INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

Clean Water Air & Vacuum Release Valve
Introduction
This manual will provide you with the information to properly install and maintain the valve to ensure a long service life. The Air & Vacuum Valve is ruggedly constructed with stainless steel trim to give years of trouble-free operation.

This valve is not intended for fluids containing suspended solids such as wastewater.

Installation
The installation of the valve is important for its proper operation. The valve must be installed in a vertical position. Next, lower valve over the mating nipple. Using Teflon tape, apply tape to the mating pipe nipple. Lightly thread the valve to the pipe nipple until tight. If leakage occurs, check the threaded connection and re-tape if necessary.

Operation
Air & Vacuum valves shall be installed at high points in the line where air accumulates, or as directed by an engineer. The Air & Vacuum Valve will permit discharging the surge of air from an empty line when filling and relieve the vacuum when the line is draining or is under negative pressure.

Disassembly
The valve does not have to be removed from the pipeline for disassembly. All work on the this valve should be performed by a skilled mechanic using the proper tools.

1. Isolate the valve from the pipeline.
2. Remove Top (1P) from Flange (2) by turning counter-clockwise. This gives access to the Valve Seat (5).
3. Remove Flange Bolts (11) and Nuts (12). Remove Flange (2) From Valve Body (3).
4. Remove float (6) and inspect for dents.
5. Using a putty knife or razorblade, scrape off the flange Gasket (4) from the Valve Body (3) and clean the body and to flange gasket surfaces with a wire brush.

Reassembly
All parts must be cleaned and gasket surfaces should be cleaned with a stiff wire brush in the direction of the serrations or machine marks. Worn parts, gaskets and seals should be replaced during reassembly.

1. Install the float (6).
2. Install Seat (5) into Flange (2).
3. Install Top (1P) into Flange (2).
4. Apply top flange gasket (4) to the valve body (3). Be sure to align the gasket so that the center holes are concentric with each other.
5. Gently lower the top flange (2) onto the valve body (3). Once aligned, use flange bolts (11) and nuts (12) and tighten to 30-90 ft-lbs.
6. Open isolation valve (if applicable).

Note: During routine maintenance, it is advised to replace the valve seat (5).

Maintenance
Crispin Air & Vacuum Valves require no scheduled lubrication or maintenance.
Service
Parts and service are available from your local representative or distributor. Make note of the valve size, operating pressure and model number located on the valve tag.

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>TOP</td>
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<td>2</td>
<td>FLANGE</td>
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<td>BODY</td>
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<td>4</td>
<td>GASKET</td>
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<td>5</td>
<td>SEAT</td>
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<td>6</td>
<td>FLOAT</td>
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<td>11</td>
<td>BOLT</td>
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<td>12</td>
<td>NUT</td>
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<td>29</td>
<td>PLUG</td>
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<tr>
<td>50</td>
<td>INTERFERENCE PIN</td>
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