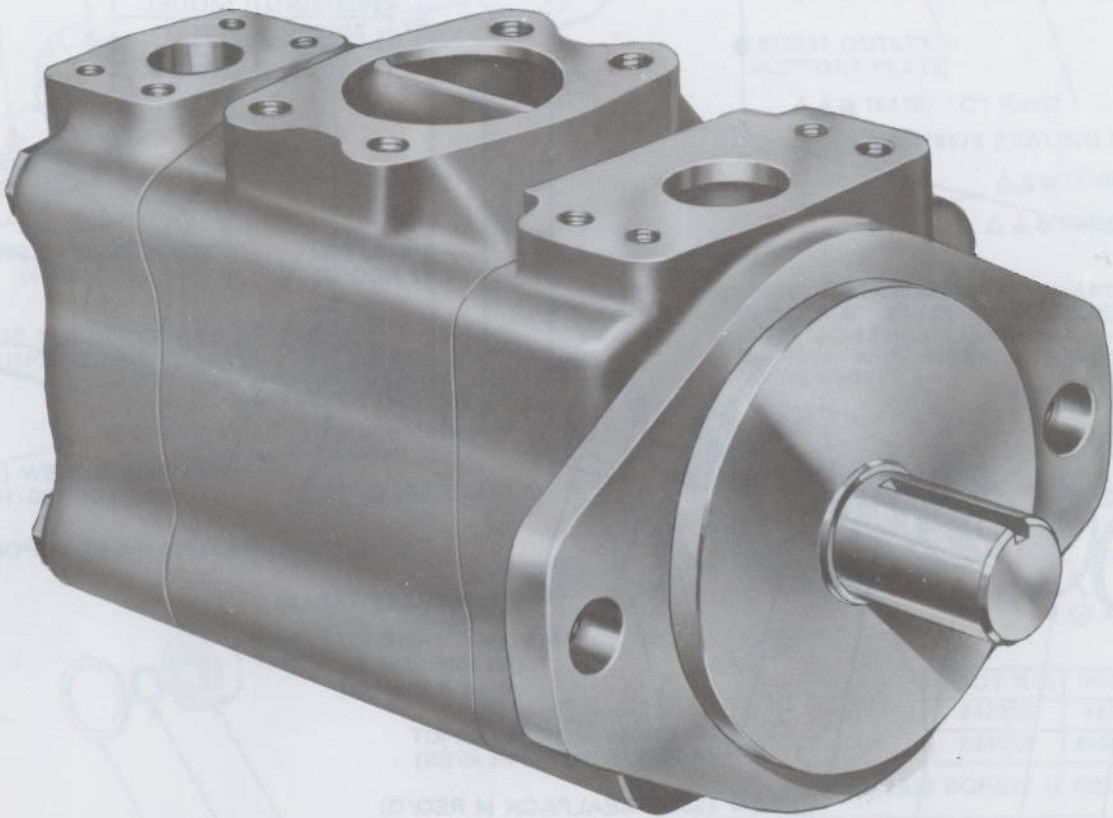


Service Parts Information

Double
Pumps

(F3)-4535VQ(H) Series
- 30 Design



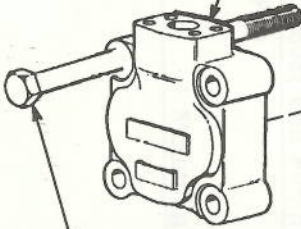
Vickers, Incorporated

1401 Crooks Road
Troy, Michigan 48084

Released 10-1-87 M-2509-S

4535VQ(H)-***-30

COVER	MODEL
270679	4535VQ*A
433209	4535VQH*A



269879 BOLT (4 REQ'D)
OIL & TORQUE 255-275 lb.ft.)

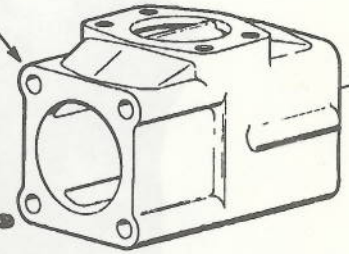
NOTE

Seals must be completely wetted at time of assembly with an SAE 10W motor oil of "SE" quality or an industrial hydraulic equivalent.

CAUTION

Individual cartridge parts and complete kits are not interchangeable with similar parts or kits of the previous design.

HOUSING	MODEL
379585	4535VQ
425975	4535VQH

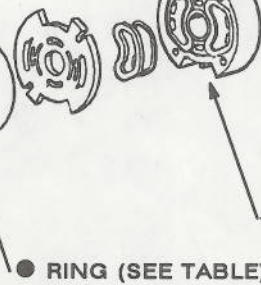


410609 SCREW (2 REQ'D)
TORQUE 130-140 lb.in.

631864 INLET SUPORT PLATE

418108 PIN
(2 REQ'D)

593540 ROTOR



RING (SEE TABLE)

924007 VANE KIT
(kit includes 10 vanes & inserts)

924006 SIDE PLATE KIT
(INCLUDES 2 PLATES)

433765 SEALPACK (4 REQ'D)

595049 OUTLET SUPPORT PLATE

154101 "O" RING

419674 SEALING RING

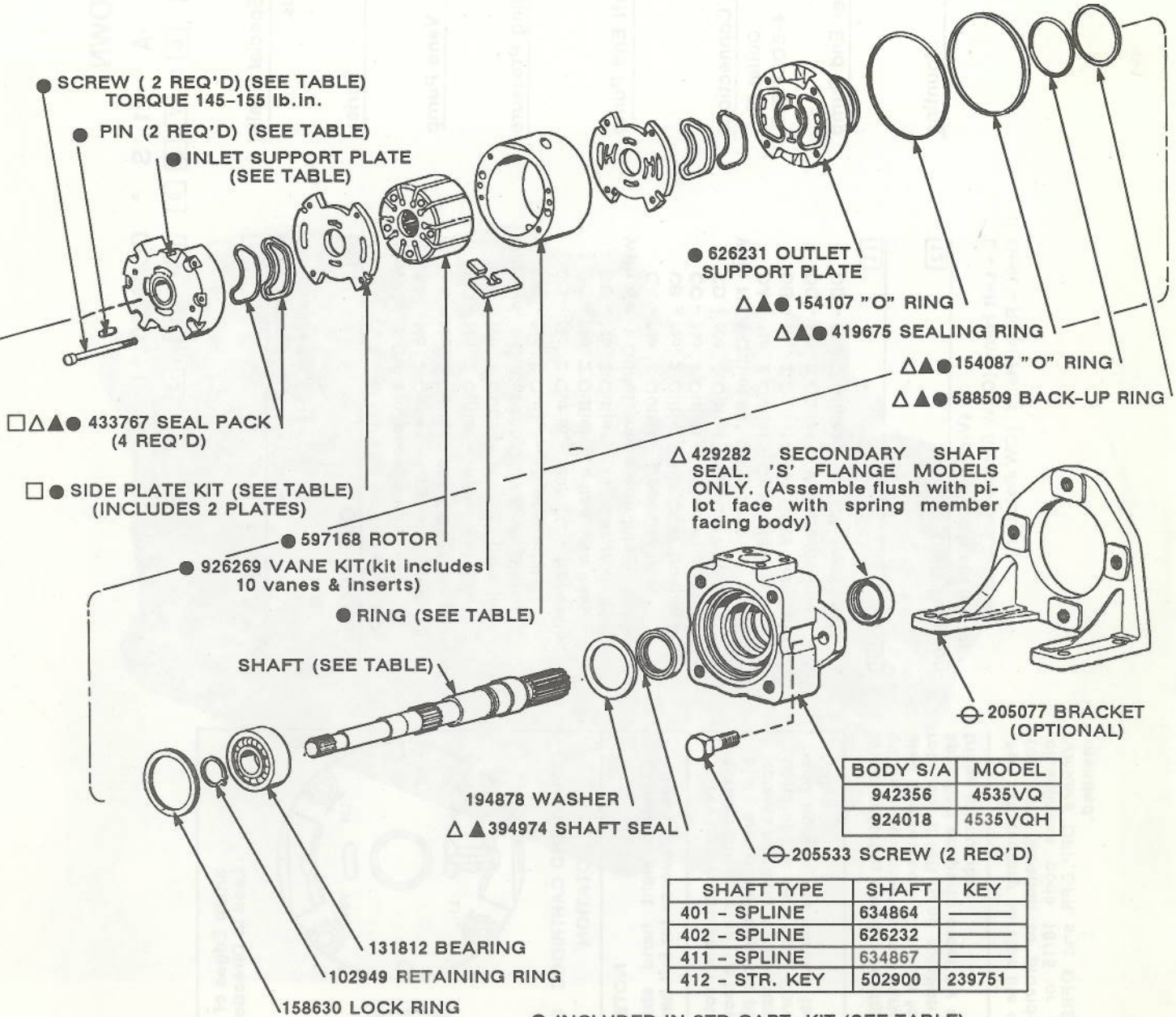
154084 "O" RING

588508 BACK-UP RING

Model (Cover End)	Ring	Cartridge Kit	
		Std	F3
4535VQ(H)***-21	595378	595696	597172
4535VQ(H)***-25	576210	595697	597173
4535VQ(H)***-30	576212	595698	597174
4535VQ(H)***-35	576214	595699	597175
4535VQ(H)***-38	575476	595700	597176

NOTE
Install 419674 sealing ring into cover, then install cartridge.

Model (Shaft End)	Screw	Pin	Inlet Support Plate S/A	Side Plate Kit	Ring	Cartridge Kit	
						Std.	F3
4535VQ42	380109	422208	631855	926270	631858	630654	630646
4535VQ47					628307	630647	630653
4535VQ50					631859	630656	630648
4535VQ57					630645	630649	630655
4535VQ60					631862	630658	630650
4535VQH42	433227	427335	631857	924017	631858	634897	634901
4535VQH47					628307	634898	634902
4535VQH50					631859	634899	634903
4535VQH57					630645	634900	634904
4535VQH60					631862	634908	634907



NOTE
 Install 419675 sealing ring into
 body, then install cartridge.

Wipe O.D. of shaft seals with oil before
 pressing into body. Apply grease to seal I.D.
 before installation of shaft. Assemble seal
 with spring member toward bearing.

- INCLUDED IN STD CART. KIT (SEE TABLE)
 EQUIVALENT F3 CARTRIDGE KIT (SEE TABLE)
- ▲ INCLUDED IN STD SINGLE SHAFT SEAL KIT 920072
 EQUIVALENT F3 SINGLE SHAFT SEAL KIT 920074
- ▲ INCLUDED IN STD DOUBLE SHAFT SEAL KIT 920073
 EQUIVALENT F3 DOUBLE SHAFT SEAL KIT 920075
- INCLUDED IN SIDE PLATE KIT
 (BRONZE SURFACES MUST FACE ROTOR)
- ⊖ INCLUDED IN FOOT BRACKET FB-C-10

MODEL CODE BREAKDOWN

(F3) 4535 VQ (H) 42 A 21 S * CC 30 L
 [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12]

[1] Special Seals
 For mineral oil & fire resistant fluids.

[2] Series
 4535VQ Double Pump

[3] Vane Pump
 (Intra-Vane Flex Plate Type)

[4] Operating Pressure
 H-High Pressure (3000-3500 PSI)
 Omit-Rated Pressure (3000 PSI)

[5] US GPM Capacity Shaft End Pump
 (SAE RATING 1200 RPM-100 PSI)
 42, 47, 50, 57, 60

[6] SAE Port Connections
 Code Inlet Outlet #1 Outlet #2
 A 4-BOLT FLG. 4-BOLT FLG. 4-BOLT FLG.

[7] US GPM Capacity Cover End Pump
 (SAE RATING 1200 RPM-100 PSI)
 21, 25, 30, 35, 38

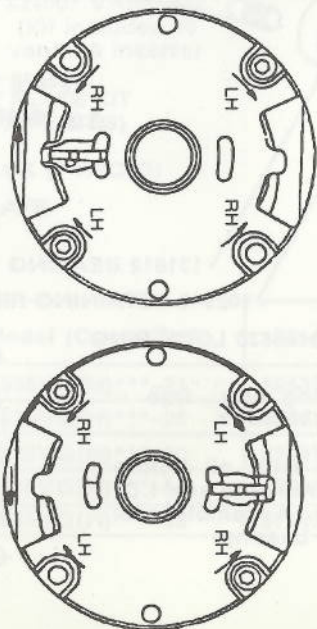
[8] Mounting
 F-Foot (Single Shaft Seal)
 S-Flange (Double Shaft Seal)
 Omit-Flange (Single Shaft Seal)

[9] Shaft Type
 401 - Splined 411 - Splined
 402 - Splined 412 - Str. Key

[10] Outlet Positions
 (Viewed from cover end of pump)
 With No. 1 Outlet Opposite Inlet:
 AA - No. 2 Outlet - Opposite Inlet
 AB - No. 2 Outlet - 90° CCW from Inlet
 AC - No. 2 Outlet - Inline with Inlet
 AD - No. 2 Outlet - 90° CW from Inlet
 With No. 1 Outlet 90° CCW from Inlet:
 BA - No. 2 Outlet - Opposite Inlet
 BB - No. 2 Outlet - 90° CCW from Inlet
 BC - No. 2 Outlet - Inline with Inlet
 BD - No. 2 Outlet - 90° CW from Inlet
 With No. 1 Outlet Inline with Inlet:
 CA - No. 2 Outlet - Opposite Inlet
 CB - No. 2 Outlet - 90° CCW from Inlet
 CC - No. 2 Outlet - Inline with Inlet
 CD - No. 2 Outlet - 90° CW from Inlet
 With No. 1 Outlet 90° CW from Inlet:
 DA - No. 2 Outlet - Opposite Inlet
 DB - No. 2 Outlet - 90° CCW from Inlet
 DC - No. 2 Outlet - Inline with Inlet
 DD - No. 2 Outlet - 90° CW from Inlet

[11] Design
 [12] Shaft Rotation
 (Viewed from shaft end)
 L - Left Hand (CCW Rotation)
 Omit - Right Hand (CW Rotation)

Sharp Edges of Vane Must
 Lead in Direction of Rotation



COVER END CARTRIDGE R.H. ROTATION
 R.H. ROTATION

NOTE
 Standard right hand shaft rotation cartridges shown. Reverse for left hand rotation.

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 to recommended torque value.

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.

For satisfactory service life of these components, use full flow filtration to provide fluid which meets ISO cleanliness code 18/15 or cleaner. Selections from Vickers OFP, OFR and OFRS filter series are recommended.