

Service Data

Vickers®

Transmissions



Double Transmission Pump Package

TA1919V20*-21/-22




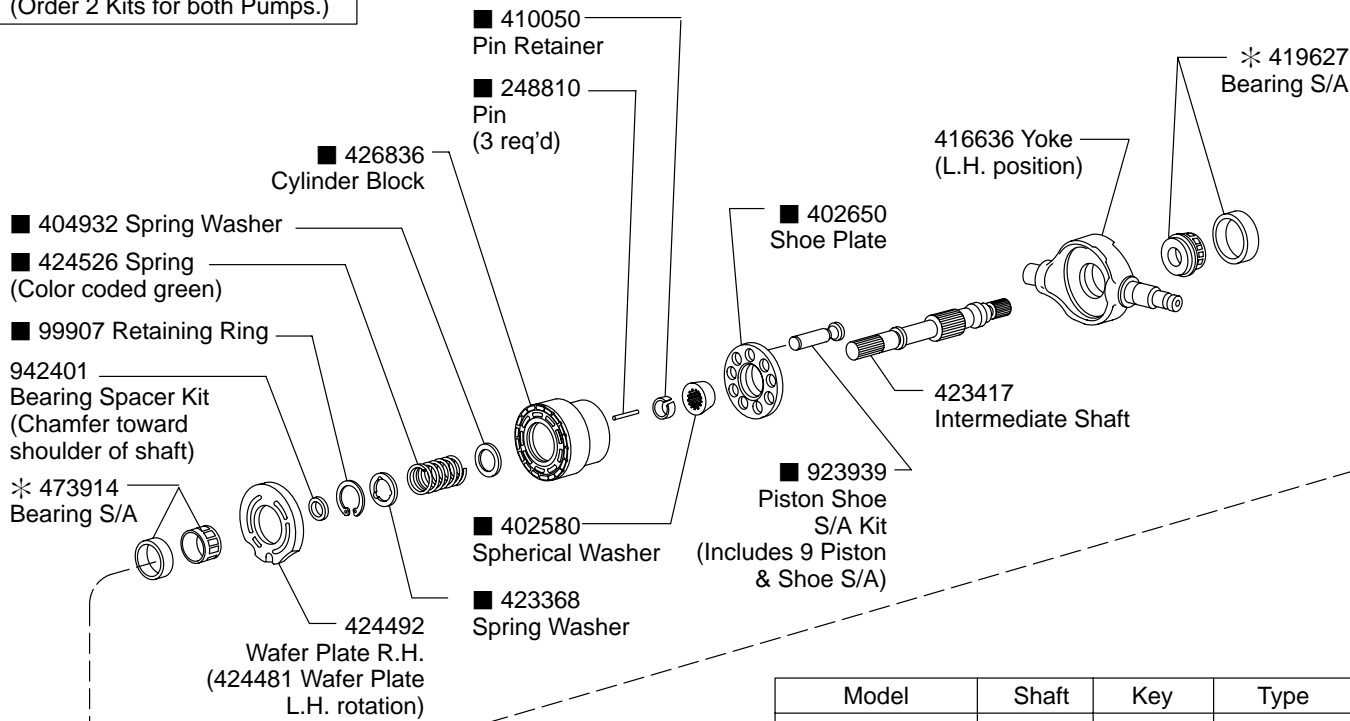
● Included in 923938 Shim Kit

▲ Included in 920171 Seal Kit

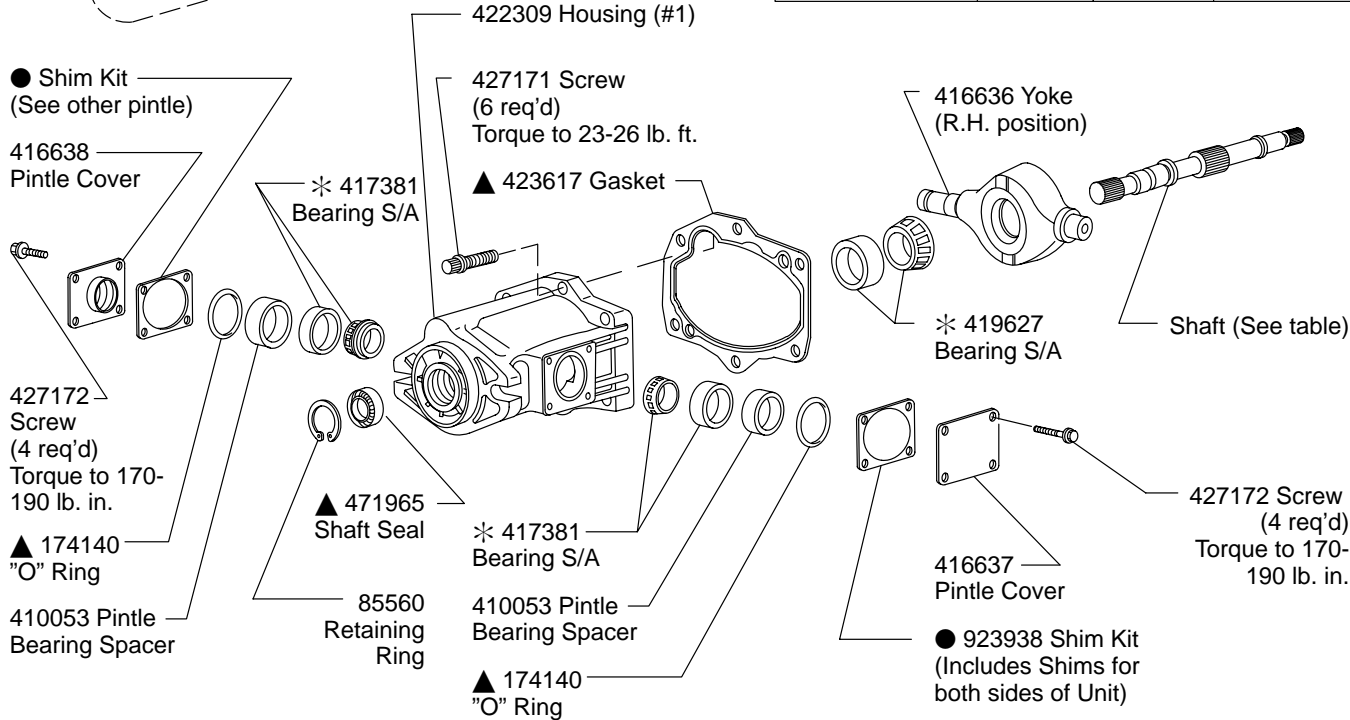
* See Overhaul Manual for Bearing Preload Adjustment.

■ Included in 923936 Rotating Group Kit (For one Pump only) (Order 2 Kits for both Pumps.)

WARNING

 Use this drawing for parts information only. See Overhaul Manual M-2835-S for maintenance information.



Model	Shaft	Key	Type
TA1919V20**-2	423416	—	Splined
TA1919V20**-12	426443	235252	Keyed
TA1919V20**-13	435296	398082	



427172 Screw (4 req'd)
Torque to 170-190 lb. in.

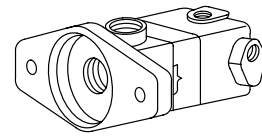
▲ 174140 "O" Ring

410053
Pintle Bearing Spacer

* 417381
Bearing S/A

427171 Screw
(6 req'd)
Torque to 23-26 lb. in.

See Double Transmission Vane Pump
exploded view shown on back page.



416637
Cover

● Shim Kit
(See other pintle)

▲ 423617
Gasket

422309
Housing (#2)
199740 Screw (2 req'd)
Torque to 54-60 lb. ft.

427700 Washer
(2 req'd)

* 417381
Bearing S/A

▲ 174140 "O" Ring

410053
Pintle Bearing
Spacer

● 923938
Shim Kit
(Includes
Shims for both
sides of unit)

Supercharge
Inlet Port

7075 Plug (3 req'd)
Torque to 15-17 lb. ft.

427172 Screw
(4 req'd)
Torque to 170-190 lb. in.

416638
Pintle Cover

416599 Plug
Torque to 128-148 lb. ft.

416599 Plug
Torque to 128-148 lb. ft.

▲ 154131 "O" Ring
424525 Spring
(Color coded red)

416645
Poppet

422303
Valve Block

Outlet
Ports
A1
& A2

■ 410050
Pin Retainer

■ 402580
Spherical
Washer

■ 402650
Shoe
Plate

■ 923939
Piston Shoe
S/A Kit
(Includes 9 Piston
& Shoe S/A)

■ 248810
Pin
(3 req'd)

■ 99907
Retaining Ring

■ 423368
Spring
Washer

■ 424526
Spring
(Color coded green)

■ 426836
Cylinder Block

■ 404932
Spring Washer

942401 Bearing Spacer Kit
(Chamfer toward shoulder of shaft)

424481 Wafer Plate R.H.
(424492 Wafer Plate L.H. rotation)

* 473914
Bearing S/A
416650
Coupling

Drain Port
Replenishing Check Only
(See table)

429325
Pin
(4 req'd)

248910 Pin
(2 req'd)

Replenishing
Check Only
(See table)

416602
Spring
(4 req'd)

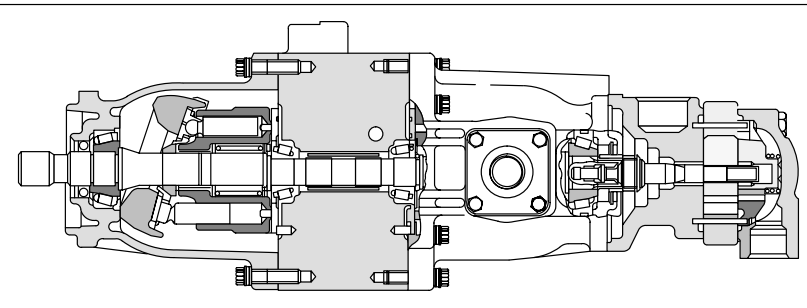
▲ 154131
"O" Ring
(2 req'd)

416645
Spring
(4 req'd)
Color
coded
green

317697
Plug
Torque to 128-148 lb. ft.
(Use with Check
Valve only)

416599 Plug
Torque to 128-148 lb. ft.
(Use with Replenishing
Check & Relief)

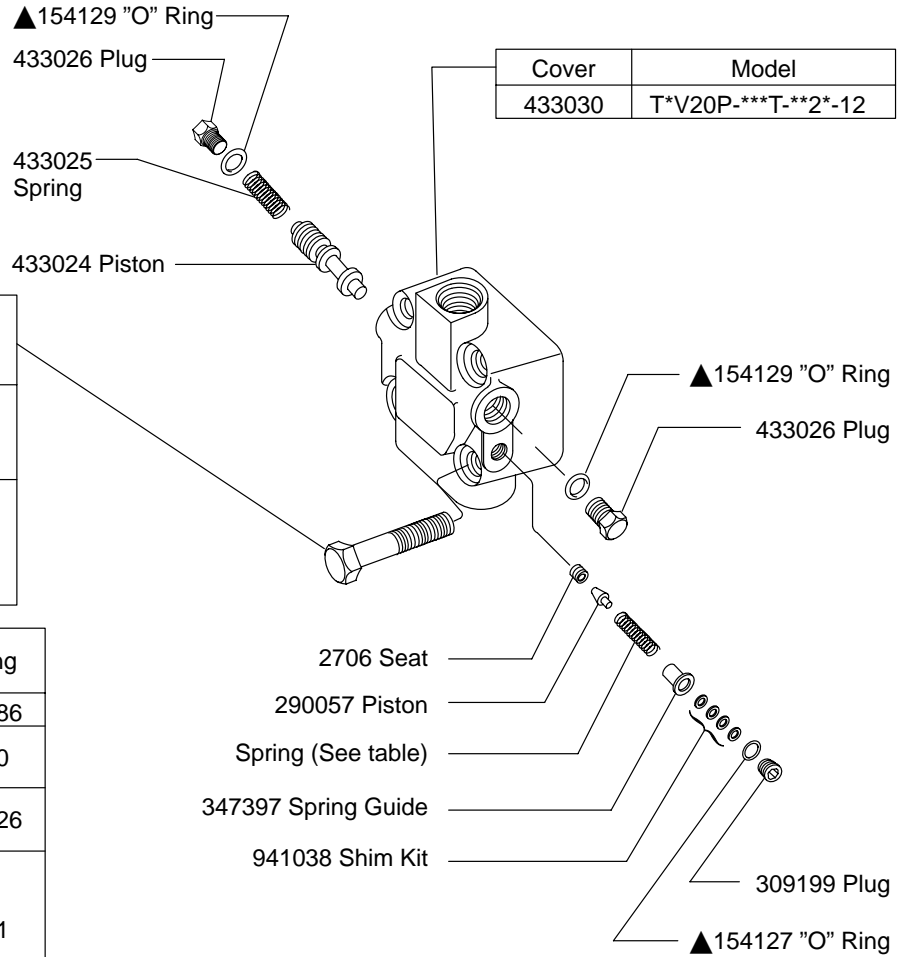
Model	Replenishing Check and Relief Valve Kit (4 req'd)	Replenishing Check (4 req'd)
TA1919V20**-**R	942429 - 5000 psi	NONE
TA1919V20**-001 Suffix	942430 - 3500 psi	NONE
TA1919V20**-**0	NONE	416645
TA1919V20**-014 Suffix	942428 - 3000 psi	NONE
TA1919V20**-016 Suffix	942427 - 4000 psi	NONE



Priority Valve Cover

Model	Screw (4 req'd) Torque to 80 ± 5 lb. ft.
T*V20P-***7*-****-12	9431
T*V20P-***8*-****-12	
T*V20P-***9*-****-12	
T*V20P-***10*-****-12	96168
T*V20P-***11*-****-12	
T*V20P-***12*-****-12	
T*V20P-***13*-****-12	

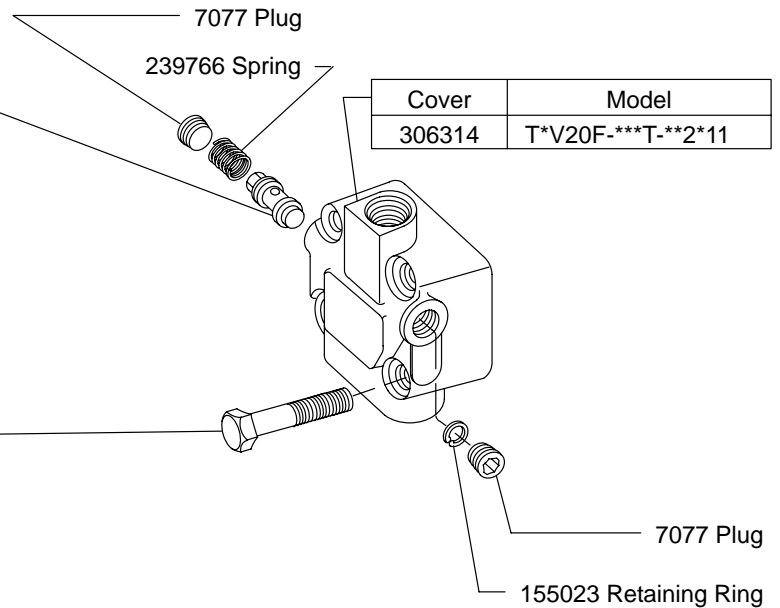
Model	Pressure Setting	Spring
T*V20P-****-***-A12	250	252886
T*V20P-****-***-B12	500	2280
T*V20P-****-***-C12	750	
T*V20P-****-***-D12	1000	435626
T*V20P-****-***-E12	1250	
T*V20P-****-***-F12	1500	2281
T*V20P-****-***-G12	1750	
T*V20P-****-***-H12	2000	
T*V20P-****-***-J12	2250	
T*V20P-****-***-K12	2500	



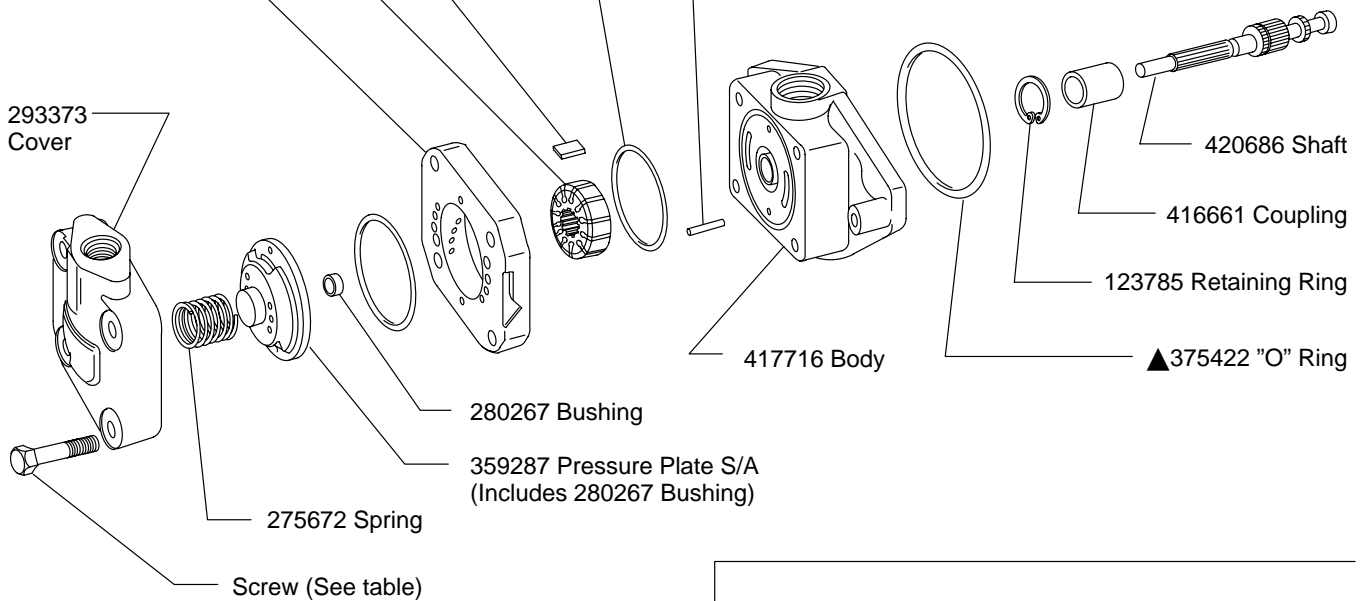
Flow Control Cover

Model	Pressure Setting	Control Valve S/A
T*V20F-****-***-C11	750	232794
T*V20F-****-***-D11	1000	232795
T*V20F-****-***-E11	1250	232796
T*V20F-****-***-F11	1500	232797
T*V20F-****-***-G11	1750	232798
T*V20F-****-***-H11	2000	232799
T*V20F-****-***-J11	2250	233019
T*V20F-****-***-K11	2500	233020

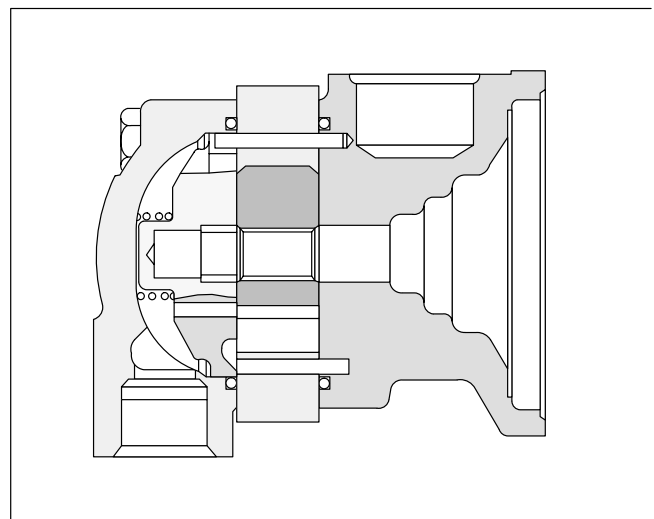
Model	Screw (4 req'd) Torque to 80 ± 5 lb. ft.
T*V20F-***7*-****11	9431
T*V20F-***8*-****11	
T*V20F-***9*-****11	
T*V20F-***10*-****11	96168
T*V20F-***11*-****11	
T*V20F-***12*-****11	
T*V20F-***13*-****11	



Ring	Rotor	Vane Kit (12 Vanes)	▲"O" Ring (2 req'd)	Cartridge Kit	Pin (2 req'd)	Screw (4 req'd) Torque to 80 ± 5 lb. ft.	Model
Serviced in Cartridge Kit							
328152	358330	923493	154090	923481	2478	131486	T*V20*-*7*-*11/12
331791				923483			T*V20*-*8*-*11/12
331789				923484			T*V20*-*9*-*11/12
374309	358332	923478		923620	16662		T*V20*-*10*-*11/12
328156				923482			T*V20*-*11*-*11/12
331806	358334	923479		923486	9603		1319
331807			923487	T*V20*-*13*-*11/12			

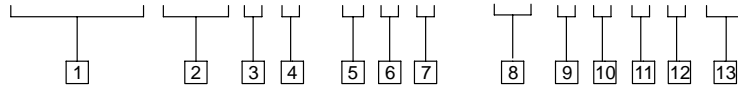


▲ Included in Seal Kit shown on Piston Pump section of drawing.



Model Code

TA1919 V20 * * - 2 * * - ** * * * * 2*



1 Double Transmission Pump

Each rated @ 19 USgpm @1800 rpm

2 Auxiliary Vane Pump

3 Vane Pump Cover

F - Flow control
P - Priority flow
Omitted - STD cover

4 Rotation

(Viewed from shaft end)

R - Right hand (CW)
L - Left hand (CCW)

5 Input Shaft

2 - SAE B-B Spline
12 - Straight keyed
13 - Straight keyed

6 Control Pintle

(Location viewed from shaft end w/drain port up.)

Code	Pump #1	Pump #2
A	RH side	RH side
B	LH side	RH side
C	RH side	LH side
D	LH side	LH side

7 Main Relief Valve

R - Relief valve
O - No relief valve

8 Vane Pump Ring Capacity

(@ 1200 rpm)

07 - 7 USgpm	11 - 11 USgpm
08 - 8 USgpm	12 - 11 USgpm
09 - 9 USgpm	13 - 11 USgpm
10 - 10 USgpm	

9 Vane Pump Outlet Pump

(Position viewed from cover end)

A - In line with case drain
C - 180° Opposite case drain

10 Vane Pump Inlet Port

(Viewed from cover end)

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

11 Flow Rate

Orifice in "F" cover:

2, 4, 6, 8, 10 USgpm

Orifice in "P" cover:

1, 2, 2.5, 3, 4, 5, 6, 7, 8 USgpm

12 Vane Pump Relief Valve Setting

("F" & "P" cover)

A - 250 psi	G - 1750 psi
B - 500 psi	H - 2000 psi
C - 750 psi	J - 2250 psi
D - 1000 psi	K - 2500 psi
E - 1250 psi	O - No relief valve
F - 1500 psi	

Design

13
 -21/-22

For satisfactory service life of these components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 18/16/13 or cleaner. Selections from Eaton OFP, OFR, and OFRS series are recommended.