

HurricaneTM Electric Dispense System

311216K
EN

***For dispensing oil, gear lube, anti-freeze, and automatic transmission fluid.
DO NOT use with flammable fluids or in Class 1 hazardous locations.***

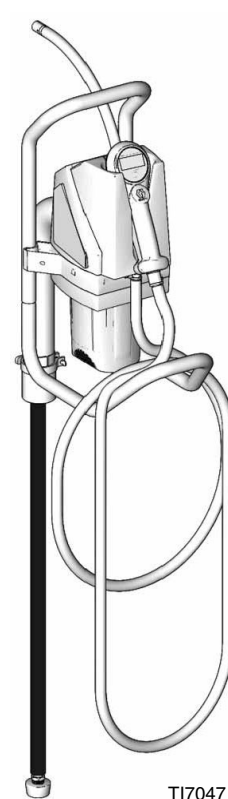
200 psi (1.38 MPa, 13.8 bar) Maximum Working Pressure

See page 2 for model numbers and configurations.



Important Safety Instructions

Read all warnings and instructions in this manual.
Save these instructions.














TI7047



TI7049

Model Numbers and Configurations

Part Number	Approvals	110 V	220 V	Tapper	8 ft (2.44 m) Dispenser	25 ft (7.62 m) Dispenser	Power Cord Interface
234902		✓			✓		North American plug
247396		✓			✓		North American plug
247397		✓			✓		North American plug
247398		✓			✓		North American plug
248918		✓		✓			North American plug
248919	CE		✓		✓		IEC-320 receptacle*
248920	CE		✓	✓			IEC-320 receptacle*
249289	CE 		✓	✓			Asia and Australia plug
249290	CE 		✓		✓		Asia and Australia plug
249291	CE 		✓			✓	Asia and Australia plug
249292	CE		✓			✓	IEC-320 receptacle*
249294		✓				✓	North American plug
247458		✓				✓	North American plug
247459		✓				✓	North American plug
249298	CE		✓	✓			Continental Europe plug
249299	CE		✓		✓		Continental Europe plug
249300	CE		✓			✓	Continental Europe plug

* Use only a power cord designed with a 60320 connector and a minimum rating of 250 VAC, 10 amps and 60° C.





Related Manuals





This manual is available in the following languages:

English	311216
French	311217
German	311218
Italian	311219
Spanish	311220
Chinese	311221
Korean	311222
Japanese	311223

Warnings

The following general warnings are for the setup, use, grounding, maintenance, and repair of this equipment. Additional, more specific warnings may be found throughout the body of this manual where applicable. *Symbols appearing in the body of the manual refer to these general warnings. When these symbols appear throughout the manual, refer back to these pages for a description of the specific hazard.*

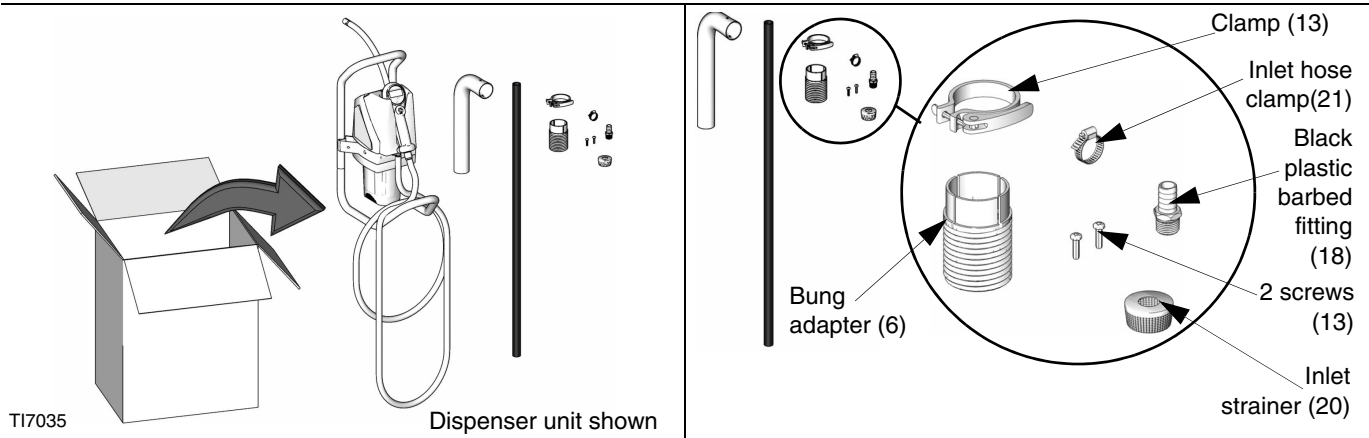
 WARNING	
	<p>EQUIPMENT MISUSE HAZARD</p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> • Do not operate the unit when fatigued or under the influence of drugs or alcohol. • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data in all equipment manuals. • Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer. • Check equipment daily. Repair or replace worn or damaged parts immediately with genuine Graco replacement parts only. • Do not alter or modify equipment. • Use equipment only for its intended purpose. Call your Graco 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.
	<p>FIRE AND EXPLOSION HAZARD</p> <p>When flammable fluids are present in the work area, such as gasoline and windshield wiper fluid, be aware that flammable fumes can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> • Do not use equipment to dispense flammable liquids such as gasoline or windshield washer fluid. • Use equipment only in well ventilated area. • Eliminate all ignition sources, such as cigarettes and portable electric lamps. • Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline. • Do not plug or unplug power cords or turn lights on or off when flammable fumes are present. • Ground all equipment in the work area. • Use only grounded hoses. • If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem. • Keep a fire extinguisher in the work area.
	<p>ELECTRIC SHOCK HAZARD</p> <p>Improper grounding, setup, or usage of the system can cause electric shock.</p> <ul style="list-style-type: none"> • Turn off and disconnect power cord before servicing equipment. • Use only grounded electrical outlets. • Use only 3-wire extension cords. • Ensure ground prongs are intact on equipment and extension cords. • Do not expose to rain. Store indoors.

 WARNING	
	<p>PRESSURIZED EQUIPMENT HAZARD</p> <p>Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.</p> <ul style="list-style-type: none"> • Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment. • Tighten all fluid connections before operating the equipment. • Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.
	<p>PRESSURIZED ALUMINUM PARTS HAZARD</p> <p>Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use can cause serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.</p>
	<p>MOVING PARTS HAZARD</p> <p>Moving parts can pinch or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> • Keep clear of moving parts. • Do not operate equipment with protective guards or covers removed. • Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the Pressure Relief Procedure in this manual. Disconnect power or air supply.

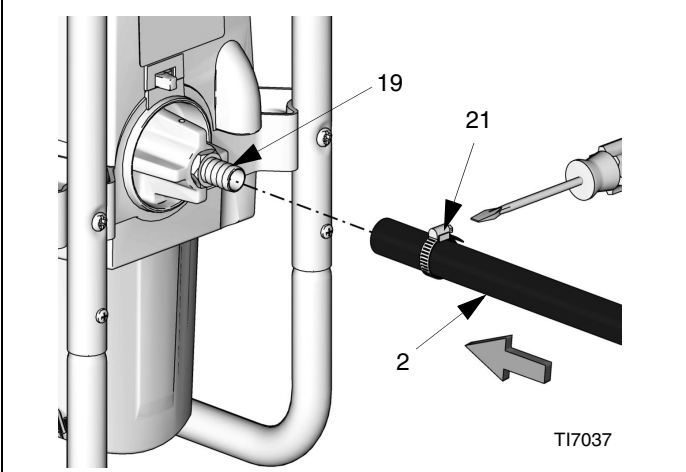
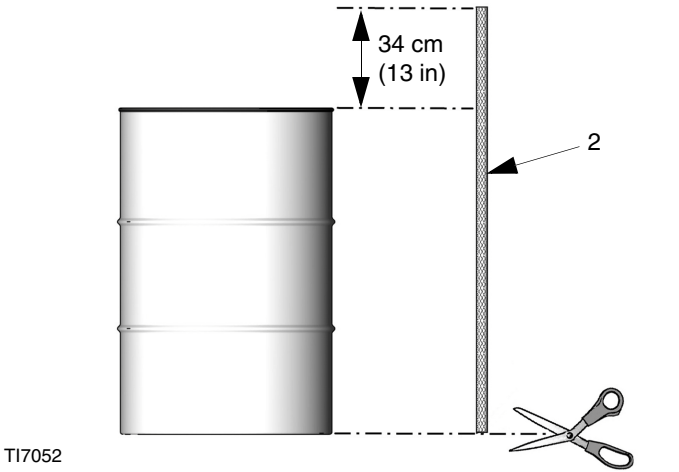
PRODUCT DISPOSAL AND RECYCLE INSTRUCTIONS

This product contains electrical and/or electronic components. These components must be removed and disposed of or recycled according to local waste regulations.

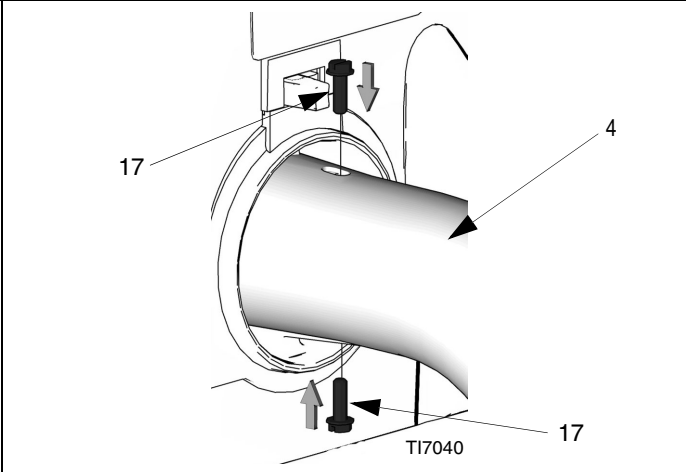
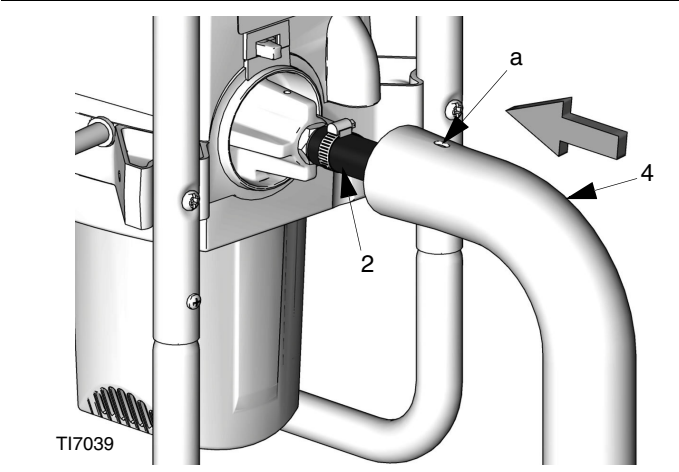
Setup and Operation



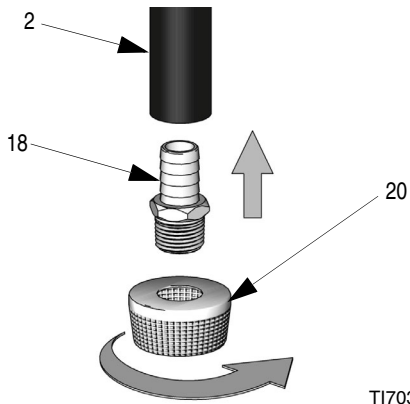
1. Take Hurricane™ Electric Dispense System out of the box.
2. Check that all unassembled parts shown are present.



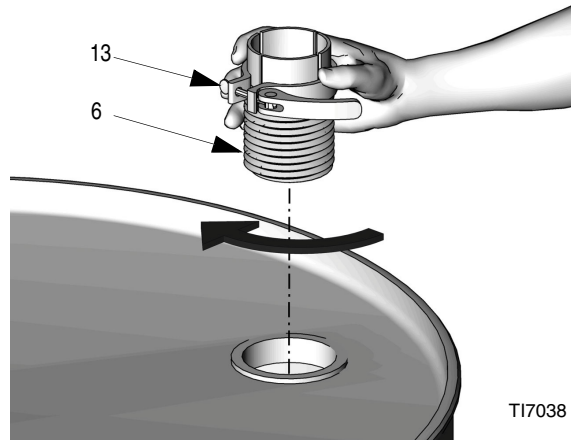
3. Use a utility knife to cut suction hose (2) to the appropriate length for your container.
4. Slide hose clamp (21) onto suction hose (2), press end of suction hose on to barbed fitting (19) at back of unit and slide clamp over barbed fitting. Tighten clamp screw securely.



5. Feed suction hose (2) through support tube (4) being careful to keep slots (a) on support tube (4) vertical to line up with holes on inlet port.
6. Insert 2 screws (17), provided with pump through slots in support tube (4) and into the holes on inlet port. Tighten securely.



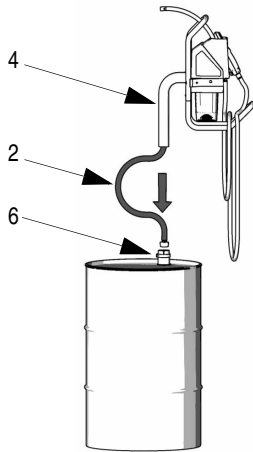
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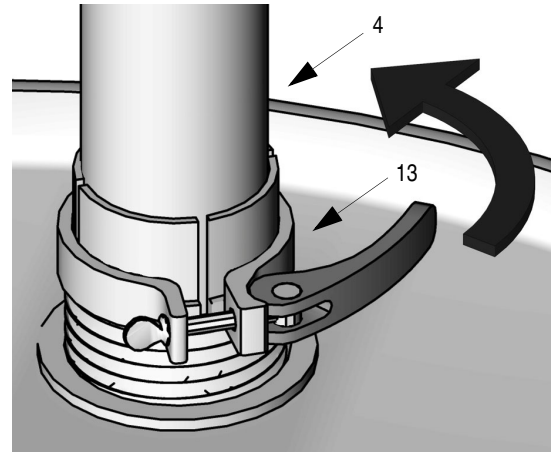
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7. Assemble inlet strainer (20) and black plastic barbed fitting (18) to inlet end of suction hose (2).

8. Insert bung adapter (6) into bung hole of supply container and hand tighten. Leave clamp (13) open.



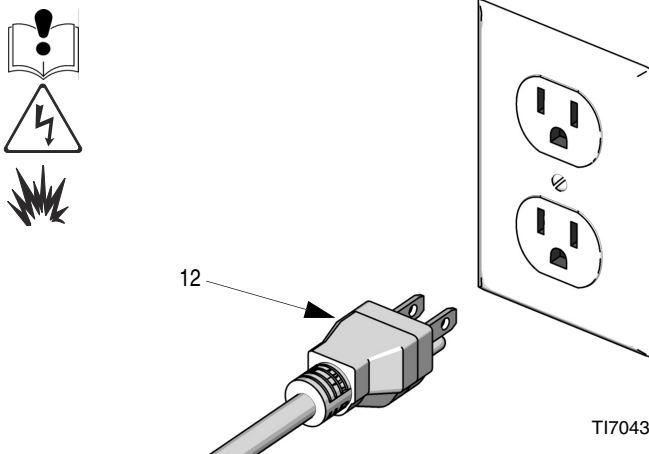
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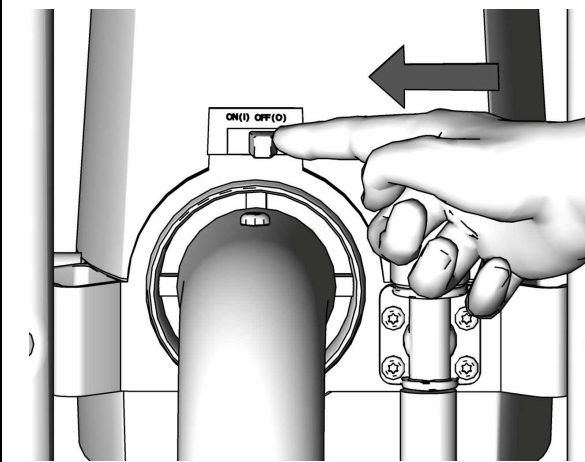
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9. Feed suction hose (2) through bung adapter (6) and push support tube (4) down until it seats.

10. Close bung adapter clamp (13) around support tube (4).



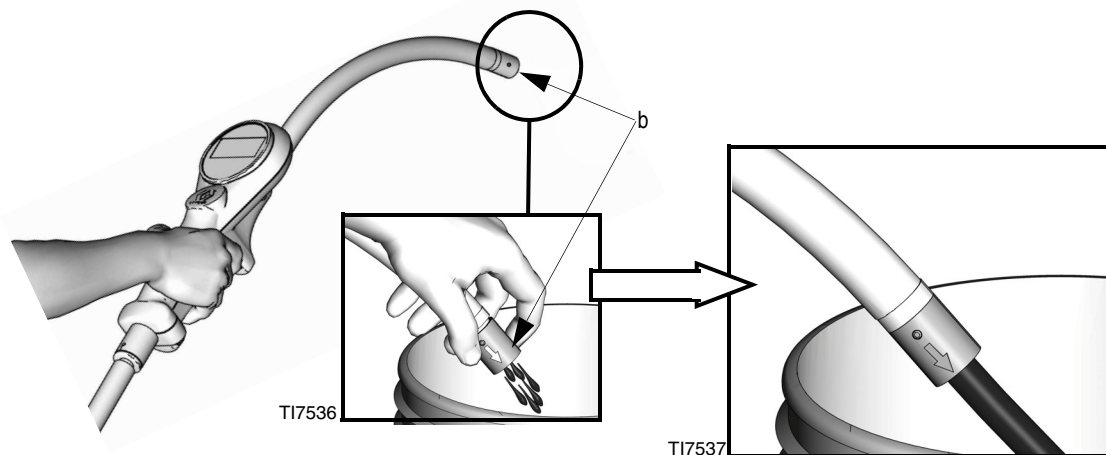
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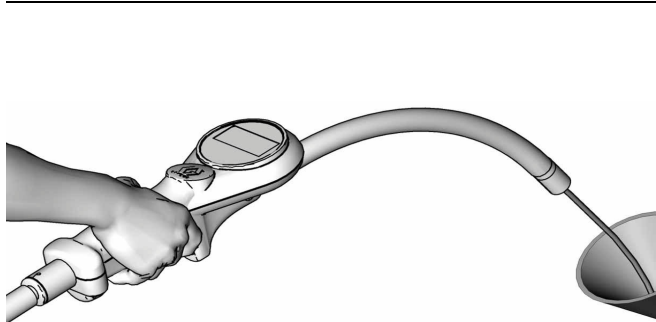
TI7044

11. Plug electrical cord (12) into grounded socket. Depending on your configuration, the system requires either a 110 VAC, 60 Hz, 15 A circuit with grounding receptacle or a 220 VAC, 50/60 Hz, 15 A circuit with grounding receptacle.

12. Set toggle switch (11) to "On" position.

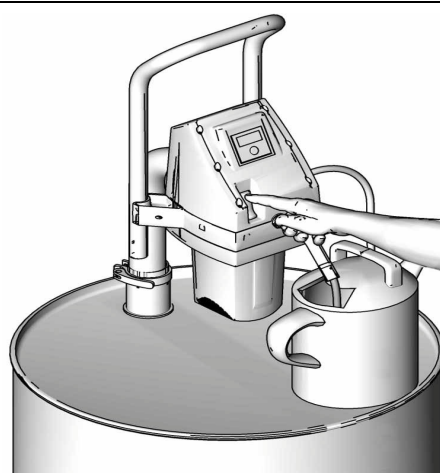


13. On handset unit, extend the nozzle sleeve (b) by pulling it away from the dispenser. While holding sleeve in extended position, press the trigger until fluid begins to flow.



TI7045

14. On handset unit, press trigger to dispense fluid.



TI7046

15. On tapper unit, press dispense button to dispense fluid.

Safety Check

When you turn on the Hurricane Electric Pump (step 12 in the Setup and Operation procedure), the software checks two critical safety components. While this check is occurring, the pump will not dispense and the meter screen displays the current software revision (i.e., x.xx). Do not press the trigger or the dispense button until the meter screen displays 0.00. If you attempt to dispense before the check is complete, you must release the trigger or dispense button and press again to dispense.

Priming

If the pump does not immediately prime when turned on, follow these steps:

1. Extend the nozzle by pulling the nozzle sleeve as indicated by the label wrapped around the nozzle.
2. While the nozzle is extended, press the trigger on the handset to dispense fluid (air may be felt at the nozzle outlet).
3. Continue to hold the nozzle sleeve in the extended position, with the trigger pressed, until fluid is dispensed from the nozzle outlet.
4. To avoid splashing back onto skin or into eyes, always aim dispenser or dispense tube at inside wall of pail.

Dispense Options


The Hurricane Electric Pump can be programmed to measure dispense volume in liters, gallons, quarts or pints. Follow these steps to reset the units of measure.

1. Press and hold the Set/Reset button for 3 seconds until the meter screen displays "Set".
2. Press the Set/Reset button to scroll through the four units of measure options.
3. When the desired unit is displayed, do nothing for 3 seconds and the value will be set.
4. The meter will now show the dispense volume in the selected units of measure. If a dispense volume was displayed when you changed the units of measure, that amount will be lost and the meter screen will display 0.00.

Determining Pump Usage

To determine the total amount of fluid dispensed, in gallons, follow these steps.

1. Turn the power switch to the Off position (O).
2. Aim dispenser or dispense tube at inside wall of a pail.
3. Press and hold the trigger.
4. Turn the power switch to the On position (I).

 Pressing the trigger while the power switch is being turned on, puts the pump in a mode where no fluid will be dispensed.

5. While holding the trigger, press and hold the Set/Reset button for 5 seconds. The total amount of fluid dispensed will be displayed in gallons.
6. Release the trigger to return to dispense mode.


Pressure Relief Procedure

The Hurricane Electric Pump incorporates a safety device to prevent excessive pressure situations. If this occurs, the motor speed and flow rate may decrease or stop and the message "Fault" will be shown on the display. To correct this, perform the following steps:

1. Unplug the power cord.
2. Check the inlet strainer to ensure debris is not clogging the inlet.
3. Check the outlet nozzle to ensure debris is not clogging the outlet.
4. Connect power to the pump.
5. Reprime the pump.
6. If this does not correct the problem, contact your Graco distributor.

Thermal Overload

The motor incorporates a thermal overload switch to shut down if overheated.

						
To reduce risk of injury from motor starting unexpectedly as it cools, always turn power switch to OFF (O) position if motor shuts down.						

Replacing the Dispense Assemblies



Remove the handset assembly

Reference numbers on FIG. 1 refer to the Parts List on page 13.

1. Disconnect power before beginning this procedure.
2. Remove 4 screws (A) to detach the motor cover (8). Pull motor cover down.
3. Remove 6 screws (B) to remove pump cover (10). Lift cover off pump.
4. Unplug handset wire (C) from control board (16) and pull out through hole in pump cover.
5. Remove 4 screws (D) that secure the manifold (7) to the pump. Remove hose/handset assembly.



Fluid may leak when screws (D) are removed.

Replace the handset assembly

Use Handset Replacement Kit 253279 (8 ft (2.44 m) hose) or 253395 (25 ft (7.62 m) hose) to replace the handset assembly.

1. Ensure o-ring (3) from replacement kit 253279 is in the groove on the back of the manifold (7). Line up manifold with fluid outlet (E) and replace 4 screws (D) to secure the manifold to the pump.
2. Feed the handset wire (C) through the hole in the pump cover and plug in to the control board (16).
3. Reseat pump cover (10) and replace 6 screws (B).
4. Reseat motor cover (8) and replace 4 screws (A).
5. Plug in power cord.
6. Pump is ready for use

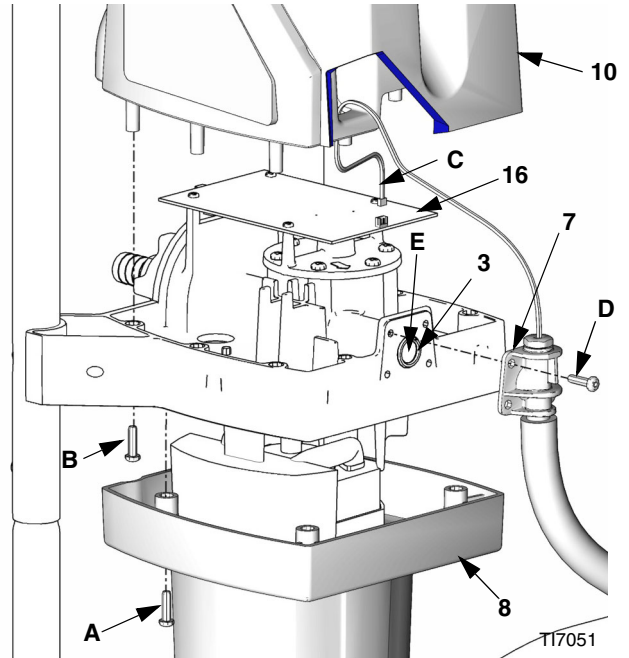


FIG. 1



- Never allow the pump to run dry of the fluid being dispensed. A dry pump will quickly accelerate to a high speed, causing damage to the pump. If the 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 entered the system, prime the pump with fluid.
- The minimum flow rate generated by the pump is 1.5 gpm (5.7 lpm). A new pump breaks in over a period of time dependent on the level of use. When the pump is completely broken in, the flow rate generated by the pump may increase to 1.6 - 1.7 gpm (6.1 - 6.4 lpm).

Replacing the Tapper Dispense Tube

Use Tapper Dispense Tube Replacement Kit 253280 to replace the tapper dispense assembly.

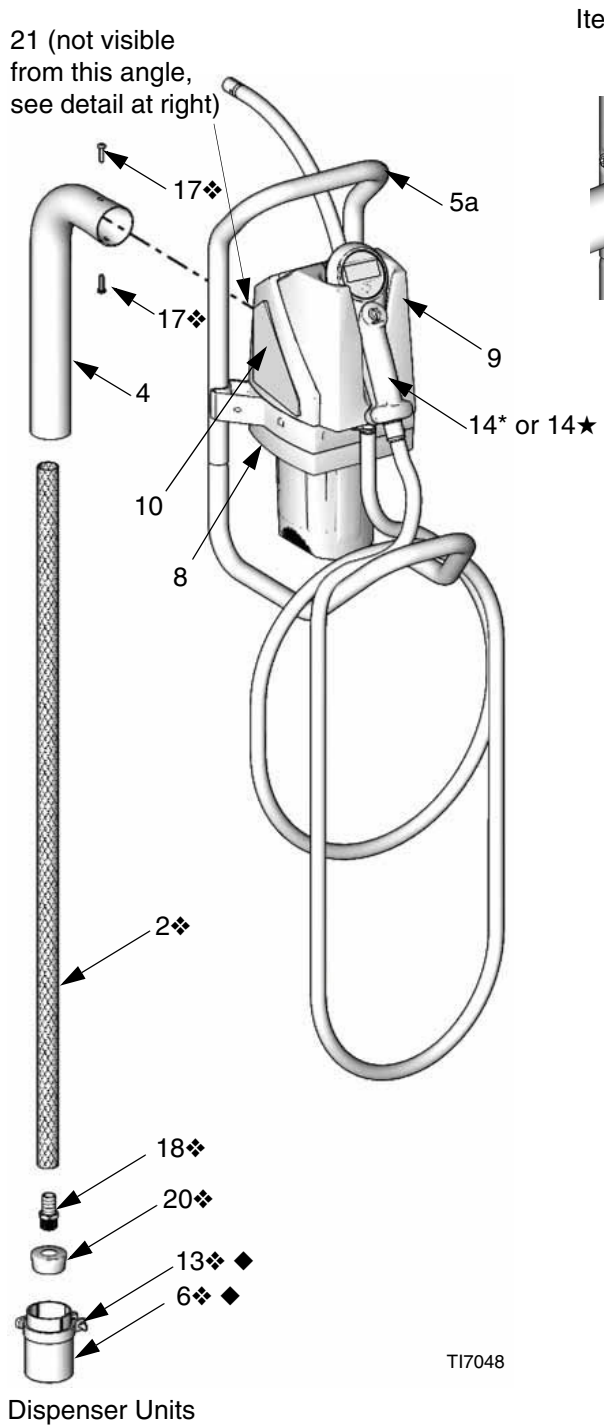
1. Disconnect power before beginning this procedure.
2. Remove dispense tube assembly by unscrewing brass fitting.
3. Replace with new assembly

Troubleshooting

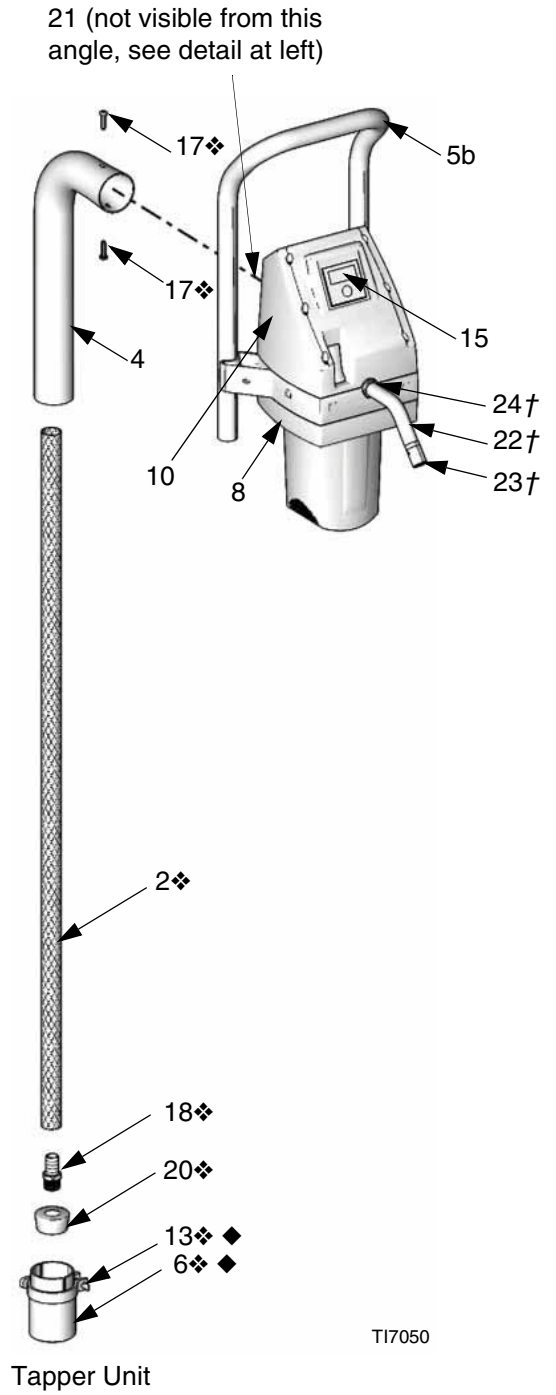
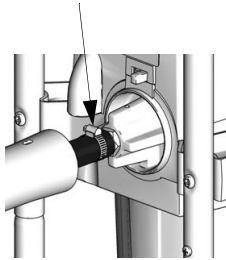
Problem	Cause	Solution
<p>Power switch is in the On position (I) and is plugged in, but the motor does not run and the pump fails to dispense.</p>	<p>Motor or control system is damaged.</p>	<p>Contact your Graco distributor for return or repair</p>
	<p>Electric outlet is not providing power.</p>	<p>Try a different outlet or plug in a device that you know is working to test the outlet. Reset building circuit breaker or replace fuse.</p>
	<p>Extension cord is damaged</p>	<p>Replace extension cord.</p>
	<p>Pump electric cord is damaged.</p>	<p>Check for broken insulation or wires. Contact your Graco distributor if damaged.</p>
<p>Pump does not prime.</p>	<p>Pump is dry.</p>	<p>Follow priming instructions on page 7.</p>
	<p>Inlet strainer is clogged or suction hose is not immersed in fluid.</p>	<p>Clean debris off inlet strainer and ensure suction hose is at the bottom of the fluid reservoir.</p>
	<p>Exhausted fluid supply.</p>	<p>Refill supply or move pump to new reservoir and reprime.</p>
	<p>Nozzle is obstructed.</p>	<p>Ensure no obstructions are present at the nozzle outlet.</p>
	<p>Suction hose is leaking.</p>	<p>Tighten inlet hose clamp and inspect hose for cracks or vacuum leaks.</p>
<p>Pump cycles (motor runs) but there is low or no fluid dispensed.</p>	<p>Drivetrain is damaged (motor runs but numbers on the display do not increase).</p>	<p>Contact your Graco distributor for return or repair.</p>
	<p>Inlet strainer is clogged or suction hose is not immersed in fluid.</p>	<p>Clean debris off inlet strainer and ensure suction hose is at the bottom of the fluid reservoir.</p>
	<p>Exhausted fluid supply.</p>	<p>Refill supply or move pump to new reservoir and reprime.</p>
	<p>Excessive pressure has been built in the system.</p>	<p>Read notes on page 8. Stop dispensing and cycle power on the pump.</p>
	<p>Suction hose is leaking.</p>	<p>Tighten inlet hose clamp and inspect hose for cracks or vacuum leaks.</p>

Problem	Cause	Solution
Power switch is in the ON position (I) and is plugged in, but display is not active or shows unintelligible characters.	Meter is damaged	Contact your Graco distributor for return or repair.
	Electric outlet is not providing power.	<ul style="list-style-type: none"> • Try a different outlet or plug in a device that you know is working to test the outlet. • Reset building circuit breaker or replace fuse.
	Electronic controls are stalled.	Cycle power on the pump. If problem continues, contact your Graco distributor for return or repair.
	Extension cord is damaged.	Replace extension cord.
	Pump electric cord is damaged.	Check for broken insulation or wires. Contact your Graco distributor if damaged.
Fluid leaks from any location on the pump or meter.	Seals or connections need to be replaced.	Contact your Graco distributor for return or repair.
The message "Fault" is shown on the display.	Motor, drivetrain, meter, or control system is damaged.	Contact your Graco distributor for return or repair.
	Pump has entered a runaway condition.	Cycle power on the pump. If problem continues, contact your Graco distributor for return or repair.

Parts



Item 21 detail



Parts List

Ref. No.	Description	Qty.
1★	SCREW, machine, torx pan head (qty. 4 ea. in kits 253279, and 253395)	26
2❖	HOSE, suction	1
3★	PACKING, o-ring	1
4	TUBE, support	1
5a	FRAME, tubular (dispenser unit)	1
5b	FRAME, tubular (tapper unit)	1
6❖◆	ADAPTER, bung, 2 in. clamp	1
7‡	CHASSIS, manifold, machining	1
8	COVER, motor	1
9	HOLDER, dispense handset	1
10	COVER, pump	1
11‡	COVER, switch	1
12	CORD SET, sjt, with grip	1
13❖◆	CLAMP, quick release	1
14*	DISPENSER, handset/hose, Hurricane, 8 ft (2.44 m) (dispenser unit)	1
14★	DISPENSER, handset/hose, Hurricane, 25 ft (7.62 m) (dispenser unit)	1
15	DISPLAY (tapper unit)	1
16‡	BOARD, circuit, assembly Hurricane control	1
17❖	SCREW, machine, panhead, #8-16 x 1/2 in.	2
18❖	FITTING, 1/2 in. NPTM x 5/8 in. barbed	1
19‡	FITTING, 1/2 in. NPTM x 5/8 in. barbed	1
20❖	STRAINER	1
21❖	CLAMP, hose	1
22‡	TUBE, dispense (tapper unit)	1
23‡	NOZZLE, dispenser (tapper unit)	1
24‡	FITTING (tapper unit)	1
25▲	LABEL, Hurricane Warning (not shown)	1

* Parts included in 8 ft (2.44 m) Handset Replacement Kit 253279, which may be purchased separately.

★ Parts included in 25 ft (7.62 m) Handset Replacement Kit 253395, which may be purchased separately.

❖ Parts included in Drum Mount Replacement Kit 253514, which may be purchased separately.

‡ Parts included in Tapper Dispense Tube Replacement Kit 253280, which may be purchased separately.

◆ Parts included in Bung Adapter Replacement Kit 253703, which may be purchased separately.

‡ Parts shown only in setup and operations steps on pages 5 through 7 and the handset replacement procedure on page 9.

▲ Replacement Danger and Warning labels in various language combinations are available at no cost.

Part number: **15H108** - pinch point label

15G550 - warning/safety label

French, Spanish, English

15H133 - warning/safety label

French, Spanish, German

15H134 - warning/safety label

French, German, English

15H135 - warning/safety label

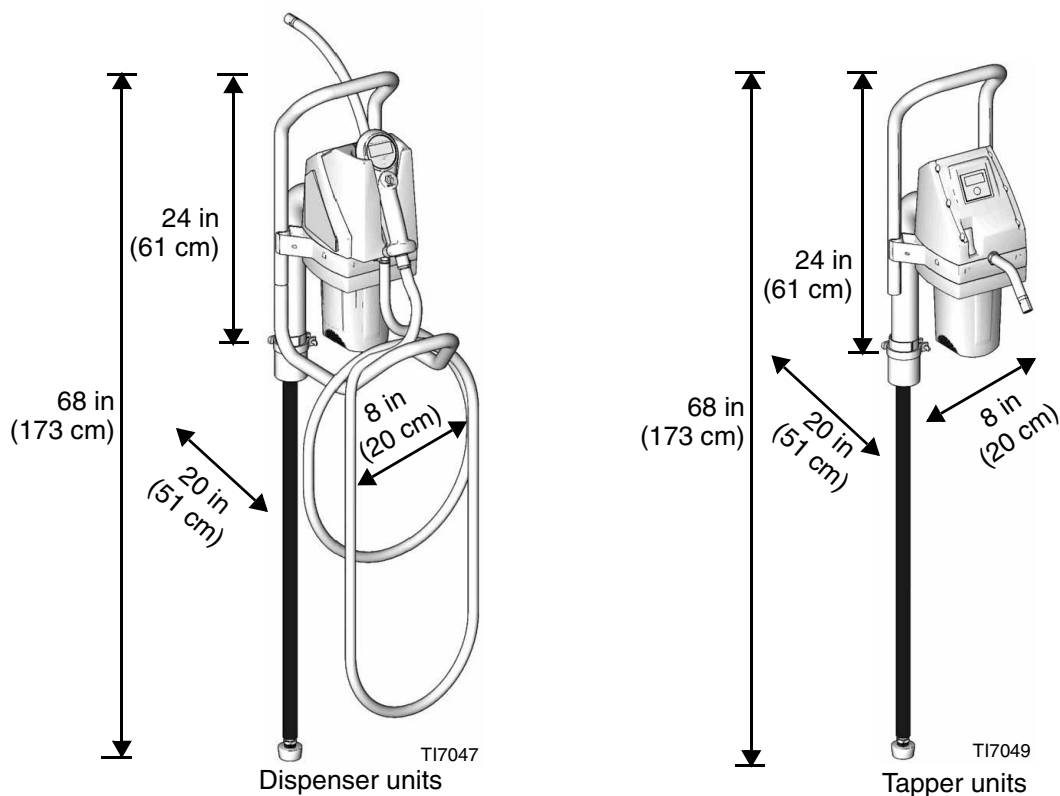
Chinese, English

Technical Data

Flow range	0.5 to 2.0 gpm
Out-of-box flow rate*	1.5 gpm
Operating pressure range	20 to 200 psi
Weight (varies depending on model)	12.0 - 19.8 lbs
Storage Temperature Range	-40° to 120° F
Operating Temperature Range	32° to 120° F
Wetted Parts	aluminum, polyurethane (ester based), polypropylene, stainless steel, brass, nylon, nitrile rubber, steel, zinc
Fluid Compatibility	motor oils, automatic transmission fluid, antifreeze (50/50 mix), gear lubricant
Accuracy*	±1.5%
Repeatability*	±.45%
Sound pressure level*	66.7 dB(A)
Sound power level*	78.1 dB(A)

*Values determined with 10W30 motor oil at 79° F. Each dispense consisted of 1 gallon of fluid. Values vary with fluid pressure and viscosity. Sound levels measured per ISO 9614.

Dimensions





A series of horizontal lines spanning the width of the page, providing a template for technical data entry.

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 twenty four months from the date of sale or up to a dispense volume of 5,000 gallons, 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

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Graco Information

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6928 or **Toll Free:** 1-800-533-9655, **Fax:** 612-378-3590

*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.*

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

Original instructions. This manual contains English. MM 311216

Graco Headquarters: Minneapolis

International Offices: Belgium, China, Japan, Korea

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