

Progressive Cavity Pump

3A5364J

EN

For the dispensing of highly filled single component fluids for the electronics industry. For use with UniXact® Automated Dispense Platform. For professional use only.

Not approved for use in explosive atmospheres or hazardous locations.

25B055 (Series A and B)

25B192 (Series A and B)

25B193 (Series A and B)

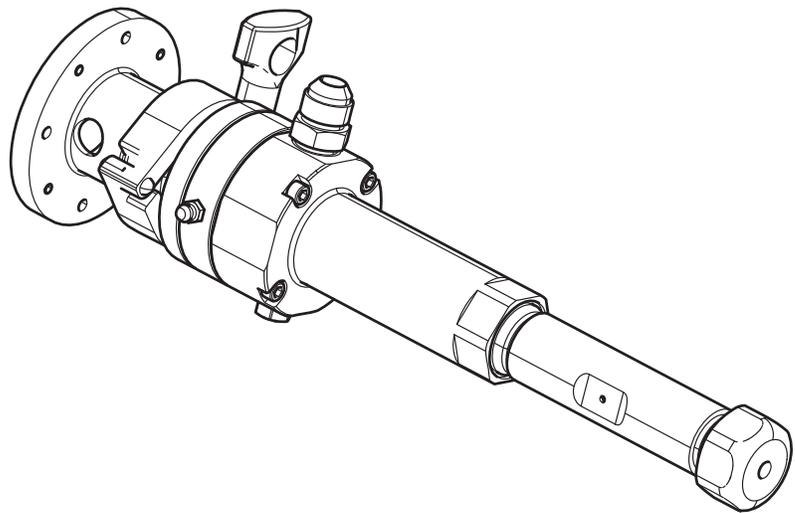
26B152 (Series A)

290 psi (2 MPa, 20 bar) Maximum Working Pressure



Important Safety Instructions

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



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Related Manuals

Manual	Description
3A4061	UniXact Automated Dispense Instructions-Parts
3A3649	UniXact Automated Dispense Setup-Operations

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.

 <h1 style="margin: 0;">WARNING</h1>	
 	<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, relieve pressure and disconnect all power sources.
	<p>BURN HAZARD</p> <p>Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns:</p> <ul style="list-style-type: none"> • Do not touch hot fluid or equipment.
	<p>TOXIC FLUID OR FUMES HAZARD</p> <p>Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none"> • 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.
  	<p>PRESSURIZED EQUIPMENT HAZARD</p> <p>Fluid from the equipment, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.</p> <ul style="list-style-type: none"> • Follow the Pressure Relief Procedure when you stop spraying/dispensing 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.



WARNING



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 Sheets (SDSs) from distributor or retailer.
- 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.



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.

General Information

The information in this manual refers to both Series A and Series B Progressive Cavity Pumps. Refer to **Component Identification** starting on page 6 and **Parts** starting on page 20 for information about the differences between Series A and B.

Pump Housing

The pump is designed with a pump housing, bearing package, and a rotor-stator set. The inlet of the pump is a JIC #8 internal thread. A JIC #6 fitting is included with the pump. The outlet of the pump has a 5/16 - 28 UN thread for a Luer internal thread.

Shaft, Bearing and Lubrication

The drive shaft is positioned in bearings which have permanent lubrication.

Recommended Spare Parts

Thermal Interface Materials tend to be very abrasive due to their high concentration of conductive fillers. These fillers will accelerate wear on the wetted components of the pumps. Therefore, Graco highly recommends stocking the following wetted components.

Series A Pumps

- Rotor Kit (25B224, 25B225, 25B226)
- Stator Kit (25B227, 25B228, 25B231)
- Seal Kit (25E195)
- Shaft Bearing Kit (25E196)

Refer to **Series A Kits** on page 26 and **Series A and B Shared Kits** on page 29 for more information.

Series B Pumps

- Rotor Kit (26A986, 26A987, 26A988)
- Stator Kit (25B227, 25B228, 25B231)
- Seal Kit (25E195)
- Shaft Bearing Kit (26A995)

Refer to **Series B Kits** on page 32 and **Series A and B Shared Kits** on page 29 for more information.

Storage

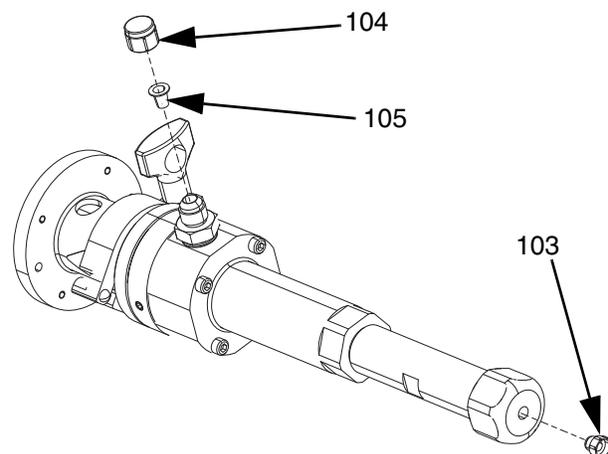
When storing the pumps, the following points must be noted:

- Drive units should generally be stored indoors.
- Ambient temperature max. 25°C/77°F; relative humidity max. 80%.
- The stator should be removed from the rotor for long-term storage.
- The progressive cavity pump units must be protected against sunlight and UV light.
- No aggressive or corrosive materials or agents must be stored nearby.
- The units must be protected against mechanical strain and the impact of external forces.

Removing Shipping Parts

Both Series A and Series B Progressive Cavity Pumps are shipped with parts that need to be removed before first use. Remove the plug (103) from the pump end cap as shown below. Remove the cap (104) and tapered plug (105) from the inlet fitting.

Ref	Description	Quantity
103	PLUG, Idpe, 5/16-28 thread	1
104	CAP, Idpe, 9/16-18 thread	1
105	PLUG, Idpe, tapered, .236-.302 od	1



Component Identification

Series A

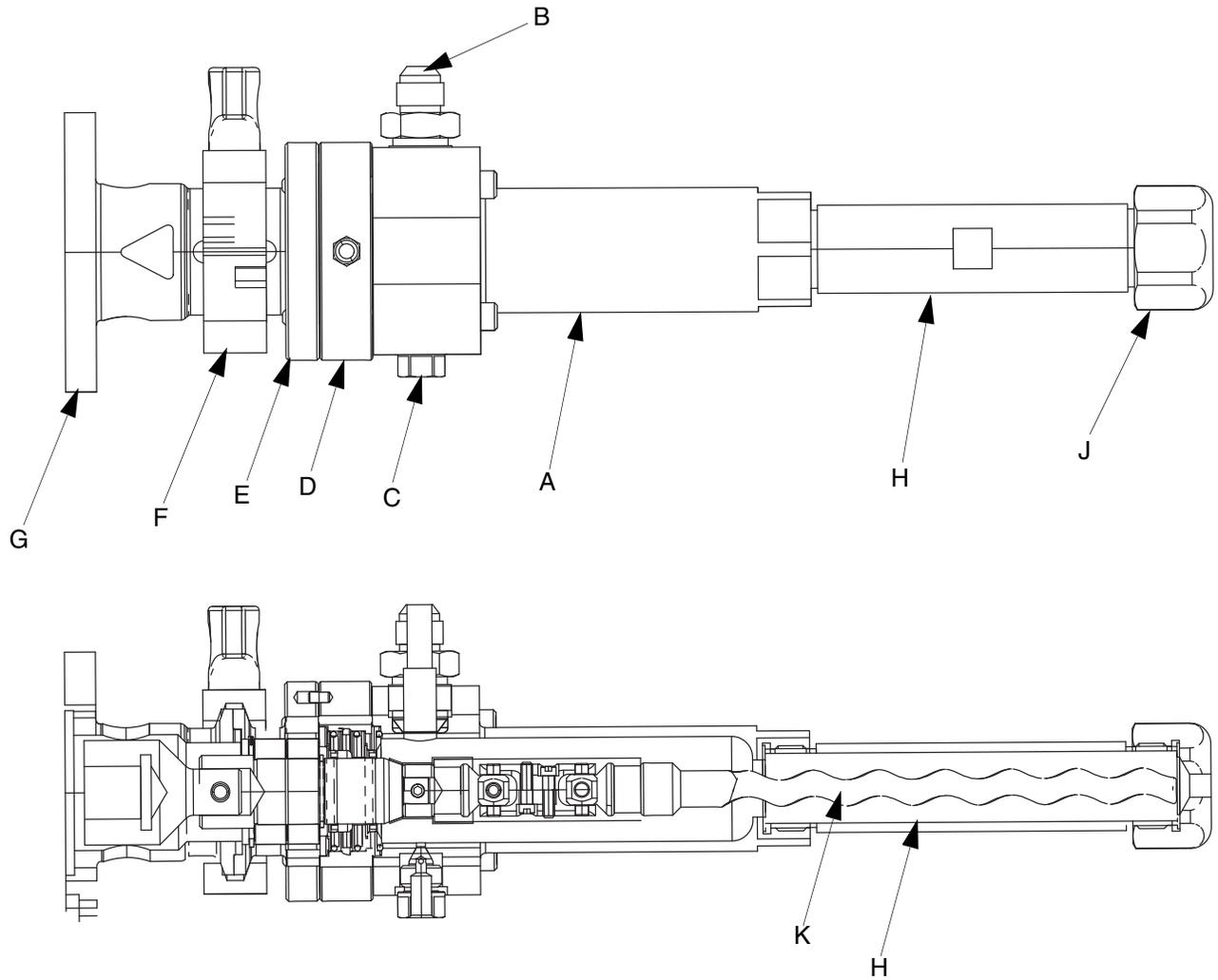


FIG. 1: Series A Component Identification

Key:

- A Pump Body
- B Inlet Fitting (JIC #6 and JIC #8)
- C Bleed Port
- D Seal Housing
- E Bearing Housing
- F Sanitary Clamp
- G Gear Box Connection Flange
- H Stator
- J End Adapter
- K Rotor Assembly

Series B

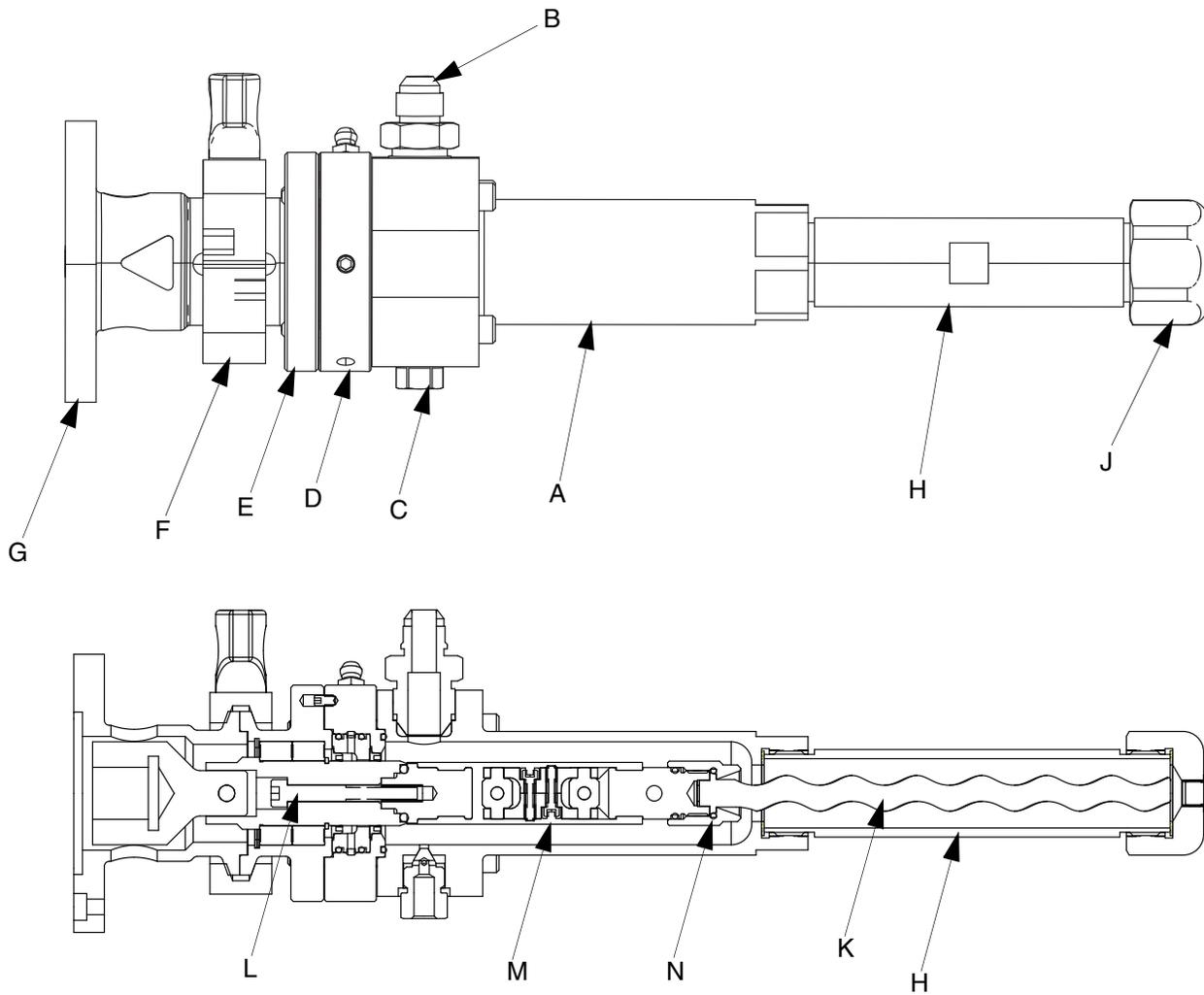


FIG. 2: Series B Component Identification

Key:

- | | |
|-------------------------------------|-----------------|
| A Pump Body | H Stator |
| B Inlet Fitting (JIC #6 and JIC #8) | J End Adapter |
| C Bleed Port | K Rotor |
| D Seal Housing | L Cap Screw |
| E Bearing Housing | M Coupler |
| F Sanitary Clamp | N Retaining Nut |
| G Gear Box Connection Flange | |

Maintenance and Repair

				
<p>Running the pump at high speed can cause equipment surfaces to become very hot. To avoid burns, do not touch hot fluid or equipment and allow equipment to cool completely before touching it.</p> <p>To prevent injury from moving parts, assembly and maintenance work must only be carried out while the drive is stationary. The unit must be isolated from the power source and secured to prevent accidental start-up.</p>				

Pressure Relief Procedure

 Follow the Pressure Relief Procedure whenever you see this symbol.

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

Always de-pressurize the system prior to any repair, following the instructions listed in the appropriate system manual. See **Related Manuals** on page 2.

Priming the Pump

The pump is self-priming when certain conditions are met. However, with higher viscosity media, the material must be introduced first (pre-pressure). For more information on the priming conditions of specific material, refer to information provided by the material supplier.

Purging the Pump

For the pump to operate properly, all air needs to be removed and the pump needs to be filled with material.

				
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1. Apply pressure to the inlet (25) of the pump.
2. Loosen the pressure bleed (20) one to two turns using a 1/2 inch wrench so air can escape. Material can flow without this pressure bleed being completely removed.

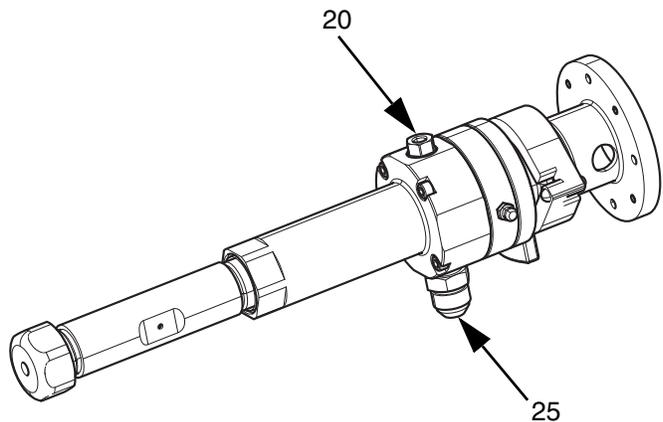


FIG. 3

Pump Maintenance

NOTE: The operating conditions of your particular system determine how often maintenance is required.

Graco progressive cavity pumps are largely maintenance-free. However, gaskets and bearings, as well as the stator and rotor, are subject to wear and must be replaced in certain circumstances at regular intervals. Regular review of the performance data is recommended. When there is maintenance work being carried out anywhere else on the system, the following points must be considered:

- Check all fastening screws and connections to ensure they are securely tightened, and re-tighten if necessary.
- Check the coupling (elastomer) for wear.
- Check the tightness of the pump, especially the shaft seals.
- The pump has a zerk fitting which allows for lubricant to be filled in between the shaft seals to help extend the life of the seals.

Pump Disassembly and Reassembly

Disassembling the Pump

Refer to **Component Identification** on page 6 as well as the following instructions/illustrations for the proper disassembly procedures for each corresponding section of the pump. Note the position of the parts relative to each other. We recommend marking the position of the pump parts and numbering them consecutively.

NOTICE

All disassembly must be carried out with care. Due to the risk of breakage, do not use force.

Assembling the Pump

O-rings must be checked for damage and replaced with new ones if necessary. PTFE gaskets must be replaced. All sealant residue must be completely removed.

Series A Repair

Stator Disassembly



NOTE: Model 25B055 is shown in Figure 4, and also represents model 26B152. For information about the different stator part configuration for models 25B192 and 25B193, refer to **25B192 and 25B193, Series A** in **Parts** on page 21.

1. Perform the **Pressure Relief Procedure** on page 8.
2. Remove the pump by loosening the sanitary clamp (12) from the gear box adapter (6).

3. Unscrew the end cap (24) from the stator (23).
4. Unscrew the stator (23) from the pump body (1).

NOTE: Holding the shaft (5) in place to keep the rotor (19) from rotating will aid in removing the stator.

NOTE: Reverse steps 2-4 for reassembly. Apply the blue adhesive provided to the threads of the new stator (23). Apply 100 in-lbs of torque when tightening the end cap (24) and stator (23).

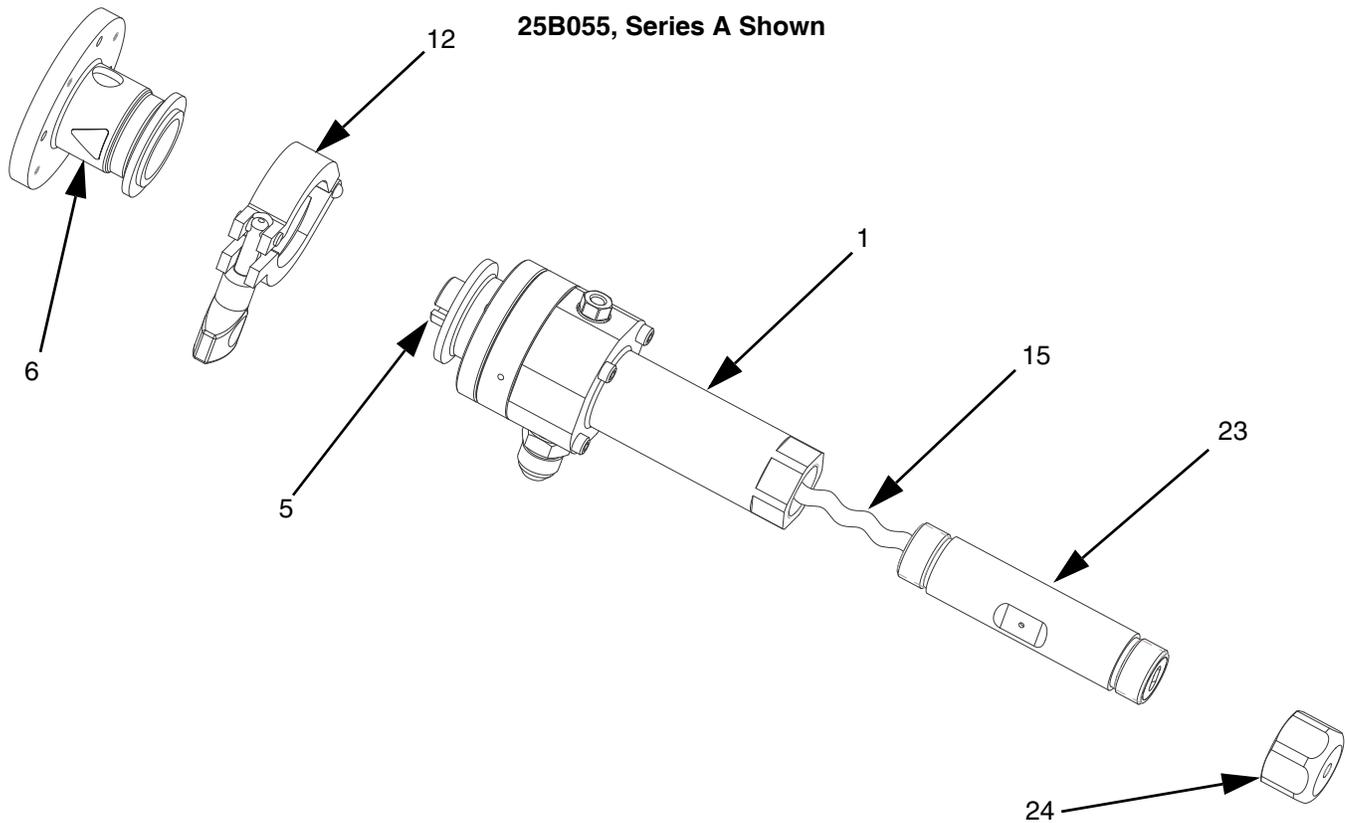


FIG. 4

Shaft and Bearing Housing Disassembly



1. Perform the **Pressure Relief Procedure** on page 8.
 2. Remove the pump by loosening the sanitary clamp (12) from the gear box adapter (6).
 3. Remove the four screws (17) using a 4 mm allen wrench.
 4. Remove the bearing housing (4), seal housing (2) and rotor assembly (15) from the pump body (1).
 5. Cut the protective sleeve (33) to remove it from the bearing shaft (5) and rotor assembly (15) to expose the shoulder bolt (16).
 6. Remove the shoulder bolt (16) using a 3/32 in. allen wrench to disconnect the rotor assembly (15) from the shaft (5).
- NOTE:** To ensure the hex does not strip out of the shoulder bolt (16), make sure no excess material is in the hex before removing.
7. Use a pick or small screw driver to remove the retaining ring (11) from the bearing housing (4).
 8. Remove the shaft (5) and the bearing assembly (9).

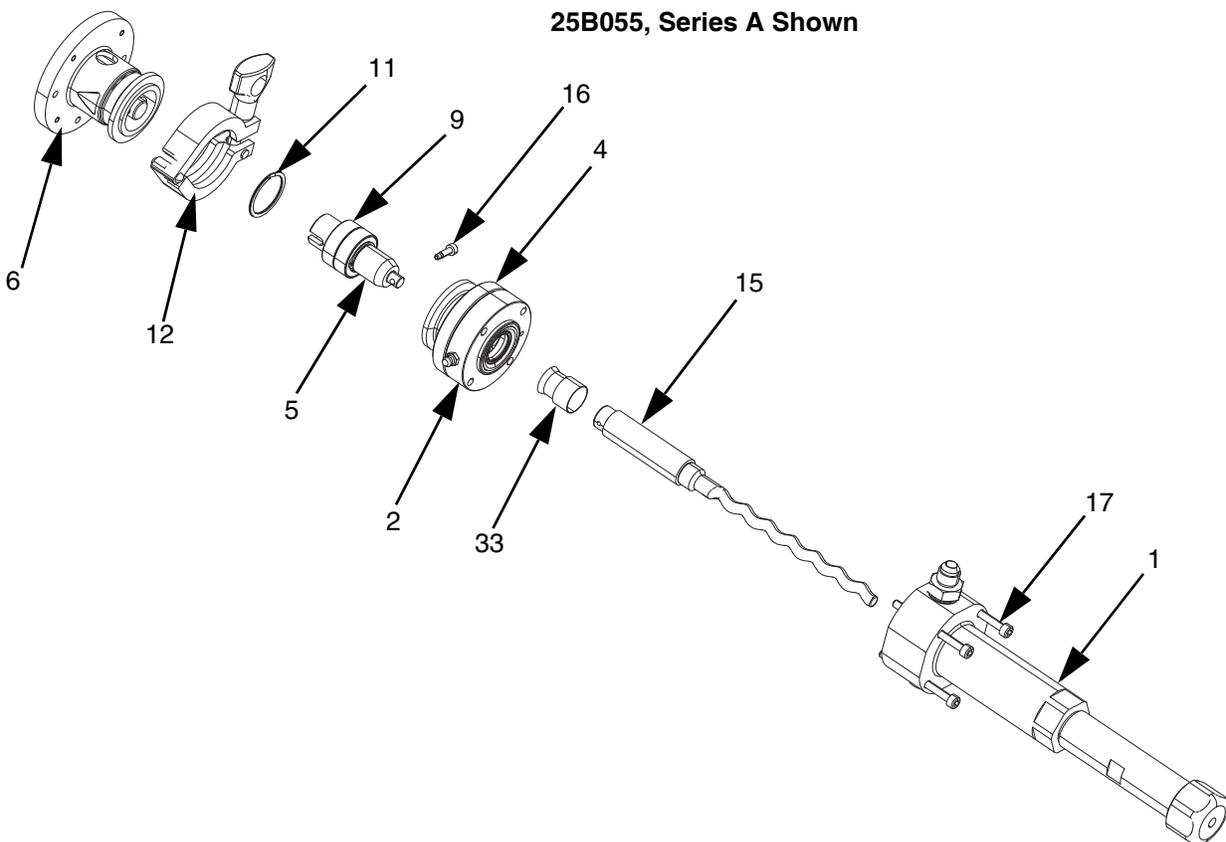


FIG. 5

Rotor Assembly Disassembly and Reassembly

25B055, Series A Shown

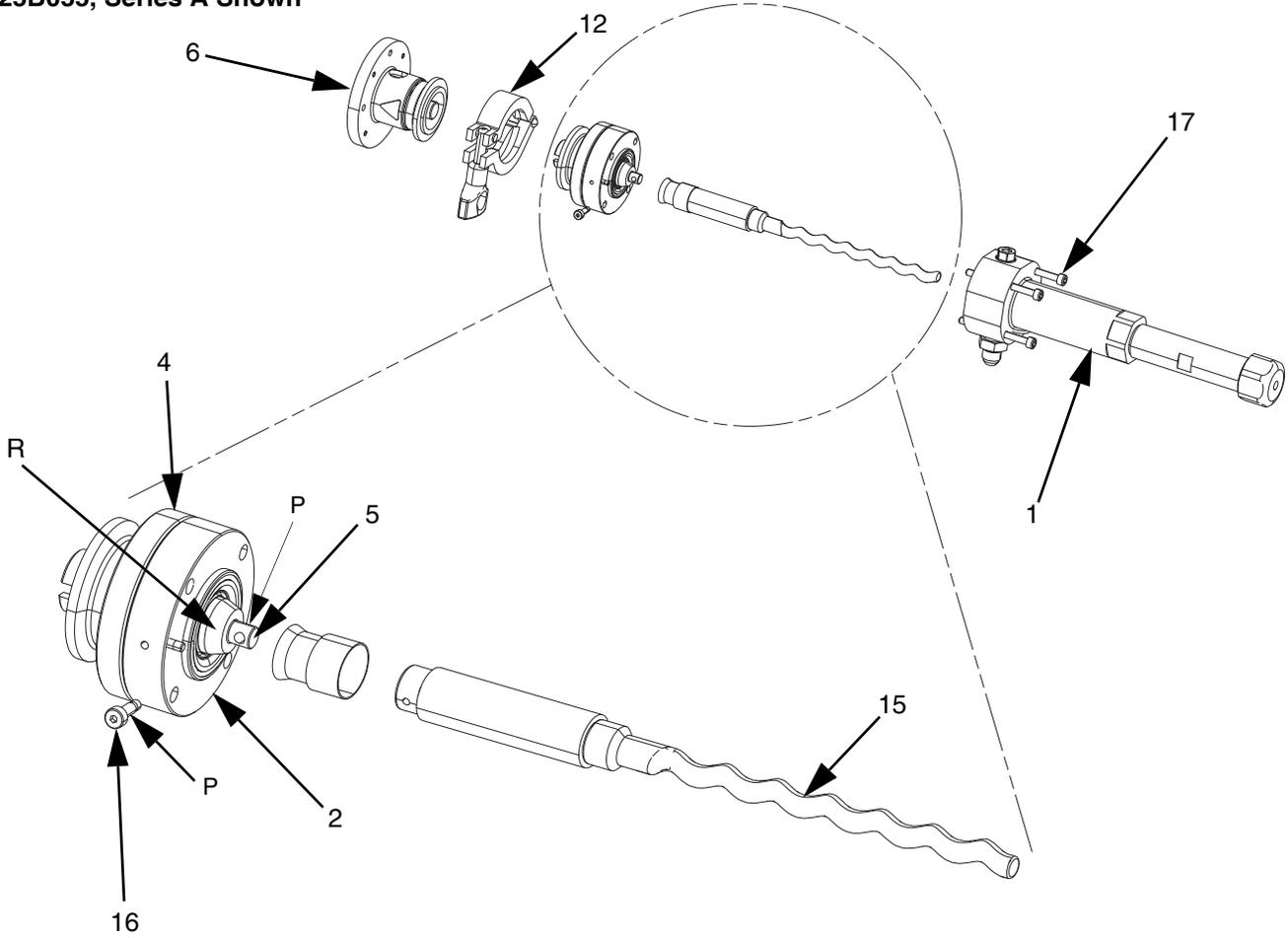


FIG. 6

Disassembly

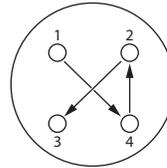
1. Perform the **Pressure Relief Procedure** on page 8.
2. Remove the pump by loosening the sanitary clamp (12) from the gear box adapter (6).
3. Remove the four screws (17) using a 4 mm allen wrench.
4. Cut the protective sleeve (33) to remove it from the bearing shaft (5) and rotor assembly (15) to expose the shoulder bolt (16).
5. Remove the rotor assembly (15), bearing housing (4), and seal housing (2) from the pump body (1).
6. Clean any material out of the shoulder bolt (16).
7. Remove the shoulder bolt (16) using a 3/32 in. allen wrench.

NOTE: To ensure the hex does not strip out of the shoulder bolt (16), make sure no excess material is in the hex before removing.

Reassembly

1. Ensure the rotor assembly (15) and shaft (5) are clean before reassembly.
2. Apply a strip of removable strength blue adhesive to the indicator lines (P) on the shoulder bolt (16) and the end of the rotor (15) as shown in FIG. 6.
3. Tighten the shoulder bolt (16) to 9-10 in-lbs.
4. Slide the protective sleeve (33) into place. Do not allow it to extend beyond the end of the taper (R). Shrink the sleeve with a heat gun using a maximum temperature of 250° F (121° C).

NOTE: When attaching the pump body (1), apply grease to the four screws (17) and tighten in a star pattern to ensure each screw is tightened equally. Snug-tighten all four screws, then torque screws 1, 4, 2, and 3 to 28-31 in-lbs incrementally so they are fully tightened.



Seal Replacement

Disassembly

1. Follow steps 1-7 for **Rotor Assembly Disassembly and Reassembly** on page 13 to access the seal housing.
2. Remove the seal housing (2) from the bearing housing (4).
3. Remove the seal insert (3).
4. Remove the rotary seals (8) and o-rings (7) and replace as needed.

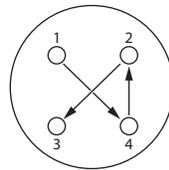
NOTE: Pay careful attention to direction of the rotary seals when reinstalling.

3. Follow steps 1-4 for **Rotor Reassembly** on page 13.

NOTE: When attaching the pump body (1), apply grease to the four screws (17) and tighten in a star pattern to ensure each screw is tightened equally. Snug-tighten all four screws, then torque screws 1, 4, 2, and 3 to 28-31 in-lbs incrementally so they are fully tightened.

Reassembly

1. Install o-rings (7) onto the seal insert (3).
2. Install the seals (8) into the seal insert (3) and seal the housing (2).



25B055, Series A Shown

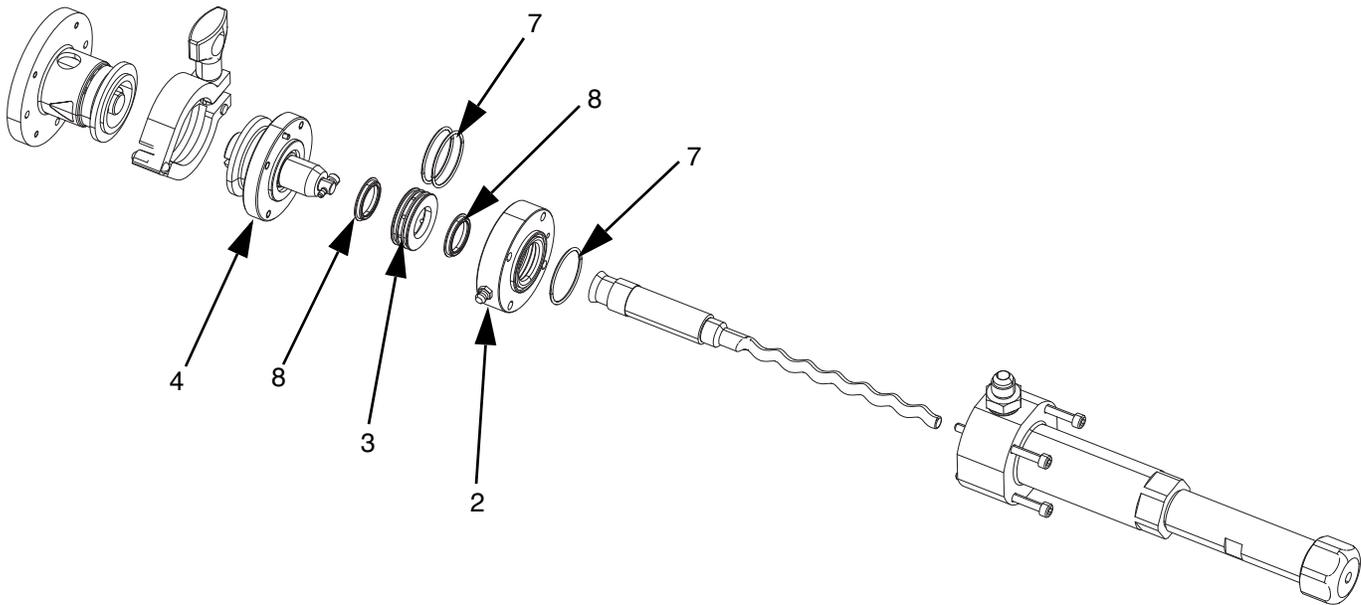


FIG. 7

Series B Repair

Stator Replacement

Disassembly



NOTE: Model 25B055 is shown in Figure 8. For information about the different stator part configuration for models 25B192 and 25B193, refer to **25B192 and 25B193, Series B in Parts** on page 24.

1. Perform the **Pressure Relief Procedure** on page 8.
2. Remove the pump by loosening the sanitary clamp (12) from the gear box adapter (6).
3. Unscrew the end cap (24) from the stator (23).

4. Unscrew the stator (23) from the pump body (1).

NOTE: Holding the shaft (5) in place to keep the rotor (15) from rotating will aid in removing the stator.

Reassembly

1. Replace the seals (22) if needed.
2. Apply the blue adhesive provided to the threads of the new stator (23).
3. Apply 100 in-lbs of torque when tightening the end cap (24) and stator (23).
4. Replace the gear box adapter (6) and tighten the sanitary clamp (12).

25B055, Series B Shown

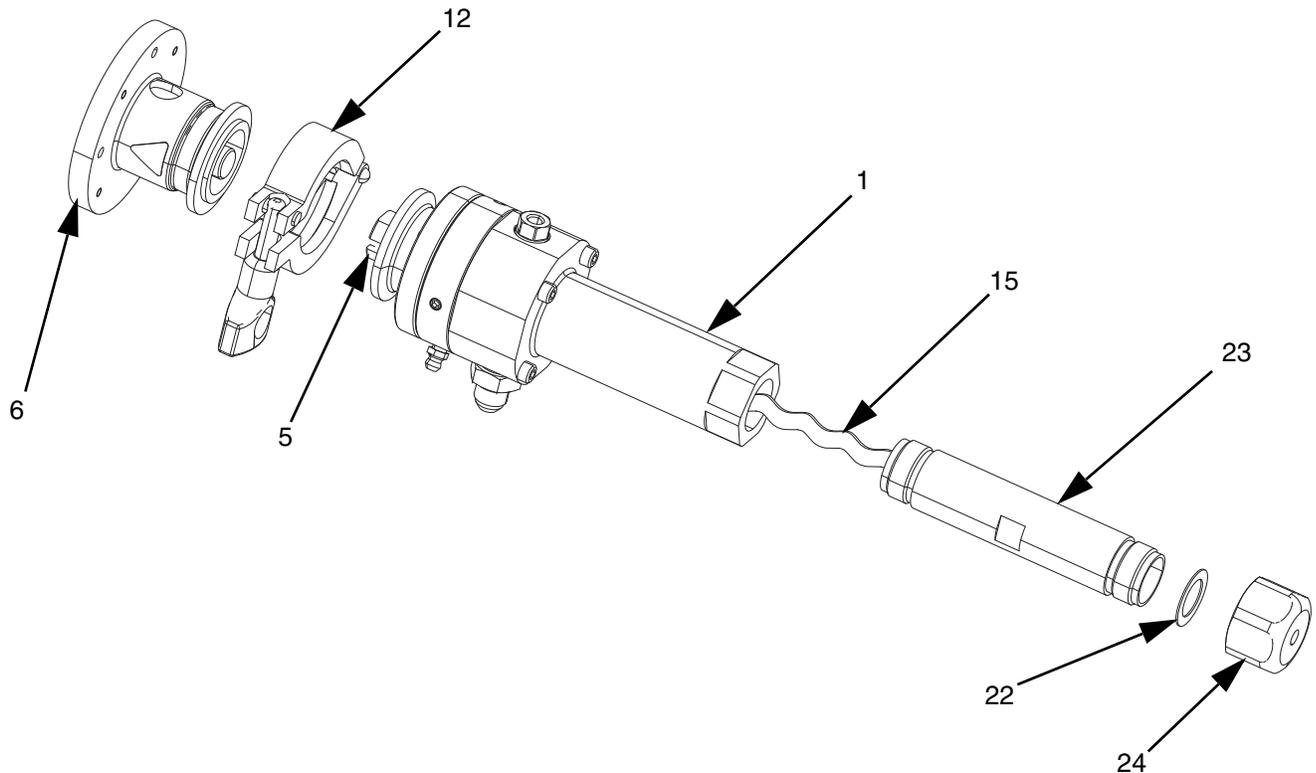


FIG. 8

Bearing Assembly Replacement

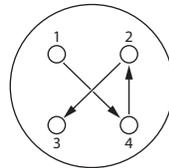
Disassembly



1. Perform the **Pressure Relief Procedure** on page 8.
2. Remove the pump by loosening the sanitary clamp (12) from the gear box adapter (6).
3. Remove the four screws (17) from the pump body (1) using a 4 mm Allen wrench.
4. Remove the cap screw (36) using a 4 mm Allen wrench.
5. Remove the bearing housing (4) and seal housing (2). Remove the rotor (15), coupler (16), and retaining nut (38) together from the pump body (1).
6. Use a pick or small screw driver to remove the retaining ring (11) from the bearing housing (4).
7. Remove the bearing assembly that includes the bearing shaft (5) and the two bearings (9).

Reassembly

1. Ensure that no material is present in the pump and seal housings other than the grease.
2. Insert the new bearing assembly into the bearing housing (4) and seal housing (2).
3. Reinstall the retaining ring (11) into the bearing housing (4).
4. Apply the blue adhesive provided to the cap screw (36) and replace it. Torque to 85-95 in-lbs to tighten.
5. Insert the assembled parts into the pump body (1).
6. Replace the gear box adapter (6) and tighten the sanitary clamp (12).
7. Attach the pump body (1). Apply grease to the four screws (17) and tighten in a star pattern to ensure each screw is tightened equally. Snug-tighten all four screws, then torque screws 1, 4, 2, and 3 to 28-31 in-lbs incrementally so they are fully tightened.



25B055, Series B Shown

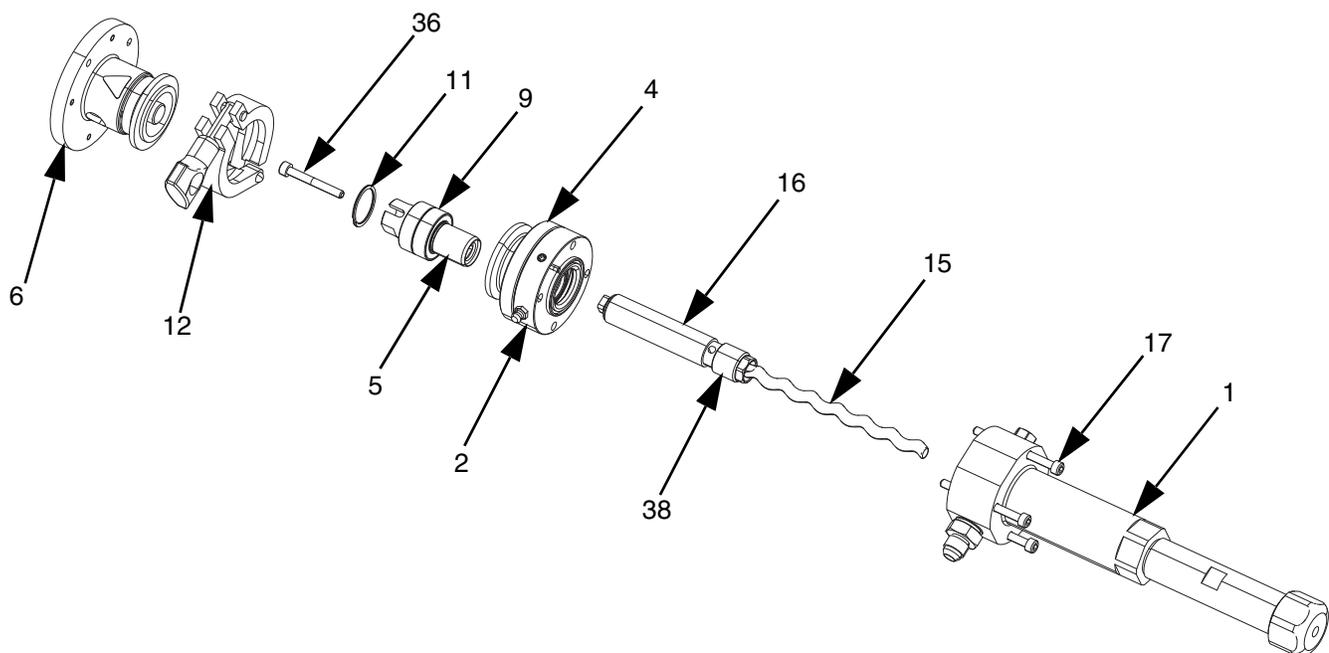


FIG. 9

Rotor and Coupler Disassembly and Reassembly

Disassembly



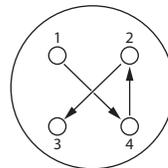
1. Perform the **Pressure Relief Procedure** on page 8.
2. Remove the pump by loosening the sanitary clamp (12) from the gear box adapter (6).
3. Remove the four screws (17) from the pump body (1) using a 4 mm Allen wrench.
4. Remove the cap screw (36) using a 4 mm Allen wrench.
5. Remove the bearing housing (4) and seal housing (2). Remove the rotor (15), coupler (16), and retaining nut (38) together from the pump body (1).

NOTE: The hole in the coupler (16) is to aid in the disassembly of the retaining nut (38).

6. Disconnect the retaining nut (38) from the coupler (16) and rotor (15). Remove the two o-rings (37) for replacement as needed.
7. Remove the o-ring (35) used to connect the coupler (16) to the bearing shaft (5) for replacement as needed.

Reassembly

1. Ensure the rotor (15), coupler (16) and bearing shaft (5) are clean before reassembly.
2. Place the rotor (15) into the coupler (16) and ensure the two o-rings (37) are properly positioned. Tighten the retaining nut until secure.
3. Insert the other end of the coupler (16) into the bearing shaft (5) with the o-ring (37) properly positioned.
4. Apply the blue adhesive provided to the cap screw (36) and replace it. Torque to 85-95 in-lbs to tighten.
5. Replace the gear box adapter (6) and tighten the sanitary clamp (12).
6. Attach the pump body (1). Apply grease to the four screws (17) and tighten in a star pattern to ensure each screw is tightened equally. Snug-tighten all four screws, then torque screws 1, 4, 2, and 3 to 28-31 in-lbs incrementally so they are fully tightened.



25B055, Series B Shown

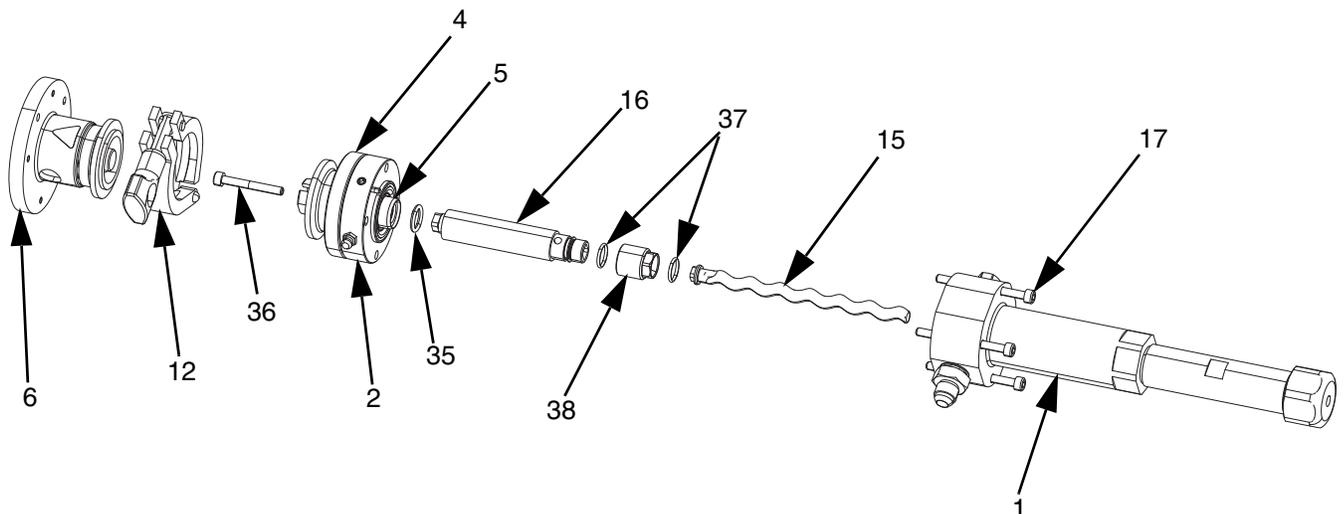


FIG. 10

Seal Replacement

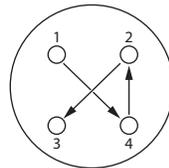
Disassembly



1. Perform the **Pressure Relief Procedure** on page 8.
2. Remove the pump by loosening the sanitary clamp (12) from the gear box adapter (6).
3. Remove the four screws (17) from the pump body (1) using a 4 mm Allen wrench.
4. Remove the cap screw (36) using a 4 mm Allen wrench.
5. Remove the bearing housing (4) and seal housing (2). Remove the rotor (15), coupler (16), and retaining nut (38) together from the pump body (1).
6. Remove the seal housing (2) from the bearing housing (4).
7. Remove the seal insert (3).
8. Remove the rotary seals (8) and o-rings (7) for replacement as needed.

Reassembly

1. Replace the o-rings (7) and rotary seals (8),
 2. Place the seal insert (3) into the seal housing (2).
- NOTE:** Pay careful attention to the direction of the rotary seals when reinstalling.
3. Connect the seal housing (2) and bearing shaft (5) to the bearing housing (4).
 4. Insert the end of the coupler (16) into the bearing shaft (5).
 5. Apply the blue adhesive provided to the cap screw (36) and replace it. Torque to 85-95 in-lbs to tighten.
 6. Replace the gear box adapter (6) and tighten the sanitary clamp (12).
 7. Attach the pump body (1). Apply grease to the four screws (17) and tighten in a star pattern to ensure each screw is tightened equally. Snug-tighten all four screws, then torque screws 1, 4, 2, and 3 to 28-31 in-lbs incrementally so they are fully tightened.



25B055, Series B Shown

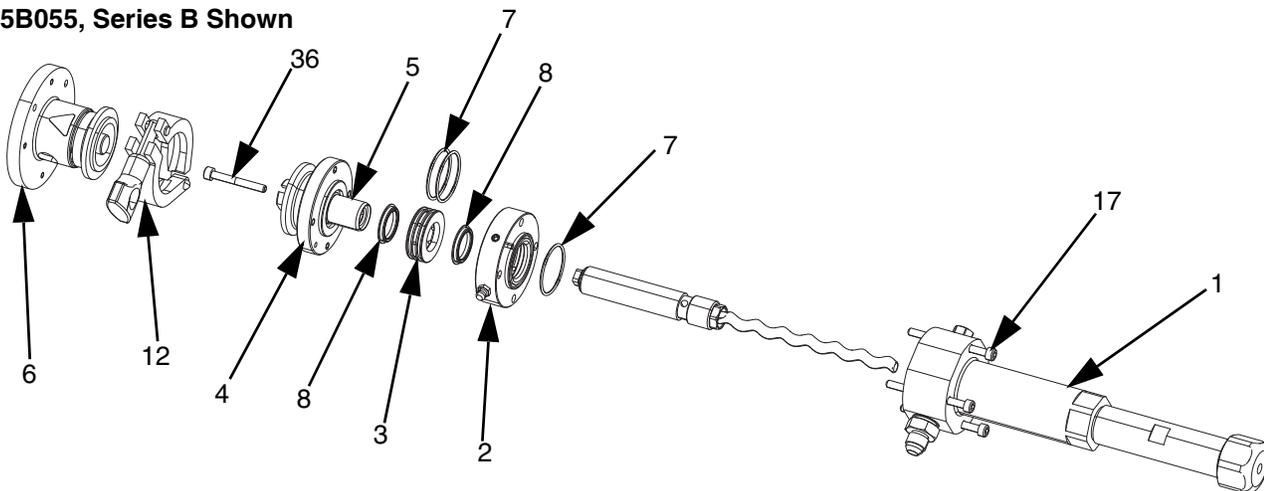


FIG. 11

Troubleshooting



1. Follow **Pressure Relief Procedure**, page 8, before checking or repairing the pump.
2. Check all possible problems and causes before disassembling the pump.

Problem	Cause	Solution
No or very little material is being pumped.	Worn rotor/stator	Replace rotor/stator.
	Material supply pressure not adequate.	Check feed system, ensure sufficient material is being supplied to pump.
Material is seeping out of seal housing.	Worn seal	Check/replace seals.
Material drools after dispense.	Worn rotor/stator	Replace rotor/stator.
	Material pressure too high	Check pressure to the pump to ensure it is within operating limits.
	No or insufficient snuffback	The pump will reverse the flow of material (snuffback), which is controlled by the system. Verify sufficient snuffback is enabled.

Parts

25B055 and 26B152, Series A

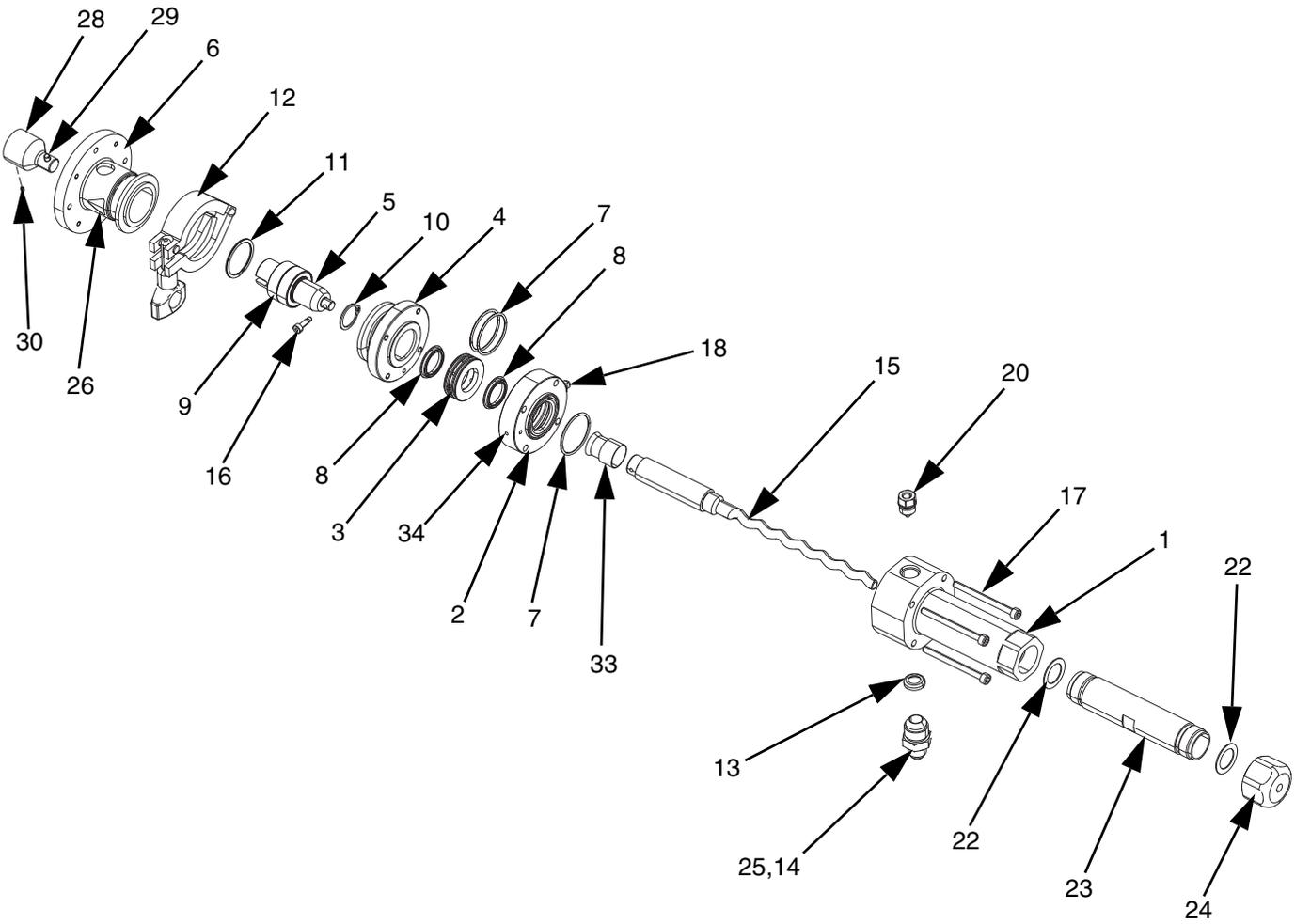


FIG. 12

25B192 and 25B193, Series A

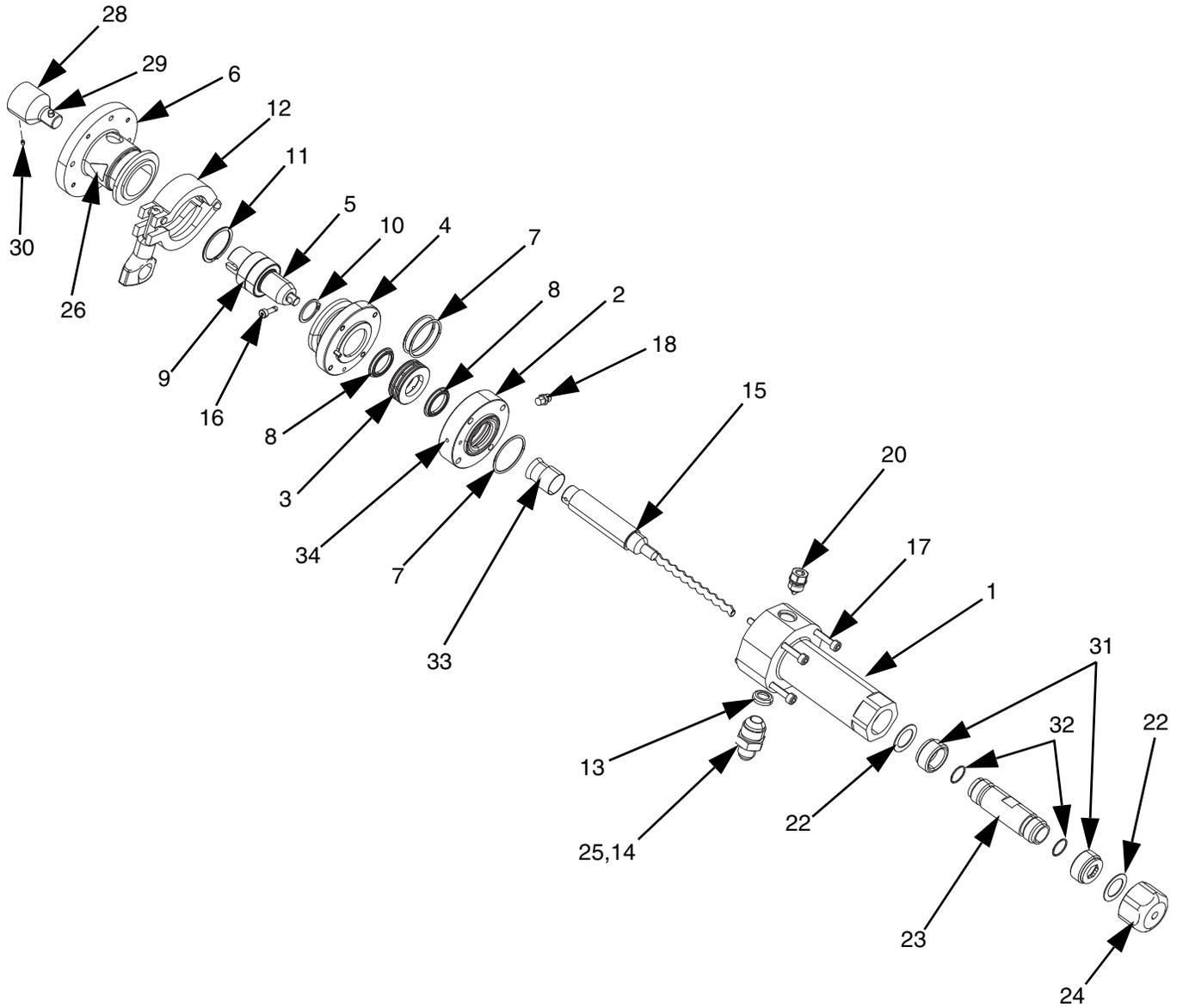


FIG. 13

25B055, 25B193, 25B192, and 26B152, Series A

Ref.	Part	Description	Quantity			
			25B055	25B193	25B192	26B152
1	25B114	KIT, housing, pc pump, 1.45 cc	1	1	1	1
2†	---	HOUSING, seal back, pc pump, assy	1	1	1	1
3	25B116	KIT, seal insert	1	1	1	1
4	25B117	KIT, housing, bearing	1	1	1	1
5✓	---	SHAFT, pc pump	1	1	1	1
6	25B118	KIT, coupler, gear box	1	1	1	1
7❖	122134	O-RING, 027, FX75	3	3	3	3
8❖	131510	SEAL, rotary, 20mm 10, uhmw pe	2	2	2	2
9✓	---	BEARING, dbl row, angular contact	2	2	2	2
10✓	131511	RETAINER, ring, ext, 25/32 dia, sst	1	1	1	1
11✓	127022	RING, retaining, spiral	1	1	1	1
12	118598	CLAMP, 1.5" sanitary	1	1	1	1
13◆	---	SEAT, 8 jic	1	1	1	1
14	125781	FITTING, union, 08 jic x 08 jic, sst	1	1	1	
	---	ROTOR, pc pump, 1.45 cc	1			1
15‡❁	---	ROTOR, pc pump, 1.00 cc, sst		1		
	---	ROTOR, pc pump, 0.30 cc, sst)			1	
16‡❁	---	SCREW, shoulder, 6-32 x 518	1			1
17	125386	SCREW, shcs, m5X60	4	4	4	4
18†	---	FITTING, grease, 1/4-28	1	1	1	1
20	B32250	KIT, bleed, pressure	1	1	1	1
22‡❁★❖❖	---	SEAL, washer, ptfе	2	2	2	2
	129426	STATOR, 1.45 cc, fkm, etched	1			1
23❁★	129425	STATOR, 1.00 cc, fkm, etched		1		
	129424	STATOR, 0.30 cc, fkm, etched			1	
24	25B119	KIT, adapter, end cap	1	1	1	1
25	126366	FITTING, union, 8 jic x 6 jic	1	1	1	1
26▲	15F744	LABEL, warning, iso pinch hazard	1	1	1	1
28⊗	---	COUPLER, shaft	1	1	1	1
29⊗	---	PIN, dowel, m5 x 22mm, alloy	1	1	1	1
30⊗	129647	SCREW, set, sh, cup, m3 x 4mm, sst	1	1	1	1
31❁★❖	---	ADAPTER, thread, mxф		2	2	
32‡❁★❖❖	---	O-RING, fkm, 1mm x 14.5mm		2	2	
33‡❁	18A815	SLEEVE, 25mm	1	1	1	1
34†	555537	SCREW, set, 1/4-28 x .313	2	2	2	2

--- Not available for individual sale.

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

† Parts included in Seal Housing Kit 25B115.

✓ Parts included in Shaft Bearing Kit 25E196.

❖ Parts included in Seal Kit 25E195.

◆ Parts available in Kit 25B010 (pack of 10).

‡ Parts included in Rotor Assembly Kits. See **Rotor Assembly Kits, Series A** on page 26.

❁ Parts included in Rotor Stator Kits. See **Rotor Stator Kits, Series A** on page 27.

★ Parts included in FKM Stator Kits. See **Stator Kits** on page 29.

❖ Parts included in Adapter Kit 25B238.

❖ Parts included in Seal Kit 25B321.

⊗ Parts included in Shaft Coupler Kit 26B134.

NOTE: Refer to **Series A Kits** on page 26 and **Series A and B Shared Kits** on page 29 for more information. Kits are purchased separately.

25B055, Series B

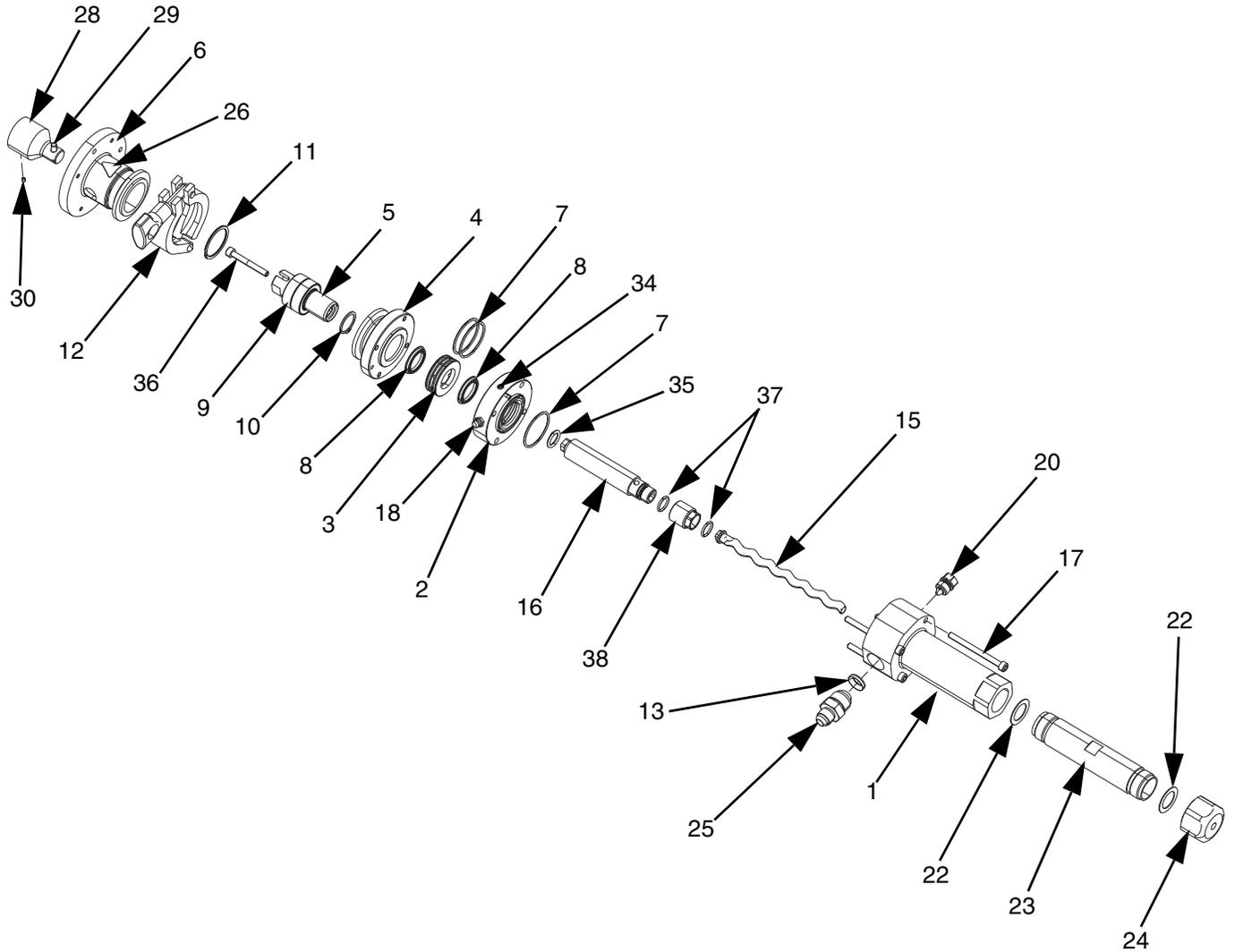


FIG. 14

25B192 and 25B193, Series B

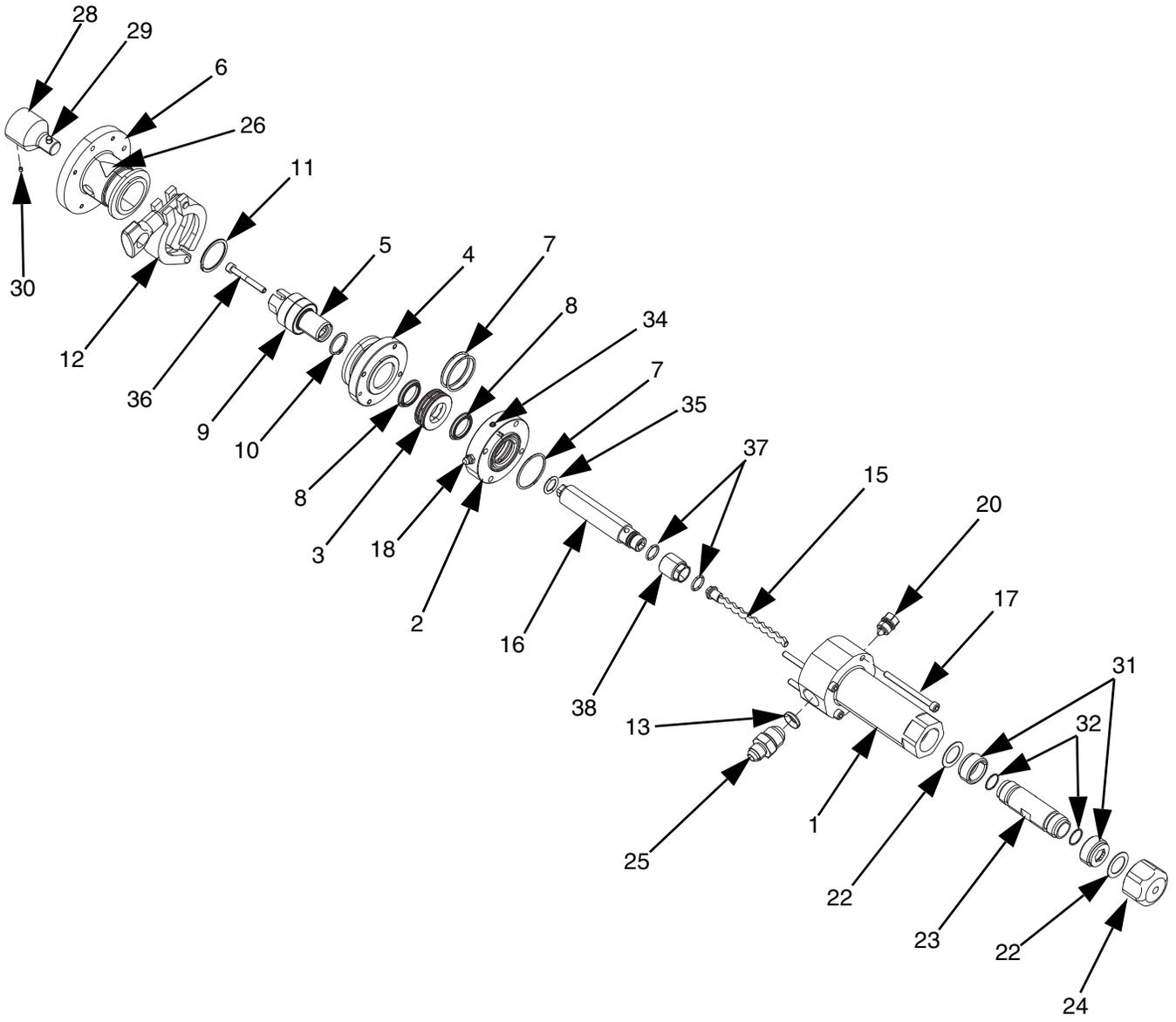


FIG. 15

25B055, 25B193, 25B192, Series B

Ref.	Part	Description	Quantity		
			25B055	25B193	25B192
1	25B114	KIT, housing, pc pump, 1.45 cc	1	1	1
2†	---	HOUSING, seal back, pc pump, assy	1	1	1
3	25B116	KIT, seal insert	1	1	1
4	25B117	KIT, housing, bearing	1	1	1
5✓	---	SHAFT, bearing, pc pump	1	1	1
6	25B118	KIT, coupler, gear box	1	1	1
7❖	122134	O-RING, 027, FX75	3	3	3
8❖	131510	SEAL, rotary, 20mm 10, uhmw pe	2	2	2
9✓	---	BEARING, dbl row, angular contact	2	2	2
10✓	131511	RETAINER, ring, ext, 25/32 dia, sst	1	1	1
11✓	127022	RING, retaining, spiral	1	1	1
12	118598	CLAMP, 1.5" sanitary	1	1	1
13◆	---	SEAT, 8 jic	1	1	1
	---	ROTOR, pc pump, 2 pc, 1.45 cc	1		
15‡❖	---	ROTOR, pc pump, 2 pc 1.00 cc		1	
	---	ROTOR, pc pump, 2 pc, 0.30 cc			1
16#	---	ADAPTER, u-joint, overmolded	1		
17	125386	SCREW, shcs, m5X60	4	4	4
18†	---	FITTING, grease, 1/4-28	1	1	1
20	B32250	KIT, bleed, pressure	1	1	1
22‡❖★❖❖	---	SEAL, washer, ptfe	2	2	2
	129426	STATOR, 1.45 cc, fkm, etched	1		
23❖★	129425	STATOR, 1.00 cc, fkm, etched		1	
	129424	STATOR, 0.30 cc, fkm, etched			1
24	25B119	KIT, adapter, end cap	1	1	1
25	126366	FITTING, union, 8 jic x 6 jic	1	1	1
26▲	15F744	LABEL, warning, iso pinch hazard	1	1	1
28⊗	---	COUPLER, shaft	1	1	1
29⊗	---	PIN, dowel, m5 x 22mm, alloy	1	1	1
30⊗	129647	SCREW, set, sh, cup, m3 x 4mm, sst	1	1	1
31❖★❖	---	ADAPTER, thread, mxl		2	2
32‡❖★❖❖	---	O-RING, fkm, 1mm x 14.5mm		2	2
34†	555537	SCREW, set, 1/4-28 x .313	2	2	2
35	157277	PACKING, o-ring	1	1	1
36	114196	SCREW, cap, socket, hd	1	1	1
37‡❖#	103610	PACKING, o-ring	2	2	2
38	---	NUT, retaining	1	1	1

--- Not available for individual sale.

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

† Parts included in Seal Housing Kit 25B115.

✓ Parts included in Shaft Bearing Kit 26A995.

❖ Parts included in Seal Kit 25E195.

◆ Parts available in Kit 25B010 (pack of 10).

‡ Parts included in Rotor Assembly Kits. See **Rotor Assembly Kits, Series B** on page 32.

❖ Parts included in Rotor Stator Kits. See **Rotor Stator**

Kits, Series B on page 33.

★ Parts included in FKM Stator Kits. See **Stator Kits** on page 29.

* Parts included in Adapter Kit 25B238.

❖ Parts included in Seal Kit 25B321.

⊗ Parts included in Shaft Coupler Kit 26B134.

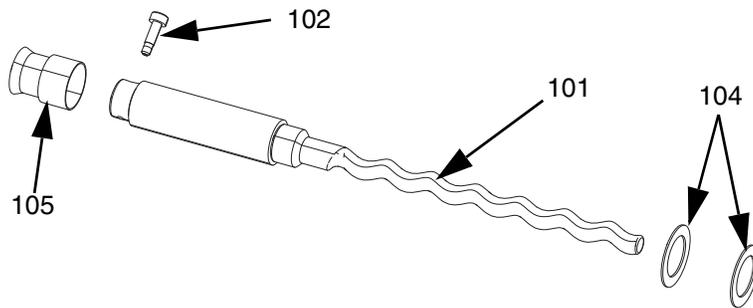
Parts included in Coupler Kit 26A996.

NOTE: Refer to **Series B Kits** on page 32 and **Series A and B Shared Kits** on page 29 for more information. Kits are purchased separately.

Series A Kits

Rotor Assembly Kits, Series A

Kit 25B226 (1.45 cc)



Kit 25B225 (1.00 cc)

Kit 25B224 (0.30 cc)

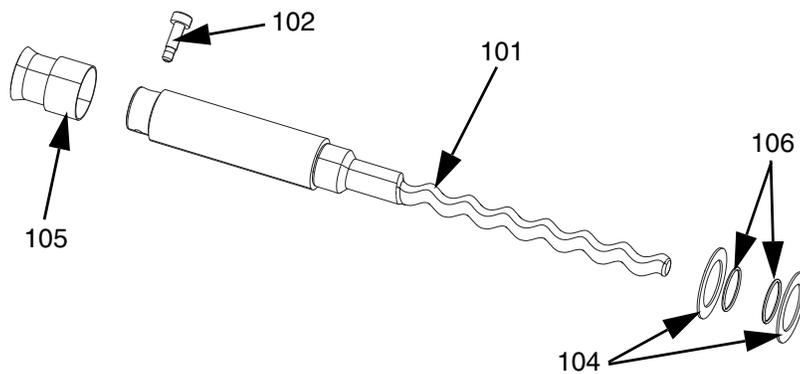


FIG. 16

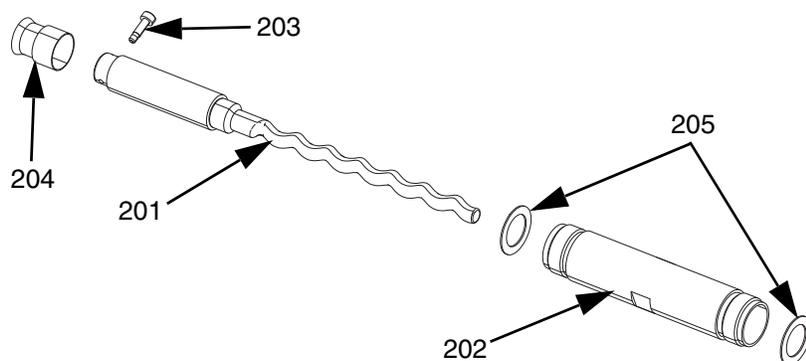
Ref.	Part	Description	Quantity		
			25B226	25B225	25B224
---	---	ROTOR, assy, 1.45 cc	1		
101	---	ROTOR, assy, 1.00 cc, sst		1	
---	---	ROTOR, assy, 0.30 cc, sst			1
102	---	SCREW, shoulder	1	1	1
103*	---	ADHESIVE, anaerobic	1	1	1
104	---	SEAL, washer, PTFE	2	2	2
105	18A815	SLEEVE, 25 mm	1	1	1
106	---	O-RING, FKM, 1 mm x 14.5 mm		2	2

--- Not available for individual sale.

* Not Shown

Rotor Stator Kits, Series A

Kit 25B237 (1.45 cc)



Kit 25B236 (1.00 cc)

Kit 25B235 (0.30 cc)

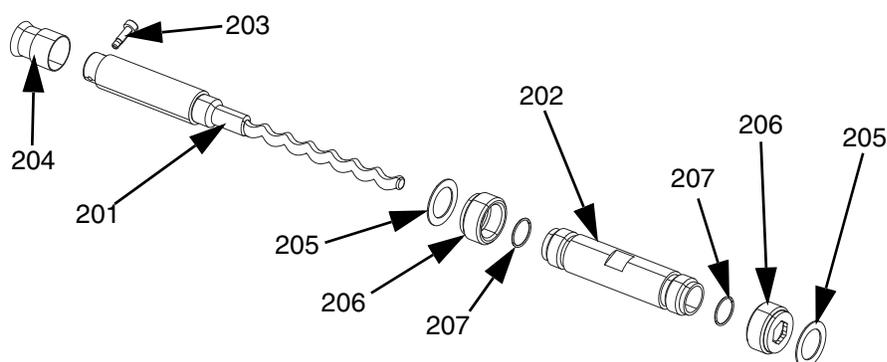


FIG. 17

Ref.	Part	Description	Quantity		
			25B237	25B236	25B235
---	---	ROTOR, assy, 1.45 cc	1		
201	---	ROTOR, assy, 1.00 cc		1	
---	---	ROTOR, assy, 0.30 cc			1
---	---	KIT, stator 1.46 cc/rev	1		
202	---	KIT, stator 1.00 cc/rev		1	
---	---	KIT, stator 0.30 cc/rev	2		1
203	---	SCREW, shoulder	1	1	1
204	18A815	SLEEVE, 25 mm	1	1	1
205	---	SEAL, washer, PTFE	2	2	2
206	---	ADAPTER, thread, mxf		2	2
207	---	O-RING, FKM, 1 mm x 14.5 mm		2	2
210*	---	ADHESIVE, anaerobic	1	1	1

--- Not available for individual sale.

* Not Shown

Shaft Bearing Kit, 25E196

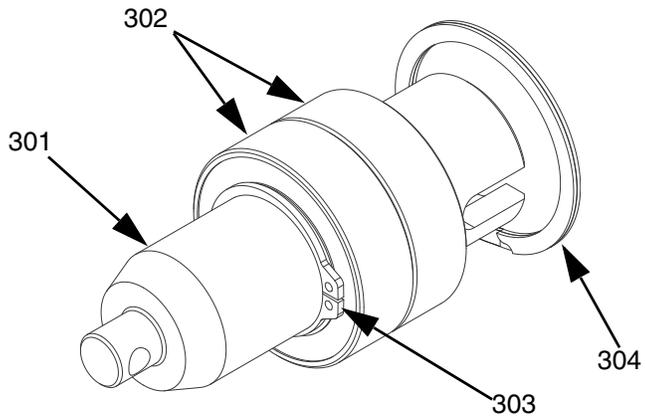


FIG. 18

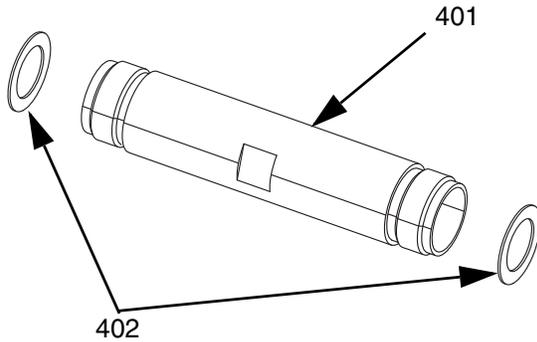
Ref.	Part	Description	Qty.
301	---	SHAFT, pc pump	1
302	---	BEARING, dbl row, angular contact	2
303	131511	RETAINER, ring, ext	1
304	127022	RING, retaining, spiral	1

--- Not available for individual sale.

Series A and B Shared Kits

Stator Kits

Kit 25B231 (1.45 cc)



Kit 25B228 (1.00 cc)

Kit 25B227 (0.30 cc)

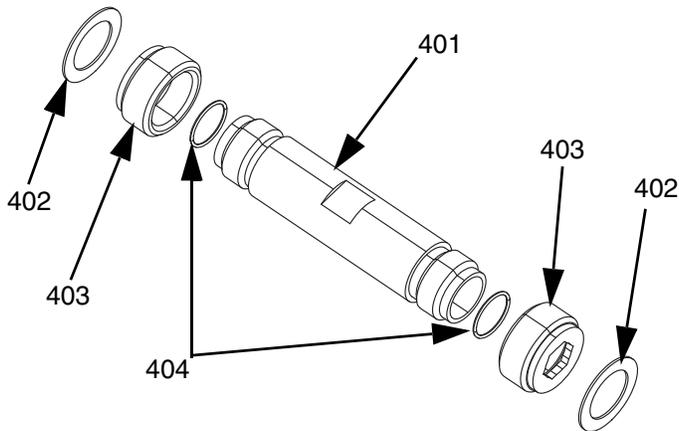


FIG. 19

Ref.	Part	Description	Quantity		
			25B231	25B228	25B227
---	---	KIT, stator 1.45 cc/rev	1		
401	---	KIT, stator 1.00 cc/rev		1	
---	---	KIT, stator 0.30 cc/rev			1
402	---	SEAL, washer, PTFE	2	2	2
403	---	ADAPTER, thread, mxf		2	2
404	---	O-RING, FKM, 1 mm x 14.5 mm		2	2

--- Not available for individual sale.

Adapter Kit, 25B238

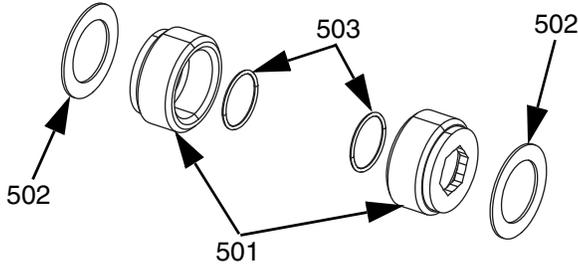


FIG. 20

Ref.	Part	Description	Qty.
501	---	ADAPTER, thread, mx	2
502	---	SEAL, washer, PTFE	2
503	---	O-RING, FKM, 1 mm x 14.5 mm	2

--- Not available for individual sale.

Seal Kit, 25B321 (for 0.30 cc and 1.00 cc Stators)

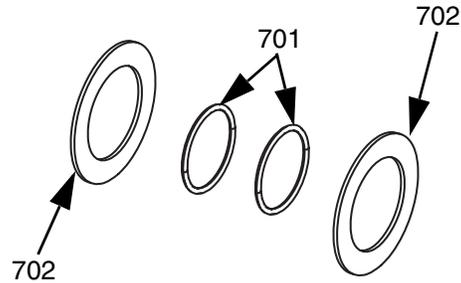


FIG. 22

Ref.	Part	Description	Qty.
701	---	O-RING, FKM, 1 mm x 14.5 mm	4
702	---	SEAL, washer, PTFE	4

--- Not available for individual sale.

Seal Kit, 25E195

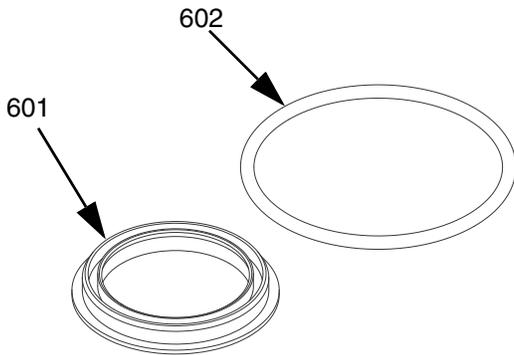


FIG. 21

Ref.	Part	Description	Qty.
601	131510	SEAL, rotary, 20 mm id, uhmw pe	2
602	122134	O-RING, 027, FX75	3

Shaft Coupler Kit 26B134

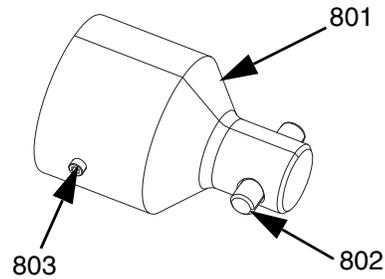


FIG. 23

Ref.	Part	Description	Qty.
801	---	COUPLER, shaft	1
802	---	PIN, dowel, m5 x 22mm, alloy	1
803	129647	SCREW, set, sh, cup, m3 x 4mm, sst	1

--- Not available for individual sale.

Seal Housing Kit, 25B115

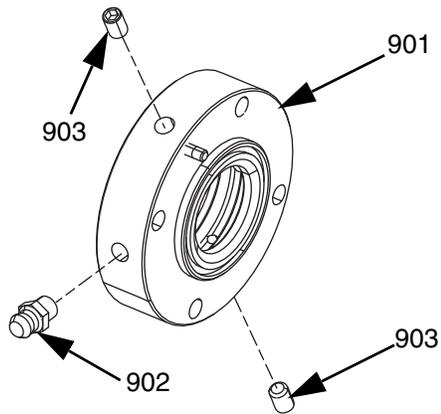


FIG. 24

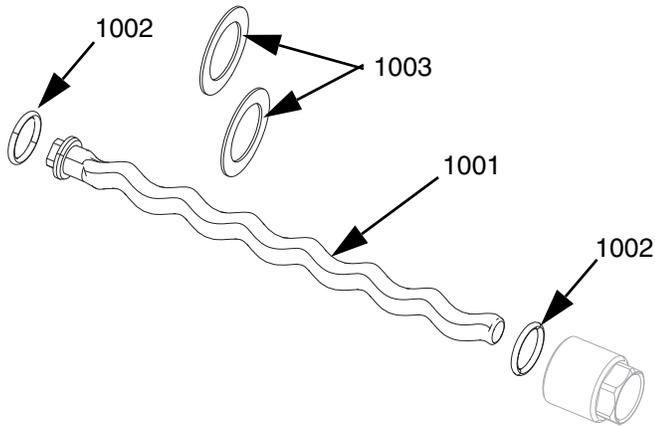
Ref.	Part	Description	Qty.
901	---	HOUSING, seal, back, pc pump	1
902	---	FITTING, grease, 1.4-28	1
903	555537	SCREW, set 1/4-28 x .313	2

--- Not available for individual sale.

Series B Kits

Rotor Assembly Kits, Series B

Kit 26A988 (1.45 cc)



Kit 26A987 (1.00 cc)

Kit 26A986 (0.30 cc)

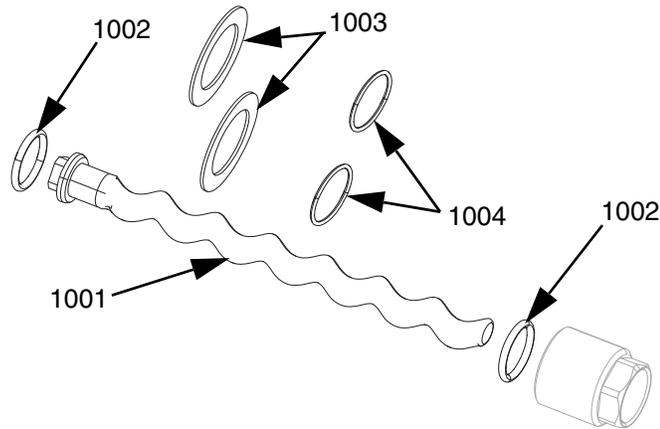


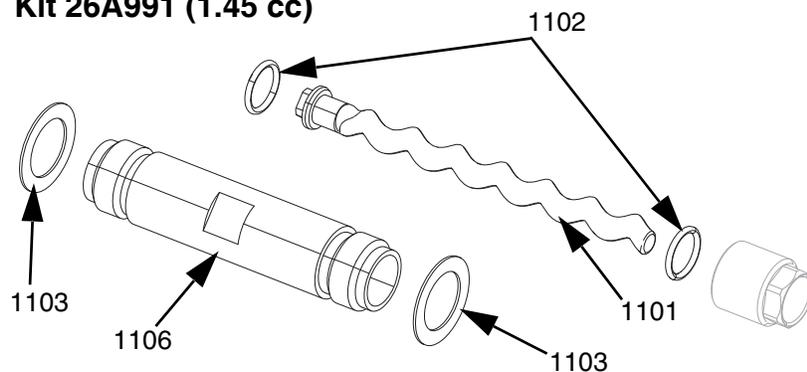
FIG. 25

Ref.	Part	Description	Quantity		
			26A988	26A987	26A986
---	---	ROTOR, pc pump, 2 pc, 1.45 cc	1		
1001	---	ROTOR, pc pump, 2 pc, 1.00 cc		1	
---	---	ROTOR, pc pump, 2 pc, 0.30 cc			1
1002	103610	PACKING, o-ring	2	2	2
1003	---	SEAL, washer, PTFE	2	2	2
1004	---	O-RING, fkm, 1 mm x 14.5 mm, id		2	2

--- Not available for individual sale.

Rotor Stator Kits, Series B

Kit 26A991 (1.45 cc)



Kit 26A990 (1.00 cc)

Kit 26A989 (0.30 cc)

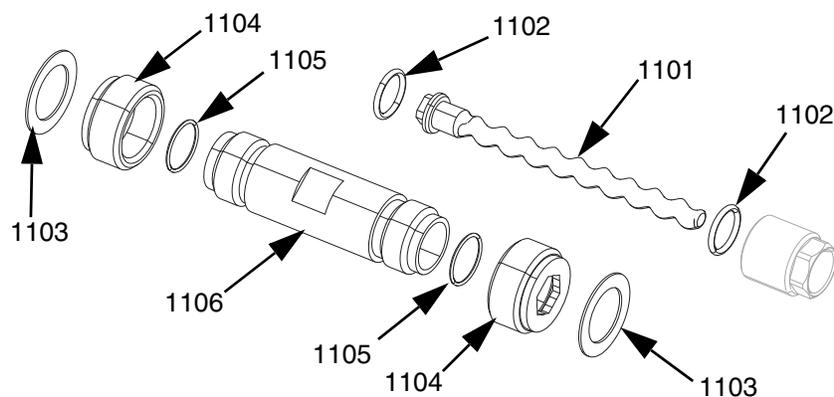


FIG. 26

Ref.	Part	Description	Quantity		
			26A991	26A990	26A989
---	---	ROTOR, pc pump, 2 pc, 1.45 cc	1		
1101	---	ROTOR, pc pump, 2 pc, 1.00 cc		1	
---	---	ROTOR, pc pump, 2 pc, 0.30 cc			1
1102	103610	PACKING, o-ring	2	2	2
1103	---	SEAL, washer, PTFE	2	2	2
1104	---	ADAPTER, thread, m x f, pc pump		2	2
1105	---	O-RING, fkm, 1 mm x 14.5 mm, id	2	2	2
---	---	KIT, stator, 1.45 cc/rev	1		
1106	---	KIT, stator, 1.00 cc/rev		1	
---	---	KIT, stator, 0.30 cc/rev			1
1107*	---	ADHESIVE, anaerobic	1	1	1

--- Not available for individual sale.

* Not Shown

Shaft Bearing Kit, 26A995

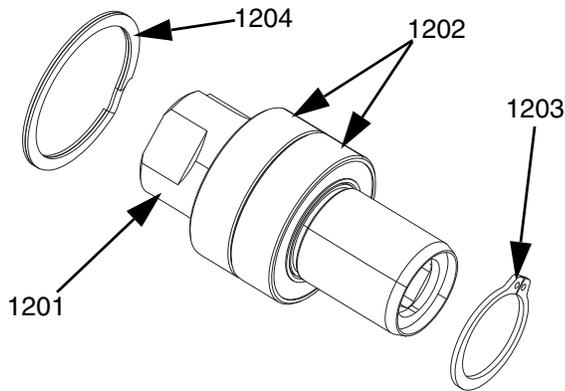


FIG. 27

Ref.	Part	Description	Qty.
1201	---	SHAFT, bearing, seal, pc pump	1
1202	---	BEARING, dbl row, angular contact	2
1203	131511	RETAINER, ring, ext	1
1204	127022	RING, retaining, spiral	1

--- Not available for individual sale.

Coupler Kit, 26A996

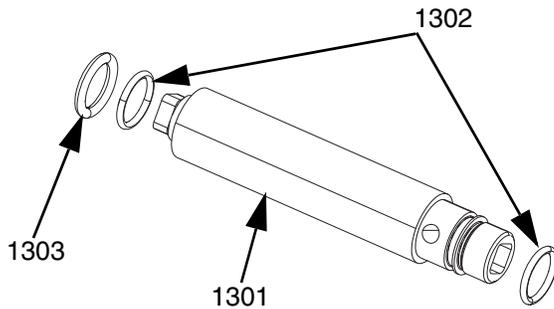


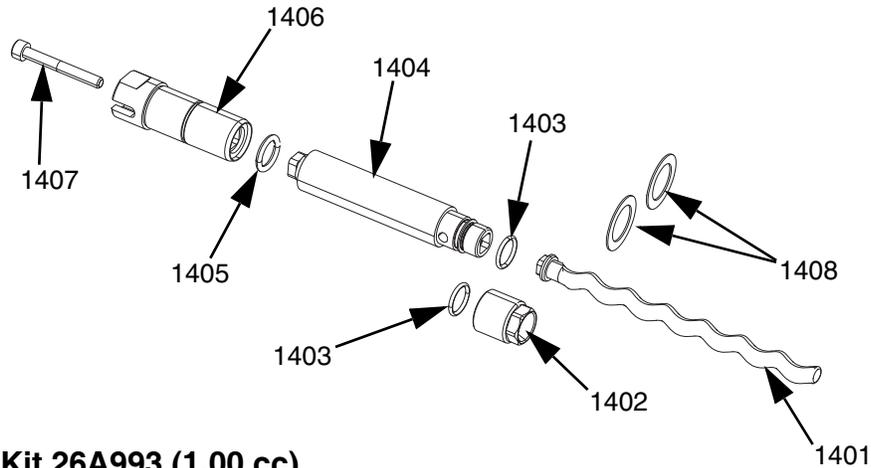
FIG. 28

Ref.	Part	Description	Qty.
1301	---	ADAPTER, u-joint, overmolded	1
1302	103610	PACKING, o-ring	2
1303	157277	PACKING, o-ring	1

--- Not available for individual sale.

Series A to Series B Upgrade Kits

Kit 26A994 (1.45 cc)



Kit 26A993 (1.00 cc)

Kit 26A992 (0.30 cc)

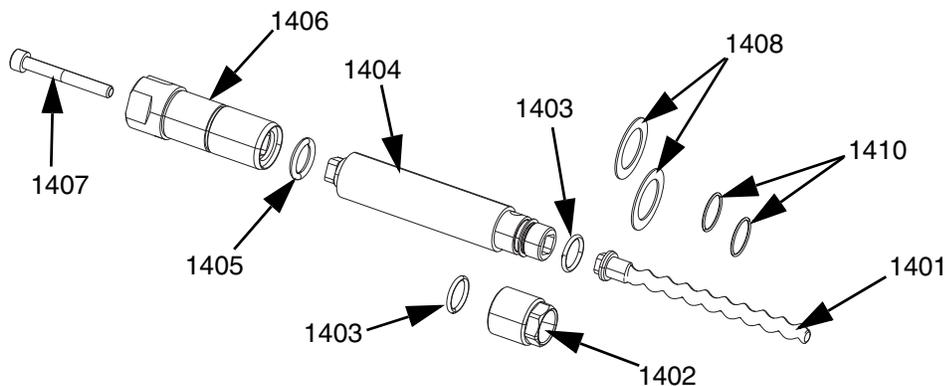


FIG. 29

Ref.	Part	Description	Quantity		
			26A994	26A993	26A992
---	---	ROTOR, pc pump, 2 pc, 1.45 cc	1		
1401	---	ROTOR, pc pump, 2 pc, 1.00 cc		1	
---	---	ROTOR, pc pump, 2 pc, 0.30 cc			1
1402	---	NUT, retaining	1	1	1
1403	103610	PACKING, o-ring	2	2	2
1404	---	ADAPTER, u-joint, overmolded	1	1	1
1405	157277	PACKING, o-ring	1	1	1
1406	---	SHAFT, bearing, seal, pc pump	1	1	1
1407	114196	SCREW, cap, socket, hd	1	1	1
1408	---	SEAL, washer, ptfе	2	2	2
1409*	---	ADHESIVE, anaerobic	1	1	1
1410	---	O-RING, fkm, 1 mm x 14.5 mm, id		1	1

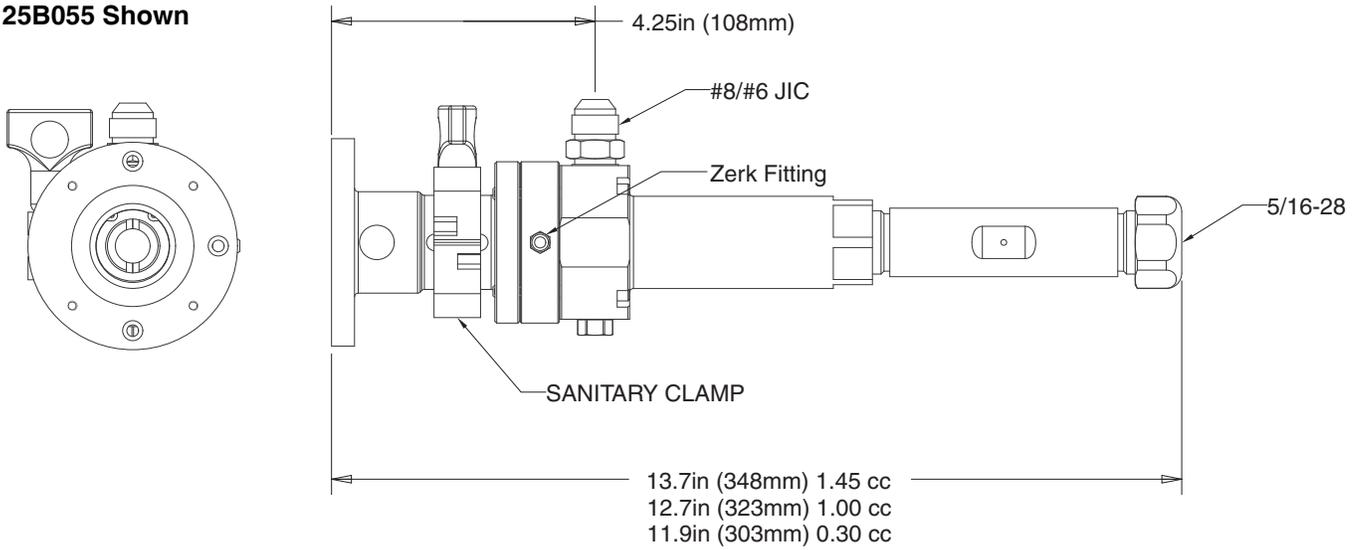
--- Not available for individual sale.

* Not Shown

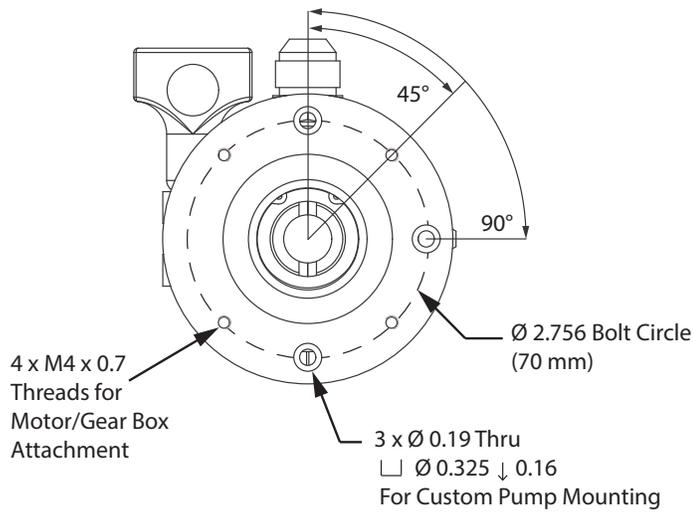
Dimensions

25B055, 25B193, 25B192, and 26B152

25B055 Shown

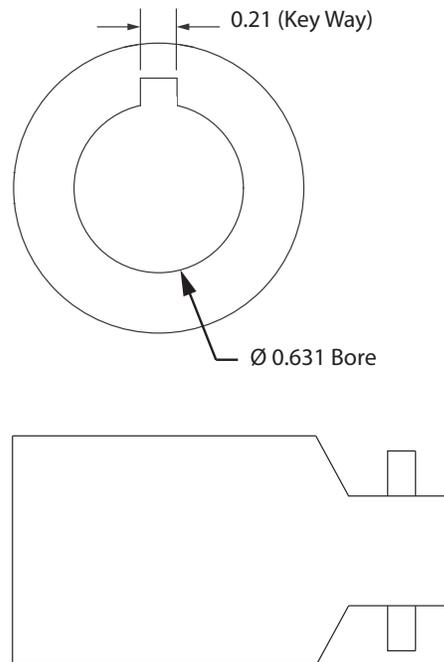


Motor/Gear Box Adapter



Shaft Coupler

NOTE: The shaft coupler is mounted to the gear box.



Technical Specifications

Progressive Cavity Pump		
Stepper Motor Information	24-75 VDC - 10A; powered by UniXact (not included)	
Displacement (cc/rev.)		
25B055 and 26B152	1.45 cc/rev	
25B193	1.00 cc/rev	
25B192	0.30 cc/rev	
	US	Metric
Maximum Operating Pressure		
All models	290 psi	2.0 MPa, 20 bar
Operating Temperature*		
Ambient temperature range	50°-120° F	10°-50° C
Maximum material temperature	140° F	60° C
Maximum pump speed		
All models	60 revolutions per minute	
Viscosity		
All models	1 - 1,000,000 mPa • s (depending on size)	
Wetted Parts		
All models	SST, FKM, UHMW, Alloy Steel, Acetal, Chrome Plating	
Notes		
* Refer to the Temperature section below for more information.		

NOTE: The maximum operating pressures stated in the table above must not be exceeded. These values may change, depending on the speed and viscosity.

Temperature

The minimum and maximum temperature depends on the sealing material. Please note that there is a possible change in the material's viscosity when the temperature changes.

Speed Recommendation / Viscosity Ranges

Without pre-pressure; p1 = 0 bar

These recommendations are only guideline values and depend greatly on the application and in situ conditions. The maximum permitted speed is crucial for the service life or wear of the pump. The inlet pressure must be selected within the permissible limits so that continuous filling of the pump is guaranteed.

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.

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Sealant and Adhesive Dispensing Equipment

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