

USER MANUAL



SECTION 1 RECEIVING

For safe and easy handling, the Pressure & Vacuum Breather Valve should remain in the packing box, until it is ready to mount on the tank nozzle.

The packing box contains the Pressure & Vacuum Breather Valve, with mounting studs and nuts and a flange gasket. Mounting bolts are not supplied. Loading weights (,if required) are not installed on pallets, but are packed separately within the box to avoid damage to diaphragms etc., during transit.

SECTION 2 INSTALLATION

- a. The Pressure & Vacuum Breather Valve must be mounted on vertical tank nozzle, which ensures that the pallets will lie in a horizontal plane.
- b. Remove the Pressure & Vacuum Breather Valve from packing box at tank nozzle. DO NOT handle the Valve by hood. Use nonmetallic rope or slings in handling.
- c. Place the flat gasket on the tank nozzle flange. Mount the Pressure & Vacuum Breather Valve on to the nozzle flange, taking care not to damage the flange gasket or the exposed outer rim of the vacuum seat and its screen. The flange gasket should not interfere with bolt insertion. Tighten the bolts so as to evenly compress the flange gasket.

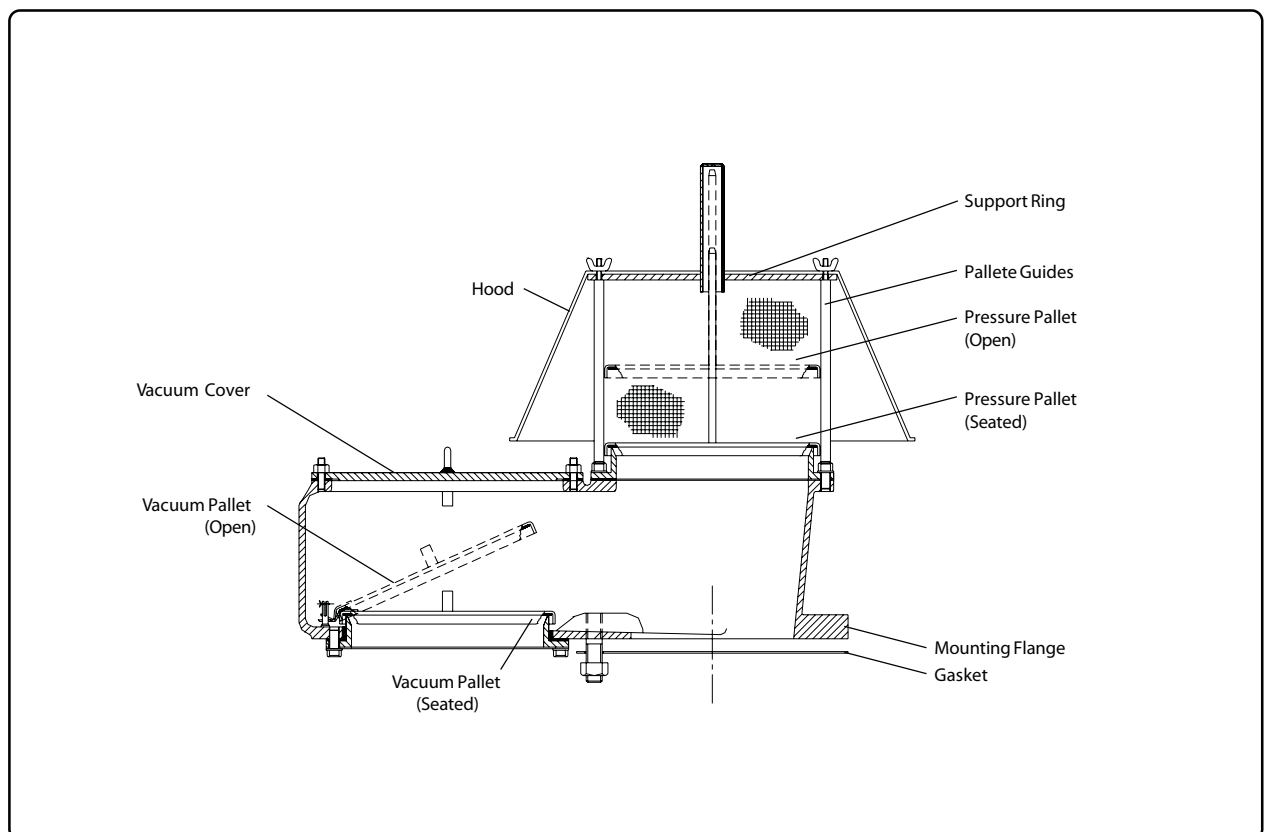
SECTION 3 REMOVAL OF PROTECTIVE PACKING

Pressure side :

- a. Remove the hood by removing the wing nuts. Remove the support ring by lifting it off the pallet guides. The pressure pallet can now be removed by lifting it straight upwards. Remove the soft plastic sheet (inserted to protect the pressure seat during transit) and place the pressure pallet back. Check to ensure that the pressure pallet moves freely.
- b. Remove the loading weights from the packing box and carefully place the pressure loading weight(s) on the pressure pallet. The loading weights are clearly marked with the setting and whether pressure side or vacuum side.
- c. Place the support ring (on pressure side) on the pallet guides and push it down to the nuts on pallet guides. Ensure that all the pallet guides are properly located in the support ring and then place the hood over it, carefully positioning the guide tube in the hood over the pressure pallet stem. Locate the holes over the threaded ends of the pallet guides, then set the hood on to the support ring and fasten using the wing nuts.

Vacuum side :

- a. Remove the vacuum cover by removing hex nuts. Swing the vacuum pallet wide open and remove the soft plastic sheet (inserted to protect the vacuum seat during transit). Check to ensure that the vacuum pallet swings freely.



- b. Carefully place the vacuum loading weight(s) on the vacuum pallet.
- c. Place the vacuum cover back, ensuring that it is seated properly. Then locate washers and hex nuts and tighten.

SECTION 4 INSPECTION AND MAINTENANCE

Inspection should be carried out periodically, usually every three months.

- a. Refer to Section 3 for removal of vacuum cover and hood.
- b. Before removing the pallets, remove all accumulations from the protective screen, the pallets and from all surfaces of the valve. Brush the screens so that dirt etc. falls to the outside.
- c. To remove pressure pallet, first lift the support ring off from the top of the pallet guides and then lift straight upwards.
- d. To remove vacuum pallet, remove the split pin at the top of the hinge posts, lift out the hinge retainer bar, and then carefully lift the pallet until the pallet hinge is clear of the hinge posts and then tip the pallet into a vertical position so that it can pass through the cover opening in the body.

Note : Care must be taken at all times to prevent the vacuum pallet hinge being distorted or forced out of position, otherwise the sealing and flow efficiency will be impaired.

- e. Inspect gaskets, seats, diaphragms, pallet stems, stem guides and pallet guides. Remove any gummy deposits and foreign matters, taking care not to damage the diaphragms or seats.

Check that all mating surfaces are free from nicks, cuts, cracks or deposits, that might interfere with proper seating or sealing of the various parts. For replacement of soft parts, gaskets and diaphragm, etc., see Section 5.

- f. Replace pallets in the reverse order of paragraphs (c) and (d) above and check that the pallets move/ swing freely over their full range of travel. DO NOT force the vacuum pallet further open than its hinge allows.
- g. Replace hood and covers as directed in Section 3.

SECTION 5 REPLACEMENT OF SOFT PARTS

- a. Vacuum Cover Gaskets
Clean the mounting surface of all traces of the previous gasket. Apply gasket cement (shellac) to one side of the gasket and adhere to the cover. Carefully install the cover without disturbing the gasket and fix in position.
- b. Diaphragm, Backup Disc and Spacer Disc
Dismantle the pressure pallet by removing the nut on its underside. Dismantle the vacuum pallet by removing the screw on its underside. Clean all traces of previous sealing compound on the metal parts, including nuts and screws. Replace any damaged components and reassemble in the correct order. Apply sealing compound to all metal to metal mating surfaces, particularly under the nut on the pressure pallet and under the screw head on the vacuum pallet to ensure pressure tightness.

Note : The spacer disc, backup disc and diaphragm must be flat and be free from creases or wrinkles.

Parts List

Part No.	Part Name	Qty./assy	Part No.	Part Name	Qty./assy
2" Valve			8" Valve		
8300 10 3606	Spacer	2	8308 10 3606	Spacer (Pressure)	2
8300 10 4607	Backup Disc	2	8308 10 3606	Spacer (Vacuum)	1
8300 10 3708	Diaphragm	2	8308 10 4607	Backup Disc	2
8300 00 3613	Vacuum Cover Gasket	1	8308 10 3708	Diaphragm	2
			8308 00 3613	Vacuum Cover Gasket	1
3" Valve			10" Valve		
8302 10 3606	Spacer (Pressure)	1	8310 10 3606	Spacer (Pressure)	2
8300 10 3606	Spacer (Vacuum)	1	8308 10 3606	Spacer (Vacuum)	1
8302 10 4607	Backup Disc	2	8310 10 4607	Backup Disc	2
8302 10 3708	Diaphragm	2	8310 10 3708	Diaphragm	2
8302 00 3613	Vacuum Cover Gasket	1	8310 00 3613	Vacuum Cover Gasket	1
4" Valve			12" Valve		
8304 10 3606	Spacer (Pressure)	2	8312 10 3606	Spacer (Pressure)	2
8302 10 3606	Spacer (Vacuum)	1	8310 10 3606	Spacer (Vacuum)	1
8304 10 4607	Backup Disc	2	8312 10 4607	Backup Disc	2
8304 10 3708	Diaphragm	2	8312 10 3708	Diaphragm	2
8304 00 3613	Vacuum Cover Gasket	1	8312 00 3613	Vacuum Cover Gasket	1
6" Valve					
8306 10 3606	Spacer (Pressure)	2			
8304 10 3606	Spacer (Vacuum)	1			
8306 10 4607	Backup Disc	2			
8306 10 3708	Diaphragm	2			
8306 00 3613	Vacuum Cover Gasket	1			

- ◆ Specifications are subject to change without notice.
- ◆ All dimensions are in mm unless otherwise specified.