TRIPLEX

GENERAL PUMP *A member of the Interpump Group*

EP1812HA17

Triplex Plunger Pump, Hydraulic

FEATURES

- Triplex plunger pump
- Forged brass manifold
- 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
- Flanged for direct coupling to hydraulic motors (SAE-A)

SPECIFICATIONS

Pump Model	EP1812HA17
Max Volume	4.2 GPM
Max Discharge Pressure	2,900 PSI
Horsepower	8.3 HP
Max Pump Speed	1750 RPM
Inlet Pressures	Flooded to 70 PSI
Plunger Bore	.709 in./18 mm
Plunger Stroke	.472 in./12 mm
Oil Capacity	15 oz.
Max Fluid Temperature	165º F
Inlet Port Thread	1/2"-14 BSP-F
Discharge Port Thread	3/8"-19 BSP-F
Shaft Diameter	5/8" / 15.78 mm
Weight	15.4 lbs.
Dimensions	9.5" x 7.6" x 4.8"

TRIPLEX

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

Maximum temperature of the water through the pump is 165ºF (73ºC).

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/mi)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.**

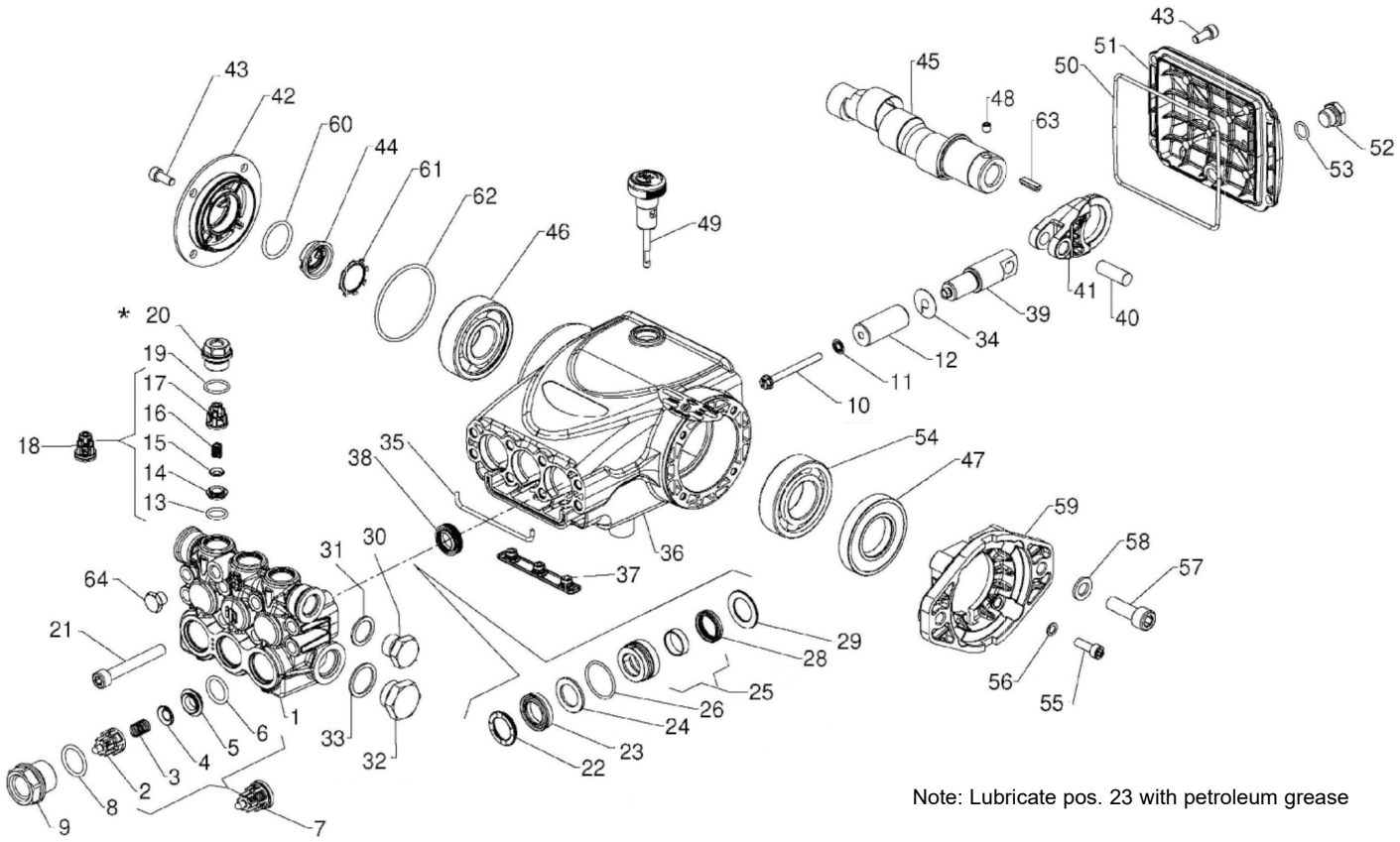
Please note: If the pump works in conditions with high humidity and with sharp temperature changes, it is possible that condensation will appear inside the crankcase, which mixing with the oil can change its properties. This is easy to see because the oil changes to a white, milky color.

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

EP Series
Hollow Shaft - Hydraulic



Note: Lubricate pos. 23 with petroleum grease

PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1.	58120241	Manifold, Ø 18	1
2.	36202551	Valve Cage	3
3.	94737600	Spring, Ø 9.4x14.8	3
4.	36200176	Valve	3
5.	36200366	Valve Seat	3
6.	701115	O-ring, Ø17.13v2.62	3
7.	36711501	Valve Assembly	3
8.	701002	O-ring, Ø20.24x2.62	3
9.	98222600	Valve Cap, M24x1.5x16.7	3
10.	99169000	Plunger Bolt, M5x55	3
11.	96690500	Washer, Ø 5x11.5x0.4	3
12.	58040209	Plunger, Ø 18x42	3
13.	701014	O-ring, Ø 12.42x1.78	3
14.	36211366	Outlet Valve Seat	3
15.	36211276	Outlet Valve Poppet	3
16.	94733300	Spring, Ø 6.2x10.4	3
17.	36211151	Outlet Valve Cage Guide	3
18.	36719301	Complete Outlet Valve	3
19.	701016	O-ring, Ø 15.6x1.78	3
20.	98213700	Outlet Valve Cap, M18x1.5x10	3
21.	99317500	Screw, M8x60	8

ITEM	PART NO.	DESCRIPTION	QTY
22.	63101151	Head Ring, Ø 18	3
23.	90265350	Packing, Ø 18, HP	3
24.	90511150	Anti-ext. Ring, Ø 18	3
25.	58605801	Intermed. Ring, Ø 18	3
26.	701023	O-ring, 26.7x1.78	3
28.	90265000	Seal, Ø 18 LP	3
29.	58210870	Support Ring, Ø 18	3
30.	98210000	Plug, 3/8"x13	1
31.	96738000	Gasket, 17.5x23x1.5	1
32.	98217600	Plug, 1/2" BSPx10	1
33.	96751400	Gasket, Ø 21.5x27x1.5	1
34.	96699000	Washer, Ø 7.5x23.0x0.5	3
35.	58210582	Gasket, Ø 3x94	1
36.	58010022	Crankcase	1
37.	58210451	Drip Cover	1
38.	90156550	Oil Seal, Ø 15x24x5.7	3
39.	58050066	Piston Guide	3
40.	97734000	Piston Pin, Ø 10x29.5	3
41.	58030022	Connecting Rod	3
42.	58150122	Side Cover	1
43.	99183700	Screw M6x14	8

ITEM	PART NO.	DESCRIPTION	QTY
44.	53210851	Oil Level Indicator	1
45.	63023765	Crankshaft, C.12.5	1
46.	91833100	Bearing	1
47.	90165100	Oil Seal, Ø 30x62x10	1
48.	99179000	Screw, M6x6	1
49.	98210500	Oil Dipstick	1
50.	90392550	O-ring, Ø 113.97x2.62	1
51.	58160022	Rear Cover	1
52.	98204250	Plug, 1/4"x9	1
53.	701013	O-ring, Ø 10.82x1.78	1
54.	91837100	Bearing	1
55.	99186700	Screw, M6x18	4
56.	99393800	Washer, Ø 6.4x10x0.7	4
57.	99368600	Screw, M10x30	4
58.	96710300	Washer, Ø 10.5x18x2	4
59.	10076322	Hydraulic Flange, SAE-A	1
60.	90385900	Washer, Ø 25.07x2.62	1
61.	90067100	Stop Ring	1
62.	90389800	O-ring, Ø 56.82x2.62	1
63.	91468500	Key	1
64.	98196600	Plug, G1/8"x8	1

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EP Series
Hollow Shaft - Hydraulic

REPAIR KITS

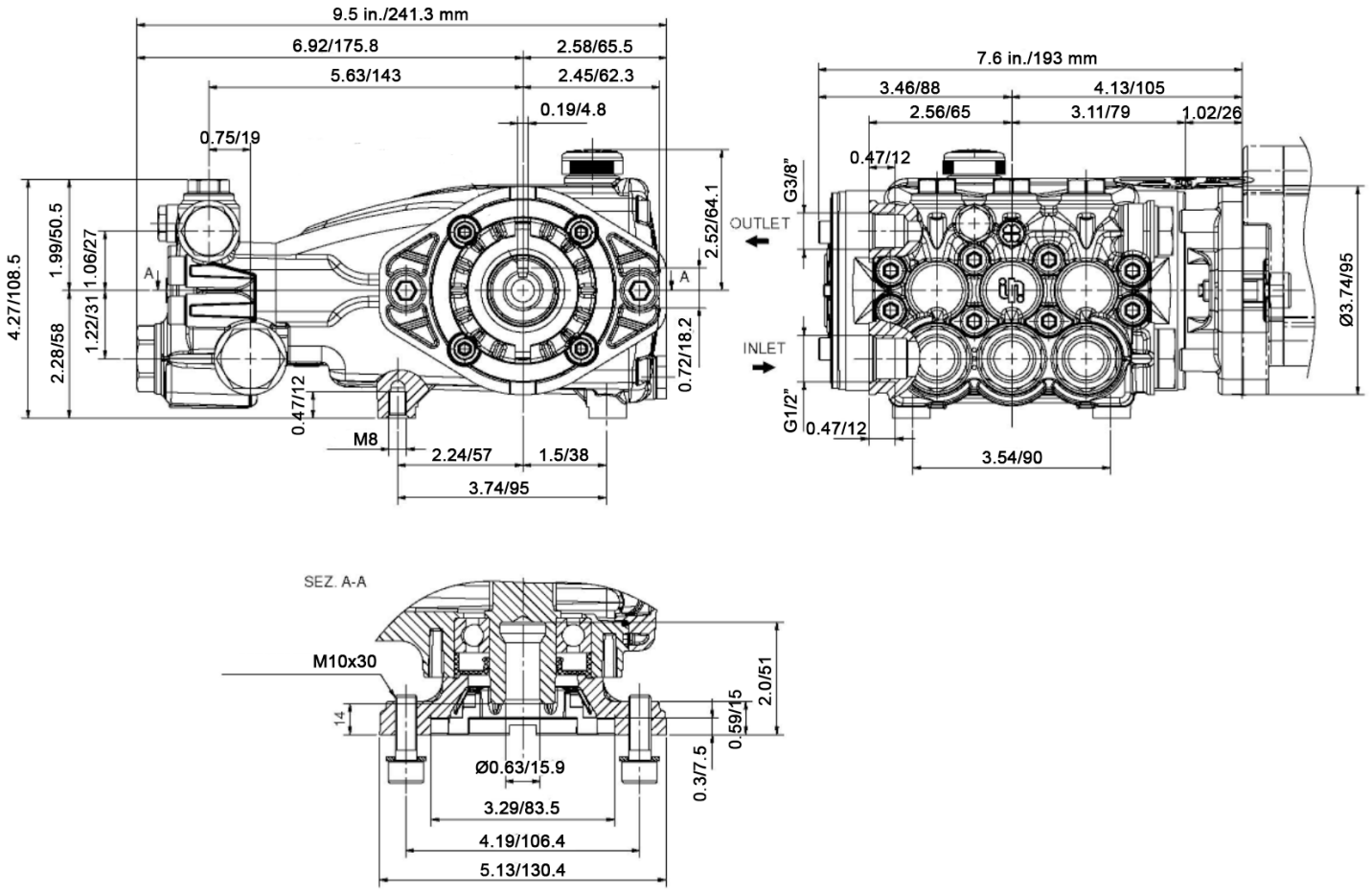
KIT NO.	K269	K270	K271	Ø 18	
				K274	K277
ITEM NO'S INCLUDED IN KIT	2, 3, 4, 5, 6, 13, 14, 15, 16, 17, (7), (18)	8, 9, 19, 20	38	22, 23, 24, 26, 28	22, 23, 24, 25, 26, 28 29
NUMBER OF ASSY'S IN KIT	6	6	3	3	1
NO. OF CYLINDERS KIT SERVICES	3	3	3	3	1

TORQUE SPECS*

Position	Ft.-Lbs.	Nm.
9	96	130
10	4.5	6
20	36.9	50
21	14.8	20
30**	30	40
32	30	40
43	7.4	10
52	14.8	20
55	7.4	10
64**	9.6	13

*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 know to the state of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov

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