Vickers®

Service Data

Transmissions

Double Transmission Pump Package

TA1919V20*-21/-22

Revised 11/01/89

M-2847-S

● Included in 923938 Shim Kit

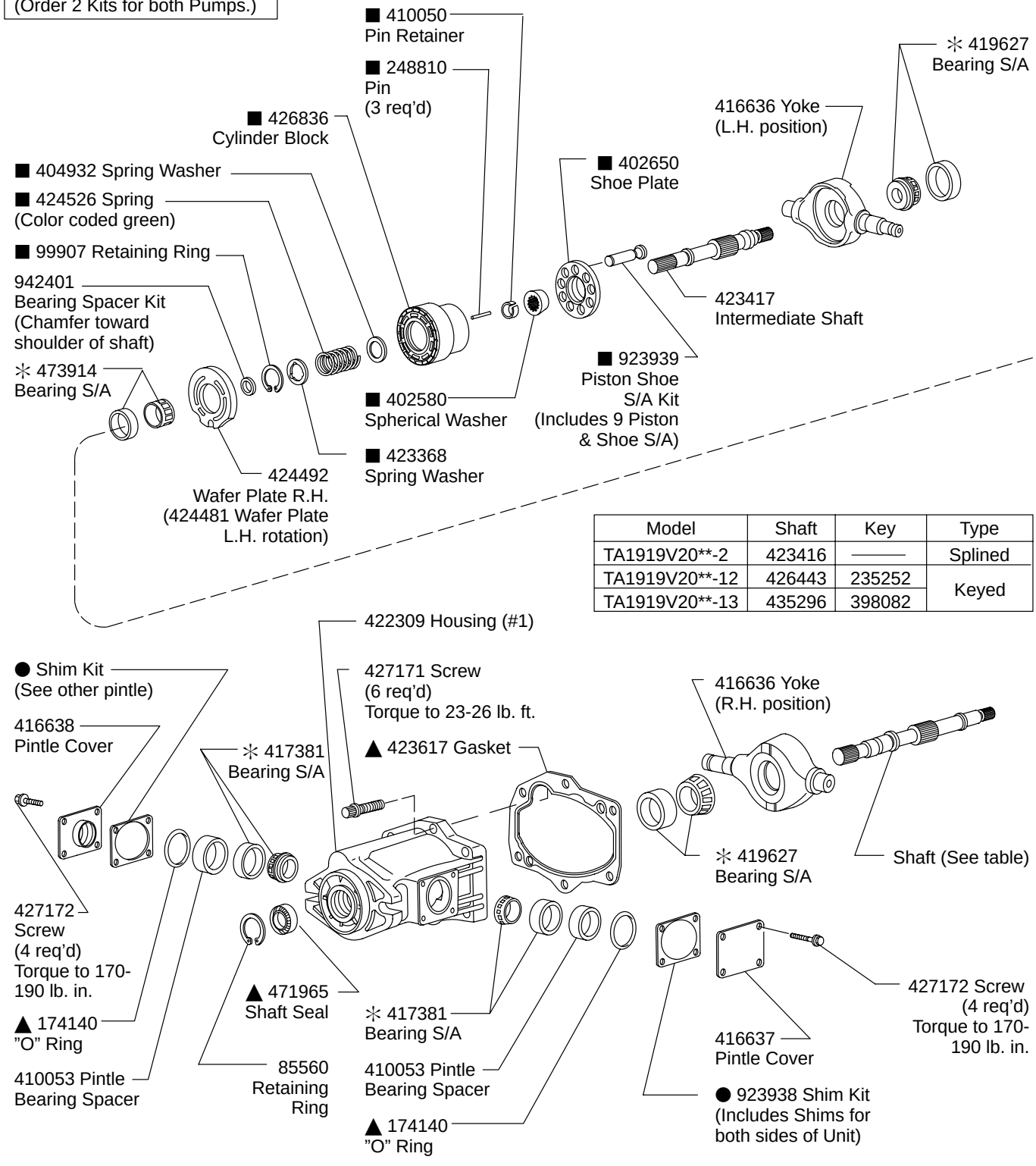
▲ Included in 920171 Seal Kit

⁜ 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	

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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.

416637
Cover

● Shim Kit
(See other pintle)

✳ 417381
Bearing S/A

▲ 174140 "O" Ring

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

410053
Pintle Bearing
Spacer

416638
Pintle Cover

▲ 423617
Gasket

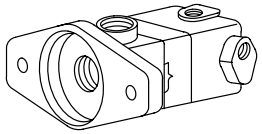
422309
Housing (#2)

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

427700 Washer
(2 req'd)

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

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



Supercharge
Inlet Port

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

422303
Valve Block

416599 Plug
Torque to 128-148 lb. ft.

416645
Poppet

▲ 154131 "O" Ring

424525 Spring
(Color coded red)

Outlet
Ports
A1
& A2

■ 99907
Retaining Ring

■ 410050
Pin Retainer

■ 402580
Spherical
Washer

■ 248810
Pin
(3 req'd)

■ 423368
Spring
Washer

■ 402650
Shoe
Plate

Drain Port

Replenishing Check Only
(See table)

416960
Spring
(4 req'd)
Color
coded
green

✳ 473914
Bearing S/A

416650
Coupling

■ 424526
Spring
(Color coded green)

■ 426836
Cylinder Block

■ 404932
Spring Washer

429325
Pin
(4 req'd)

248910 Pin
(2 req'd)

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

942401 Bearing Spacer Kit
(Chamfer toward shoulder of shaft)

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

Replenishing
Check Only
(See table)

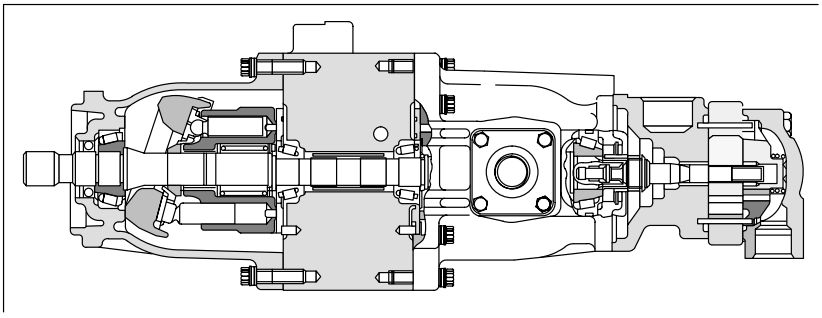
317697
Plug
Torque to 128-148 lb. ft.
(Use with Check Valve only)

416602
Spring
(4 req'd)

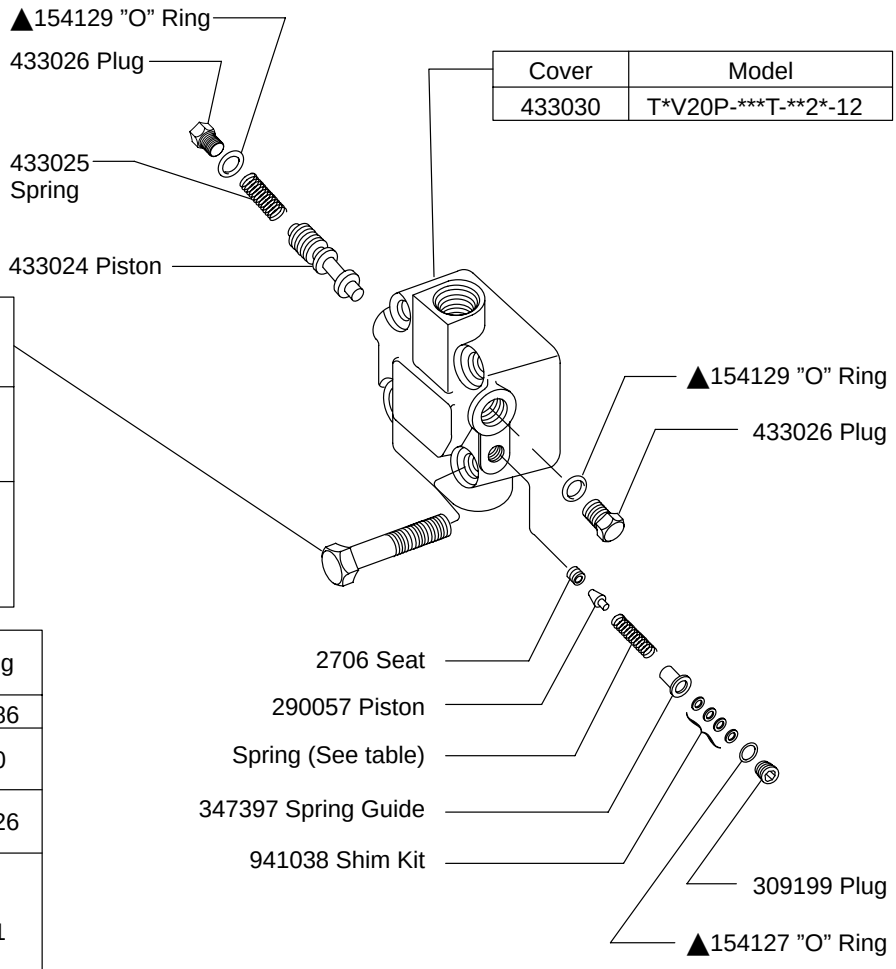
▲ 154131
"O" Ring
(2 req'd)

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	
TA1919V20**-**0	NONE	416645
TA1919V20**-014 Suffix	942428 - 3000 psi	NONE
TA1919V20**-016 Suffix	942427 - 4000 psi	



Priority Valve Cover

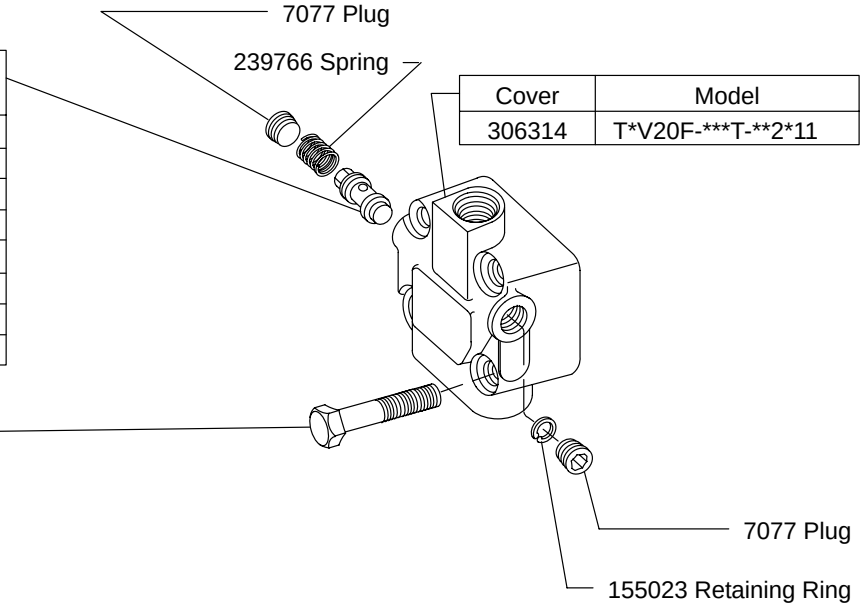


Cover	Model
433030	T*V20P-***T-**2*-12

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

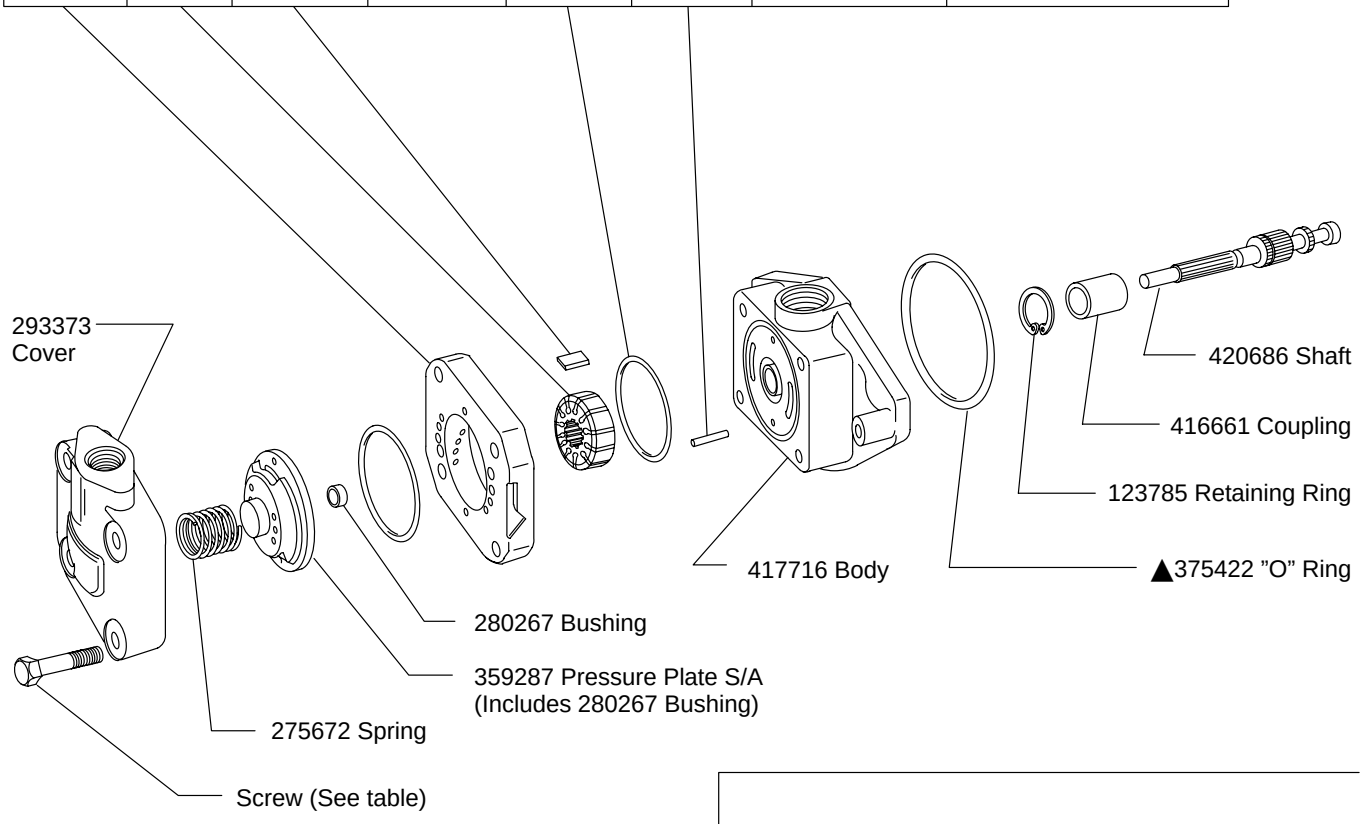


Cover	Model
306314	T*V20F-***T-**2*11

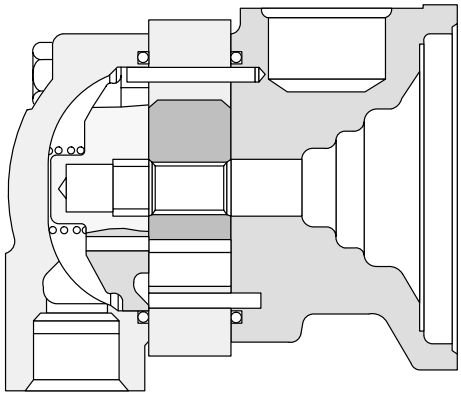
Model	Pressure Setting	Control Valve S/A
T*V20F-****-***-C11	750	232794
T*V20F-****-***-D11	1000	232795
T*V20F-****-***-E11	1250	232796
T*V20F-****-***-F11	1500	232797
T*V20F-****-***-G11	1750	232798
T*V20F-****-***-H11	2000	232799
T*V20F-****-***-J11	2250	233019
T*V20F-****-***-K11	2500	233020

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	T*V20*-**12*-****11/12
331807				923487			T*V20*-**13*-****11/12

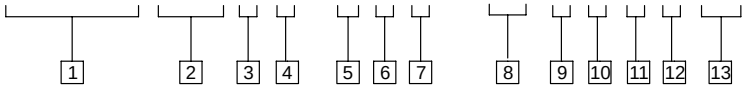


▲ Included in Seal Kit shown on Piston Pump section of drawing.



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
08 - 8 USgpm
09 - 9 USgpm
10 - 10 USgpm
11 - 11 USgpm
12 - 11 USgpm
13 - 11 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
B - 500 psi
C - 750 psi
D - 1000 psi
E - 1250 psi
F - 1500 psi
G - 1750 psi
H - 2000 psi
J - 2250 psi
K - 2500 psi
O - No relief valve

13 Design

-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.

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