

W772 Series Balanced Back Pressure Regulator

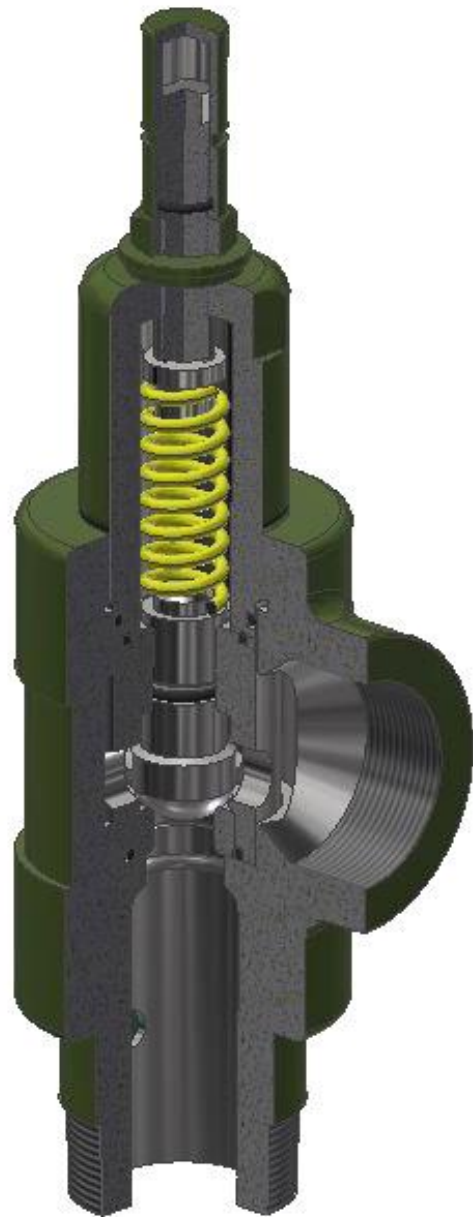
The WNS Lowery Series W772 Balanced Back Pressure Regulator (BBPR) offers an economical solution for automatic relief of pressure in liquid or gas applications. The spring balanced design regulates pressure based on the upstream conditions while remaining unaffected by downstream pressure. The BBPR's simple design allows for quick maintenance to be performed while the unit is still in-line and can be adjusted in the field.

Features:

- Lapped Piston and Seat
- SS internals for increased life
- Easy access to the internal parts for ease of repair and maintenance
- Field adjustable
- Multiple seal and material options for a wide variety of applications
- Reduces paraffin by keeping gas in solution

Applications:

- Paraffin
- Pump Bypass
- Pump Relief
- Pipeline Relief
- Heading Up



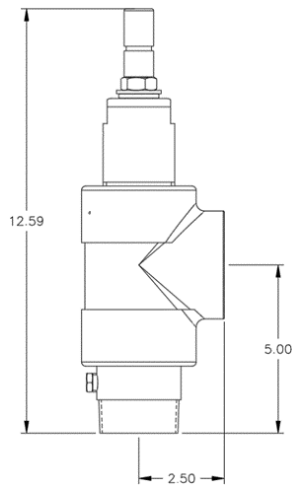


WNS Lowery
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 Oklahoma City, OK 73149
 (405) 677-7222

Selection Matrix

1	2	3	4	-	5	6	7	8	9	10	11	12	
W	7	7		-									
													Size
			2										2" (0.816" orifice)
													Body Type
					T								Balanced Tee Body
													Trim
						B							17-4 H900 w/ Buna-N
						V							17-4 H900 w/ Viton
						P							17-4 H900 w/ PC Buna
						E							17-4 H900 w/ EPDM
						H							17-4 H900 w/ HSN
													Spring Range
							0	1	0				30-100, Green
							0	2	0				30-200, Yellow
							0	5	0				30-500, Brown
							1	0	0				30-1000, Orange
							1	5	0				30-1500, Black
													Body Material
										C	S		LCC Carbon Steel (Standard)
													Inlet & Outlet
												7	2"

Specifications



Materials of Construction	
Body	LCC Steel
Bonnet	LCC Steel
Cage	17-4PH H900 SS
Body Plug	Xylan Coated CS
Seat	440C SS
Piston	Annealed 17-4PH H900 SS
Seals	Buna-N, Viton, PC Buna, EPDM, or HSN
Back-Up Ring	Teflon
Spring	17-7PH SS or 302 SS

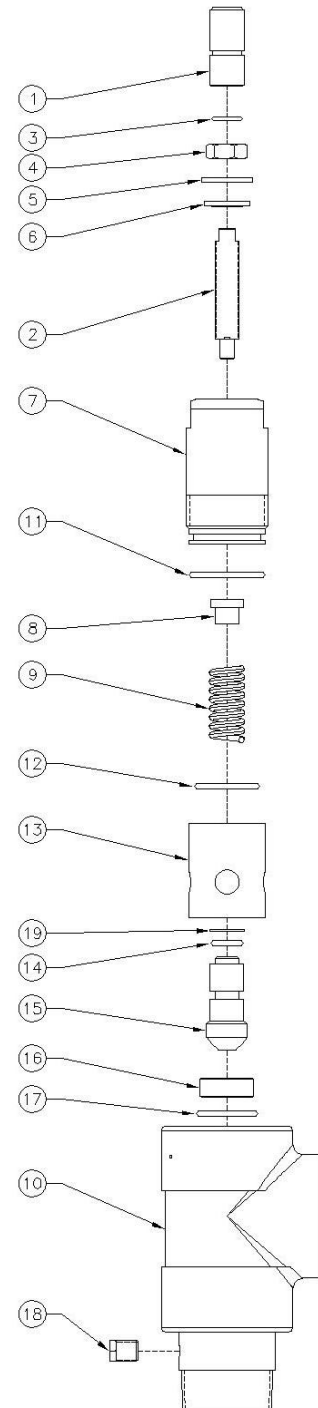
Installation and Maintenance

Installation and Start-Up:

1. Remove all shipping and protective material from the BBPR and inspect the unit for any damage that might have occurred during shipping and handling.
2. Install the BBPR based on the flow direction of the system and the flow arrow on the unit.
3. All BBPRs come preset at a given value within the rated spring range. If the preset pressure is not at the desired pressure, the unit can be adjusted by removing the Cap (item 1) and loosening the Jam Nut (item 4). The adjustment screw should be turned counterclockwise to reduce the set pressure or clockwise to increase the set pressure until the desired setting is achieved. Once the BBPR is properly set, tighten the Jam Nut back into place.

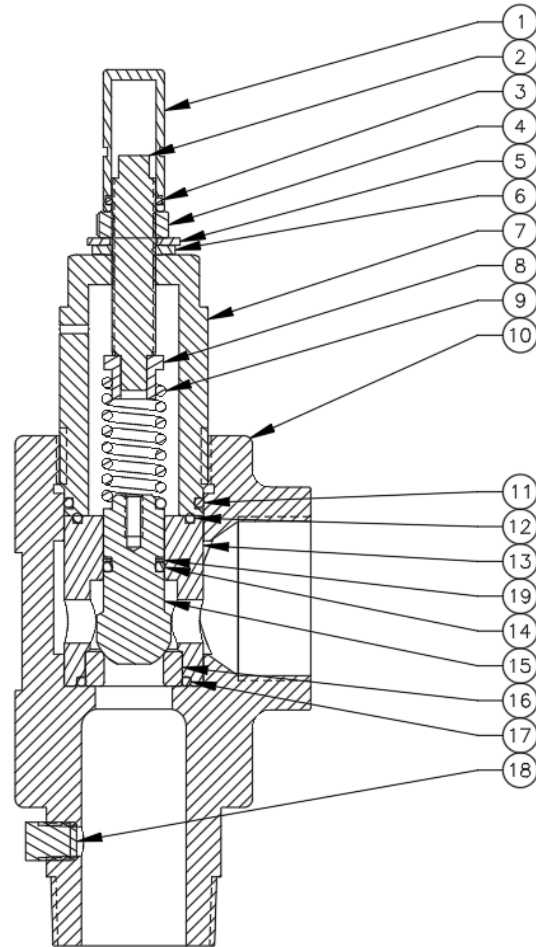
Operation and Maintenance:

1. The BBPR should be monitored to ensure proper function. If the BBPR no longer performs as intended, the unit should be inspected for wear of the internal components.
2. Prior to performing any maintenance to the unit, it should be isolated from the system and all pressure released.
3. To begin maintenance, remove the Cap (item 1) and loosen the Jam Nut (Item 4). Back off and remove the Adjustment Screw (item 2).
4. To gain access to the internals, unthread the Bonnet (item 7) from the Body (item 10).
5. Thread the repair tool into the threads on the top of the Plug (Item 15) and pull the Cage (item 13) and Seat (item 16) out of the Body.
6. Push the Plug into the Seat until the Seat pops out of the Cage.
7. Replace all O-Rings, the Seat, and the Plug.
8. Rebuild the unit by reversing these steps.
 - a. Place the Back Up Ring (Item 19) on top of the O-Ring (item 14) on the atmospheric side of the Plug.
 - b. Use the O-Ring (Item 17) to hold the Seat in place during reassembly.



Part Numbers

Item	Description	Item Number
1	Cap	106082
2	Adjustment Screw	119102
3	Cap O-Ring	114325
4	Jam Nut	113452
5	Washer	160002
6	Seal Washer	160003
7	Bonnet	102292
8	Spring Keeper	112803
9	Spring, 30-100, Green	120206
	Spring, 30-200, Yellow	120207
	Spring, 30-500, Brown	120208
	Spring, 30-1000, Orange	120209
	Spring, 30-1500, Black	120210
10	Body	100502
11	Bonnet O-Ring	114321
12	Cage O-Ring	114322
13	Piston Cage	105903
14	Plug O-Ring	114324
15	Plug	117403
16	Seat	118702
17	Seat O-Ring	114323
18	Xylan Plug	117501
19	Back-Up Ring	118900



Recommended Replacement Parts		
Item	Description	Item Number
3	Cap O-Ring	114325
11	Bonnet O-Ring	114321
12	Cage O-Ring	114322
14	Plug O-Ring	114324
15	Plug	117403
16	Seat	118702
17	Seat O-Ring	114323
19	Back-Up Ring	118900