

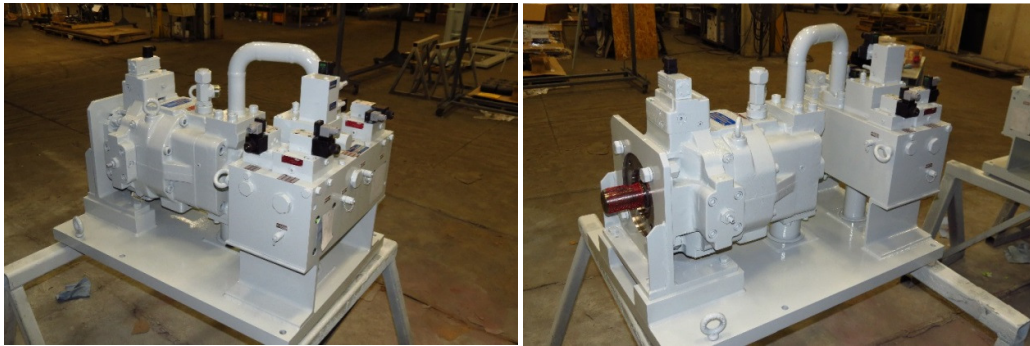
Subject: OILGEAR OFFERINGS for D150 and Larger PUMPS, PVV540 x D150 Pump Conversion Packages, and Integration services for YOUR EQUIPMENT

Annex B: Complement to Standard offer and annex A and C.

D150 to PVV540 Standard Replacement Kit, pricing, delivery time and options.

A) The D150 pump conversion Kit to PVV-540 pumps: “Drop in” configuration.

See example pictures below: A conversion unit with VM servo control and 2-way operation valve manifold is shown below.



For sizes D150 and over, Oilgear replacement Kits with PVV-540 pump on a mounting plate (D pump footprint) to replace the existing D-150 units.

- The conversion unit will include a valve manifold to fit in place of your current 1-way or 2-way D pump.
- The drive shaft of the PVV540 will be in the same location as the existing D-150 pump shaft.
- The PVV-540 drive shaft is a different size so the pump motor coupling will need to be replaced.
- The delivery port(s) of the PVV540 conversion unit are the exact size and located in the exact position as on the D-150 pump, making the conversion unit a “**drop-in**” replacement.

Important notes: Oilgear is proud of the ability of the D pump to perform with fluid in “less than optimal cleanliness” condition. However, this is a key factor which must be investigated when converting a system to modern PVV pumps. In addition, fluid type, viscosity, location and quality of pilot oil sources, and suction conditions (altitude, for example) are key factors for PVV reliability which have not been minimized or overlooked in this offering.

Modern, axial piston port plate pumps like the PVV are by nature of their architecture more sensitive to these factors than radial piston D pumps.

To achieve Oilgear durability, several options to address these factors have been implemented and are site-proven in 24/7 use.

→ See the **various Options** below to cover these key aspects. Oilgear engineers are at your disposal for guidance and support. See Annex C for information on Oilgear's Machine Integration site visit.

Oilgear also offers a modern electronic interface for the servo controls of PVV pumps. Oilgear's EPC3 programmable digital amplifier is the market-leading solution for easy interfacing with PLC or analog controls.

Prices for a Standard D type replacement kit including:

- D pump footprint mounting plate/frame.
 - New PVV540 VM servo controlled axial piston pump.
 - Delivery manifold for outlet connections.
 - Onboard piping (between PVV and Delivery manifold).
 - Piping under the mounting plate (suction, drain, manifold return).
 - Filter for pilot oil.
 - Assembly, test and technical literature of the replacement kit.
- a) **Price for one way delivery unit: \$71,241** / 12 to 16 weeks after receipt of order, shipped from Oilgear's factory.
- b) **Price for two way delivery unit: \$76,264** / 12 to 16 weeks after receipt of order, shipped from Oilgear's factory.

Extras and options:

- 1) Expert site service visit for integration at your plant: **See Annex C.**
- 2) Rear mounted partial 25% boost unit with inlet filter (single) and suction check valve (one way units only) – **To be quoted post Integration engineering expert visit depending on site configuration.**
- 3) External full boost and filtering unit (externally mounted, not within D pump footprint) with T connection block. – **To be quoted post Integration engineering expert visit depending on site configuration.**
- 4) New coupling – **To be quoted post Integration engineering expert visit.**
- 5) EPC3 digital amplifier interface card (delivered loose), **\$1,354**

B) Horizontal mounting Alternative: (not a "Drop in" replacement)

For several customers we have developed a simplified alternative to upgrade the D pump. This alternative is not a form and fit replacement, but offers other benefits which some users may prefer.

This alternative is useful for a user who needs to free up extra room on the top of a tank for other purposes (manifold mounting, for example) or to replace old or obsolete electrical motors

while upgrading a D pump to a PVV. Oilgear has supplied multiple examples of this alternative in the past years, and we now include this option as part of our Standard Offer.

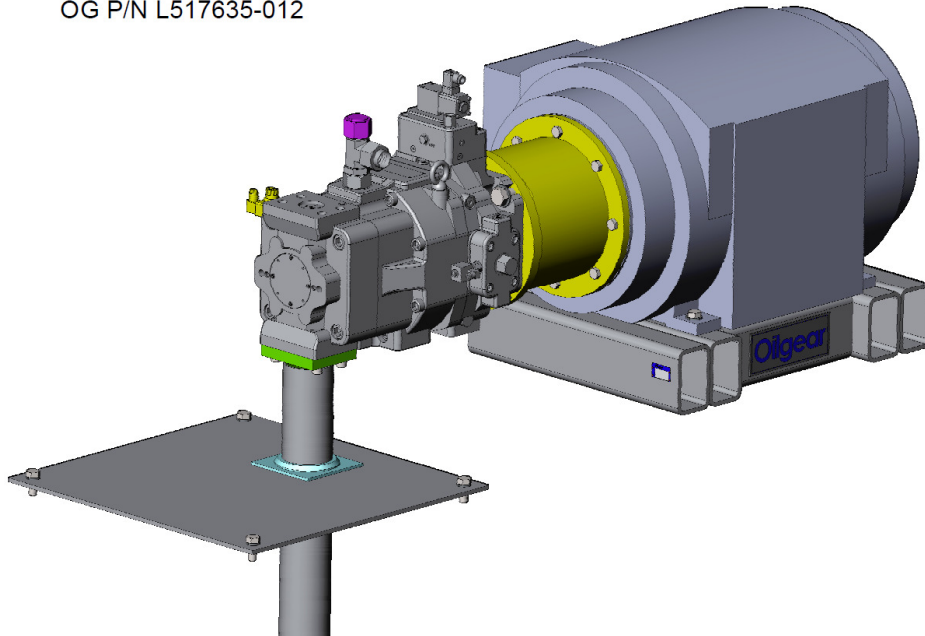
The Horizontal Mounting Alternative requires mounting and piping changes. Oilgear's application engineering and recommendations offer (see Annex C) applies. Oilgear's engineer will review the changes required to implement this solution on your machine.

A vertical mount skid option can also be supplied.

- Pricing is on demand for this alternative: Consult our New Berlin or Traverse City facilities.

A typical example of the Horizontal Mounting option is shown below:

PVV540-VM x 250HP ODP Motor Unit
Free Suction w/Purge Valve
OG P/N L517635-012



PVV540 axial pistons pump pricing:

- Repairs and "not to exceed" repair pricing: **\$32,000**
- Preventative repair at recommended inspection interval of 20,000 hours:
not to exceed \$20,000
- New PVV 540 B2BV RDFY VM20SA: **\$46,055**

- For PVL, PVK pumps or Prefill valves: Consult Oilgear.

Oilgear's standard terms and conditions apply.

Effective January, 2017