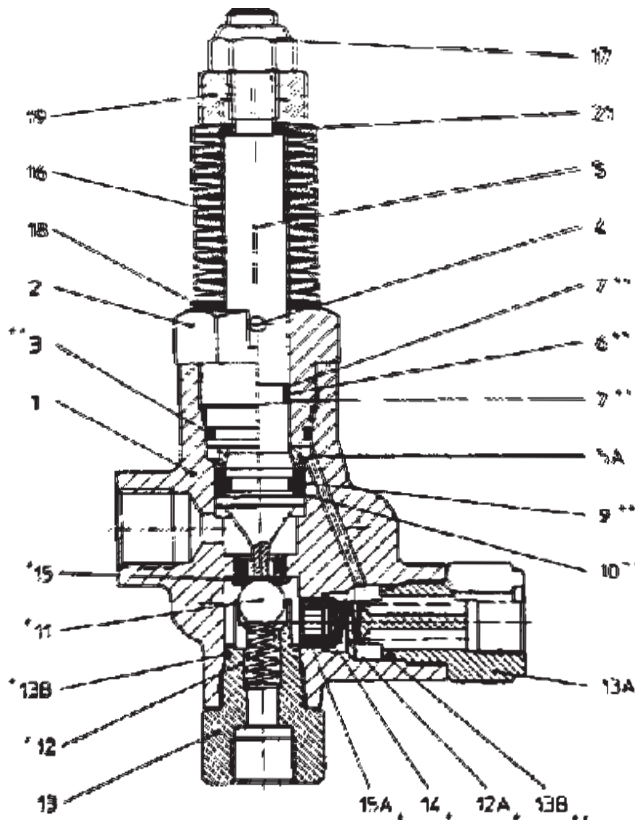


Model 22914

Pressure Actuated Unloader



* = Item Included in Kit Number 09479
+ = Item Included in Kit Number 09480

ITEM	PART	DESCRIPTION	QTY
1	12266	Casing	1
2	12267	Guide Plug	1
3	12092	O-Ring	1
4	12268	Serrated Pin	1
5	12269	Piston Rod	1
5A	12270	Distance Ring	1
6	12204	O-Ring	1
7	12205	Support Ring	2
9	04006	Cup	1
10	04018	Back Up Ring	1
11	12014	Ball	1
12	12321	Bypass Valve Spring	1
12A	22771	Kick-Back Valve Spring	1
13	12271	Bypass Valve Plug	1
13A	12272	Kick-Back Valve Plug	1
13B	07770	O-Ring	2
14	22768	Valve Plate	1
15	12309	Valve Seat	1
15A	22767	Valve Seat	1
16	16154	Spring Plate	17
17	12246	Self-Locking Hexagon Nut	1
18	12023	Disc	1
19	12274	Compression Cap	1
21	12275	Spacer Disc	5

Repair Kits:

#09479

O-Ring Kit - Parts Included:

3, 6, 7, 9, 10, 13B

#09480

Complete Rebuild Kit - Parts Included:

3, 6, 7, 9, 10, 11, 12, 12A, 13B, 14, 15, 15A

#09521

Check Valve Kit- Parts Included:

12A, 13B, 14 & 15A



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10/00 22914.INDD

OPERATING CONDITIONS

Max. Flow:	8 GPM
Max. Pressure:	4000 PSI
Maximum Temp.:	160 °F
Inlet Port:	1/2" FNPT
Outlet Port:	1/2" FNPT
Bypass Port:	1/2" FNPT

INSTALLATION & OPERATING INSTRUCTIONS

- 1) The unloader is to be positioned on the discharge side of the pumping unit.
- 2) The bottom port (in) receives the pump discharge.
- 3) The side port (out) is the pressure outlet.
- 4) The back-side port (by-pass) redirects the pumped media when the pressure outlet is closed.
- 5) The proper sized by-pass line can be directed to a holding tank, to atmosphere, or back to the pump inlet.

NOTE: By-pass lines returning to the pump inlet should be equipped with a thermal relief to prevent excessive heat buildup in the by-pass line that can be damaged the pumping system during periods of prolonged by-pass.

CAUTION: Improper placement of the accumulator can affect the unloader capacity of your unloader and can lead to severe system damage and possible bodily injury.

- 6) If an accumulator is used as a pulsation dampener in your pumping system, the accumulator must be positioned on the downstream side of the unloader.

CAUTION: A properly sized pressure gauge must be used when attempting to adjust your unloader to its pressure setting. Position gauge between the pump and unloader.

NOTE: Cracking pressures at which the unloader is activated can rise 300-400 PSI over rated operating pressures depending on your system.

- 7) Always adjust unloader springs to system pressure with the system open. Be sure before adjusting that the spray nozzle orifice is properly sized for the volume and pressure you desire and then fine tune the unloader.

CAUTION: Never use the unloader to compensate for a worn nozzle as you risk bottoming out unloader causing unloader malfunction that can lead to severe system damage and possible bodily injury.

- 8) Giant Industries, Inc. strongly recommends the use of a pop-off valve positioned between the pump and the unloader as a safety backup to unloader malfunction.

Defect	Cause	Remedy
Valve switches repeatedly when gun is closed	Leaky gun Leaky pressure pipe Leaky sleeve	Renew gun Seal pressure pipe Renew sleeve (9).
	Worn out kick-back valve body or O-ring	Renew kick-back valve body (15a) and O-ring (14a) Examine valve seat
Leaky piston rod	Defective O-Ring/ support Ring	Renew piston rod seals (6, 7) and examine surface of guide plugs.
Leaky bypass at nominal pressure	Nozzle too small, too much water.	Install larger nozzle.
	Worn out bypass valve.	Examine and renew as necessary, ball (11), and bypass valve body (15).
Manometer shows high pressure fluctuations when shutting off gun.	Valve set too high above operating pressure. Dirty valve.	Turn back adjusting nut (19) and hexagon nut (17). Clean valve (removing lime deposits etc.). Grease parts before reinstalling.



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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