

Engineering Bulletin 1-99

Subject: Normal Vent Test Procedure

Notes:

- A Normal Vent Test Tank (Part No. 6687AL) is required to test the Normal Vents.
- A regulator must be used to slowly apply pressure to the tank.

1. Model 6496AL (Normal vent for DOT 406)

1.1. Pressure Test: 49CFR 178.346-3(b)(2) states that the normal vent for a DOT 406 must be set to open at not less than 1 psig.

1.1.1. Screw the Normal Vent into the lid of the test tank as shown in figure 1. In order to detect leakage, attach the reducer bushing, compression fitting, and tubing. Place the end of the tubing in a water jar. The water jar is not included with the test tank.

1.1.2. Slowly apply pressure to the tank. Bubbles will indicate the opening pressure of the vent.

1.1.3. A properly functioning 6496AL Normal Vent should open between 1.0 to 1.5 psig, but in no case open less than 1 psig.

1.2. Vacuum Test: 178.346-3(c)(2) states that the normal vent for a DOT 406 must be set to open at no more than 6 ounces vacuum (.375 psig).

1.2.1. Screw the Normal Vent into the lid of the test tank as shown in figure 2.

1.2.2. Slowly apply pressure to the tank and inspect the top opening for pressure release. Apply soapy water to the top of the vent in order to detect the point at which the vent opens.

1.2.3. A properly functioning 6496AL Normal Vent should vacuum relieve between 0.25 to 0.375 psig, but in no case more than 0.375 psig.

1.3. Repair or replace any Normal Vent that does not meet the specifications.

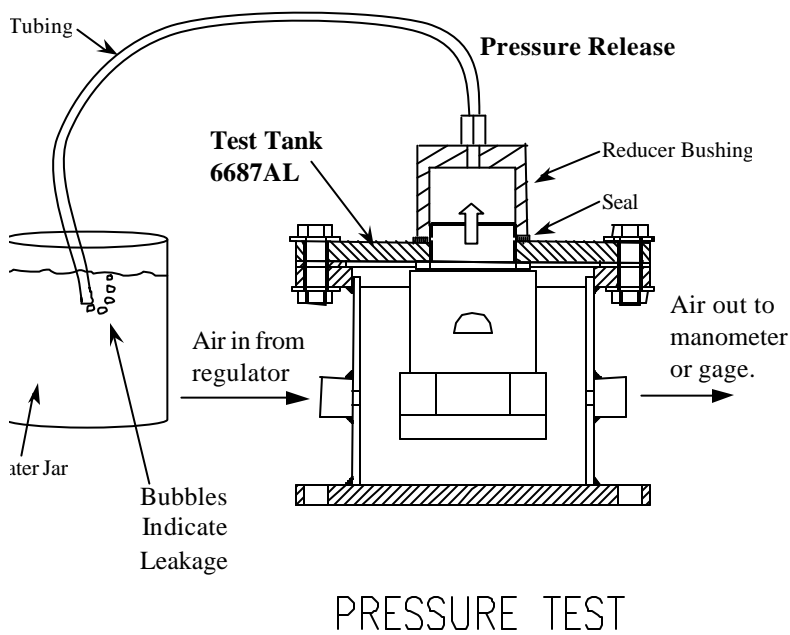


Figure 1

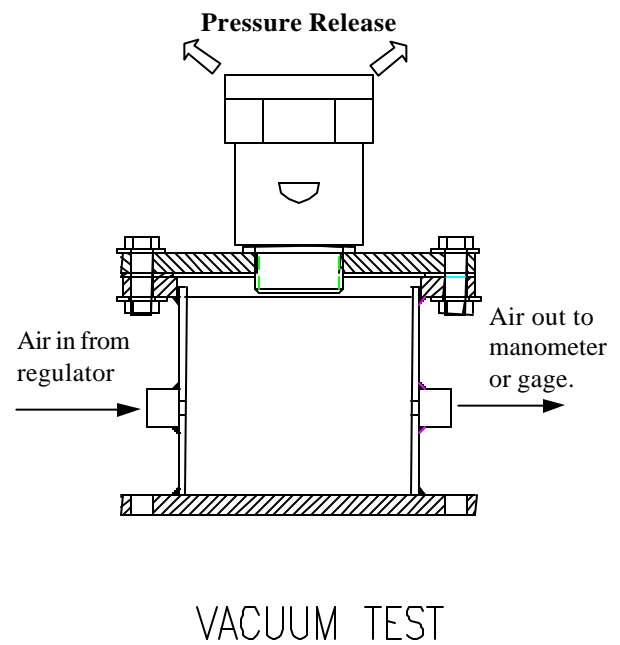


Figure 2

Betts Industries, Inc.

1800 Pennsylvania Ave. West
Warren, PA 16365 U.S.A.

Engineering Bulletin 1-99 (continued)

2. Model 6238AL (Normal vent for MC306)

- 2.1. Pressure Test: 49CFR 178.341-4(b) states that the normal vent for a MC 306 must be set to open at no more than 1 psig.
 - 2.1.1. Screw the Normal Vent into the lid of the test tank as shown in figure 1.
 - 2.1.2. Slowly apply pressure to the tank. Bubbles in the jar of water will indicate the opening pressure of the vent.
 - 2.1.3. A properly functioning 6238AL Normal Vent should pressure relieve between 0.8 to 1.0 psig, but in no case more than 1 psig.
- 2.2. Vacuum Test: 49CFR 178.341-4(b) states that the normal vent for a MC 306 must be set to open at no more than 6 ounces vacuum (.375 psig).
 - 2.2.1. Screw the Normal Vent into the lid of the test tank as shown in figure 2.
 - 2.2.2. Slowly apply pressure to the tank and inspect the top opening for pressure release. Apply soapy water to the top of the vent in order to detect the point at which the vent opens.
 - 2.2.3. A properly functioning 6238AL Normal Vent should vacuum relieve between 0.25 to 0.375 psig, but in no case greater than 0.375 psig.
- 2.3. Repair or replace any Normal Vent that does not meet the specifications.

Conversions

6 Inches of Water	= .22 psi
6 ⁷/₈ Inches of Water	= .25 psi
10 ³/₈ Inches of Water	= .375 psi = 6 ounces
18 Inches of Water	= .65 psi
22 ¹/₄ Inches of Water	= .80 psi
27 ³/₄ Inches of Water	= 1.0 psi
41 ⁵/₈ Inches of Water	= 1.5 psi