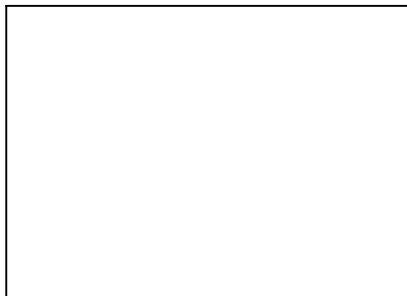
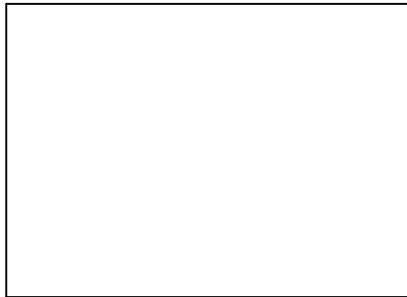




Service Information SS4-00151

VT67EC

Double vane pump

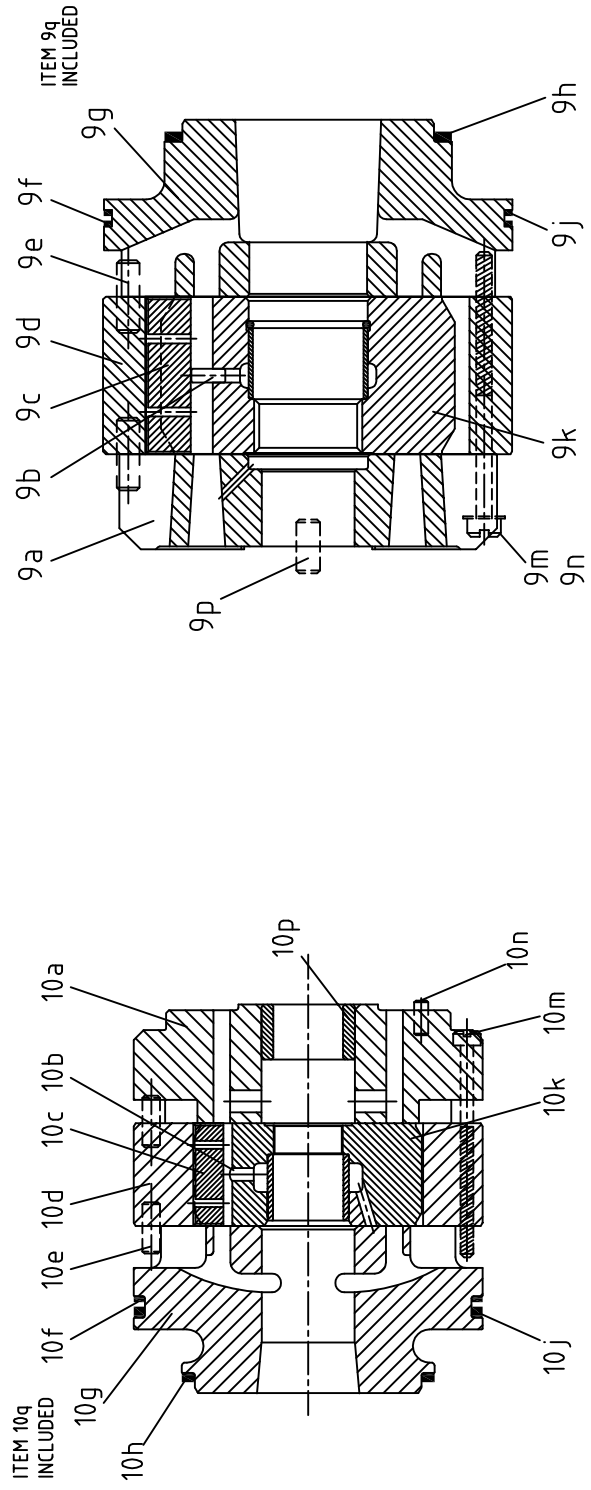
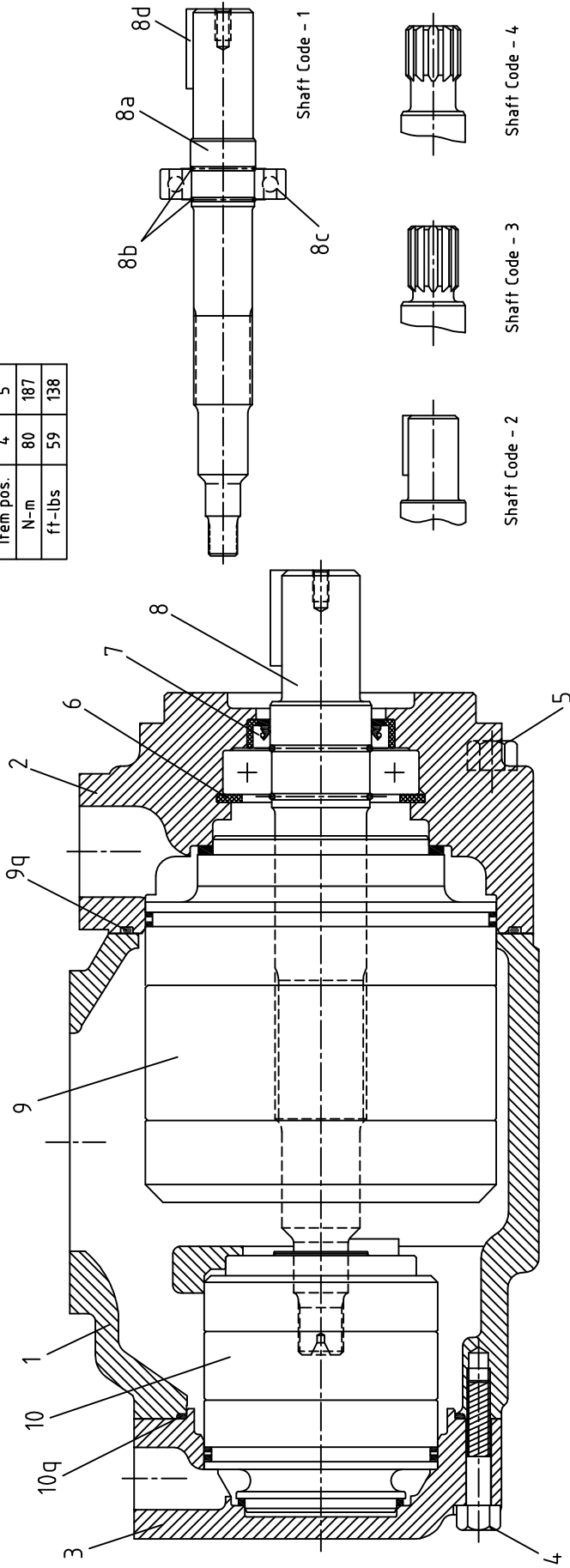


PHOTO

Bold printed are recommended repair kits and assemblies

Mounting torque

Item pos.	4	5
N-m	80	187
ft-lbs	59	138



Item pos.	Description	Part No.		Qty
		VT67EC (Standard)	VT67EC (Bi-dir plates) (only for P2)	
1	Housing (UNC)	V034-70263	V034-70263	1
	Housing (Metric)	C-034-03069	C-034-03069	
2	Mounting flange (UNC)	V034-70265	V034-70265	1
	Mounting flange (Metric)	C-034-03070	C-034-03070	
3	End cap (UNC) (P2=3/4")	V034-66523	V034-66523	1
	End cap (Metric) (P2=3/4")	H-034-66765	H-034-66765	
	End cap (UNC) (P2=1")	V034-48579	V034-48579	
	End cap (Metric) (P2=1")	H-034-71327	H-034-71327	
4	Mounting Screw	V306-40111	V306-40111	7
5	Mounting Screw	V306-40216	V306-40216	4
6	Retaining ring	V356-30315	V356-30315	1
7	Shaft seal (S1-0.7 bar)	V620-82064	V620-82064	1
	Shaft seal (S4-S5-7 bar)	V620-82072	V620-82072	
8	Shaft and bearing ass'y (Code-1)	VS14-28178	VS14-28178	1
	Shaft and bearing ass'y (Code-2)	VS24-49213	VS24-49213	
	Shaft and bearing ass'y (Code-3)	VS14-28176	VS14-28176	
	Shaft and bearing ass'y (Code-4)	VS14-28177	VS14-28177	
8a	Shaft (Keyed) (Code-1)	V034-71408	V034-71408	1
	Shaft (Keyed) (Code-2)	V034-71410	V034-71410	
	Shaft (Splined) (Code-3)	V034-71315	V034-71315	
	Shaft (splined) (Code-4)	V034-71409	V034-71409	
8b	Round section ring	V034-70866	V034-70866	2
8c	Ball bearing	V230-03208	V230-03208	1
8d	Key (Code -1)	V034-70330	V034-70330	1
	Key (Code -2)	V034-49676	V034-49676	
9	Cartridge assembly 042 C.W. (P1)	VS24-77675		1
	Cartridge assembly 042 C.C.W. (P1)	VS24-77676		
	Cartridge assembly 045 C.W. (P1)	VS24-77677		
	Cartridge assembly 045 C.C.W. (P1)	VS24-77678		
	Cartridge assembly 050 C.W. (P1)	VS24-77679		
	Cartridge assembly 050 C.C.W. (P1)	VS24-77680		
	Cartridge assembly 052 C.W. (P1)	VS24-77681		
	Cartridge assembly 052 C.C.W. (P1)	VS24-77682		
	Cartridge assembly 054 C.W. (P1)	VS24-77683		
	Cartridge assembly 054 C.C.W. (P1)	VS24-77684		
	Cartridge assembly 057 C.W. (P1)	VS24-77685		
	Cartridge assembly 057 C.C.W. (P1)	VS24-77686		
	Cartridge assembly 062 C.W. (P1)	VS24-77687		
	Cartridge assembly 062 C.C.W. (P1)	VS24-77688		
	Cartridge assembly 066 C.W. (P1)	VS24-77689		
	Cartridge assembly 066 C.C.W. (P1)	VS24-77690		
	Cartridge assembly 072 C.W. (P1)	VS24-77691		
	Cartridge assembly 072 C.C.W. (P1)	VS24-77692		
Cartridge assembly 085 C.W. (P1)	VS24-77693			
Cartridge assembly 085 C.C.W. (P1)	VS24-77694			
9a	Port plate - rear C.W.	H-034-67407		1
	Port plate - rear C.C.W.	H-034-67435		
9b	Pin vane holdout	V034-59161		12
9c	Vane	V034-59162		12
9d	Cam ring - 042	H-034-67503		1
	Cam ring - 045	H-034-67504		
	Cam ring - 050	H-034-67505		
	Cam ring - 052	H-034-67506		
	Cam ring - 054	H-034-67619		

Item pos.	Description	Part No.		Qty
		VT67EC (Standard)	VT67EC (Bi-dir plates) (only for P2)	
	Cam ring - 057	H-034-67507		
	Cam ring - 062	H-034-67508		
	Cam ring - 066	H-034-67509		
	Cam ring - 072	H-034-67447		
	Cam ring - 085	H-034-67455		
9e	Dowel pin	V324-22016		2
9f	Back-up ring	V618-15018		1
9g	Port plate - pressure C.W.	H-034-67408		1
	Port plate - pressure C.C.W.	H-034-67434		
9h	Sq. section seal	V691-10237		1
9j	Sq. section seal	V691-10253		1
9k	Rotor-insert ass'y	VS24-10185		1
9m	Screw	V310-10340		2
9n	Lockwasher internal tooth	V348-10010		2
9p	Dowel pin	V323-82014		1
9q	Sq. section seal	V691-10259		1
10	Cartridge assembly 003 C.W (P2)	VS24-10767	VS24-26607	1
	Cartridge assembly 003 C.C.W (P2)	VS24-10768	VS24-26608	
	Cartridge assembly 005 C.W (P2)	VS24-10769	VS24-26609	
	Cartridge assembly 005 C.C.W (P2)	VS24-10770	VS24-26610	
	Cartridge assembly 006 C.W (P2)	VS24-10771	VS24-26611	
	Cartridge assembly 006 C.C.W (P2)	VS24-10772	VS24-26612	
	Cartridge assembly 008 C.W (P2)	VS24-10773	VS24-26613	
	Cartridge assembly 008 C.C.W (P2)	VS24-10774	VS24-26614	
	Cartridge assembly 010 C.W (P2)	VS24-10775	VS24-26615	
	Cartridge assembly 010 C.C.W (P2)	VS24-10776	VS24-26616	
	Cartridge assembly 012 C.W (P2)	VS24-26480	VS24-26617	
	Cartridge assembly 012 C.C.W (P2)	VS24-26481	VS24-26618	
	Cartridge assembly 014 C.W (P2)	VS24-10777	VS24-26619	
	Cartridge assembly 014 C.C.W (P2)	VS24-10778	VS24-26620	
	Cartridge assembly 015 C.W (P2)	C-S14-72362	C-S14-72339	
	Cartridge assembly 015 C.C.W (P2)	C-S14-72363	C-S14-72340	
	Cartridge assembly 017 C.W (P2)	VS24-10779	VS24-26621	
	Cartridge assembly 017 C.C.W (P2)	VS24-10780	VS24-26622	
	Cartridge assembly 020 C.W (P2)	VS24-40234	C-S14-71678	
	Cartridge assembly 020 C.C.W (P2)	VS24-40235	C-S14-71679	
	Cartridge assembly 022 C.W (P2)	VS24-10781	VS24-26623	
	Cartridge assembly 022 C.C.W (P2)	VS24-10782	VS24-26624	
	Cartridge assembly 025 C.W (P2)	VS24-10783	VS24-26625	
	Cartridge assembly 025 C.C.W (P2)	VS24-10784	VS24-26626	
Cartridge assembly 028 C.W (P2)	VS14-97722	VS14-26627		
Cartridge assembly 028 C.C.W (P2)	VS24-25791	VS24-26628		
Cartridge assembly 031 C.W (P2)	VS24-45789	VS24-26629		
Cartridge assembly 031 C.C.W (P2)	VS24-45790	VS24-26630		
10a	Port plate - rear C.W.	V034-59777		1
	Port plate - rear C.C.W.	V034-59776		
	Port plate - rear Bi-dir		H-034-59118	
10b	Pin vane holdout	V034-59098	V034-59098	10
10c	Vane	V034-59099	V034-59099	10
10d	Cam ring - 003	V034-59050	V034-59050	1
	Cam ring - 005	V034-59051	V034-59051	
	Cam ring - 006	V034-59052	V034-59052	
	Cam ring - 008	V034-59053	V034-59053	
	Cam ring - 010	V034-59054	V034-59054	
	Cam ring - 012	V034-66595	V034-66595	
	Cam ring - 014	V034-59206	V034-59206	
	Cam ring - 015	C-034-66893	C-034-66893	

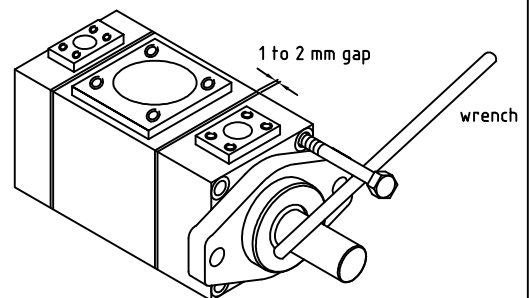
Item pos.	Description	Part No.		Qty
		VT67EC (Standard)	VT67EC (Bi-dir plates) (only for P2)	
	Cam ring - 017	V034-59207	V034-59207	
	Cam ring - 020	V034-66607	V034-66607	
	Cam ring - 022	V034-59208	V034-59208	
	Cam ring - 025	V034-59209	V034-59209	
	Cam ring - 028	V034-59245	V034-59245	
	Cam ring - 031	V034-66843	V034-66843	
10e	Dowel pin	V324-21208	V324-21208	2
10f	Back-up ring	V618-15016	V618-15016	1
10g	Port plate - pressure CW	V034-59772		1
	Port plate - pressure CCW	V034-59773		
	Port plate - pressure Bi-dir		H-034-66453	
10h	Sq. section seal	V691-10229	V691-10229	1
10j	Sq. section seal	V691-10238	V691-10238	1
10k	Rotor-insert ass'y	VS24-10116	VS24-10116	1
10m	Screw	V317-06266	V317-06266	2
10n	Dowel pin	V323-82010	V323-82010	1
10p	Bush	V034-70868	V034-70868	1
10q	Sq. section seal	V671-10156	V671-10156	1
7	Seal kit (S1 - 0,7 bar)	VS24-10242	VS24-10242	1
9f,9h	Seal kit (S4 - 7 bar)	VS24-10242-4	VS24-10242-4	
9j,9q 10f,10h 10j,10q	Seal kit (S5 - 7 bar)	VS24-10242-5	VS24-10242-5	
9a	Port plate - rear ass'y C.W. (P1)	VS24-73820		1
	Port plate - rear ass'y C.C.W. (P1)	VS24-76213		
10a	Port plate - rear and bush ass'y C.W. (P2)	VS24-10809		1
10n	Port plate - rear and bush ass'y C.C.W. (P2)	VS24-10810		
10p	Port plate - rear and bush ass'y Bi-dir (P2)		VS24-10139	

To change porting position, follow the steps below:

1. Secure pump and remove 4 bolts from mounting flange. Move the mounting flange 1 to 2 mm away from housing. Insert one bolt halfway to mounting flange. Install a wrench between the shaft and bolt and turn in the desired way, so that the required position of P1 port with respect to Suction is obtained. Reinstall the bolts and tighten to corresponding mounting torque as provided on page 2.
2. Follow similar procedure for changing P2 position. Use wrench between two bolts placed diagonally opposite.

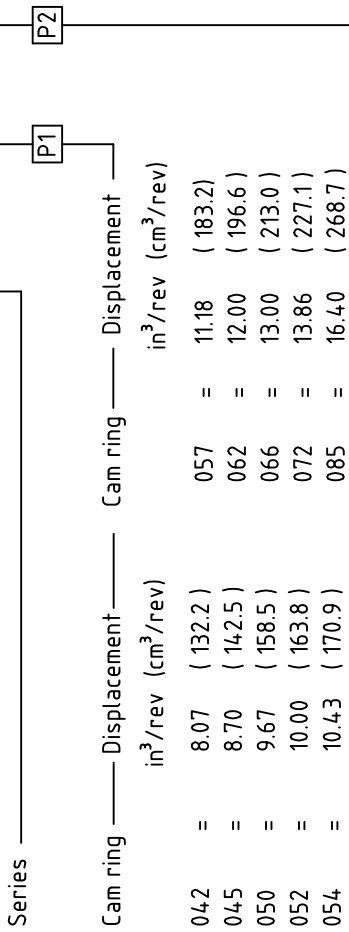
Instruction : Do not remove mounting flange/end cap completely from the housing but only just 1 to 2 mm to avoid the cartridge pin to move out from the housing dowel pin hole. Make sure no piece of paint enters into the gap to avoid leakage.

If it is difficult to turn mounting flange/end cap put some hydraulic oil in to the pressure port to lubricate the pressure port seals.



MODEL CODE

Series ————— VT67EC - 062 - 010 - 1 R 00 - A 1 00 *



Modification
Mounting W/connection variables
4 bolts SAE flange J518

TYPE	M0	M1	00	01
CODE	1"	3/4"	1"	3/4"

Seal class

- 1 = S1 (for mineral oil)
- 4 = S4 (for fire resistant fluids)
- 5 = S5 (for mineral oil and fire resistant fluids)

Design letter _____

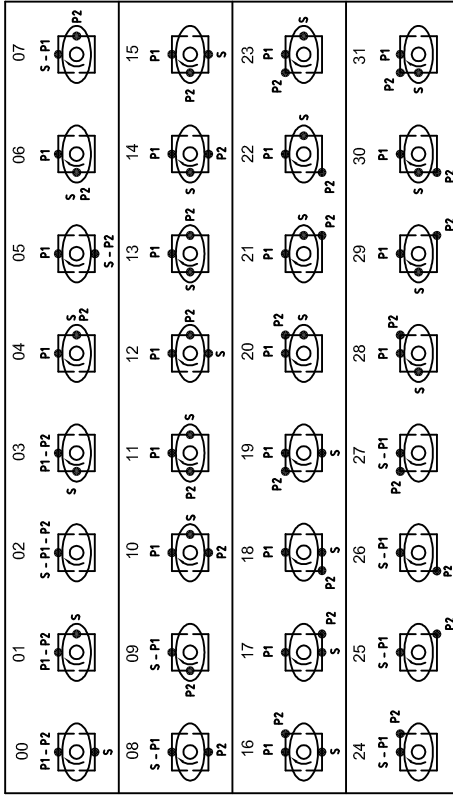
Porting combination : (00 = Standard)

Cam ring	Displacement in ³ /rev (cm ³ /rev)	Cam ring	Displacement in ³ /rev (cm ³ /rev)
042 =	8.07 (132.2)	057 =	11.18 (183.2)
045 =	8.70 (142.5)	062 =	12.00 (196.6)
050 =	9.67 (158.5)	066 =	13.00 (213.0)
052 =	10.00 (163.8)	072 =	13.86 (227.1)
054 =	10.43 (170.9)	085 =	16.40 (268.7)

Cam ring	Displacement in ³ /rev (cm ³ /rev)	Cam ring	Displacement in ³ /rev (cm ³ /rev)
003/B03 =	0.66 (10.8)	015/B15 =	3.08 (50.5)
005/B05 =	1.05 (17.2)	017/B17 =	3.56 (58.3)
006/B06 =	1.30 (21.3)	020/B20 =	3.89 (63.8)
008/B08 =	1.61 (26.4)	022/B22 =	4.29 (70.3)
010/B10 =	2.08 (34.1)	025/B25 =	4.84 (79.3)
012/B12 =	2.26 (37.1)	028/B28 =	5.42 (88.8)
014/B14 =	2.81 (46.0)	031/B31 =	6.10 (100.0)

Type of Shaft _____

- | |
|----------------------|
| VT67EC |
| 1 = Keyed (SAE -CC) |
| 2 = Keyed (no SAE) |
| 3 = Splined (SAE -C) |
| 4 = Splined (SAE-CC) |



Direction of rotation(view on shaft end)

- R = Clockwise
- L = Counter - clockwise

Print	_____
Replace	_____
Revision	_____