Service Data

Vickers®

Piston Pumps

Low Noise Industrial Piston Pump

PVQ 10–A2/MA * * – ** * * – 10 C** *** *** * – 11/12/20**
PVQ 13–A2/MA * * – ** * * – 10 C** *** *** * – 11/12/20**

CAUTION

▩ Model PVQ13C compensator pressure adjustment shall not exceed 2000 psi.

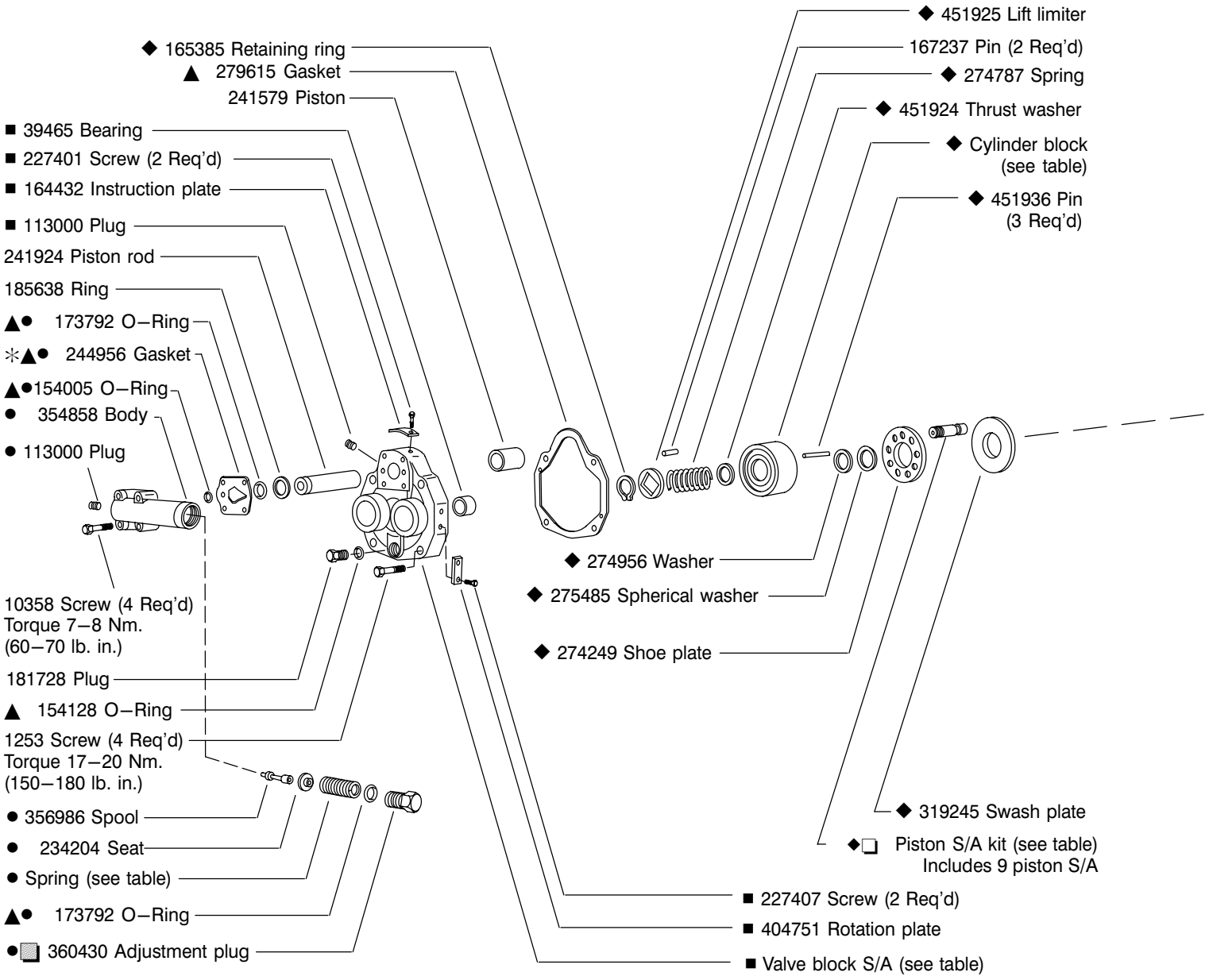
Model	●Comp. kit	●Comp. Spring	●Load Sense Spring
PVQ**C	942158	239371	———
PVQ**CM	942159	265693	———
PVQ**CG	942480	239371	———
PVQ**CMG	941353	265693	———
PVQ**C**V(C)11B	02−142729	239371	581073
PVQ**C**V(C)11P	02−142728	239371	581073
PVQ**C**V(C)24B	02−142730	239371	581072
PVQ**C**V(C)24P	02−142727	239371	581072
PVQ**CD****	(Refer to service parts information I−3255−S)		

NOTE

C, CM Compensator shown for right hand rotation. Rotate 180° for left hand shaft rotation and connect to left hand valve block S/A.

9 NOTE

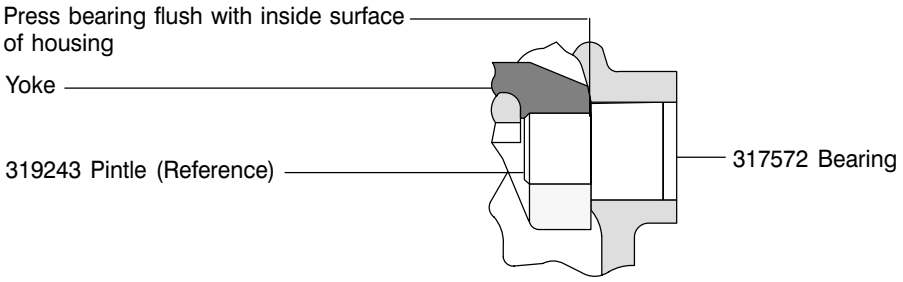
See model code for pressure range settings of individual compensator kits.



CAUTION

⁎ Position gasket with small end of teardrop hole pointing in direction of compensator adjusting plug

■ Valve block S/A	Right hand	Left hand
Rear ports	02-142930	02-142931
Side ports	02-142932	02-142933

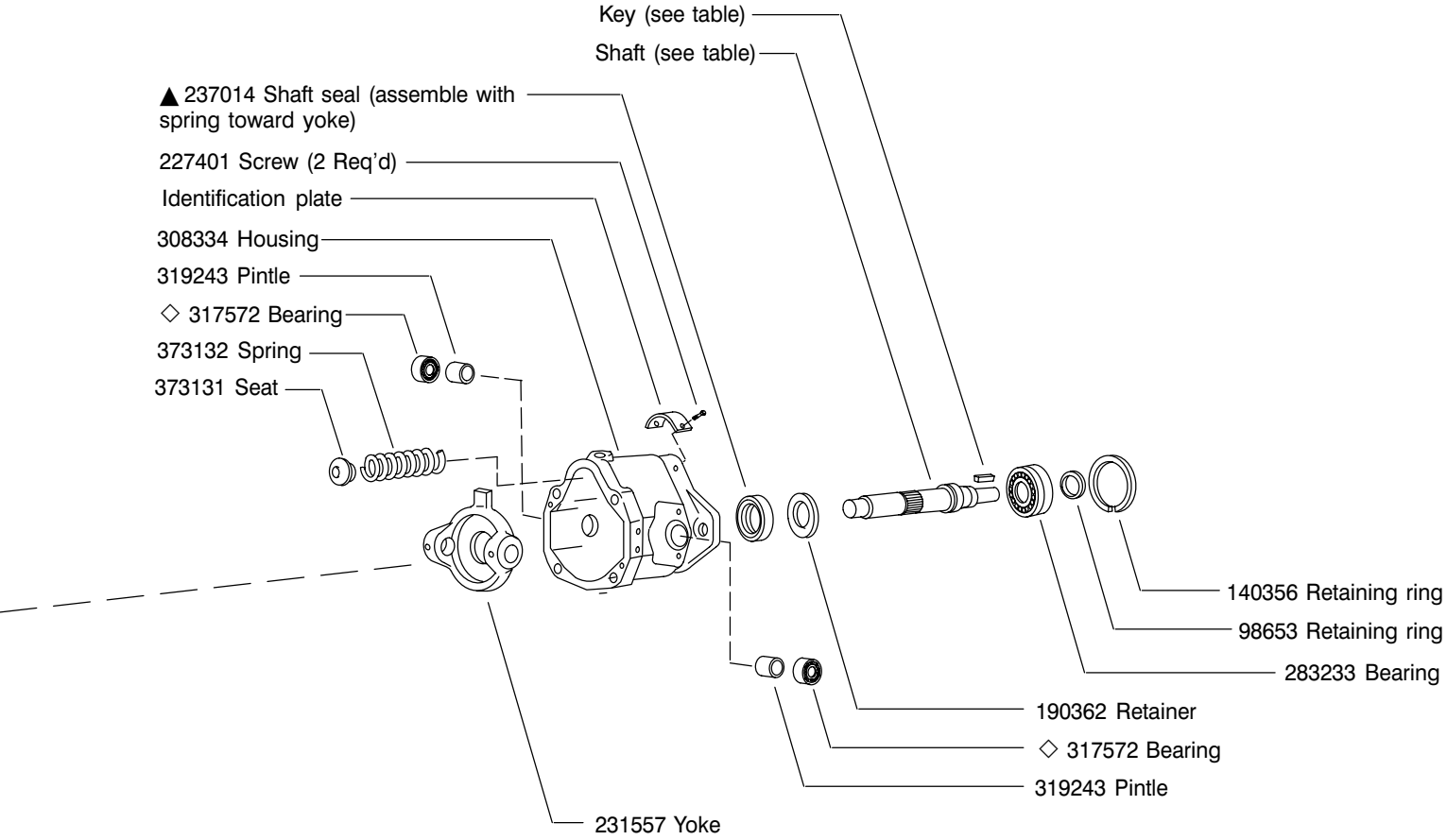


◇ PINTLE BEARING ASSEMBLY NOTE

The bearing O.D. surface and mating surface in the housing must be clean. Apply sealing compound (Loctite A (10−1) or equivalent) to the bearing O.D. and press in place.

CAUTION

Do not allow sealing compound to contact the bearing needles.



Model	Cylinder block	❑ Piston S/A kit	◆ Rotating group kit
PVQ10	677061	942229	875775
PVQ13	677060	942230	875773

Shaft	Type	Key
266162	1	142843
286848	3	———
883030	N	472255

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.

▲ Standard seal kit 919191
F3 equivalent seal kit 919308
● Compensator kit (see table)
■ Valve block S/A (see table)
◆ Rotating group kit (see table)
❑ Piston S/A kit (see table)

Model Code

PVQ 1* - ** * - ** * * - 10 C ** * *** * - **

1 2 3 4 5 6 7 8 9 10 11

1 PVQ Series

P — Inline piston pump
V — Variable volume
Q — Quiet series

2 Displacement
(CC/Rev & Pressure ratings)

10 — 10 CC/Rev (.64 CIR)
210 bar (3000 psi)
13 — 13 CC/Rev (.84 CIR)
140 bar (2000 psi)

3 Mounting flange

A2 — SAE "A" 2−bolt
MA – ISO 3019/2 "A" 2−bolt (available with "N" driveshaft only)

4 Rotation
(viewed from shaft end)

R — Right hand (CW), (standard)
L — Left hand (CCW), (optional)

5 Ports
(type and location)

SE — O-ring boss rear port, 1.0625 inch (Inlet & Outlet) (standard)
SS — O-ring boss side port, 1.3125 inch (Inlet & Outlet) (optional)

6 Shafts
(input)

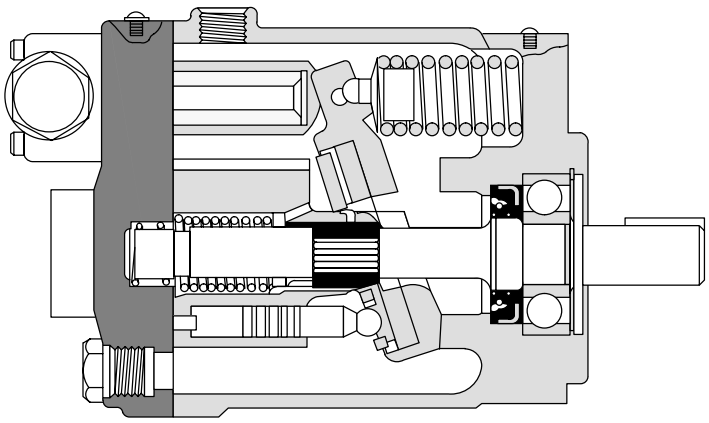
1 — Straight keyed SAE "A" modified .75 inch Dia. x 1.75 inch long
3 — Splined SAE "A" modified 9T, 16/32 DP major Dia. fit
N — ISO 3019/2 short straight keyed (available with "MA" mounting only)

7 Seals

S — Buna N (standard)
F — Fluorocarbon, (optional)

8 Pump design number

10 — First design



Typical Sectional View

9 Control type

C —** Pressure compensator, PVQ10: Std. model is C21, indicating factory setting of 210 bar (3000 psi). Range is 02−21 in tens of bar (350−3000 psi)
PVQ13: Std. model is C14, indicating factory setting of 140 bar (2000 psi). Range is 02−14 in tens of bar (350−2000 psi)
CM —** Low pressure compensator, Std. model is CM7, indicating factory setting of 70 bar(1000 psi). Range is 02−10 in tens of bar (350−1500 psi)
CV**B —** Pressure compensator C**, as above, with load sensing. Std. load sensing setting is 11 bar (160 psi). Range 10−17 bar (150−250 psi), with bleed down orifice. Example: C21V11B indicates PVQ10 compensator with 210 bar pressure setting and 11 bar load sense differential.
CV**P —** Pressure compensator with load sensing as C**V**B above, but with bleed down orifice plugged.
CVC**B —** Pressure compensator with load sensing. Compensator same as C** above. Std. load sensing setting is 24 bar (350 psi). Range 17−31 bar (250−450 psi), with bleed down orifice
CVC**P —** Pressure compensator with load sensing.Same as C**VC**B above, but with bleed down orifice plugged.
CG — Pressure compensator modified for hydraulic remote control.
CD —** Electric dual range compensator. PVQ10: Std. model is CD2110, indicating dual pressure settings of 210 and 100 bar, adjustment ranges are 20−210 bar (high) and 20−100 bar (low). PVQ13: Std. model is CD1407, indicating settings of 140 and 70 bar, adjustment ranges are 20−140 bar (high) and 20−100 bar (low).

10 Control option

Blank — Without adjustable Max. displacement stop (standard)
D — Max. adjustable displacement stop (optional)

11 Control design

11 — For C** & CM**
11 — For C**D & CM**D
12 — For C**V(C)**B & C**V(C)**P
20 — CD**** & CG

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