

Service Data

Vickers®

Vane Pumps



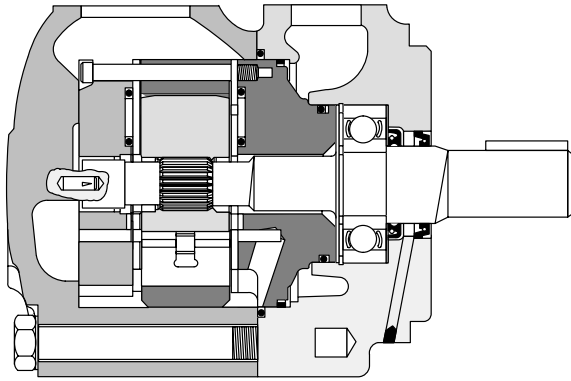
Vane Type Single Pump

45VQ**A-86*-20(L)



Revised 10-01-89

I-3168-S



⊖ TO REVERSE CATRIDGE KIT ROTATION, REMOVE THE TWO (2) 413834 SCREWS, AND REVERSE THE LOCATION OF THE INLET SUPPORT PLATE 430805 AND OUTLET SUPPORT PLATE 419079. REINSTALL THE TWO (2) SCREWS HAND TIGHT. USE PUMP COVER TO ALIGN ALL SECTIONS OF THE CARTRIDGE. REMOVE COVER CAREFULLY AND TIGHTEN SCREWS TO 50 LB. IN. TORQUE.

□ WIPE O.D. OF SEAL WITH OIL BEFORE PRESSING INTO BODY. APPLY GREASE TO SEAL I.D. BEFORE INSTALLATION OF SHAFT.

▲ INCLUDED IN SINGLE SHAFT SEAL KIT 920025 F3 EQUIVALENT 920027

▲△ INCLUDED IN DOUBLE SHAFT SEAL KIT 920026 F3 EQUIVALENT 920028

*INCLUDED IN CARTRIDGE KIT

61321 SCREW (4 REQ'D)
(OIL & TORQUE TO 265 ± 10 LB. FT)

229633 COVER (INLET)

TORQUE TO 105 ± 5 LB. IN

NOTE
BRONZE FACES MUST BE INSTALLED TOWARD THE ROTOR.

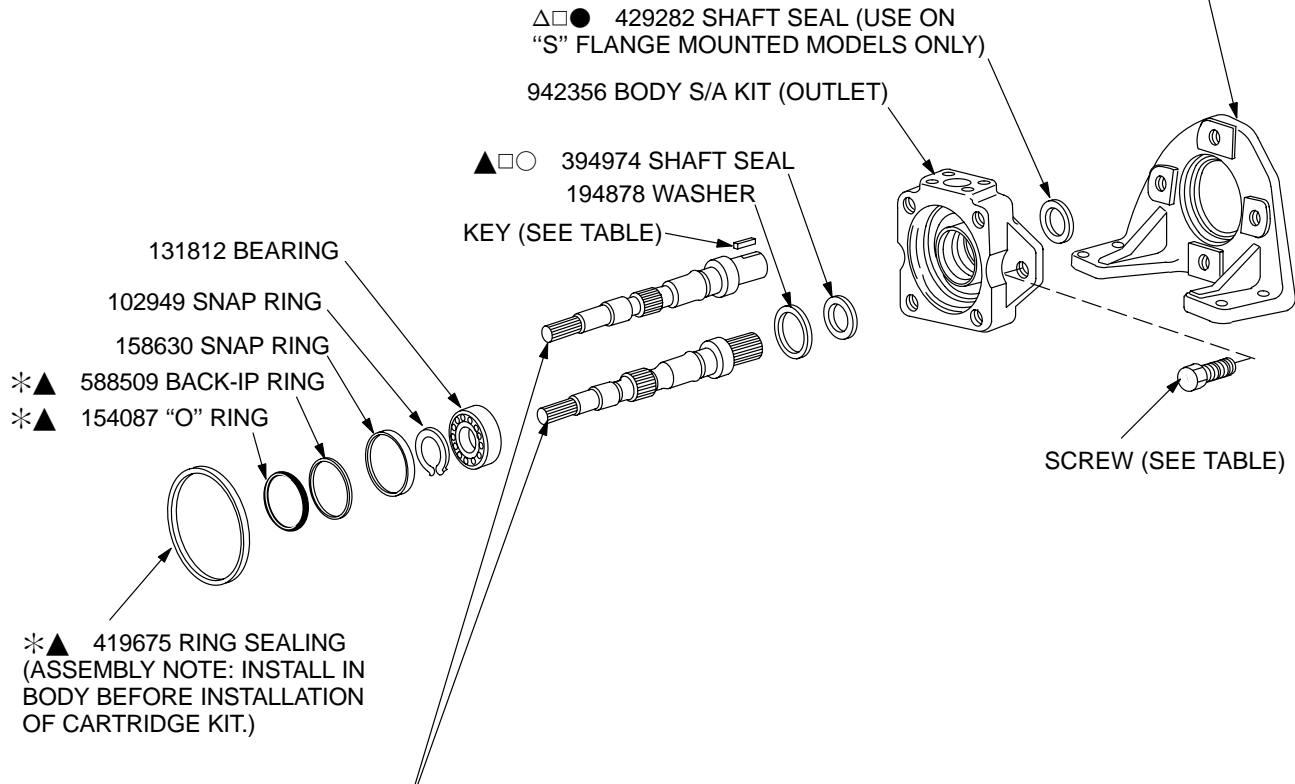
*▲ 154107 "O-RING"

CAPACITY (USGPM)	SCREW (2 REQ'D)	PIN (2 REQ'D)	INLET SUPPORT PLATE	▲SEAL PACK (4 REQ'D)	◆FLEX-SIDE PLATE KIT	ROTOR	VANE KIT	RING	OUTLET SUPPORT PLATE	CART. KIT	F3 CART. KIT
THESE PARTS ARE INCLUDED IN CARTRIDGE KIT											
45VQ42A	380109	422208	430807 (INCLUDES BUSHING)	433768 S/A	923954	283871	922701 (INCLUDES 10 VANES & 10 INSERTS)	297510	415382	416435	419511
45VQ47A								297718		421234	421954
45VQ50A								297502		416436	419510
45VQ57A								306772		421233	421955
45VQ60A								297503		416437	419509

○ ASSEMBLE SEAL WITH SPRING TOWARD BEARING.

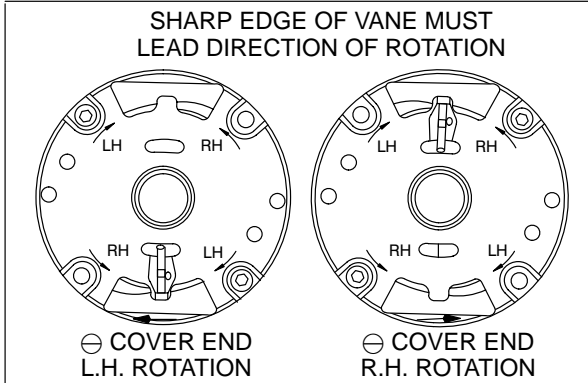
● ASSEMBLE SEAL FLUSH TO PILOT FACE WITH SPRING FACING INWARD AS SHOWN.

MOUNTING ASSEMBLY 45VQ***F-**-20(L)		
INCLUDED IN MOUNTING KIT FB-B-10	SCREW (2 REQ'D) 205533	MOUNTING BRACKET 205077



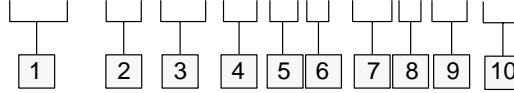
SHAFTS				KEY	TYPE
SINGLE SEAL MODELS		DOUBLE SEAL MODELS			
SHAFT NO.	PART NO.	SHAFT	PART NO.		
1	233369	—	—	217596	STRAIGHT, KEYED
4	233370	—	—	—	SPLINE
11	242885	—	—	—	SPLINE
—	—	130	422541	—	SPLINE
86	361760	—	—	239751	STRAIGHT, KEYED

◆ NOTE
WHEN ORDERED INDIVIDUALLY,
FLEX SIDE PLATE KIT INCLUDES
(4) F3 SEAL PACK SUB ASSY'S.



Model Code

(F3) -45 VQ ** A * - * * * 20 (*)



1 Viton Seals

(Omit if not required.)

2 Series

3 Vane Type

4 SAE Rated Capacity

(Rating @ 1200 RPM - 100 psi)
(See Inside for Capacities.)

5 Port Connections

A - SAE 4-Bolt Flange

6 Mounting & Shaft Seals Assembly

F - Foot (Single Shaft Seal Assy.)
S - Flange (Double Shaft Seal Assy.)
Omitted- Flange (Single Shaft Seal Assy.)

7 Shafts

See Tabulation, Exploded View.

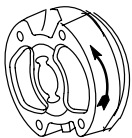
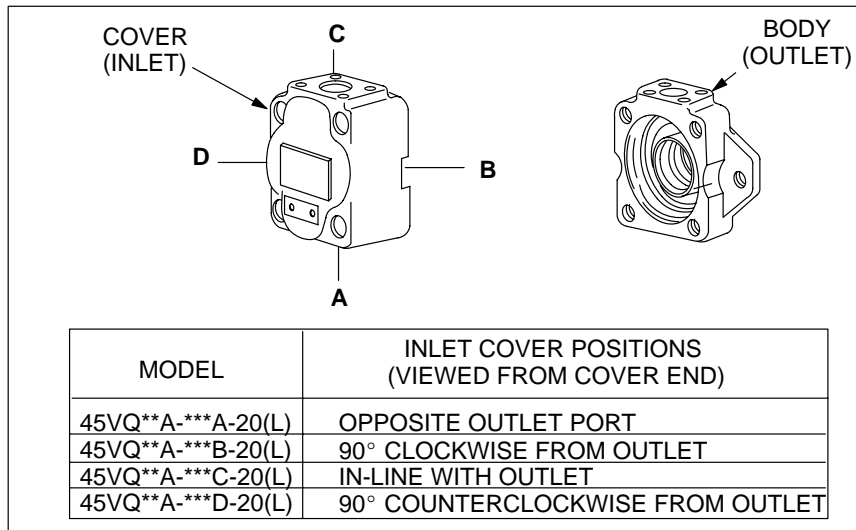
8 Port Positions

See Chart Below

9 Design

10 Rotation

(Viewed from Shaft End)
L - Left Hand (CCW Rotation)
Omitted - Right Hand Rotation



PARTS ORDERING

PARTS ARE THE SAME FOR BOTH RIGHT AND LEFT HAND ROTATION, 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 KIT NUMBER. FOR EXAMPLE, 416439-L.

For satisfactory service life of these components, use full flow filtration to provide fluid which meets ISO cleanliness code 16/13 or cleaner. Selections from pressure, return, and in-line filter series are recommended.