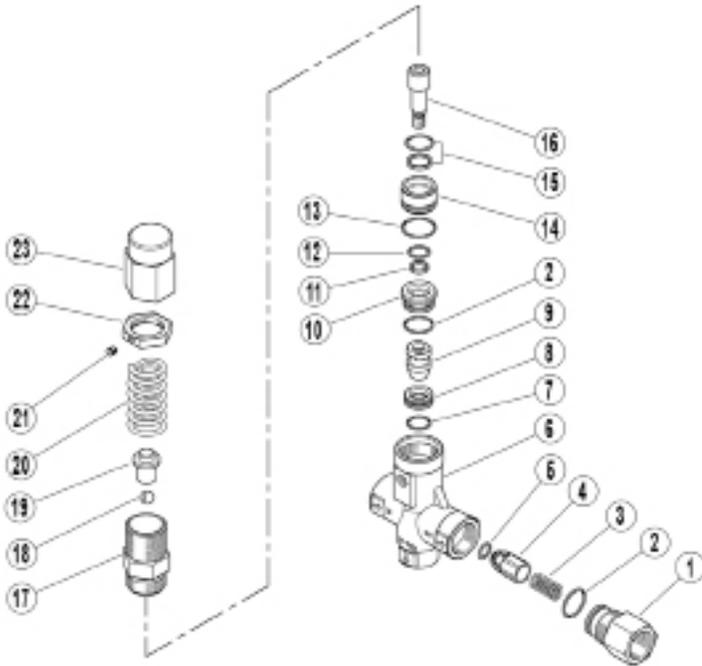


Models 22210/22215

Pressure Actuated Unloaders



Item	Part#	Description	Qty
1	04210	Discharge Fitting, 1/2" FBSP, SS	1
2	07770	O-Ring	2
3	04211	Spring, 316 SS	1
4	04212	Kick-Back Valve, SS	1
5	04213	O-Ring	1
6	04214	Housing, SS	1
7	08573	O-Ring	1
8	05459	Seat, SS	1
9	05460	Shutter pin, SS	1
10	04215	Spacer Ring, SS	1
11	04216	Backup Ring	1
12	04217	O-Ring	1
13	08719	O-Ring	1
14	04218	Spacer Ring, SS	1
15	04208	Stem Seal and O-Ring	1
16	04209	Piston, SS	1
17	04298	Piston Holder, SS	1
18	08624	Ball, SS	1
19	04222	Spring Holder, brass	1
20	04219	Spring, 22210	1
20	04299	Spring, 22215	1
21	08557	Set Screw	1
22	04220	Ring Nut, brass, 22210	1
22	05464	Ring Nut, brass, 22215	1
23	04221	Valve Regulating Nut, brass, 22210	1
23	04300	Valve Regulating Nut, brass, 22215	1

Operating Conditions

Max. Flow:	21.1 GPM (80 L/min)
Min. Pressure (22210):	580 PSI (40 Bar)
Max. Pressure (22210):	5800 PSI (400 Bar)
Permissible Pressure (22210):	7250 PSI (500 Bar)
Min. Pressure (22215):	798 PSI (55 Bar)
Max. Pressure (22215):	7250 PSI (500 Bar)
Permissible Pressure (22215):	7975 PSI (555 Bar)
Max. Temp. (Continuous)	158 ° F (60 ° C)
Max. Temp. (Intermittent):	194 ° F (90 ° C)
Inlet Port:	1/2" FBSP
Outlet Port:	1/2" FBSP
By-Pass:	1/2" FBSP

Repair Kit- #09763

Includes Item Numbers:

2,5,7,8,9,11,12,13 and 15

INSTRUCTIONS

This product is to be utilized with clean fresh water, even slightly additivated with normal detergents. For use involving different or corrosive liquids, contact Giant. Appropriate filtration should be installed when using unclean liquids. Choose the valve in line with the data of nominal running (system rated pressure, maximum flow and maximum temperature). **In any case, the pressure of the machine should not exceed the permissible pressure rate imprinted on the valve.**

INSTALLATION

This accessory, on a system that produces hot water, must be fitted **in front of the heat generator**. This product is bound to be incorporated on a finished machine. On a system that generates hot water, anticipate the fitting of accessories that limit the accidental increase of fluid temperature. **Always install a safety valve that protects the pressurized inlet channel.** Choose a correct nozzle size, which allows a regular discharge on bypass, at least 5% of the total flow of the system in order to achieve a constant pressure value and avoid troublesome pressure spikes at closure. If the nozzle wears out, the pressure drops. On installation of a new nozzle, re-adjust the system to the original pressure setting.

OPERATION

The valve regulates the maximum pressure of the system through a piston, which acts on a ball correctly positioned, that closes the bypass opening. A check valve cuts out the delivery section, the pressure of which controls the drive of the piston. Each regulation should be made when the system is operational and the nozzle open.

ATTENTION: The nut (22) must never be removed. Removal of this item means that there is no way to limit the maximum pressure, which put people and equipment in danger.

DISCHARGE SYSTEM AND WATER SUPPLY

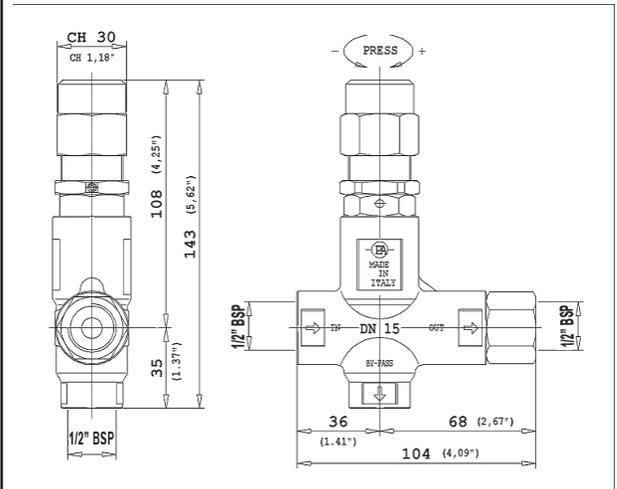
The bypass line should be returned into a tank with baffles. If the bypass is directed back to the pump, it is necessary to install a pressure reducer in order to have an even flow supply and to protect the circuit intake. When the system is opened and closed frequently, it is recommended to install a thermal protector valve in order to eliminate excessive temperature build-up.

MAINTENANCE

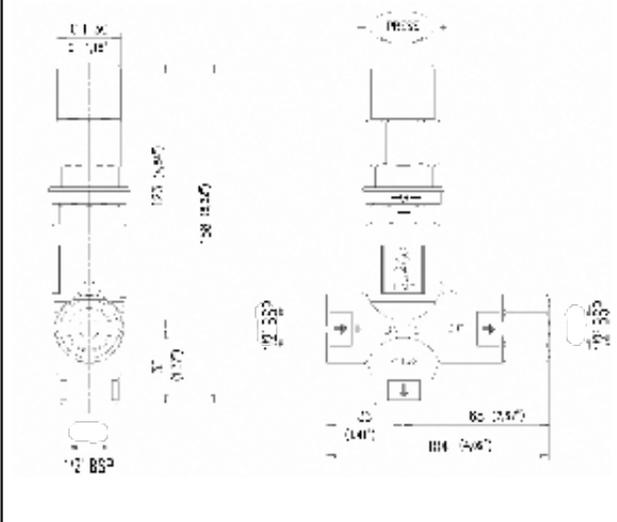
Maintenance has to be carried out by qualified technicians. **STANDARD:** every 400 working hours (about 10,000 cycles), check and lubricate the seals with water resistant grease. **SPECIAL:** every 800 working hours (about 20,000 cycles), control the wear of the seals and internal parts and, if necessary, replace with new parts taking care during installation and to lubricate with water resistant grease.

ATTENTION: reassemble the valve in the correct manner paying special attention to the Nut (22*) by fastening it with a drop of strong glue. The manufacturer is not to be considered responsible for damage as a result from incorrect fitting and maintenance.

22210 Dimensions - mm [inches]



22215 Dimensions - mm [inches]



Troubleshooting Guide

Problem	Cause	Remedy
Cycling	Damaged check valve O-ring	Replace
	Leaky connections	Check and re-new
	Restricted bypass	Clean and adjust
Does not reach pressure	Unloader not properly sized	change spring or type of valve
	Piston O-rings worn out	Replace
	Material matter between seat and kick back valve	Clean the seat
	Worn out nozzle	Replace
Pressure peaks	There is not a minimum of 5% of total flow in bypass	Reset
	Excessive flow in bypass	Change type of valve or adjust passages
	Spring totally compressed	Loosen know and change nozzle
High bypass pressure	Jammed check valve	Clean or replace
	Check valve O-ring worn out	Replace
	Material matter on check valve	Clean



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