

Vickers®

Service Data

# Vane Pumps

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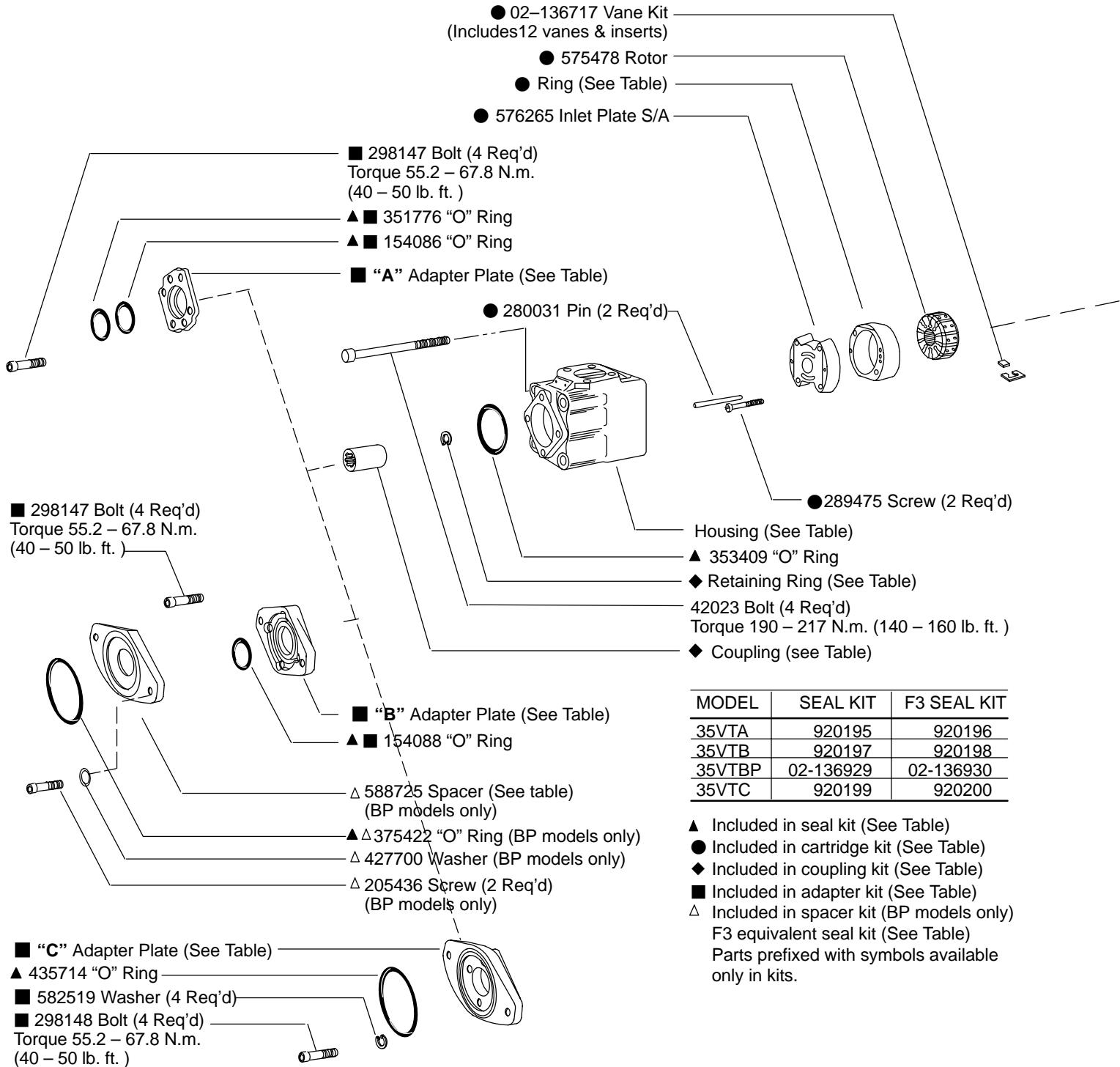
## Thru-Drive Vane Type Pump

(F3)-35VT\*(M)-\*\*A(M)2-\*\*-\*-22-\*

MODEL	ADAPTER PLATE	ADAPTER KIT	SPACER KIT	RETAINING RING	COUPLING	COUPLING KIT
VTA	584936	941296	—	223172	426770	02-136810
VTB	584922	941297	02-136817	83003 (1)	584924	02-136813
VTBP				83003 (2)		02-136814
VTC	581833	941298	—	237807	584940	02-136815

**NOTE**

FOR BP MODELS AN ADAPTER KIT AND SPACER KIT IS REQUIRED.

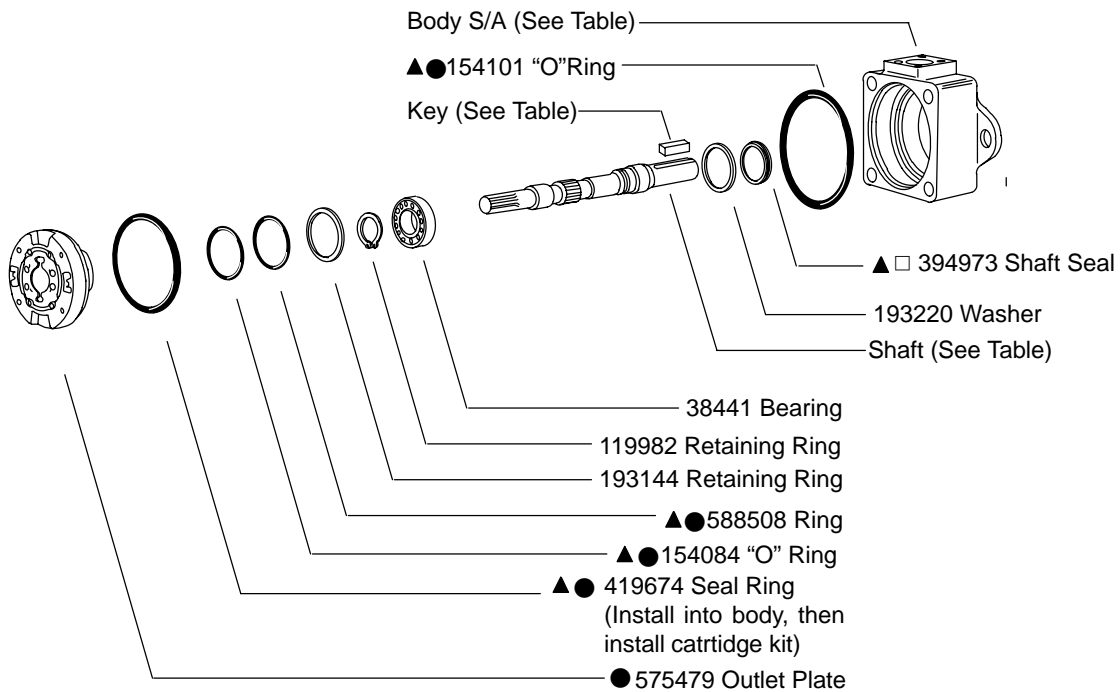


MODEL	SEAL KIT	F3 SEAL KIT
35VTA	920195	920196
35VTB	920197	920198
35VTBP	02-136929	02-136930
35VTC	920199	920200

- ▲ Included in seal kit (See Table)
  - Included in cartridge kit (See Table)
  - ◆ Included in coupling kit (See Table)
  - Included in adapter kit (See Table)
  - △ Included in spacer kit (BP models only)
- F3 equivalent seal kit (See Table)  
Parts prefixed with symbols available only in kits.

MODEL	SHAFT	KEY
35VTAS-202	876128	393536
35VTAS-203	860508	
35VTAS-297	876119	—
35VTAM-292N	860505	472287
35VTB(P)S-202	876129	393536
35VTB(P)S-203	860509	
35VTB(P)S-297	876120	—
35VTB(P)M-292N	860506	472287
35VTCS-202	876130	393536
35VTCS-203	860510	
35VTCS-297	876118	—
35VTCM-292N	860507	472287

MODEL	HOUSING	BODY S/A
35VT*S**A	250818	02-136919
35VT*S**AM	478506	02-136920
35VT*M**A	250818	02-136921
35VT*M**AM	478506	02-136922

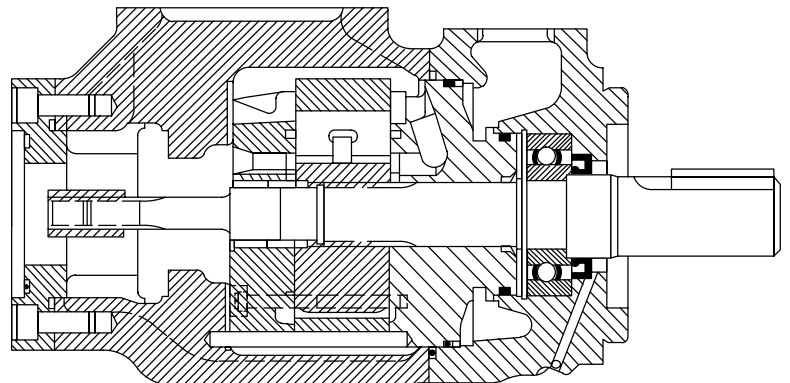


MODEL	RING	● CART KIT	F3 CART KIT
35VT25	576210	02-102552	02-102560
35VT30	576212	02-102553	02-102561
35VT35	576214	02-102554	02-102562
35VT38	575476	02-102555	02-102563

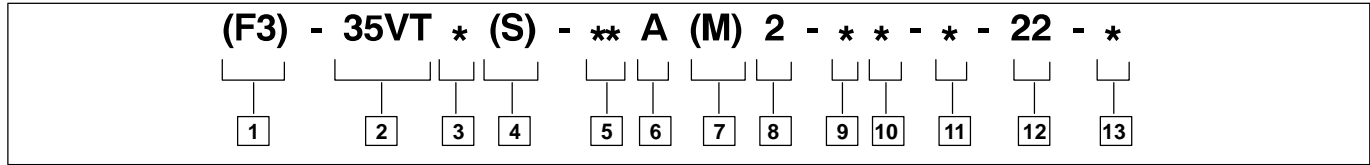
□ Assemble seal with spring loaded sealing member towards bearing. Seals to be completely wetted with oil prior to assembly.

**NOTE**

For satisfactory service life of these components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 16/13 or cleaner. OFP, OFR, and OFRS series filters are recommended.



# Model Code



**1** Viton seals  
Omit – Standard seals

**2** Thru drive series designation  
35VT – 81 to 121 cm<sup>3</sup>/r  
(4.94 to 7.37 in<sup>3</sup>/r)

**3** Rear pump mounting SAE  
(ISO 3019/1) 2 – bolt

A – 2-bolt SAE “A”  
B – 2-bolt SAE “B”  
BP – 2-bolt SAE “B” to mount  
PVE19/21 (Includes spacer)  
C – 2-bolt SAE “C”

**4** Pilot designation  
M – ISO 3019/2 100A2HW  
S – SAE – J744 flange

**5** Geometric displacement  
(Rated capacity (USgpm) at  
1200 rpm, 6.9 bar (100 psi))

Frame Size	Code	cm <sup>3</sup> /r	in <sup>3</sup> /r
35V	25	81	4.94
	T	30	5.91
		35	6.83
		38	7.37

**6** Port connections  
A – SAE 4 bolt flange

**7** Port connection modifier  
M – Metric thread port connection  
(4 bolt flange)  
Omit – Inch thread port connection  
(4 bolt flange)

**8** Thru–drive coupling  
2 – Coupling (included with pump)

Pump series	Tail shaft pump requirements
35VTA	SAE “A” size w/30_ involute spline, 9T 16/32 D.P.
35VTB	SAE “B” size w/30_ involute spline, 13T 16/32 D.P.
35VTC	SAE “C” size w/30_ involute spline, 14T 12/24 D.P.

**9** Shaft  
202 – SAE ‘B’ square key  
203 – SAE ‘BB’ square key  
292N – ISO key 8mm x 10mm  
(M pilot only)  
297 – 14T 12/24 splined SAE ‘C’

**10** Outlet positions  
(Viewed from adapter end of pump)

A – Opposite inlet port  
B – 90° CCW from inlet  
C – In line with inlet  
D – 90° CW from inlet

**11** Thru–drive adapter orientation  
(Viewed from adapter end of pump)  
A adapter

A – Rotate 45° CW with respect to pump mounting flange  
B – Rotate 45° CCW with respect to pump mounting flange

B or C adapter

A – In line with pump mounting flange  
B – Rotate 90° with respect to pump mounting flange

**12** Design

**13** Rotation

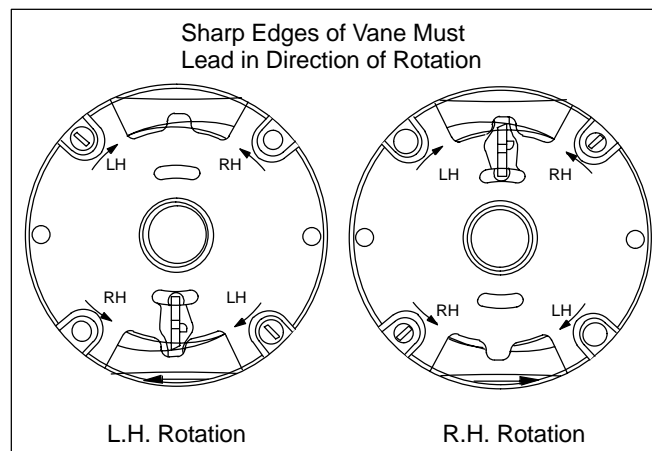
(Viewed from shaft end of pump)  
L – Left hand for counterclockwise  
R – Right hand for clockwise

## NOTE

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

## NOTE

When ordering spare cartridge parts, it is recommended they be obtained in cartridge kits. Kits are assembled and tested by Vickers 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.



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