

Triplex Plunger Pump, 1" Hollow Shaft

FEATURES

- Triplex plunger pump
- Features built-in unloader (U) or unloader and fixed injector (UIF)
- New Forged brass manifold, increases working pressure to 4,200 PSI
- New plunger guide bushing (patent pending)
- Solid ceramic plungers with dual guide system
- New dual diameter plunger guide
- New optimized outlet valves
- New dual lip oil seal
- 1" Hollow shaft, flanged for direct couple to gas engines (SAE J609B)

**SPECIFICATIONS**

Pump Model	EP1313G8U/IF
Maximum Volume	4.0 GPM
Maximum Discharge Pressure	4,200 PSI
Maximum Pump Speed	3400 RPM
Inlet Pressures	Flooded to 70 PSI
Plunger Bore	.512 in./13 mm
Plunger Stroke	.512 in./13 mm
Oil Capacity	15 oz.
Maximum Fluid Temperature	165° F
Inlet Port Thread	1/2"-14 BSP-F
Discharge Port Thread	3/8"-19 BSP-M
Shaft Diameter	1" Hollow
Weight	15.9 lbs.
Dimensions	11.2"x9.6"x7.6"



General Pump
is a member of
the Interpump Group



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Instructions and Recommendations for the Installation of *EP Series Pumps*

Maximum temperature of the water through the pump is 165°F (73°C).

In order to obtain maximum performance in terms of duration of seals and valves, it is necessary to respect a few simple rules, as follows:

- 1) **In order to avoid damage caused by cavitation, the pump must be pressure fed.**

Note: Contact General Pump's technical sales department for guidance when operating the pump outside of the related inlet specs.

- 2) **The plumbing which feeds the pump must be of a diameter at least equal to the inlet port.**

Also, follow the suggestions below:

- a) Make the plumbing as short and straight as possible, preferably in an upward direction to facilitate the expulsion of eventual air bubbles naturally if compatible with the requirements of the system.
- b) It is always useful to put a filter at the inlet with capacity of 4 to 5 times the flow of the pump, for example for a 4 gpm (15 l/min) pump, put a filter from 16 to 20 gpm (60-75 l/min). The mesh size suitable for this application is 0.016" (.4 mm).
- c) It is extremely important to put a pressure switch on the suction port of the pump, and in any case downstream from the filter, so that it can stop the pump should the feed pressure drop by 20% due to the filter clogging or failure of the feed pump, etc.

3) Change of oil

We recommend the **first oil change after the first 50 hours**, with the **pump stopped** and the **oil still warm**.

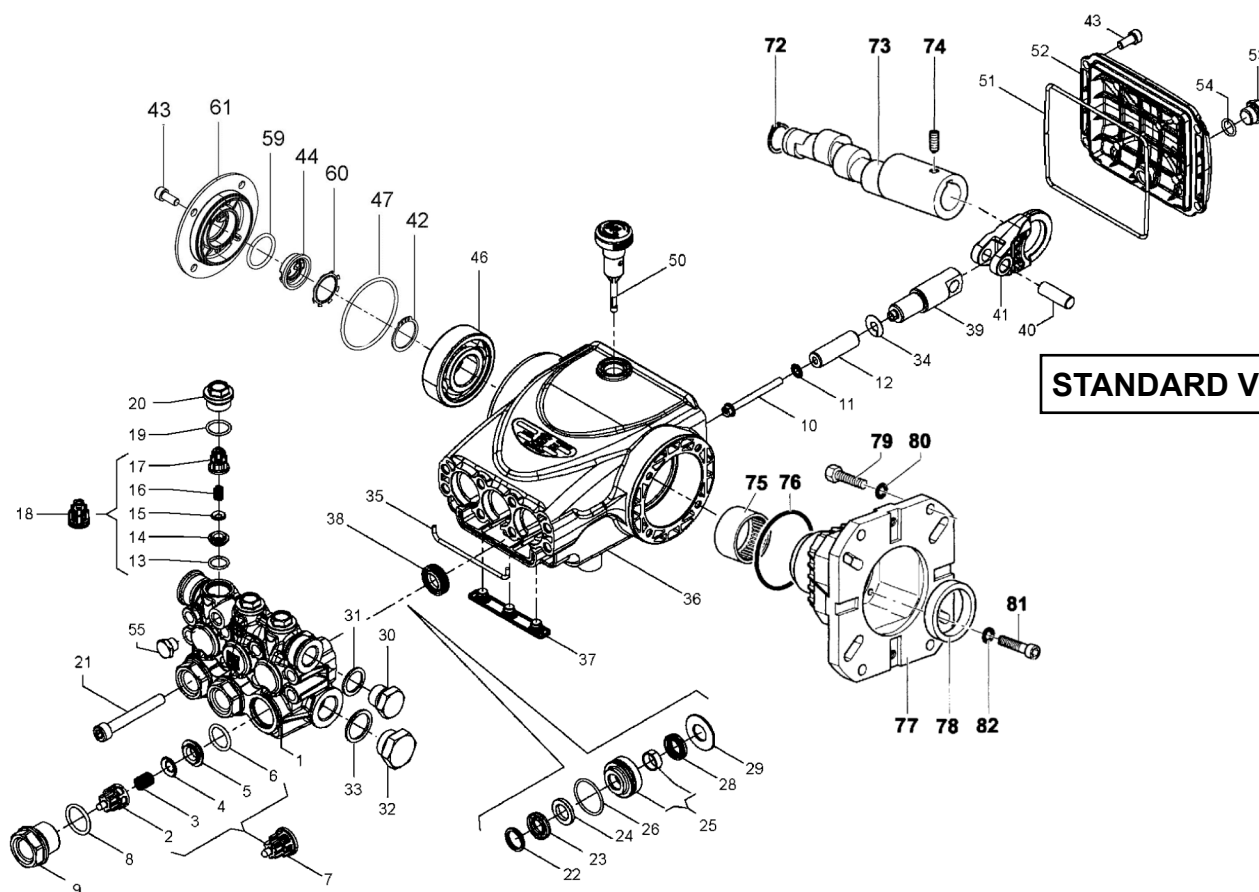
This change is not recommended because the oil has lost its properties, but rather to eliminate the impurities that have gotten into the oil during the running-in phase. If these impurities are not removed, but are allowed to remain in the oil, they *may cause premature wear* to the moving parts and the oil seals. **After this initial change, the oil can then be changed every three months or 300 hours of operation thereafter.**

Please note: If the pump works in conditions with high humidity and with sharp temperature changes, it is possible that condensation will appear inside the crankcase, which mixing with the oil can change its properties. This is easy to see because the oil changes to a white, milky color.

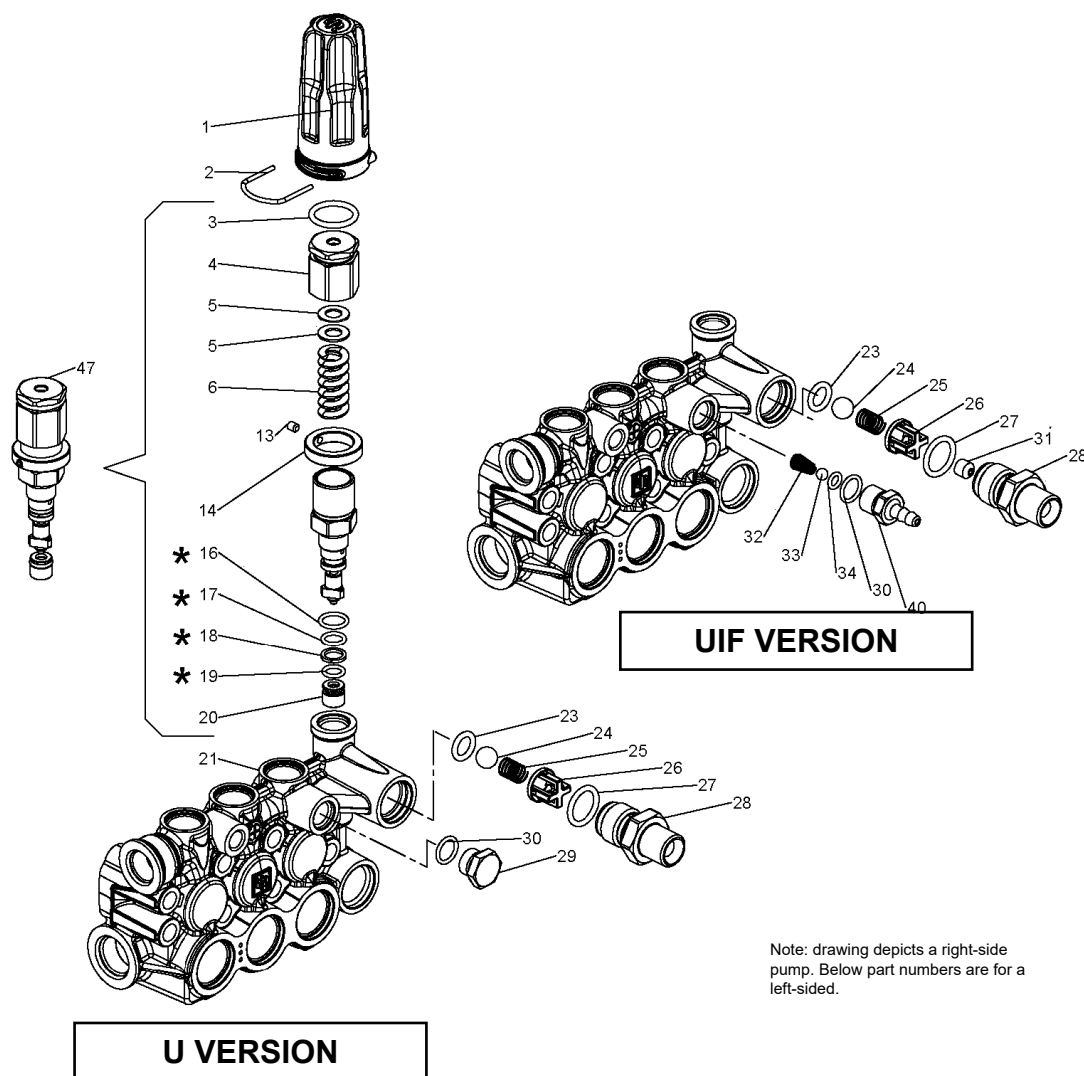
If the pump does not have excessive water leaking from the packings, and the oil becomes milky, the oil has to be changed more frequently. The percentage of water in the oil must not exceed 20%.

Use oil per the following chart:

CHART OF COMPATIBLE OILS	
General Pump	Series 100
BP	VISCO 2000
CASTROL	CWX
MOBIL	SUPER
SHELL	HELIX SUPER
TOTAL	QUARTZ 4000-5000


PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1.	58120041	Manifold, Ø 13, Standard	1	25.	58605601	Intermed. Ring, Ø 13	3	53.	98204100	Plug, 1/4"x9	1
2.	36202551	Valve Cage	3	26.	701023	O-ring, 26.7x1.78	3	54.	701013	O-ring, Ø 10.82x1.78	1
3.	94737600	Spring, Ø 9.4x14.8	3	28.	90260100	Seal, Ø 13, LP	3	55.	98196600	Plug, 1/8"x8	1
4.	36200176	Valve	3	29.	58210670	Support Ring, Ø 13	3	56.	99303700	Screw, Hex Head	4
5.	36200366	Valve Seat	3	30.	98210000	Plug, 3/8"x13	1	57.	96701600	Washer, Ø 8.4	4
6.	701115	O-ring, Ø17.13x2.62	3	31.	96738000	Gasket, 17.5x23x1.5	1	58.	50200074	Pump Foot	2
7.	36711501	Valve Assembly	3	32.	98217600	Plug, 1/2" BSPx10	1	59.	90385900	O-ring Ø 25.07x2.62	1
8.	701002	O-ring, Ø20.24x2.62	3	33.	96751400	Gasket, Ø 21.5x27x1.5	1	61.	58150122	Side Cover	1
9.	98222600	Valve Cap, M24x1.5x16.7	3	34.	96698000	Washer, Ø 7.5x15x0.5	3	60.	90067100	Stop Ring	1
10.	99169000	Plunger Bolt, M5x55	3	35.	58210582	Gasket, Ø 3x94	1	72.	90063500	Circlip, Ø 25	1
11.	96690500	Washer, Ø 5x11.5x0.4	3	36.	58010022	Crankcase	1	73.	63029065	Crankshaft, 13 mm	1
12.	58040009	Plunger, Ø 13x42	3	37.	58210451	Drip Cover	1	74.	99179000	Set Screw, M6x6	1
13.	701014	O-ring, Ø 12.42x1.78	3	38.	90156550	Oil Seal, Ø 15x24x5.7	3	75.	91856800	Needle Bearing	1
14.	36211366	Outlet Valve Seat	3	39.	58050066	Piston Guide	3	76.	90409700	O-ring	1
15.	36211276	Outlet Valve Poppet	3	40.	97734000	Piston Pin, Ø 10x29.5	3	77.	10051822	Flange	1
16.	94733300	Spring, Ø 6.2x10.4	3	41.	58030022	Connecting Rod	3	78.	90168700	Oil Seal, Ø 45x60x8	1
17.	36211151	Outlet Valve Cage Guide	3	42.	90063500	Stop Ring Ø 25	1	79.	99275500	Screw, Hex Head	4
18.	36719301	Complete Outlet Valve	3	43.	99183700	Screw M6x14	12	80.	203476	Washer, Ø 8.4x15x1.5	4
19.	701016	O-ring, Ø 15.6x1.78	3	44.	53210851	Oil Level Indicator	1	81.	99191200	Screw, M6x30	4
20.	98213700	Outlet Valve Cap, M18x1.5x10	3	46.	91833100	Premium bearing	1	82.	203510	Washer, Ø 6.4x10x.7	4
21.	99317500	Screw, M8x60	8	47.	90389800	O-ring Ø 56.82x2.62	1				
22.	44100251	Head Ring, Ø 13	3	50.	98210500	Oil Dipstick	1				
23.	90260200	Packing, Ø 13, HP	3	51.	90392550	O-ring, Ø 113.97x2.62	1				
24.	90507650	Anti-ext. Ring, Ø 13	3	52.	58160022	Rear Cover	1				



PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1.	36351751	Adjustment knob	1	18.	90503800	Anti-extrusion ring	1	29.	98204100	Plug, 1/4"x9 (U)	1
2.	10084666	Fork for adjustment knob	1	19.	90357800	O-ring, Ø7.66x1.78	1	30.	90358500	O-ring, Ø10.82x1.78 (U)	1
3.	90384500	O-ring, Ø18.72x2.62	1	20.	36348366	Seat	1	32.	94821700	Spring, Ø4.3/7.3x110	1
4.	36348170	Pressure adjusting nut	1	21.	58120941	Manifold, left side unloader	1	33.	97478200	Ball, Ø7/32"	1
5.	36348651	Washer	2	23.	90382300	O-ring, Ø9.92x2.62	1	34.	90357300	O-ring, Ø5.25x1.78	2
6.	94739500	Spring, Ø11.3x34.5	1	24.	97483800	Ball, Ø13/32"	1	40.	36349270	Hose barb	1
13.	99126700	Screw, M4X5	1	25.	94735500	Spring, Ø8.2x12	1	47.	36605401	Valve Assembly	1
14.	36347770	Pressure ring	1	26.	36310451	Valve guide	1				
16.	90358700	O-ring, Ø11.11x1.78	1	27.	90383900	O-ring, Ø15.88x2.62	1				
17.	90358100	O-ring, Ø8.73x1.78	1	28.	36348770	Nipple, 3/8" NPT-M	1				

TORQUE SPECS*

Position	Ft.-Lbs.	Nm.
9	96	130
10	4.5	6
20	44.3	60
21	14.8	20
28	32.5	44
30**	30	40
32	30	40
43	7.4	10
47	10.3	14
53	14.8	20
55**	9.6	13
81	7.4	10

****Use Loctite 542 Red**

