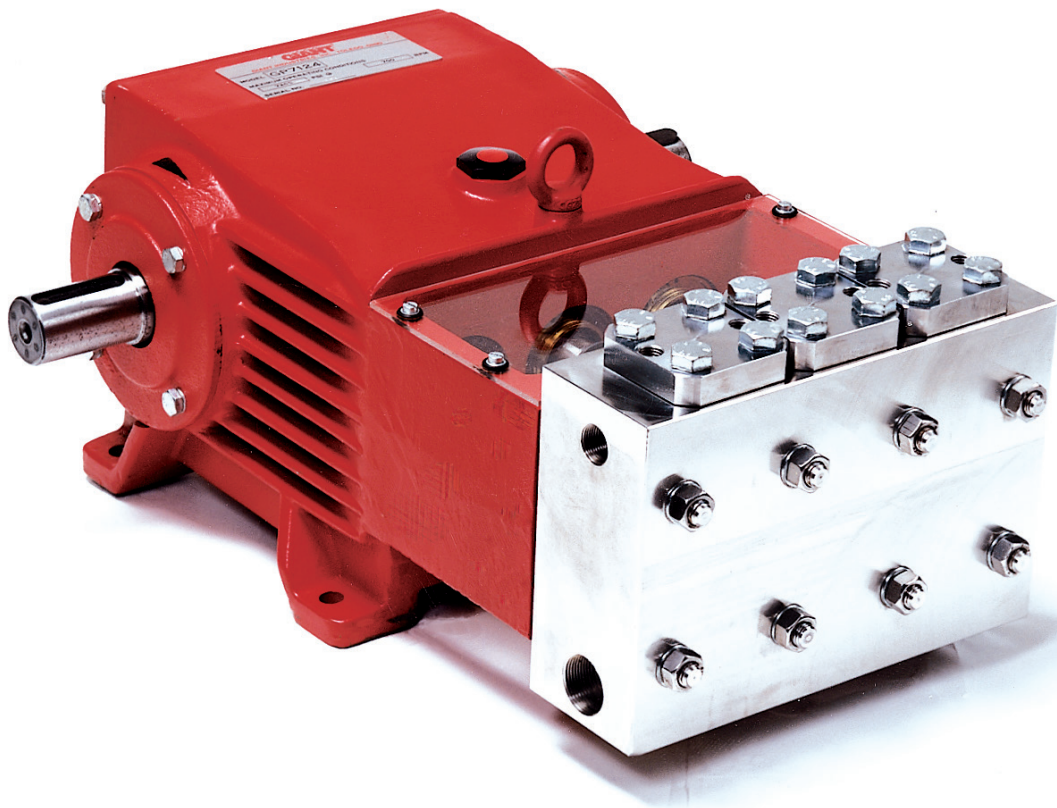


Model GP6124-4000

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	Crankshaft ø
Model	BHP	PSI	RPM	GPM	°F	in	in	lbs.	ft. of head	in
GP6124-4000	51.2	6090	800	12.8	140	0.95	1.89	309	25.6	1.65

Metric Measurements

	Power Required	Pressure	Max. Speed	Max. Flow	Max. Temp.	Plunger ø	Plunger Stroke	Weight	NPSHR	Crankshaft ø
Model	kW	bar	RPM	l/min	°C	mm	mm	kg	mWs	mm
GP6124-4000	38.2	420	800	48.5	60	24	48	140	7.8	42

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

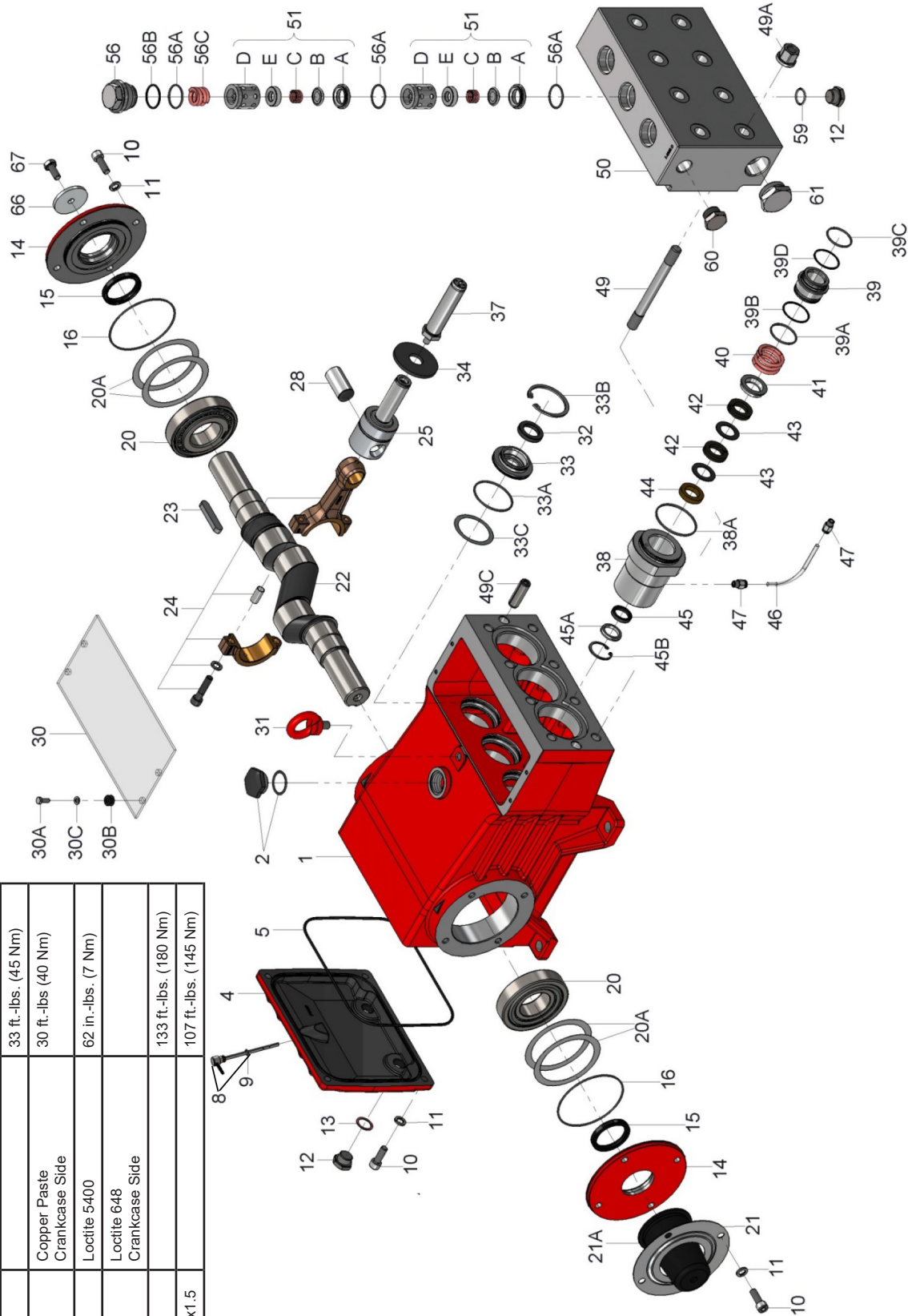
Set the direction of rotation of the drive unit according to the direction of rotation arrow on the crankcase.

Suction line filter

Recommended mesh size 150 µm.

Exploded View - GP6124-4000

GP6124-4000 Series Torque Specifications			
Position	Thread	Lubrication Info.	Torque Amount
10	M10		33 ft.-lbs. (45 Nm)
12	1/2" BSP		59 ft.-lbs. (80 Nm)
15		Loctite 403	30 ft.-lbs. (40 Nm)
24	M10		30 ft.-lbs. (40 Nm)
32		Loctite 403	
37			33 ft.-lbs. (45 Nm)
38		Copper Paste Crankcase Side	30 ft.-lbs (40 Nm)
47	R1/8	Loctite 5400	62 in.-lbs. (7 Nm)
49		Loctite 648 Crankcase Side	
49A	M16		133 ft.-lbs. (180 Nm)
56	M42x1.5		107 ft.-lbs. (145 Nm)



GP6124-4000 PARTS LIST

ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	13200	Crankcase	1	38A	07721	O-Ring	3
2	13000	Oil Filler Plug Assembly	1	39	05880	Seal Case	3
4	13201	Crankcase Cover	1	39A	12055	O-Ring	3
5	13202	O-Ring, Crankcase Cover	1	39B	07693	Support Ring	3
8	13203	Oil Dip Stick	1	39C	07354	O-Ring	3
9	01009	O-Ring, Dip Stick	1	39D	12056	Support Ring	3
10	22706	Hexagon Screw	12	40	07173	Seal Sleeve	3
11	06725	Spring Washer	12	41	05883	Seal Case	3
12	07109	Drain Plug	5	42	07685	Support Ring	6
13	06272	Gasket, Drain Plug	2	43	07718	Support Ring	6
14	12549	Bearing Cover	2	44	06956	Guide Ring	3
15	07877	Radial Shaft Seal	2	45	13049	Grooved Ring	3
16	08055	O-Ring	2	45A	05884	Drip Return Support Disc	3
20	13206	Taper Roller Bearing	2	45B	05885	Clip Ring	3
20A	13207	Fitting Disc (Shim)	1-5	46	04786	Hose	1
21	05881	Shaft Guard Mount	1	47	04785	Push-In Fitting	6
21A	05646	Shaft Guard	1	49	13159	Stud Bolt	8
22	06895	Crankshaft	1	49A	06958	Nut	8
23	08213	Key	1	49C	13162	Centering Stud	2
24	06896	Connecting Rod Assembly	3	50	03682	Valve Casing	1
25	12550	Crosshead Assembly	3	51	08286	Valve Assembly, 51A-E	6
28	06898	Crosshead Pin	3	51A	07064-0100	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	05472	Spacer Pipe	6
30C	08280	Washer	4	51E	05473	Valve Spring Guide	6
31	07623	Eye Bolt	1	56	06077	Tensioning Plug	3
32	06118	Radial Shaft Seal	3	56A	07150	O-Ring	9
33	13216-0100	Seal Retainer	3	56B	06266	Support Ring	3
33A	07721	O-Ring	3	56C	06078	Spring	3
33B	13217	Circlip	3	59	06807	Steel Ring	3
33C	12551	Fitting Disc	3	60	13150-0100	Plug, 3/4" BSP	1
34	13218	Flinger	3	61	13151	Plug, 1-1/4" BSP	1
37	13397	Plunger Pipe	3	66	13362	Disc, Crankshaft	1
38	05882	Seal Sleeve	3	67	13358	Inner Hexagon Screw	1

GP6124-4000 REPAIR KITS

Plunger Packing Kit

09872

Item	Part #	Description	Qty
38A	07721	O-Ring	3
39A	12055	O-Ring	3
39B	07693	Support Ring	3
39C	07354	O-Ring	3
39D	12056	Support Ring	3
42	07685	Support Ring	6
44	06956	Guide Ring	3
45	13049	Grooved Ring	3
46	04786	Hose	1

Valve Assembly Kit

09874

Item	Part #	Description	Qty
51A	07064-0100	Valve Seat	6
51B	13130	Valve Plate	6
51C	07062-0100	Valve Spring	6
51D	05472	Spacer Pipe	6
51E	05473	Valve Spring Guide	6
56A	07150	O-Ring	9
56B	06266	Support Ring	3

Oil Seal Kit

09870

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

GP6124-4000 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:

- Snap-ring tongs tool
- Screw M16x80

Suction and Discharge Valves

Screw off tension plugs (56).

Check O-ring (56A) and support ring (56B).

Take out spring (56C).

Take out discharge valve (51), pulling them upwards out of the valve casing with snap-ring tongs or screw M16. Then remove suction valves in the same way.

Remove valve seats (51A) from spacer pipe by lightly hitting the valve plate (51B) with a plastic stick.

Check sealing surface and replace worn parts.

Reassemble with new O-rings if possible and oil them before installing.

Tighten tension plugs (56) to the required torque.

Seals and Plunger

Screw out screw-in connector (47) on the valve casing. Loosen nuts (49A) and remove pump head. Remove piping (46, 47) from the seal sleeves (38). Separate plunger connection (37) from crosshead assy (25) by means of an open-end wrench (size 27).

Pull seal sleeve (38) out of their fittings in the crankcase.

Take seal case (39) out of seal sleeve (38).

Examine plunger (37), guide Ring (44) and seals (42, 43, 45).

Check O-rings (39A, 39C) and support rings (39B, 39D). Replace worn parts.

When replacing plunger (37), tighten plunger to the required torque.

Grease seals with silicone before installing.



Don't loosen the 3 plunger (37) before the valve casing has been removed. Otherwise plunger (37) could hit against the spacer pipe (51D) when the pump is being turned.

Mounting Valve Casing:

Check O-rings on seal case (39).

Clean surfaces of seal sleeves (38) in crankcase (1) and sealing surfaces of valve casing (50).

Push valve casing carefully onto seal case and centring studs (49C).

Mount piping (46, 47) between seal sleeve (38) and valve casing (50).

Tighten the fixing nuts (49A) for the valve casing evenly to the required torque.

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

Spare Parts

When **ordering spare parts**, please specify **pump type, pump number, year of manufacture, and parts order number**.

This data can be found on the nameplate and in the spare parts list.

Malfunctions / Remedy

For informations, see assembly instructions Giant Industries.

Materials Used

Valve Casing: AISI 303

Plunger: Solid ceramic

Valves: High-Grade Stainless Steel

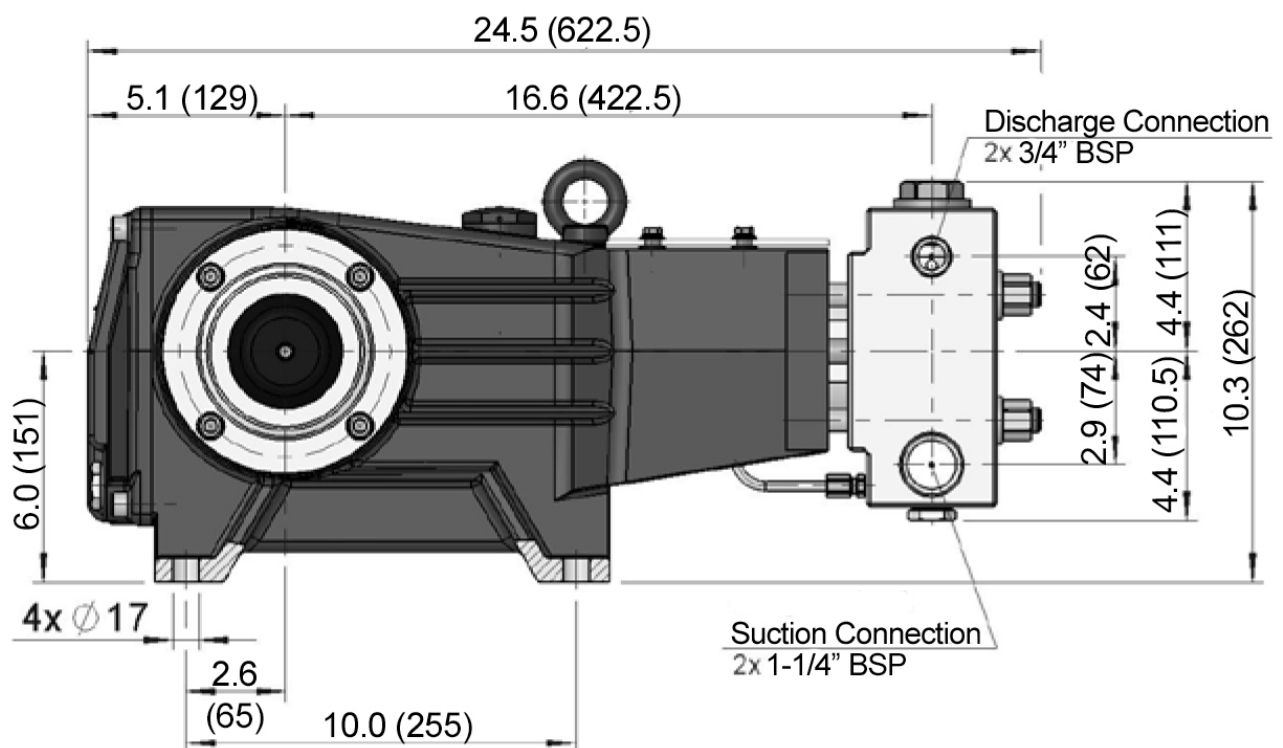
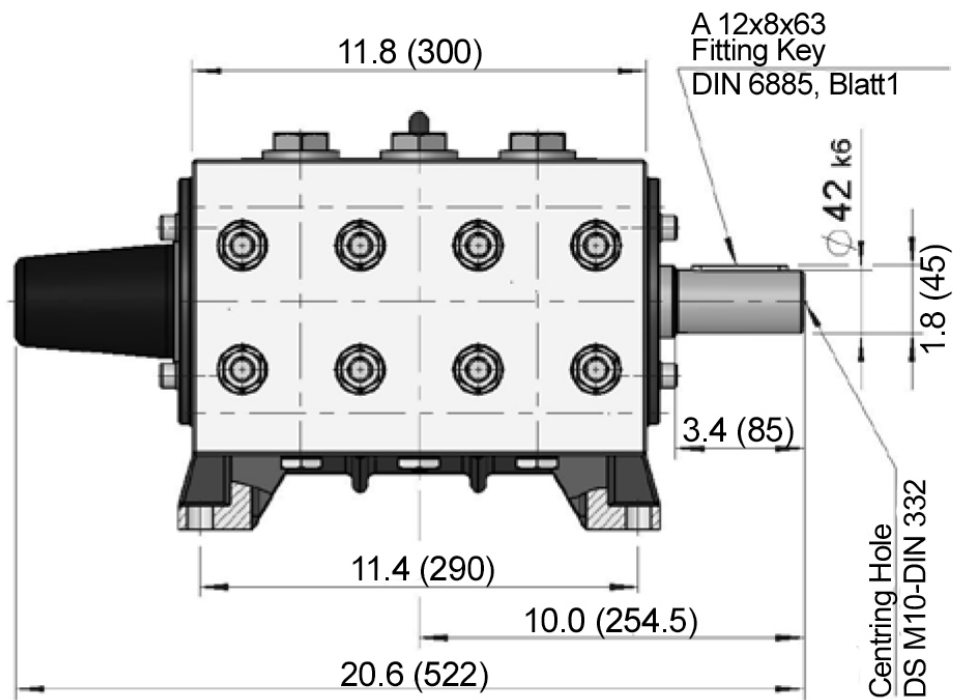
Seals: Nitrile with fabric reinforcing

O-Rings: Nitrile

Paint

The pump drive is painted in RAL 3001 as standard.

GP6124-4000 DIMENSIONS



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.

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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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