Service Data

 $\textbf{Vickers}^{\texttt{R}}$ 

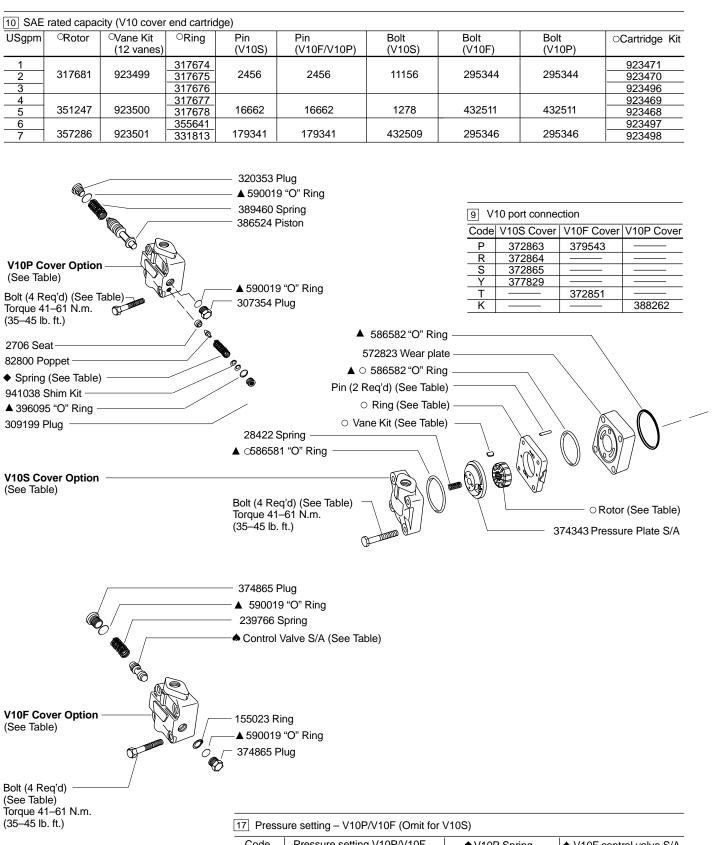
Vane Pumps



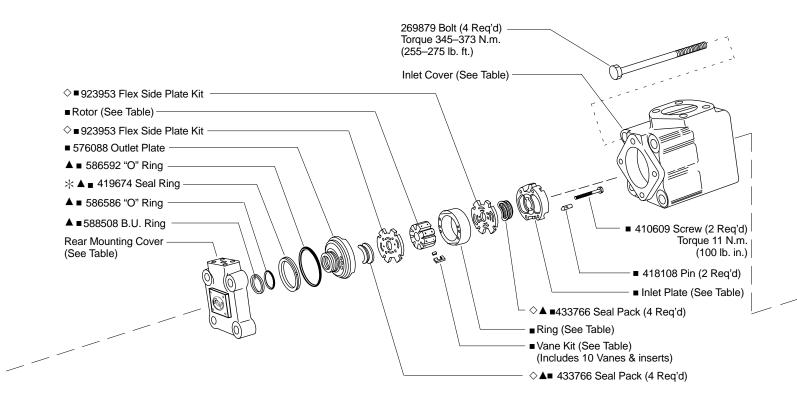
## Vane Type Triple Pump

(F3)-4535VQSV10\*-\*\*\*\*--20\*





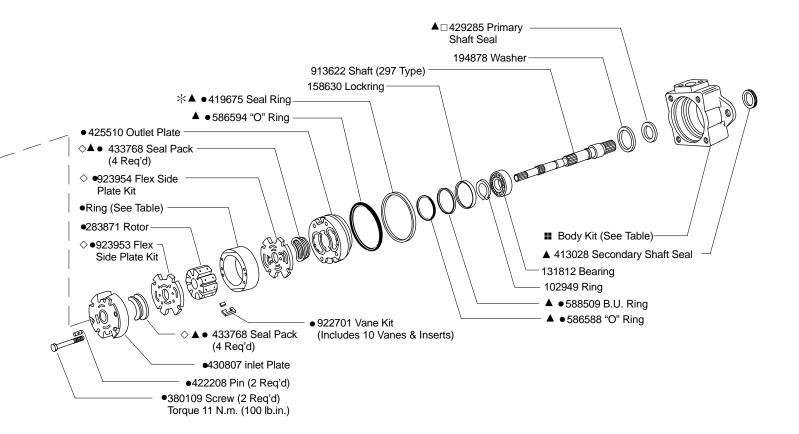
Code	Pressure setting V10P/V10F	♦V10P Spring	♦ V10F control valve S/A
A	250 psi	252886	229613
В	500 psi	2280	233018
С	750 psi		232794
D	1000 psi	2282	232795
E	1250 psi		232796
F	1500 psi		232797
G	1750 psi	2281	232798
Н	2000 psi		232799
J	2250 psi		233019
K	2500 psi		233020



1	8 SAE rated capacity (**35 VQ center cartridge)					
	■USgpm	■ Ring	Inlet Plate	Rotor	■Vane Kit	F3 Cart. Kit
	21	394961				583338
	25	319396				583339
	30	319397	412005	262154	922700	583340
	35	319398	112000	202101	022100	583341
	38	319399				583342

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- Included in 45\*\* VQ shaft end cartridge kit. .
- Included in \*\*35 VQ center cartridge kit.
- $\cap$ Included in V10 cover end cartridge kit.
- Included in seal kit 920168. (Kit contains ▲ F3 components & both shaft seals.)
- ◇ Included in flex side plate kit; bronze face of plate must be installed toward the rotor. Kit also contains four seal packs.
- $\Box$  Assemble seal with spring loaded sealing member towards bearing. Seals to be completely wetted with oil prior to assembly.
- \* Install 419675 & 419674 sealing ring into body, then install cartridge kit.



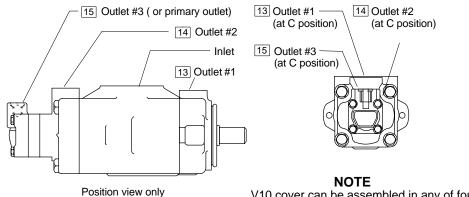
6 SAE rated capacity (45**VQ shaft end cartridge)				
●USgpm	●Ring	<ul> <li>F3 Cart. Kit</li> </ul>		
42	297510	419511		
47	297718	421954		
50	297502	419510		
57	306772	421955		

7 Port connections			
Connection Type	Body Kit	Inlet Cover	Rear Mounting Cover
A – 4 Bolt Flange (Inch)	02-136923	379585	572817
AM – 4 Bolt Flange (Metric)	02-136924	875811	913710

**II** NOTE: Body kit includes body, ball, and plug. (Ball and plug not shown.)

## Model Code

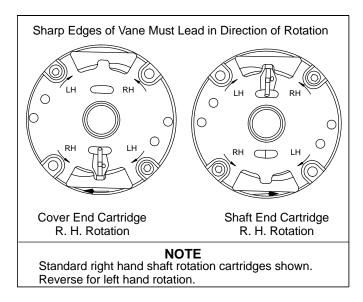
(F3	3) - 4535V	Q S V10 * - * * * * - * * * * *	* <b>+ - 20</b> *	
1 Special seals F3 – Vition "O"Rings and sh	naft seals	V10S standard covers and outlet # 3 (V re	ort orientation (Outlet #2) /iewed from cover end of pump; efer to table on next page)	
<ul> <li>Pump series designation</li> <li>45**VQ – Shaft end pump</li> <li>**35VQ – Center pump</li> </ul>		Code       15       Pc $S = .750 - 16$ Str. thd.       15       Pc $P = \frac{1}{2}$ " - NPT thd.       or       or $Y = .875 - 14$ Str. thd.       (V $R = 1.062 - 12$ Str. thd.       (V	15       Port orientation (Outlet #3 or primary outlet)         (Viewed from cover end of pump; refer to table on next page)	
3 Body mounting flang S – SAE mounting per J–74			ontrolled flow rate, V10F & V10P mit for standard cover)	
4 Pump series designa V10 cover end pump	tion	$\begin{array}{c c} \textbf{T}750 - 16 \text{ Str. thd} & .750 - 16 \text{ Str. thd.} \\ \textbf{P}750 - 16 \text{ Str. thd.} & \frac{1}{2} - \text{NPT thd.} \\ \textbf{3} - 3 \text{ L} \\ \textbf{4} - 4 \text{ L} \end{array}$		
<ul> <li>5 V10 pump cover options</li> <li>S – Standard cover</li> <li>F – Flow control and relief cover</li> <li>P – Priority valve and relief cover</li> </ul>		V10P priority control covers       5 - 5 USgpm       8 - 8 U         Primary       Secondary       Tank port         port       port       Str. thd         Code       Str. thd       17         Relief valve pressure setting,       V10F & V10P         (Omit for standard cover)		
6 SAE rated capacity (VQ shaft - end carts Code	Code	K5625-18         .750-16         .5625-18         Code           10         SAE rated capacity (V10 cover end cartridge)         A - 25 B - 50 C - 75           Code         D - 10	00 psi <b>G</b> – 1750 ps 50 psi <b>H</b> – 2000 ps 500 psi <b>J</b> – 2250 psi	
<b>42</b> – 42 USgpm <b>47</b> – 47 USgpm <b>50</b> – 50 USgpm	<b>57</b> – 57 USgpm <b>60</b> – 60 USgpm	E - 12:           1 - 1 USgpm         5 - 5 USgpm           2 - 2 USgpm         6 - 6 USgpm           3 - 3 USgpm         7 - 7 USgpm           4 - 4 USgpm         0	50 psi K – 2500 ps esign (Subject to change)	
<ul> <li>7 VQ port connections (inlet &amp; outlet #1 &amp; #2)</li> <li>A - 4 bolt flange (inch threads)</li> <li>AM - 4 bolt flange (metric threads)</li> </ul>		19   Kr     11   Shaft seal     L - Lei	Rotation (Viewed from shaft end of pump)         L – Left hand for counterclockwise         R – Right hand for clockwise	
8 SAE rated capacity (VQ center cartridge)		12 Shaft type		
<b>Code</b> <b>21</b> – 21 USgpm <b>25</b> – 25 USgpm <b>30</b> – 30 USgpm	<b>Code</b> <b>35</b> – 35 USgpm <b>38</b> – 38 USgpm	297 – All series         13       Port orientation (Outlet #1)         (Viewed from cover end of pump; refer to table on next page)		



## 13 14 15 Port orientation code (Viewed from cover end of pump) Outlet 13 #1 14 #2 15 #3

Outlet	13 #1	14 #2	15 #3
Opposite inlet	A	A	Α
90° CCW from inlet	В	В	В
Inline with inlet	C	С	С
$90^{\circ}$ CW from inlet	D	D	D

**NOTE** V10 cover can be assembled in any of four positions refer to drawing M–2005–S.



## NOTE

To reverse cartridge kit rotation, remove the two screws and reverse the location of the inlet support plate and the outlet support plate. Reinstall the two screws hand tight. Use pump cover to align all sections of the cartridge. Carefully remove the cover and tighten the screws.

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