2” ROTARY VEIN PUMP KIT

124 DMTP0013



USER MANUAL

V1.0 2026

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INTRODUCTION

The 2" Rotary Vein pump is designed and manufactured to provide reliable performance when used correctly and maintained in accordance with the instructions in this manual. The pump is covered by a 12-month warranty, starting from the date of purchase, subject to the warranty terms and conditions.

This is a self-priming rotary pump with a positive-displacement vein design. It is fitted with a bypass valve and suction filter. The pump is reliable, has excellent self-priming capability, is easy to clean and is suitable for continuous operation, including applications where there is high back pressure. It is designed for transferring low-viscosity diesel fuel and similar non-corrosive fluids. It must not be used with corrosive substances or fluids that are not compatible with the pump materials.

This manual provides important safety information and instructions for the correct installation, operation and maintenance of the pump. Following these instructions will help prevent injury, equipment damage and environmental harm. This manual must be read by anyone who installs, operates, services or maintains the pump.Keep this manual in a safe and easily accessible location near the pump for the entire service life of the equipment. All users should familiarise themselves with the instructions and safety information before operating the pump. Safety depends not only on reading this manual, but also on:

- Correct installation of the pump
- Regular maintenance and daily checks
- Using the pump only for its intended purpose
- Following all safety requirements and applicable local laws

The pump is supplied in protective packaging together with this instruction manual and is ready for installation.After removing the pump from its packaging, carefully inspect it for any signs of damage. If you notice any damage, missing parts or other problems, contact your supplier before installing or using the pump. Provide details of the issue and, where possible, photographs of any damage.Before installation, read this entire manual carefully. The pump must be installed and operated in accordance with all applicable Australian safety requirements, regulations and standards, as well as any requirements that apply to the specific installation location. Installation must be carried out correctly and safely. Failure to follow the safety instructions may result in:

- Serious injury or harm to people
- Damage to the pump or other equipment
- Environmental damage
- Loss of warranty coverage

MAIN COMPONENTS

Component	Function
Engine	Provides the power to operate the pump.
Pump	Transfers the liquid, in this case diesel fuel.
Suction and delivery connections	Allow the pump to be connected to the fuel supply and delivery hose.
Filter	Filters the incoming diesel fuel to help prevent contaminants from entering the pump.






INTENDED USE

The diesel fuel transfer pump is designed for above-ground use only. It must not be submerged or operated with the engine or pump under the liquid being transferred. The pump can be hazardous if used without proper supervision. Children and people who require assistance must not operate the pump or be left unsupervised while it is in use. The pump is designed only for transferring low-viscosity diesel fuel (less than 5 cSt) with a flash point of at least 60°C. The liquid must be non-corrosive and clean, or contain no more than 2.3% solid particles. Excessive solid particles may cause premature wear to the internal pump components. If the fuel may contain a higher level of contaminants, use a suitable heavy-duty filter on the suction line (not supplied with the pump).

OPERATING ENVIRONMENT

Do not use the pump in corrosive or explosive environments, including areas containing flammable dust, vapours or gases. The engine is **not flameproof**. To ensure safe and reliable operation, use the pump only in environments with:

- Ambient temperature between **5°C and 40°C**
- Relative humidity of **90% or less**

The engine is designed for continuous operation. However, operation through the bypass should be limited to a few minutes at a time.

⚠ **WARNING**
Do not use this pump with:

- **Solvents**
- **Highly flammable fuels or liquids**
- **Thick or high-viscosity liquids**
- **Corrosive fluids**
- **Water**
- **Food or other liquids intended for consumption**

SAFETY INSTRUCTIONS

Read this manual carefully before installing or operating the pump.

Only use the pump to transfer liquids specified under Intended Use. Do not use it for any other liquids or applications. Before starting the transfer:

- Make sure the diesel fuel is being discharged into a suitable and approved container.
- Never direct the fuel flow towards people, objects, electrical switchboards or live electrical components.
- Position the pump so the on/off switch cannot be accidentally activated.
- Disconnect the power supply after every use.
- Do not modify or alter any part of the pump. Unauthorised modifications may affect its operation, compromise safety and void the warranty.
- If a component fails or breaks, make sure diesel fuel does not leak or spill into the environment.
- Any replacement parts must be genuine original parts.
- For safety reasons, the pump must be inspected and serviced regularly. Repairs and replacement of components should only be carried out by an authorised service centre. Attempting repairs yourself may be dangerous and may void the warranty.

⚠ **WARNING**
Always position the pump so the on/off switch cannot be accidentally activated. Before carrying out any work or maintenance on the pump, switch it off and disconnect the power supply.

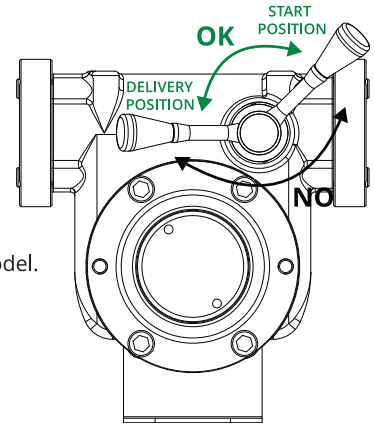
If you are unsure about the safe operation, installation or maintenance of the pump, do not use it. Contact an authorised service centre for assistance.

ENGINE

For detailed information about the engine, refer to the **engine manufacturer's manual supplied with the pump.**
Everyone who installs, operates or maintains the pump must read the engine manual carefully. Keep the manual in a safe place **near the pump for the entire service life of the equipment.**

INSTALLATION, STARTING AND SELF-PRIMING

STARTING THE ENGINE



1. Open the engine fuel valve and set it to **ON.**
2. Turn on the switch located at the rear of the engine.
3. Close the engine **choke.**
4. Set the **START** lever on the pump housing to the position specified for your model.
5. Pull the starter cord to start the engine.
6. Once the engine starts, **immediately open the choke**.
7. Return the **START** lever on the pump housing to the operating position specified for your model.

START POSITION: OK
DELIVERY POSITION: NO

INSTALLATION AND PRIMING

Before carrying out installation, maintenance or any other work on the pump, position it so the switch cannot be accidentally activated.

Do not use **tapered-thread fittings** unless specifically approved. Incorrect fittings may damage the pump threads. Refer to the **Technical Specifications section** for the correct connections.

Before starting the pump, help the self-priming process by ensuring the **suction hose and pump body are filled with diesel fuel.** Start the engine. If the pump has not primed within **30 seconds**, stop the engine and check the suction hose and connections for air leaks.

Regularly check that all connections and hose clamps are properly tightened.

The suction hose must be **rigid or reinforced with a spiral.** A standard flexible hose may collapse due to the vacuum created while the pump is operating.

If the suction height is greater than **3 metres**, a **foot valve and/or non-return valve** must be fitted. For best performance:

- Position the pump as close as practical to the diesel fuel tank.
- Keep suction lines as short as possible to reduce pressure loss.
- Minimise bends, elbows and reductions in the hose.
- Use a hose with an appropriate internal diameter.
- Keep the suction filter clean.

Never run the pump dry. Always ensure there is diesel fuel inside the pump body before operating it.

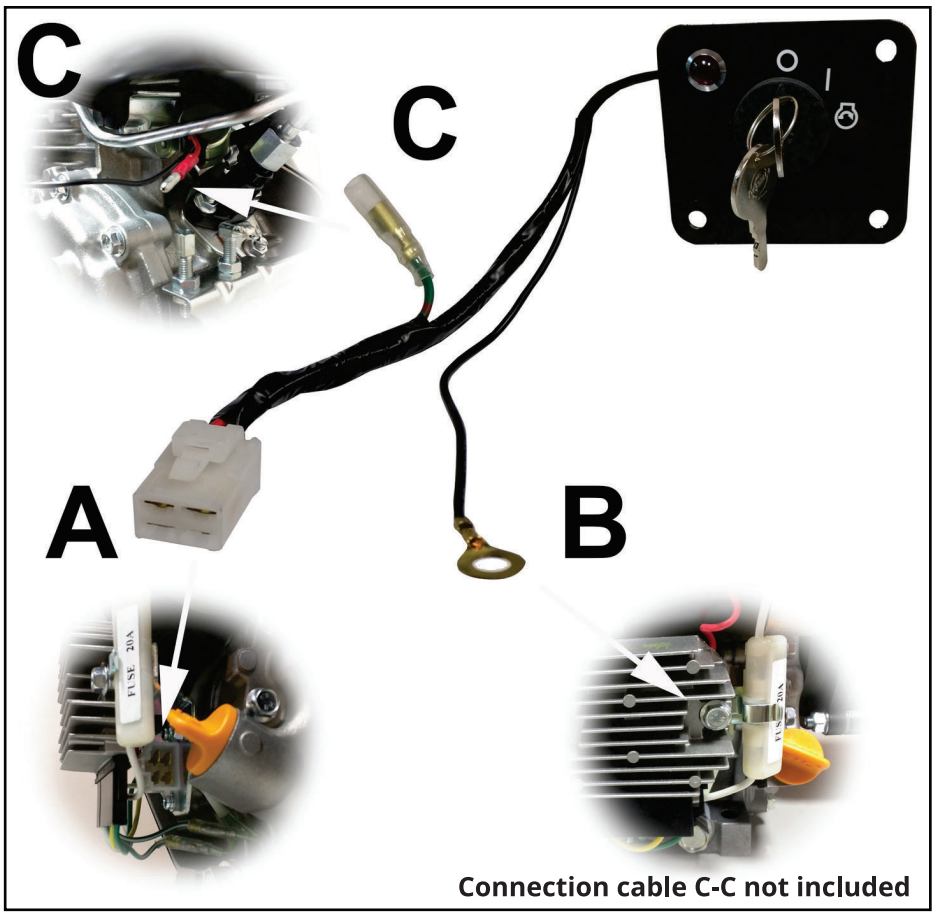
The pump can be installed in either a **vertical or horizontal position.** Secure it firmly to a suitable mounting surface using bolts that match the mounting holes in the engine base.

⚠ **WARNING**
Before starting the pump, check the suction hose carefully. Make sure it is:

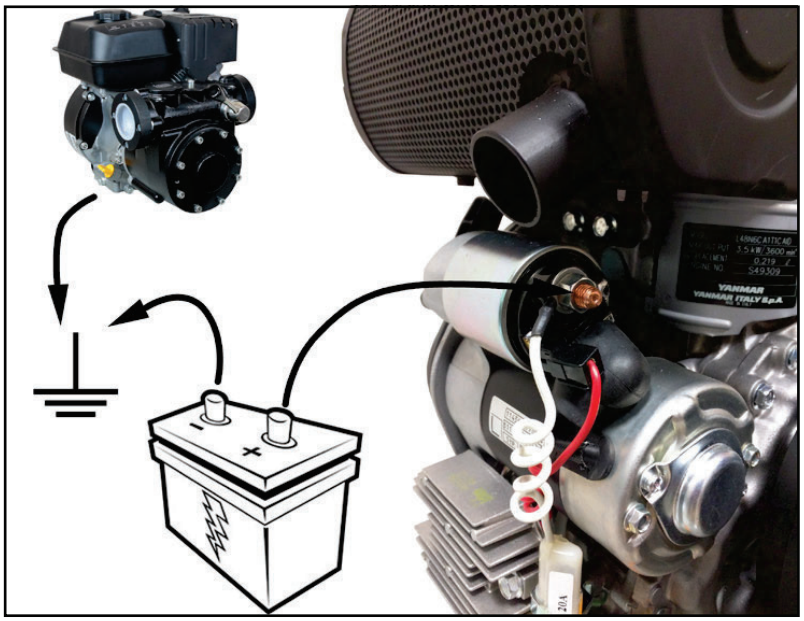
- **Free from blockages**
- **Not crushed or kinked**
- **Fully immersed in the diesel fuel**

Never operate the pump if the suction hose is blocked, damaged or not fully immersed in the fuel.

CONNECTION FOR ELECTRIC START



Connection cable C-C not included



Use battery 45 amp minimum.
Follow the recommended diagram.

Wiring:
Red (+) Ø no less than section 25 mm
Black (-) Ø no less than section 8 mm

HANDLING

The pump should be **transported and handled carefully by two people.** The pump is supplied fully assembled, ready for use and securely packaged to prevent damage during transport. Dispose of the packaging responsibly. While the packaging is not hazardous or environmentally harmful, it should be **recycled or disposed of through the appropriate waste facility.** Do not leave packaging in the environment.

If the pump needs to be stored or transported after use, **drain all diesel fuel from the pump body and suction hose** first. When operating the pump, always wear **protective gloves and suitable safety footwear** and follow all applicable safety requirements. Diesel fuel and other liquids must be collected and disposed of in **suitable containers in accordance with local regulations.**

MAINTENANCE

The pump's moving parts are **pre-lubricated during manufacture.** Do not add oil or grease to the moving parts, as this may damage the pump. For safety and reliable operation, only use **genuine spare parts and accessories approved by the manufacturer.** Unauthorised modifications to the pump may affect its safety and performance and will void the manufacturer's responsibility for any resulting damage.

The pump is designed to require minimal maintenance. However, we recommend:

- **Weekly:** Check all hose and connection points for leaks or loose fittings.
- **Monthly:** Clean and inspect the filter and pump body to maintain performance and efficiency.
- Follow the **engine manufacturer's maintenance schedule** provided in the separate engine manual.

If the pump will not be used for an extended period, store it in a **dry, covered location protected from moisture, rain and other weather conditions.** When the pump reaches the end of its service life, do not dispose of its components in the environment. Contact an **appropriate recycling or waste facility** for correct disposal.

TROUBLESHOOTING

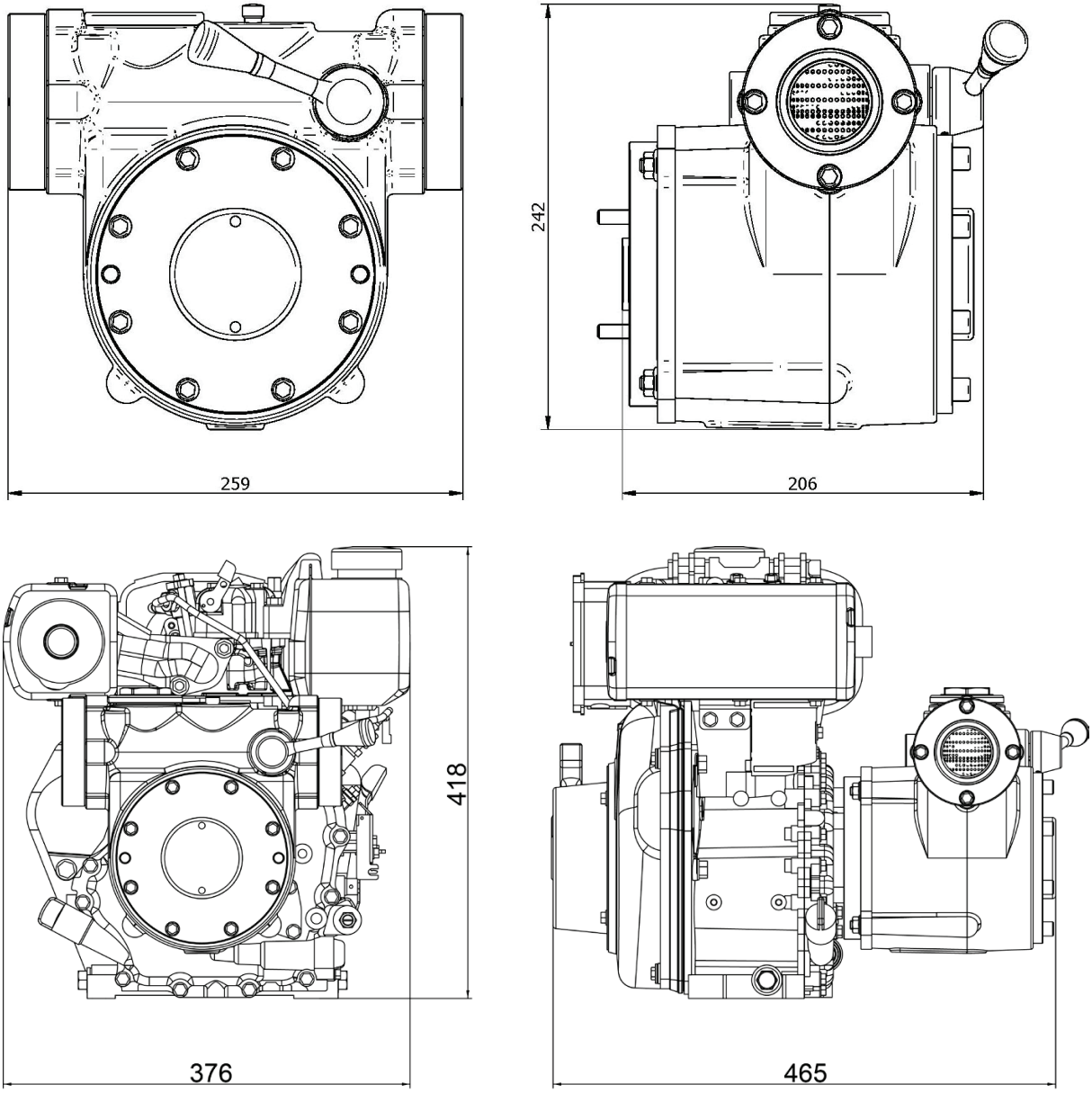
Problem	Possible Cause	Solution
Engine does not start or runs very slowly	Fuel level is too low or there is no fuel	Check the fuel level and add fuel if required.
	Rotor is seized or blocked	Remove the cover and inspect and clean the rotor.
	Spark plug is not working	Check the spark plug and lead; replace if necessary.
Engine runs but there is little or no fuel flow	Filter is blocked	Clean the filter.
	START valve is incorrectly positioned	Set the valve to the correct position.
	Suction hose is blocked	Clean or replace the suction hose.
	Suction height is too high	Position the pump closer to the fuel level.
	Air is entering the suction line	Check and tighten all connections.
	Excessive pressure loss in the system	Reduce bends, restrictions and other flow restrictions.
	Bypass valve is stuck or blocked	Free, clean or replace the bypass valve.
	Suction hose is collapsing	Use a suitable reinforced suction hose.
	Rotor or pump body is blocked	Clean the rotor and pump body.
Pump is leaking diesel fuel	Pump seals are damaged	Replace the seals.

IF THE PROBLEM PERSISTS
If the problem continues after carrying out the recommended checks, contact the manufacturer or your authorised local dealer for assistance.

TECHNICAL SPECIFICATIONS

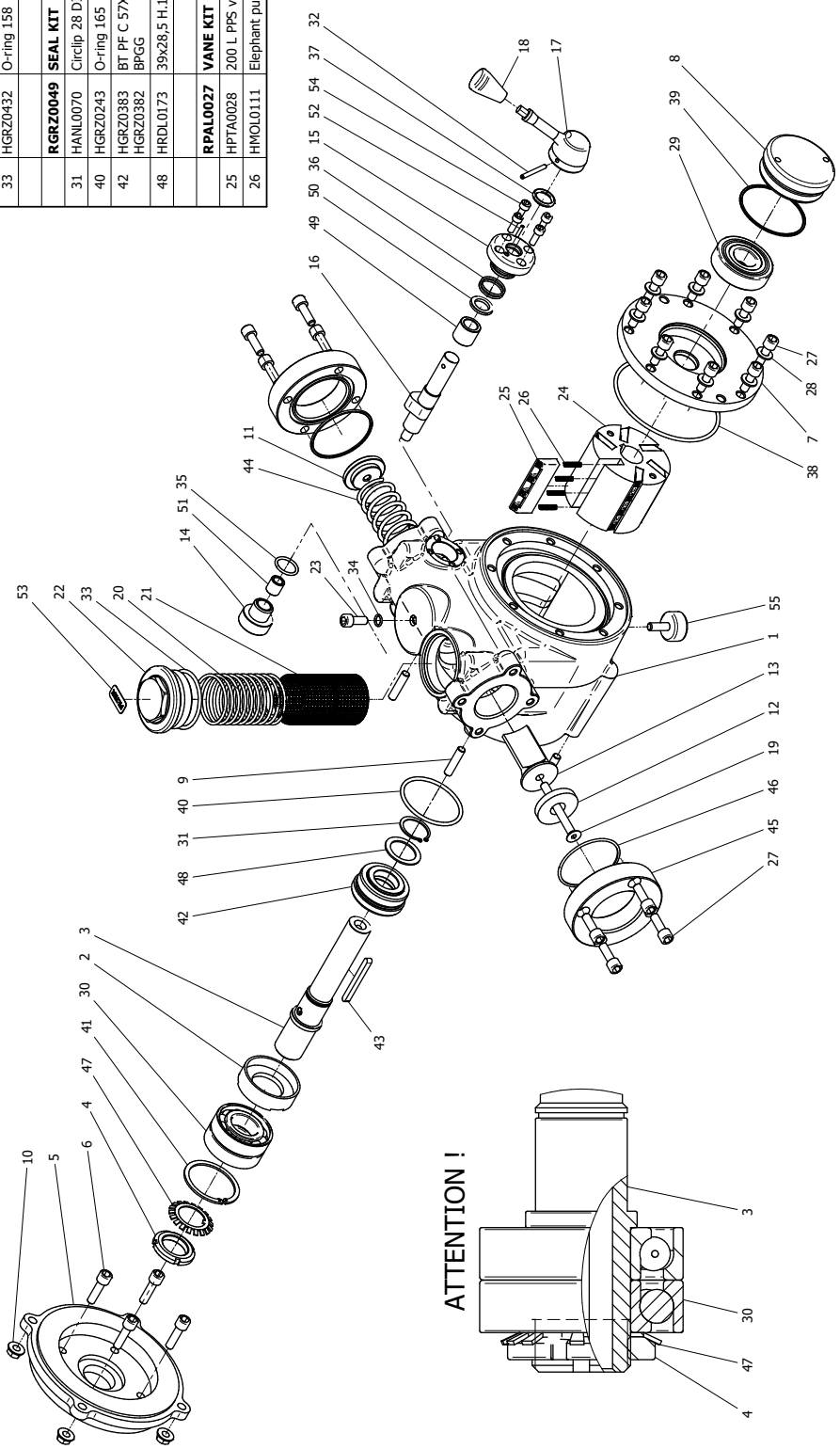
Specification	Details
Model	124 DMTP0013
Inlet / Outlet Connections	2″ F – 2″ F
Flow Rate	320 L/min
Maximum Head	25 m
Maximum Suction Height	2.5 m
Required Power	5.5 hp
Engine Speed	3200 rpm
Shaft Diameter	Ø 19.1 mm
Minimum Diesel Fuel Temperature	+5°C
Weight	30–43 kgs

DIMENSIONS



PARTS LIST

#	code	name	Q.ty
	RBYP0004	**BY-PASS KIT**	
11	HBYP0006	8 mm twin pumps washer	1
12	HBYP0007	8,5 mm twin pumps washer	1
13	HBYP0005	Motopump bypass	1
19	HVTE0288	M08x75 TSEI SS screw	1
44	HMOL0079	Elephant bypass spring	1
	RFLR0029	**FILTER KIT**	
20	HMOL0112	Elephant filter support spring	1
21	HFLR0160	Mesh filter	1
33	HGRZ0432	O-ring 158	1
	RGRZ0049	**SEAL KIT**	
31	HANL0070	Circlip 28 DIN471	1
40	HGRZ0243	O-ring 165	1
42	HGRZ0383 HGRZ0382	BT PF C 57X32X10 VP-BT PR AR 28 BPGG	1
48	HRDL0173	39x28,5 H.1,5 SS washer	1
	RPAL0027	**VANE KIT**	
25	HPTA0028	200 L PPS vane	6
26	HMOL0111	Elephant pump vane spring	24



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B.A.R Group P/L
15 Hudson Place,
Mulgrave, NSW, Australia 2756
Phone: 02 4577 2144
www.bargroup.au

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541D Te Rapa Road, Te Rapa,
Hamilton 3200, New Zealand
Phone: 07 849 0000
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