



## ToughTek<sup>®</sup> S340e Pump Lower Conversion Kit

3A3439D  
EN

*Kit to convert an F340e pump lower to an S340e pump lower. For professional use only.*

*Not approved for use in explosive atmospheres or hazardous locations.*

### Model 25A178

Kit, conversion, F340e pump lower to S340e pump lower

*600 psi (4.13 MPa, 41.3 bar) Maximum Fluid Working Pressure*








#### IMPORTANT SAFETY INSTRUCTIONS

Read all warnings and instructions in the main system manual. Save these instructions.

### Related Manuals:

Part	Manual
3A3109	ToughTek F340e Portable Fireproofing Pump
3A3437	ToughTek S340e Portable Stucco Pump

# Replace Pump Components

				
<b>PRESSURIZED FLUID HAZARD</b>				
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 <b>Pressure Relief Procedure</b> when you stop pumping, before cleaning, chucking or servicing the equipment, and before you perform a pump conversion.				

Additional component references may be found in **Figure 5** (page 4).

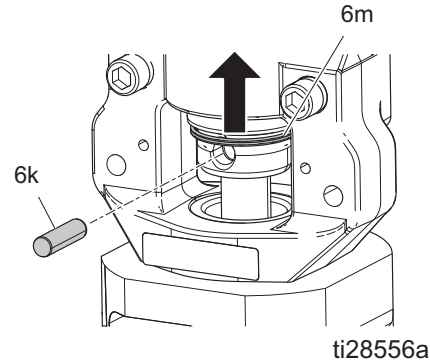
1. Perform the **Flush** procedure in the ToughTek™ S340e or F340e Operation manual.
2. Before following the pump lower replacement procedure, make sure the pump is in the down position and perform the **Pressure Relief Procedure** in the ToughTek™ S340e or F340e Operation manual.
3. Disconnect the power.
4. Disconnect the material hose.
5. Remove the outlet fittings from the pump lower outlet.
6. Remove the hopper. See ToughTek™ S340e or F340e Operation manual for complete instructions.
7. Remove the inlet housing ball guide (3) by removing the lower inlet screws (10), nuts (16), and clamps (2). See **Figure 5** (page 4).

**NOTE:** The weight of the inlet housing will cause it to fall once the clamps are removed. Make sure to hold or support the housing so it does not fall.

8. Remove the inlet ball stop (4) and cylinder o-ring (28). Set the cylinder o-ring aside to reuse. Unthread the inlet housing (9) from the inlet housing ball guide (3).
9. Remove the seat (26) and seat o-ring (22).
10. Remove the cylinder tube (5) by removing the upper inlet screws (10), nuts (16), and clamps (2). Pull the cylinder off the piston assembly. Set the cylinder o-ring (28) aside to reuse.

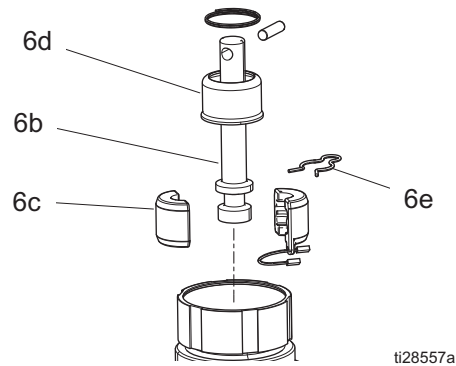
11. Lift the retaining spring (6m) and remove pin (6k).

**FIG. 1: Retaining Spring and Pin**



12. Loosen jam nut (19) and unthread the pump lower (6a) from housing (6f). See **Figure 4** (page 3).
13. Disconnect the piston extension rod (6b) by removing clip (6e) and disassembling the coupler cover (6d) and assembly coupling (6c).

**FIG. 2: Piston Extension Rod**

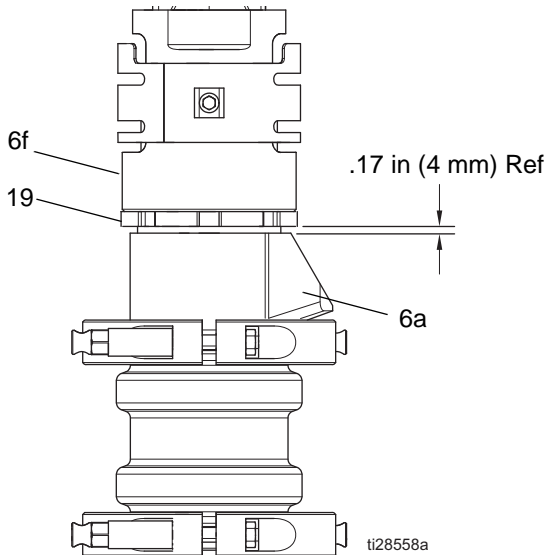


14. Unthread the packing nut (12) from the outlet housing (1) to remove the throat bearing seal.
15. Set the piston assembly (PAF) aside and replace with the new piston assembly (PAS) from the kit.
16. Lubricate the piston shaft and install the throat bearing seal (14) from the kit. Thread the packing nut (12) into the outlet housing (1). Torque the packing nut to 30 +/- 5 ft-lb (40 +/- 6.7 N•m)
17. Reconnect the piston extension rod (6b), assembly coupling (6c), coupler cover (6d) and clip (6e).

- Reinstall the pump lower onto the unit.

**NOTE:** When reinstalling the pump lower, the jam nut (19) should be threaded on the pump lower housing outlet until it bottoms out. The pump lower should be threaded completely into the motor adapter (6f) and backed off to the correct orientation position shown below. Once in position, unthread the pump two additional turns and secure the jam nut (see the image below).

**FIG. 3: Installing the Pump Lower**



**NOTICE**

Failure to assemble the pump lower to the correct depth and orientation can cause damage to the pump. To avoid damage to the pump, follow the preceding note.

- Place the cylinder o-ring (28) onto the cylinder tube (5). Lubricate (Fusion Grease part 118665 recommended) the piston bearing (15), cylinder o-ring (28), and cylinder tube (5) and install the cylinder tube onto the piston. Install clamps (2), nuts (16) and screws (10) to hold the cylinder tube on the outlet housing.

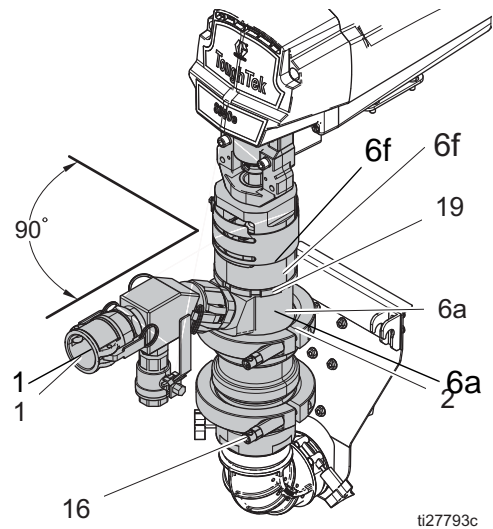
**NOTE:** Orient the housing outlet (1) as shown in relation to the pump clamps (2) and extension nuts (16) as shown in **Figure 4**.

- Place the new inlet o-ring (22\*) onto the new inlet seat (26) from the kit and place the seat into the inlet housing (9).

- Apply a serviceable thread locker to the threads of the inlet housing (9) and thread onto the inlet housing ball guide (3). Torque to 200 +/- 10 ft-lb (271 +/- 13.5 N•m).
- Place the check ball (25) from the kit into the inlet housing ball guide (3). Place the inlet ball stop (4) from the kit into the inlet housing ball guide.
- Place the cylinder o-ring (28) onto the cylinder, lubricate the o-ring, and place the inlet housing ball guide onto the cylinder. Secure with clamps (2), screws (10) and nuts (16).

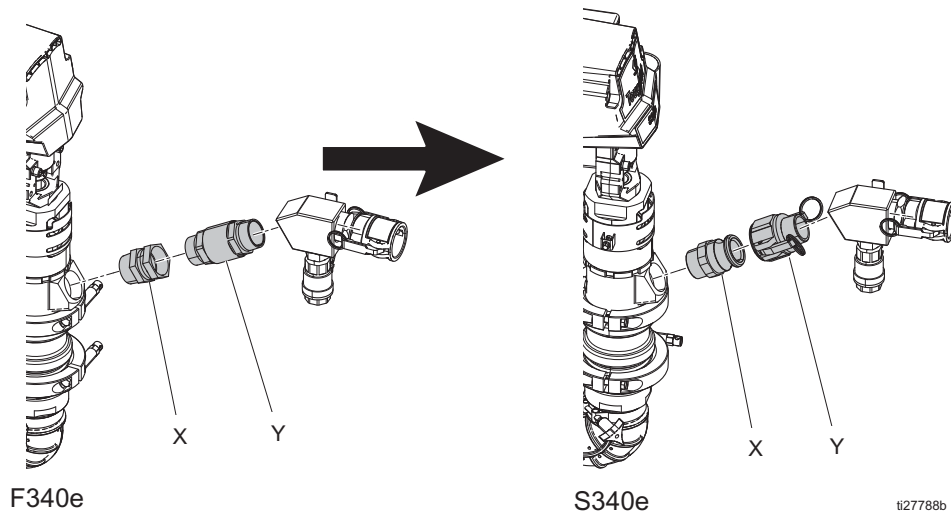
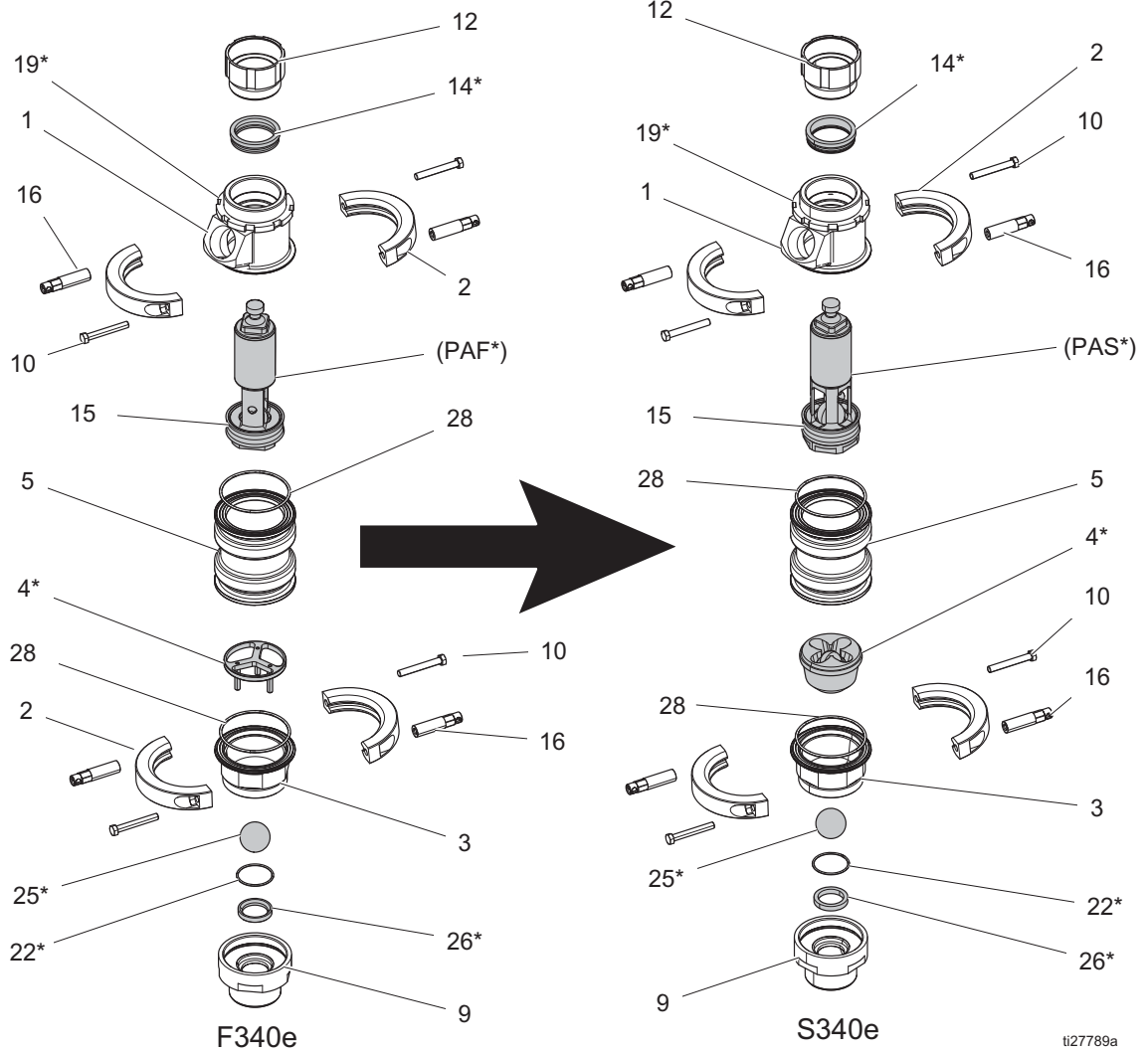
**NOTE:** Orient the pump clamps (2) and extension nuts (16) as shown in relation to the pump outlet (1) as shown below in **Figure 4**.

**FIG. 4: Replace Pump Components**



- Replace the 1.5 in. npt swivel fitting (X) from the pump fluid outlet with the 1.5 in. male cam lock fitting from the kit.
- Remove the check valve assembly (Y) and replace with the 1.5 in. female cam lock fitting from the kit.
- Replace the 1 in. male cam lock fitting (Z) with the 1.5 in. male cam lock fitting from the kit. Reattach the outlet fittings onto the pump lower outlet.

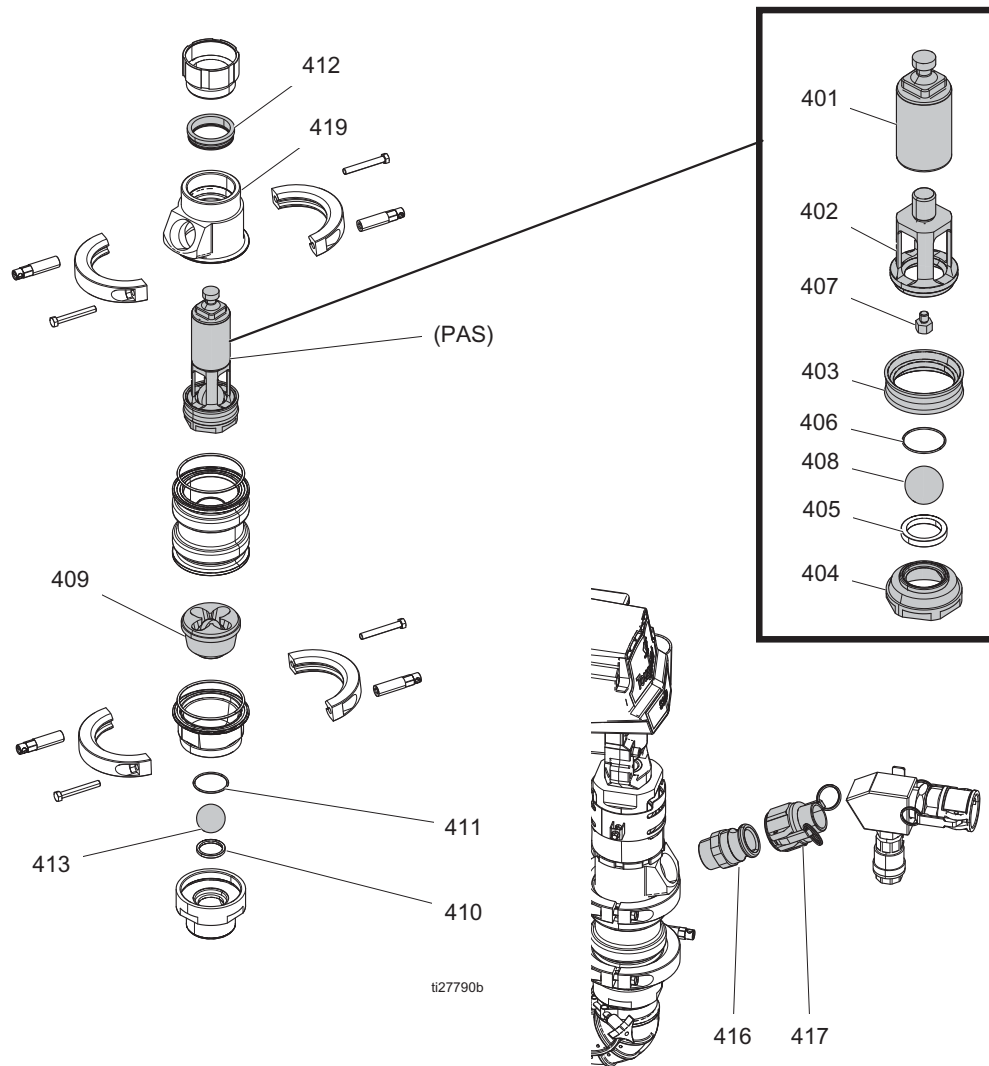
FIG. 5: Replace Pump Components



\* Indicates which parts are replaced during conversion.  
 \*\* Label replacement optional

# Parts

FIG. 6: Pump Parts



## Parts List

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
401	17G331	ROD, short displacement	1	412†	17G796	BEARING, seal, throat, triple lip	1
402	17G795	GUIDE, ball, piston	1	413	15H833	BALL, neo/sst core, 1.75 in.	1
403†	16U808	PACKING, cup	1	416	128473	FITTING, 1.50 cmlk m x 1.50 npt m	1
404	17G794	VALVE, piston	1	417	128758	FITTING, 1.50 cmlk f x 1.50 npt f	1
405+		SEAT, carbide, valve, piston	1	419	176859	NUT, jam, black	1
406†+	113082	PACKING, o-ring	1	420	176836	LABEL, front, S340E	1
407	17G817	STOP, ball, piston	1	421	17G835	LABEL, side, S340E (not shown)	1
408	17G798	BALL, neoprene, cs core, 1.625 in.	1				
409	17G793	GUIDE, ball, inlet	1			+ Included in Kit 17G862.	
410*	17G861	SEAT, carbide, valve, inlet	1			* Included in Kit 17G863.	
411†*	16U802	O-RING, 50 mm x 2.5 mm	1			† Included in Kit 25A233.	

## Graco Information

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*All written and visual data contained in this document reflects the latest product information available at the time of publication.  
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Original instructions. This manual contains English. MM 3A3439

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