

G3 Auto-fill Shutoff Reservoir and O-Ring Conversion Kit

3A5051B

EN

Used to convert a G3 pump reservoir to a 4L or larger Auto-fill Shutoff equipped reservoir. For use in grease applications only. For professional use only.

Part No.:

571286 - 4 Liter

571287 - 8 Liter

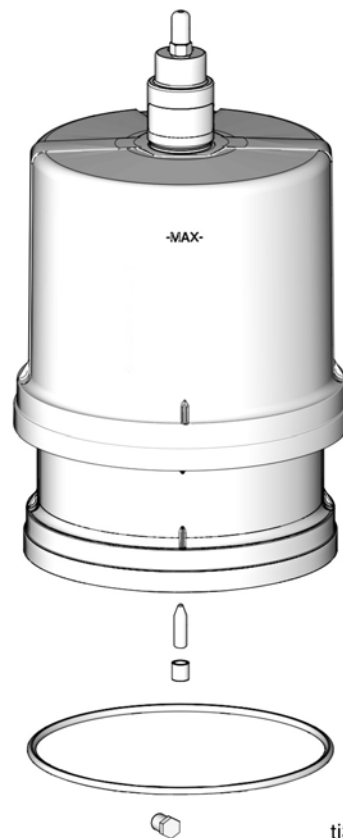
571288- 12 Liter

571289 - 16 Liter



Important Safety Instructions

Read all warnings and instructions in this manual and the G3 Pump Instruction manual included with your unit. Save these instructions.



ti30875a

Instructions

Pressure Relief Procedure



Follow the Pressure Relief Procedure whenever you see this symbol.

WARNING

SKIN INJECTION HAZARD
 High-pressure fluid from dispense device, 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.**

Follow **Pressure Relief Procedure** in this manual when you stop dispensing and before cleaning, checking, or servicing equipment.

To **Relieve pressure** in system:

1. Secure one wrench on the pump element and one wrench on the pump element fitting.
2. Work the wrenches in opposite directions to **only** loosen fitting.

NOTE: When loosening pump element fitting, do NOT loosen **pump element**. Loosening pump element will change the output volume.

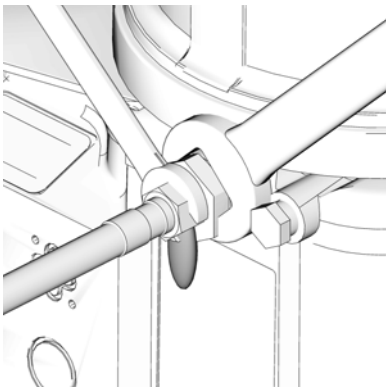


FIG. 1

Disassembly

Reference numbers used in these instructions correspond to parts included in Kit and are provided on page 11. Parts identified with an alpha character are user-provided or already installed components.

3. Disconnect pump from the power source.
4. Relieve pressure using Pressure Relief Procedure.
5. Install a strap wrench around reservoir. Turn reservoir 2 turns counter-clockwise (FIG. 2). Do not rotate the adapter ring.

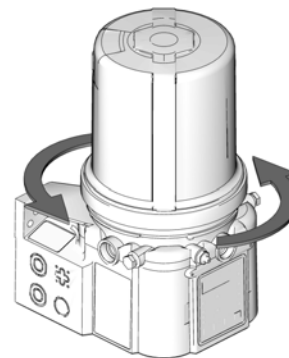


FIG. 2

6. Remove reservoir from adapter ring.
7. If a follower plate is installed on the pump, verify the following parts were removed with reservoir (FIG. 3):

- Spring (S)
- Follower Plate (FP)
- Follower Plate Seal (FPS)
- Rod (R)

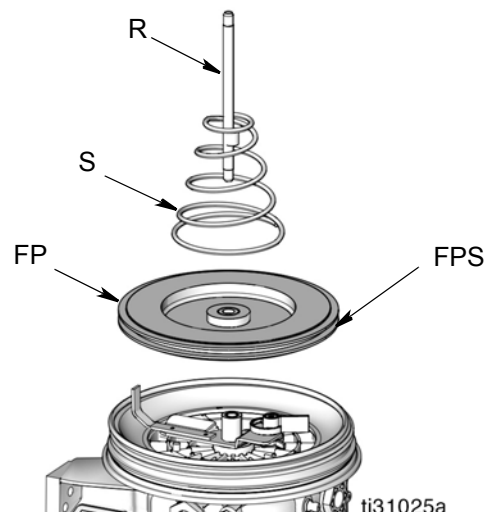


FIG. 3

8. Remove o-ring from adapter ring.

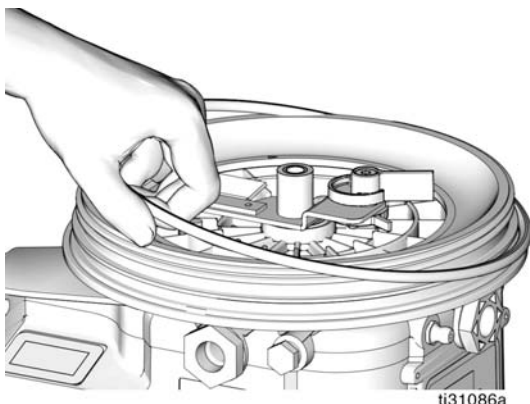


FIG. 4

9. Discard the o-ring, reservoir and all follower plate assembly parts removed in Step 7 according to local codes for proper disposal.

Reassembly

1. Install large black o-ring (4) around adapter ring (2).
2. Install bearing (5) and then bullet-shaped alignment pin (6) into center opening (f). These parts must be installed in the order shown in FIG. 5.

NOTE: The bullet-shaped alignment pin must be installed with the pointed end facing up.

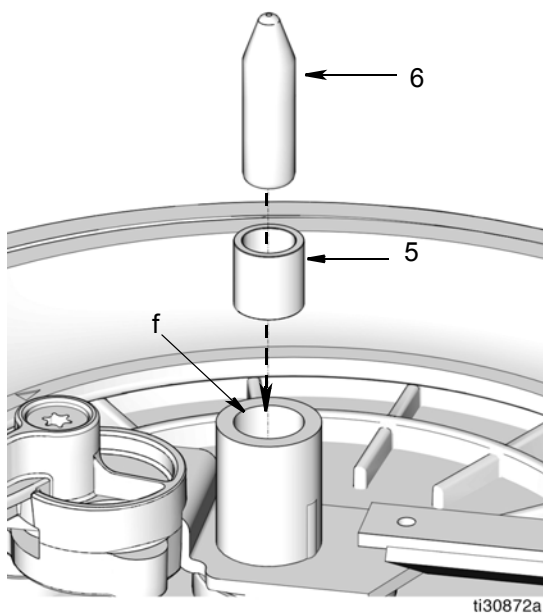


FIG. 5

3. Liberally grease the outer threads on the adapter ring (2) and the outside surface of the large o-ring (4).
4. Install the new Auto-fill Shutoff reservoir (7) over adapter ring (2).

NOTE: Be sure the end of the tube running through the center of the reservoir from the Auto-fill Shutoff is seated over the pointed end of the alignment pin (6) (FIG. 6).

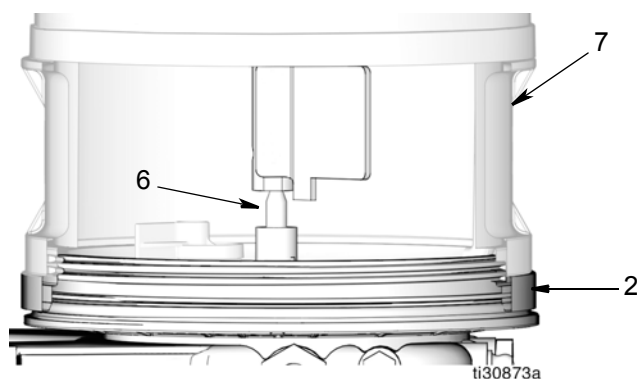


FIG. 6

5. Align the vent (g) in the reservoir toward the rear of the pump base (h). See FIG. 7 for correct orientation of these parts to ensure proper installation.

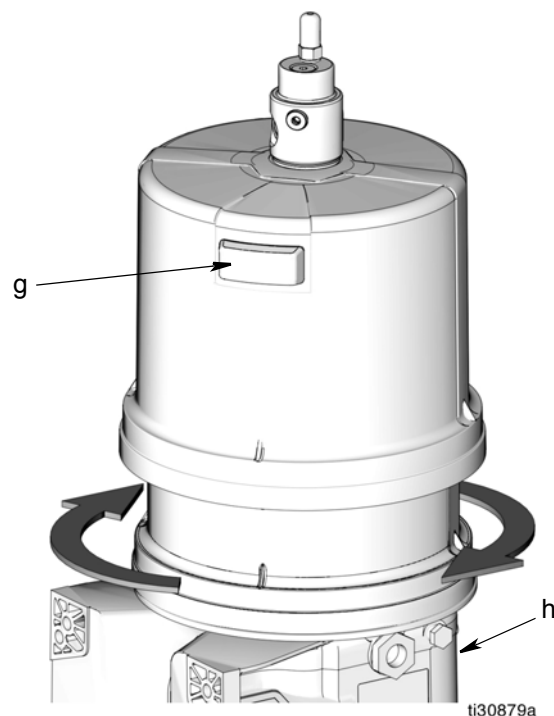


FIG. 7

6. Position strap wrench over reservoir and use it to turn reservoir 2 full turns clockwise until the front of the reservoir aligns to the front of the pump base. (FIG. 7).

NOTE: Align the gusset (9a) running down the front of the reservoir with the circle indicator (9b) molded into the front of the adapter plate (2) (see FIG. 8).

NOTICE

Be careful when installing reservoir that o-ring is not pinched. If the o-ring is not correctly installed, grease could leak out of the bottom of the G3 reservoir.

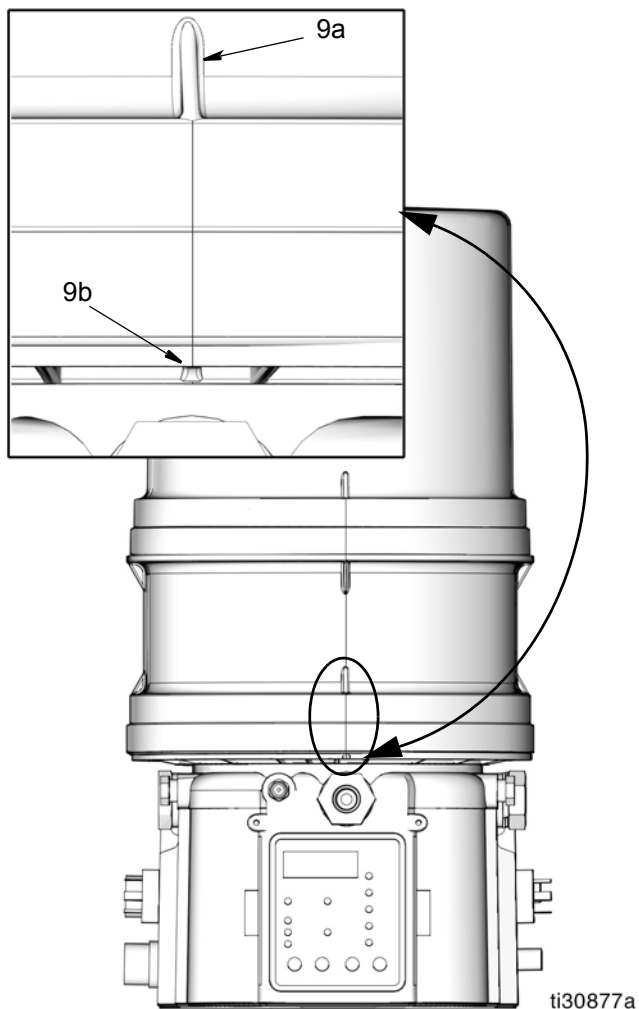


FIG. 8

Installation

 WARNING				
				
COMPONENT RUPTURE HAZARD The maximum working pressure of each component in the system may not be the same. To reduce the risk of over-pressurizing any component in the system, be sure you know the maximum working pressure of each component. Never exceed the maximum working pressure of the lowest rated component in the system. Over-pressurizing any component can result in rupture, fire, explosion, property damage and serious injury. Regulate input pressure to the remote fill pump so that no fluid line, component or accessory is over pressurized.				

NOTE: The Typical Installation guides shown on pages 6 and 7 are provided for reference only. Refer to your pump instruction manual for complete information about installing this equipment.

Typical Installation - With Remote Fill Manifold

The installation shown is only a guide for selecting and installing system components. Contact your Graco distributor for assistance in planning a system to suit your needs.

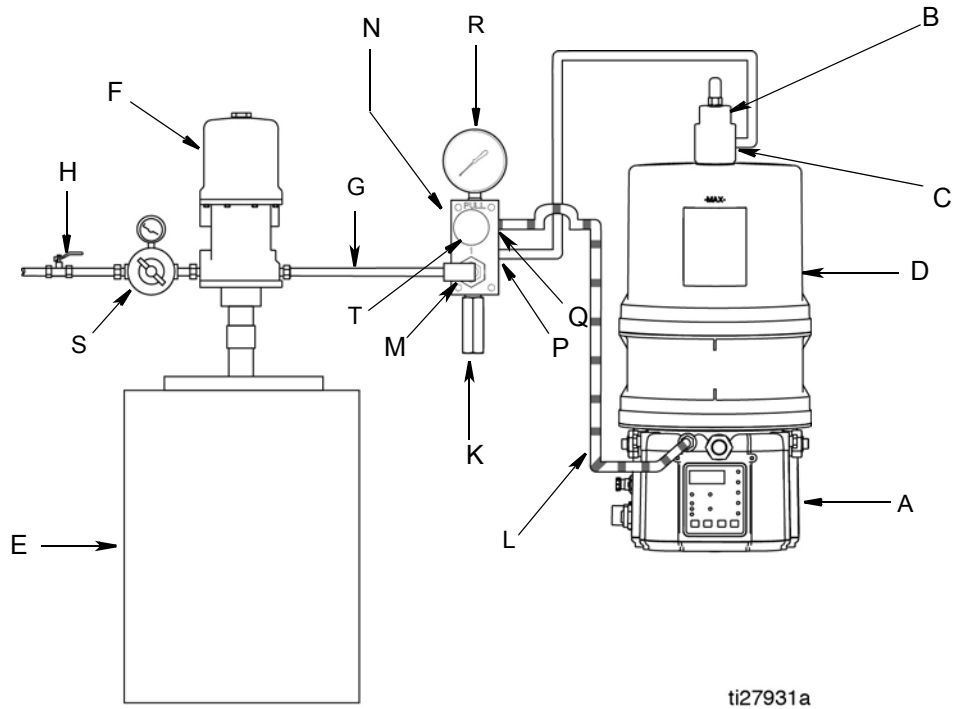


FIG. 9

Key:

- A G3 Pump
- B Auto-Fill Shut Off Valve
- C Auto-Fill Inlet
- D G3 Reservoir
- E Remote Fill Reservoir
- F Remote Fill Pump
- G Supply Hose (user supplied)
- H Air Supply to Refill Pump
- K Pressure Relief Valve
- L Drain Hose
- M Fill Coupler/Inlet (quick disconnect)
- N Fill Manifold❖
- P Fill Manifold Outlet
- Q Fill Manifold Vent Port
- R Pressure Gauge
- S Pressure Regulator and Gauge
- T Pressure Relief Knob

❖ To relieve the stall pressure in the fill line a fill manifold (N) **must** be installed in the system.

Optional Installation - Without Remote Fill Manifold

The installation shown is only a guide for selecting and installing system components. Contact your Graco distributor for assistance in planning a system to suit your needs.

NOTE: The remote filling station pump stalls (dead-heads) when the reservoir is full. If the pump does not stall (dead-head) there is a leak in the system.

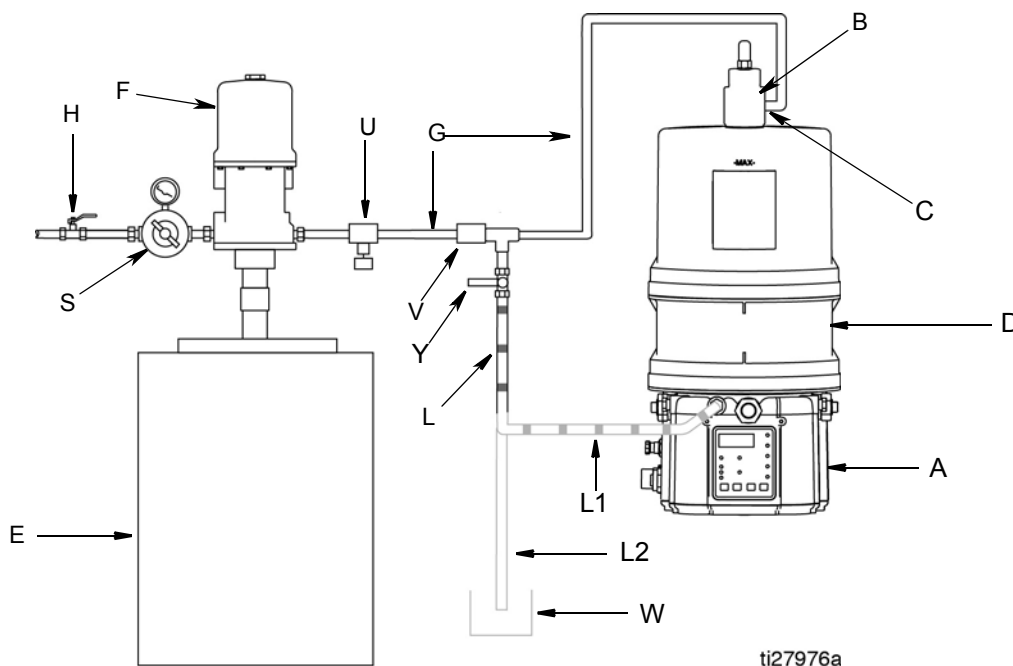


FIG. 10

Key:

- A G3 Pump
- B Auto-Fill Shut Off Valve
- C Auto-Fill Inlet
- D G3 Reservoir
- E Remote Fill Reservoir
- F Remote Fill Pump
- G Supply Hose (user supplied)
- H Air Supply to Refill Pump
- L Drain Tube
- L1 Option - To reservoir
- L2 Option - To overflow container
- S Pressure Regulator and Gauge
- U Pressure Relief Valve
- V Quick Disconnect
- W Overflow Container
- Y Supply Hose Pressure Relief Valve❖

❖ To relieve the stall pressure in the fill line a ball valve (Y) **must** be installed in the system.

Auto-fill Shutoff Setup

The Auto-Fill Shut Off is used for refilling the G3 reservoir in an automatic lubrication system. As fluid is added to the reservoir, it pushes the plate valve up to the top of the reservoir. The plate valve then pushes the valve pin and closes the inlet fluid path.

When the fluid refilling path closes, the refilling line pressurizes and brings the refilling pump to a pressurized stall condition.


WARNING






PRESSURIZED FLUID HAZARD

The remote filling station pump stalls (dead-heads) when the reservoir is full, causing the supply system pressure to rise to the maximum output pressure of the filling station pump. To help prevent equipment damage or serious injury caused by pressurized fluid, such as skin injection or injury from splashing fluid, always use a remote filling station pump with a maximum output pressure of 5100 psi (35.1 MPa, 351.6 bar) and use supply hoses with a minimum pressure rating of 5100 psi (35.1 MPa, 351.6 bar).

Loading Grease

To ensure optimal performance from the G3:

- Only use NLGI #000 - #2 greases appropriate for your application, automatic dispensing, and the temperature. Consult with machine and lube manufacturer for details.
- Do not overfill.

NOTE: The operator must remain in the filling area to monitor the system while filling the reservoir to prevent overfilling.

- Do not operate G3 without reservoir attached.

NOTICE

Care must be used when filling the reservoir using a pneumatic or electric transfer pump to not pressurize and break the reservoir.

Changing Greases

When changing greases, always use compatible fluids or greases.

Remote Fill with Remote Fill Manifold

The reference letters used in the following instructions refer to the Typical Installation diagram, page 6.

The fill valve is used to relieve pressure in the refill line and to reset the Auto Fill Shut Off. See Fill Valve instruction manual 333393. Graco fill valve, part no. 77X542 is available. Contact your local Graco distributor.

1. Pull out and hold the Pressure Relief Knob (T) long enough to relieve line pressure between Fill Manifold (N) and Auto-Fill Shut Off Valve (B).
2. Verify the Auto-Fill Shut Off (B) pin is down, indicating it is reset (FIG. 11).

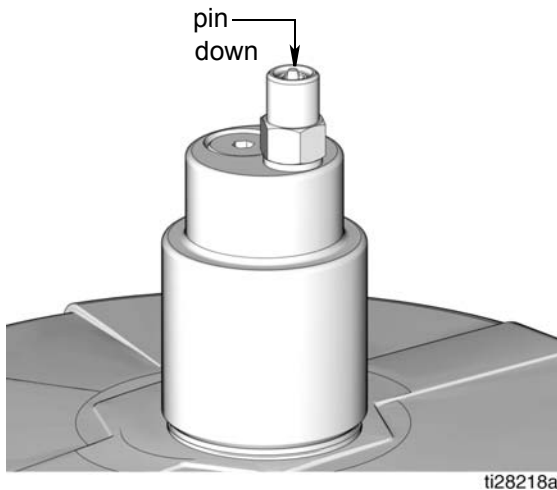


FIG. 11

3. Remove yellow Dust Cover from Fill Coupler (M).
4. Connect Supply Hose (G) between the Remote Filling Station Pump (F) and Fill Coupler port marked with an "I".
5. Start Remote Filling Station Pump (F).
6. When the G3 Reservoir (D) is filled:
 - the Remote Filling Station Pump (F) stalls (dead-heads),
 - the Auto-Fill Shut Off (B) pin pops up as shown in FIG. 12,
 - the Pressure Gauge (R) rises to the fill pump's set pressure.

NOTE: If the pump does not stall (dead-head) there is a leak in the system.

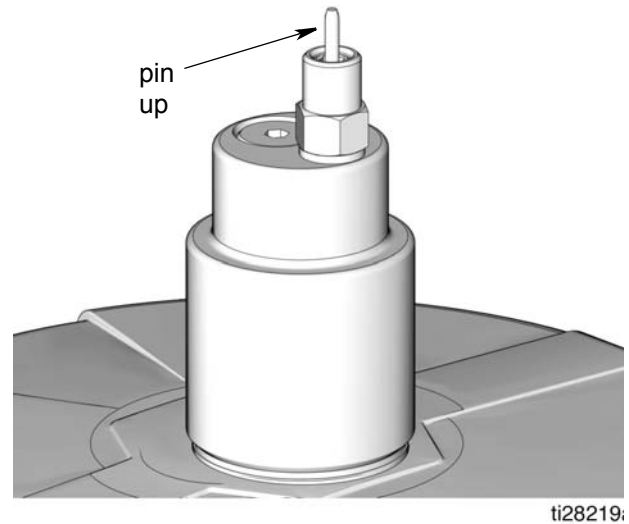


FIG. 12

7. Turn off the Remote Filling Station Pump (F).
8. Pull out and hold the Pressure Relief Knob (T) long enough to relieve line pressure between Fill Manifold (N) and Auto-Fill Shut Off Valve (B) and between Remote Filling Station Pump (F) and Fill Manifold (N).

NOTE: The length of time it takes to vent varies depending on the system design and installation. In some installations it may be necessary to repeat Step 8 to ensure pressure is relieved.

9. Disconnect Supply Hose (G) at Fill Coupler (M).
10. Replace yellow Dust Cover over Fill Coupler (M).

Remote Fill without Remote Fill Manifold

The reference letters used in the following instructions refer to the Typical Installation diagram, page 7.

1. A supply hose pressure relief valve (Y) and overflow container (W) (for collecting excess fluid that drains during pressure relief) **must** be installed in an easily accessible location between the remote filling station pump (F) and the Auto-Fill Shut Off (B). This pressure relief valve is used to relieve pressure in the refill line and to reset the Auto-Fill Shut Off. See Typical Installation, page 7.

Pressure relief kit 247902 is available from Graco. Contact your distributor or Graco Customer Service for additional information about this kit.

2. Connect Supply Hose (G) at Quick Connect (V).
3. Turn on remote filling station pump (F) and fill the G3 reservoir (D) until the indicator pin on the Auto-Fill Valve pushes up as shown in FIG. 13. The pressure in the refill pump (F) builds and the pump stalls.

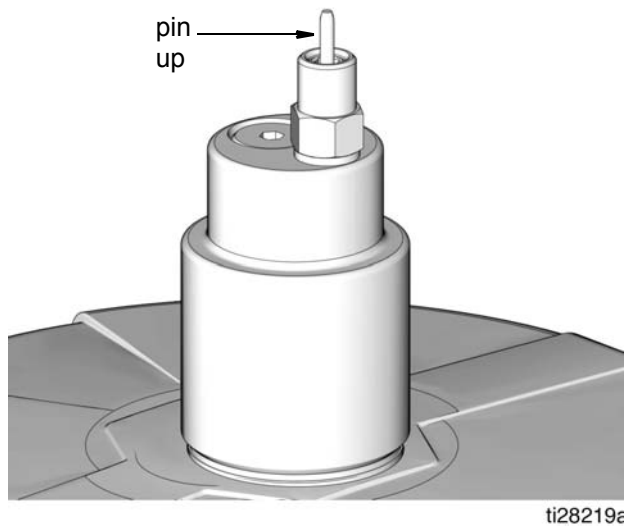


FIG. 13

4. Turn off the air supply (H) to pump (F).
5. Relieve remote filling station pump pressure using the following Remote Filling Station Pressure Relief procedure:

Remote Filling Station Pressure Relief Procedure

The reference letters used in the following instructions refer to the Typical Installation diagram on page 7.



The following Remote Filling Station Pressure Relief Procedure is only used with the Auto-Fill Shut Off Valve to relieve remote filling station and lubricant supply line pressure.

WARNING				
PRESSURIZED EQUIPMENT HAZARD 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 dispensing and before cleaning, checking, or servicing the equipment.				

- a. To relieve pressure between the Refill Pump (F) and Auto-Fill Shut Off (B), open ball valve (bv) (FIG. 14). Pressure will be released and excess fluid will drain out of the drain tube (L) and into the lubrication overflow container (W).

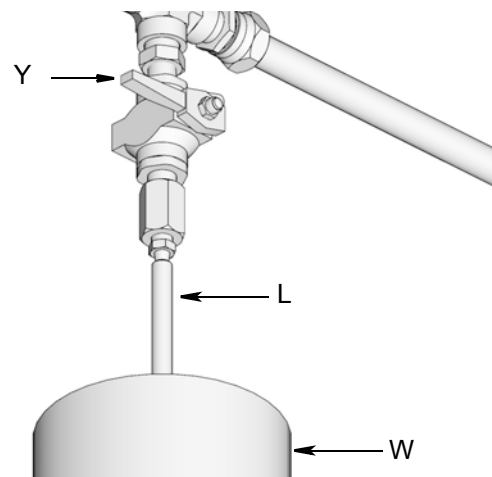


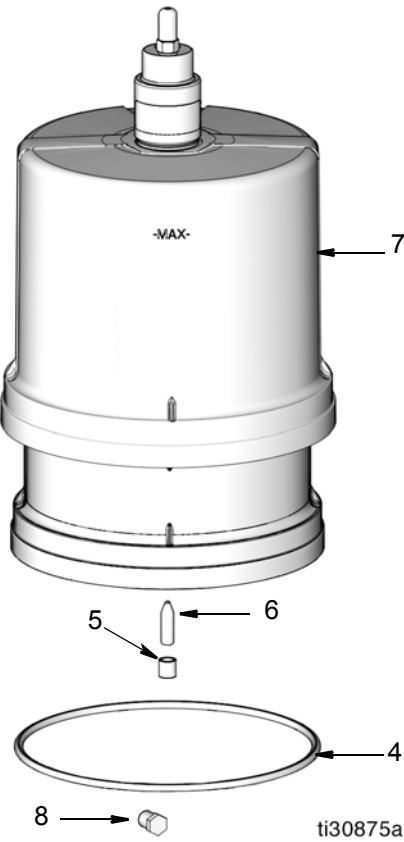
FIG. 14:

- b. Close supply hose pressure relief valve (Y) when all pressure has been relieved.
6. Disconnect the supply hose (G) from Quick Connect (V).

Parts

Ref.	Description	Qty
4	O-RING, oval, 8.475 ID	1
5	BEARING, sleeve	1
6	PIN, alignment	1
7	RESERVOIR, AFSO*	1
8	PLUG, 1/4 MP with hex head	1

*4L, 8L, 12L or 16L capacity. See kit part number provided on the cover of this manual.



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: 612-623-6928 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.*

Original instructions. This manual contains English. MM 3A5051

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