

E-Mix™ XT Displacement Pump

3B0281A

EN

For use with E-Mix XT proportioner. Not approved for use in explosive atmosphere or hazardous (classified) locations. For professional use only.

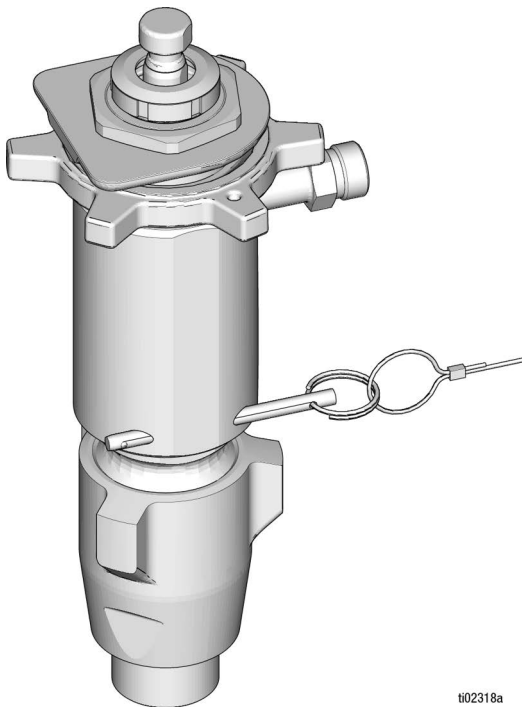
Models: 2007207

5000 psi (34.5 MPa, 345 bar) Maximum Working Pressure



Important Safety Instructions

Read all warnings and instructions in this manual and related manuals.
Be familiar with the controls and the proper usage of the equipment.
Save these instructions.



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*Use only genuine Graco replacement parts.
The use of non-Graco replacement parts may void warranty.*



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Related Manuals

Manual in English	Description
3B0221	E-Mix™ XT, Operation
3B0224	E-Mix™ XT, Repair - Parts

Safety Symbols

The following safety symbols appear throughout this manual and on warning labels. Read the table below to understand what each symbol means.

Symbol	Meaning
	Fire and Explosion Hazard
	Moving Parts Hazard
	Moving Parts Hazard
	Skin Injection Hazard
	Skin Injection Hazard
	Splash Hazard
	Do Not Place Hands or Other Body Parts Near Fluid Outlet

Symbol	Meaning
	Do Not Stop Leaks with Hand, Body, Glove or Rag
	Eliminate Ignition Sources
	Follow Pressure Relief Procedure
	Ground Equipment
	Read Manual
	Ventilate Work Area
	Wear Personal Protective Equipment



Safety Alert Symbol

This symbol indicates: Attention! Become Alert! Look for this symbol throughout the manual to indicate important safety messages.

General Warnings

The following warnings apply throughout this manual. Read, understand, and follow the warnings before using this equipment. Failure to follow these warnings can result in serious injury.

WARNING

FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. Paint or 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 anti-static or conductive.
- **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 lock when not spraying.
- 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 hoses and couplings daily. Replace worn or damaged parts immediately.

WARNING



MOVING PARTS HAZARD

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.



PERSONAL PROTECTIVE EQUIPMENT

Always wear appropriate personal protective equipment and cover all skin when spraying, servicing equipment, or when in the work area. Protective equipment helps prevent serious injury, including long-term exposure; inhalation of toxic fumes, mists or vapors; allergic reaction; burns; eye injury and hearing loss. This protective equipment includes but is not limited to:

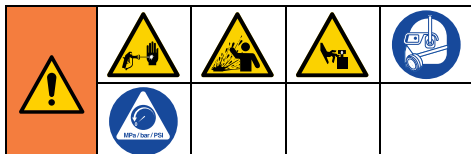
- A properly fitting respirator, which may include a supplied-air respirator, chemically impermeable gloves, protective clothing and foot coverings as recommended by the fluid manufacturer and local regulatory authority.
- Protective eyewear and hearing protection.

Pressure Relief Procedure

Pressure Relief Procedure



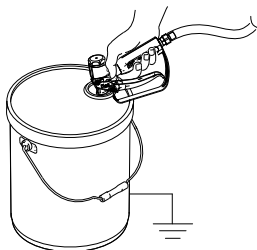
Follow the Pressure Relief Procedure whenever you see this symbol.



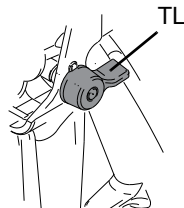
This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the **Pressure Relief Procedure** when you stop spraying and before cleaning, checking, or servicing the equipment.

1. Use the Advanced Display Module to stop the system by pressing the Displacement Pump ON/OFF Switch on the home screen.
2. Turn OFF the heaters using primary heater A and B ON/OFF switch on the home screen of the Advanced Display Module.
3. Turn the main power switch to OFF.
4. Turn off the feed pumps or solvent pumps, if used. Follow the **Solvent Pump Pressure Relief** in your E-Mix XT operation manual.

5. Hold a metal part of the spray gun firmly to a grounded metal pail. Trigger the spray gun to relieve pressure in material hoses.

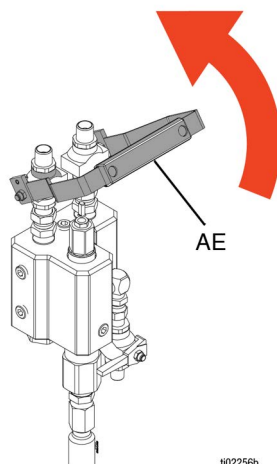


6. Engage the trigger lock (TL).



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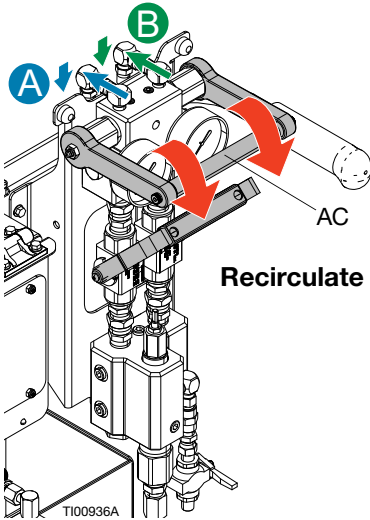
7. Close the dual shutoff handle (AE).



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Pressure Relief Procedure

8. Open the recirculation handle (AC) to relieve "A" and "B" fluid pressure.

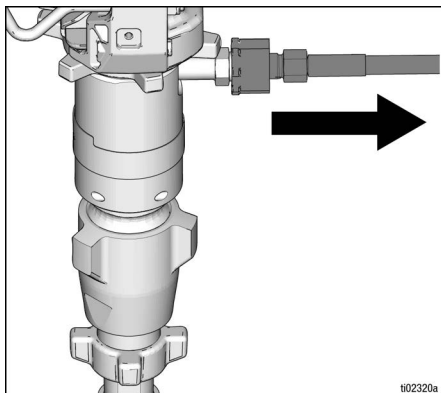


9. If you suspect the spray tip or hose is clogged or that the pressure has not been fully relieved:
 - a. Using a wrench, VERY SLOWLY loosen the tip guard retaining nut or the hose end coupling to relieve pressure gradually.
 - b. Loosen the nut or the coupling completely.
 - c. Clear the obstruction in the hose or tip.

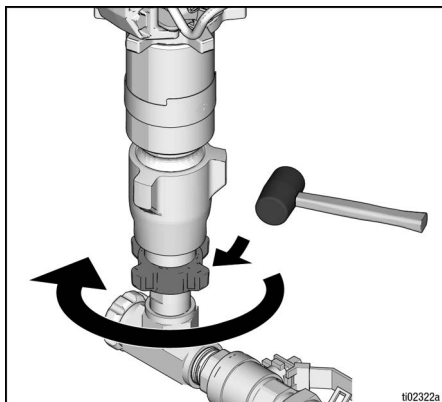
Pump Removal

Pump Removal

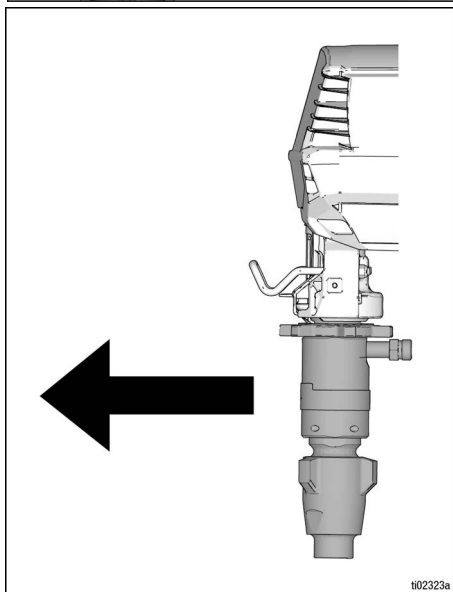
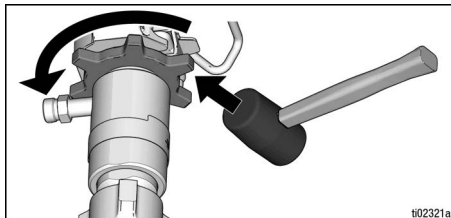
1. Perform **Pressure Relief Procedure**, page 6.
2. Disconnect the power cord.
3. Disconnect fluid outlet hose.



4. Disconnect fluid inlet by hammering the lower star nut loose.

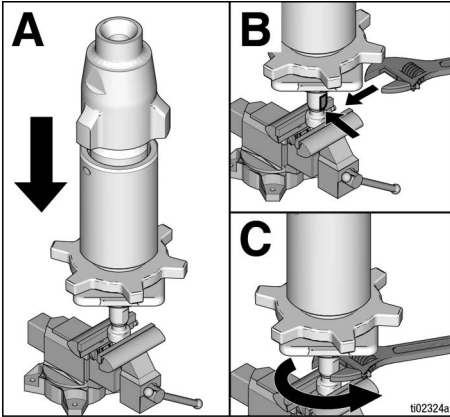


5. Remove pump after hammering upper star nut loose. Pull pump straight out after nut is completely backed off.

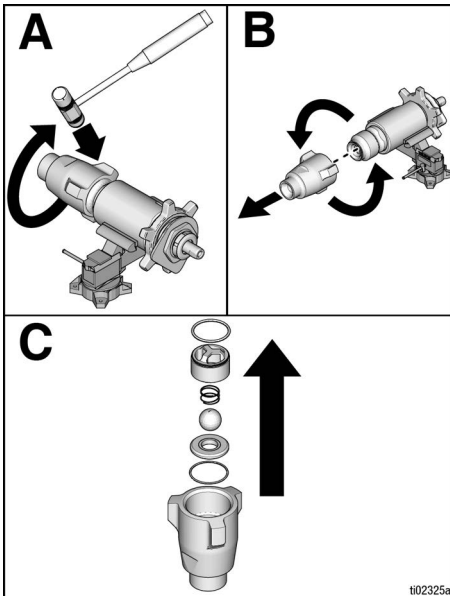


Disassemble Pump

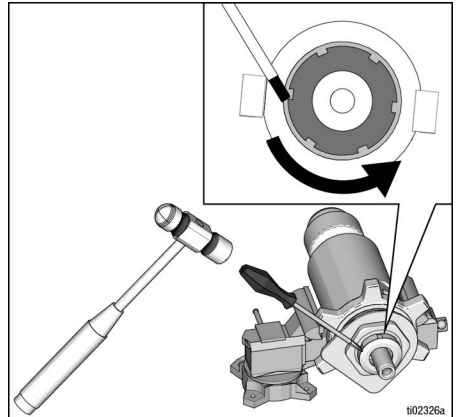
1. Remove displacement rod adapter.



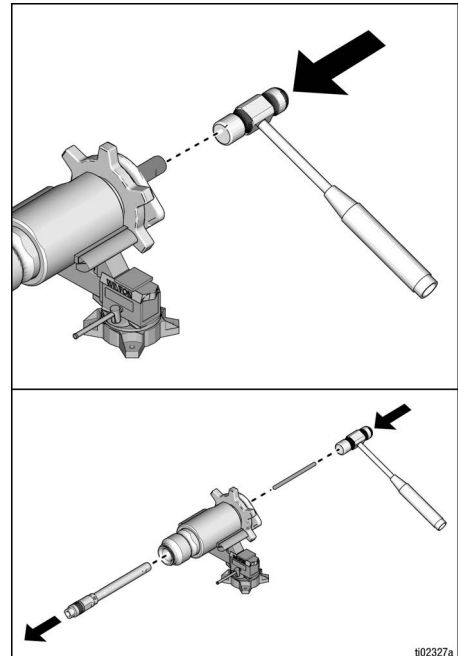
2. Unscrew cylinder from intake valve.



3. Loosen and remove packing nut.

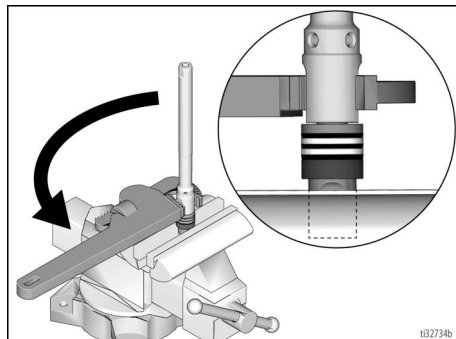


4. Tap displacement rod out of cylinder with a plastic hammer being careful of the threads. Use a thin, soft rod if necessary.

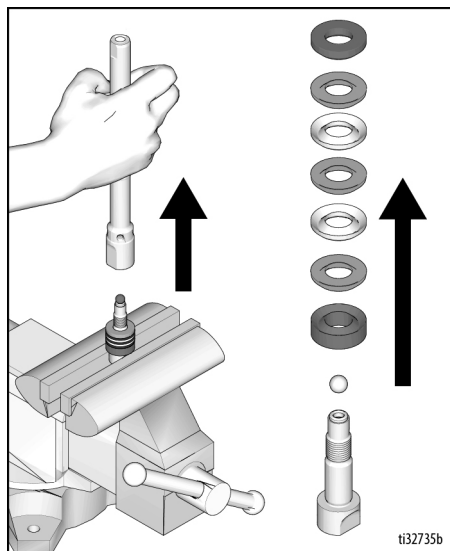


Disassemble Pump

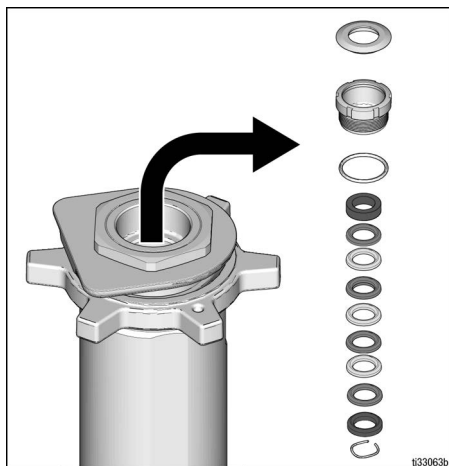
5. Unscrew piston valve from displacement rod.



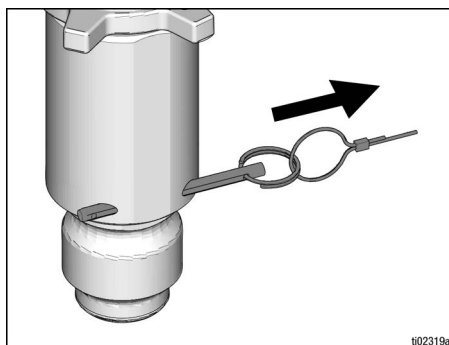
6. Remove piston from displacement rod. Clean and inspect parts.



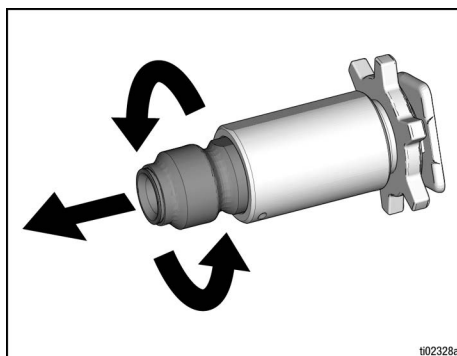
7. Remove and discard throat packing, glands and spring from the outlet housing.



8. Remove locking pin from lower cylinder.



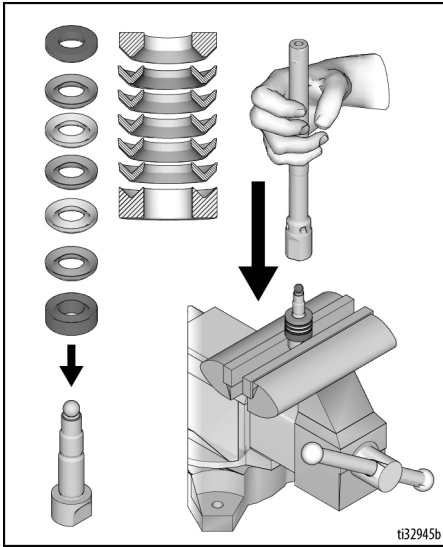
9. Unscrew cylinder from outer housing.



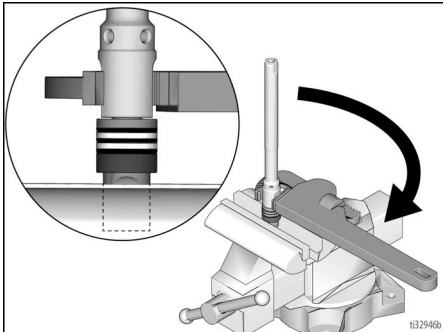
Assemble Pump

NOTE: to convert to a different packing material, use kits shown in the parts section.

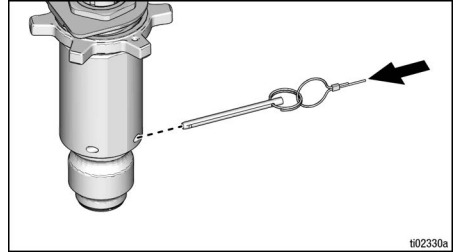
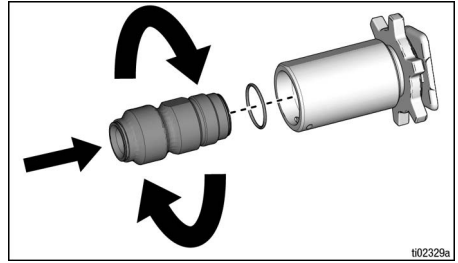
1. Ensure there are no burrs or debris on mating threads of displacement rod and piston valve. Apply anti-seize lubricant to threads and mating surfaces of displacement rod and piston valve. Assemble packings and ball to piston and displacement rod.



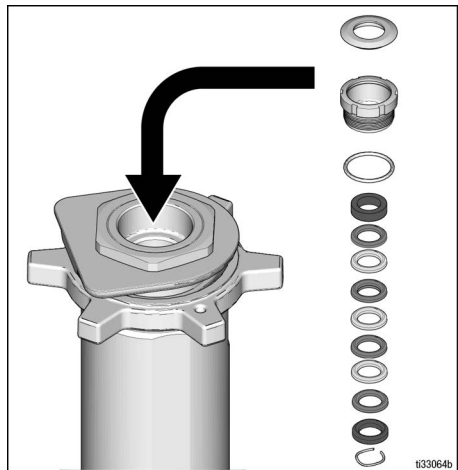
2. Torque to 85 ± 5 ft-lb (115 ± 7 N•m).



3. Apply grease to top o-ring, then screw cylinder onto outlet housing until it bottoms out. Use a wrench to tighten cylinder. Back off as little as possible until hole in housing lines up with flat on cylinder. Insert locking pin into cylinder.

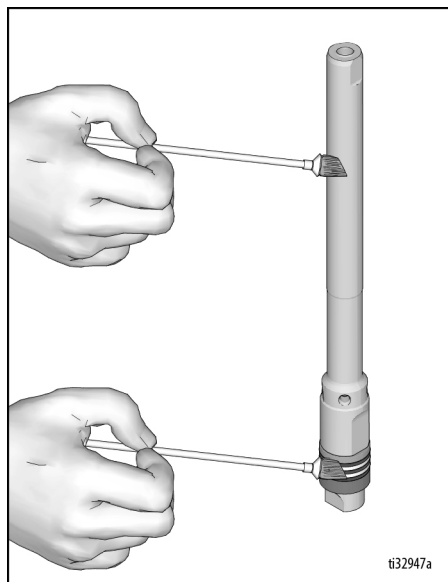


4. Assemble throat packings and place in pump cylinder.

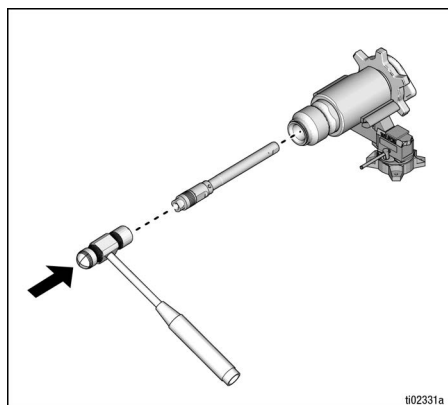


Assemble Pump

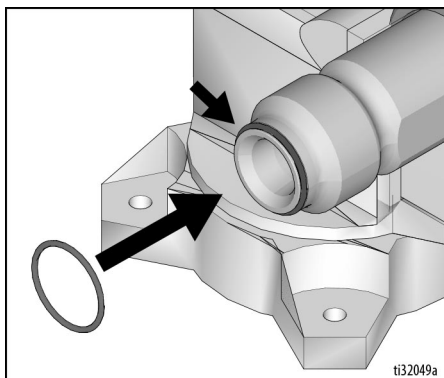
5. Apply liberal amounts of grease or oil to piston packings. Grease top inch or two of displacement rod that will go through the cylinder throat packings.



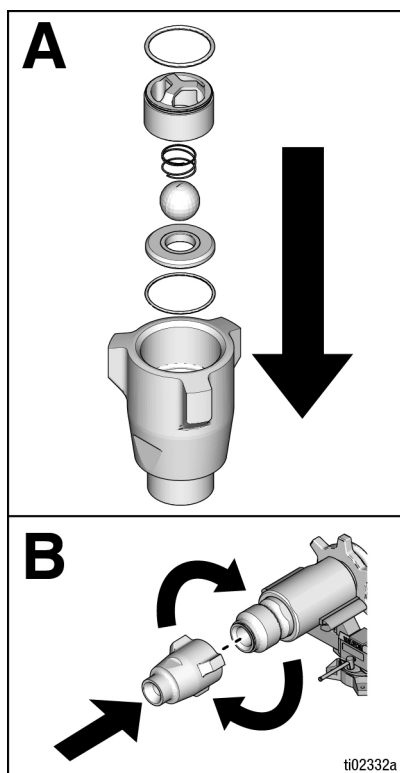
6. Gently guide displacement rod up through throat packings. Tap bottom of piston valve as necessary with a leather or plastic hammer.



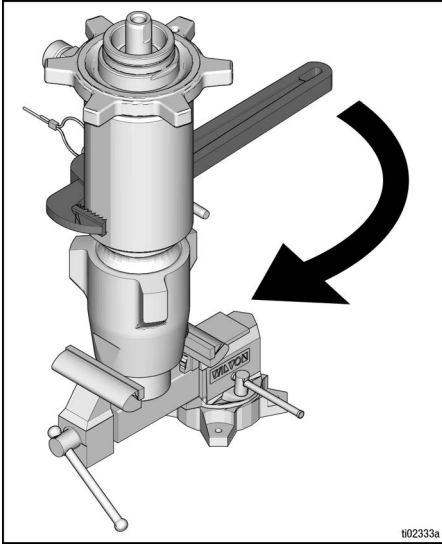
7. Grease o-ring and place on outside diameter ring groove.



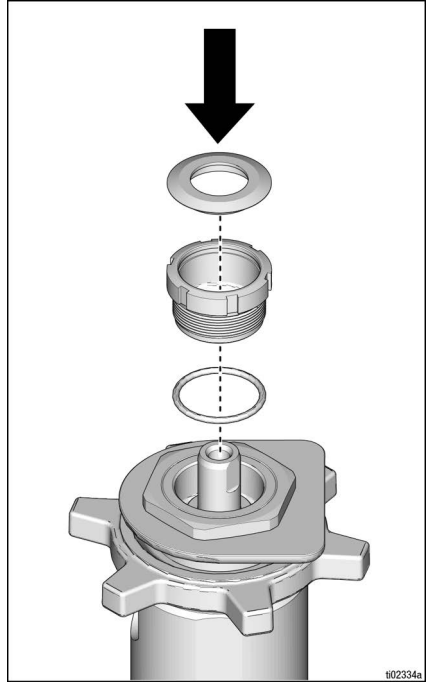
8. Clean seat thoroughly. Reassemble intake valve with a seat, ball, and new o-ring. Seat may be flipped over and used on other side.



9. Torque foot valve to 290 ± 10 ft-lb (393 ± 14 N•m).

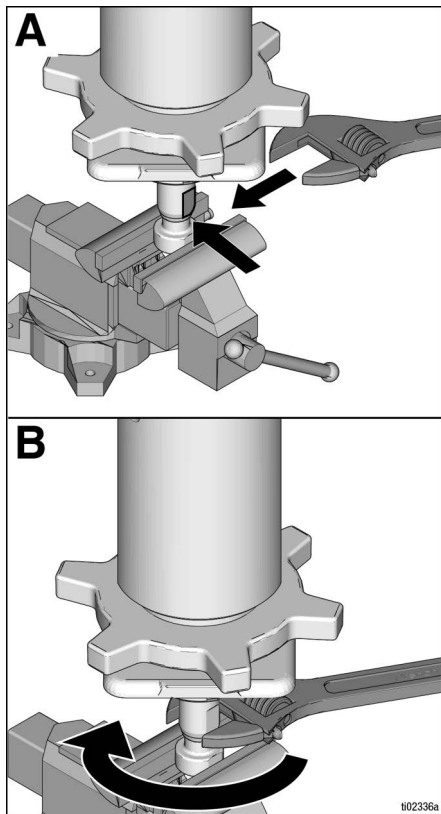


10. Install O-ring and Packing Nut. Torque packing nut to 70-80 ft-lbs (95-108 N•m).



Assemble Pump

11. Apply threadlocker and then install displacement rod adapter, torque to 35 ± 5 ft-lbs (47 ± 7 N•m).



Recycling and Disposal

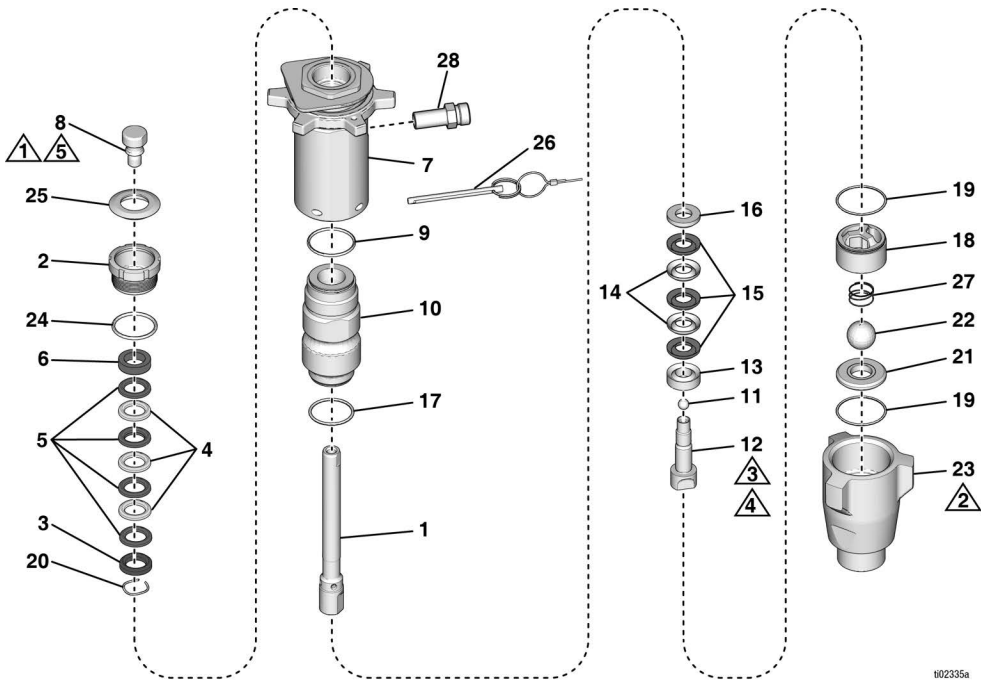
End of Product Life

At the end of the product's useful life, dismantle and recycle it in a responsible manner.

- Perform the **Pressure Relief Procedure**.
- Drain and dispose of fluids according to applicable regulations. Refer to the material manufacturer's Safety Data Sheet.
- Deliver remaining product to a recycling facility.

Parts

Ref.	Torque
	35 ± 5 ft-lb (47 ± 7 N•m)
	290 ± 10 ft-lb (393 ± 4 N•m)
	85 ± 5 ft-lb (115 ± 7 N•m)
	Apply anti-seize lubricant
	Apply ThreadLocker



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Parts List

Ref	Part	Description	Qty
1❖	-----	ROD, displacement	1
2	193032	NUT, packing	1
3†◆	-----	GLAND, packing, male, throat	1
4†◆	-----	PACKING, vee, throat, PTFE	3
5†	-----	PACKING, vee, throat, UH	4
6†◆	-----	GLAND, packing, female, throat	1
7❁	-----	HOUSING, outlet, pump	1
8❖	-----	ADAPTER, rod, displacement	1
9	288067	KIT, packing, o-ring (10-pack)	1
10	2007385	CYLINDER, pump <i>(includes qty. 1 of ref 9 and qty. 1 of ref 17)</i>	1
11	262485	KIT, ball, piston (3-pack)	1
12	16D464	VALVE, piston, assembly	1
13*‡	-----	GLAND, packing, female, piston	1
14*‡	-----	PACKING, vee, piston, PTFE	2
15*	-----	PACKING, vee, piston, UH	3
16*‡	-----	GLAND, packing, male, piston	1
17	262512	PACKING, o-ring (10-pack)	1
18	16D472	GUIDE, ball, (1.000")	1
19	288068	KIT, packing, o-ring (10-pack)	1
20†◆	17G972	SPRING, wave, 0.875	1
21	15F665	SEAT, (1.000" BALL)	1
22	244899	KIT, ball, SST (3-pack)	1
23	15F667	HOUSING, inlet (2.25")	1
24	C20987	PACKING, o-ring	1
25	183171	PLUG, throat seal	1
26❁	244826	PIN, self locking w/ lanyard	1
27	124007	SPRING, compression	1
28❁	16Y579	FITTING, pump	1

† Included in Throat Packings Kit 25D169 (UH/PTFE)

* Included in Piston Packings Kit 25D183 (UH/PTFE)

◆ Included in Throat Packings Kit 25D148 (all PTFE)

‡ Included in Piston Packings Kit 25D158 (all PTFE)

❖ Included in Displacement Rod Kit 2007384

❁ Included in Outlet Housing Kit 2007386

Order kit 25D252 for Full Pump Repair (UH/PTFE)

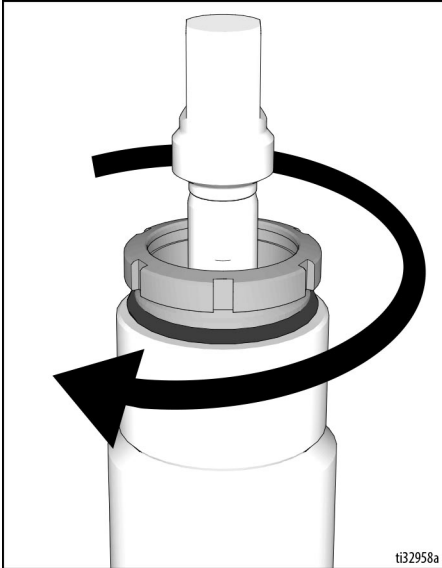
Order kit 25D241 for Full Pump Repair (all PTFE)

Order kit 17U998 for Foot Valve replacement parts

Throat Packing Adjustment

Throat Packing Adjustment

When pump packings begin to leak after much use, perform **Pressure Relief Procedure**, page 6, and tighten packing nut down until leakage stops or lessens. This allows approximately 100 gallons of additional operation before a repacking is required. Packing nut can be tightened without o-ring removal.



California Proposition 65

CALIFORNIA RESIDENTS

 **WARNING:** 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.

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 1-800-690-2894 to identify the nearest distributor.

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 3B0281

Graco Headquarters: Minneapolis

International Offices: Belgium, China, Japan, Korea

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www.graco.com

Revision A, June 2024