



TECHNICAL DATA

MULTI-ZONE PNEUMATIC RELEASE DEVICE ASSEMBLY

The Viking Corporation | 210 N Industrial Park Drive | Hastings MI 49058

Viking Special Hazards | Technical Services: 877-384-5464 | Email: techsvcs@vikingcorp.com | www.vikinggroupinc.com

The technical data described herein is for components of the Viking VSH200 and VSH1230 Clean Agent Systems.

For design, installation, and operation instructions, refer to the latest edition of the original source documents as outlined below.

VSH1230: Installation and Service Manual (Part No. 932159), Design Manual (Part No. 932157), and Operation Manual (Part No. 932161).

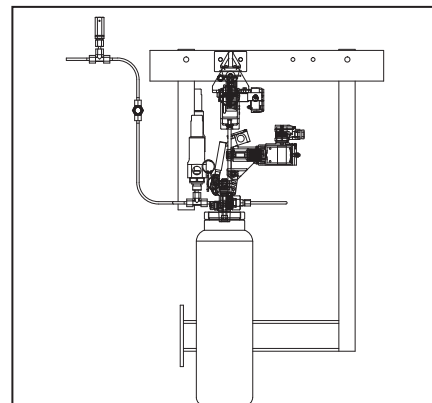
Visit the Viking website for the latest edition of the technical manuals listed above.

1. DESCRIPTION

The Viking VSH1230 Multi Zone Fire Extinguishing System is equipped with a pneumatic release device (PAE). The pilot cylinder of these systems is activated electrically when a fire is detected. The CO₂ contained in the pilot cylinder flows through the pilot line to the pneumatic actuators, mounted to the selector valves, and opens them.

Each selector valve has a small pilot valve attached. This ensures that only the selector valve assigned to the associated protected enclosure opens and the agent discharges into the corresponding pipe. This prevents the agent from flowing into protected enclosures that are not affected by fire.

EM electric release devices are mounted on a small pilot valve at each selector valve. They are electrically activated if there is release of the system via the fire suppression detection system. The release pin of the EM release device is unlocked and activates the valve lever of the small pilot valve. The valve lever swings approx. 90° and opens the valve.



2. LISTINGS AND APPROVALS



UL Listed: Clean Agent Extinguishing System Unit



FM Approved: Clean Agent Fire Extinguishing System



WARNING: Cancer and Reproductive Harm-
www.P65Warnings.ca.gov

3. TECHNICAL DATA

Pneumatic Release Device

Medium: CO₂ - gaseous

Operating Temperature Range: -4°F to +122°F (-20°C to +50°C)

Operating Temperature Range per UL: 0°F to +122°F (-18°C to +50°C)

Operating Pressure: 2031 psi (140 bar)

Test Pressure: 3046 psi (210 bar)

Fill Amount: 15.7lbs (7.1kg)

Thread Connection: Steel Pipe 6x1mm

Pneumatic Release Device - Release Device EM Solenoid

Magnetic Force: 44N

Switching Duration: 100%

Voltage: 24 V DC

Current: 1,04 A

Stroke: 0.35" (9mm)

IP Code: IP 54

Ordering Information - Refer to figure 1 and table 1

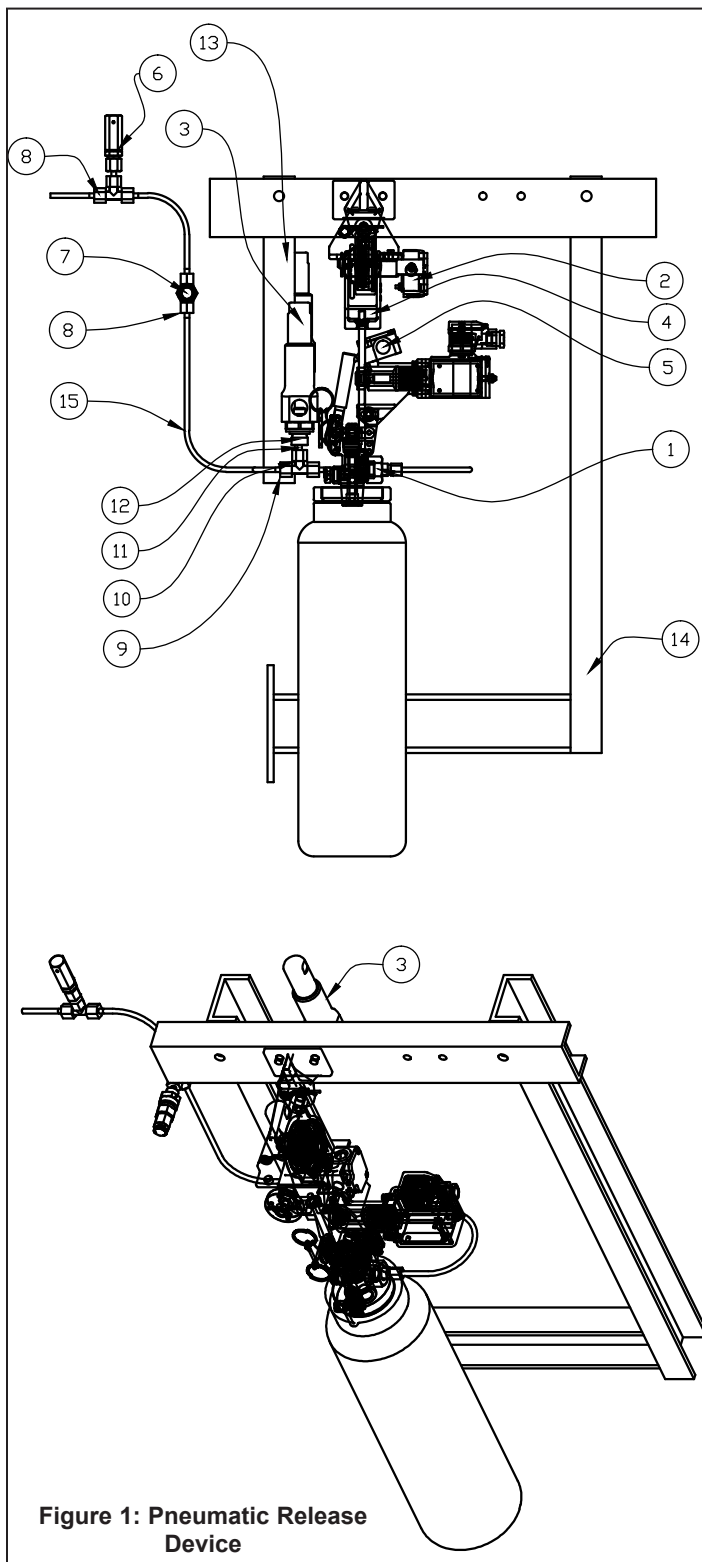


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**Figure 1: Pneumatic Release
Device**

TABLE 1: Pneumatic Release Device Components

Part No.		Description	
19303		PAE Assembly	
Item	Part No.	Description	Required
1	91 1757	Pneumatic Release Device Assembly	1
2	88 8998	Monitoring Device Weighing Unit	1
3	88 6282	140 Bar Pressure Relief	1
4	88 6350	Support Weighing Device	1
5	88 5740	Monitoring Device Electrical Release	1
6	88 5869	Safety Malfunction Device	1
7	82 2674	Push Button Relief Valve	1
8	12 5633	6mm Tee	1
9	88 6406	Tee, 6mm with M10 Adapter	1
10	75 5260	Union Kor 10/6-PL A3C (Press RLP)	1
11	75 5259	Union Kor 15/10-PL A3C	1
12	87 7430	Union Gal15LRCLFX	1
13	19364	PAE Vertical Mounting Bracket	1
14	19363	PAE Horizontal Mounting Bracket	1
15	19385	6mm Tubing, 3'	1



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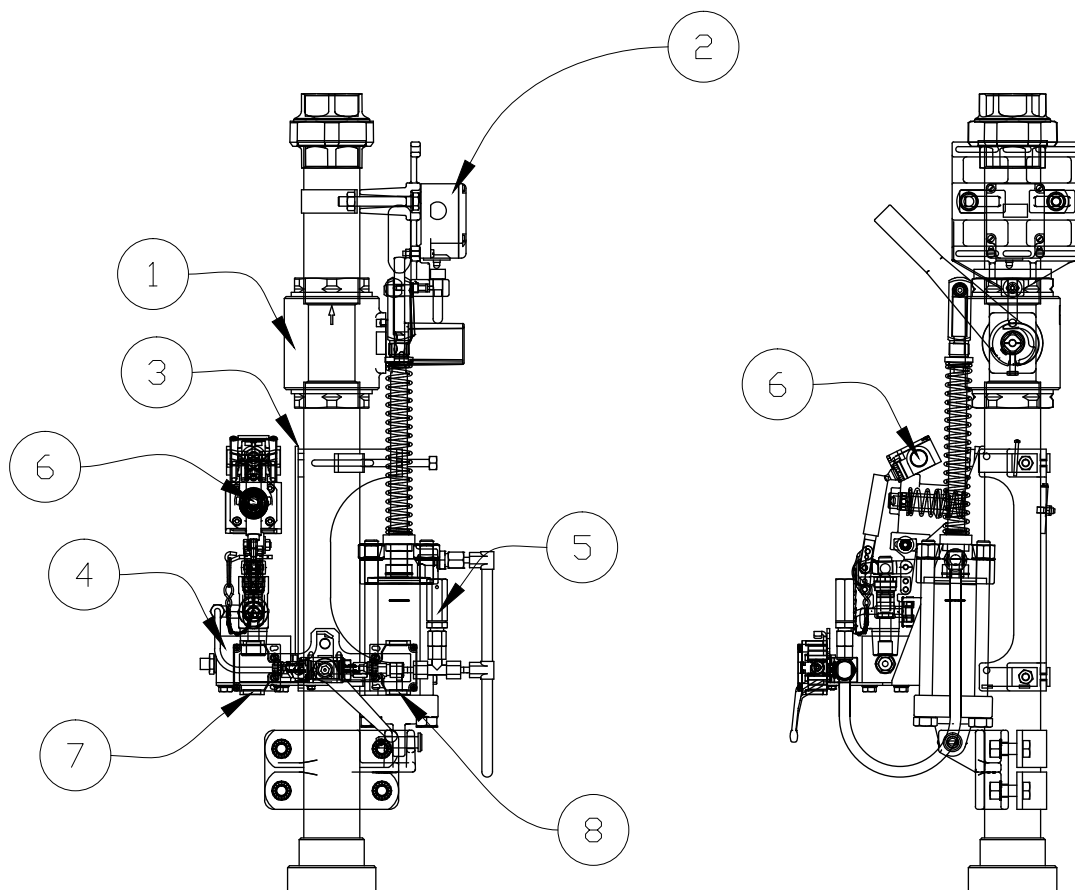


Figure 2: 1-1/2" (40mm) Valve

TABLE 2: 1-1/2" (40mm) Valve

Part No.		Description	
19298		1-1/2" (40mm) Multi-Zone Valve Assembly	
Item	Part No.	Decription	Required
1	91 2053	1-1/2" (40mm) Selector Valve	1
2	72 4420	Valve Position Sensor	1
3	91 3084	Disable Control Unit Bracket	1
4	91 2467	Disable Control Unit	1
5	88 5869	Safety Malfunction Device	1
6	82 8482	EM Electrical Release Device Position Sensor	1
7	84 8284	Disable Unit Position Sensor "Operation"	1
8	84 8284	Disable Unit Position Sensor "Disabled"	1



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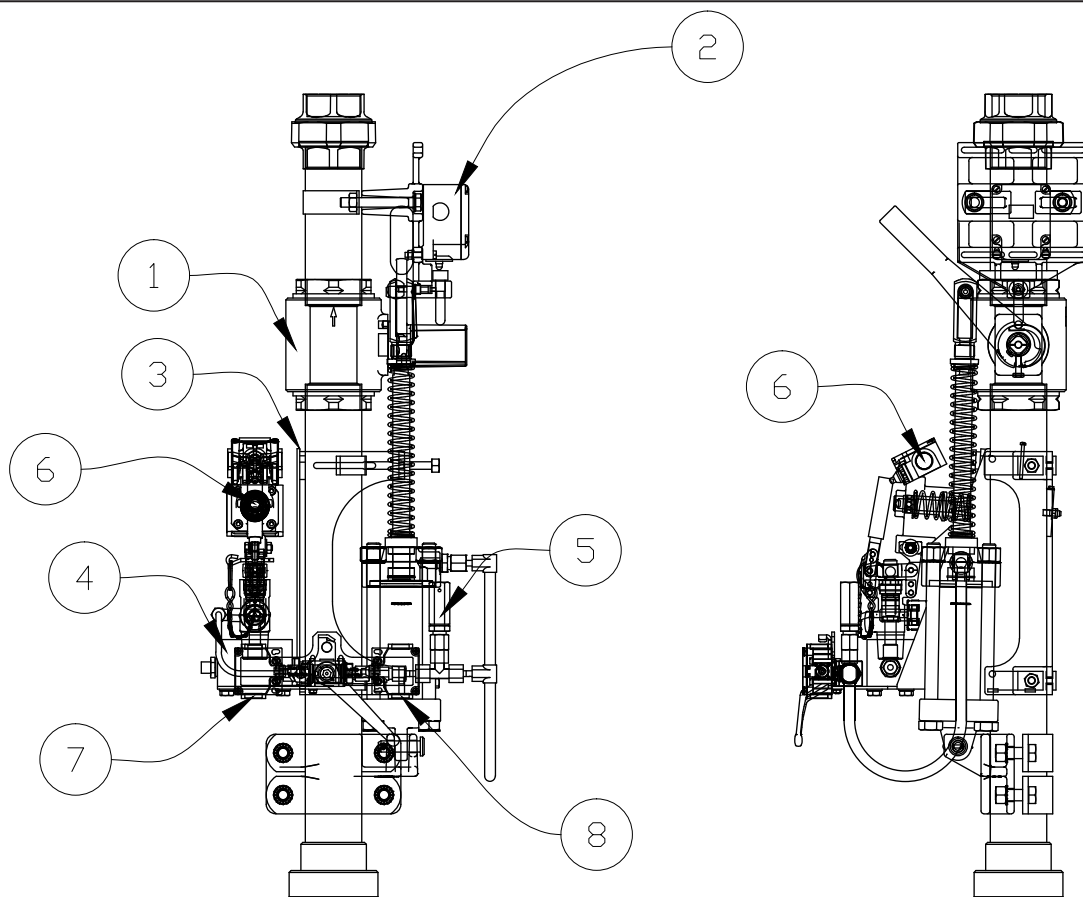


Figure 3: 2" (50mm) Valve

TABLE 3: 2" (50mm) Valve

Part No.		Description	
19299		2" (50mm) Multi-Zone Valve Assembly	
Item	Part No.	Decription	Required
1	91 2054	2" (50mm) Selector Valve	1
2	72 4420	Valve Position Sensor	1
3	91 3084	Disable Control Unit Bracket	1
4	91 2467	Disable Control Unit	1
5	88 5869	Safety Malfunction Device	1
6	82 8482	EM Electrical Release Device Position Sensor	1
7	84 8284	Disable Unit Position Sensor "Operation"	1
8	84 8284	Disable Unit Position Sensor "Disabled"	1



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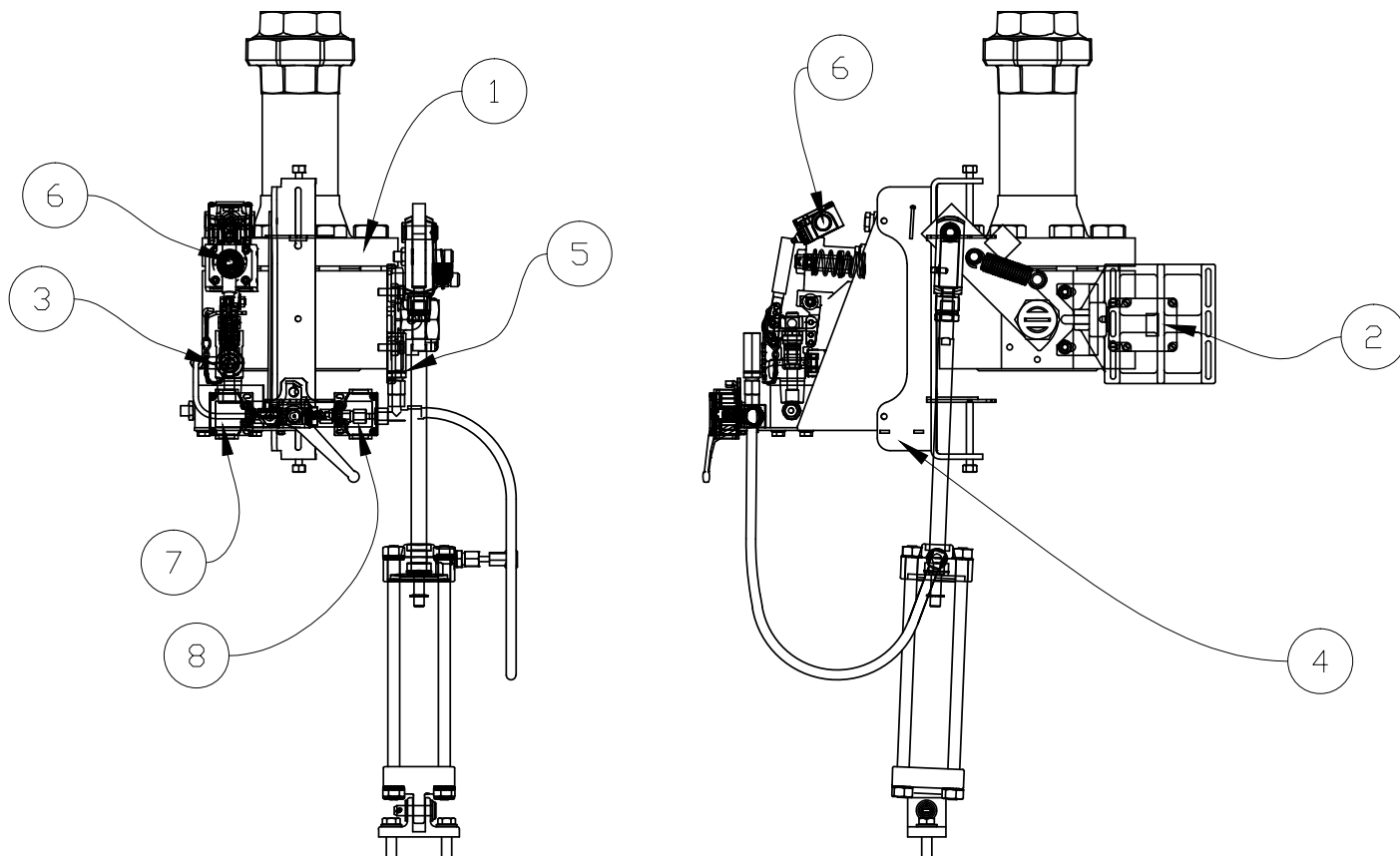


Figure 4: 2-1/2" (65mm) Valve

TABLE 4: 2-1/2" 65mm Valve			
Part No.		Description	
19300		2-1/2" (65mm) Multi-Zone Valve Assembly	
Item	Part No.	Decription	Required
1	87 3217	2-1/2" (65mm) Selector Valve	1
2	72 4420	Valve Position Sensor	1
3	91 2467	Disable Control Unit	1
4	91 5033	Disable Control Unit Bracket	1
5	88 5869	Safety Malfunction Device	1
6	82 8482	EM Electrical Release Device Position Sensor	1
7	84 8284	Disable Unit Position Sensor "Operation"	1
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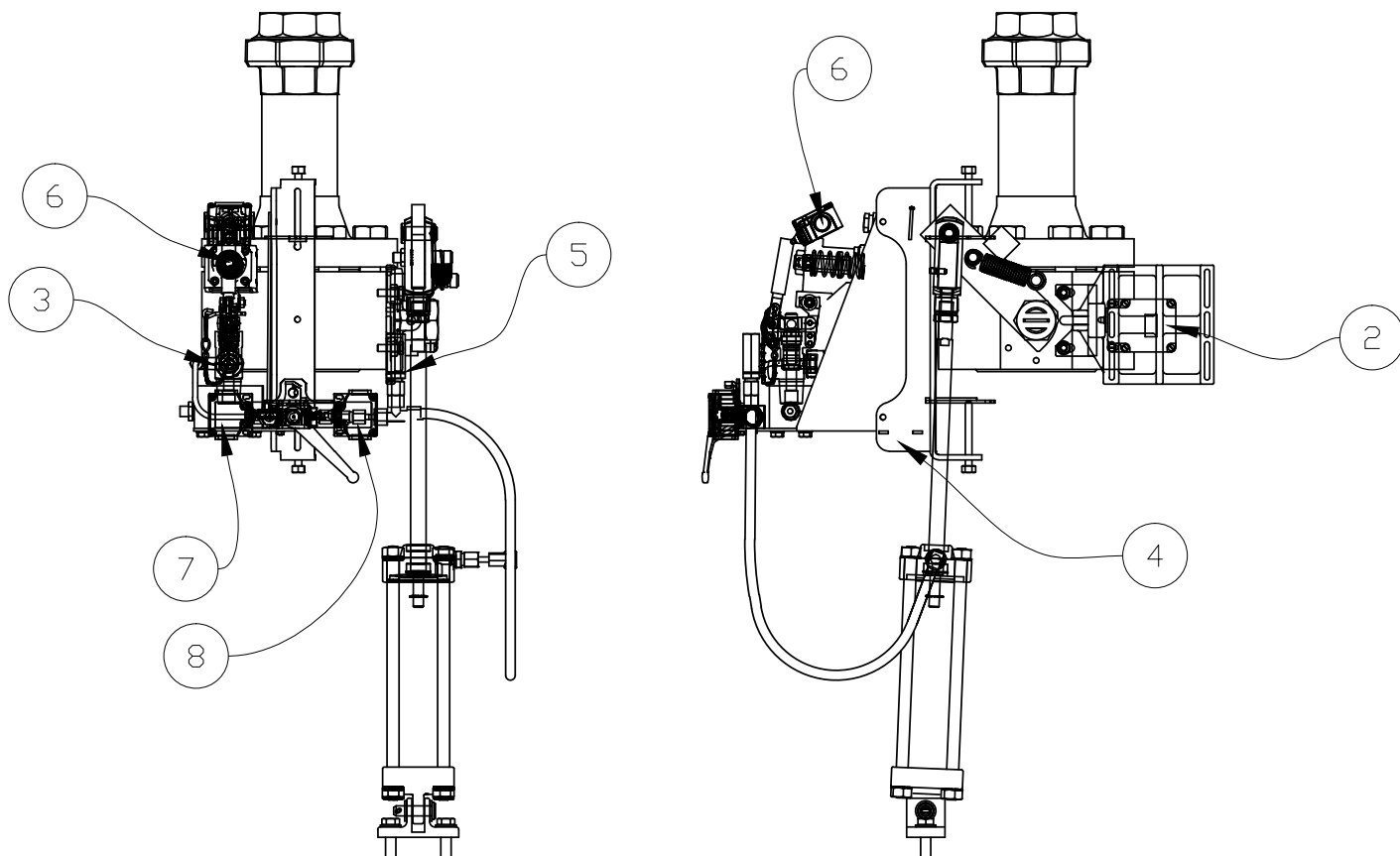


Figure 5: 3" (80mm) Valve

TABLE 5: 3" (80mm) Valve			
Part No.		Description	
19301		3" (80mm) Multi-Zone Valve Assembly	
Item	Part No.	Decription	Required
1	87 6255	3" (80mm) Selector Valve	1
2	72 4420	Valve Position Sensor	1
3	91 2467	Disable Control Unit	1
4	91 5033	Disable Control Unit Bracket	1
5	88 5869	Safety Malfunction Device	1
6	82 8482	EM Electrical Release Device Position Sensor	1
7	84 8284	Disable Unit Position Sensor "Operation"	1
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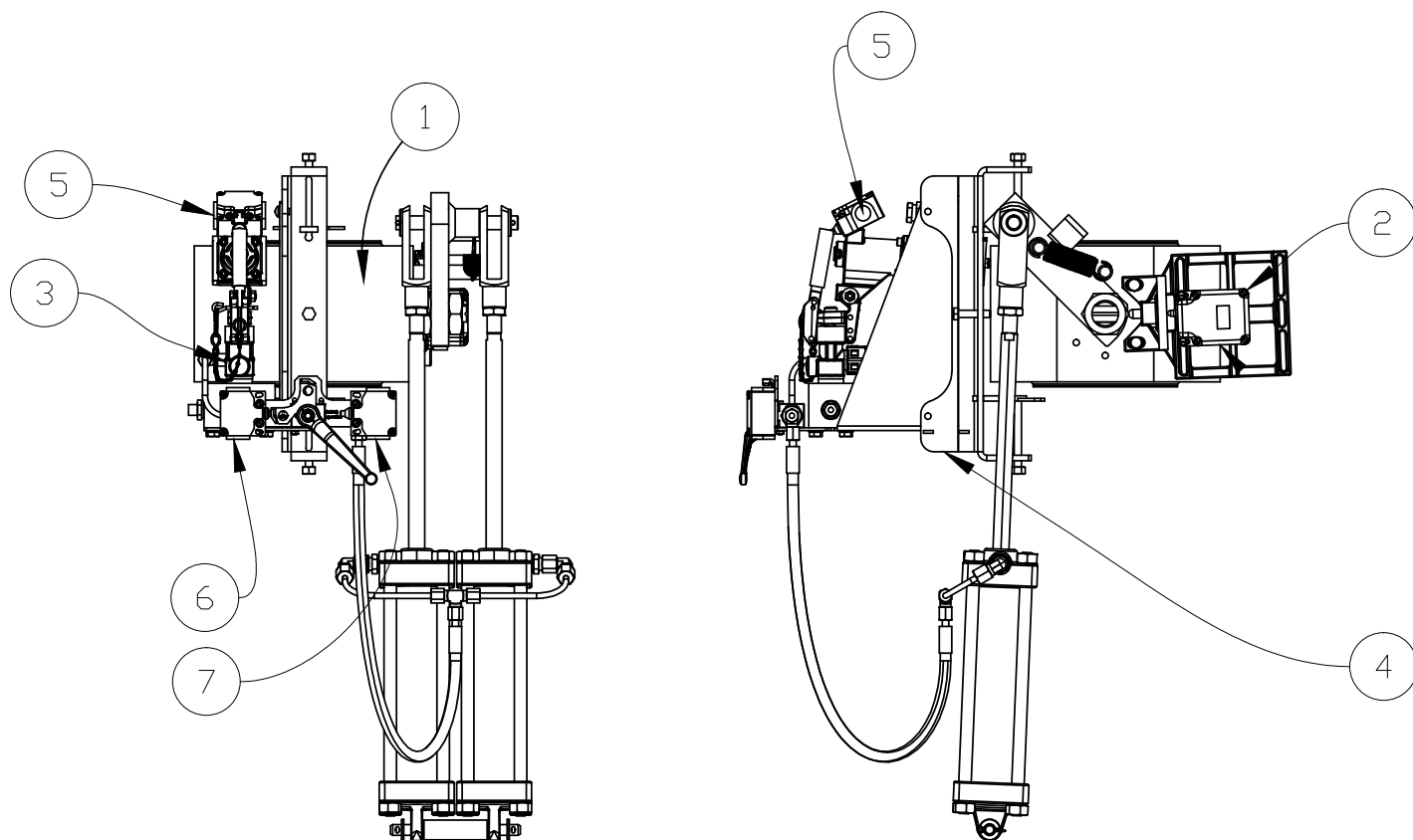


Figure 6: 4" (100mm) Valve

TABLE 6: 4" (100mm) Valve			
Part No.		Description	
19302		4" (100mm) Multi-Zone Valve Assembly	
Item	Part No.	Description	Required
1	88 7895	4" (100mm) Selector Valve	1
2	72 4420	Valve Position Sensor	1
3	91 2467	Disable Control Unit	1
4	91 5033	Disable Control Unit Bracket	1
5	82 8482	EM Electrical Release Device Position Sensor	1
6	84 8284	Disable Unit Position Sensor "Operation"	1
7	84 8284	Disable Unit Position Sensor "Disabled"	1