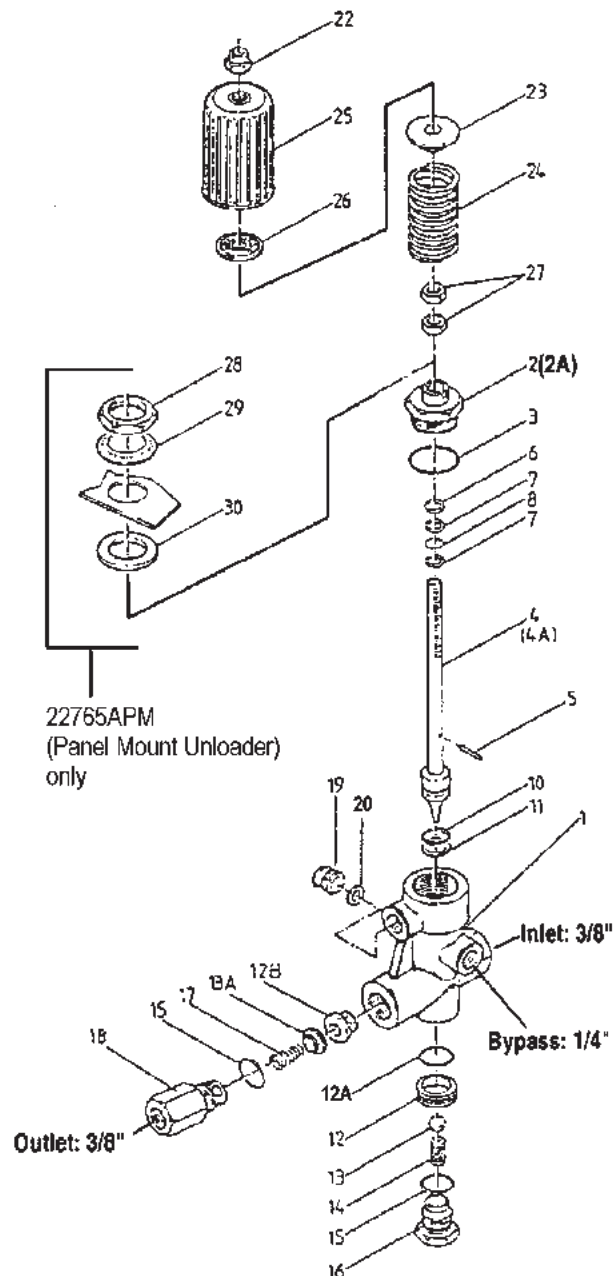


# Models

# Unloader

## 22765A/22765A-SS/

## 22765APM/22765APM-SS



ITEM #	PART #	DESCRIPTION	QTY
1	22761	Valve Body	1
2	22762	Guide Plug (22765A)	1
2A	12227	Guide Plug (22765APM)	1
3	07913	O-Ring	1
4	22763	Piston Rod (22765A)	1
4A	12228	Piston Rod (22765APM)	1
5	22764	Lock Pin	1
6	12305	Spacer Ring	1
7	12018	Support Ring	2
8	11507	O-Ring	1
10	03001	O-Ring, Piston	1
11	08324	Backup Ring, Piston	1
12	22766	Bypass Valve Seat	1
12A	12017	O-Ring	1
12B	22767	Kick Back Valve Seat	1
13	07416	Bypass Valve Ball	1
13A	22768	Valve Plate	1
14	12321	Bypass Valve Spring	1
15	12007	O-Ring	2
16	22769	Bypass Valve Plug (22765/22765APM)	1
16	22769-0400	Bypass Valve Plug (22765-SS/22765APM-SS)	1
17	22771	Kickback Valve Spring	1
18	22772-4000	Kickback Valve Spring Retainer	1
19	12314	Plug	2
20	12236	O-Ring	2
22	12317	Lock Nut	1
23	12318	Spring Tension Disc	1
24	12319	Spring	1
25	12322	Hand Grip	1
26	12323	Bearing	1
27	12320	Limiting Nuts	2
28	12335	Nut (22765APM)	1
29	12333	Retainer (22765APM)	1
30	12334	Lock Washer (22765APM)	1

### Repair Kit # 09163

Includes Item Numbers: 3, 6, 7, 8, 10, 11, 15

### OPERATING CONDITIONS

Maximum Flow:	5 GPM
Minimum Flow:	1.3 GPM
Maximum Pressure:	4000 PSI
Minimum Pressure:	580 PSI
Maximum Temperature:	160 °F
Inlet Port:	3/8" FNPT
Outlet Port:	3/8" FNPT
Bypass Port (2):	1/4" BSP
Guage Port:	1/4" BSP

# INSTALLATION & OPERATING INSTRUCTIONS

## Installation

1. The unloader is to be positioned on the discharge side of the pumping unit.
2. The port marked "inlet" receives the pump discharge.
3. The port marked "outlet" is the pressure outlet. Make sure all unused plugs are tightened securely.
4. Any of the back side ports or the small front port can be used for bypass to redirect the pumped media when the pressure outlet is closed.
5. The proper sized bypass line can be directed to a holding tank, to atmosphere, or back to the pump inlet.

**NOTE:** Bypass lines returning to the pump inlet should be equipped with a thermal relief to prevent excessive heat buildup in the bypass line that can damage the pumping system during periods of prolonged bypass.

6. If a pulsation dampener is used in your pumping system, the dampener 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 pump and unloader.

7. The 22765 unloader may be operated at flow rates to 5 GPM and pressures up to 4000 PSI.

**NOTE:** Cracking pressures, at which the unloader is activated, can rise 200-400 PSI over the rated operating pressures depending on your system.

8. Always adjust unloader spring to system pressure with the system open. Make certain before adjusting that the spray nozzle orifice is properly sized for the volume and pressure you desire, and then fine tune the unloader.
9. Giant Industries strongly recommends the use of a pop-off valve positioned downstream of the unloader as a safety backup to unloader malfunction.

## DISASSEMBLY OF THE 22765 SERIES UNLOADER

### To Replace Piston Rod Seals:

1. Remove lock nut (22), handwheel (25), bearing (26), spring tension disc (23), and spring (24).
2. Remove the valve cap (2 or 2A) out of the valve body (1). Remove the pin (5) and take piston rod (4 or 4A) out of the valve cap. Cut out spacer ring (6), support rings (7) and o-ring (8). Next, cut out piston o-ring (10) and backup ring (11).

Note: Lightly grease all part before reinstalling.

3. Place spacer ring (6) support rings (7) and o-ring (8) on piston rod (4 or 4A). **Do not damage piston rod threads.**
4. Place o-ring (10) and backup ring (11) on piston body (9). Check surfaces of valve body (1) and valve cap (2 or 2A) for dirt or wear.

### To Check Valves:

1. Remove kick back valve spring retainer (18) and bypass valve plug (16).
2. Check for wear on the following parts: bypass valve ball (13), kick back valve plate (13A), bypass valve seat (12) and kick back valve seat (12B). Note: The valve seats can be removed with a 6mm wrench.
3. Use Loctite (572) to help secure new valve seats (12 and 12B) and tighten securely. Replace seals and install remaining parts. Allow to dry for 60 minutes before putting unloader into operation.



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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](http://www.P65Warnings.ca.gov)