



# JORDAN VALVE

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## I & M Mark 675 Series

### Installation & Maintenance Instructions for the Mark 675 Back Pressure Regulator

**Warning:** Jordan Valve Pressure Regulators must only be used, installed and repaired in accordance with these Installation & Maintenance Instructions. Observe all applicable public and company codes and regulations. In the event of leakage or other malfunction, call a qualified service person; continued operation may cause system failure or a general hazard. Before servicing any valve, disconnect, shut off, or bypass all pressurized fluid. Before disassembling a valve, be sure to release all spring tension.

### Please read these instructions carefully!

Your Jordan Valve product will provide you with long, trouble-free service if it is correctly installed and maintained. Spending a few minutes now reading these instructions can save hours of trouble and downtime later.

When making repairs, use only genuine Jordan Valve parts, available for immediate shipment from the factory.

### Upper Case & Body Assembly

1. Insert Mk675 packing set over Stem (5) and into Body bore (1), in order, lubricating each piece as follows: Packing Spring (21), Packing Retainer (22), Packing Set (23), Packing Follower (24), and Packing Flange (25). Secure Packing Flange (25) with two SHCS (26).
2. Place Gasket (4) on Body/Bonnet (1). Place Lower Case (2) onto Gasket (4) and secure with six SHCS (20), then securely tighten with impact wrench.
3. Thread Hex Jam Nut (28) onto Stem (5). Thread Lower Diaphragm Plate (3) onto Stem (5).
4. Place diaphragm (19) onto Lower Diaphragm Plate (3). Thread Upper Diaphragm Plate (7) onto Lower Diaphragm Plate (3) and tighten securely.
5. Lubricate and Insert Stem (5) into Body/Bonnet (1).

### Seat Set Assembly & Stroke Adjustment

1. Place the Plate (18) on a clean, flat surface, lapped side up.
2. For 3" Valves Only: Install Disc Guides (15) onto Plate (18), using FHMS (16) and loosely tighten. Carefully place Disc (29) onto Plate (18), align slots in the open position, then securely tighten FHMS (16).
3. For 4" & 6" Valves Only: carefully place Disc (29) onto Plate (18), and install Guide Screws (16) and Guide Washers (not shown).
4. Seats will be used with the Disc (29) "TOP DIR" facing up.
5. Place the assembled seat set into the body (the gasket will be installed after stroke is set), with the "T" head on the Stem (5) engaging the "T" slot on the Disc (29).

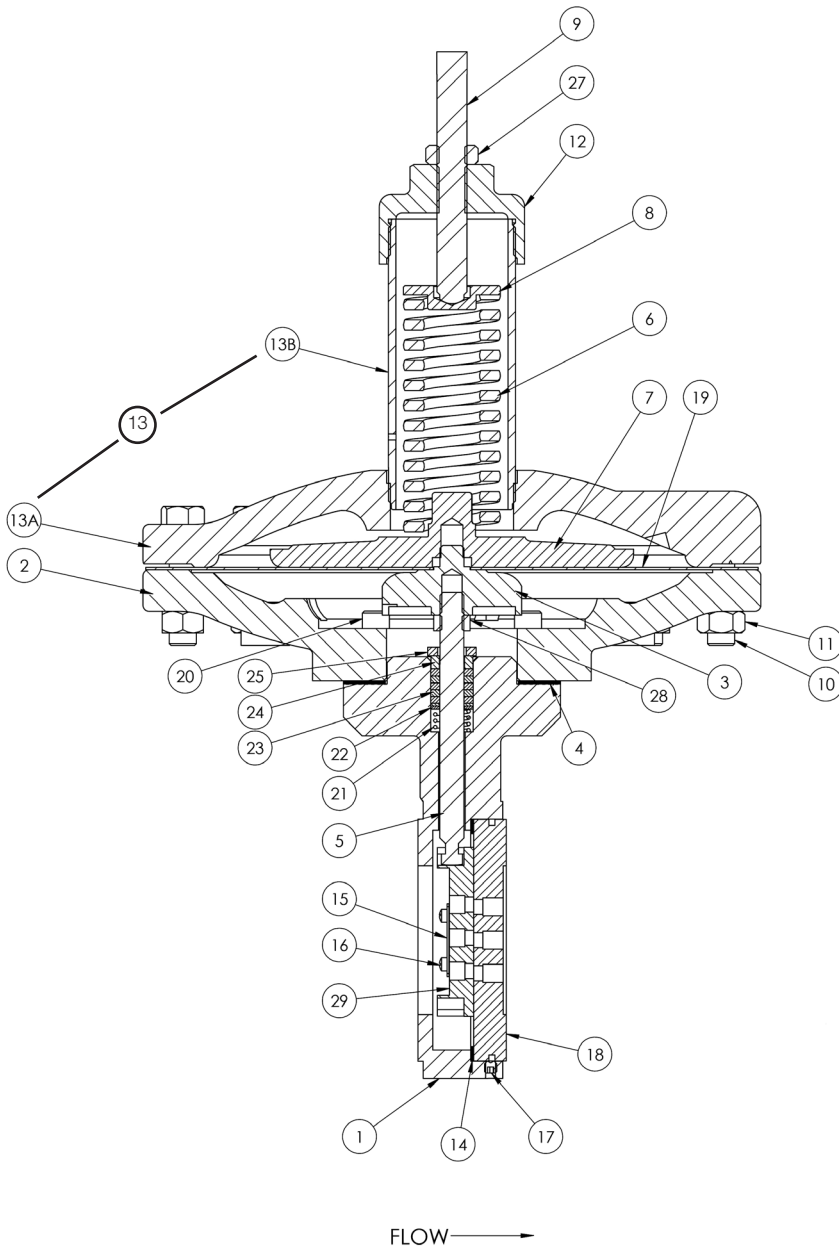
6. Push the lower diaphragm plate down to its bottom stop and check seat alignment at full open. To adjust stroke: withdraw seat set from body, then withdraw stem diaphragm assembly from body. Loosen jam nut (28), then adjust stem (5) insertion into lower diaphragm plate (3)\*. Replace stem diaphragm assembly and seat set to re-check adjustment at full open. Secure assembly with Hex Jam Nut (28) once stroke is set.

### Final Assembly

1. Reinsert stem diaphragm assembly back into body, lining up holes in diaphragm (19) with those in the lower case (2).
2. Place Range Spring (6) onto Upper Diaphragm Plate (7). Place Spring Seat (8) onto Range Spring (6). Carefully place Upper Case Assembly (13) over Range Spring (6), aligning bolt holes in the Upper Case (13A) with those in the Diaphragm (19) and Lower Case (2).
3. Use twelve HHCS (10) and Hex Nuts (11) to fasten upper case assembly; cross-tighten securely using an impact wrench
4. Lubricate and insert Body Gasket (14) into Body (1). Insert seat set, then install three CPSSS into Body (1) to retain seat set.
5. Install Jam Nut (27) onto Adjusting Screw (9). Thread Adjusting Screw (9) into Closing Cap (12)
6. Install p/n 67541-\* 1/4" Hex Pipe Plug (not shown) into Lower Case (2). Install p/n 96442 plastic 3/8" Bug Proof Vent into Lower Case (2). Attach p/n 97162 Sensing Tap Tag to vent.

\* If disc does not fully open, thread stem (5) further into lower diaphragm plate (3). Thread stem out if disc goes past full open.

## Illustration and Parts List



Item	Description	1 Qty.1
1	Body/Bonnet	1
2	Lower Case	1
3	Lower Diaphragm Plate	1
4	Gasket (Spring Housing/Body)	1
5	Stem	1
6	Spring	1
7	Upper Diaphragm Plate	1
8	Spring Seat	1
9	Adjusting Screw	1
10	HHCS 9/16-12 x 2-1/2"	12
11	Hex Nut 9/16-12	12
12	Closing Cap	1
13	Upper Case Assembly	1
13A	Spring Housing	1
13B	Spring Case Tube	1
14	Gasket, Body	1
15	Disc Guide	2
16	FMS 8-32UNC x 3/4"	Varies
17	CPSSS 1/4-20 x 1/4"	3
18	Plate	1
19	Diaphragm	1
20	SHCS 3/8-16 x 1-5/8"	6
24	Packing Follower	1
25	Packing Flange	1
27	Hex Jam Nut 5/8-18	1
28	Hex Jam Nut 1/2-13	1
29	Disc	1
30	Flow Arrow	1
31	Screw, Self Tap #2 x 1/8	2

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