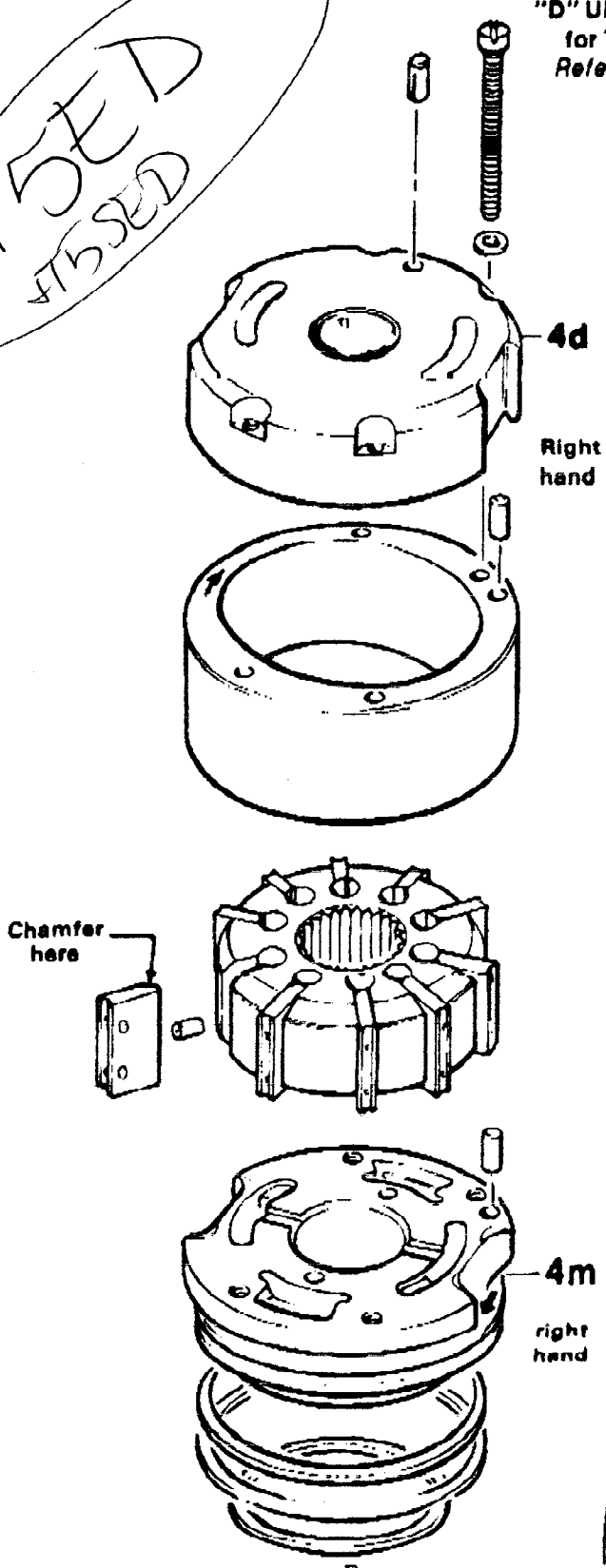
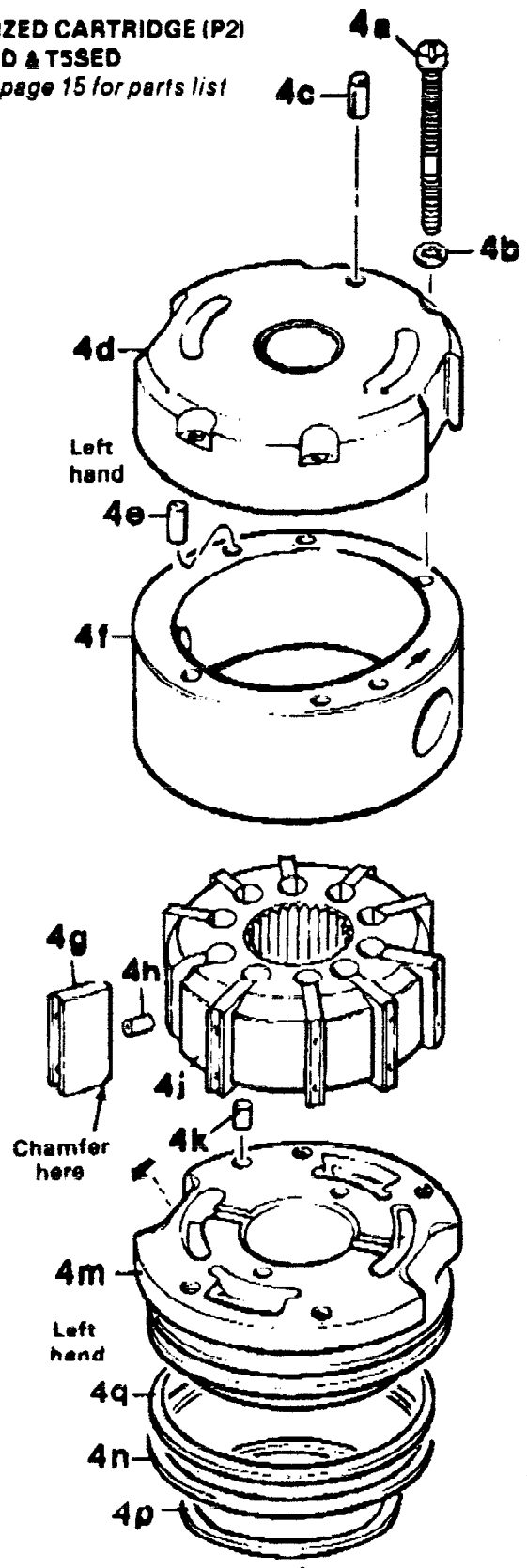


T5ED
T5SED

"D" UNITIZED CARTRIDGE (P2)
for T5ED & T5SED
Refer to page 15 for parts list



Parts in position for right-hand (CW) rotation.



Parts in position for left-hand (CCW) rotation.

FIG. V

T5ED and T5SED
"D" Utilized Cartridge Parts List
(Cap End of Pumps)
Refer to Figure V

ITEM 4 UNITIZED "D" CARTRIDGE ASSEMBLY for T5ED*		These parts and common parts listed are a complete T5ED "D" size utilized cartridge.				
Model No.	Code No.	4d PORT PLATE ASSY.	4f CAM RING	4m PRES PORT PLATE	4n SEAL	4p SEAL
Right Hand or CW Rot.		S24-10981	034-49933 034-48532 034-48533 034-48534 034-48535 034-48536 034-48537	034-72237	691-10244	691-10232
T5ED-024R	S24-10992					
T5ED-028R	S24-10982					
T5ED-031R	S24-10984					
T5ED-035R	S24-10986					
T5ED-038R	S24-10988					
T5ED-042R	S24-10990					
T5ED-045R	S24-10992					
Left Hand or CCW Rot.		S24-10980	034-49933 034-48532 034-48533 034-48534 034-48535 034-48536 034-48537	034-72328	691-10244	691-10232
T5ED-024L	S24-10993					
T5ED-028L	S24-10983					
T5ED-031L	S24-10985					
T5ED-035L	S24-10987					
T5ED-038L	S24-10989					
T5ED-042L	S24-10991					
T5ED-045L	S24-10993					
QTY.	1	1	1	1	1	1

*For use with petroleum base fluids.

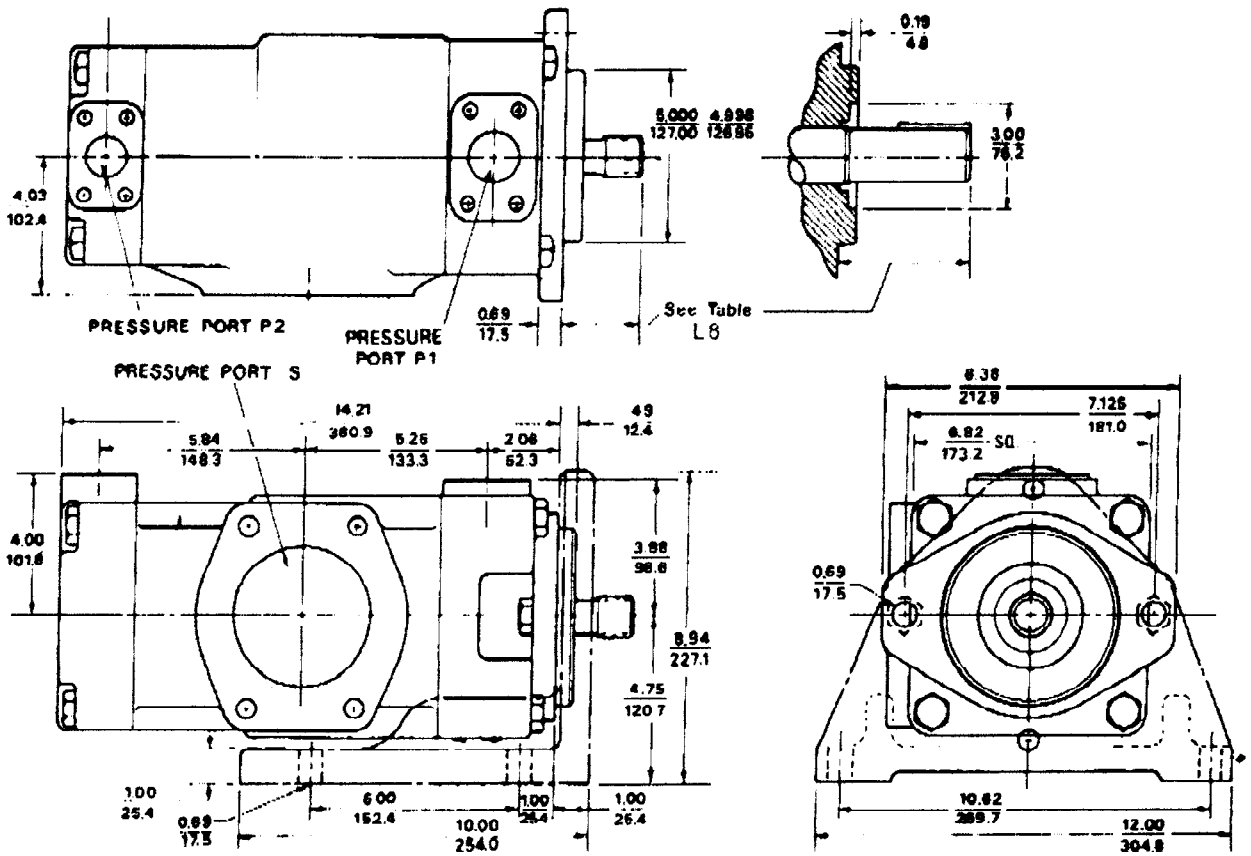
ITEM 4 UNITIZED "D" CARTRIDGE ASSEMBLY FOR T5SED**		These parts and common parts listed are a complete T5SED "D" size unitized cartridge assembly.				
Model No.***	Code No.***	4d PORT PLATE ASSY.	4f CAM RING	4m PRES PORT PLATE	4n SEAL	4p SEAL
Right Hand or CW Rot.						
T5SED-024R T5SED-028R T5SED-031R T5SED-035R T5SED-038R T5SED-042R T5SED-045R	S24-10286 S14-53674 S14-53676 S14-53678 S14-53680 S14-53682 S14-53684	S14-53662	034-59294 034-70747 034-70748 034-70749 034-70750 034-70751 034-70752	034-72237		
Left Hand or CCW Rot.					691-10244	691-10232
T5SED-024L T5SED-028L T5SED-031L T5SED-035L T5SED-038L T5SED-042L T5SED-045L	S24-10287 S14-53675 S14-53677 S14-53679 S14-53681 S14-53683 S14-53685	S14-53663	034-59294 034-70747 034-70748 034-70749 034-70750 034-70751 034-70752	034-72328		
QTY.	1	1	1	1	1	1

** For severe duty applications.

*** When using fluids requiring Viton A seals add -5 to the end of model and code no. and specify 695-20244 and 695-20232 seals.

COMMON "D" UNITIZED CARTRIDGE PARTS FOR ALL MODELS

Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
4a	4	317-10320	10-24 x 3 Fillester Hd. Screw	4g	10	034-72190	Vane
4b	4	348-10010	# 10 Lockwasher	4h	10	034-24984	Vane Holdout Pin
4c	1	323-82004	1/4 x 3/4 Drive-Lok Pin	4j	1	S14-22869	Rotor Assembly
4e	1	324-21612	1/4 x 3/4 Dowel Pin	4k	1	324-21612	1/4 x 3/4 Dowel Pin
				4q	1	324-21612	Back-up Ring



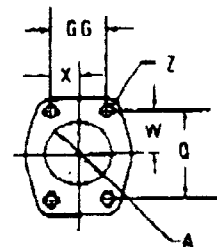
Shaft Dimensions

Code	Type	Dim.	Lgth. L8	Key Shaft Dimensions				Splined Shaft Dimensions					
				Dia.	Sq. Key Section	Dim. over Key	Key Lgth.	Major Dia.	Minor Dia.	No. Teeth	Pitch	Pressure Angle	Spline Lgth.
1	Keyed — SAE-CC	inch	3.56	1.500	.375	1.668	2.00	X	X	X	X	X	X
		mm	90.4	38.10 38.05	9.52	42.37	50.8						
2	Keyed — Non SAE	inch	2.44	1.250	.3125	1.388	1.00	X	X	X	X	X	X
		mm	62.0	31.75 31.67	7.94	35.26	25.40						
3	Splined — SAE-C	inch	2.19	X	X	X	X	1.229	1.0627	14	12/24	30°	0.94
		mm	55.6					1.219	1.0497				
4	Splined — SAE-CC	inch	2.44	X	X	X	X	1.479	1.312	17	12/24	30°	1.25
		mm	62.0					1.474	1.299				

Port Dimensions

4-bolt pads per SAE-J518B

Connection	Dim.	A	W	Q	X	GG	Z
1½" Pressure Port P1	inch	1.46	1.38	2.750	0.70	1.406	½-13 UNC x 0.94 DP.
	mm	37.1	35.1	69.9	17.8	35.7	23.9 DP.
1¼" Pressure Port P2	inch	1.25	1.16	2.312	0.59	1.188	7/16-14 UNC x 0.94 DP.
	mm	31.8	29.5	58.7	15.0	30.2	23.9 DP.
3" Inlet Port S	inch	4.00	2.56	5.125	1.53	3.062	¾-11 UNC x 1.12 DP.
	mm	101.6	65.0	130.2	38.9	77.8	28.4 DP.



"E" SIZE UNITIZED CARTRIDGE (P1)
T5ED and T5SED
 Refer to page 20 for parts list

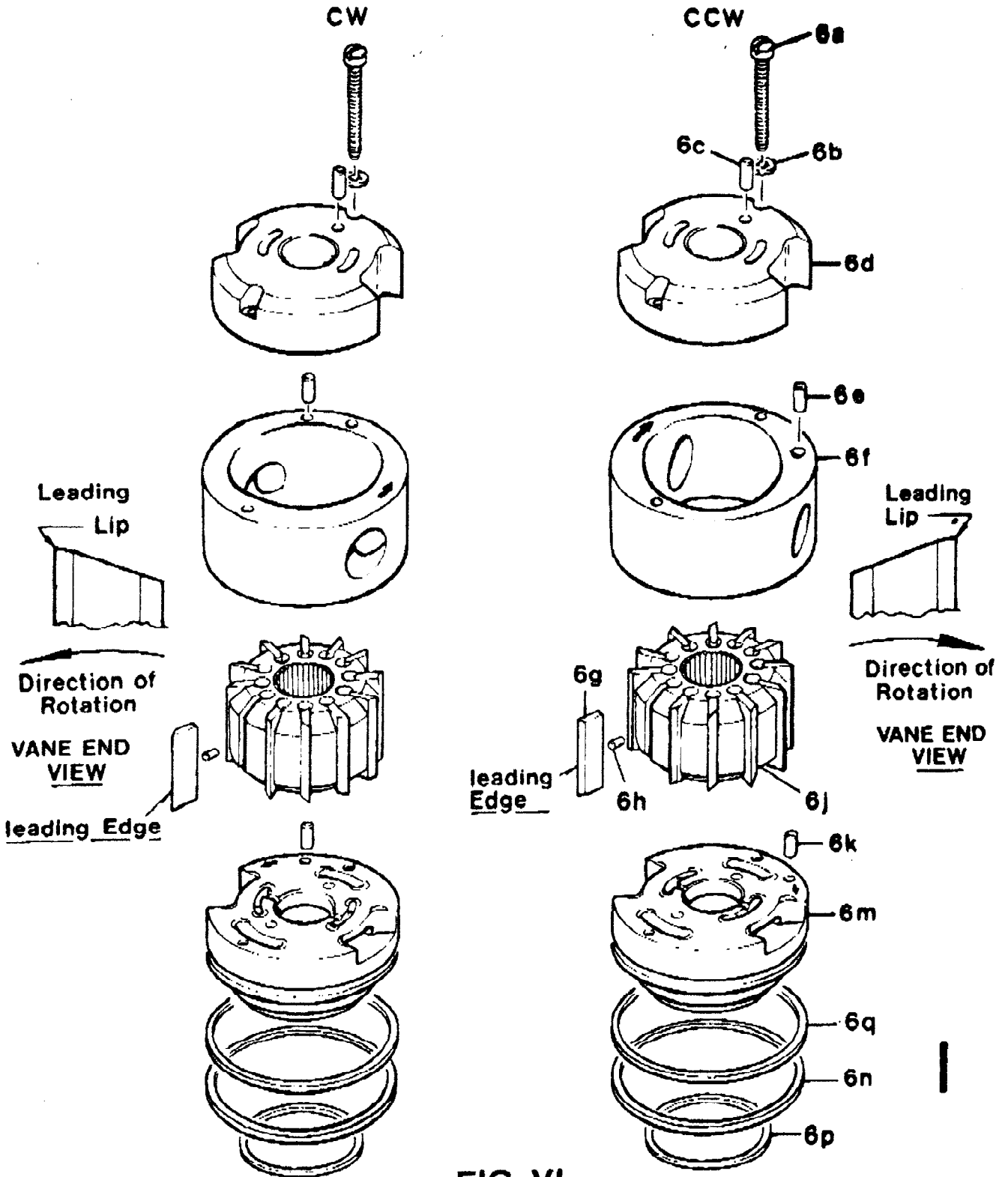


FIG. VI

R
 Parts in position for
 Right Hand (CW) Rotation

L
 Parts in position for
 Left Hand (CCW) Rotation

T5ED AND T5SED (P1) "E" SIZE

ITEM 6 UNITIZED "E" CARTRIDGE ASSEMBLY for T5ED		These parts and common parts listed are a complete T5ED "D" size unitized cartridge.				
Model No.	Code No.	6d PORT PLATE	6f CAM RING	6m PRESSURE PLATE	6n SEAL	6p SEAL
Right Hand or CW Rot.		034-72273	034-72122	034-71429	691-10253	691-10237
T5ED-050R	S14 43350		034-72123			
T5ED-055R	S14-43352		034-72279			
T5ED-060R	S14-43354		034-72280			
Left Hand or CCW Rot.		034-72274	034-72122	034-71430	691-10253	691-10237
T5ED-050L	S14-43351		034-72123			
T5ED-055L	S14-43353		034-72279			
T5ED-060L	S14-43355		034-72280			
T5ED-066L	S14-43357					
QTY.	1	1	1	1	1	1

ITEM 6 UNITIZED "E" CARTRIDGE ASSEMBLY for T5SED**		These parts and common parts listed are a complete T5SED "E" size unitized cartridge assembly.				
Model No.***	Code No.***	6d PORT PLATE	6f CAM RING	6m PRESSURE PLATE	6n SEAL	6p SEAL
Right Hand or CW Rot.		034-72273	034-72278	034-71429	691-10253	691-10237
T5SED-050R	S14-46900-5		034-72277			
T5SED-055R	S14-46902-5		034-72276			
T5SED-060R	S14-46904-5		034-72275			
Left Hand or CCW Rot.		034-72274	034-72278	034-71430	691-10253	691-10237
T5SED-050L	S14 46901 5		034-72277			
T5SED-055L	S14-46903-5		034-72276			
T5SED-060L	S14-46905-5		034-72275			
T5SED-066L	S14-46907-5					
QTY.	1	1	1	1	1	1

*** When using fluids requiring Viton A seals add -5 to the end of model and code no. and specify 695-20253 and 695-20237.

COMMON UNITIZED CARTRIDGE PARTS FOR ALL MODELS

Item	Qty	Part No.	Description	Item	Qty	Part No.	Description
6a	2	310-10340	10-24 x 3/4 Rd. Hd. Screw	6g	12	034-70255	Vane
6b	2	348-10010	#10 Lockwasher	6h	12	034-70259	Vane Holdout Pin
6c	1	323-82014	5/16 x 3/4 Drive-Lok Pin	6j	1	S14-28188	Rotor Assy.
6e	1	324-22016	5/16 x 1 Dowel Pin	6k	1	324-22016	5/16 x 1 Dowel Pin
				6q	1	618-15018	Back-up ring

T5ED & T5SED PARTS LIST

ITEM	QUANTITY	PART NO.	DESCRIPTION
1	4	306-40156	Hex head cap screw 1/2 - 11 x 3
2	1	034-70275	End cap (P2)
3	1	*671-10159	Square section seal #159
	1	**695-10159	Square section seal #159 (S5)
4	1	See page 15	"D" cartridge (P2)
5	1	034-70271	Center housing inlet
6	1	See page 19	"E" cartridge (P1)
7	1	356-30315	Internal snap ring
8	1	See below	Shaft assembly
9	1	*620-82064	Shaft seal
	1	**620-82072	Shaft seal (S5)
10	1	*671-10259	Square section seal #259
	1	**695-10259	Square section seal #259 (S5)
11	1	034-70285	Mounting cap
12	4	306-40216	Hex head cap screw 5/8 - 11 x 3 3/4

*S14-28191
**S14-28191-5

Seal kit T5ED & T5SED
Seal kit with S-5 (Viton A) seals.

ITEM 8 SHAFT ASSEMBLIES

TYPE	ASS'Y NO.	SHAFT	BEARING	SNAP RING	KEY NO.
#1 SAE "C-C" W/KW	S14-28182	034-71416	230-03208	034-70866 2 required	034-70330
#2 Not SAE W/KW	S14-28183	034-71418			034-70342
#3 SAE "C"	S14-28180	034-71415			
#4 SAE "C-C"	S14-28181	034-71417			

Foot mounting bracket kit—S14-28966

* For use with petroleum base fluids and severe duty applications.

** For use with fluids requiring Viton A seals.

*** Add -5 to the end of model and code no. when ordering a kit requiring Viton A seals. Change seal prefix to 675 or 695 when ordering seal separately.