Service Data

$\text{Vickers}^{\text{\tiny{\it \tiny{R}}}}$

Vane Pumps

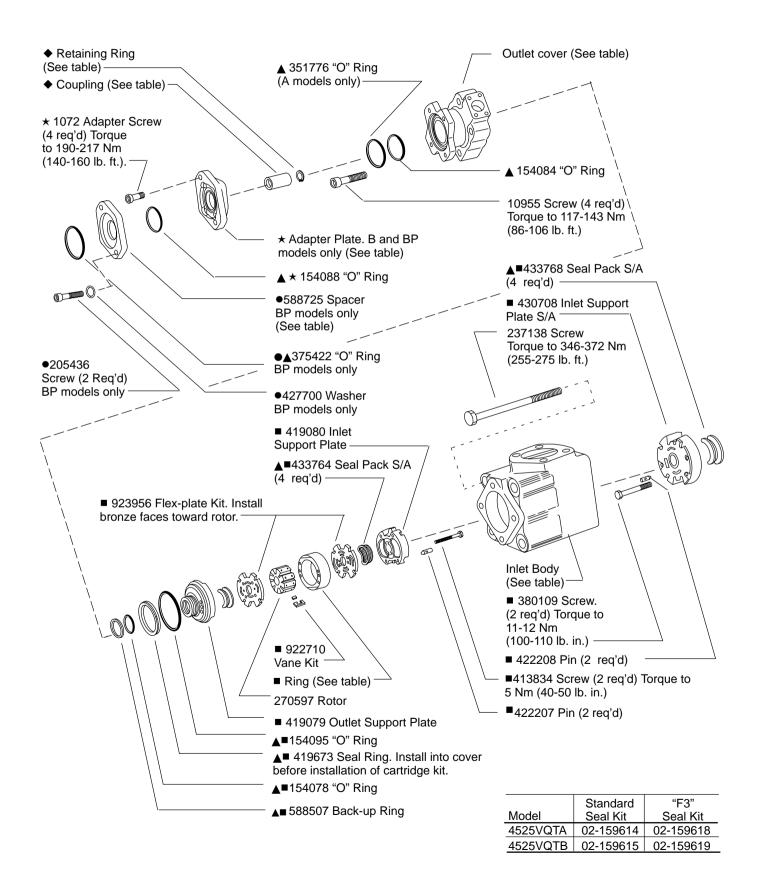


Double Thru-drive Vane Pumps

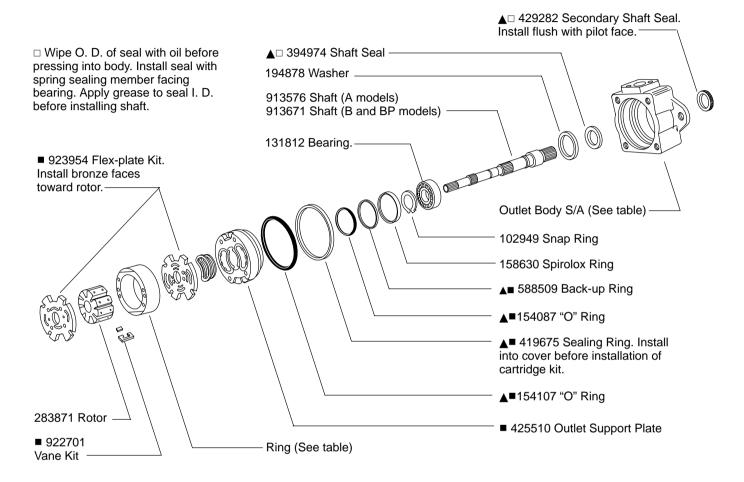
4525VQT Series (-20 Design)



Model	Adapter Plate	Adapter Kit	Spacer Kit	Retaining Ring	Coupling	Coupling Kit
4525VQTA	_	_	_	223172	426770	02-136810
4525VQTB	913385	02-159611	_	89447	584926	02-136811
4525VQTBP	913385	02-159611	02-136817	89447	452865	02-136812



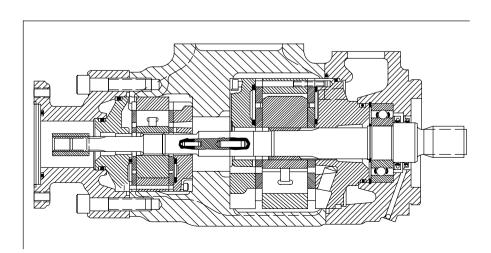
Front Pump Code (USgpm)	Rear Pump Code (USgpm)	■ Ring	Standard Cart. Kit	F3 Cart. Kit
42		297510	416435	419511
50	_	297502	416436	419510
60		297503	416437	419509
	12	326984	421244	421576
	14	326985	421235	421577
_	17	326986	421236	421578
	21	326988	421238	421580



Model	Inlet Body	Outlet Cover	Outlet Body S/A
4525VQT*S**A	370071	913259	02-136923
4525VQT*S**AM	875778	913582	02-136924

NOTE: Parts prefixed with symbols are available only in kits.

- ▲ Included in standard seal kit. See table for standard and F3 kits.
- Included in cartridge kit. See table.
- ◆ Included in coupling kit. See table.
- ★ Included in adapter kit. See table. "O" ring in adapter kit is 262413 (F3).
- Included in spacer kit (BP models only).



(F3) - 4525 VQT * S - ** A * ** (S) - 2 297 ** (*) - 20 * 2 3 4 5 6 8 9 10

1 F3 – Viton seals Omit if not required.

2 Series designation 4525VQT

Thru-drive (rear) 2-bolt mounting flange

- SAE "A" flange

B - SAE "B" adapter flange

BP - SAE "B" flange with spacer for Vickers PVE12, 19, or 21 pump

4 Front mounting flange

S - SAE J-744 (127-2)

Geometric displacement, front end pump

Code = SAE rating (USgpm) at 1200 rpm and 6,9 bar (100 psi)

Code	cm ³ r	in ³ /r	
42	139	8.46	
50	162	9.90	
60	193	11.80	

Port connections

SAE 4-bolt flange

AM - Metric 4-bolt flange (Flange pads stamped "M" for metric threads)

Geometric displacement. rear end pump

Code = SAE rating (USgpm) at 1200 rpm and 6,9 bar (100 psi)

Code	cm ³ /r	in ³ /r	
12	40	2.45	
14	45	2.77	
17	55	3.37	
21	68	4.12	

8 Shaft seal assembly

S - Double seal

- Omit for single seal.

9 Thru-drive coupling

2 - With spline for tandem pump

10 Shaft

297 - Splined "C" size per SAE J744C. 32-4 per SAE J744 Oct 83

Port position

(Viewed from rear end of pump) With no. 1 outlet opposite inlet

AA - No. 2 outlet 135° CCW from inlet

AB - No. 2 outlet 45° CCW from inlet

AC - No. 2 outlet 45° CW from inlet

AD - No. 2 outlet 135° CW from inlet

With no. 1 outlet 90° CCW from inlet

BA - No. 2 outlet 135° CCW from inlet

BB – No. 2 outlet 45° CCW from inlet BC – No. 2 outlet 45° CW from inlet

BD - No. 2 outlet 135° CW from inlet

With no. 1 outlet in line with inlet

CA - No. 2 outlet 135° CCW from inlet

CB - No. 2 outlet 45° CCW from inlet

CC - No. 2 outlet 45° CW from inlet

CD - No. 2 outlet 135° CW from inlet

With no. 1 outlet 90° CW from inlet

DA - No. 2 outlet 135° CCW from inlet

DB - No. 2 outlet 45° CCW from inlet

DC - No. 2 outlet 45° CW from inlet

DD - No. 2 outlet 135° CW from inlet

12 Thru-drive (rear) mounting flange position

(Viewed from rear end of pump)

A – In line with no. 2 outlet port

B - 90° from no. 2 outlet port

- Omit for 4525VQTA models.

13 Design

14 Rotation

(Viewed from front end of pump)

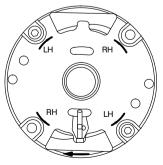
L - Left hand (counterclockwise)

R - Right hand (clockwise)

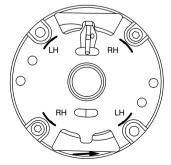
Standard right-hand shaft rotation cartridges are shown at right. To reverse rotation, remove two screws and reverse the location of the inlet and outlet support plates. Re-align all sections of the cartridge, then re-install and hand-tighten the two screws. Tighten screws to recommended torque.

When ordering spare cartridge parts, it is recommended they be obtained in kits. Kits are assembled and tested for either right or left hand rotation. If left hand rotation is required, specify on parts order by adding suffix "L" to cartridge kit number.

Sharp edge of vane must lead in direction of rotation.



Rear Cartridge. Right Hand Rotation.



Front Cartridge. Right Hand Rotation.