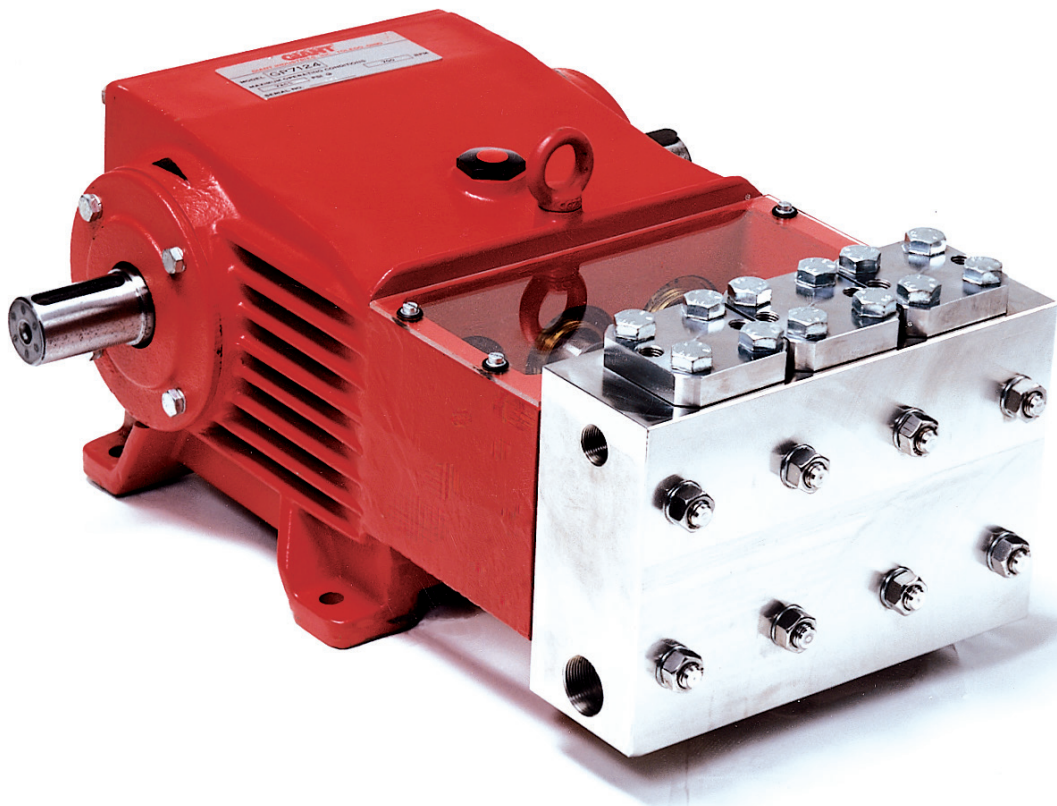


Model GP6128

Triplex Ceramic
Plunger Pump
Operating Instructions/
Manual



GIANT
Performance Under Pressure

Updated 06/24

SPECIFICATIONS

U.S. Measurements

	Power Required	Pressure	Max. Speed	Max. Flow	Max. Temp.	Plunger ø	Plunger Stroke	Weight	NPSHR
Model	BHP	PSI	RPM	GPM	°F	in	in	lbs.	ft. of head
GP6128	51.4	4350	800	18.0	140	1.10	1.89	309	23.6

Metric Measurements

	Power Required	Pressure	Max. Speed	Max. Flow	Max. Temp.	Plunger ø	Plunger Stroke	Weight	NPSHR
Model	kW	bar	RPM	l/min	°C	mm	mm	kg	mWs
GP6128	38.3	300	800	68.1	60	28	48	140	7.2

INSTALLATION INSTRUCTIONS

Performance data for intermittent operation, data for continuous operation on request.

For information on intermittent operation and calculating of the performance data, see the Giant Industries assembly instructions.

NPSHR / Inlet pressure

Required NPSH refers to water (at 68 °F [20°C]) at maximum permissible pump speed.

The inlet pressure on the suction side must not exceed 29 PSI (2 bar).

Make sure that suction pulsation is sufficiently dampened – water column resonance must be avoided.

Level of noise emission

Emission sound pressure level: ≤ 92 dB(A)

Fields of application

The fields of application of these pump types correspond to the specifications in the assembly instructions Giant Industries.

Ambient conditions

Ambient temperature: $41\text{ °F} < T_{\text{Amb.}} < 86\text{ °F}$

Ambient temperature: $5\text{ °C} < T_{\text{Amb.}} < 30\text{ °C}$

Oil filling

- Filling quantity: **1.1 gal (4.2 l)**
- Quality: Industrial gear oil **ISO VG 220** or automotive gear oil **SAE 90 GL4 (Giant's p/n 01154)**
- Intervals: first oil change after **50 operating hours**, then every **1000 operating hours**, but at the latest after **12 months**.

Installation/ Putting into Operation

Shaft protector

When the pump is in operation, the open shaft end must be covered up by shaft protector (21), the driven shaft side and coupling by a contact-protector and the plunger room by cover (30).

Direction of pump rotation

Set the direction of rotation of the drive unit according to the direction of rotation arrow on the crankcase.

Suction line filter

Recommended mesh size 150 µm.

Operation

For informations, see assembly instructions Giant Industries, Inc.

GP6128 REPAIR INSTRUCTIONS

Maintenance and Servicing

For the type of threadlocker used and the required tightening torques, observe the table in the exploded view.

Special tools required

The following special tools are required for assembly:

- Pull-out tool size 5

Suction and Discharge Valves

Loosen plugs (56) and take out complete valve assembly (51) with pull-out tool size 5.

The O-rings (56A) between the suction and discharge valve and under the suction valve, can be taken out with a bent piece of wire.

Dismantle valves:

The valve seat (A) is pushed out of the spacer pipe (D) by hitting the valve plate (B) carefully with a bolt. Check sealing surfaces and replace worn parts.

Check O-rings.

When reinstalling the valve, particular care must be taken that the O-rings sit properly in their fittings in the valve casing.

Tighten plugs (56) to the required torque.

Seals and Plunger

Loosen nuts (49A) and remove pump head.

Separate plunger connection (36) from crosshead assembly (25) by means of an open-end wrenches (size 27).

Pull seal sleeves (40) out of their fittings in the crankcase.

Take seal case (41) out of seal sleeve (40).

Remove tension spring (42).

Examine plunger parts (36-39), seals (44,45) and O-rings. Replace worn parts.

When replacing plunger pipe (37), tighten tension screw (38) to the required torque.

Grease seals with Silicone before installing.



Don't loosen the 3 plunger screws (36) before the valve casing has been removed.

Otherwise the tension screw (38) could hit against the spacer pipe (51D) when the pump is being turned.

Seal unit (43, 44, 44A) is pretensioned by spring (42). Seal life can be increased if the pretensioning allows for a little leakage.

This assists lubrication and keeps the seals cool.

It is therefore not necessary to replace seals before the leakage becomes too heavy and causes output and operating pressure to drop.

When reassembling, tighten plunger screws (36) to the required torque.

Mounting Valve Casing:

Check O-rings on seal case (41).

Clean surfaces of seal sleeves in gear box and sealing surfaces of valve casing.

Push valve casing carefully onto O-rings of seal case and centring studs (49C).

Tighten nuts (49A) to the required torque.

If required, supplementary assembly instructions can be requested from the manufacturer Giant Industries, Inc.

Malfunctions / Remedy

For informations, see assembly instructions Giant Industries, Inc.

Materials Used

Valve Casing: AISI 303

Plunger: Solid ceramic

Valves: High-Grade Stainless Steel

Seals: Nitrile with fabric reinforcing

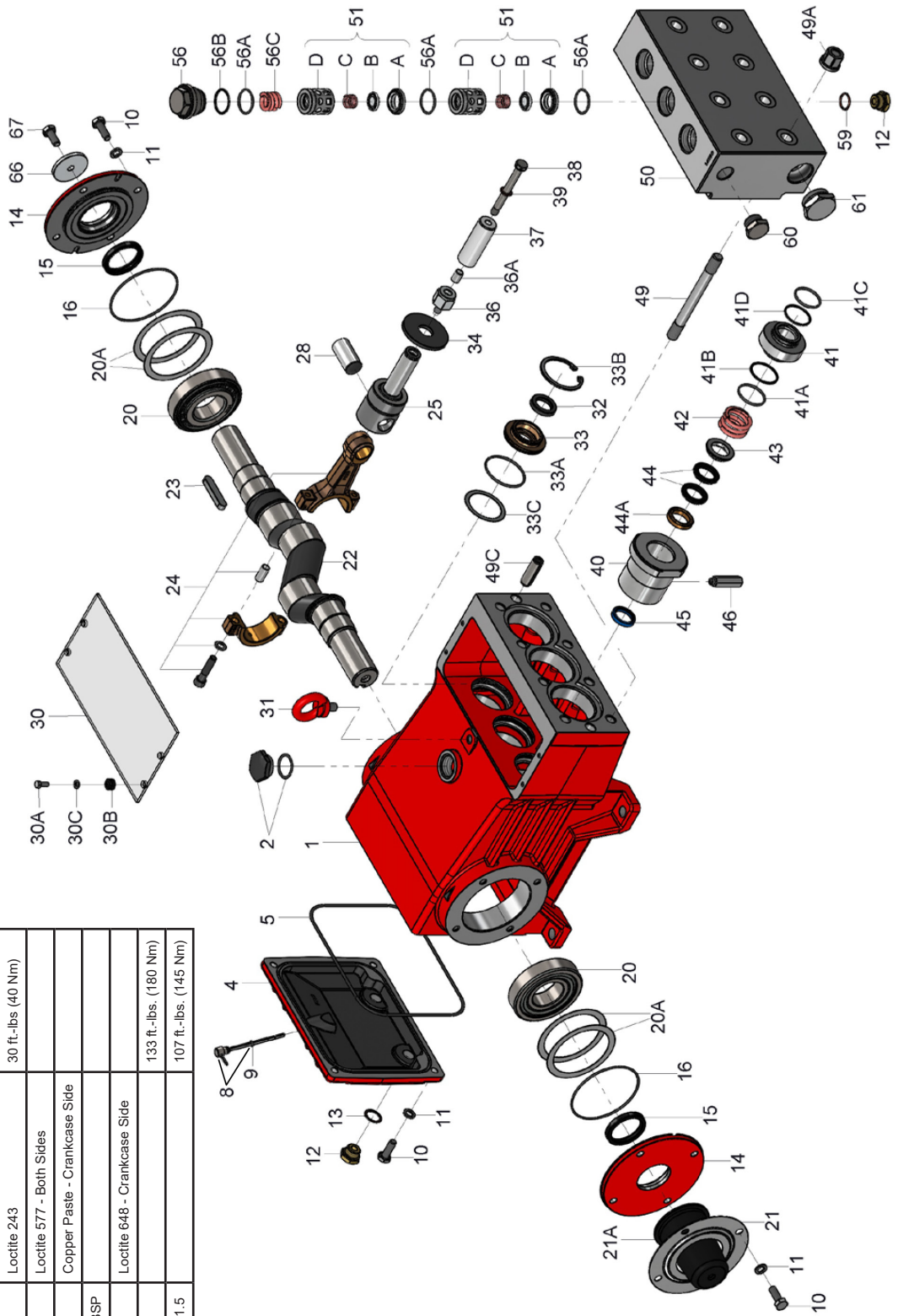
O-Rings: Nitrile.

Paint

The pump drive is painted in RAL 3001 as standard.

Exploded View - GP6128

GP6128 Series Torque Specifications		
Position	Thread	Torque Amount
10	M10	33 ft.-lbs. (45 Nm)
12	1/2" BSP	59 ft.-lbs. (80 Nm)
15		Loctite 403
24	M10	30 ft.-lbs. (40 Nm)
32		Loctite 403
36		33 ft.-lbs. (45 Nm)
38	M10	30 ft.-lbs. (40 Nm)
39		Loctite 577 - Both Sides
40		Copper Paste - Crankcase Side
46	1/8" BSP	
49		Loctite 648 - Crankcase Side
49A	M16	133 ft.-lbs. (180 Nm)
56	M42x1.5	107 ft.-lbs. (145 Nm)



GP6128 PARTS LIST

<u>ITEM</u>	<u>PART</u>	<u>DESCRIPTION</u>	<u>QTY.</u>	<u>ITEM</u>	<u>PART</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	13200	Crankcase	1	36A	07125	Centering Sleeve	3
2	13000	Oil Filler Plug Assembly	1	37	13220	Plunger Pipe	3
4	13201	Crankcase Cover	1	38	13023	Tensioning Screw	3
5	13202	O-Ring, Crankcase Cover	1	39	07755	Copper Ring	3
8	13203	Oil Dip Stick Assembly	1	40	13031	Seal Sleeve	3
9	01009	O-Ring, Dip Stick	1	41	06439	Seal Case	3
10	13133	Hexagon Screw	12	41A	12055	O-Ring	3
11	06725	Spring Washer	12	41B	07693	Support Ring	3
12	07109	Drain Plug	5	41C	07354	O-Ring	3
13	06272	Gasket, Drain Plug	2	41D	12056	Support Ring	3
14	12549	Bearing Cover	2	42	07173	Tension Spring	3
15	07877	Radial Shaft Seal	2	43	06998	Sleeve Support Ring	3
16	08055	O-Ring	2	44	13369	V-Sleeve	6
20	13206	Taper Roller Bearing	2	44A	13370	Pressure Ring	3
20A	13207	Fitting Disc (Shim)	1-5	45	13228	Grooved Ring	3
21	05881	Shaft Guard Mount	1	46	05169	Threaded Pipe	3
21A	05646	Shaft Protector	1	49	13159	Stud Bolt	8
22	06895	Crankshaft	1	49A	13160	Nut	8
23	08213	Key	1	49C	13162	Centering Stud	2
24	06896	Connecting Rod Assembly	3	50	03683	Valve Casing	1
25	06897	Crosshead Assembly	3	51	07067A	Valve Assembly, 51A-D	6
28	06898	Crosshead Pin	3	51A	07064	Valve Seat	6
30	13214	Cover Plate	1	51B	13130	Valve Plate	6
30A	07225-0100	Hexagon Screw	4	51C	07062-0100	Valve Spring	6
30B	13136	Grommet	4	51D	07066	Spacer Pipe	6
30C	05053	Washer	4	56	06077	Tensioning Plug	3
31	07623	Eye Bolt	1	56A	07150	O-Ring	9
32	06118	Radial Shaft Seal	3	56B	06266	Support Ring	3
33	13216	Seal Retainer	3	56C	06078	Spring	3
33A	07721	O-Ring	3	59	07661	Copper Ring	3
33B	13217-0100	Circlip	3	60	13150-0100	Plug, 3/4" BSP	1
33C	12551	Fitting Disc	3	61	13151	Plug, 1-1/4" BSP	1
34	13218	Flinger	3	66	13362	Disc, Crankshaft	1
36	13219	Plunger Connection	3	67	13358	Inner Hexagon Screw	1

GP6128 REPAIR KITS AND TORQUE SPECIFICATIONS

Plunger Packing Kit - #09873

<u>Item</u>	<u>Part #</u>	<u>Description</u>	<u>Qty</u>
41A	12055	O-Ring	3
41B	07693	Support Ring	3
41C	07354	O-Ring	3
41D	12056	Support Ring	3
44	13369	V-Sleeve	6
45	13228	Grooved Ring	3

Valve Assembly Kit - #09875

<u>Item</u>	<u>Part #</u>	<u>Description</u>	<u>Qty</u>
51A	07064	Valve Seat	6
51B	13130	Valve Plate	6
51C	07062-0100	Valve Spring	6
56A	07150	O-Ring	9
56B	06266	Support Ring	3

Oil Seal Kit - #09870

<u>Item</u>	<u>Part #</u>	<u>Description</u>	<u>Qty</u>
32	06118	Radial Shaft Seal	3
33A	07721	O-Ring	3
33B	13217-0100	Circlip	3

GIANT INDUSTRIES LIMITED WARRANTY

Giant Industries, Inc. pumps and accessories are warranted by the manufacturer to be free from defects in workmanship and material as follows:

1. Five (5) years from the date of shipment for all pumps used in portable pressure washers with NON-SALINE, clean water applications.
2. Two (2) years from the date of shipment for Giant pumps used in car wash applications.
3. One (1) year from the date of shipment for all other Giant industrial and consumer pumps.
4. Six (6) months from the date of shipment for all rebuilt pumps
5. Ninety (90) days from the date of shipment for all Giant accessories.

This warranty is limited to repair or replacement of pumps and accessories of which the manufacturer's evaluation shows were defective at the time of shipment by the manufacturer. The following items are NOT covered or will void the warranty:

1. Defects caused by negligence or fault of the buyer or third party.
2. Normal wear and tear to standard wear parts.
3. Use of repair parts other than those manufactured or authorized by Giant.
4. Improper use of the product as a component part.
5. Changes or modifications made by the customer or third party.
6. The operation of pumps and or accessories exceeding the specifications set forth in the Operations Manuals provided by Giant Industries, Inc.

Liability under this warranty is on all non-wear parts and limited to the replacement or repair of those products returned freight prepaid to Giant Industries which are deemed to be defective due to workmanship or failure of material. A Returned Goods Authorization (R.G.A.) number and completed warranty evaluation form is required prior to the return to Giant Industries of all products under warranty consideration. Call (419)-531-4600 or fax (419)-531-6836 to obtain an R.G.A. number.

Repair or replacement of defective products as provided is the sole and exclusive remedy provided hereunder and the MANUFACTURER SHALL NOT BE LIABLE FOR FURTHER LOSS, DAMAGES, OR EXPENSES, INCLUDING INCIDENTAL AND CONSEQUENTIAL DAMAGES DIRECTLY OR INDIRECTLY ARISING FROM THE SALE OR USE OF THIS PRODUCT.

THE LIMITED WARRANTY SET FORTH HEREIN IS IN LIEU OF ALL OTHER WARRANTIES OR REPRESENTATION, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL SUCH WARRANTIES ARE HEREBY DISCLAIMED AND EXCLUDED BY THE MANUFACTURER.



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

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Performance Under Pressure

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