

EN

HydraClean[®] LT Package

3A7319F

For pressure washing applications. Use only with water and cleaning solutions. For professional use only.

Model 247984

HydraClean LT 45:1 Sprayer

4500 psi (31.0 MPa, 310 bar) Maximum Working Pressure 100 psi (0.7 MPa, 7 bar) Maximum Inlet Air Pressure

See page 3 for model information, including maximum working pressure.



Important Safety Instructions

Read all warnings and instructions in this manual before using the equipment. Save these instructions.





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Related Manuals

Manual in English	Description
308511	Hydra-Clean [®] Spray Gun
312792	Merkur Displacement Pump, Lower Repair/Parts
312796	NXT [®] Air Motor
312585	Hydra-Clean [®] Packages
312794	Merkur Pump Assembly, Instructions/Parts
307273	Fluid Outlet Filter

Models

Check the identification plate (ID) for the 6-digit part number of your package.

Package includes air controls, hose, gun, wand, pump, and ground wire.



Model	Series	Maximum Working Pressure psi (MPa, bar)	Maximum Inlet Air Pressure psi (MPa, bar)	Ratio	Maximum Fluid Flow Rate gpm (lpm)
247984	A	4500 psi (31.0 MPa, 310 bar)	100 psi (0.7 MPa, 7 bar)	45:1	0.8 (3.0)

Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

	FIRE AND EXPLOSION HAZARD
	Flammable fumes, such as solvent, in work area can ignite or explode. Solvent flowing through the equipment can cause static sparking. To help prevent fire and explosion:
	 Use equipment only in well-ventilated area. Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static sparking).
	 Ground all equipment in the work area. See Grounding instructions. Never spray or flush solvent at high pressure
	 Keep work area free of debris, including solvent, rags and gasoline. Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.
	 Use only grounded hoses. Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are apti-atatic or conductive.
e	 Stop operation immediately if static sparking occurs or you feel a shock. Do not use equipment until you identify and correct the problem.
	 Keep a working fire extinguisher in the work area.
	SKIN INJECTION HAZARD
	High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment.
	 Do not spray without tip guard and trigger guard installed. Engage trigger sofety leteb when not engaging
	 Do not point gun at anyone or at any part of the body.
	 Do not put your hand over the spray tip. Do not stop or deflect leaks with your hand, body, glove, or rag.
	 Follow the Pressure Relief Procedure when you stop spraying and before cleaning, checking, or servicing equipment.
	 Tighten all fluid connections before operating the equipment. Check bases and couplings daily. Replace were or demaged parts immediately.
	• Check hoses and couplings daily. Replace worn of damaged parts inimediately.
MPa/bar/PSi	

	EQUIPMENT MISUSE HAZARD							
	Misuse can cause death or serious injury.							
MPa/bar/PSI	 Do not operate the unit when fatigued or under the influence of drugs or alcohol. Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Specifications in all equipment manuals. Use fluids and solvents that are compatible with equipment wetted parts. See Technical Specifications in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request Safety Data Sheets (SDSs) from distributor or retailer. Do not leave the work area while equipment is energized or under pressure. 							
	 Turn off all equipment and follow the Pressure Relief Procedure when equipment is not in use. Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only. Do not alter or modify equipment. Alterations or modifications may void agency approvals and creat safety hazards. 							
	 Make sure all equipment is rated and approved for the environment in which you are using it. Use equipment only for its intended purpose. Call your distributor for information. Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not kink or over bend hoses or use hoses to pull equipment. Keep children and animals away from work area. Comply with all applicable safety regulations. 							
^	MOVING PARTS HAZARD							
MPa/bar/Psi	 Moving parts can pinch, cut or amputate fingers and other body parts. Keep clear of moving parts. Do not operate equipment with protective guards or covers removed. Equipment can start without warning. Before checking, moving, or servicing equipment, follow the Pressure Relief Procedure and disconnect all power sources. 							
	Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.							
	 Read Safety Data Sheets (SDSs) to know the specific hazards of the fluids you are using. Route exhaust away from work area. If diaphragm ruptures, fluid may be exhausted into the air. Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines. 							
	PERSONAL PROTECTIVE EQUIPMENT							
	Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. Protective equipment includes but is not limited to:							
	 Protective eyewear, and hearing protection. Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer. 							

Installation

NOTICE

Some cleaning solutions may cause damage to wetted parts. Only use cleaning solutions that are not harmful to the wetted parts. See the **Technical Specifications**, page 19.

 Using thread sealant on the male threads, connect the suction hose (N) between the pump fluid inlet (M) and the suction tube (R).

- 2. Screw on the suction tube strainer (S).
- 3. Place the suction tube in the supply container and adjust it so it is 1 in. (25 mm) off the bottom of the container. Tighten the thumbscrew of the pipe hanger onto the container.
- 4. Connect the gun spray hose (H) to the pump fluid outlet (J).
- 5. Connect the spray gun (G) to the gun spray hose (H). Use thread sealant on the male threads.



FIG. 1: Typical Installation and Component Identification

Key:

- A Air Shutoff Valve (optional, not supplied)
- B Air Line Filter (optional, not supplied)
- C Bleed-type Master Air Valve (3/8-18 npt(f))
- D Pump Air Pressure Gauge
- E Pump Air Pressure Regulator
- F Gun Swivel
- G Spray Gun
- H Gun Spray Hose
- J Pump Fluid Outlet
- K Grounding Wire (required, see **Grounding**, page 7)
- L Wet Cup (not shown)

- M Pump Fluid Inlet
- N Suction Hose
- R Suction Tube
- S Suction Tube Strainer
- T Gun Fluid Inlet
- U Fluid Drain Valve (optional, not supplied)
- V Fluid Filter (optional, not supplied)
- W Gun Trigger
- Y Pump
- Z Wand

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Grounding



The equipment must be grounded to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode. Grounding provides an escape wire for the electric current.

When using the sprayer in enclosed areas, such as storage tanks, locate the pump and air compressor outside the area and well away from it. Provide adequate ventilation. If the area you are cleaning has stored flammable materials, ensure the sprayer is properly grounded and follow your local codes for appropriate precautions to avoid static sparking.

Pump: See FIG. 2. Verify that the ground screw (GS) is attached and tightened securely to the air motor. Connect one end of the ground wire (K) to the ground screw. Connect the other end of the ground wire to a true earth ground.



Gun Spray Hoses: Use only electrically conductive fluid hoses. Check electrical resistance of hoses. If total resistance to ground exceeds 25 megohms, replace hose immediately.

Supply air: Follow manufacturer's recommendations.

Spray gun: Grounded through connection to a properly grounded fluid hose and pump.

Fluid supply container: Follow local code.

Object being sprayed: Follow local code.

Solvent supply containers used when flushing:

Follow local code. Use only conductive metal supply containers, placed on a grounded surface. Do not place the supply container on a non-conductive surface, such as paper or cardboard, which interrupts the grounding continuity.

To maintain grounding continuity when flushing or relieving pressure: Hold a metal part of the wand (Z) firmly to the side of a grounded metal supply container, then trigger the gun.

Air Controls

See FIG. 1. Air controls are included with all packages.

- The bleed-type master air valve (C) is required in your system to relieve air trapped between it and the air motor when the valve is closed. Do not block access to the valve.
- The pump air regulator (E) controls pump speed and outlet pressure by adjusting the air pressure to the pump.
- The pressure relief valve (311, see page 17) opens automatically to prevent overpressurization of the pump.

Air Line Accessories

Install the following accessories as shown in FIG. 1, using adapters as necessary. Use thread sealant on male threads.

- An air line filter (B) removes harmful dirt and moisture from the compressed air supply.
- A second bleed-type air shutoff valve (A) isolates the air line accessories for servicing. Locate upstream from all other air line accessories.

Fluid Line Accessories

Install the following accessory as shown in Fig. 1, using adapters as necessary. Use thread sealant on male threads.

• A fluid drain valve (U) relieves fluid pressure in the hose and gun.

Flush Before Using Equipment

The equipment was tested with lightweight oil, which is left in the fluid passages to protect parts. To avoid contaminating the fluid with oil, flush the equipment with a compatible solvent before using the equipment. See **Flush the Pump**, page 12.

Operation

Pressure Relief Procedure



Perform the **Pressure Relief Procedure** whenever you see this symbol.



This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the **Pressure Relief Procedure** when you stop spraying and before cleaning, checking, or servicing the equipment.

- 1. Engage the trigger safety latch. See Fig. 3.
- 2. Close the bleed-type master air valve (C) to shut off the pump.
- 3. Disengage the trigger safety latch.
- 4. Hold a metal part of the wand (Z) firmly to a grounded metal supply container. Trigger the gun to relieve pressure.
- 5. Engage the trigger safety latch.
- 6. Prepare a waste container to catch the drainage, then open all fluid drain valves in the system. Leave the drain valves open until you are ready to spray again.
- 7. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved:
 - a. Pull the tip locking feature away from the tip of the wand (Z) to disengage the balls.
 - b. Remove the spray tip.
 - c. Clear the obstruction in the hose or spray tip.



FIG. 3. Trigger Safety Latch

Cleaning Solutions



Wear appropriate protective clothing, such as waterproof outerwear and eye goggles, according to the cleaner manufacturer's recommendations. Cleaning chemicals may be toxic, and cause serious irritation to your eyes or skin.

Prepare the cleaning solution according to the manufacturer's instructions. Be sure to observe all warnings. If you are using powdered cleaners, mix them thoroughly in a separate pail before adding them to a supply container. Undissolved powders are extremely abrasive and may damage pump parts.

Prime the Pump

- 1. Refer to **Fig. 1**, page 6. Lock the gun trigger (W) with the safety latch. Remove the spray tip from the wand (Z). Refer to your gun manual.
- 2. Close the pump air pressure regulator (E) by turning the knob counterclockwise and reducing the pressure to zero. Close the bleed-type master air valve (C). Also verify that all drain valves are closed.
- 3. Connect the air line to the bleed-type master air valve (C).
- 4. Check that all fittings throughout system are securely tightened.
- 5. Position the supply container close to the pump. The suction hose (N) is 4 ft (1.2 m) long. Place the hose inside of the supply container. Do not stretch the hose tight; let it hang to assist the fluid flow into the pump.

- 6. Hold the metal part of the wand (Z) firmly to the side of the grounded supply container. Unlock the safety latch on the gun trigger (W) and hold the gun trigger open.
- 7. Open the bleed-type master air valve (C). Slowly turn the pump air pressure regulator (E) clockwise, increasing pressure until the pump starts.
- 8. Cycle the pump slowly until all air is pushed out and the pump and hoses are fully primed.
- 9. Release the gun trigger and lock the trigger safety latch. The pump should stall against pressure.

Install the Spray Tip



To avoid serious injury from skin injection, do not put your hand in front of the spray tip when installing or removing the spray tip.

- 1. Follow **Pressure Relief Procedure**, page 9.
- 2. Install the spray tip.
 - a. Pull the tip locking feature away from the tip of the wand (Z) to disengage the balls.
 - b. Insert the spray tip.
 - c. Release the tip locking feature to engage the balls and lock the spray tip in place.

The fluid output and pattern width depend on the size of the spray tip, the fluid viscosity, and the fluid pressure.

Start the Pump

- 1. Open the bleed-type master air valve (C).
- 2. Trigger the gun into a grounded supply container, holding a metal part of the wand (Z) firmly to the supply container.
- 3. Slowly open the pump air pressure regulator (E) until the pump starts running.
- 4. Run the pump slowly until all the air is purged, release the gun trigger, and lock the trigger safety latch.

Recommendations for Optimal Use

- Always use the lowest pressure necessary to get the desired results.
- Never allow the pump to run dry of fluid being pumped. A dry pump will quickly accelerate to a high speed, possibly damaging itself. If your pump accelerates quickly, or is running too fast, stop it immediately and check the fluid supply. If the supply container is empty and air has been pumped into lines, prime the pump and lines with fluid, or flush and leave filled with a compatible solvent. Be sure to eliminate all air from the fluid system.

- Always stop the pump at the bottom of the stroke to prevent fluid from drying on the rod and damaging the throat packings. When you finish pumping, always relieve the pressure. Perform the **Pressure Relief Procedure**, page 9.
- If you are pumping fluid that dries, hardens, or sets up, flush the system with a compatible solvent as often as necessary to prevent a buildup of dried fluid in the pump or hoses.
- Every 40 hours of operation, check that the packing nut on your pump is tight. Perform the **Pressure Relief Procedure**, page 9. Then, snugly tighten the packing nut. Do not over-tighten or the packings may be damaged.

Shutdown



- 1. Perform the **Pressure Relief Procedure**, page 9.
- 2. Flush the pump. See Flush the Pump, page 12.

Always flush the pump before the fluid dries on the displacement rod.

Maintenance

Preventive Maintenance Schedule

The operating conditions of your particular spray package determine how often maintenance is required. Establish a preventive maintenance schedule by recording when and what kind of maintenance is needed, and then determine a regular schedule for checking your spray package.

Replace lens covers on regulator gauge lenses when dirt makes the gauge difficult to read.

Check Hoses and Threaded Connections

Before each use, check all hoses for wear or damage. Replace hoses as necessary. Check that all threaded air and hose connections are tight and leak-free. Tighten as necessary.

Flush the Pump



To avoid fire and explosion, always ground equipment and waste container. To avoid static sparking and injury from splashing, always flush at the lowest possible pressure.

Flush the pump:

Before first use

- When changing fluids
- Before repairing equipment
- Before fluid dries or settles out in a dormant pump
- At the end of the day
- Before storing the pump

Flush at the lowest pressure possible. Flush with a fluid that is compatible with the fluid you are pumping and with the wetted parts in your system. Check with your fluid manufacturer or supplier for recommended flushing fluids and flushing frequency.

- 1. Perform the **Pressure Relief Procedure**, page 9.
- 2. Remove the spray tip from the wand (Z). Refer to your gun manual.
- 3. Place the siphon tube in the grounded supply container containing cleaning fluid.
- 4. Set the pump to the lowest possible fluid pressure, and start the pump.
- 5. Hold a metal part of the wand firmly to a grounded supply container.
- 6. Trigger the gun (G). Flush the system until clear solvent flows from the tip of the wand.
- 7. Perform the Pressure Relief Procedure, page 9.
- 8. Clean the spray tip and optional fluid filter (V) element separately, then reinstall them.
- 9. Clean inside and outside of the suction tube.

Troubleshooting



- 1. Perform the **Pressure Relief Procedure**, page 9. before checking or repairing the equipment.
- 2. Check all possible problems and causes before disassembling the equipment.

Problem	Cause	Solution
Pump fails to operate.	Restricted line or inadequate air supply; closed or clogged valves.	Clear line or increase air supply. Check that the valves are open.
	Obstructed fluid hose or gun; fluid hose inner-diameter (ID) is too small.	Open, clear* the fluid hose or gun; use hose with larger ID.
	Fluid dried on the displacement rod.	Clean the displacement rod; always stop the pump at the bottom of its stroke.
	Dirty, worn, or damaged air motor parts.	Clean or repair the air motor. Refer to the NXT Motor manual. See Related Manuals , page 3.
Pump operates, but output is low on both strokes.	Restricted line or inadequate air supply; closed or clogged valves.	Clear line or increase air supply. Check that the valves are open.
	Obstructed fluid hose or gun; fluid hose ID is too small.	Open, clear* the fluid hose or gun; use hose with larger ID.
	Worn packings in displacement pump.	Replace packings. Refer to your pump manual. See Related Manuals , page 3.
Pump operates, but output is low on downstroke.	Held open or worn ball check valves or piston packings.	Clear valve; replace packings. Refer to your pump manual. See Related Manuals , page 3.
Erratic or accelerated	Exhausted fluid supply.	Refill and prime.
pump speed.	Held open or worn ball check valves or packings.	Clear valve, replace packings. Refer to your pump manual. See Related Manuals , page 3.
Fluid being pumped is visible in the wet cup.	Worn throat packings.	Replace throat packings. Refer to your pump manual. See Related Manuals , page 3.
Pump fails to operate.	Restricted line or inadequate air supply; closed or clogged valves.	Clear line or increase air supply. Check that the valves are open.

* To determine if the fluid hose or gun is obstructed, relieve the pressure. Disconnect the fluid hose and place a container at the pump fluid outlet to catch any fluid. Turn on the air just enough to start the pump. If the pump starts when the air is turned on, the obstruction is in the hose or gun.

Repair

Refer to your pump manual for pump repair instructions. See **Related Manuals**, page 3.

Parts

Parts

HydraClean LT Sprayer



247984 Parts

Ref.	Part	Description	Qty.
1		Pump Assembly	1
	289855	Air motor	
	289847	Lower assembly	
2		PANEL, air controls (included with 3)	1
	26C857	pump only, 100 psi	
3		INSERT, panel (included with 2)	1
4		HOSE, suction (included with 5)	1
	256421	Cart Mount Packages	
5		STRAINER (included with 4)	1
6	17B529	GUN, includes wand, see page 16	1
7	247878	HOSE, fluid	1
8	15R399	ADAPTER, 3/8 npt x 3/8 qr, sst	1
9	105332	NUT, lock, M5 x 0.08 (included with 2)	2
10	111799	SCREW, cart mount, M8 x 16 (included with 12)	4

Ref.	Part	Description	Qty.
11	238909	WIRE, grounding assembly	1
12	289694	CART MOUNTING KIT, not shown	1
13	805531 805532 805533 805534 805591 805592	TIP, spray, Q-Type (pressure washer), not shown	1
14▲	15M676	LABEL, warning, not shown	

– – – Not sold separately.

▲ Replacement Warning labels, signs, tags, and cards are available at no cost.

Kits

Bare Gun Replacement Kits

- **15T283:** Brass Spray Gun (standard).
- 15T282: Stainless Steel Spray Gun (optional).

Gun Stainless Steel Fitting Kit

• **247880:** Includes stainless steel gun inlet and outlet fittings.

Gun Wand Replacement Kits

- **15T279:** 32 in. (813 mm) Stainless Steel Wand (standard).
- **15T280:** 10 in. (254 mm) Stainless Steel Wand (optional).

Pulsation Dampener Kits

- **17A074:** Forged steel with maximum fluid pressure of 4750 psi (32.7 MPa, 327 bar).
- **24X732:** Stainless steel with maximum fluid pressure of 3000 psi (20.7 MPa, 207 bar).

Chemical Injector Kit

• **24W670:** To be attached between the pump outlet and the gun inlet. Maximum fluid pressure is 4500 psi (31.0 MPa, 310 bar).

Foaming Attachment Kit

• **17C690:** Bottle-type foaming attachment, to be attached at the end of the gun wand.

Air Control Panel Kits





HydraClean LT Air Control Panel Kit

Kit 26C964

Ref.	Part	Description	Qty.
301	114362	VALVE, ball	1
303		TUBE, 1.5 in, 1/2 OD, cut to fit,	1
		order Tubing Kit 24D496	
304	121212	ELBOW, swivel, 1/2T x 3/8 npt(m)	2
305	15T536	REGULATOR, air, 3/8 npt	1
306		ELBOW, swivel, 5/32 T x 1/4 npt	1
307		TUBE, 5 in., black, cut to fit,	1
		order Tubing Kit 24D496	
308		SWIVEL, 90°, 5/32T x 1/8 npt(f)	1
310	15T500	GAUGE, pressure	1
311	113498	VALVE, safety	1
313	15T538	NUT, regulator	1

Ref.	Part	Description	Qty.
314	114381	SCREW, cap, button head	2
317		PANEL	1
319		INSERT	1
320	105332	NUT, lock, not shown	2
321		ELBOW, 1/2T x 1/2 npt	1
322		COVER, lens, 12 sticker sheet, <i>not shown</i> , order Kit 24A540 for 5 sheets	1
326		FITTING, straight, 1/2T x 3/8 npt(m)	1
327	24P814	RING, grounding	1

– – Not sold separately.

Performance Charts

45:1 Ratio, 50 cc/cycle





KEY

- A 100 psi (0.7 MPa, 7 bar)
- B 70 psi (0.5 MPa, 5 bar)
- C 40 psi (0.3 MPa, 3 bar)
- Fluid flow
- - Air Flow

Dimensions



	A	В	С	D	E	F	G	Н	J
in.	13.43	10.00	28.64	20.45	10.22	17.32	16.36	28.64	10.63
mm	341.2	254.00	727.50	519.40	257.70	439.90	415.50	727.50	270.00

Technical Specifications

HydraClean [®] LT Sprayer			
	US	Metric	
Maximum fluid working pressure	4500 psi	31.0 MPa, 310 bar	
Maximum air inlet pressure	100 psi	0.7 MPa, 7.0 bar	
Maximum gun air inlet pressure	100 psi	0.7 MPa, 7.0 bar	
	-		
Ratio	45:1		
Ambient air temperature range	35° to 120°F	2° to 49°C	
Maximum fluid operating temperature			
Maximum fluid temperature	160°F	71°C	
Noise (dBa)	-		
Maximum sound pressure, Air Motor	80.1 dBa @ 70 psi (0.48 MPa, 4.8 bar),		
Sound pressure measured 3.28 feet (1 meter)	from equipment.		
Sound power measured per ISO-9614-2.			
Inlet Size			
Air inlet size	3/8-18 npt(f)		
Materials of Construction	-		
Wetted parts	Displacement pump: Stainless steel, tungsten carbide with 6% nickel, UHMWPE, PTFE		
	Spray gun: Refer to your spray gun manual		
	Fluid hoses: nylon		
	Suction assembly: stainless steel, nylon		
	Fluid filter: Refer to your fluid outlet filter manual		
	Drain valve: stainless steel, nylon		
Weight			
45:1 Mounted pump*	92 lb.	42 kg	
45:1 Mounted pump* and siphon kit	96 lb.	43 kg	
45:1 Mounted pump*, siphon kit, and fluid filter	101 lb.	46 kg	
Notes			
* Includes air controls.			
All trademarks or registered trademarks are the property of their respective owners.			

California Proposition 65

CALIFORNIA RESIDENTS

MARNING: Cancer and reproductive harm – www.P65warnings.ca.gov.

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be 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 general wear and tear, or 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 of Graco equipment with 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 to an authorized Graco distributor for verification of 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.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but 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 any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Information

For the latest information about Graco products, visit www.graco.com.

For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor. Phone: 612-623-6921 or Toll Free: 1-800-328-0211, Fax: 612-378-3505

All written and visual data contained in this document reflects the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Original instructions. This manual contains English. MM 3A7319

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