

# Torque Instructions

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## VERDERAIR VA 80 Diaphragm Pumps

Rev. B  
EN



### Important Safety Instructions

Read all warnings and instructions in the *VERDERAIR VA 80 Air-Operated Diaphragm Pump Repair/Parts manual*. Save all instructions.

**NOTE:** Fluid cover and manifold fasteners on the polypropylene pumps have a thread-locking adhesive patch applied to the threads. If this patch is excessively worn, the fasteners may loosen during operation. Replace screws with new ones or apply medium-strength (blue) Loctite or equivalent to the threads.

**NOTE:** Always completely torque fluid covers, then torque the manifold pieces together, then torque the assembled manifolds to the fluid covers.

Start all fluid cover screws a few turns. Then turn down each screw just until head contacts cover. Then turn each screw by 1/2 turn or less working in a crisscross pattern to specified torque. Repeat for manifolds.

### Fluid cover fasteners:

**Polypropylene and Stainless Steel:** 40-45 ft-lb (54-61 N•m)

**Aluminum:** 55-60 ft-lb (75-81 N•m)

### Manifold fasteners:

**Polypropylene:** 40-45 ft-lb (54-61 N•m)

### Aluminum:

**Refs 1-8:** 11-21 ft-lb (15-28 N•m)

**Refs 9-16:** 55-60 ft-lb (75-81 N•m)

### Stainless Steel:

**Refs 1-4:** 110-120 in-lb (12-13 N•m)

**Refs 5-12:** 40-45 ft-lb (54-61 N•m)

Retorque the air valve fasteners in a crisscross pattern to specified torque.

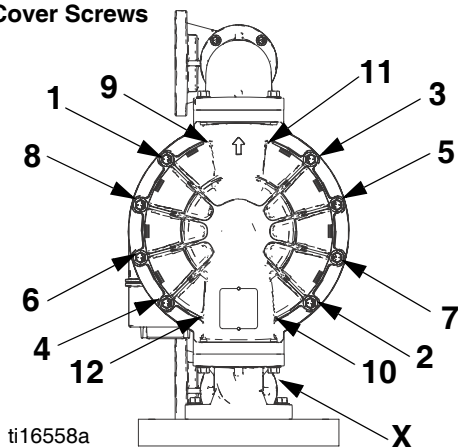
### Air Valve fasteners

**Plastic Center Sections:** 45-55 in-lb (5-6.2 N•m)

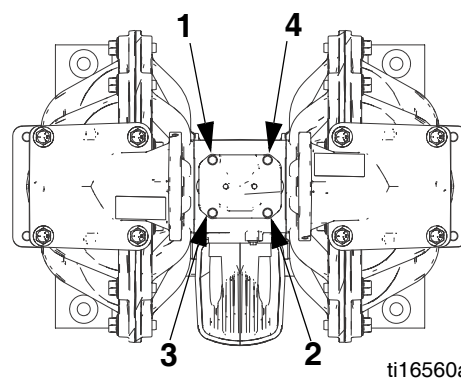
**Aluminum Center Sections:** 75-85 in-lb (8.5-9.6 N•m)

Also check and tighten the nuts or bolts (X) holding the manifold feet to the mounting brackets.

Fluid Cover Screws

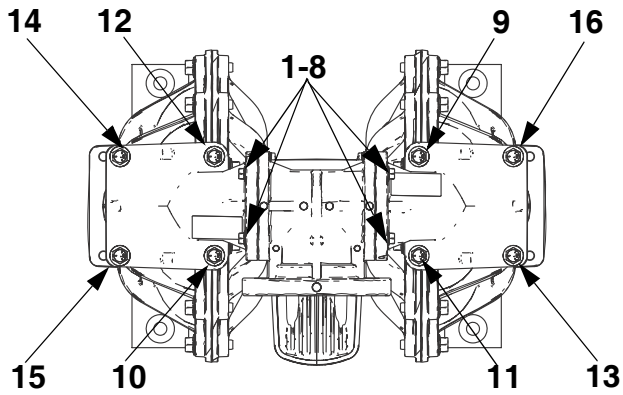


Air Valve Screws



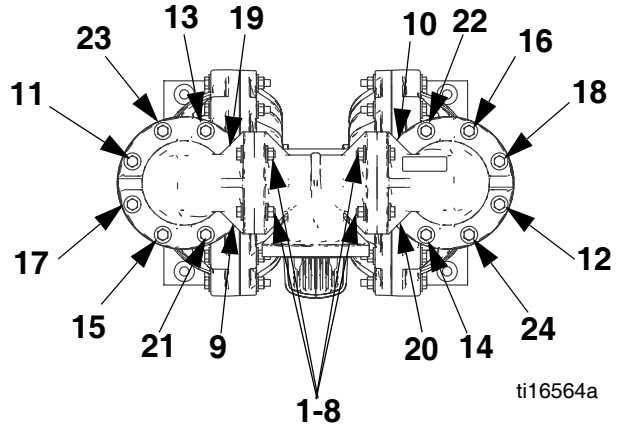
See reverse for manifold fasteners.

Aluminum



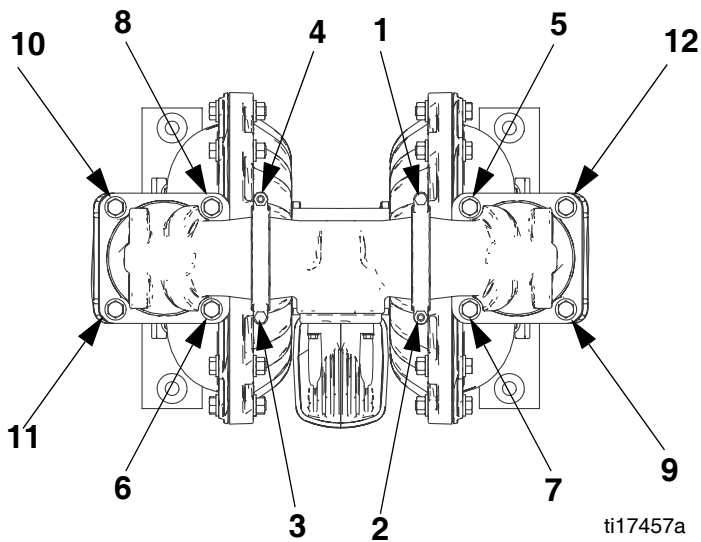
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Polypropylene

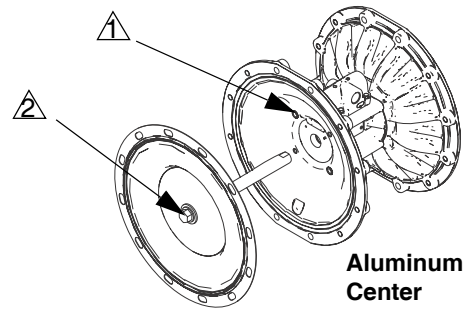


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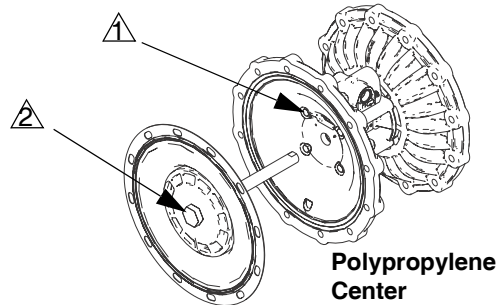
Stainless Steel



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Aluminum Center



Polypropylene Center

△ Aluminum: Torque to 30-40 ft-lb. (41-54 N•m).  
 Poly: Torque to 25-35 ft-lb. (34-47 N•m).

△ Torque to 110-120 ft-lb. (149-163 N•m) at 100 rpm maximum.