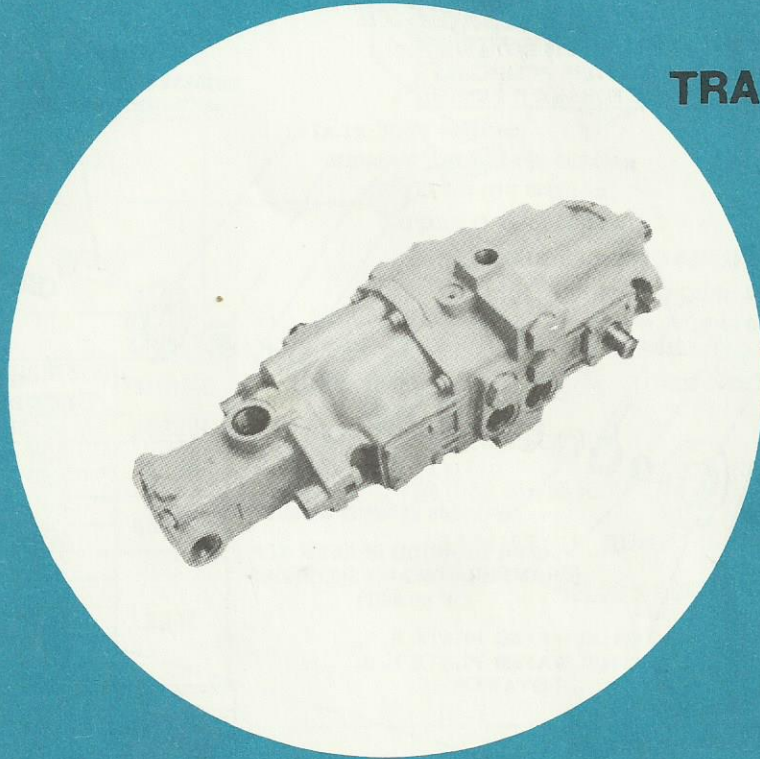


SPERRY VICKERS

**DOUBLE
TRANSMISSION
PUMP
PACKAGE**



**SERVICE
PARTS
INFORMATION**

TA1919V20 * -20/-21

Revised 5-1-83

SPERRY VICKERS, TROY, MI 48084
VICKERS, INCORPORATED, IS A SUBSIDIARY OF SPERRY CORPORATION
SPERRY VICKERS IS A REGISTERED TRADEMARK OF SPERRY CORPORATION

M-2847 -S

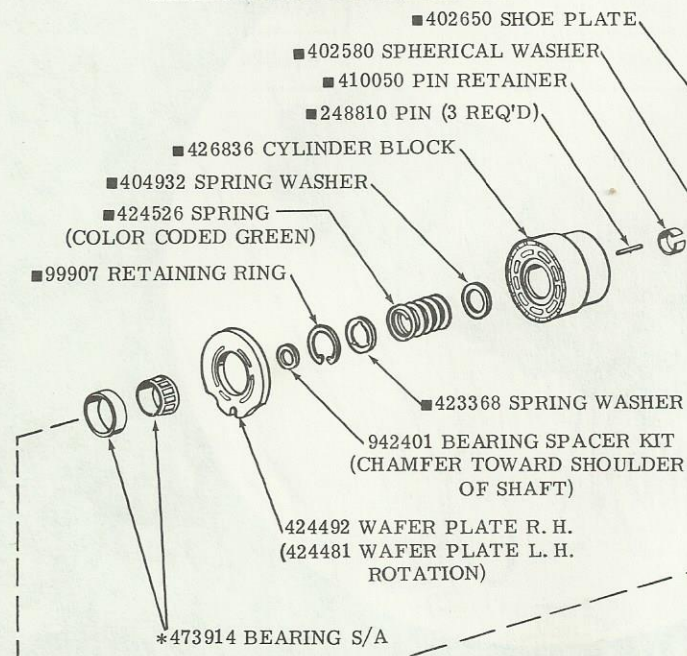
**WARNING: USE THIS DRAWING FOR PARTS INFORMATION ONLY.
SEE OVERHAUL MANUAL M-2835-S FOR MAINTENANCE INFORMATION**

● 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).



427172 SCREW (4 REQ'D)
TORQUE TO 170-190 lb. in.

■ 923939 PISTON SHOE S/A KIT
(INCLUDES 9 PISTON & SHOE S/A)

● SHIM KIT
(SEE OTHER PINTLE)

410053 PINTLE
BEARING SPACER

416636 YOKE
(L. H. POSITION)

423417
INTERMEDIATE
SHAFT

BEARING S/A
*419627

▲ 423617
GASKET

MODEL	SHAFT	KEY	TYPE
TA1919V20**-2	423416	—	SPLINED
TA1919V20**-12	426443	235252	KEYED
TA1919V20**-13	435296	398082	

■ 426836 CYLINDER BLOCK
■ 248810 PIN
■ 410050 PIN RETAINER
■ 402580 SPHERICAL WASHER
■ 402650 SHOE PLATE

■ 923939 PISTON SHOE S/A KIT
(INCLUDES 9 PISTON & SHOE S/A)

SHAFT (SEE TABLE)

427172 SCREW (4 REQ'D)
TORQUE TO 170-190 lb. in.

427171 SCREW (6 REQ'D)
TORQUE TO 23-26 lb. ft.

422309
HOUSING
(#1)

▲ 423617
GASKET

*419627
BEARING S/A

416636 YOKE (R. H. POSITION)

416638
PINTLE
COVER

● SHIM KIT
(SEE OTHER
PINTLE)

▲ 174140
"O" RING

410053
PINTLE
BEARING
SPACER

85560
RETAINING
RING

▲ 471965
SHAFT SEAL

*417381
BEARING S/A

● 923938 SHIM KIT (INCLUDES SHIMS
FOR BOTH SIDES OF UNIT)

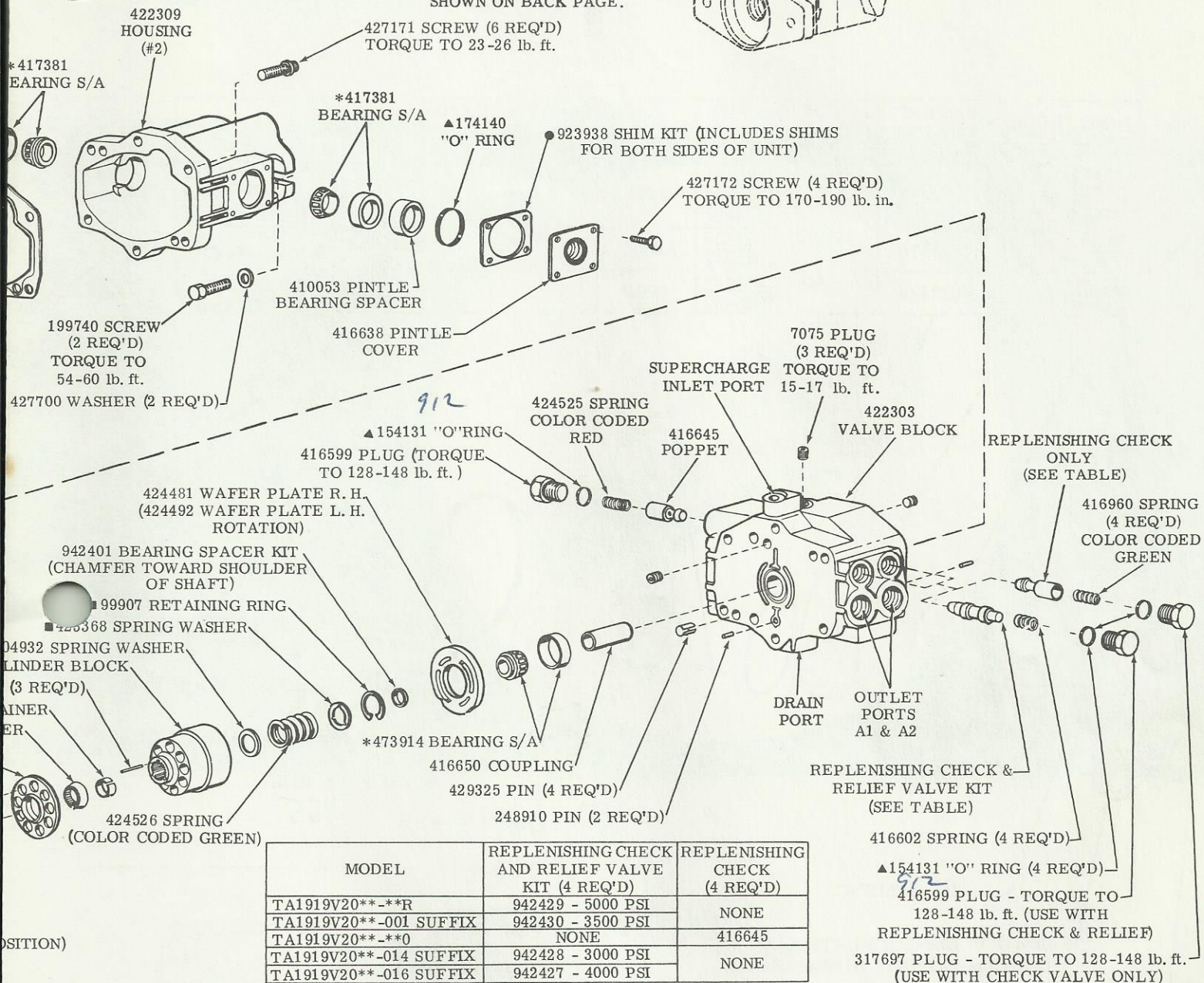
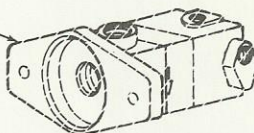
427172 SCREW (4 REQ'D)
TORQUE TO 170-190 lb. in.

416637 COVER

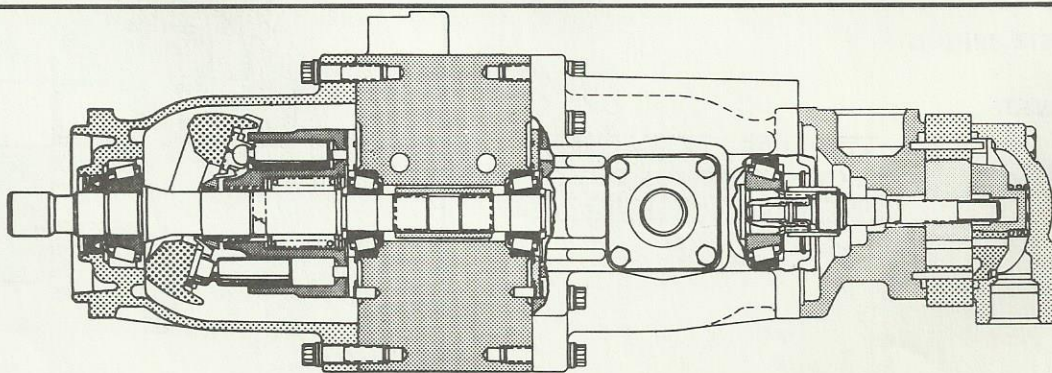
▲ 174140 "O" RING

410053 PINTLE BEARING SPACER

SEE DOUBLE TRANSMISSION
VANE PUMP EXPLODED VIEW
SHOWN ON BACK PAGE.

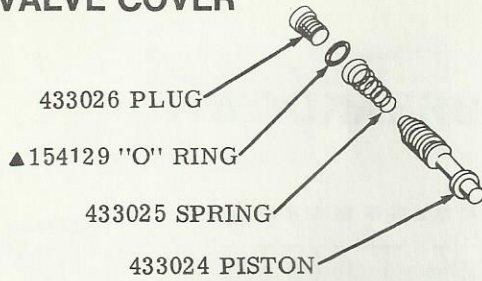


MODEL	REPLENISHING CHECK AND RELIEF VALVE KIT (4 REQ'D)	REPLENISHING CHECK (4 REQ'D)
TA1919V20**-*R	942429 - 5000 PSI	NONE
TA1919V20**-*001 SUFFIX	942430 - 3500 PSI	NONE
TA1919V20**-*00	NONE	416645
TA1919V20**-*014 SUFFIX	942428 - 3000 PSI	NONE
TA1919V20**-*016 SUFFIX	942427 - 4000 PSI	NONE



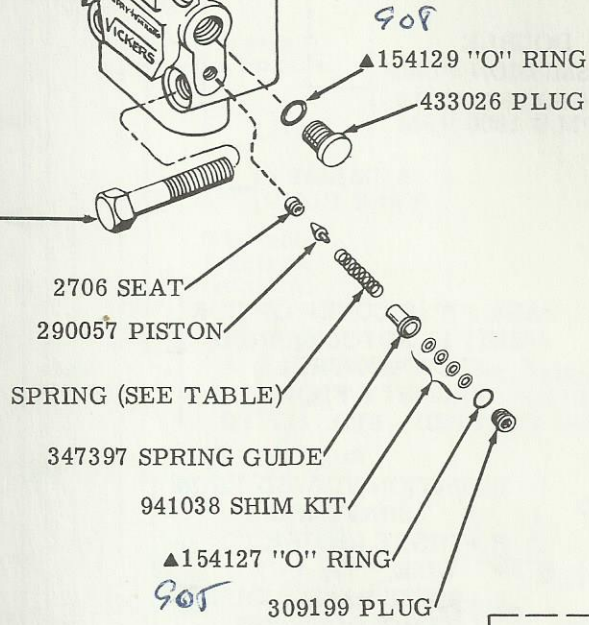
PRIORITY VALVE COVER

COVER	MODEL
433029	T*V20P-***T-**1*-12
433030	T*V20P-***T-**2*-12
433031	T*V20P-***T-**2.5*-12
433032	T*V20P-***T-**3*-12
433033	T*V20P-***T-**4*-12
433034	T*V20P-***T-**5*-12
433035	T*V20P-***T-**6*-12
433799	T*V20P-***T-**7*-12
433036	T*V20P-***T-**8*-12

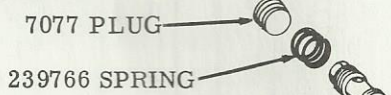


MODEL	SCREW (4 REQ'D) TORQUE TO 80 ± 5 lb. ft.
T*V20P-** 7*-****-12	9431
T*V20P-** 8*-****-12	
T*V20P-** 9*-****-12	
T*V20P-**10*-****-12	96168
T*V20P-**11*-****-12	
T*V20P-**12*-****-12	
T*V20P-**13*-****-12	

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	
T*V20P-****-***G12	1750	
T*V20P-****-***H12	2000	
T*V20P-****-***J12	2250	
T*V20P-****-***K12	2500	2281



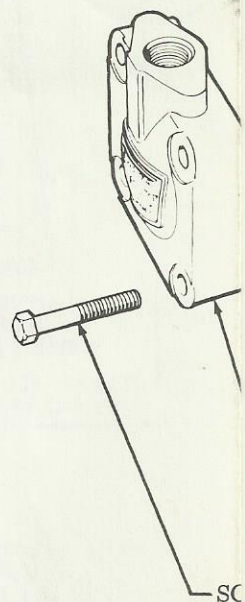
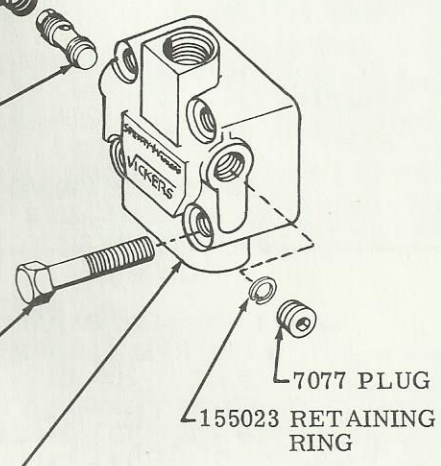
FLOW CONTROL COVER



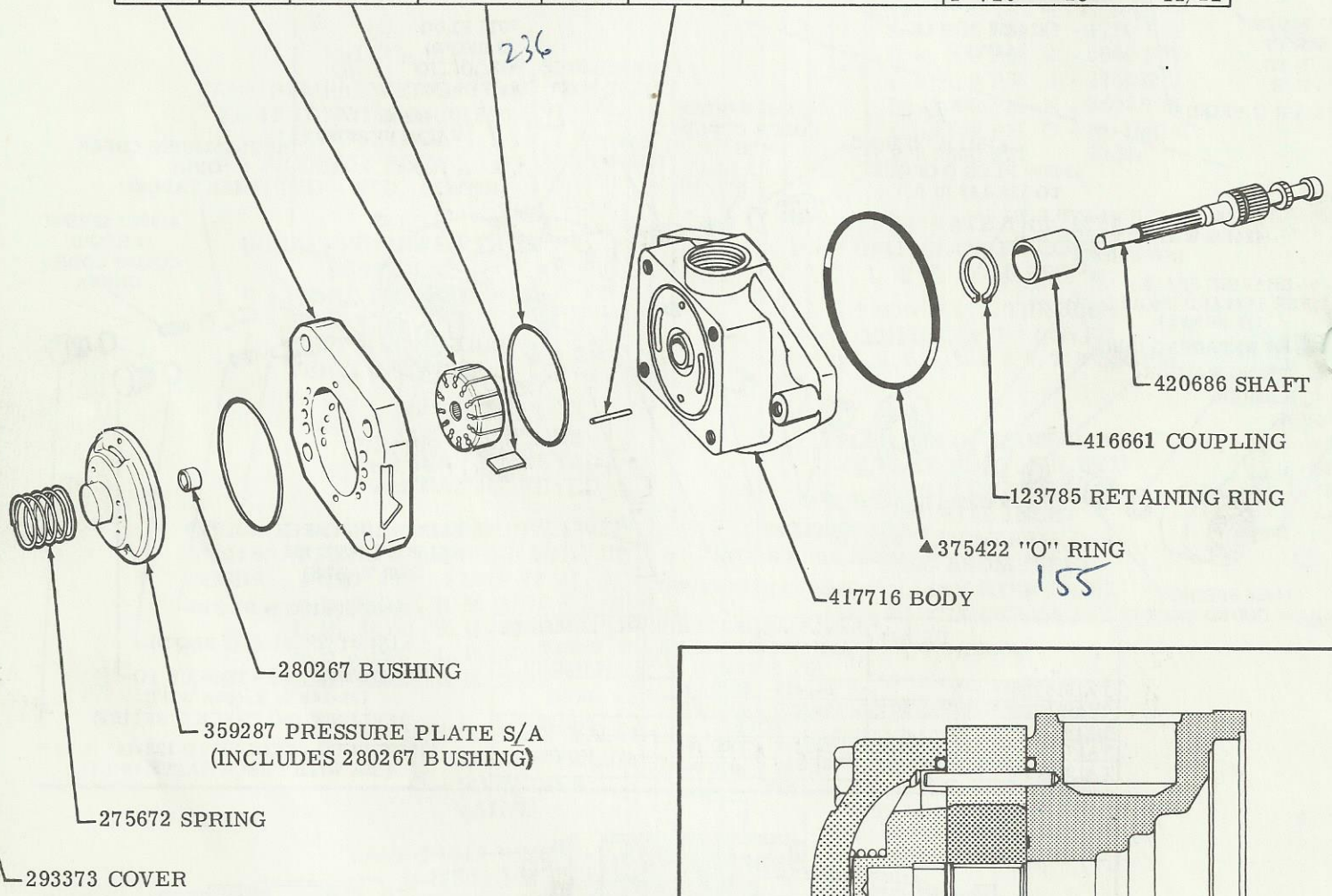
MODEL	PRESSURE SETTING	CONTROL VALVE S/A
T*V20F-****-***C11	750	232794
T*V20F-****-***D11	1000	232795
T*V20F-****-***E11	1250	232796
T*V20F-****-***F11	1500	232797
T*V20F-****-***G11	1750	232798
T*V20F-****-***H11	2000	232799
T*V20F-****-***J11	2250	233019
T*V20F-****-***K11	2500	233020

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	

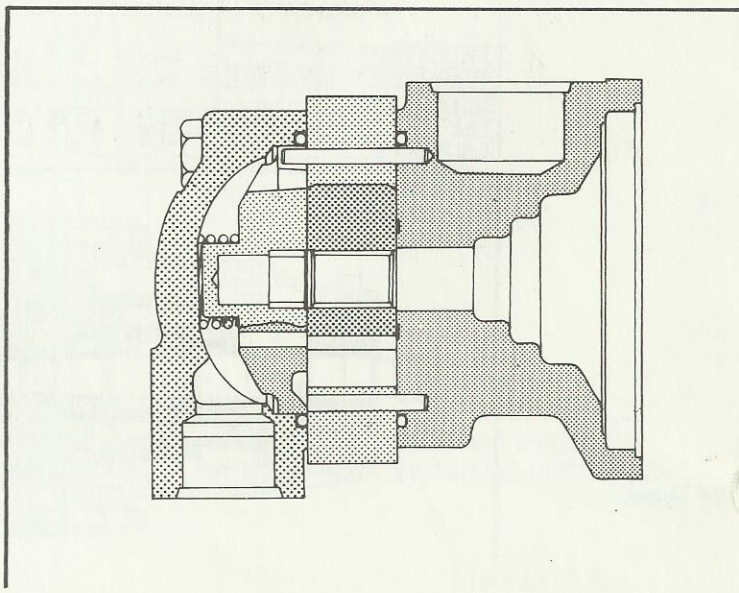
COVER	MODEL
306314	T*V20F-***T-** 2*11
306346	T*V20F-***T-** 4*11
306819	T*V20F-***T-** 6*11
306821	T*V20F-***T-** 8-11
306823	T*V20F-***T-**10-11



RING	ROTOR	VANE KIT (12 VANES)	▲"O"RING (2 REQ'D)	CART KIT	PIN (2 REQ'D)	SCREW (4 REQ'D) TORQUE TO 80 ± 5 lb. ft.	MODEL
SERVICED IN CARTRIDGE KIT							
328152				923481			T*V20*_** 7*_****11/12
331791	358330	923493		923483	2478	131486	T*V20*_** 8*_****11/12
331789				923484			T*V20*_** 9*_****11/12
374309			154090	923620	16662		T*V20*_**10*_****11/12
328156	358332	923478		923482		1319	T*V20*_**11*_****11/12
331806				923486	9603		T*V20*_**12*_****11/12
331807	358334	923479		923487			T*V20*_**13*_****11/12



▲ INCLUDED IN SEAL KIT
SHOWN ON PISTON PUMP
SECTION OF DRAWING.



REW (SEE TABLE)

MODEL CODE BREAKDOWN

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

DOUBLE
TRANSMISSION PUMP
EACH RATED AT 19
USGPM @ 1800 RPM

AUXILIARY
VANE PUMP

DESIGN
-21/-22

VANE PUMP COVER OPTION
(OMIT IF NOT REQUIRED)
F - FLOW CONTROL
P - PRIORITY FLOW
OMITTED - STD. COVER

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
F - 1500 PSI Valve

ROTATION VIEWED FROM
SHAFT END
R - RIGHT HAND (CLOCK-
WISE)
L - LEFT HAND (COUN-
TERCLOCKWISE)

FLOW RATE THROUGH
ORIFICE IN "F" COVER
2, 4, 6, 8, 10 USGPM

FLOW RATE THROUGH
ORIFICE IN "P" COVER
1, 2, 2.5, 3, 4, 5, 6, 7, 8 USGPM

INPUT SHAFT
2 - SAE B-B SPLINE
12 - STRAIGHT KEYED
13 - STRAIGHT KEYED

POSITION OF VANE PUMP
OUTLET PORT, VIEWED
FROM COVER END
A - OPPOSITE INLET
B - 90° COUNTERCLOCK-
WISE FROM INLET
C - IN LINE WITH INLET
D - 90° CLOCKWISE FROM
INLET

CONTROL PINTLE LOCATION VIEWED
FROM SHAFT END WITH DRAIN PORT UP

CODE	PUMP #1	PUMP #2
A	R. H. SIDE	R. H. SIDE
B	L. H. SIDE	R. H. SIDE
C	R. H. SIDE	L. H. SIDE
D	L. H. SIDE	L. H. SIDE

MAIN RELIEF VALVE
R - RELIEF VALVE
O - NO RELIEF
VALVE

VANE PUMP INLET PORT
POSITION VIEWED FROM
COVER END
A - IN LINE WITH CASE
DRAIN
C - 180° OPPOSITE
CASE DRAIN

VANE PUMP RING CAPACITY
@ 1200 RPM - USGPM
07 - 7 10 - 10
08 - 8 11 - 11
09 - 9 12 - 12
 13 - 13

For sustained efficiency and maximum trouble-free life of this precision equipment, initial and continuous
filtration of the fluid medium to 35 microns absolute or less is essential. (For information pertaining to Sperry
economical filters, see bulletin 81-216.)