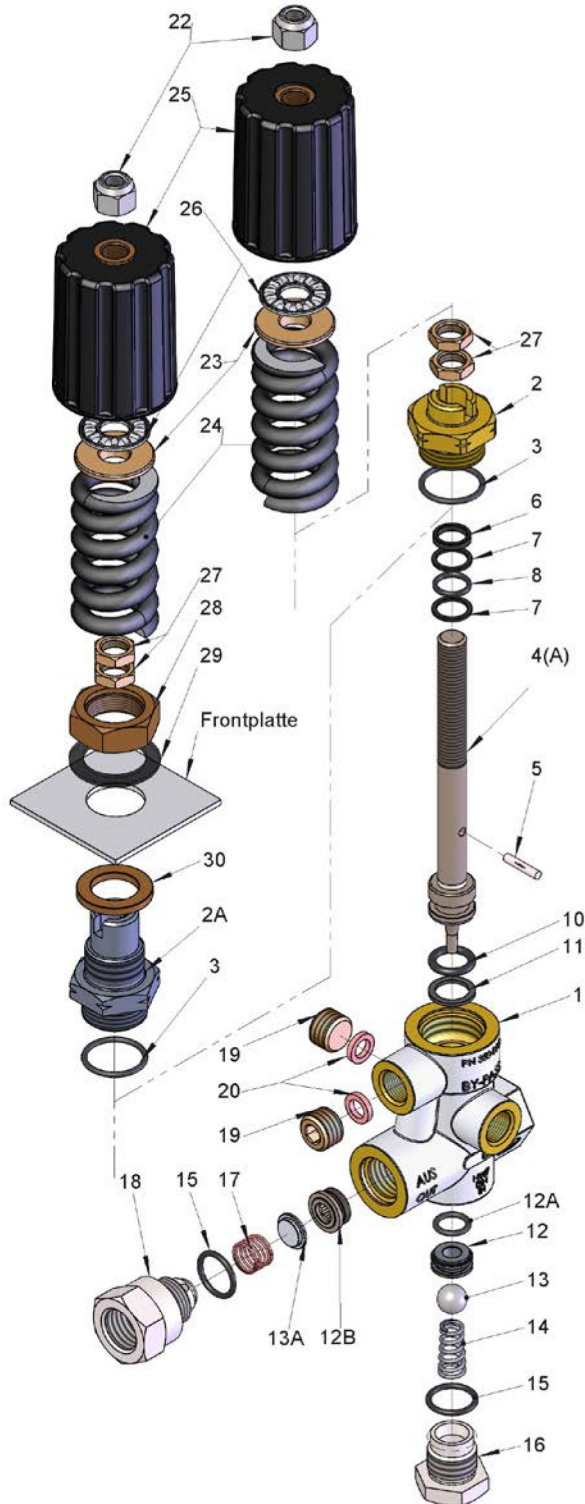


# Models

## 22765A/22765APM

# Unloader



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	Support 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	03477	Valve Plate	1
14	12321	Bypass Valve Spring	1
15*	12007	O-Ring	2
16	22769-0400	Bypass Valve Plug	1
17	22771	Kickback Valve Spring	1
18	22772-4000	Kickback Valve Spring Retainer	1
19	12280	Plug	2
20	12332	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
	*09163	Repair Kit	

### OPERATING CONDITIONS

<b>Maximum Flow (side port):</b>	8 GPM (30 L/min)
<b>Maximum Flow (bottom port):</b>	5 GPM (19 L/min)
<b>Minimum Flow:</b>	1.3 GPM (4.9 L/min)
<b>Maximum Pressure:</b>	4350 PSI (300 bar)
<b>Minimum Pressure:</b>	580 PSI (40 bar)
<b>Maximum Temperature:</b>	160 °F (70 °C)
<b>Inlet Port:</b>	3/8" FNPT
<b>Outlet Port:</b>	3/8" FNPT
<b>Bypass Port (2):</b>	1/4" BSP
<b>Guage Port:</b>	1/4" BSP

## SAFETY INSTRUCTIONS

**IMPORTANT!** Observe direction of flow. The bypass must under no circumstances be closed or fitted with any shut-off device.

**IMPORTANT!** Continuous bypass operation without releasing the water can cause the liquid to heat up which in turn could damage the unit and endanger persons.

### Possible preventive measures:

1. Limit the bypass duration (maximum temperature 160 °F [70 °C]); the duration is to be calculated by the operator and in conjunction with the operating conditions.
2. Use fittings (e.g. thermal relief valve on water inlet) to avoid heat increase.

## ADJUSTING PRESSURE

1. Valve should be tension free i.e. loosen nut (22) and hand wheel (25) so that the piston rod can be moved manually.
2. Pressure spring (24) and nut (22) are to be tensioned by centring disc (23) with open gun, (in case of more guns, all have to be open) and while the pump is running. When the required operating pressure has been reached, no more water should run out on the bypass side.

The maximum operating pressure can be set by tightening and locking the stop nuts (27) to centring disc (23). Various operating pressures (up to maximum operating pressure) can be set by turning the hand wheel

If the nozzle hole is properly suited to the output and pressure of the pump, no more water should flow through the bypass after the required operating pressure has been reached.

If the nozzle hole is too small to allow all the fluid to run through the hole after the required operating pressure has been reached, on no account is the valve to be adjusted higher than the maximum operating pressure of the pump. In this case, the bypass is to be left partially open. Nevertheless, it is advisable to have suitable nozzles installed.

## SERVICE AND ADJUSTMENT

Reservicing and adjusting work is only to be carried out by skilled tradesmen.

## RENEWAL OF PISTON SEALS

1. Remove guide plug (2) from the valve body (1); remove lock pin (5) and take piston rod (4/4A) out of plug.
2. Cut out worn seals (6, 7 and 8).
3. Put spacer ring (6), o-ring (8) and support rings (7) carefully over the threads onto the piston rod. Note order of installation.
4. Clip the o-ring (10) and support rings (11) and install new parts onto the piston rod. Check inner surfaces of valve body (1) and guide plug (2/2A). Dirt or damage will prematurely wear seals.
5. Grease all parts lightly with Silicone before reinstalling.

## TO CHECK VALVES

1. Remove plugs (16, 18) and examine ball (13), or valve plate (13A), as well as seats (12, 12B) for wear.
2. Seats can be removed with an allenhead wrench (6 mm).
3. Glue in new seats with Loctite 572. Before putting into operation, allow to dry for 60 minutes.

**GIANT**  
Performance Under Pressure

Giant Industries, Inc.

900 N. Westwood Ave., Toledo, Ohio 43607

Phone: 419-531-4600, Fax: 419-531-6836, [www.giantpumps.com](http://www.giantpumps.com)



**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)