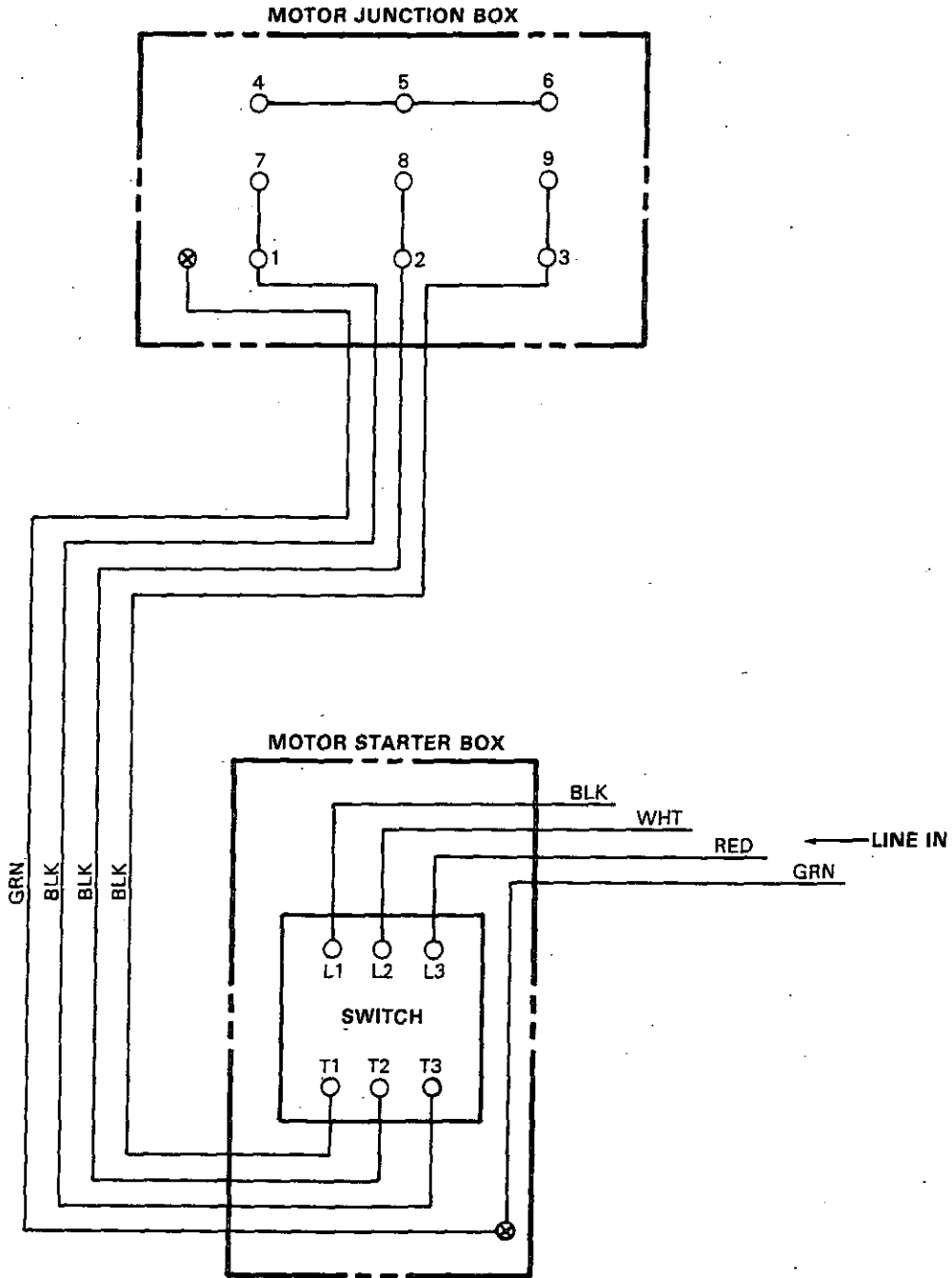
Connect tank and pump with 3/4 in. I.D. hose and clamps provided with the unit.

Place one end of hose on hose barb at bottom of water tank. Place the other end of hose on hose barb at pump inlet. Clamp each end with hose clamp. Pump module and water tank should be as close together as possible. A maximum distance of 5 ft. is recommended.

# WIRING DIAGRAM

## CAUTION

Unit must be properly wired to 230V / 60 cycle / 50 Amp (three phase) current.



If the optional 460V / 60 cycle / 25 Amp (three phase) current is desired, contact the manufacturer for further instructions.

## OPERATION

### STARTUP

Before starting, be sure to read the safety warnings and installation instructions.

Check oil level in pump.

Turn on the water supply.

#### CAUTION

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

Inspect all connections for any leaks. Tighten if necessary.

Trigger the gun to release any back-pressure.

#### WARNING

DO NOT wire or tie the gun trigger into the open or triggered position.

Push starter switch to ON position.

### CLEANING

The 1020E comes with an upstream chemical injector system. See photo on page 3. When using the chemical injector insert plastic chemical line with filter into chemical container. Close large gate valve at water tank outlet until valve bottoms out against factory installed sleeve. Open needle valve, directly connected to the gate valve.

The needle valve may be used to adjust chemical flow.

If chemical does not come up chemical hose, check chemical filter on the end of hose.

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

Mist-wet surface with cleaning solution. Let it soak briefly, then use spray rinse to "chisel" off dirt. Keep nozzle at an angle to surface, and at distance you determined to be best for surface. If some dirt remains, repeat procedure, letting it soak a little longer. Protect surfaces that might be damaged by cleaning solution or high pressure spray, and rinse solution before it dries.

When you have finished cleaning, shut off unit and trigger spray gun to relieve pressure.

For abrasive cleaning, see the Water Sandblaster Tank Manual, 801-767.

### SHUTDOWN AND CARE OF UNIT

When the unit is not in use, turn off the water supply.

When shutting down for the day or weekend, shut off the unit, shut off the water supply valve, and trigger the gun to relieve pressure. Wipe off the unit with a damp rag.

#### CAUTION

Shut off the cleaning unit when not actually spraying, for longer pump life. The pump will overheat if left running for over 10 minutes without spraying.

Check filter on inside of water tank at the outlet at least once a month. If filter is plugged, remove from tank and disassemble filter. Rinse parts off, reassemble filter and replace in water tank.

If water surges occur while using unit, this is an indication that the filter might need cleaning.

THE PUMP MUST NOT BE RUN DRY and must be drained of water before exposure to freezing temperatures. Use and store the unit where it will not be subjected to freezing temperatures. If water does freeze in the unit, thaw before trying to start. A 50% antifreeze solution may be pumped prior to cold weather storage.

#### CAUTION

Let a frozen pump thaw in a warm place. Don't pour hot water on a frozen pump. A sudden temperature change may crack the ceramic plungers.

Do not pump caustic materials.

Before extended storage, flush the pump with light oil.

Avoid dragging hose over an abrasive surface such as cement. This causes excessive wear and shorter hose life.

### Lubrication and Care

Fill pump crankcase to dot on oil gauge window with 54 oz. (1.6 liters) of crankcase oil (part no. 801-144) or equivalent SAE 40 weight hydraulic oil with antiwear and rust inhibitor additives. Change initial fill after 50 hour running period. Change oil every 3 months or at 500 hour intervals.

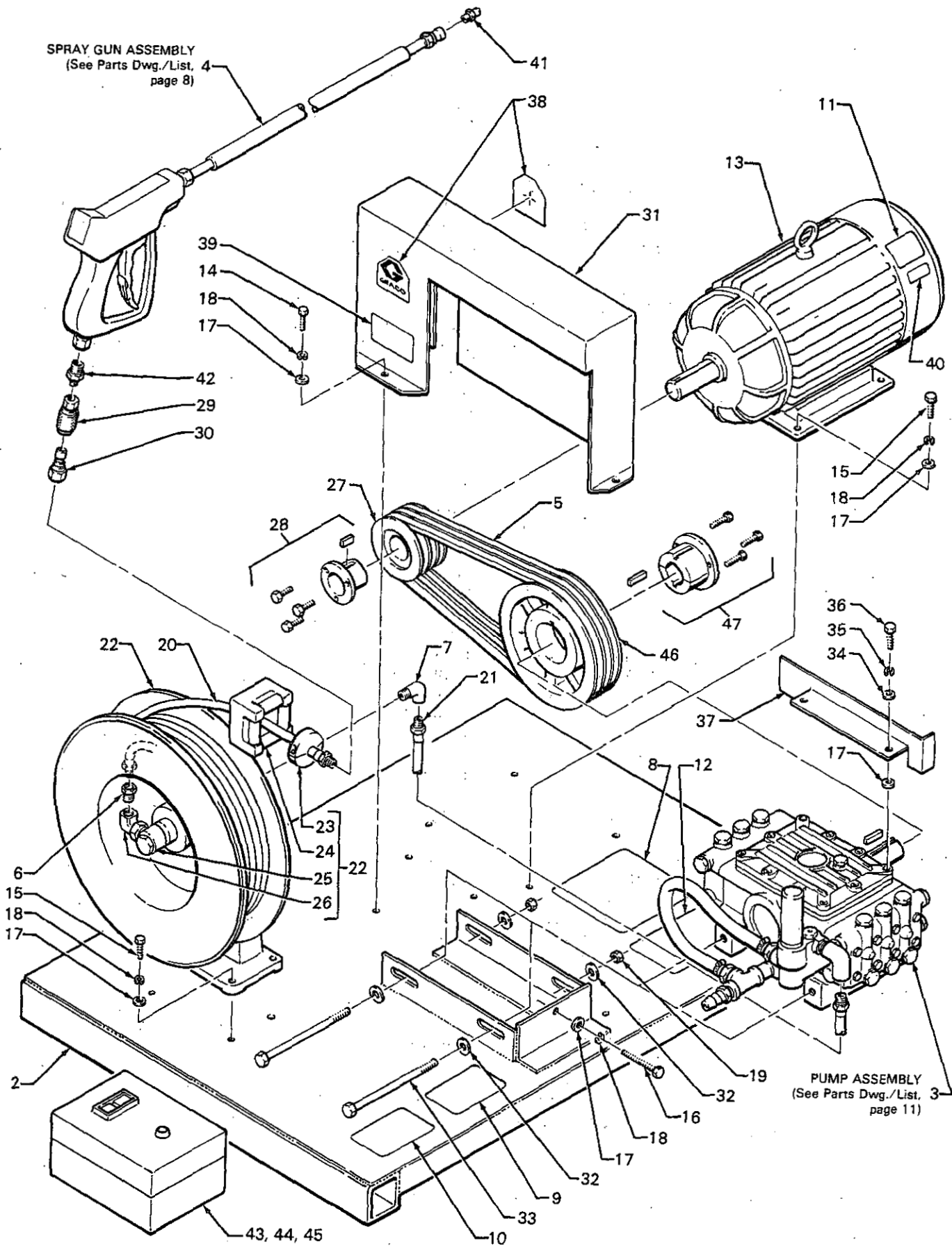
#### WARNING

NEVER alter adjustment or modify the unloader valve.

Altering or adjusting unloader *will not* increase performance of unit.

Service of the unloader must be performed only by qualified service personnel.

**PARTS DRAWING**  
**Pressure Washer Assembly, 800-076**



**NOTE:** Item 1, Water Tank Assembly, is not shown: see page 9.

## PARTS LIST

### Pressure Washer Assembly, 800-076

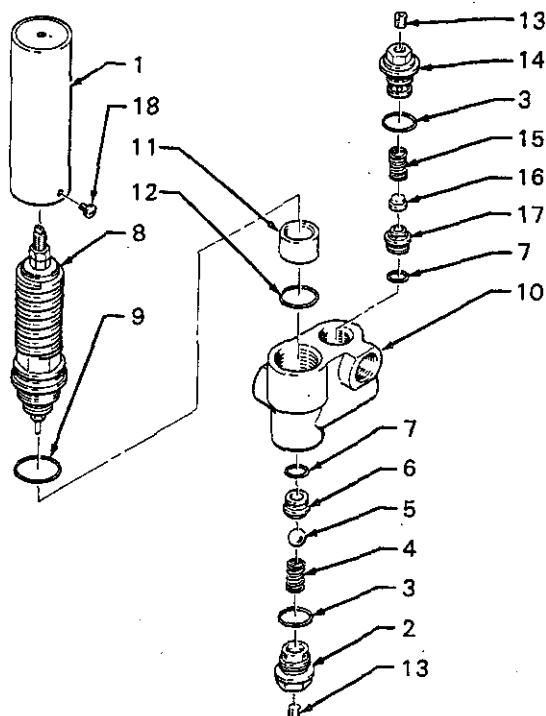
REF. PART NO. NO.	DESCRIPTION	QTY	REF. PART NO. NO.	DESCRIPTION	QTY
1 800-148	WATER TANK ASSEMBLY, Not Shown, see page 9	1	27 801-822	PULLEY, motor, 3TB-58	1
2 800-150	CHASSIS WELDMENT ASSY.	1	28 801-823	BUSHING, pulley, P1-1-5/8 Ø (includes key and bolts)	1
3 800-144	PUMP ASSEMBLY, see parts drawing/list, page 11	1	29 *801-567	QUICK COUPLE, female, 3/8", brass	1
4 800-145	SPRAY GUN ASSEMBLY, see parts drawing/list, page 8	1	30 *801-566	QUICK COUPLE, male, 3/8", steel	1
5 801-814	DRIVE BELT, BX46	3	31 801-825	WELDMENT, beltguard	1
6 801-247	BUSHING, HP, 1/2" x 3/8	1	32 801-612	WASHER, flat, 7/16"	4
7 801-316	ELBOW, street, 90° HP, 1/2 NPT	1	33 801-820	BOLT, hex, 1/2-13 NC x 8", grade 5	2
8 801-815	LABEL, warning	1	34 801-023	WASHER, flat, 1/4"	2
9 801-129	LABEL, warning, multi-language	1	35 801-139	WASHER, lock, 1/4	2
10 801-130	LABEL, warning	1	36 801-082	BOLT, hex, M6 x 30mm	2
11 801-388	LABEL, grounding	1	37 801-826	BELTGUARD PLATE	1
12 801-816	LABEL, serial no.	1	38 801-008	LABEL, Graco "G"	2
13 801-817	MOTOR, electric	1	39 801-128	LABEL, warning, cover	1
14 801-818	SCREW, hex, 3/8-16 x 1"	4	40 801-417	LABEL, starting	1
15 801-214	SCREW, hex, 3/8-16 x 1-3/4"	8	41 *801-758	TIP, 1513, 1/4" meg	1
16 801-819	SCREW, hex, 3/8-16 x 3"	1	42 801-603	NIPPLE, hex, brass, 3/8 NPT	1
17 801-015	WASHER, flat, 5/16"	15	43 801-827	STARTER BOX	1
18 801-363	WASHER, lock, 3/8	13	44 801-828	HEATER ELEMENT	3
19 801-020	NUT, hex, 1/2-13-NC, lock	2	45 801-829	START-STOP KIT	1
20 801-830	HOSE, HP, 50 ft.	1	46 801-821	PULLEY, pump, 3TB-94	1
21 801-831	HOSE, HP, 34 in.	1	47 801-824	HUB, pump, QI-32mm (includes key and bolts)	1
22 801-808	HOSE REEL ASSEMBLY, (replaceable parts include items 23-26)	1			
23 801-809	BUMPER, hose stop	1			
24 801-810	GUIDE, arm	1			
25 801-811	SWIVEL STEM	1			
26 801-316	STREET ELBOW, 1/2" NPT	1			

Order parts by name and series letter of the assembly for which you are ordering.

\* Recommended "tool box" spare parts.

## PARTS DRAWING

### Unloader Assembly, 800-122



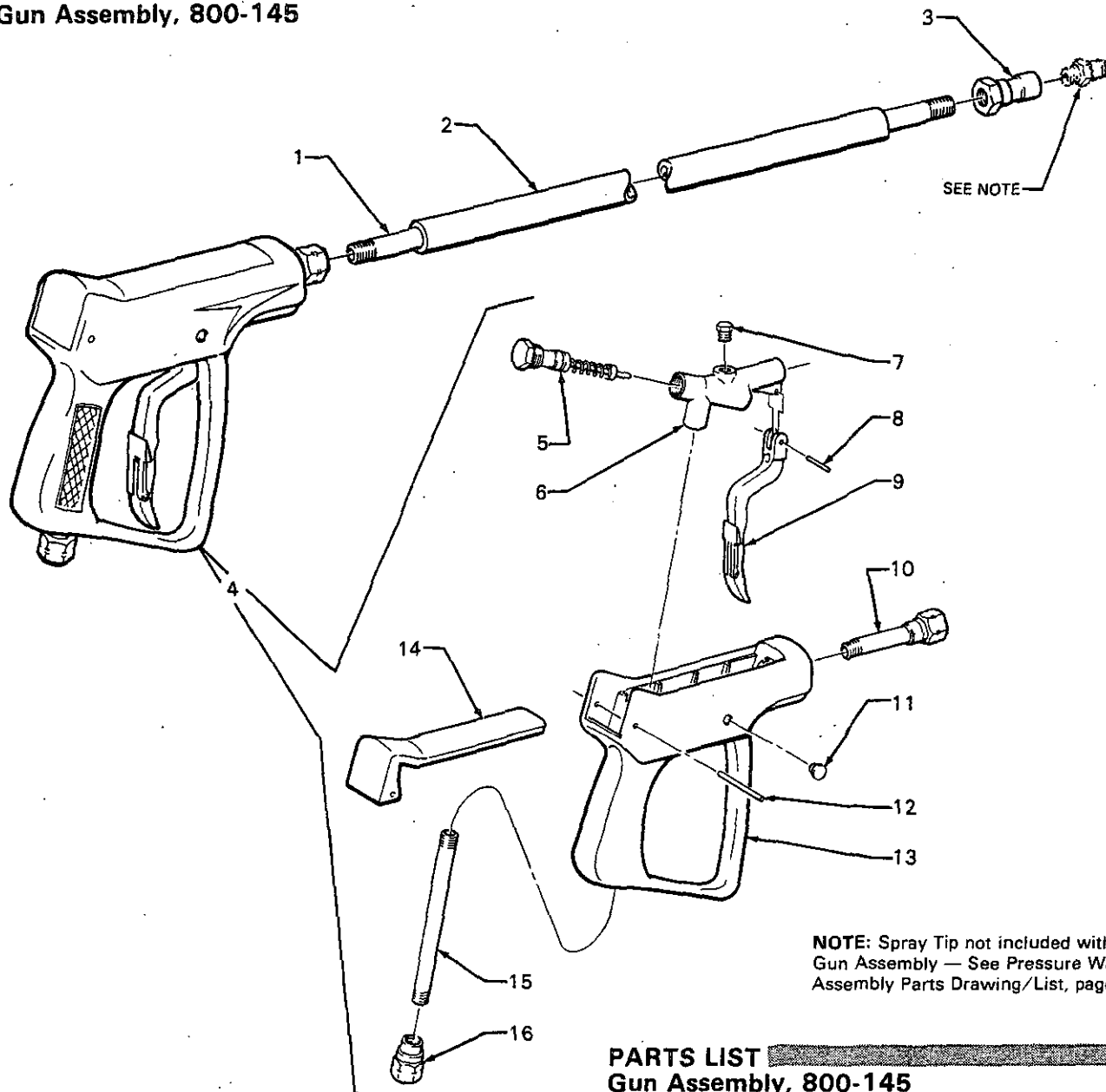
## PARTS LIST

### Unloader Assembly, 800-122

REF. PART NO. NO.	DESCRIPTION	QTY
1 800-044	SLEEVE ASSEMBLY	1
2 801-045	CAGE, valve	1
3 801-046	O-RING	2
4 801-047	SPRING	1
5 801-048	BALL	1
6 801-049	SEAT	1
7 801-050	O-RING	2
8 800-123	UNLOADER SUB-ASSEMBLY	1
9 801-059	O-RING	1
10 801-412	HOUSING	1
11 801-432	CYLINDER	1
12 801-062	O-RING	1
13 801-063	PLUG	2
14 801-068	HOUSING VALVE	1
15 801-069	SPRING	1
16 801-070	VALVE	1
17 801-071	SEAT	1
18 801-465	SCREW, button hd., #6-32 NC x 5/16	2

Order parts by name and series letter of the assembly for which you are ordering.

**PARTS DRAWING**  
**Gun Assembly, 800-145**



**NOTE:** Spray Tip not included with Gun Assembly — See Pressure Washer Assembly Parts Drawing/List, page 6, 7.

**PARTS LIST**  
**Gun Assembly, 800-145**

**SERVICE**  
**Gun, Cartridge Replacement**

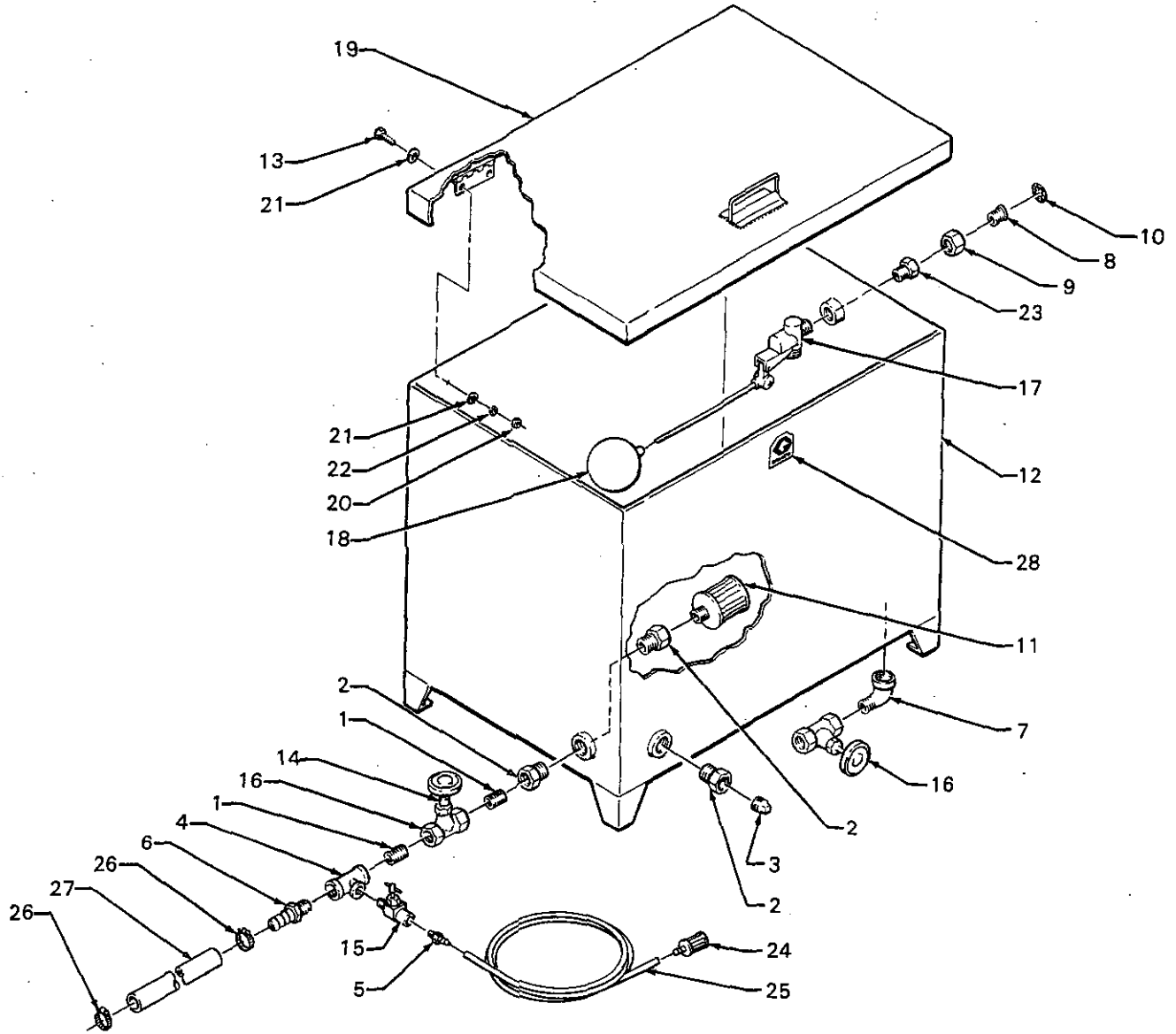
1. Press access pin (12) from gun handle and remove access plate (14) by sliding plate backwards. Remove cartridge (5) from housing (6) by using a 19 mm socket wrench.
2. Check inside housing to be sure all o-rings came out when cartridge was removed. If o-ring can be seen inside the housing, remove it, being careful not to damage internal threads in housing.
3. Throw away old cartridge and install new cartridge using a small amount of pipe sealant on threads. Be sure to tighten cartridge firmly against housing.
4. Slide access plate into place and install access pin.

REF. PART NO.	NO.	DESCRIPTION	QTY
1	801-134	TUBE, 32"	1
2	801-674	GRIP	1
3	801-117	TIP ADAPTOR	1
4	801-638	SPRAY GUN, (replaceable parts include items 5-16)	1
5	801-639	CARTRIDGE	1
6	801-671	HOUSING	1
7	801-670	HEX PLUG	1
8	801-256	TRIGGER PIN	1
9	801-424	TRIGGER	1
10	801-672	OUTLET	1
11	801-673	PIN COVER	2
12	801-428	ACCESS PIN	1
13	801-419	HANDLE	1
14	801-427	ACCESS PLATE	1
15	801-420	TUBE	1
16	801-423	INLET FITTING	1

*Order parts by name and series letter of the assembly for which you are ordering.*



**PARTS DRAWING**  
**Water Tank Assembly, 800-148**



**PARTS LIST**  
**Water Tank Assembly, 800-148**

REF PART NO.	NO.	DESCRIPTION	QTY	REF PART NO.	NO.	DESCRIPTION	QTY
1	801-793	NIPPLE, brass, low pressure, 3/4 npt x 1-3/8" long	2	13	801-366	BOLT, 1/4-20 NC x 1"	4
2	801-794	BUSHING, brass, low pressure, 1" npt x 3/4 npt	3	14	801-803	TUBING, spacer, .350 ID x .55 OD x .6 in. long	1
3	801-796	PLUG, brass, low pressure, 3/4 npt	1	15	801-804	VALVE, needle	1
4	801-797	TEE, brass, low pressure, 3/4 npt x 1/4 npt	1	16	801-805	VALVE, 3/4 npt	2
5	801-733	HOSE BARB, brass, 1/4 npt x 1/4 hose	1	17	801-806	VALVE, float	1
6	801-798	HOSE BARB, brass, 3/4 npt x 3/4 hose	1	18	801-807	BALL, float	1
7	801-799	ELBOW, street, brass, low pressure, 3/4 npt x 90°	1	19	801-802	LID, tank	1
8	801-110	ADAPTER, garden hose	1	20	801-310	NUT, 1/4-20 NC	4
9	801-111	COUPLING, garden hose	1	21	801-023	WASHER, flat, 1/4"	8
10	801-112	FILTER, garden hose	1	22	801-139	WASHER, lock, 1/4"	4
11	801-800	FILTER	1	23	801-795	BUSHING, hex, 1/2 x 3/4	1
12	801-801	TANK, water	1	24	801-812	CHEMICAL STRAINER	1
				25	801-813	TUBING, 1/4 ID x 8 ft.	1
				26	801-123	HOSE, clamp, 1-1/4"	2
				27	801-570	HOSE, 3/4 ID x 2 ft.	1
				28	801-008	LABEL, Graco "G"	1

*Order parts by name and series letter of the assembly for which you are ordering.*

## SERVICE

### Pump (Refer to Parts Drawing, Page 11)

**NOTE:** Three sizes of metric wrenches are necessary for servicing the pump; M13, M30, and M10.

#### Valves:

1. Remove the hex plug (16) from manifold (17) using M30 wrench.
2. Examine o-ring (15) under plug and replace if cuts or distortion exist.
3. Remove valve unit and o-ring (14) from cavity.

**NOTE:** Valve unit may come apart during removal.

4. Replace valves with Kit No. 801-472 if necessary.
5. Replace hex plug and torque to 75 ft. lbs. (10.3 K/m).

**NOTE:** Hex plug should be re-torqued after 5 hours operation.

#### Pumping Section:

1. Remove the 16 cap screws (12) from the manifolds using the M13 wrench.
2. Carefully separate the manifolds from the crankcase.

**NOTE:** It may be necessary to tap manifold lightly with mallet to loosen.

#### CAUTION

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

3. Carefully examine each plunger (27) for any scoring and replace if necessary.

#### Servicing Plungers:

1. Loosen plunger retaining screw (23) 5-6 turns, using M-10 wrench. Push plunger towards crankcase. This will separate plunger and retaining screw.
2. Remove retaining screw from plunger and examine o-ring (29) back-up ring (28) and copper bearing/gasket washer (24). Replace if necessary using plunger repair kit P/N 801-474.
3. Remove plunger from plunger rod and remove copper flinger (26). Clean or replace if necessary.
4. Lightly grease flinger and replace it on plunger rod.
5. Replace plunger.
6. Lightly grease retaining screw assembly to avoid cutting o-ring. Lightly grease outer end of plunger.

7. Install retaining screw assembly into plunger and torque to 14.4 ft. lbs. (2 K/m).

8. Lubricate each plunger and carefully slide manifolds onto crankcase.

9. Replace the 16 capscrews and snug them up. Torque to 21.7 ft. lbs. (3 K/m).

**NOTE:** The eight capscrews on each manifold must be torqued evenly to apply equal pressure on the manifold so that it seats properly and doesn't bind or jam. This is best done by torquing bolts closest to the center of the manifold first and then working out from those bolts.

#### Servicing V-Packings:

**NOTE:** Use packing repair kit P/N 801-769.

1. After removing the 16 capscrews and the manifolds carefully pull packing retainer (30) from the manifold. Examine o-ring (21) and replace if necessary.
2. Remove low pressure packing (19) and head ring (18).
3. Pull intermediate retainer ring (31) from manifold. Remove long life ring (20), high pressure packing (19) and head ring (18).
4. Inspect all parts and replace if necessary.

**NOTE:** If just the packings are needed use kit 801-769. If rings or retainers need replacement use kit 801-770.

5. Thoroughly clean packing cavity in manifold and examine. Lightly grease packing cavity.
6. Replace packing assembly in the following order: head ring (18), packing (19), long life ring (20), intermediate ring (31), head ring (18), packing (19), packing retainer (30) and o-ring (21).

#### CAUTION

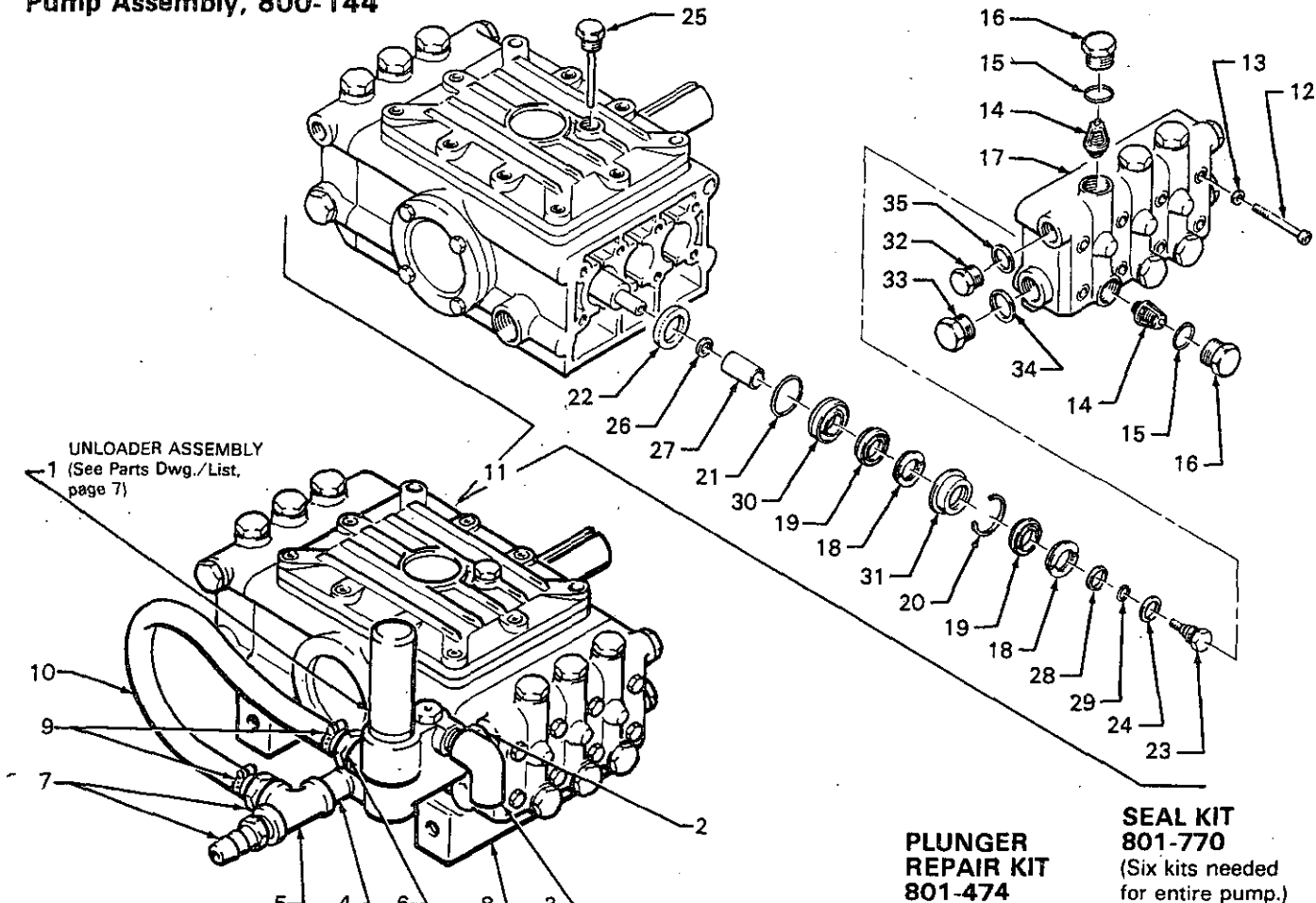
Carefully study the location of each part and the position of the seals to assure proper reassembly and operation.

7. Lubricate each plunger and carefully slide manifold onto crankcase.

**NOTE:** When replacing the manifold onto plungers, extreme caution should be exercised to avoid damage to the seals.

8. Replace the 16 capscrews in the manifolds and tighten as previously described (step 9 under servicing plungers).

**PARTS DRAWING**  
**Pump Assembly, 800-144**



UNLOADER ASSEMBLY  
 (See Parts Dwg./List,  
 page 7)

**VALVE KIT  
 801-472**

(Two kits needed  
 for entire pump.)  
 Includes:  
 REF. NO. QTY.  
 14 6

**OIL SEAL KIT  
 801-779**

(Two kits needed  
 for entire pump.)  
 Includes:  
 REF. NO. QTY.  
 22 3

**PACKING KIT  
 801-769**

(Two kits needed  
 for entire pump.)  
 Includes:  
 REF. NO. QTY.  
 19 6

**PLUNGER  
 REPAIR KIT  
 801-474**

(Two kits needed  
 for entire pump.)  
 Includes:  
 REF. NO. QTY.  
 23 3  
 24 3  
 28 3  
 29 3

**SEAL KIT  
 801-770**

(Six kits needed  
 for entire pump.)  
 Includes:  
 REF. NO. QTY.  
 18 2  
 19 2  
 20 1  
 21 1  
 30 1  
 31 1

**PARTS LIST**  
**Pump Assembly, 800-144**

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	800-122	UNLOADER ASSEMBLY, see parts drawing/list, page 7	1	19	801-776	PACKING	12
2	801-416	BUSHING, 3/8 NPT x 3/4 NPT	1	20	801-775	LONG LIFE RING	6
3	801-316	ELBOW, street, HP, 1/2 NPT	1	21	801-476	O-RING	6
4	801-786	NIPPLE, brass, 3/4 x 3	1	22	801-780	OIL SEAL	6
5	801-787	TEE, LP, brass, 3/4 NPT	1	23	801-493	PLUNGER RETAINING SCREW	6
6	801-788	BARB, 1/2 NPT x 3/4	1	24	801-492	BEARING/GASKET WASHER	6
7	801-121	BARB, 3/4 NPT x 3/4	2	25	801-782	OIL DIPSTICK	1
8	801-789	BRACKET, mounting	2	26	801-489	FLINGER	6
9	801-123	CLAMP-HOSE, 1-1/4	2	27	801-783	PLUNGER	6
10	801-570	HOSE, LP, 3/4 ID	24"	28	801-491	BACK-UP RING	6
11	801-790	PUMP, T1631, 2500 PSI, (replaceable parts include items 12-35)		29	801-488	O-RING	6
12	801-468	SCREW, M8 x 70 mm	16	30	801-772	PACKING RETAINER	6
13	801-469	WASHER	16	31	801-773	INTERMEDIATE RING	6
14	801-852	VALVE UNIT	12	32	801-484	CAP, 3/8 NPT	3
15	801-470	O-RING	12	33	801-482	CAP, 1/2 NPT	4
16	801-648	HEX PLUG, M24 x 2 x 16	12	34	801-483	WASHER	4
17	801-781	MANIFOLD	2	35	801-485	WASHER	3
18	801-774	HEAD RING	12				

Order parts by name and series letter of the assembly for which you are ordering.

# SERVICE

## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Low Pressure	<p>Worn nozzle. Belt slippage.</p> <p>Air leak in inlet plumbing. Relief valve stuck, partially plugged or improperly adjusted; valve seat worn. Tank outlet filter clogged. Worn packing. Abrasives in pumped fluid or severe cavitation. Inadequate water supply. Fouled or dirty inlet or discharge valves. Worn inlet or discharge valve. Leaky discharge hose.</p>	<p>Replace with nozzle of proper size. Tighten or replace; use correct belts and replace all three at the same time. Disassemble, reseal, and reassemble. Clean, and adjust relief valve; check for worn and dirty valve seats. Kit available.</p> <p>Clean. Check more frequently. Install proper filter. Check flow available to pump.</p> <p>Clean inlet and discharge valve assemblies.</p> <p>Replace worn valves, valve seats and/or discharge hose.</p>
Pump runs extremely rough, pressure low.	<p>Restricted inlet or air entering the inlet plumbing. Inlet restrictions and/or air leaks. Stuck inlet or discharge valve. Leaking high pressure seals.</p>	<p>Proper size inlet plumbing; check for air tight seal. Clean out foreign material, replace worn valves.</p> <p>Replace seals.</p>
Water leakage from under the manifold.	Worn packing.	Install new packing.
Water in pump crankcase.	May be caused by humid air condensing into water inside the crankcase.	Change oil at 3 month or 500 Hour intervals using Crankcase Oil (other approved oil every month or 200 hours) P/N 801-144.
Frequent or premature failure of the packing.	<p>Scored plungers. Over pressure to inlet manifold. Damaged or worn plungers. Abrasive material in the fluid being pumped. Excessive pressure and/or temperature of fluid being pumped.</p> <p>Over pressure of pumps. Running pump dry.</p>	<p>Replace plungers. Reduce inlet pressure. Replace plungers. Install proper filtration on pump inlet plumbing.</p> <p>Check pressures and fluid inlet temperature; be sure they are within specified range. Pump will overheat if run for over 10 minutes without spraying. Check tip size. Use only proper tip. Do not run pump without water.</p>
Strong surging at the inlet and low pressure on the discharge side.	Foreign particles in the inlet or discharge valve, or worn inlet and/or discharge valves.	Check for smooth lap surfaces on inlet and discharge valve seats. Discharge valve seats and inlet valve seats may be lapped on a very fine oil stone.
Electric motor won't run.	<p>Building circuit fuse blown. Overload switch has opened.</p>	<p>Check, replace or reset. Shut unit off, hold gun open, restart.</p>
Electric motor stops while spraying.	<p>Building circuit fuse blown. Overload switch has opened.</p> <p>Tip plugged.</p>	<p>Check, replace or reset. Shut unit off, relieve pressure—allow to cool. Remove and clean.</p>
Electric motor labors when starting; blows fuses.	Not wired properly.	<p>Replace capacitor. See wiring diagram.</p>

**ACCESSORIES (Must be purchased separately)**

**WATER SANDBLASTER TANK 800-149**

For abrasive cleaning of stubborn dirt and paint.

**TECHNICAL DATA**

**MOTOR:** 20 hp Gould Century

**ELECTRICAL SERVICE:** 230V/60 Hz/50 Amp/3 phase

**WATER TANK:** 65 gallon (246 liters)

**WATER PUMP:** 2500 psi (172 bar) max.  
10 GPM (38 liter/min)

**WETTED PARTS:** Stainless Steel, Aluminum,  
Phenolic Plastic, Ceramic  
Liners, Nitrile Rubber

**TOTAL UNIT WEIGHT:** 650 lb. (295 kg)  
(Empty Tank)

**OVERALL DIMENSION:** **Water Tank**  
Length: 21.5 in. (546 mm)  
Width: 35.5 in. (902 mm)  
Height: 30 in. (762 mm)

**Pump Module**  
Length: 34 in. (864 mm)  
Width: 47 in. (1194 mm)  
Height: 26 in. (660 mm)

**MAXIMUM INLET WATER TEMPERATURE:** 160° (70° C)

**INLET HOSE CONNECTION:** 3/4" garden hose to water tank

## THE GRACO WARRANTY

Graco Inc. warrants all equipment manufactured by it and bearing its name to be free from defects in material and workmanship under normal use and service. This warranty extends to the original purchaser for a period of 12 months from the date of purchase and applies only when the equipment is installed and operated in accordance with written factory recommendations. This warranty does not cover damage or wear which, in the reasonable judgment of Graco, arises from misuse, abrasion, corrosion, negligence, accident, substitution of non-Graco parts, faulty installation or tampering.

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 workmanship or material, repairs will be made at a reasonable charge and return transportation will be charged.

THIS LIMITED WARRANTY IS EXCLUSIVE, AND IS 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.

EQUIPMENT NOT COVERED BY GRACO WARRANTY. Accessories or components of equipment sold by Graco that are not manufactured by Graco (such as electric motors, switches, hose, etc.) are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making such claims.

**Factory Branches:** Atlanta, 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 55440-1444**