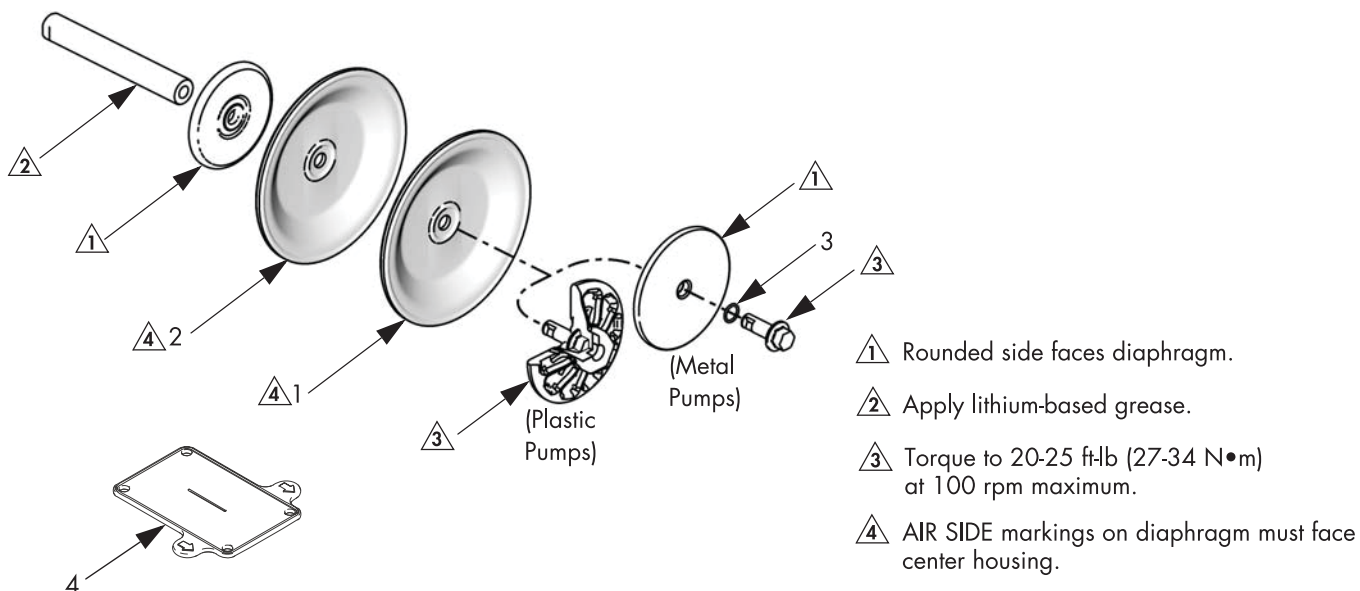


TWO-PIECE BOLT-THROUGH DIAPHRAGM KIT #784-92408



Kit Contents

QTY	ITEM	DESCRIPTION
2	1	PTFE Diaphragm
2	2	EDPM Backup Diaphragm
2	3	O-Ring
1	4	Diaphragm Install Tool (shown on back)
8	5	PTFE Manifold O-Rings (not shown)

Important Safety Instructions

Read all warnings and instructions in the Operation Manual that was provided with your pump. If you have questions, call Graymills Customer Service at 773-248-6825.

See back for more information.

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Assembly

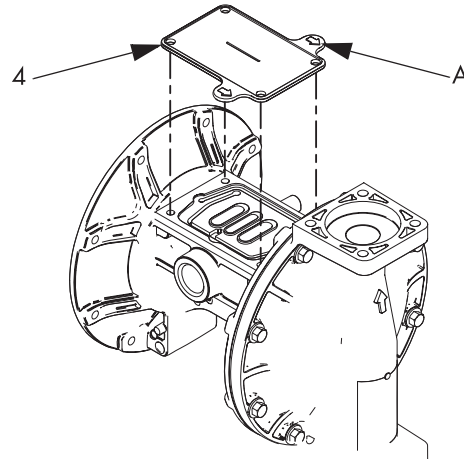
1. Follow the steps for your type of pump to assemble the diaphragms and attach one of the fluid covers.

Metal Pumps

- a. Install the o-ring (3) on the shaft bolt.
- b. Assemble the fluid side plate, the backup diaphragm (2), the diaphragm (1), and the air side diaphragm plate on the bolt exactly as shown on page 1.
- c. Apply medium-strength (blue) Loctite or equivalent to the bolt threads. Screw the bolt into the shaft hand tight.
- d. Apply lithium-based grease to the shaft u-cups (in center housing) and the length and ends of the diaphragm shaft. Slide the shaft into the housing.
- e. Repeat Steps a-c for the other diaphragm assembly.
- f. Hold one shaft bolt with a wrench and torque the other bolt to 20-25 ft-lb (27-34 N•m) at 100 rpm maximum. Do not over-torque.
- g. Reattach the first fluid cover (3). See **Torque Instructions**, in the manual. Go to Step 2

Plastic Pumps

- a. Assemble the diaphragm (1), the backup diaphragm (2), and the air side diaphragm plate on the fluid side plate.
- b. Apply medium-strength (blue) Loctite or equivalent to the threads of the screw on the fluid side plate. Screw the assembly into the shaft hand-tight.
- c. Apply lithium-based grease to the shaft u-cups (in center housing) and the length and ends of the diaphragm shaft. Slide the shaft into the housing.
- d. Repeat Steps a-b for the other diaphragm assembly.
- e. Hold one of the plates with a wrench, and torque the other plate to 20-25 ft-lb (27-34 N•m) at 100 rpm maximum. Do not over-torque.
- f. Reattach the first fluid cover. See **Torque Instructions** in the manual.



2. To ensure proper seating and extend diaphragm life, attach the second fluid cover with air pressure of the pump.
 - a. Place the supplied tool (4) where the air valve gasket normally goes. Arrows (A) must face toward the fluid cover that is already attached.
 - b. Reattach the air valve.
 - c. Supply a minimum of 20 psi (0.14 MPa, 1.4 bar) air pressure to the air valve. Shop air may be used. The diaphragm will shift so the second fluid cover will seat properly. Keep air pressure on until the second fluid cover is attached.
 - d. Attach the second fluid cover. Follow **Torque Instructions** in the manual.
 - e. Remove the air valve and the tool (4).

NOTE: If you are replacing the diaphragms but not the air valve, you must remove the air valve and gasket, put the tool in place of the gasket, and put the air valve back on to get the air pressure needed for proper installation of the second fluid cover. Remember to remove the tool and replace the gasket when finished.

3. Reassemble the ball check valves and manifolds as explained in the manual.