

Check-Mate[®] 800 Displacement Pump

334127E

EN

For use with hot-melt applications. For professional use only.

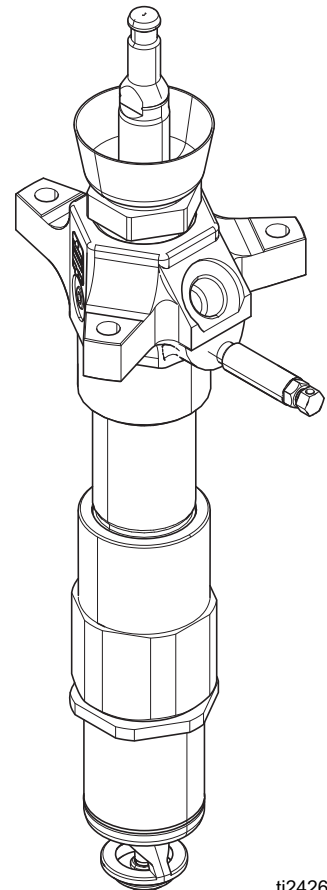
*5850 psi (40 MPa, 403 bar) Maximum Fluid Working Pressure
400° F (204° C) Maximum Operating Temperature*

See page 2 for model information.



Important Safety Instructions

Read all warnings and instructions in this manual and in all related manuals. Save all instructions.



ti24263a

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Models

| Part No. | Drum Size | Seal Material | Series |
|----------|-----------------------|--------------------|--------|
| 24W152 | 5 Gallon (20 Liter) | Carbon Filled PTFE | B |
| 24W153 | 5 Gallon (20 Liter) | Glass Filled PTFE | B |
| 24W150 | 55 Gallon (200 Liter) | Carbon Filled PTFE | B |
| 24W151 | 55 Gallon (200 Liter) | Glass Filled PTFE | B |

Related Manuals









Manuals are available at www.graco.com.

Component manuals are in English.

| | |
|--------|--|
| 334128 | Throat Seal Repair Kit, Instructions-Parts |
| 334131 | Bulldog® and Senator® Air Motors Tie Rod Kit, Instructions-Parts |
| 334132 | NXT® Air Motor Tie Rod Kit, Instructions-Parts |

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.

|  <h2 style="margin: 0;">WARNING</h2> | |
|---|---|
|      | <p>SKIN INJECTION HAZARD</p> <p>High-pressure fluid from dispensing 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.</p> <ul style="list-style-type: none"> • Do not point the dispensing device at anyone or at any part of the body. • Do not put your hand over the fluid outlet. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Follow the Pressure Relief Procedure when you stop dispensing 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. |
|   | <p>MOVING PARTS HAZARD</p> <p>Moving parts can pinch, cut 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 and disconnect all power sources. |



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.



BURN HAZARD

Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns:

- Do not touch hot fluid or equipment.



EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- 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 Sheet (SDS) 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 create 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.





WARNING

**TOXIC FLUID OR FUMES HAZARD**

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.

- Read Safety Data Sheet (SDS) to know the specific hazards of the fluids you are using.
- 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.

Component Identification

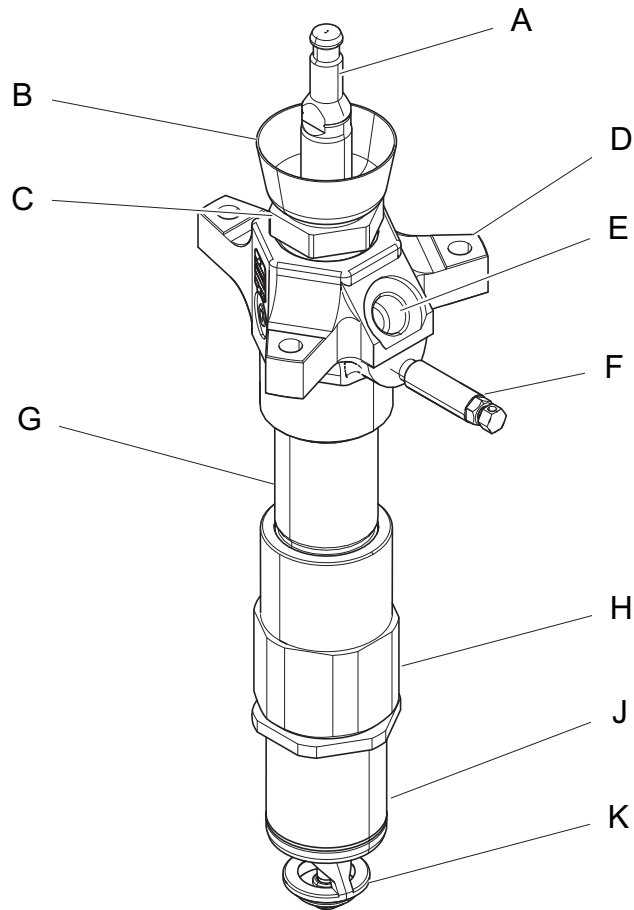





FIG. 1: Check-Mate 800 Displacement Pump Component Identification

Key:

- A Displacement Pump
- B Wetcup
- C Throat Packing
- D Outlet Housing
- E Fluid Outlet
- F Bleed Valve
- G Cylinder
- H Intake Housing
- J Intake Cylinder
- K Priming Pistion

Installation

Grounding

| | | | | |
|--|---|---|--|--|
|  |  |  | | |
| <p>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.</p> | | | | |

Pump: the displacement pump is grounded with a wire connecting the pump to the control enclosure. Locate the small hole (W) in the pump outlet housing. Attach the ground wire (Y) to the pump outlet housing using the ground screw (X) supplied with your system. Tighten the ground screw securely. Do not operate the equipment without the ground wire in place.

Air compressor: follow manufacturer’s recommendations.

Fluid supply container: follow local code.

Object being dispensed: follow local code.

Connect to a Graco Air Motor

The displacement pump may be installed on Senator, Bulldog, King®, and NXT air motors using Tie Rod Kits. See the following kit manuals for installation instructions.

| Manual | Tie Rod Kit | Air Motor |
|--------|-------------|----------------------------|
| 334131 | 24V752 | Bulldog Senator King |
| 334132 | 24V754 | NXT |

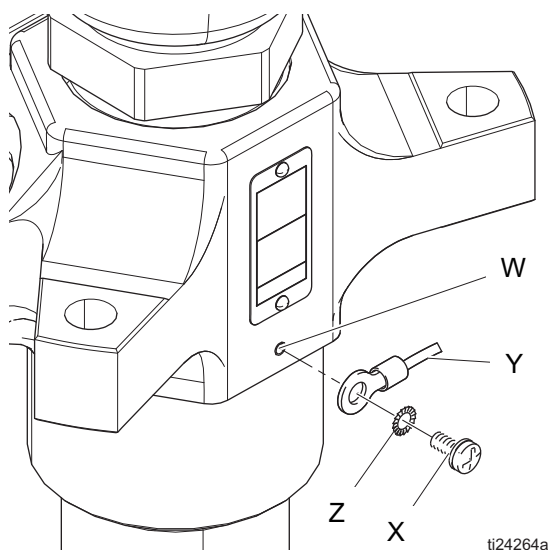


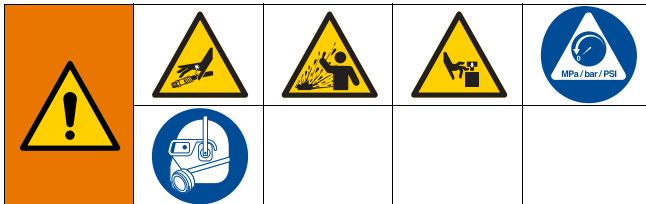
FIG. 2: Attach Grounding Wire

Operation

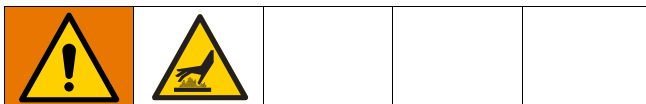
Pressure Relief Procedure



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 dispensing and before cleaning, checking, or servicing the equipment.



Heated fluid can cause severe burns and can cause equipment surfaces to become very hot. Wear protective gloves and clothing when operating this equipment in a heated system. Allow the equipment to cool thoroughly before servicing.

If you suspect that the spray tip/nozzle or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, very slowly loosen the tip retaining nut or hose end coupling and relieve pressure gradually, then loosen completely. Clear the tip/nozzle or hose.

Pump Startup, Adjustment, and Shutdown Instructions

These operations depend on the system you are using. Refer to the instructions for your system.

1. Lock the gun/valve trigger safety.
2. Close all air bleed valves (required in your system) to shut off the air supply to the pump.
3. Unlock the gun/valve trigger safety.
4. Hold a metal part of the gun/valve firmly to the side of a grounded metal pail and trigger the gun/valve to relieve pressure.
5. Lock the gun/valve trigger safety.
6. Open the pump bleeder valve (required in your system), having a container ready to catch the drainage.
7. Leave the pump bleeder valve open until you are ready to spray/dispense again.





Repair

NOTE: The numbers and letters in parentheses used in the Repair section refer to the callouts shown in the Figures. Also see **Parts**, beginning on page 16.

Required Tools

- Torque wrench
- Bench vise with soft jaws
- Rubber mallet
- Hammer
- O-ring pick
- 13 mm (1/2 in.) diameter brass rod
- Set of socket wrenches
- Set of adjustable wrenches
- Pipe wrench
- Screwdriver
- Heat gun
- Gloves
- Thread lubricant
- Thread sealant

Disconnect the Pump

| | | | | |
|--|---|---|---|--|
|  |  |  |  | |
| <p>Heated fluid can cause severe burns and can cause equipment surfaces to become very hot. Wear protective gloves and clothing when operating this equipment in a heated system. Allow the equipment to cool thoroughly before servicing.</p> | | | | |

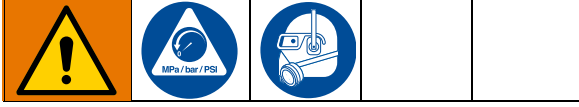
NOTE: The priming position can be serviced without disconnecting the displacement pump from the motor. See **Replace the Priming Piston** on page 11.

1. Flush the pump, if possible. Stop the pump at the bottom of its stroke to prevent fluid from drying on the exposed displacement rod.
2. Relieve the pressure. See **Pressure Relieve Procedure** on page 8.
3. Allow the pump to cool if it is being used in a heated system.

NOTE: It may be necessary to use a heat gun to ease disassembly of some parts.

4. Disconnect the air and fluid hoses.
5. Disconnect the pump from the heated platen.
6. Disconnect the displacement pump from the motor as explained in the instructions for the system you are using.

Replace the Throat Packings

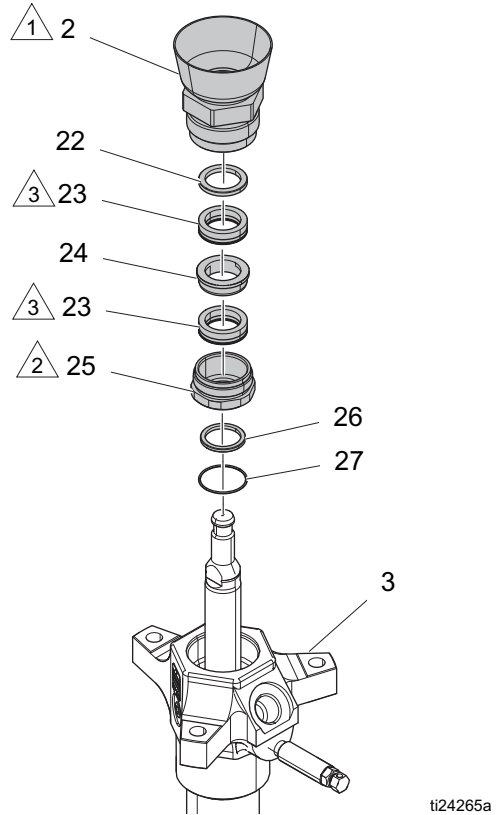


The throat packings are available as pre-assembled kits.

| Pump Part No. | Throat Seal Repair Kit |
|---------------|------------------------|
| 24W152 | 24V752 |
| 24W153 | 24V753 |
| 24W150 | 24V752 |
| 24W151 | 24V753 |

1. Relieve the pressure. See **Pressure Relief Procedure** on page 8.
2. See Figure 3. Unscrew the packing nut (2) using a pipe wrench. Remove the o-ring (27) and washer (26) from the bottom of the packing housing (25) or from the outlet housing (3).
3. Place the flats of the packing nut (2) in a vise. Unscrew the packing housing (25) and discard it and the packings.
4. Remove the washer (24), seal (23), and back up washer (22) from the packing nut.
5. The throat repair kit is pre-assembled. Screw the kit into the packing nut (2), making sure that the backup washer (22), seal (23), and washer (24) are properly positioned on top of the packing housing (25) with the lips of the seal facing down. Torque the packing housing (25) to 225 +/- 10 ft-lb (305 +/- 14 N•m).
6. Before installing the packing housing into the pump, generously lubricate the seals with the high temperature grease supplied with the repair kit.

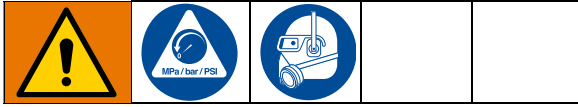
7. If necessary, use an arbor press to install the o-ring (27) in the packing housing (25).
8. Screw the packing nut (2) and packing housing (25) into the outlet housing (3). Torque to 150 +/- 30 ft-lb (203 +/- 41 N•m).



- 1 Torque to 225 +/- 10 ft-lbs (305 +/- 147 N•m).
- 2 Torque to 150 +/- 30 ft-lbs (203 +/- 41 N•m).
- 3 Lips of the u-cup packing must face down.

FIG. 3: Replace Throat Packings

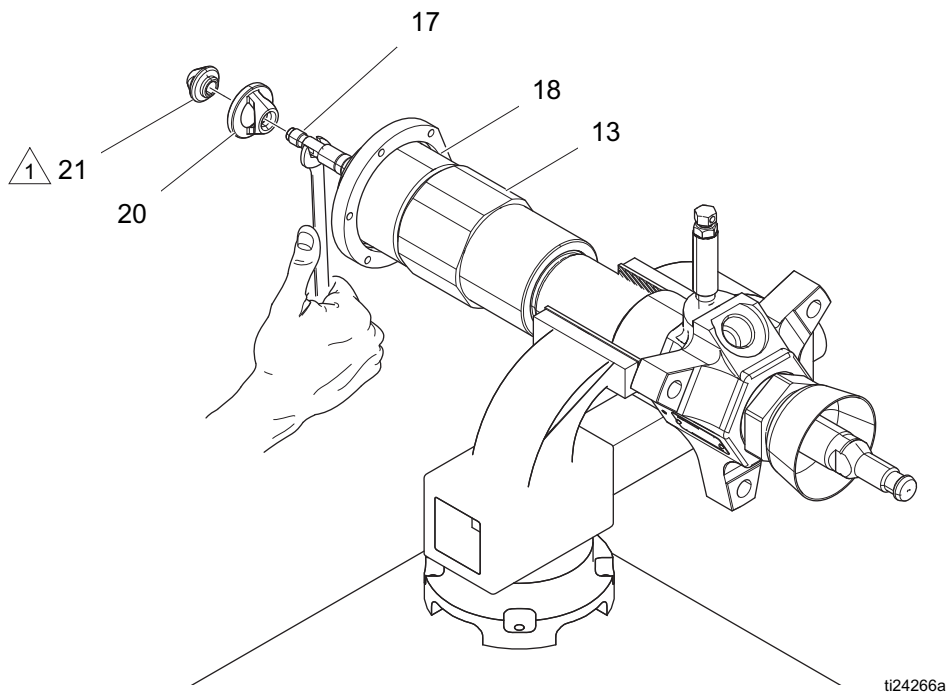
Replace the Priming Piston



| Pump Part No. | Throat Seal Repair Kit |
|---------------|------------------------|
| 24W152 | 237910 |
| 24W153 | 237910 |
| 24W150 | 237909 |
| 24W151 | 237909 |

1. Stop the pump on the down stroke with the flats of the priming piston rod (17) exposed below the intake cylinder (18). It is not necessary to disconnect the displacement pump from the motor, but you may have to disconnect it from the heated platen.

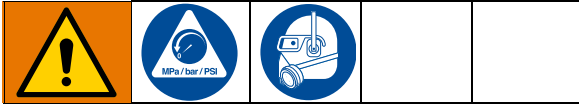
2. Relieve the pressure. See **Pressure Relief Procedure** on page 8.
3. Hold the flats of the priming piston rod (17) with an adjustable wrench and use a second wrench to unscrew the priming piston seat (21) from the rod.
4. Slide the priming piston (20) off the rod. Inspect the inner and outer surfaces of the piston (20) for scoring, wear, or other damage.
5. Slide the priming piston (20) onto the rod (17) until it stops. Hold the rod (17) steady with a wrench on the flats and screw the seat (21) onto the rod with another wrench. Torque to 60 +/- 3 ft-lb (81 +/- 4 N•m).



- Torque to 60 +/- 3 ft-lbs (81 +/- 4 N•m).
- Torque to 390 +/- 45 ft-lbs (529 +/- 61 N•m).
- Torque to 150 +/- 30 ft-lbs (203 +/- 41 N•m)

FIG. 4: Replace Priming Piston

Replace the Intake Valve



The intake valve (V) is available as a pre-assembled, pre-lubricated kit. The kit includes the valve and all seals and packings, and also includes the intake valve seat (15) and seal (16).

| Pump Part No. | Repair Kit |
|---------------|------------|
| 24W152 | 253546 |
| 24W153 | 237907 |
| 24W150 | 253546 |
| 24W151 | 237907 |

1. Relieve the pressure. See **Pressure Relief Procedure** on page 8.
2. Disconnect the displacement pump. See the system manual for instructions.
3. Place the pump in a vise with the outlet housing (3) positioned as shown in Figure 5.
4. Remove the priming piston (20). See **Replace the Priming Piston** on page 11.
5. Using a pipe wrench on the hex of the intake cylinder (18), unscrew it from the intake housing (13).

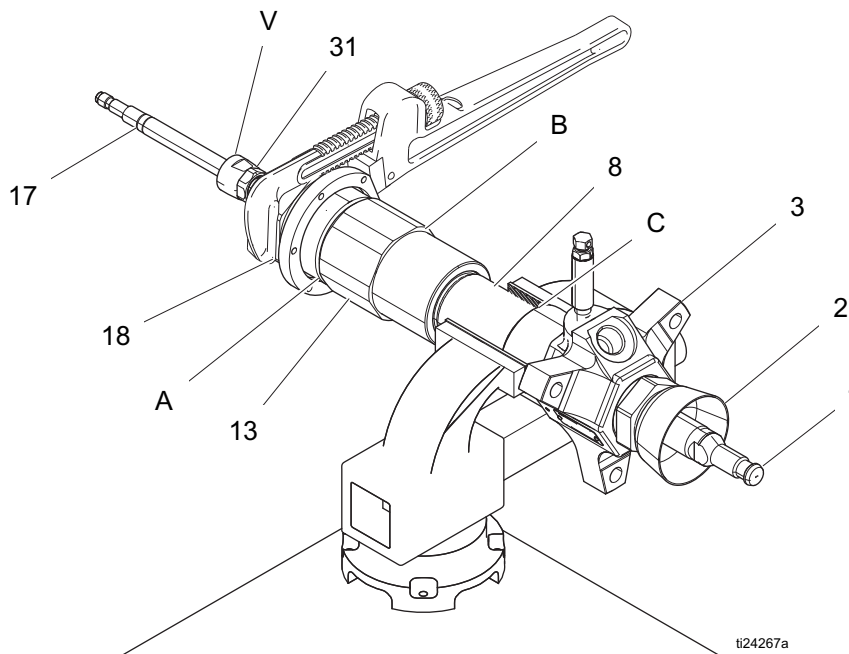
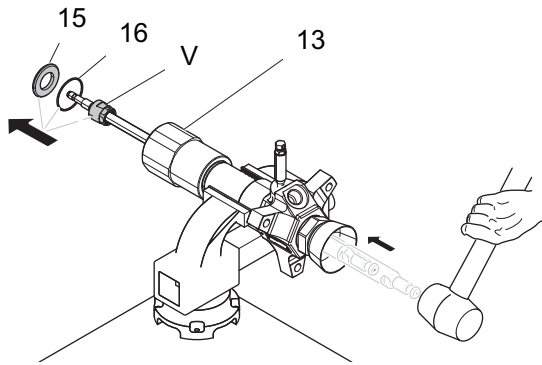


FIG. 5: Remove Priming Piston and Intake Cylinder

- Pull the intake seat (15) and seal (16) out the bottom of the intake housing (13).

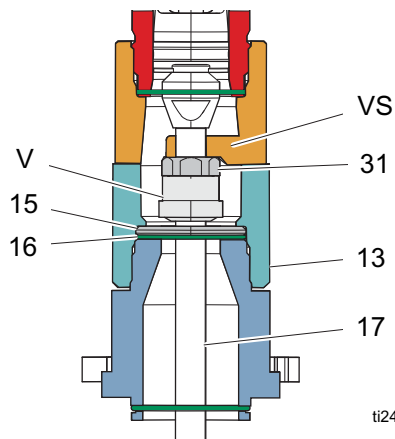
NOTE: If the seat (15) is difficult to remove, insert a brass rod through the top of the housing (13) and drive the seat out with a hammer.



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FIG. 6: Remove Valve Assembly

- Firmly tap the piston rod with a rubber mallet until the valve assembly comes free. Take care not to drop the valve assembly (V) as it comes free.
- To repair the piston, cylinder, seals, and rods, see **Repair the Piston** on page 14.
- Slide the intake housing (13) onto the priming piston rod (17), making certain that the smooth surface of the valve stop (VS) is facing down toward the pump intake. Screw the housing (13) onto the cylinder (8). See Figure 7.

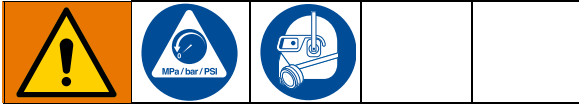


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FIG. 7: Replace Valve Assembly

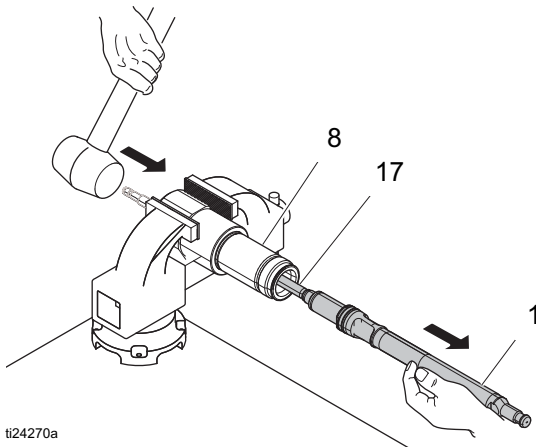
- Lubricate the priming piston rod (17), then slide the pre-assembled intake valve (V) into the rod, making certain that the packing nut (31) goes on the rod first. Push the valve assembly up the rod as far as possible. Use a rubber mallet on the priming piston rod (17) to drive the valve assembly up to the stop (VS).
- The intake seat (15) is reversible. Push it into the housing (13) until it seats securely. Lubricate the seal (16) and install it in the bevel around the bottom of the seat.
- Screw the intake cylinder (8) into the intake housing (13). Using a pipe wrench on the hex of the cylinder (8), torque the cylinder to 385-400 ft-lb (522-542 N•m).
- Replace the priming piston. See **Replace the Priming Piston** on page 11.
- Reconnect the displacement pump to the air motor as explained in the instructions for the system you are using.

Repair the Piston



The piston valve is available as pre-assembled, pre-lubricated Kit No. 237906, which includes the piston seat/guide assembly (P, items 6, 9, 10, 11, and 12).

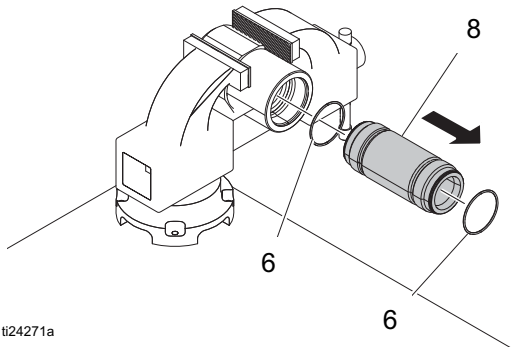
1. Follow the steps in **Replace the Intake Valve** on page 12.
2. Remove the outlet housing (3).
3. Using a rubber mallet, drive the displacement rod (1) and the priming piston rod (17) out of the cylinder (8). Inspect the outer surfaces of the rods for damage by running a finger over the surface.



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FIG. 8: Remove Piston

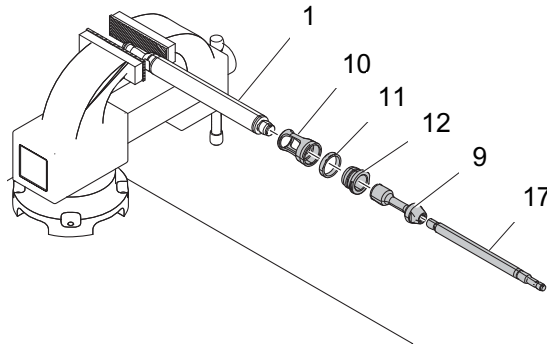
4. Remove the seal (6) from the bottom of the cylinder (8). Shine a light into the cylinder to examine the inside surface for scoring or damage.



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FIG. 9: Remove Seal

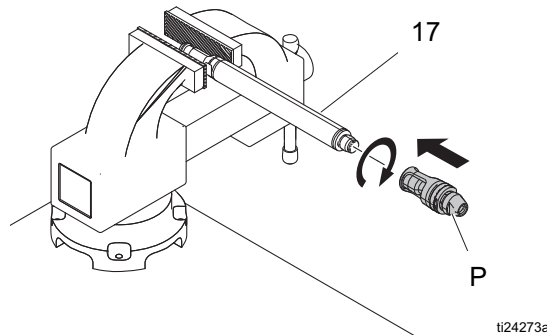
5. **Only if the cylinder is damaged or there is evidence of leaking around the top of the cylinder (8),** unscrew the cylinder from the outlet housing using a pipe wrench. Remove the top cylinder seal. See Figure 9.
6. Place the flats of the displacement rod (1) in a vise. Unscrew the piston (9) from the displacement rod; the priming piston rod (17) comes with it. Slide the piston seat/guide assembly (10, 11, and 12) off the piston (9) as shown in Figure 10.



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FIG. 10: Remove Piston Seat/Guide Assembly

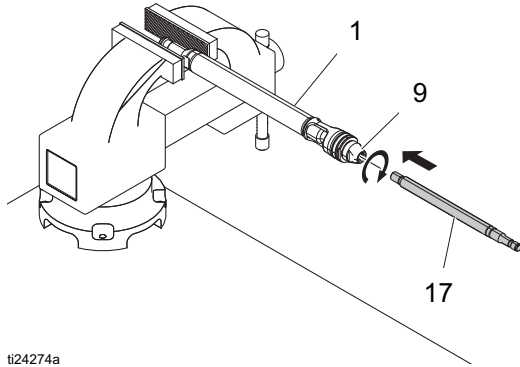
7. Place the piston (9) flats in a vise and unscrew the rod (17).
8. Place the pre-assembled piston seat/guide assembly (P, items 10, 11, and 12) onto the piston (9) so the 45 beveled seating surfaces match.
9. Place the flats of the displacement rod (1) in a vise. Screw the piston (9) onto the displacement rod (1) hand tight, then torque to 250-265 ft-lb (339-359 N•m).



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FIG. 11: Attach Piston to Displacement Rod

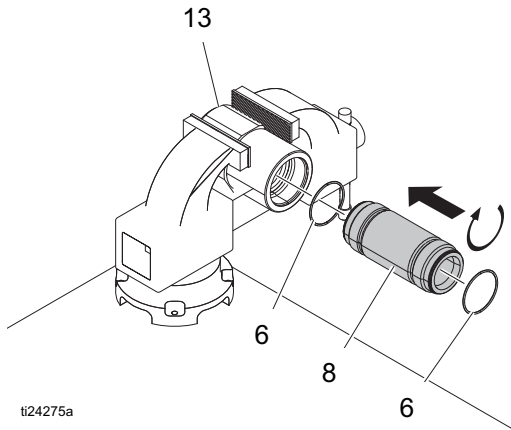
- Using an adjustable wrench on the flats of the priming piston rod (17), screw the rod into the piston (9). Torque to 92-101 ft-lb (125-137 N•m). Be careful not to create burrs on the flats of the rod.



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FIG. 12: Attach Piston Rod to Piston

- If the cylinder (8) was removed from the valve housing (13), lubricate the seal (6) and place it on the top of the cylinder. (The cylinder is symmetrical, so either end can be the top.) Screw the cylinder into the valve housing.

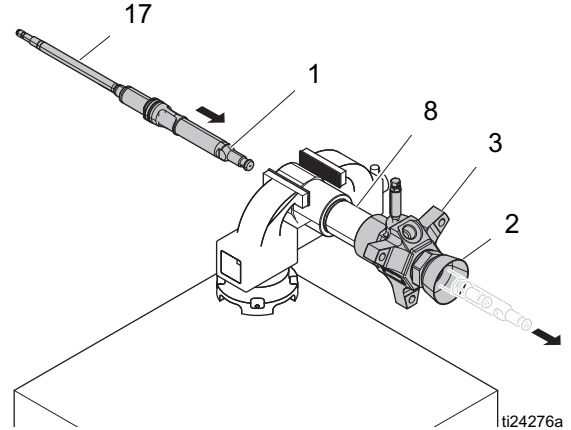


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FIG. 13: Attach Cylinder to Valve Housing

- Screw the outlet housing (3) onto the cylinder. Torque to 390 +/- 45 ft-lb (528 +/- 61 N•m).

- Lubricate the displacement rod (1). Slide the rod, piston assembly, and priming piston rod (17) into the cylinder (10) from the bottom until the top of the rod (1) protrudes from the packing nut (2).



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FIG. 14: Slide Piston Assembly and Rod into Cylinder

- Lubricate the seal (6) and install it on the bottom of the cylinder (8).
- Follow the steps in **Replace the Intake Valve** on page 12 to assemble the pump.

| Ref | Part | Description | Qty | Ref | Part | Description | Qty |
|-----|---------|-----------------------------------|-----|-----|---------|-------------------------------|-----|
| 1 | 16Y958 | ROD, displacement, chromex, 11 cm | 1 | 22 | 19Y496† | WASHER, seal back-up | 1 |
| 2 | 237799 | NUT, packing | 1 | 23 | 120286† | PACKING, u-cup (24W152) | 2 |
| 3 | 190598 | HOUSING, outlet | 1 | | 113021† | PACKING, u-cup (24W153) | 2 |
| 4 | 190620 | FLANGE | 1 | 24 | 19Y497† | WASHER, scraper 1.476 x 2.157 | 1 |
| 5 | 237908 | KIT, repair bleed valve | 1 | 25 | 190585† | NUT, packing | 1 |
| 6 | 113040* | PACKING, o-ring | 2 | 26 | 19Y495† | WASHER, rod scraper | 1 |
| 7 | --- | BEARING, piston guide cm 200 | 1 | 27 | 104537† | PACKING, o-ring, ptfе | 1 |
| 8 | 189437 | CYLINDER, pump | 1 | 28 | --- | RING, retainer | 1 |
| 9 | 189439* | SEAT, piston, sst | 1 | 29 | 190523◆ | WASHER, retainer | 1 |
| 10 | 15M520* | GUIDE, piston, 200 | 1 | | 120285◆ | PACKING, u-cup (24W152) | 1 |
| 11 | 113355* | BEARING, piston | 1 | 30 | 113020◆ | PACKING, u-cup (24W153) | 1 |
| 12 | 189441* | SEAT, piston | 1 | 31 | 190762◆ | NUT, seal | 1 |
| 13 | 190597 | HOUSING, valve | 1 | 32 | 184246◆ | GLAND, packing male | 1 |
| 14 | 189514◆ | VALVE, intake | 1 | 33 | 109301◆ | PACKING, vee | 4 |
| 15 | 189446◆ | SEAT, valve | 1 | 34 | 184196◆ | GLAND, packing female | 1 |
| 16 | 113041◆ | PACKING, o-ring | 1 | 35 | 100508 | SCREW, drive | 6 |
| 17 | --- | ROD, piston | 1 | 36 | --- | PLATE, designation | 1 |
| 18 | 190608 | CYLINDER, intake | 1 | 37 | 101754 | PLUG, pipe, 3/8 nptf | 1 |
| 19 | 113054 | PACKING, o-ring | 1 | 38 | 184090▲ | LABEL, warning | 2 |
| 20 | 190606❖ | PISTON, pump | 1 | 39 | 172479▲ | TAG, warning | 1 |
| 21 | 190607❖ | SEAT, piston | 1 | | | | |

--- Not available for individual sale.

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

† Parts are available in throat repair kit 24V752 (for 24W152) and 24V753 (for 24W153).

* Parts are available in piston repair kit 237906.

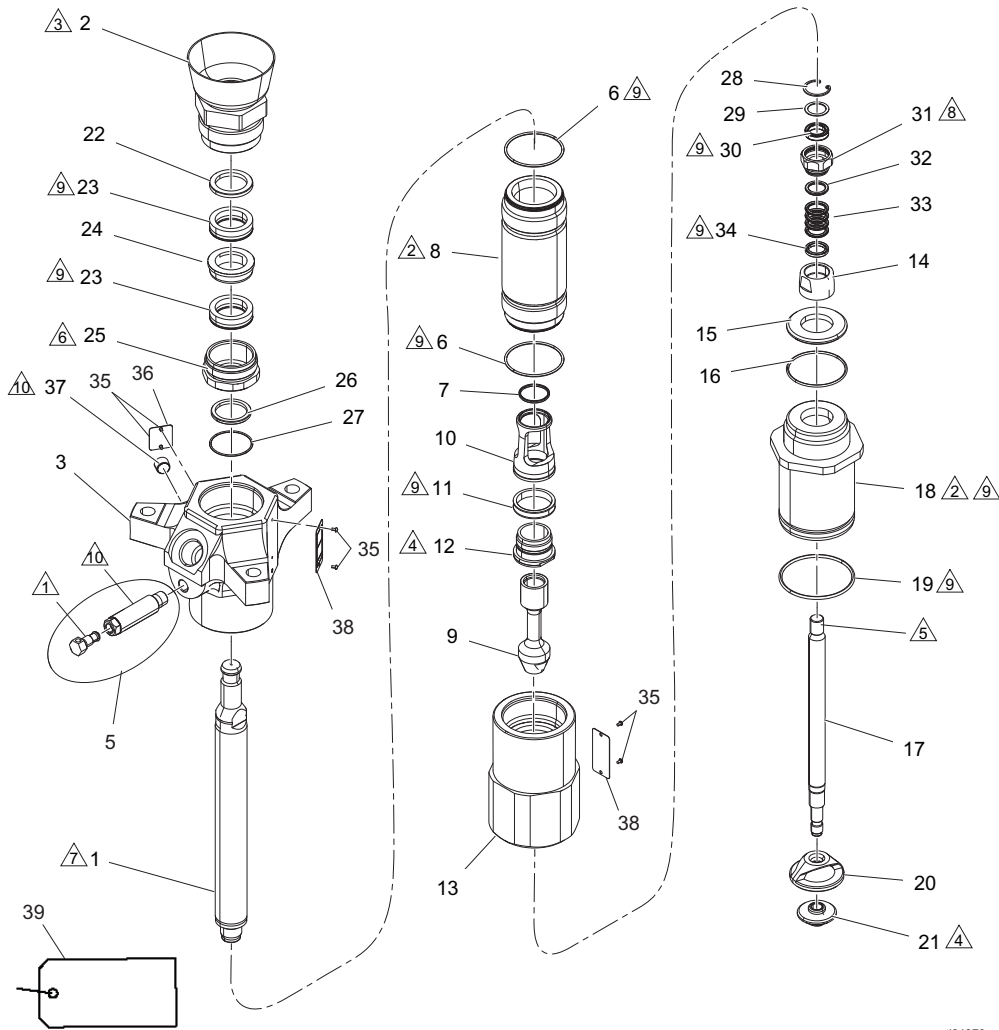
◆ Parts are available in intake valve repair kit 253546 (for 24W152) and 237907 (for 24W153).

❖ Parts are available in priming piston repair kit 237910.

55 Gallon (200 Liter) Pumps

24W150, Pump with Carbon Filled Seals

24W151, Pump with Glass Filled Seals



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△1 Torque to 25 +/- 2 ft-lbs (34 +/- 2.7 N•m).

△2 Torque to 390 +/- 45 ft-lbs (528 +/- 61 N•m).

△3 Torque to 150 +/- 30 ft-lbs (203 +/- 41 N•m).

△4 Torque to 60 +/- 3 ft-lbs (81 +/- 4 N•m).

△5 Torque to 97 +/- 5 ft-lbs (131 +/- 7 N•m).

△6 Torque to 225 +/- 10 ft-lbs (305 +/- 13 N•m).

△7 Torque to 255 +/- 16 ft-lbs (345 +/- 21 N•m).

△8 Torque to 75 +/- 4 ft-lbs (101 +/- 5 N•m).

△9 Apply lubricant.

△10 Apply sealant to threads.

Fig. 16: Models 24W150 and 24W151

| Ref | Part | Description | Qty | Ref | Part | Description | Qty |
|-----|---------|-----------------------------------|-----|-----|---------|-------------------------------|-----|
| 1 | 16Y958 | ROD, displacement, chromex, 11 cm | 1 | 22 | 19Y496 | WASHER, seal back-up | 1 |
| 2 | 237799 | NUT, packing | 1 | | 120286† | PACKING, u-cup (24W150) | 2 |
| 3 | 190598 | HOUSING, outlet | 1 | 23 | 113021† | PACKING, u-cup (24W151) | 2 |
| 5 | 237908 | KIT, repair, bleed valve | 1 | 24 | 19Y497† | WASHER, scraper 1.476 x 2.157 | 1 |
| 6 | 113040* | PACKING, o-ring | 2 | 25 | 190585† | NUT, Packing | 1 |
| 7 | ---* | BEARING, piston guide cm 200 | 1 | 26 | 19Y495† | WASHER, rod scraper | 1 |
| 8 | 189437 | CYLINDER, pump | 1 | 27 | 104537† | PACKING, o-ring, ptfe | 1 |
| 9 | 189439* | SEAT, piston, sst | 1 | 28 | ---◆ | RING, retainer | 1 |
| 10 | 15M520* | GUIDE, piston, 200 | 1 | 29 | 190523◆ | WASHER, retainer | 1 |
| 11 | 113355* | BEARING, piston | 1 | 30 | 120285◆ | PACKING, u-cup (24W150) | 1 |
| 12 | 189441* | SEAT, piston | 1 | | 113020◆ | PACKING, u-cup (24W151) | 1 |
| 13 | 190597 | HOUSING, valve | 1 | 31 | 190762◆ | NUT, seal | 1 |
| 14 | 189514◆ | VALVE, intake | 1 | 32 | 184246◆ | GLAND, packing male | 1 |
| 15 | 189446◆ | SEAT, valve | 1 | 33 | 109301◆ | PACKING, vee | 4 |
| 16 | 113041◆ | PACKING, o-ring | 1 | 34 | 184196◆ | GLAND, packing female | 1 |
| 17 | 184400 | ROD, piston | 1 | 35 | 100508 | SCREW, drive | 6 |
| 18 | 190586 | CYLINDER, intake | 1 | 36 | --- | PLATE, designation | 1 |
| 19 | 109482 | PACKING, o-ring | 1 | 37 | 101754 | PLUG, pipe, 3/8 nptf | 1 |
| 20 | 276378❖ | PISTON, | 1 | 38 | 184090▲ | LABEL, warning | 2 |
| 21 | 190241❖ | SEAT, piston | 1 | 39 | 172479▲ | TAG, warning | 1 |

--- Not available for individual sale.

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

† Parts are available in throat repair kit 24V752 (for 24W150) and 24V753 (for 24W151).

* Parts are available in piston repair kit 237906.

◆ Parts are available in intake valve repair kit 237907 (for 24W150) and 253546 (for 24W151).

❖ Parts are available in priming piston repair kit 237909.

Technical Specifications

| Check-Mate 800 Displacement Pump | | |
|---|--|-------------------|
| | US | Metric |
| Maximum fluid working pressure | 5850 psi | 40 MPa, 403 bar |
| Displacement pump effective area | 1.24 in. ² | 8 cm ² |
| Maximum pump operating temperature | 400°F | 200°C |
| Fluid outlet size | 1 in. npt(f) | |
| Wetted parts | Carbon steel, chrome, zinc, nickel plating, alloy steel, ductile iron, fluoroelastomer, PTFE, bronze, stainless steel (304, 316, 440, and 17-4 PH) | |
| Weight | | |
| 24W152 | 59 lb | 27 kg |
| 24W153 | 59 lb | 27 kg |
| 24W150 | 59 lb | 27 kg |
| 24W151 | 59 lb | 27 kg |
| Length | | |
| On upstroke | 31.15 in. | 791.2 mm |
| On downstroke (priming piston exposed) | 33.75 in. | 857.2 mm |

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