

WARRANTY

TB05-20

All parts and products are thoroughly inspected and tested from the time raw material is received at our plant, until the product is completed. We guarantee that all products are free from defects in materials and workmanship for a period of one year from the date of shipment. Any product that may prove defective within said one year period will, at our discretion, be promptly repaired, replaced or credit given for future orders. This warranty shall not apply to any products which has been altered in any way, which has been repaired by any party other than an authorized service representative, or when such a failure is due to misuse or condition of use. We shall have no liability for labor costs, freight costs or any other costs or charges in excess of the amount of invoice for the products.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED AND SPECIFICALLY THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

WARNING!!

CIVACON products should be used in compliance with the applicable federal, state and local laws and regulations. Product selection should be based on physical specifications and limitations, compatibility with the environment, and the material being handled.

CIVACON MAKES NO WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

TECHNICAL ASSISTANCE

If at any time during the installation a question arises that is not covered in this manual or with any other applicable documents feel free to call the Customer Service Department or visit our website at www.civacon.com.

In the U.S., call 1-888-526-5657
In all other countries, call your local agent.

Pressure Vacuum Vent Test Procedure NV4000, NV4000E, NV4000C

Product Description

Civacon's NV4000 Series Pressure Vacuum Vent has a design that reduces part count by 45% for easier and quicker maintenance. The NV4000 is installed on the bottom of the manlid poppet via a 15/16" hex nut and has been built to withstand the extreme shocks, high G-forces, excessive surge forces and vibrations that can occur when petroleum products are being transported.



Test Procedure:

Pressure Test (See Illustration "A")

1. Install vent (Item# 5) in the hole in the cover plate (Item# 3) of the vent test tank (Item# 2). Screw vacuum test cap (Item# 1) on to the threaded portion of the vent (Item# 5).
2. Install cover plate (Item# 3) and vent (Item#5) onto test tank (Item# 2), with vent (Item# 5) pointing downward as shown in the illustration. Use wing nuts (Item# 4) to fasten the cover plate (Item# 3) to the test tank (Item#2).
3. Attach a short length of hose to the vacuum test cap (Item#1) and run it to a small container of water. Keep the end of the hose 1/4" below the surface of the water.
4. Slowly apply pressure, and take note at what pressure the bubbles start coming out of the hose. Note the pressure reading on the gauge or the manometer.
5. The measured pressure level should fall in the range found in Table 1 for the specific vent model being tested. If the vent does not pass the test, it must be cleaned, repaired or replaced.

Vacuum Test (See Illustration "B")

1. Install vent (Item# 5) in the hole in the cover plate (Item# 3) of the vent test tank (Item# 2). Screw vacuum test cap (Item# 1) on to the threaded portion of the vent (Item# 5).
2. Install cover plate (Item# 3) and vent (Item#5) onto test tank (Item# 2), with cap inside the tank as shown in the illustration. Use wing nuts (Item# 4) to fasten the cover plate (Item# 3) to the test tank (Item#2).
3. Spray water/soap solution around the two black poppets on the side of the vent.
4. Slowly apply pressure, with the vent in the orientation shown in the illustration. Take note at what pressure the bubbles start being produced from the sealing surface. Note the pressure reading on the gauge or the manometer.
5. The measured vacuum level should fall in the range found in Table 1 for the specific vent model being tested. If the vent does not pass the test, it must be cleaned, repaired or replaced.

TABLE 1 PART NUMBER	REQUIRED SETTINGS			
	PRESSURE		VACUUM	
	MIN.	MAX.	MIN.	MAX.
NV4000	1.0 PSI (27.7" H ₂ O)	1.5 PSI (41.5" H ₂ O)	.25 PSI (7.0" H ₂ O)	.375 PSI (10.4" H ₂ O)
NV4000C	.87 PSI (6 kPa)	1.16 PSI (8 kPa)	.29 PSI (2 kPa)	.43 PSI (3 kPa)
NV4000E	1.0 PSI (69 mbar)	1.74 PSI (120 mbar)	.25 PSI (17 mbar)	.29 PSI (25 mbar)

Overturn Test (See Illustration "A")

1. Install vent (Item# 5) in the hole in the cover plate (Item# 3) of the vent test tank (Item# 2). Screw vacuum test cap (Item# 1) on to the threaded portion of the vent (Item# 5).
2. Install cover plate (Item# 3) and vent (Item#5) onto test tank (Item# 2), with vent (Item# 5) pointing downward as shown in the illustration. Use wing nuts (Item# 4) to fasten the cover plate (Item# 3) to the test tank (Item#2).
3. Set pressure regulator between 4 and 5 psi (27.6 kPa and 34.5 kPa). Slowly apply pressure until the air is exhausting out the top or the vent.
4. Rotate test fixture 90 degrees and attach a short length of hose to the vacuum test cap (Item# 3) and run it to a small container of water. Keep the end of the hose 1/4" below the surface of the water. A steady stream of bubbles would represent a failure. This overturn test must be repeated at an angle of 180 degrees and 270 degrees. If the vent fails at any of the three orientations, it must be cleaned, repaired or replaced.

