

# Models

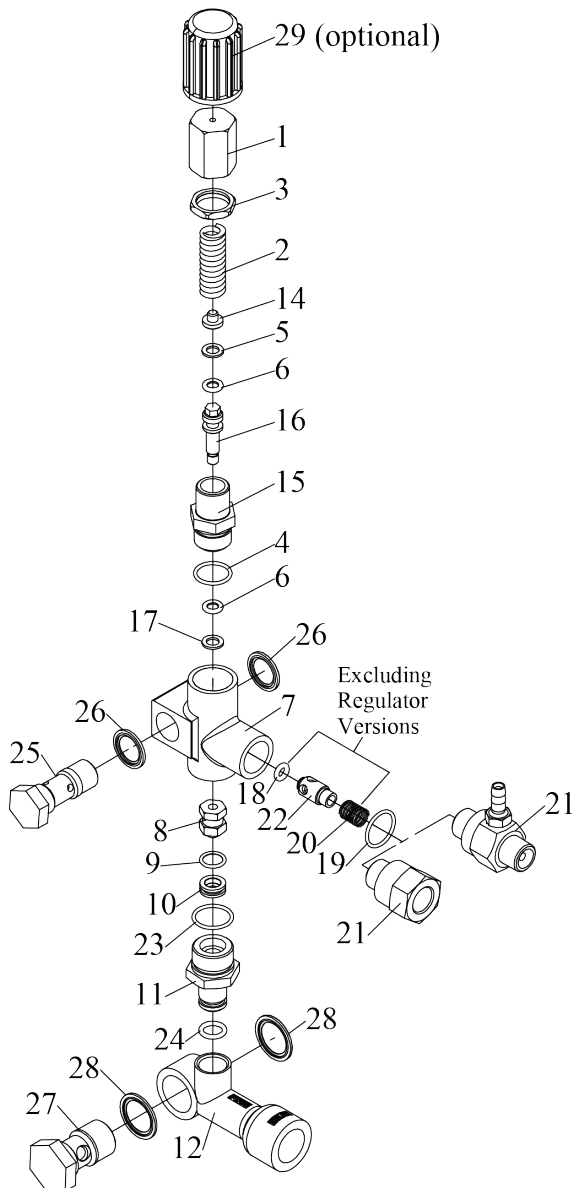
## Direct Mount Pressure Actuated Unloader/Regulator

**23270(H)/23275(H) (R) Series - P200 Pumps**  
**23280(H)/23285(H) (R) Series - P300 Pumps**

**with bypass  
connection**

### OPERATING CONDITIONS

Max Flow: .....	6.6 GPM.....	25 L/min
Pressure (23270):.....	3000 PSI .....	207Bar
Pressure (23275):.....	2000 PSI .....	140 Bar
Pressure (23280):.....	4000 PSI .....	275 Bar
Pressure (23285):.....	2000 PSI .....	140 Bar
Maximum Temp.: .....	194° F .....	90 °C
Weight: .....	2.0 lbs. ....	0.91 Kg
Inlet Port: .....	1/2" FNPT	
Discharge Port (injector):.....	3/8" MNPT	
Discharge Port (w/o injector):.....	3/8" FNPT	
Bypass:.....	Internal	



Item#	Part#	Description	Qty.
1	05137	Adjusting Spring Cap	1
2	08550	Pressure Spring (23270/23280)	1
2	04464	Pressure Spring (23275/23285)	1
3	05134	Nut	1
4	07770**	O-Ring	1
5	08553**	Support Ring	1
6	07915**	O-Ring, Piston	2
7	05131	Unloader Body	1
8	08691*	Piston	1
9	22659**	O-Ring	1
10	08563*	Seat	1
11	05138***	Bypass Fitting, 23270	1
11	05139***	Bypass Fitting, 23280	1
12	05132***	Inlet Tube, 23270	1
12	05133***	Inlet Tube, 23280	1
14	08549	Spring Retainer	1
15	08558	Guide Plug	1
16	08555	Piston Rod	1
17	08559**	Support Ring	1
18	12326**	O-Ring (except Regulator versions)	1
19	07913**	O-Ring	1
20	12328	Kick Back Valve Spring (except Regulator versions)	1
21	12340	Kick back Valve Retainer (except Regulator versions)	1
21	23750-X.X	Chemical Injector (see back for details)	1
22	12325	Kick Back Valve Cone (except Regulator versions)	1
23	08564**	O-Ring	1
24	08566**	O-Ring	1
25	13443	Discharge Banjo Bolt	1
26	08548	Seal Ring	2
27	13447	Inlet Banjo Bolt, 23270	1
27	13442	Inlet Banjo Bolt, 23280	1
28	08541	Seal Ring	2
29	08552	Handwheel (optional)	1
	*09321	Full Repair Kit (4-6,8-10, 17-19, 23 and 24)	
	+09322	Seal Repair Kit (4-6, 9, 17-19, 23 and 24)	

\*\*\*From 04/2020 these items have been modified.  
Older individual items are not available.

## ORDERING INFORMATION

### Models

23270, 23275, 23280, and 23285:  
23270R, 23275R, 23280R and 23285R:  
23270, 23275, 23280, and 23285-1.8:  
23270R, 23275R, 23280R and 23285R-1.8:  
23270, 23275, 23280 and 23285-2.1:  
23270R, 23275R, 23280R and 23285R-2.1:  
23270, 23275, 23280 and 23285-2.3:  
23270R, 23275R, 23280R and 23285R-2.3:  
23270, 23275, 23280 and 23285-1.8A:  
23270R, 23275R, 23280R and 23285R-1.8A:  
23270, 23275, 23280 and 23285-2.1A:  
23270R, 23275R, 23280R and 23285R-2.1A:  
23270, 23275, 23280 and 23285-2.3A:  
23270R, 23275R, 23280R and 23285R-2.3A:

### Description

Unloader with no injector  
Regulator with no injector  
Unloader with 1.8mm fixed chemical injector  
Regulator with 1.8mm fixed chemical injector  
Unloader with 2.1mm fixed chemical injector  
Regulator with 2.1mm fixed chemical injector  
Unloader with 2.3mm fixed chemical injector  
Regulator with 2.3mm fixed chemical injector  
Unloader with 1.8mm adjustable chemical injector  
Regulator with 1.8mm adjustable chemical injector  
Unloader with 2.1mm adjustable chemical injector  
Regulator with 2.1mm adjustable chemical injector  
Unloader with 2.3mm adjustable chemical injector  
Regulator with 2.3mm adjustable chemical injector

## **Installation and Operation Instructions**

- 1) When mounting the unloader onto the pump, make sure seal rings (26 & 28) are centered. Torque inlet plug (27) to 475 in.-lbs. (53.7 Nm) and discharge plug (25) to 350 in.-lbs. (39.5 Nm).
- 2) The valve should be tension-free; therefore, loosen handwheel (3) as far as possible.
- 3) While the gun is open, turn the handwheel (3) in a clockwise motion until desired pressure is reached.

**Important! If the nozzle orifice is too small to allow all the fluid to run through the hole after the required operating pressure is reacted, on no account is the valve to be adjusted higher than the maximum operating pressure of the pump.**

## **Disassembly and Reassembly of the 23270/23275/23280/23285 Series Unloader/Regulator**

1. Remove Adjusting Spring Cap (1) and remove Pressure Spring (2) and Spring Retainer (14).
2. Pull Inlet Tube (12) off Bypass Fitting (11) and unscrew Bypass Fitting(11) from Unloader Body (7).
3. Insert a small screwdriver or allen wrench in the bottom of the Bypass Fitting (11) and push the Seat (10) out of the Bypass Fitting. NOTE: Use caution to prevent scratching or nicking the chamfered area of the Seat.
4. Insert a 9/32" deep-well socket onto the top of the Piston Rod (16) and a 1/2" deep-well socket on to the Piston (8). Remove the Piston from the Piston Rod.
5. Unscrew the Guide Plug (15) from the top of the Unloader Body (7). Push the Piston Rod (16) out of the Guide Plug.
6. Loosen the Kick Back Valve Retainer (21) and remove the Kick Back Valve Cone (22) and Kick Back Valve Spring (20).
7. Inspect all o-rings and mating parts. Replace with parts from the kit.
8. Reassemble in reverse order.

**Note: Lightly grease all parts before reinstalling.**



**WARNING:** This product might contain a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm.  
For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**GIANT**  
Performance Under Pressure

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