Instructions-Parts

U-Cup Dura-Flo™ Lowers

3A0022E

ENG

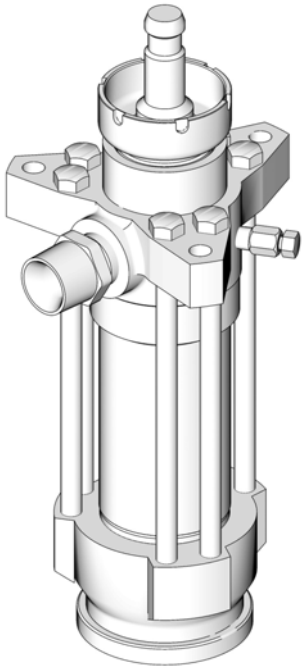
Carbon Steel and Stainless Steel Lowers, with Severe-Duty Rod and Cylinder. For professional use only.

Not for use in explosive atmospheres.

U-Cup Dura-Flo 1800 (430 cc) Lowers
U-Cup Dura-Flo 2400 (580 cc) Lowers

Important Safety Instructions
Read all warnings and instructions in this manual and all supplied manuals. Save all instructions.

See page 2 for model information. See page 15 for maximum working pressures.



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Contents

Models

Check your displacement pump's identification plate (ID) for the 6-digit part number of your displacement pump. Use the following matrix to define the construction of your displacement pump, based on the six digits. For example, displacement pump Part No. **L430S1** represents the displacement pump (**L**), output volume in cc per cycle (**430**), stainless steel material (**S**), and open wetcup (**1**).

L	430	S	1
First Digit	**Second, Third, and Fourth Digits**	**Fifth Digit**	**Sixth Digit**
L (displacement pump)	430cc	S - Stainless Steel	1 - Chromex Coating, U-cups, open wet cup
	580cc	C - Carbon Steel	2 - Chromex Coating, U-cups, enclosed wet cup (only for carbon steel lowers)

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 symbol refers to procedure-specific risk. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.

WARNING

FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. 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 arc).
- 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.
- Ground all equipment in the work area. See **Grounding** instructions.
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail.
- If there is static sparking or you feel a shock, **stop operation immediately.** Do not use equipment until you identify and correct the problem.
- Keep a working fire extinguisher in the work area.

SKIN INJECTION HAZARD

High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. **Get immediate surgical treatment.**

- Do not spray without tip guard and trigger guard installed.
- Engage trigger lock when not spraying.
- Do not point gun at anyone or at any part of the body.
- Do not put your hand over the spray tip.
- Do not stop or deflect leaks with your hand, body, glove, or rag.
- Follow the **Pressure Relief Procedure** when you stop spraying and before cleaning, checking, or servicing equipment.
- Tighten all fluid connections before operating the equipment.
- Check hoses and couplings daily. Replace worn or damaged parts immediately.

WARNING

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 Data** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS 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.
- 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.

MOVING PARTS HAZARD

Moving parts can pinch or amputate fingers and other body parts.

- 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.

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 MSDS's 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

You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. This 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.

Repair

Pressure Relief Procedure

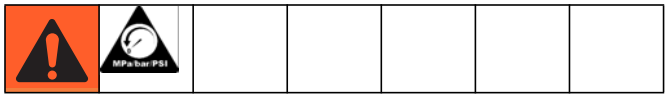
Trapped pressure can cause the pump to cycle unexpectedly, which could result in serious injury from splashing or moving parts.

1. Engage trigger lock.
2. Shutoff the pump:
   a. *For air-powered pumps,* close the bleed-type master air valve.
   b. *For hydraulic-powered pumps,* close the supply line shutoff valve (U) first, then close the return line shutoff valve (V).
3. Disengage the trigger lock.
4. Hold a metal part of the gun firmly to a grounded metal pail. Trigger the gun to relieve pressure.
5. Engage the trigger lock.
6. Open all fluid drain valves in the system, having a waste container ready to catch drainage. Leave drain valve(s) open until you are ready to spray again.
7. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen tip guard retaining nut or hose end coupling to relieve pressure gradually, then loosen completely. Clear hose or tip obstruction.

Required Tools

- Set of socket wrenches
- Set of adjustable wrenches
- 24 in. adjustable wrench
- Torque wrench
- Rubber mallet
- Arbor press
- Soft wooden block (approx. 1 square foot in size)
- Large vise, with soft jaws
- Thread lubricant
- Anti-seize lubricant 123174

Disassembly



Lay out all the removed parts in sequence, to ease reassembly. Clean all parts with a compatible solvent and inspect them for wear or damage. Refer to FIG. 2, page 8.

1. Flush the pump, if possible. Stop the pump at the bottom of its stroke. **Relieve the pressure**.
2. Disconnect the lower from the motor. See your separate pump assembly manual.
3. Stand the lower upright and clamp bottom inlet housing (15) in a large vise. Loosen, but do not remove, the packing nut (3). Remove the six long cap screws (18).
4. Lift the outlet housing (17) straight up off the lower. Be careful not to scratch the displacement rod (1) while removing the housing.
5. Lift the cylinder (7), displacement rod (1), and piston assembly off the intake housing (15).
6. Remove the seal (6), ball guide (12), intake ball (14), intake seat housing (15), and o-ring (24) from the intake housing (15). Inspect the ball (14) and the ball seat (A) on the housing (15) for wear or damage.
7. Remove the seal (6) from the bottom of the outlet housing (17). Unscrew the wetcup (3).

NOTE: Steps 8 and 9 apply only to lowers with enclosed wet cups (3).

8. On lowers with enclosed wet cups (3), use a hex wrench to remove the three screws (44) from wet cup cover (46) and remove cover. Drain and clean out the wet cup (3). See FIG. 1.

9. On lowers with enclosed wet cups (3), use o-ring pick to remove o-ring (42), and a flat head screw driver to remove wetcup seal (40) and wiper (41).

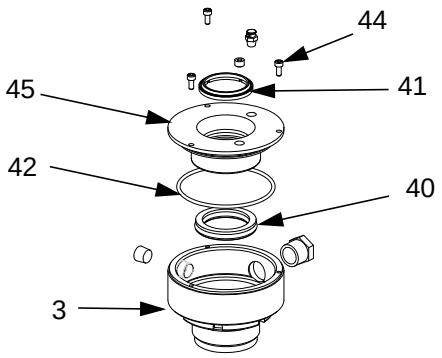


Fig. 1

10. Remove the adapter spacer (48), throat bearing (38), and u-cup (37) from the housing. Do not remove the outlet fitting (4) and o-ring (5) unless they need replacement.

11. Unscrew the bleeder valve plug (23) completely from the valve body (31). Clean the valve threads and the bleed hole. It is not necessary to remove the valve body.

NOTICE

To reduce the possibility of costly damage to the rod (1) and cylinder (7), first place the cylinder on a soft block of wood. Always use a rubber mallet or an arbor press to drive the rod (1) out of the cylinder (7). Never use a hammer to drive the rod.

12. Stand the cylinder (7) upright on a wooden block. Using a rubber mallet or an arbor press, drive the displacement rod (1) and piston assembly down into the cylinder as far as possible, then place the cylinder on its side and continue to drive the rod out the bottom until the piston comes free. Pull the rod and piston from the cylinder, being careful not to scratch the rod or cylinder.

13. Put the flats of the piston seat housing (11) in a vise. Unscrew the rod (1) from the housing (12), leaving the ball guide (9) assembled to the rod. Be careful that the piston ball (10) doesn't fall as you separate the housing (12) and ball guide (9).

14. Remove the u-cup (35) and bearing (36) from the piston seat housing (11). Inspect the ball (10) and ball seat (B) on the housing (12) for wear or damage.

15. Inspect the outer surface of the displacement rod (1) and the inner surface of the cylinder (7) for scoring or wear; replace if damaged. If replacing the rod, remove the ball guide (9) (see step 16).

NOTE: DO NOT remove the ball guide (9) from the displacement rod (1) unless either part needs replacement.

16. Place the flats of the ball guide (9) in a vise. Using a 24 in. adjustable wrench or 3/4 in. drive socket, unscrew the rod (1) from the ball guide.

Assembly

1. If the ball guide (9) was removed, place the flats of the displacement rod (1) in a vise. Apply anti-seize lubricant 123174 to the threads and mating faces of the rod and the ball guide. Screw the ball guide onto the rod, hand tight. Remove from the vise. See FIG. 2 on page 8.

2. Install the piston u-cup (35) and bearing (36) on the piston (12) in the correct order and orientation for your lower. See FIG. 2 on page 8.

3. Apply anti-seize lubricant 123174 to the threads and mating faces of the ball guide (9) and piston seat housing (11). Place the flats of the piston seat housing in a vise. Place the ball (10) on the piston seat. Screw the assembled rod (1) and ball guide (9) onto the piston assembly hand tight, then torque to 468 +/- 24 N•m (345 +/- 18 ft-lb).

4. Lubricate the o-ring (24) and seal (6). Install the o-ring on the intake seat housing (15). Install the intake seat housing (15), intake ball (14), ball guide (12), and seal (6) in the intake housing (15). Set the intake housing all the way into the vise.

NOTICE

To reduce the possibility of costly damage to the rod (1) and cylinder (7), first place the cylinder on a soft block of wood. Always use a rubber mallet or an arbor press to drive the rod (1) into the cylinder (7). Never use a hammer to drive the rod.

5. Use an arbor press to reinstall the rod (1) into the cylinder (7), as follows. (The cylinder is symmetrical, so either end may face up.) Lubricate the piston seals (P). With the piston end facing down, lower the rod into the cylinder. Start the piston into the cylinder as much as possible, then drive the rod and piston the rest of the way into the cylinder with the arbor press.

6. Place the cylinder (7) on the intake housing (15). Tap on the top of the displacement rod (1) with a rubber mallet, to seat the cylinder.

7. Lubricate the seal (6) and install it in the bottom of the outlet housing (17). Set the outlet housing on top of the cylinder (7). Apply thread lubricant to the six long cap screws (18). Install the cap screws through the outlet housing (17) and thread them loosely by hand into the intake housing (15). Tighten the cap screws oppositely and evenly, then torque to 258 +/- 41 N•m (190 +/- 30 ft-lb).

8. Install the bleeder valve plug (23). The plug has two sets of threads. Be sure to screw the plug fully into the valve body (31). Torque the plug to 34 +/- 3 N•m (25 +/- 2 ft-lb).

9. Lubricate the throat u-cup (37) and install over the displacement rod (1) into the outlet housing (17) as far as possible. Lubricate the threads and bottom face of the wetcup (3), and install it in the outlet housing (17) until the it bottoms out to press the u-cup into the outlet housing. Do not torque the wetcup yet.

10. Unthread the wetcup (3) completely from the outlet housing (17). Lubricate the bearing (38) and spacer (48). Install over the displacement rod (1), bearing first.

NOTICE

If the spacer is not installed with the bearing, the u-cup will be crushed when the wetcup is tightened. If this occurs, the u-cup cannot be used and must be replaced.

11. Verify that the spacer (48) has been installed above the bearing (38) and reinstall wetcup (3). Torque the wetcup (3) to 142 +/- 14 N•m (105 +/- 10 ft-lb).

NOTE: Steps 12 and 13 apply only to lowers with enclosed wet cups (3). See FIG. 1.

12. Install new o-ring (42), wet cup wiper (41), and wiper seal (40) into wet cup cover (46).

13. Carefully slide wetcup cover (46) over displacement rod. Line up holes in cover and wet cup. Insert screws (44). Use a hex head screwdriver to tighten screws.

NOTICE

Use caution when sliding wet cup cover (46) over displacement rod (1) to avoid damage to seals (41, 40).

NOTE: It is not ordinarily necessary to remove the outlet fitting (4) and o-ring (5). However, if they were replaced because of damage, lubricate the o-ring and place it on the fitting. Screw the fitting into the outlet housing (17). Torque to 163 +/- 22 N•m (120 +/- 16 ft-lb).

14. Reconnect the lower to the motor as explained in your separate pump assembly manual.

△1 Torque to 163 +/- 22 N•m (120 +/- 16 ft-lb).

△2 Torque to 142 +/- 14 N•m (105 +/- 10 ft-lb).

△3 Torque to 468 +/- 24 N•m (345 +/- 18 ft-lb).

△4 Torque oppositely and evenly to 258 +/- 41 N•m (190 +/- 30 ft-lb).

△5 Apply anti-seize lubricant to threads and mating faces.

△6 Lubricate.

△7 Apply thread lubricant.

△8 Use arbor press to drive into cylinder (7).

△9 Unscrew plug from valve housing and clean.

△10 Torque to 34 +/- 3 N•m (25 +/- 2 ft-lb).

△11 Used on lowers with stainless steel capscrews only.

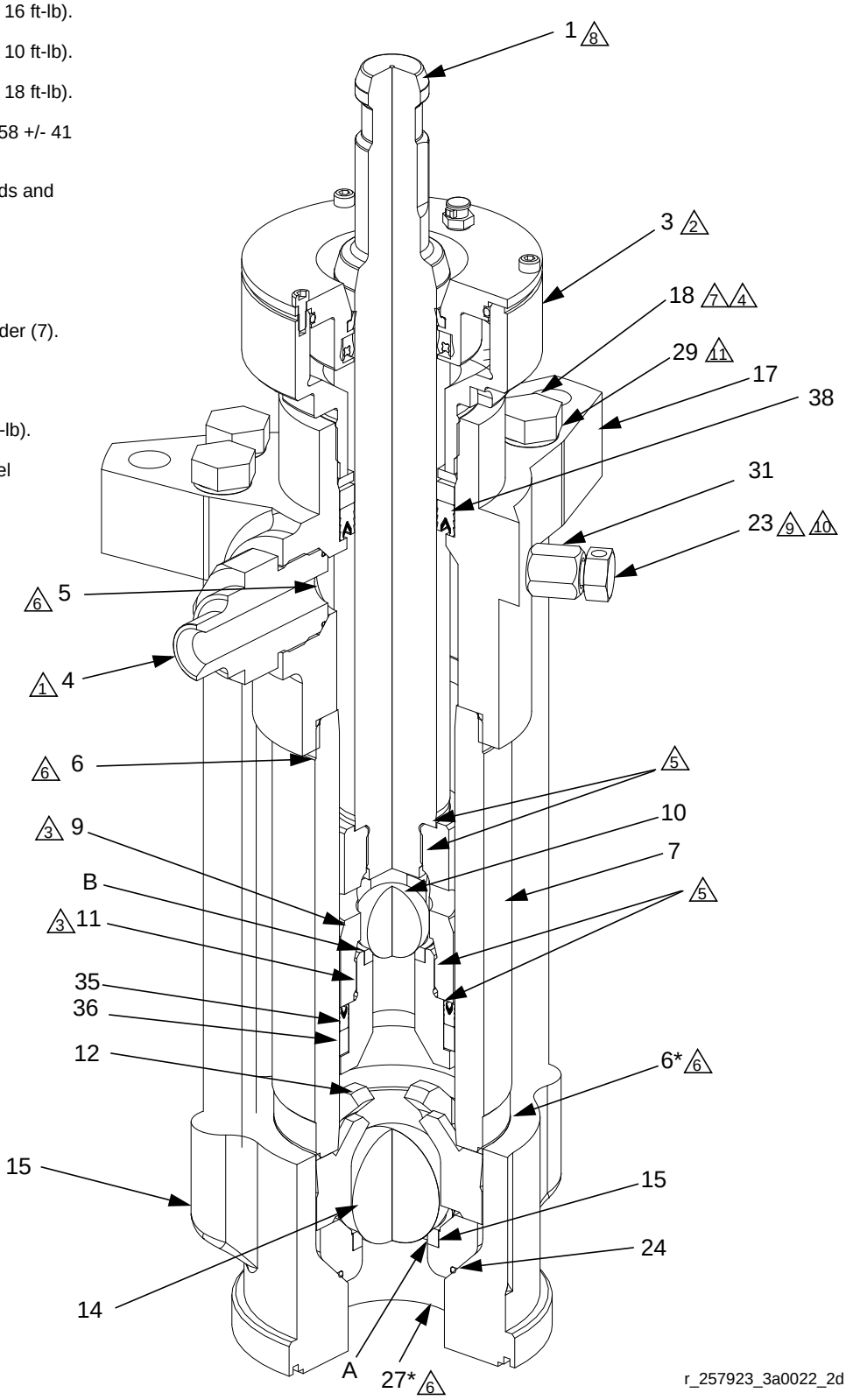
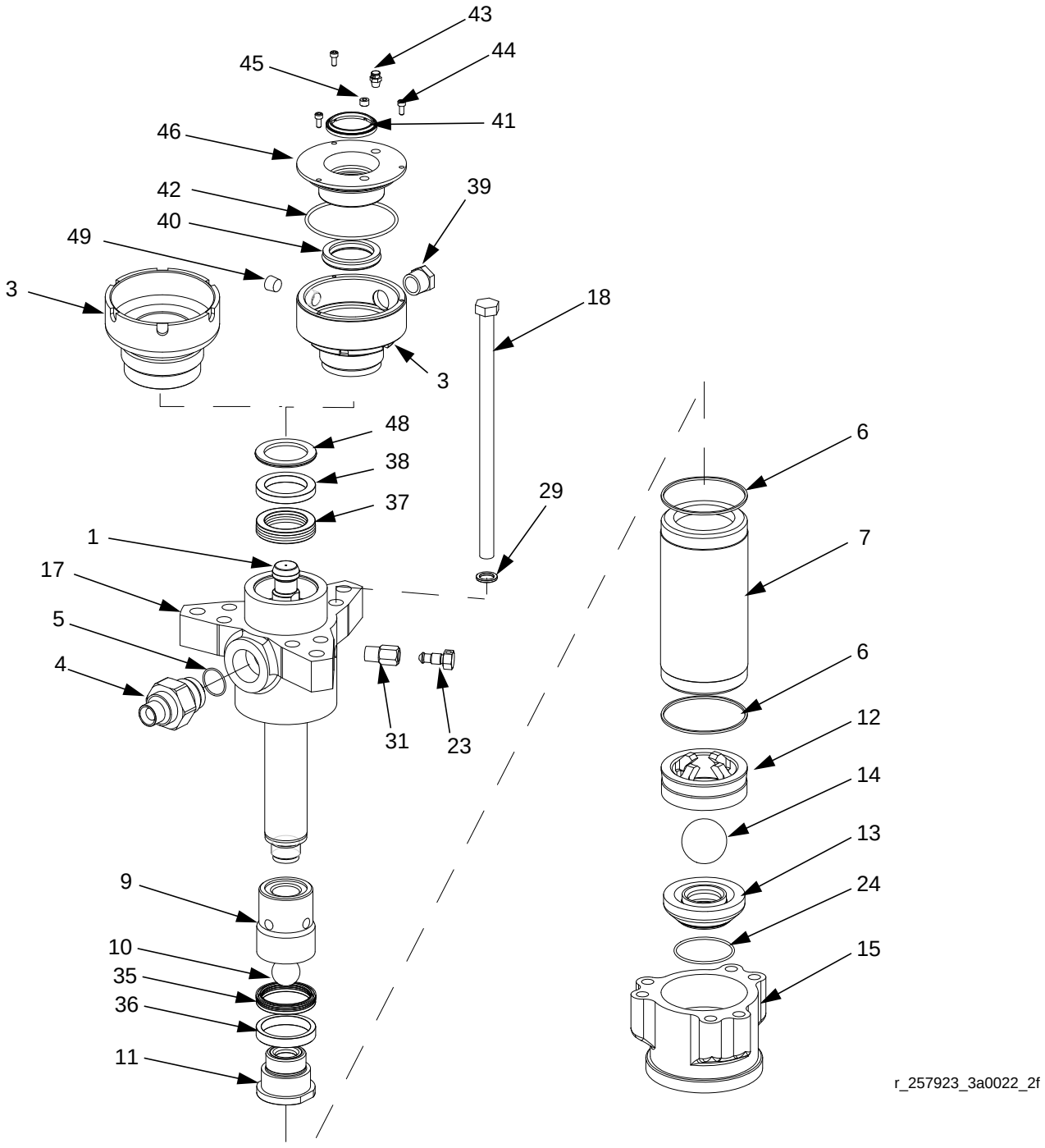


Fig. 2. Cutaway View

Parts

L430S2, L430S1, and L430C2, Dura-Flo 1800 (430 cc) Lowers
L580S2, L580S1, and L580C2, Dura-Flo 2400 (580 cc) Lowers



L430SX Dura-Flo 1800 (430 cc) Lowers
L580SX Dura-Flo 2400 (580 cc) Lowers

NOTE: See the parts drawing on page 9. The table below lists common parts of all the L430SX and L580SX lowers. For parts specific to your lower size and wetcup configuration see Varied Parts on page 11.

Common Parts

Ref. No.	Part No.	Description	Qty
4	15B316	FITTING, outlet	1
5	109213	O-RING; PTFE	1
6*	184072	SEAL; acetal	2
9	184283	GUIDE, ball, piston	1
12	184282	GUIDE, ball, intake	1
13	222838	HOUSING, valve	1
14	110294	BALL, intake; sst; 2 in. (50.8 mm)	1
15	184390	HOUSING, intake	1

Ref. No.	Part No.	Description	Qty
18	109470	BOLT, hex hd	6
20★	109202	SCREW, drive; not shown	4
23	190293	PLUG	1
24*	102857	O-RING; PTFE	1
27▲	172479	WARNING, tag	1
28★	184474	PLATE, warning	1
29	184618	WASHER	6
31	184392	HOUSING, valve	1

▲ *Replacement Danger and Warning labels, tags, and cards are available at no cost.*

* *Included with Seal and Bearing Kit. See Table 1 on page 14.*

★ *Included with replacement outlet housing (17).*

Varied Parts

NOTE: See the parts drawing on page 9. Part numbers vary by lower size and wetcup configuration. To find the part number used in your lower, read down the chart to find the desired ref. no., then read left to right to find the part number for your lower.

Ref. No.	Description	Lower Part No.				Qty
		L430S2	L580S2	L430S1	L580S1	
1	ROD, displacement; sst	24E311	24E312	24E311	24E312	1
3◆	WET-CUP	24E318	24E318	24U019	24U018	1
7	CYLINDER	184461	184003	184461	184003	1
10	BALL, piston; sst; 1.25 in. (31.8 mm)	102973		102973		1
	BALL, piston; sst; 1.5 in. (38.1 mm)		109220		109220	1
11	HOUSING, valve, seat	222795	222802	222795	222802	1
17	HOUSING, outlet; includes item 19 and 28	222917	222921	222917	222921	1
19	PLATE, designation	184446	184450	184446	184450	1
35*	SEAL, piston					1
36*	BEARING, piston					1
37*	SEAL, throat					1
38*	BEARING, throat					1
39◆	SIGHT GLASS	24E315	24E315			1
40†	SEAL, wetcup					1
41†	WIPER, wetcup					1
42†	O-RING	104095	104095			1
43	COVER, oil hole	102228	102228			1
44	SCREW, shcs, m5x12	117026	117026			3
45	PLUG, pipe	110208	110208			1
46◆	COVER, wetcup, PTFE	24E316	24E317			1
48*	SPACER, adapter	24E313	24E314	24E313	24E314	1
49	PLUG, wetcup	101748	101748			1

▲ *Replacement Danger and Warning labels, tags, and cards are available at no cost.*

* *Included with Seal and Bearing Kit. See Table 1 on page 14.*

† *Included with Enclosed Wetcup Seal Repair Kit. See Table 2 on page 14.*

◆ *Included with Enclosed Wetcup Conversion Kit. See Table 3 on page 14.*

L430C2 Dura-Flo 1800 (430 cc) Lowers
L580C2 Dura-Flo 2400 (580 cc) Lowers

NOTE: See the parts drawing on page 9. The table below lists common parts of the L430C2 and L580C2 lowers. For parts specific to your lower size and wetcup configuration see Varied Parts on page 13.

Common Parts

Ref. No.	Part No.	Description	Qty
3◆	15R050	CUP, wet, PTFE, cm500	1
4	184470	FITTING, outlet	1
5	109213	PACKING, o-ring	1
6	184072	SEAL, acetal	2
12	184406	GUIDE, ball	1
13	222794	HOUSING, valve	1
14	102974	BALL, metallic	1
15	184275	HOUSING, intake	1
17	184290	HOUSING, outlet, pump	1
18	109203	BOLT, hex hd	8
20★	100508	SCREW, drive	4

Ref. No.	Part No.	Description	Qty
23	190128	PLUG	1
24	102857	PACKING, o-ring	1
27▲	172479	TAG, warning	1
28★	184473	PLATE, warning	1
30	306877	CARD, warranty	1
31	165702	HOUSING, valve	1
39◆	120356	SIGHTGLASS	1
42†	104095	PACKING, o-ring	1
43	102228	COVER, oil hole	1
44	117026	SCREW, shcs m5x12	3
45	110208	PLUG, pipe, headless	1

▲ *Replacement Danger and Warning labels, tags, and cards are available at no cost.*

* *Included with Seal and Bearing Kit. See Table 1 on page 14.*

★ *Included with replacement outlet housing (17).*

† *Included with Enclosed Wetcup Seal Repair Kit. See Table 2 on page 14.*

◆ *Included with Enclosed Wetcup Conversion Kit. See Table 3 on page 14.*

Varied Parts

NOTE: See the parts drawing on page 9. Part numbers vary by lower size and wetcup configuration. To find the part number used in your lower, read down the chart to find the desired ref. no., then read left to right to find the part number for your lower.

Ref. No.	Description	Lower Part No.		Qty
		L430C2	L580C2	
1	ROD, piston	15Y796	15Y797	1
7	CYLINDER, pump	184461	184003	1
9	GUIDE, ball	184283	184297	1
10	BALL, metallic	102973	108001	1
11	HOUSING, valve, seat	222795	222802	1
19	PLATE, designation	184295	184449	1
35*	SEAL, piston	15Y716	15Y718	1
36*	BEARING, piston	15Y720	15Y722	1
37*	SEAL, throat	15Y717	15Y719	1
38*	BEARING, throat	15Y721	15Y723	1
40†	SEAL, wetcup cover	123027	121128	1
41†	WIPER, wetcup cover	122999	121132	1
46◆	COVER, wetcup, PTFE	15Y803	15R052	1
48*	SPACER, Dura-Flo	16A534	15Y937	1
49	PLUG, pipe sst	101748	101748	1

▲ *Replacement Danger and Warning labels, tags, and cards are available at no cost.*

* *Included with Seal and Bearing Kit. See Table 1 on page 14.*

† *Included with Enclosed Wetcup Seal Repair Kit. See Table 2 on page 14.*

◆ *Included with Enclosed Wetcup Conversion Kit. See Table 3 on page 14.*

Repair Kits

Table 1: Seal and Bearing Replacement Kits

	Reference Number and Quantity Included in Kit							
Lower No.	**Seal and Bearing Replacement Kit**	**6**	**24**	**35**	**36**	**37**	**38**	**48**
L430S2	24E212	2	1	1	1	1	1	1
L430S1	24E212	2	1	1	1	1	1	1
L580S2	24E213	2	1	1	1	1	1	1
L580S1	24E213	2	1	1	1	1	1	1

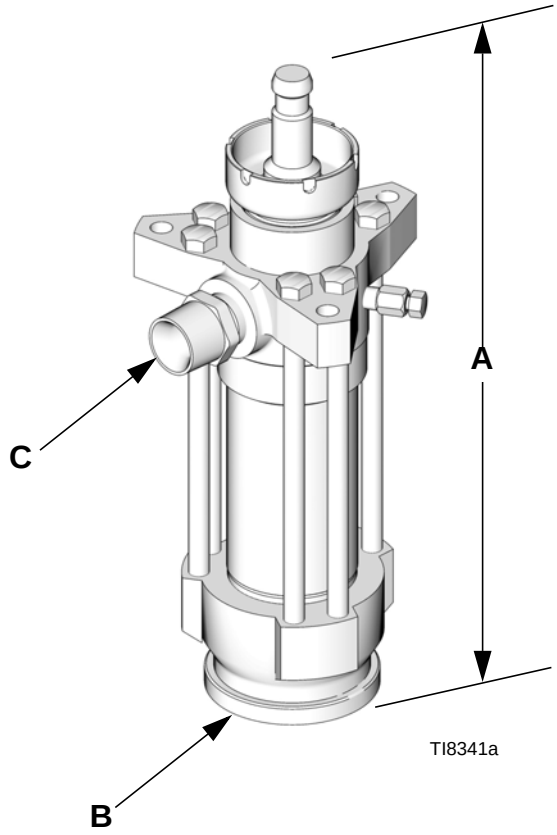
Table 2: Enclosed Wetcup Lid Seal Kits

	Reference Number and Quantity Included in Kit			
Lower No.	**Enclosed Wetcup Lid Seal Kit**	**40**	**41**	**42**
L430S2	24E215	1	1	1
L580S2	24E216	1	1	1

Table 3: Enclosed Wetcup Conversion Kits

	Reference Number and Quantity Included in Kit										
Lower No.	**Enclosed Wetcup Conversion Kits**	**3**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**49**
L430S2	24E217	1	1	1	1	1	1	3	1	1	1
L430S1	24E217	1	1	1	1	1	1	3	1	1	1
L580S2	24E218	1	1	1	1	1	1	3	1	1	1
L580S1	24E218	1	1	1	1	1	1	3	1	1	1

Dimensions



Model	A mm (in.)	B	C	Weight kg (lb)
Dura-Flo 1800	570 (22.5)	2 in. npt(f)	3/4 in. npt(m)	35 (75)
Dura-Flo 2400	570 (22.5)	2 in. npt(f)	3/4 in. npt(m)	35 (75)

Technical Data

Maximum fluid working pressure	Dura-Flo 1800 (430 cc): 4500 psi (31 MPa, 310 bar) Dura-Flo 2400 (580 cc): 3400 psi (24 MPa, 235 bar)
Lower effective area	Dura-Flo 1800 (430 cc): 18 cm^2 (2.79 $in.^2$) Dura-Flo 2400 (580 cc): 24 cm^2 (3.72 $in.^2$)
Fluid inlet size	2 in. npt(f)
Fluid outlet size	3/4 in. npt(m)
Wetted parts	*Stainless steel lowers:* E-nickel plated and PTFE coated carbon steel, 300 and 17-4 PH grades of stainless steel, tungsten carbide, acetal, PTFE UHMW Polyethylene *Carbon steel lowers:* Carbon steel, chrome, zinc and electroless nickel plating, 304, 440, and 17-4 PH grades of stainless steel, tungsten carbide, ductile iron, acetal

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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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: 612-623-6921 or **Toll Free:** 1-800-746-1334 **Fax:** 330-966-3006

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