

**Triplex Plunger Pump, Electric, Built-in Unloader****FEATURES**

- Triplex plunger pump
- New Forged brass manifold , increases working pressure to 4,000 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
- Hollow shaft, flanged for direct couple to electric motors (NEMA184TC))
- Includes built-in unloader

**SPECIFICATIONS**

<b>Pump Model</b>	<b>EP1812E17UL</b>
<b>Maximum Volume</b>	4.0 GPM
<b>Maximum Discharge Pressure</b>	2,900 PSI
<b>Horsepower</b>	6.6 HP
<b>Maximum Pump Speed</b>	1750 RPM
<b>Inlet Pressures</b>	Flooded to 70 PSI
<b>Plunger Bore</b>	.709 in./18 mm
<b>Plunger Stroke</b>	.472 in./12 mm
<b>Oil Capacity</b>	15 oz.
<b>Maximum Fluid Temperature</b>	165° F
<b>Inlet Port Thread</b>	1/2"-14 BSP-F
<b>Discharge Port Thread</b>	3/8"-19 BSP-F
<b>Shaft Diameter</b>	1.125 in./28.58 mm
<b>Weight</b>	15.4 lbs.
<b>Dimensions</b>	9.7" x 8.45" x 6.3"



General Pump  
is a member of  
the Interpump Group



Ref 301100 Rev. D  
09-24



# 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.**

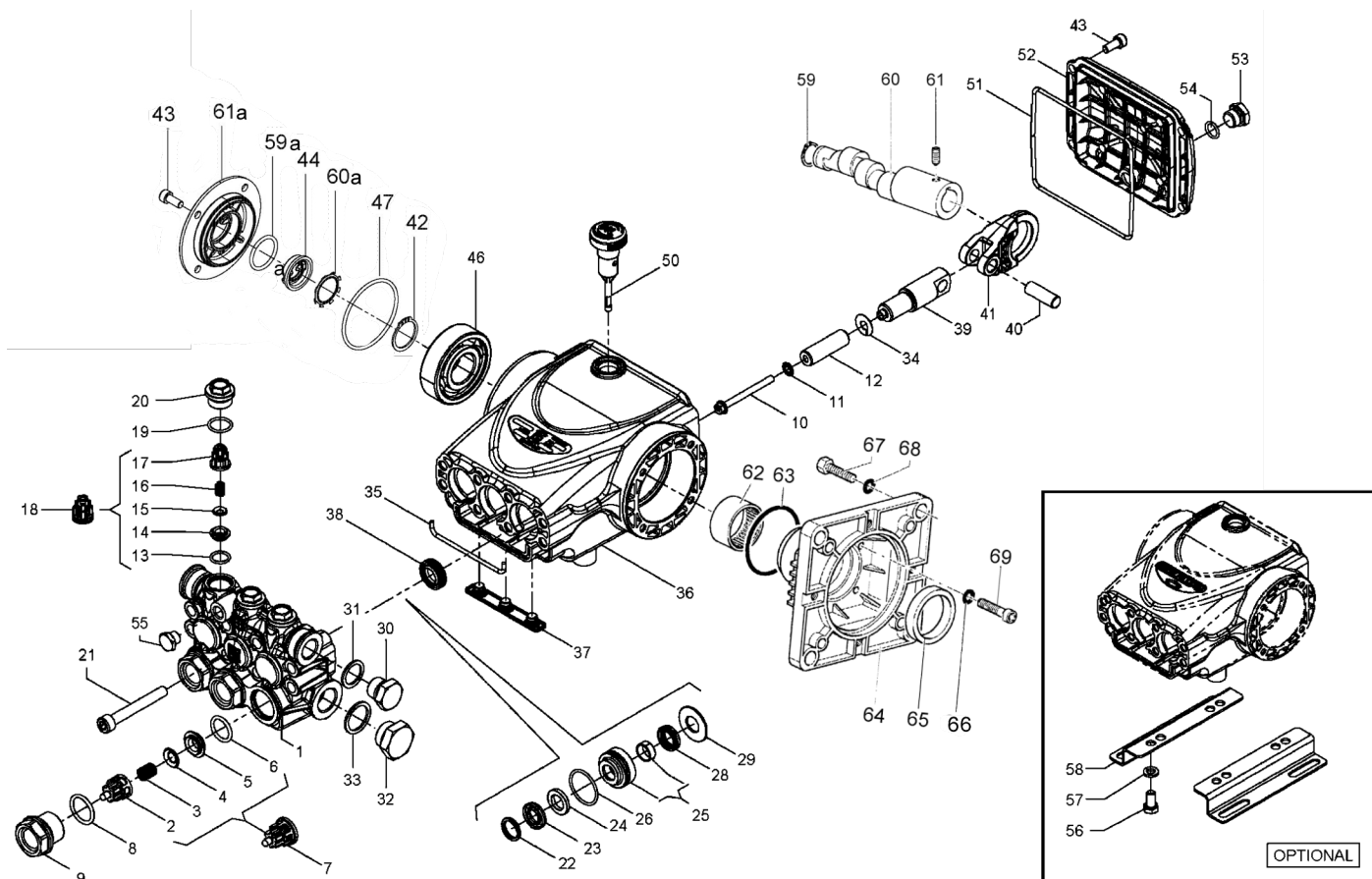
Please note: If the pump works in conditions with high humidity and with sharp temperature changes, it is possible that condensation will appear inside the crankcase, which mixing with the oil can change its properties. This is easy to see because the oil changes to a white, milky color.

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

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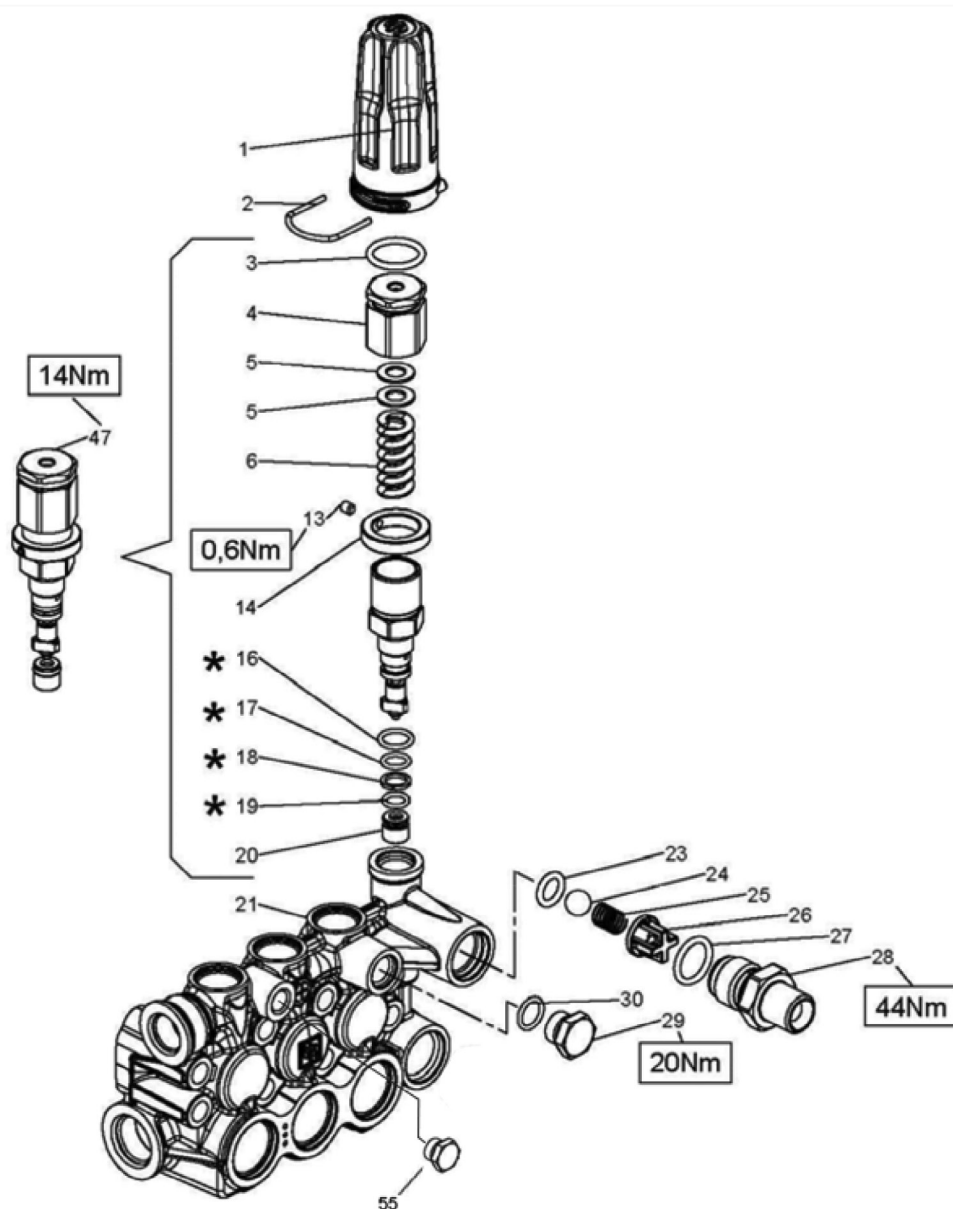


## PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1.	58120241	Manifold, Ø 18	1	26.	701023	O-ring, 26.7x1.78	3	55.	98196600	Plug, 1/8"x8	1
2.	36202551	Valve Cage	3	28.	90265000	Seal, Ø 18 LP	3	56.	99303700	Screw, Hex Head	4
3.	94737600	Spring, Ø 9.4x14.8	3	29.	58210870	Support Ring, Ø 18	3	57.	96701600	Washer, Ø 8.4	4
4.	36200176	Valve	3	30.	98210000	Plug, 3/8"x13	1	58.	50200074	Pump Foot	2
5.	36200366	Valve Seat	3	31.	96738000	Gasket, 17.5x23x1.5	1	59.	90063500	Circlip	1
6.	701115	O-ring, Ø17.13x2.62	3	32.	98217600	Plug, 1/2" BSPx10	1	59a.	90385900	O-ring Ø 56.82x2.62	1
7.	36711501	Valve Assembly	3	33.	96751400	Gasket, Ø 21.5x27x1.5	1	60.	63023665	Crankshaft, 12 mm	1
8.	701002	O-ring, Ø20.24x2.62	3	34.	96698000	Washer, Ø 7.5x15x0.5	3	60a.	90067100	Stop Ring	1
9.	98222600	Valve Cap, M24x1.5x16.7	3	35.	58210582	Gasket, Ø 3x94	1	61.	99179000	Set Screw, M6x6	1
10.	99169000	Plunger Bolt, M5x55	3	36.	58010022	Crankcase	1	61a.	58150122	Side Cover	1
11.	96690500	Washer, Ø 5x11.5x0.4	3	37.	58210451	Drip Cover	1	62.	91856800	Needle Bearing	1
12.	58040209	Plunger, Ø 18x42	3	38.	90156550	Oil Seal, Ø 15x24x5.7	3	63.	90409700	O-ring, Ø 55.56x3.56	1
13.	701014	O-ring, Ø 12.42x1.78	3	39.	58050066	Piston Guide	3	64.	10050422	Electric Flange	1
14.	36211366	Outlet Valve Seat	3	40.	97734000	Piston Pin, Ø 10x29.5	3	65.	90168700	Oil Seal	1
15.	36211276	Outlet Valve Poppet	3	41.	58030022	Connecting Rod	3	66.	203510	Washer, Ø 6.4x10x0.7	4
16.	94733300	Spring, Ø 6.2x10.4	3	42.	90063500	Stop Ring Ø 25	1	67.	99460000	Screw, Hex, 1/2"x1-1/4"	4
17.	36211151	Outlet Valve Cage Guide	3	43.	99183700	Screw M6x14	12	68.	96719500	Washer, Ø 13x18x1.1	4
18.	36719301	Complete Outlet Valve	3	44.	53210851	Oil Level Indicator	1	69.	99191200	Screw, M6x30	4
19.	701016	O-ring, Ø 15.6x1.78	3	46.	91833100	Prem Bearing	1				
20.	98213700	Outlet Valve Cap, M18x1.5x10	3	47.	90389800	O-ring, Ø 56.82x2.62	1				
21.	99317500	Screw, M8x60	8	50.	98210500	Oil Dipstick	1				
22.	63101151	Head Ring, Ø 18	3	51.	90392550	O-ring, Ø 113.97x2.62	1				
23.	90265350	Packing, Ø 18, HP	3	52.	58160022	Rear Cover	1				
24.	90511150	Anti-ext. Ring, Ø 18	3	53.	98204100	Plug, 1/4"x9	1				
25.	58605801	Intermediate Ring, Ø 18	3	54.	701013	O-ring, Ø 10.82x1.78	1				

\* 53150001 Oil Level Indicator Assembled W/O Screws and O-ring

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ITEM	PART NO.	DESCRIPTION	QTY
1.	36351751	Adjustment knob	1
2.	10084666	Fork for adjustment knob	1
3.	90384500	O-ring, Ø18.72x2.62	1
4.	36348170	Pressure adjusting nut	1
5.	36348651	Washer	2
6.	94739500	Spring, Ø11.3x34.5	1
13.	99126700	Screw, M4X5	1
14.	36347770	Pressure ring	1
16.	90358700	O-ring, Ø11.11x1.78	1
17.	90358100	O-ring, Ø8.73x1.78	1

ITEM	PART NO.	DESCRIPTION	QTY
18.	90503800	Anti-extrusion ring	1
19.	90357800	O-ring, Ø7.66x1.78	1
20.	36348366	Seat	1
21.	58120941	Manifold	1
23.	90382300	O-ring, Ø9.92x2.62	1
24.	97483800	Ball, Ø13/32"	1
25.	94735500	Spring, Ø8.2x12	1
26.	36310451	Valve guide	1
27.	90383900	O-ring, Ø15.88x2.62	1
28.	36348770	Nipple, 3/8" NPT-M	1

ITEM	PART NO.	DESCRIPTION	QTY
29.	98204100	Plug, 1/4"x9 (U)	1
30.	90358500	O-ring, Ø10.82x1.78 (U)	1
32.	94821700	Spring, Ø4.3/7.3x110	1
33.	97478200	Ball, Ø7/32"	1
34.	90357300	O-ring, Ø5.28x1.78	2
40.	36349270	Hose barb	1
47.	36605401	Valve Assembly	1
55.	98196600	Plug, 1/8"x8	1

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## REPAIR KITS

### STANDARD

KIT NO.	K269	K270	K271	Ø 18	
				K274	K277
ITEM NO'S INCLUDED IN KIT	2, 3, 4, 5, 6, 13, 14, 15, 16, 17, (7), (18)	8, 9, 19, 20	38	22, 23, 24, 26, 28	22, 23, 24, 25, 26, 28, 29
NUMBER OF ASSY'S IN KIT	6	6	3	3	1
NUMBER OF CYLINDERS KIT SERVICES	3	3	3	3	1

### UNLOADER

KIT NO.	K278
ITEM NO'S INCLUDED IN KIT	23, 24, 25, 26, 27, 47
NUMBER OF PIECES	1

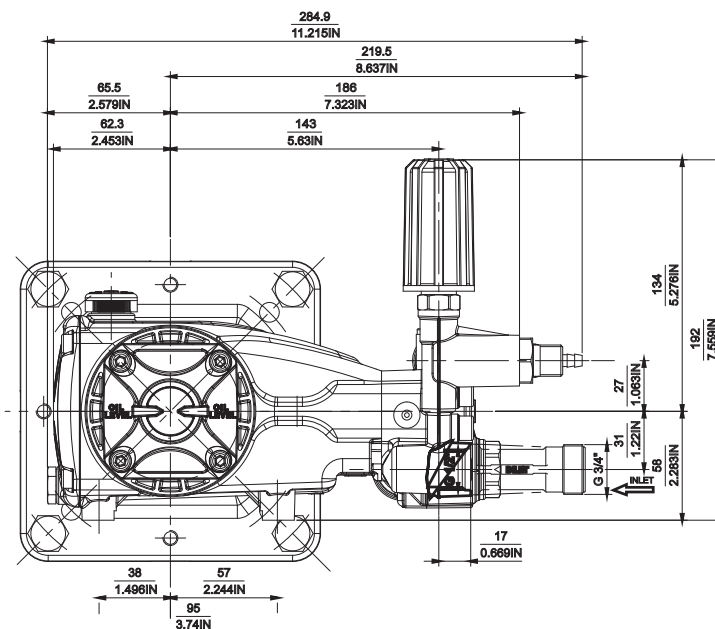
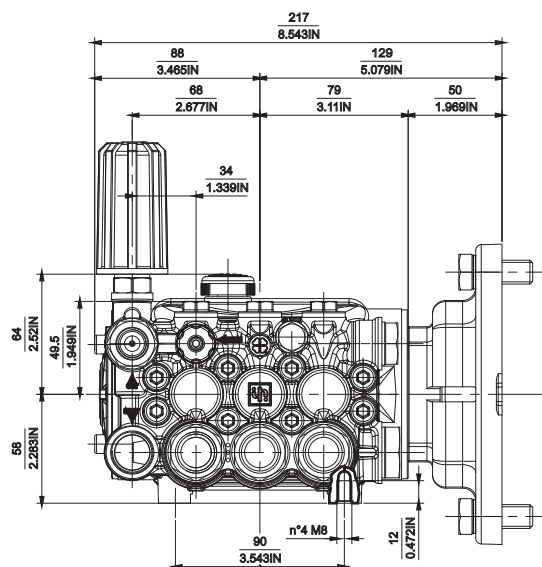
## TORQUE SPECS\*

Position	Ft.-Lbs.	Nm.
9	96	130
10	4.5	6
20	44.3	60
21	14.8	20
30	30	40
32	30	40
43	7.4	10
53	14.8	20
55	9.6	13
56	14.8	20
69	7.4	10

\*Decrease torque by 20% if threads are lubricated.

\*\*Use Loctite 542 Red

## DIMENSIONS



**WARNING:** High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices properly could result in personal injury or damage to pump or property. GP does not assume any liability or responsibility for the operation of the user's high pressure system.



WARNING: This product can expose you to chemicals including lead, which is 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)