

# 15H874 Slider Cylinder Rebuild Kit

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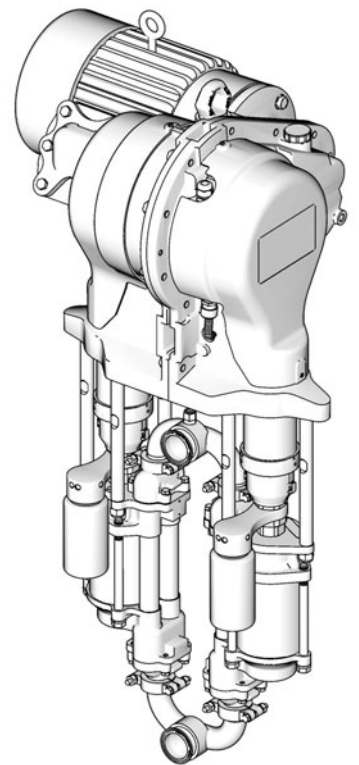
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To rebuild one slider cylinder assembly on E-Flo<sup>®</sup> 4-Ball Piston Pumps.  
For professional use only.



**Important Safety Instructions**

Read all warnings and instructions in this manual and in E-Flo Repair-Parts manual 311594. Save these instructions.



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# Pressure Relief Procedure

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

1. Set START/STOP switch to STOP.
2. Push in SECURE DISABLE switch.
3. Open the back pressure regulator and all fluid drain valves in the system, having a waste container ready to catch drainage. Leave open until you are ready to pressurize system again.
4. Check that pressure gauges on fluid supply and return lines read zero. If gauges do not read zero, determine cause and carefully relieve pressure by VERY SLOWLY loosening a fitting. Clear obstruction before pressurizing system again.

## Kit Parts

**NOTE:** Slider Cylinder Rebuild Kit 15H874 includes parts to rebuild one slider cylinder assembly. Order two kits to rebuild both slider cylinder assemblies. Parts included in the kit are marked with an asterisk, for example (2\*). Use all the new parts in the kit.

Ref. No.	Part No.	Description	Qty
2*	n/a	CYLINDER, slider	1
8*	n/a	BEARING, slider	2
15*	108683	NUT, lock, hex	3
16*	120351	GASKET, sanitary	4
31*	100664	SCREW, set, socket-head; 1/4-20 x 1/2 in. (13 mm)	1
41*	111316	O-RING; chemically resistant fluoroelastomer	1

Parts designated n/a are not available separately.

# Kit Installation

## Disassembly

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1. Jog the motor to bring the lower on the side being repaired to the bottom of its stroke. This provides access to the coupling nut (14).
2. Relieve pressure, page 2.
3. Remove the 2-piece shield (72) by inserting a screwdriver straight into the slot, and using it as a lever to release the tab. Repeat for all tabs. **Do not** use the screwdriver to pry the shields apart.
4. See FIG. 1. Place a 3/4 in. wrench on the slider piston (9) flats (just above the coupling nut), to keep the slider piston/connecting rod from turning when you are loosening the coupling nut (14). Orient the wrench so it is braced against one of the tie rods (3). Applying excessive force to the slider piston/connecting rod can shorten the life of the lower pin bearing.

Hold slider piston (9) flats with 3/4 in. wrench, and brace against tie rod (3).

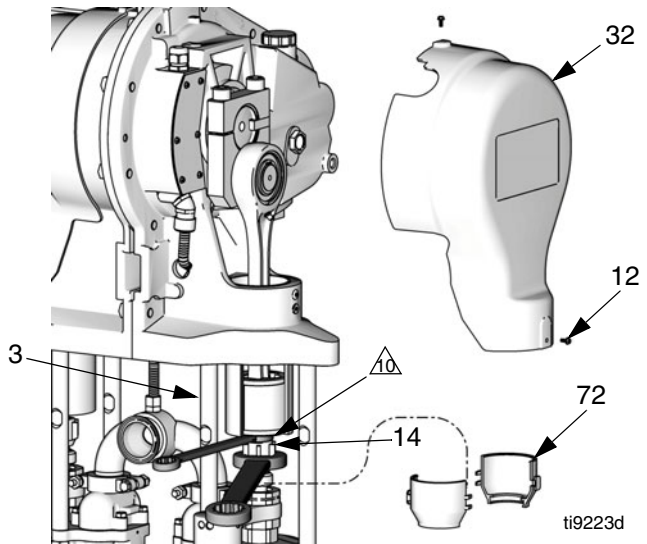


FIG. 1. Remove Coupling Nut

5. Using a 1-5/8 in. open-end wrench, unscrew the coupling nut (14) from the slider piston (9) and let it slide down onto the pump piston rod. Be careful not to lose the collars (13).
6. Shut off electrical power and allow the unit to cool.
7. Disconnect the fluid inlet and outlet lines from the pump. Plug the ends to prevent fluid contamination.
8. See FIG. 2. *On pumps with a sensor circuit:* At the pump outlet manifold (17), loosen the transducer nut (M) and unscrew the adapter (42) from the manifold. Remove the transducer (25a) from the manifold port. Remove the existing o-ring (41) and discard.
9. Loosen the clamps (18) at the inlet and outlet manifolds (17). Remove the manifolds and gaskets (16).
10. Remove the coupling nut (14) and collars (13) from the piston rods (PR).
11. Unscrew the locknuts (15). Remove the lower (22).
12. Remove two screws (12) and the cover. FIG. 1 shows the cover (32) on the side opposite from the motor; the motor side cover is (21).
13. Remove the setscrew (31). Unscrew the slider cylinder (2) from the gear reducer (1).
14. Remove the bearings (8) from the slider piston (9).

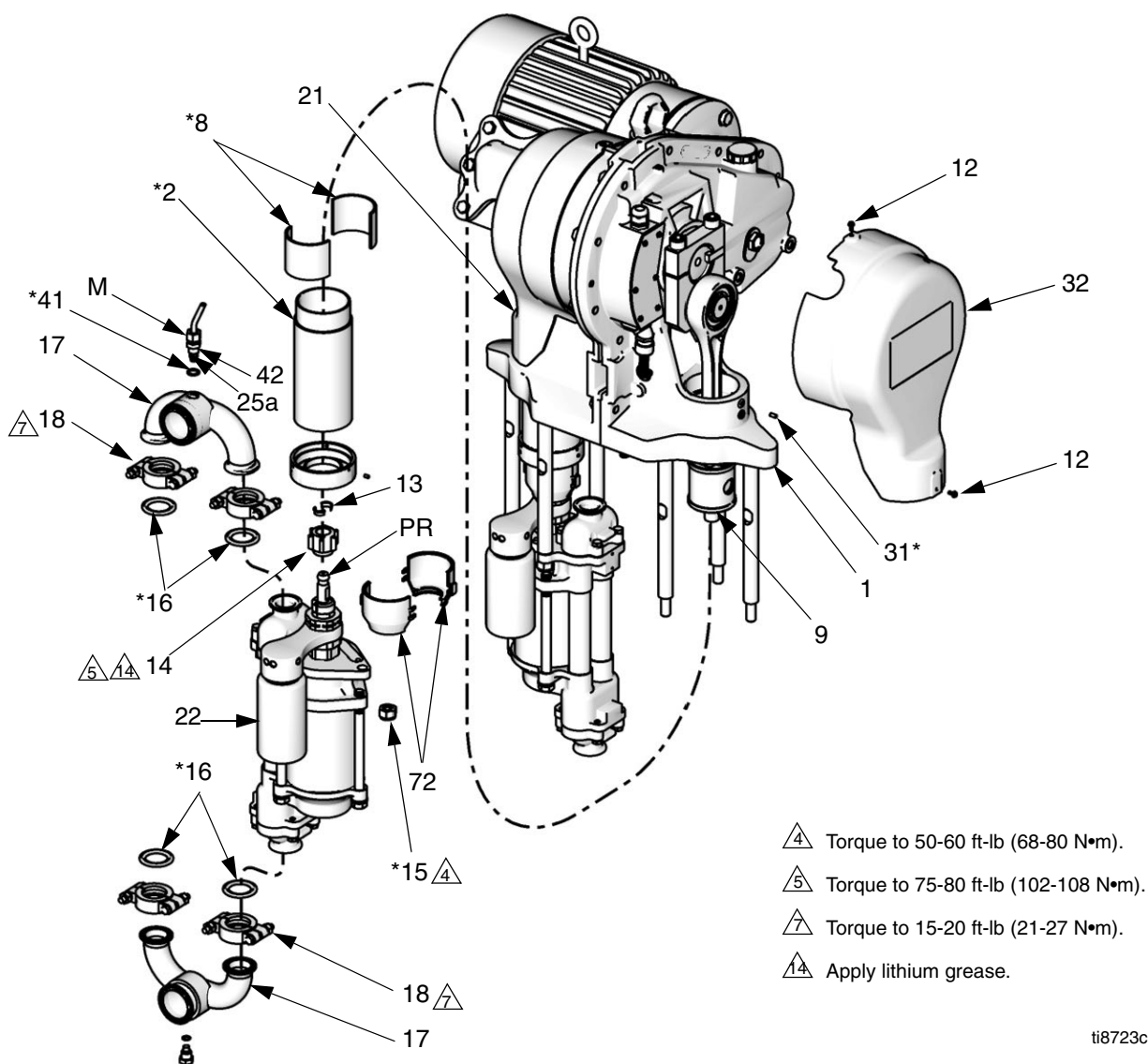
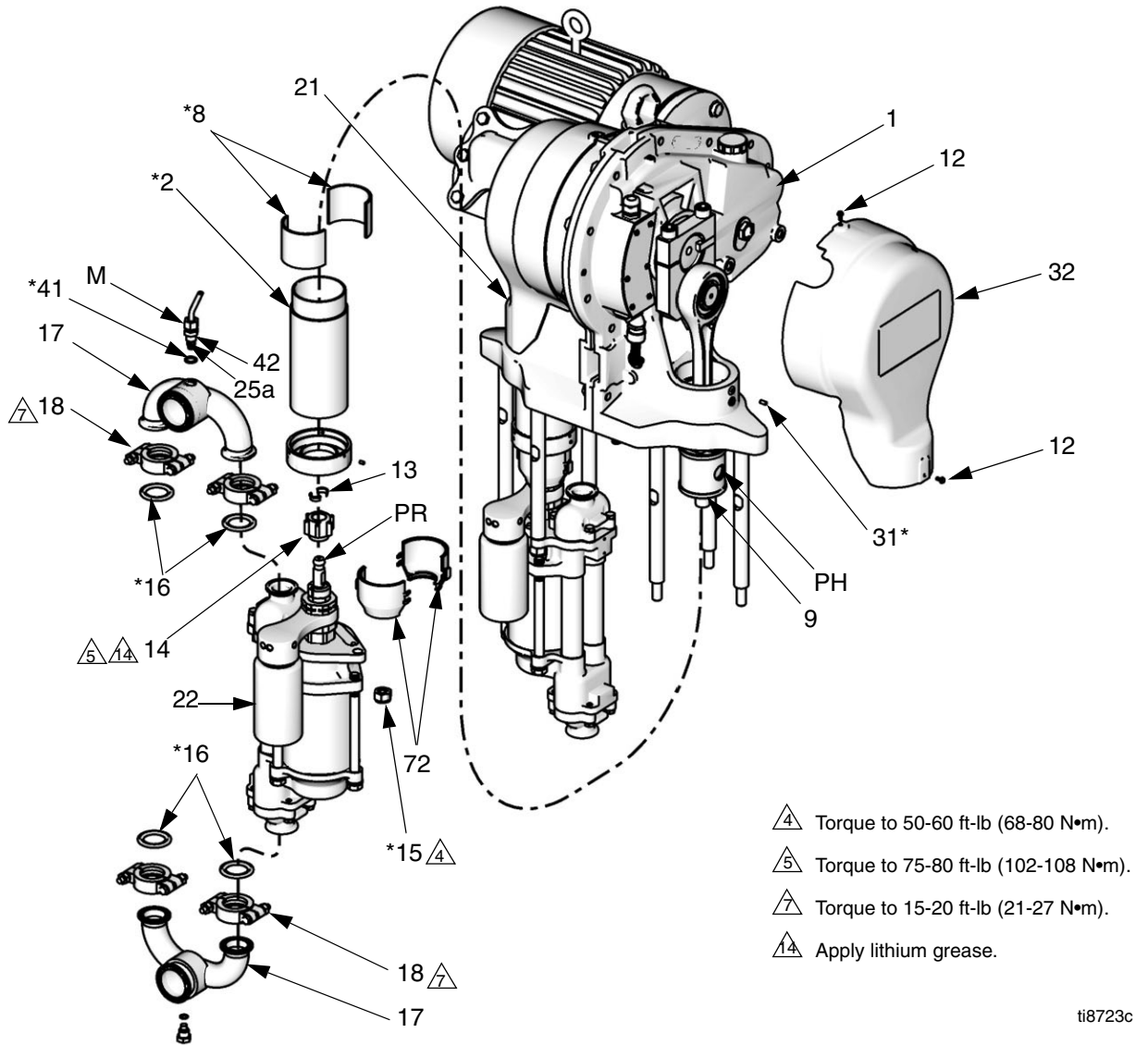


FIG. 2: Slider Cylinder Rebuild Kit

## Reassembly

1. See FIG. 3. Install the two new bearings (8\*) on the slider piston (9). The joints between the bearings must align with the pin hole (PH) in the slider piston.
2. Screw the slider cylinder (2\*) into the gear reducer (1). Torque to 15-20 ft-lb (21-27 N•m). Install the set-screw (31\*). Torque to 30-35 in-lb (3.4-3.9 N•m).
3. Install two screws (12) and the cover (32 is shown; use 21 on the motor side).
4. Install the coupling nut (14) on the lower's piston rod (PR).
5. Orient the lower (22) to the gear reducer (1) as shown. Position the lower on the tie rods (3). Screw the tie rod locknuts (15\*) included in the kit onto the tie rods handtight.
6. Assemble the inlet and outlet manifolds (17) to the lower, using new gaskets (16\*). Torque the clamps (18) to 15-20 ft-lb (21-27 N•m).
7. Torque the locknuts (15\*) to 50-60 ft-lb (68-80 N•m).
8. *On pumps with a sensor circuit:* Install a new black o-ring (41\*) on the transducer (25a). Insert the transducer into the outlet manifold (17). Torque the adapter (42) first, then the nut (M) to 15-20 ft-lb (21-27 N•m).
9. Ensure that the collars (13) are in place in the coupling nut (14).
10. Place a 3/4 in. wrench on the flats of the slider piston (9), to keep it from turning when you are tightening the coupling nut (14). Orient the wrench so it is braced against one of the tie rods (3) or the pump stand. Tighten the coupling nut (14) onto the slider piston (9) and torque to 75-80 ft-lb (102-108 N•m).
11. Install the shields (72) by engaging the bottom lips with the groove in the wet-cup cap. Snap the two shields together.
12. Turn on power and jog the motor to repeat procedure for the other lower.
13. Flush and test the pump before reinstalling it in the system. Connect hoses and flush the pump. While it is pressurized, check for smooth operation and leaks. Adjust or repair as necessary before reinstalling in the system.



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**FIG. 3: Slider Cylinder Rebuild Kit**

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