

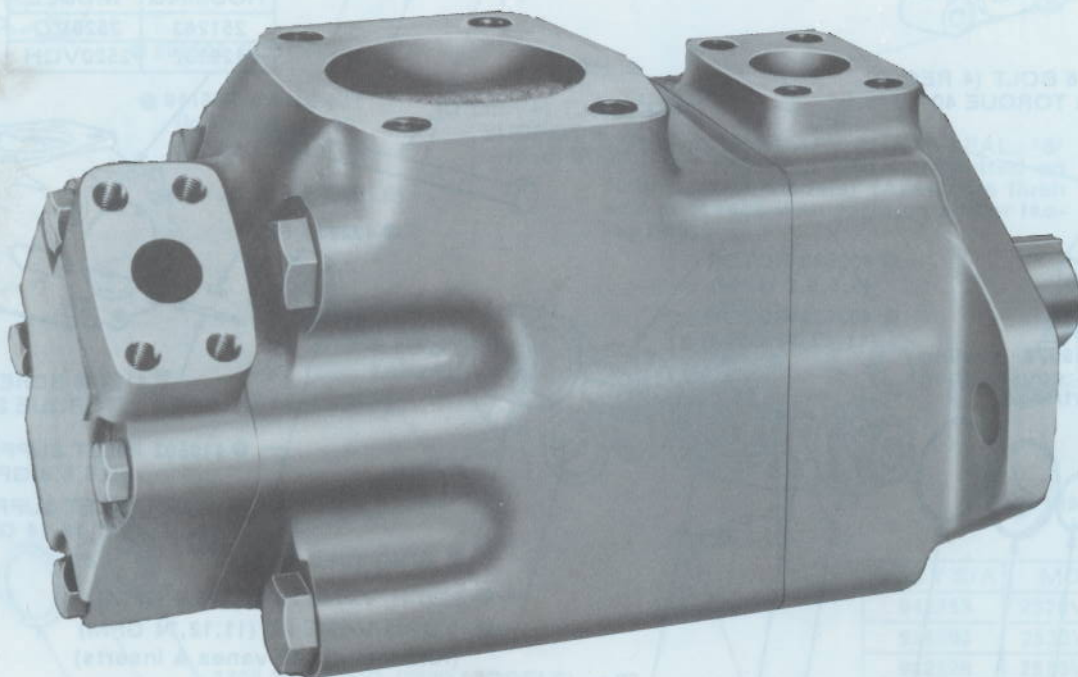


A TRIHNOVA COMPANY

Service Parts Information

Double
Pumps

(F3)-2520VQ(H) Series
- 30 Design

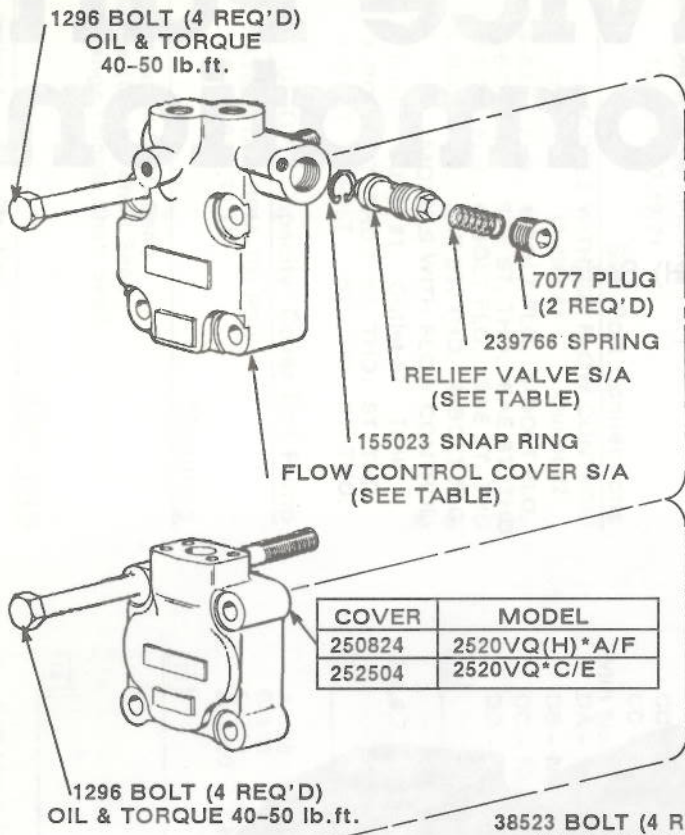


Vickers, Incorporated

1401 Crooks Road
Troy, Michigan 48084

Released 10-1-87 M-2504-S

2520VQ(H) - *** - 30

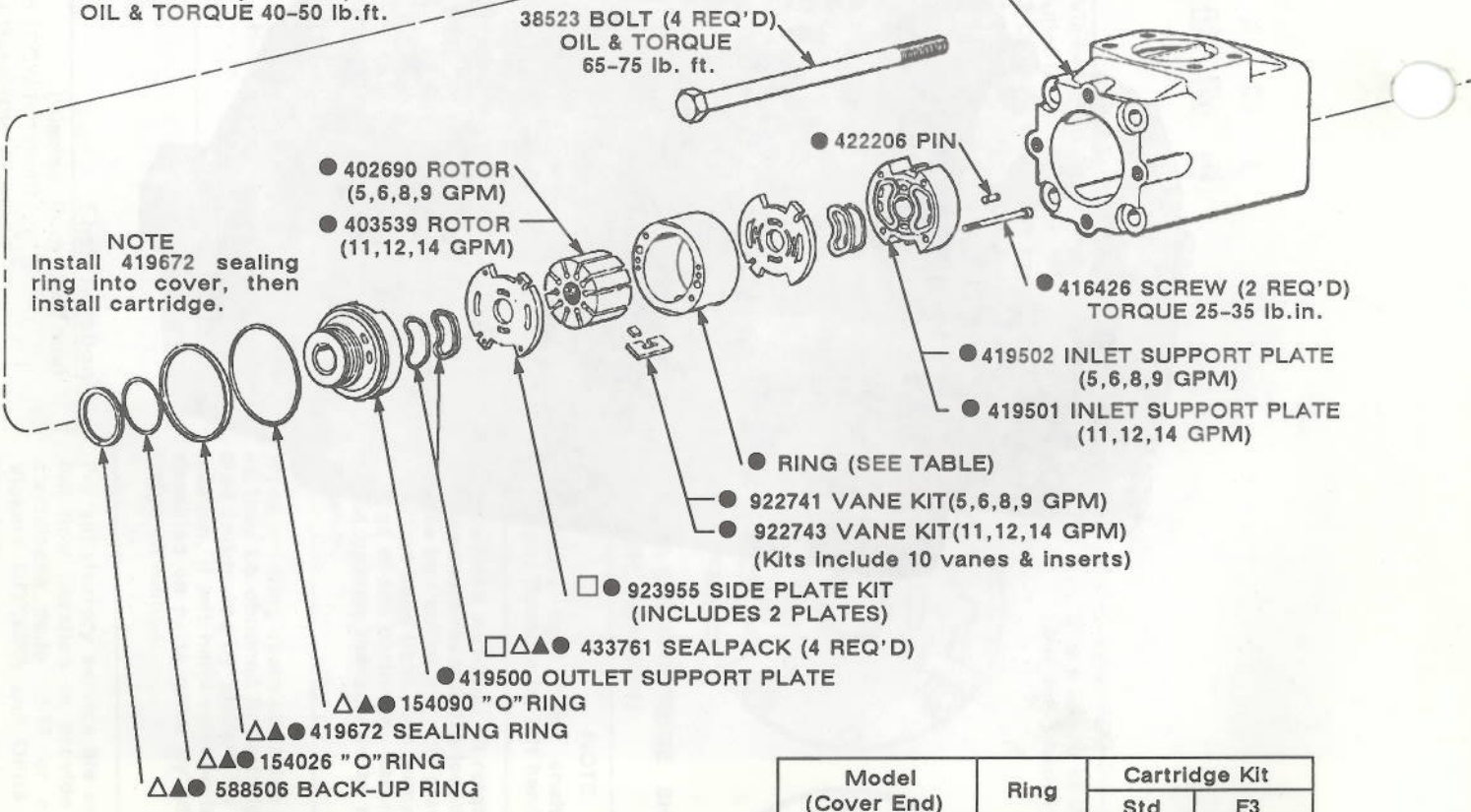


COVER	MODEL
250824	2520VQ(H) *A/F
252504	2520VQ *C/E

FLOW CONTROL COVER S/A	FLOW RATE GPM
257560	2
257561	4
257562	6
257563	7
257564	8
257565	10
257999	12

PRESSURE RANGE/RELIEF VALVE SETTING (PSI)	RELIEF VALVE S/A
A / 250	229613
B / 500	233018
C / 750	232794
D / 1000	232795
E / 1250	232796
F / 1500	232797
G / 1750	232798
H / 2000	232799
J / 2250	233019
K / 2500	233020

HOUSING	MODEL
251263	2520VQ
429132	2520VQH



NOTE
Install 419672 sealing ring into cover, then install cartridge.

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 are not interchangeable with similar parts of the previous design. Complete cartridges are interchangeable with the previous design.

Model (Cover End)	Ring	Cartridge Kit	
		Std	F3
2520VQ***5	333624	417053	421588
2520VQ***6	431883	431882	—
2520VQ***8	333625	417054	421589
2520VQ***9	374799	423096	423097
2520VQ***11	333626	416427	421590
2520VQ***12	353901	416428	421591
2520VQ***14	353902	416429	421592

MODEL (Shaft End)	RING	CARTRIDGE KIT	
		STD	F3
2520VQ12	326984	595682	626225
2520VQ14	326985	595683	626226
2520VQ16	424084	595684	626227
2520VQ17	326986	595685	626228
2520VQ19	326987	595995	626229
2520VQ21	326988	595996	626230

● 413834 SCREW (2 REQ'D)
TORQUE 40-50 lb.in.

● 422207 (2 REQ'D)

● 430805 INLET SUPPORT PLATE

□ ▲ ● 433763 SEAL PACK (4 REQ'D)

□ ● 941393 SIDE PLATE KIT
(INCLUDES 2 PLATES)

● 593506 ROTOR

● 941392 VANE KIT
(kit includes 10
vanes & inserts)

● RING (SEE TABLE)

● 596033 OUTLET
SUPPORT PLATE

▲ ▲ ● 588507 BACK-UP RING
▲ ▲ ● 154078 "O" RING
▲ ▲ ● 419673 SEALING RING
▲ ▲ ● 154095 "O" RING

NOTE
Install 419673 sealing ring
into body, then install car-
tridge.

▲ 429283 SECONDARY SHAFT SEAL. 'S'
FLANGE MODELS ONLY. (Omitted on
Flow Control Models) (Assemble flush
with pilot face with spring member fac-
ing body)

▲ ▲ 394976 SHAFT SEAL
190362 WASHER
KEY (SEE TABLE)
SHAFT (SEE TABLE)

⊖ 199491 BRACKET
(OPTIONAL)

1705 BEARING (2520 MODELS)

232750 BEARING (2620 MODELS)

120128 RETAINING RING

191400 LOCK RING

BODY S/A	MODEL
942353	2520VQ-A/E
924003	2520VQH-A
942378	2520VQ-C/F

⊖ 199740 SCREW (2 REQ'D)

SHAFT TYPE	SHAFT	KEY
1 - STR. KEYED	254964	9955
11 - SPLINE	254848	

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 920040
EQUIVALENT F3 SINGLE SHAFT SEAL KIT 920042
- ▲ INCLUDED IN STD DOUBLE SHAFT SEAL KIT 920041
EQUIVALENT F3 DOUBLE SHAFT SEAL KIT 920043
- INCLUDED IN SIDE PLATE KIT
(BRONZE SURFACES MUST FACE ROTOR)
- ⊖ INCLUDED IN FOOT BRACKET FB-B-10

MODEL CODE BREAKDOWN

(F3) 2520 VQ (H) 12 A 5 S * CC 2 A 30 L

1 Special Seals

For mineral oil & fire resistant fluids.

2 Series

2520VQ Double Pump
2620VQ 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)
12,14,16,17,19,21

6 SAE Port Connections
(MODELS WITHOUT FLOW CONTROL)

Code Inlet Outlet #1 Outlet #2
 A 4-BOLT FLG. 4-BOLT FLG. 4-BOLT FLG.
 C 4-BOLT FLG. SAE ST. THD. SAE ST. THD.
 E 4-BOLT FLG. 4-BOLT FLG. SAE ST. THD.
 F 4-BOLT FLG. SAE ST. THD. 4-BOLT FLG.
 (MODELS WITH FLOW CONTROL)
 Code Inlet Outlet #1 Outlet #2 Tank
 C 4-BOLT ST. THD. ST. THD. ST. THD.
 E 4-BOLT 4-BOLT ST. THD. ST. THD.

7 US GPM Capacity Cover End Pump
(SAE RATING 1200 RPM-100 PSI)
5,6,8,9,11,12,14

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

9 Shaft Type
 11 - Splined 1 - Str. Key

10 Outlet Positions
(Viewed from cover 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 Inline 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

11 Controlled Flow Rate-GPM
(Models with flow control)
2,4,6,7,8,10,12

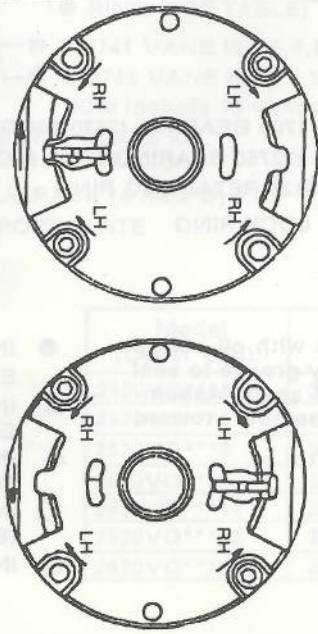
12 Relief Valve Setting -PSI
(Models with flow control)

A-250 E-1250 J-2250
 B-500 F-1500 K-2500
 C-750 G-1750
 D-1000 H-2000

13 Design

14 Shaft Rotation
 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
 SHAFT END CARTRIDGE 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.