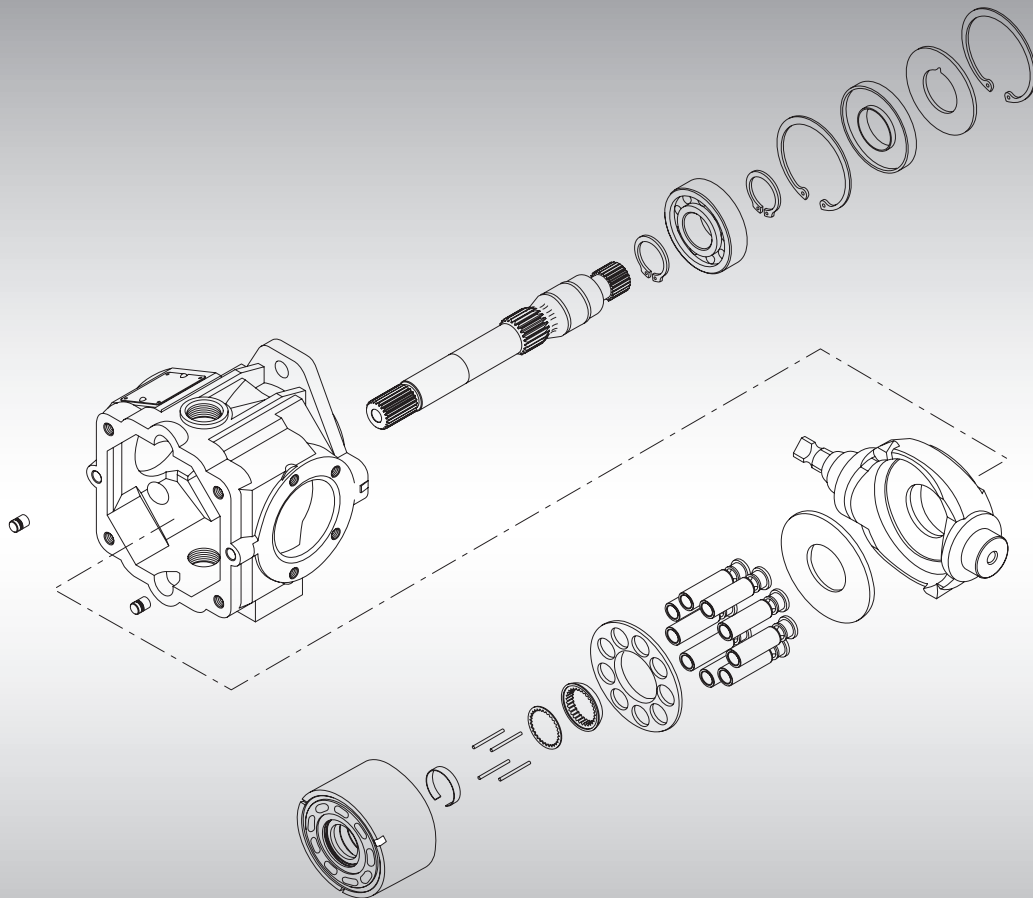




Parts Manual

Series 40 MPV035D and MPT035D Axial Piston Pumps







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General information

Service parts identification

Use this information and procedure to identify the module group, item number, manufacture date, part number, and part name of the parts included in the Series 40, M35 variable displacement pumps. Use the parts listed when performing minor repairs, major repairs, or conversions on the Series 40: M35 pumps.

Nameplate

Each unit has a nameplate affixed to its housing. The nameplate includes this information:

Model Code

The Sauer-Danfoss model code defines the specific unit. Use it when ordering parts to service this product.

Model Number

The manufacturing factory uses Sauer-Danfoss' model number. On repeat orders, order a complete unit by the model number.

Serial Number

The Sauer-Danfoss serial number identifies the manufacture date and unit sequence in the build. The serial number also identifies the unit's warranty time period.

The letter code indicates the location of original manufacture (assembly). **A** indicates the unit was originally assembled in Ames, Iowa, USA.

The first number (2 digits) indicates the year of manufacture. (01 indicates the unit was manufactured in 2001).

The second number (2 digits) indicates the calendar week of manufacture.

The third number (5 digits) is a sequential number that identifies a specific unit.





General information

Date code

The date code is the year and week of manufacture. The same item number may list more than one part number. This indicates that there is more than one configuration for that item number. You will see that there are different date codes for different part numbers. Find the date code of your unit on the nameplate to determine the service part number you need to order.

EXAMPLE: The service part desired is Item D02.

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
N	D02	02-48		5000664	Square key (SB-2002-021)	1
	D02	96-32	02-47	532 (9003310-2514)	Woodruff key	1

All units using this order code with a date code of 96-32, up to and including 02-47, must use part number 9003310-2514. All units with a date code of 02-48, and newer, must use part number 5000664.

Service bulletins

A Service Bulletin Number (SB-____-____) may follow the part name of the part you desire. Read that Service Bulletin before ordering that part. The information contained in these Service Bulletins, as of the print date, are at the end of this manual. Service Bulletins contain more detailed information such as interchangeability, what additional parts are involved, and so forth. We suggest that you add additional Service Bulletins to this manual as you receive them.

Procedure to identify a part

General

The modular design of Series 40 units results in a simplified service parts list and part number identification procedure. The same item numbers are used for same part names on all units within a product type. (Example: The shaft lip seal, Item B02, has the same item number on all pumps.)

A part number that has another number following in parentheses makes this a world-wide manual. The first number is sold in Germany. The number, in parentheses, is sold in the United States. (Example: 701912 (9008000-0121); customers order 9008000-0121 if ordering the part in the United States.)

Example of a part identification

The nameplate on a Series 40 pump has an Order Code of MPV-035-D-B-A-G-L-S-G-AA-A-A-BGG-DR-A-FF-C-NNN. Do this to determine the part number of the drive shaft used on this pump:

- 1) Referring to the input shaft module in the Order Code (see page 7), the output shaft option for this motor is identified by the code **G**. (MPV-035-D-B-A-**G**-L-S-G-AA-A-A-BGG-DR-A-FF-C-NNN)
- 2) Referring to the Service Parts List, find the shaft group.
- 3) Find the order code that relates to this unit, which is **G**.
- 4) The shaft is Item E01.
- 5) The part number 4350431.

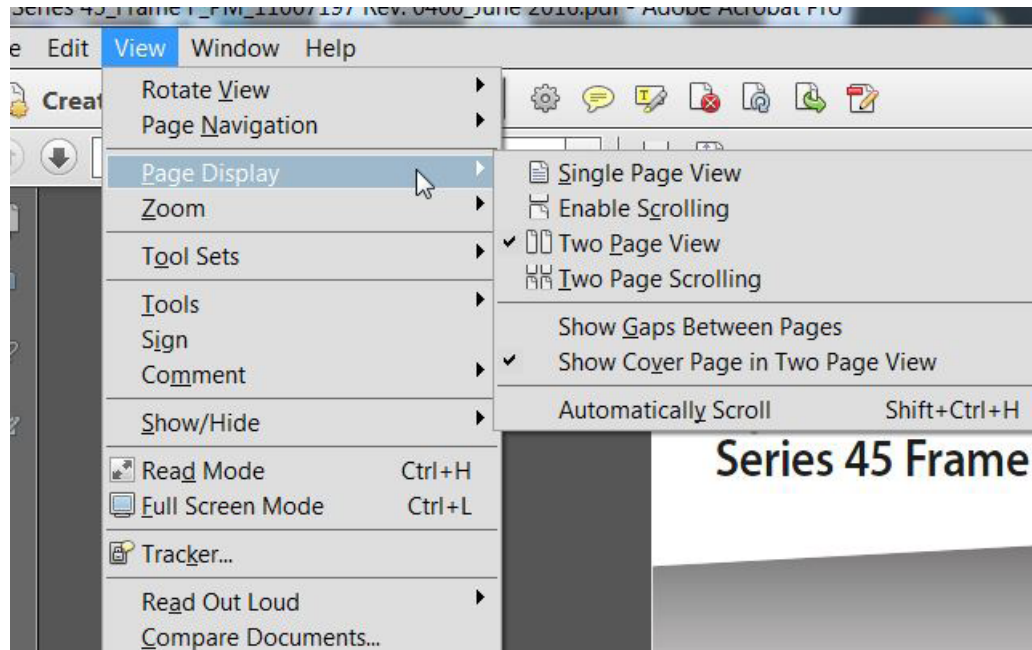


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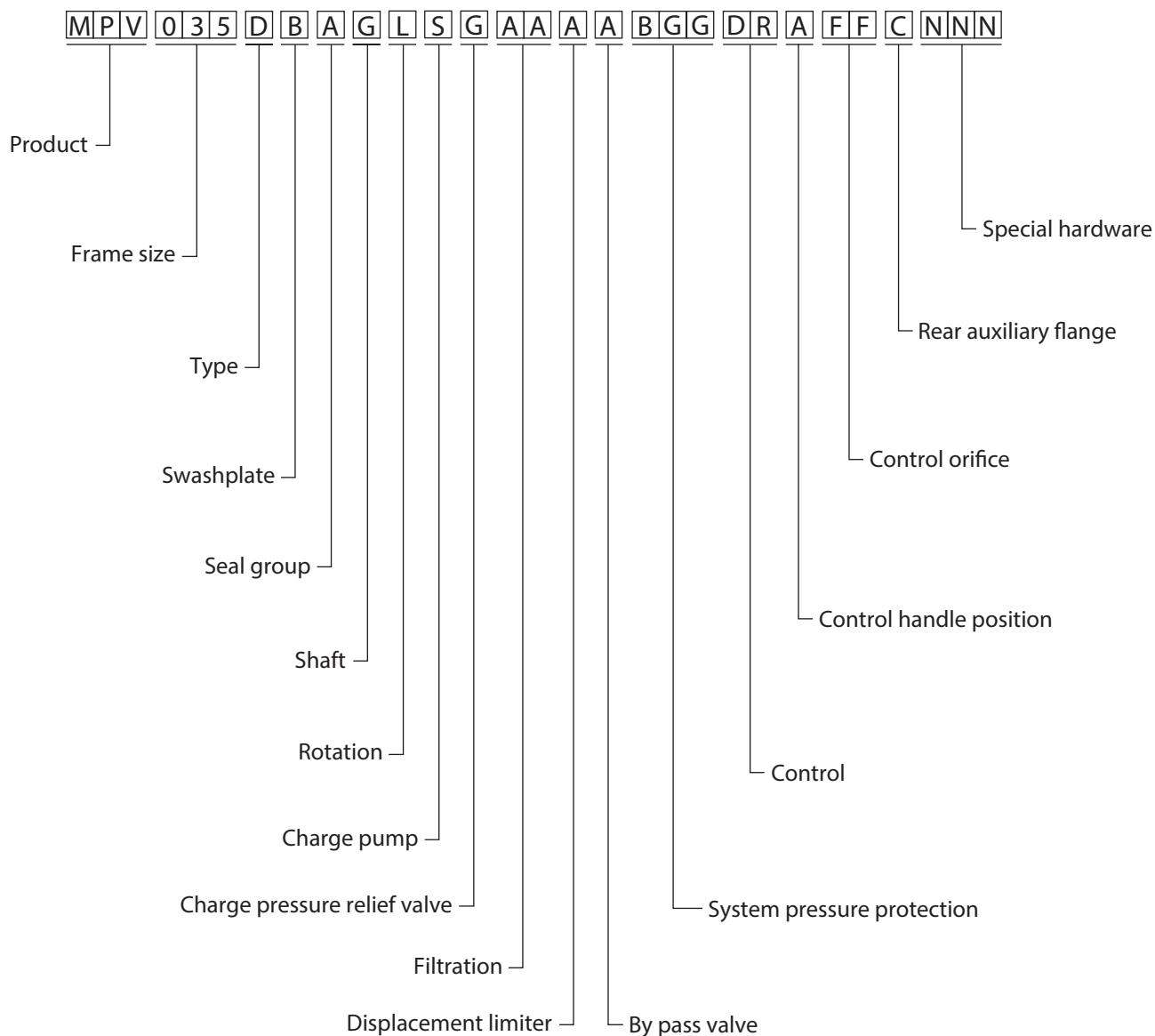
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2. Select "View" --> "Page Display" --> "Two Page View"
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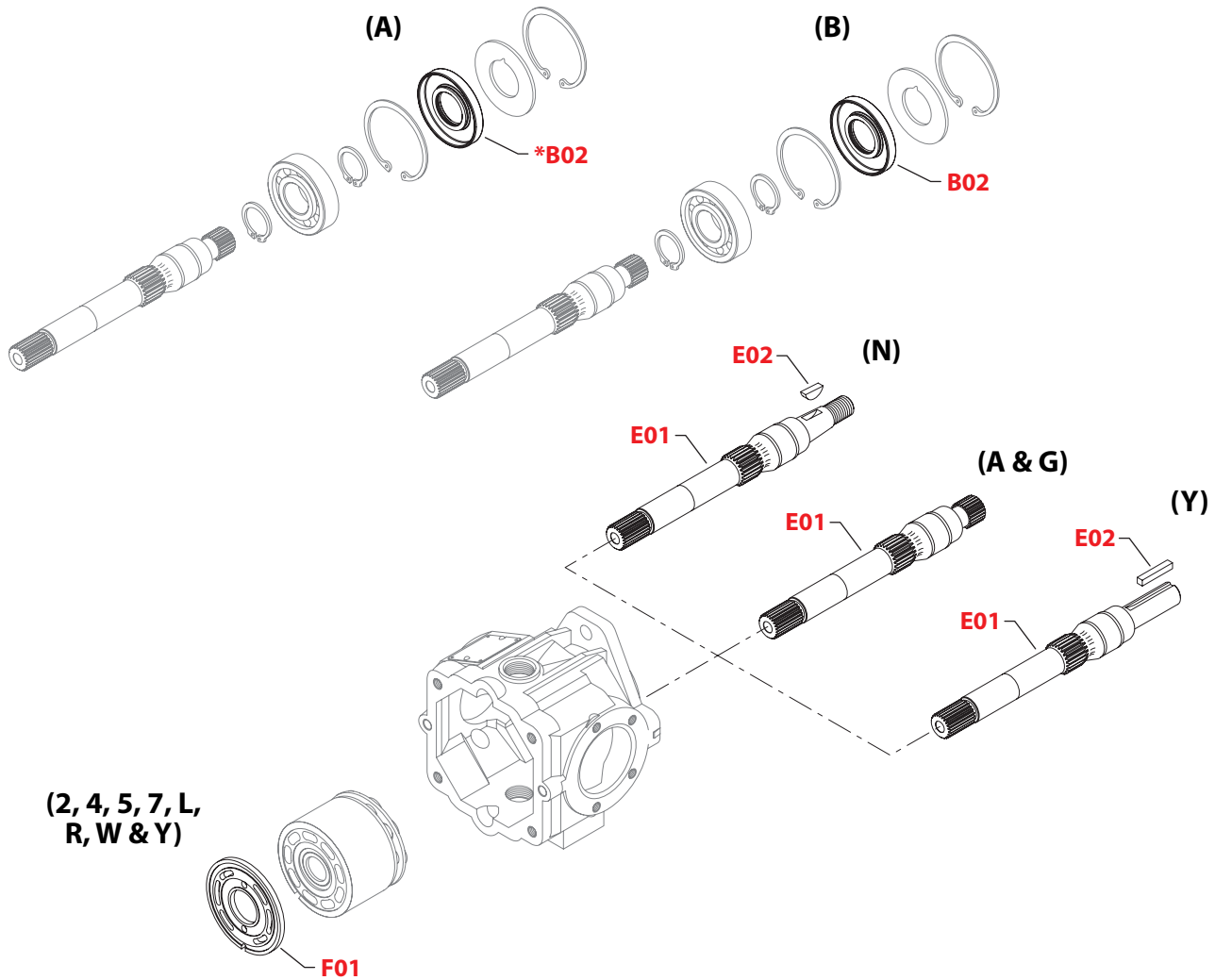
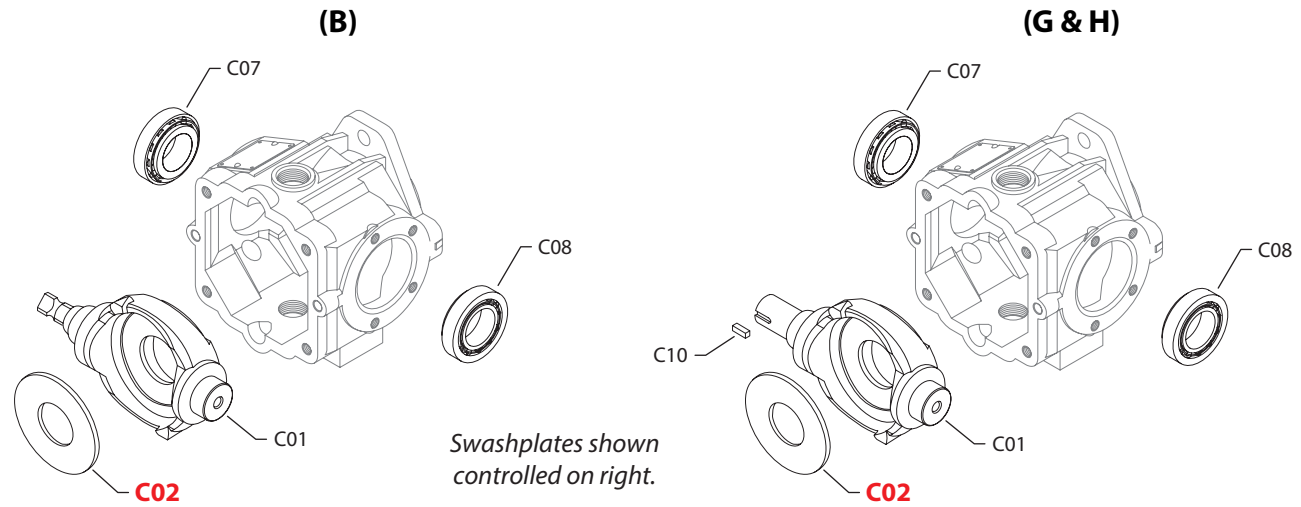
Order code



P100 634E



Variable displacement pump



* = included in overhaul seal kit Q210

E100 548E

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement pump
Swashplate

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B	C01	95-45		4350383	Swashplate	1
	C02	95-45		4350148	Thrust plate	1
	C07	95-45		4800470	Bearing kit	1
	C08	95-45		4800470	Bearing kit	1
G	C01	03-07		4350823	Swashplate, 24 mm diameter keyed, 14.6°	1
	C02	03-07		4350148	Thrust plate	1
	C07	03-07		4800470	Bearing kit	1
	C08	03-07		4800470	Bearing kit	1
	C10	05-05		1040275	Key	1
H	C01	03-07		4350822	Swashplate, 24 mm diameter keyed, 16°	1
	C02	03-07		4350148	Thrust plate	1
	C07	03-07		4800470	Bearing kit	1
	C08	03-07		4800470	Bearing kit	1
	C10	05-05		1040275	Key	1

Shaft seal

A	B02	95-45		5000689	Lip seal (SB-2003-018)	1
B	B02	13-03		11103135	Lip seal	1

Shaft

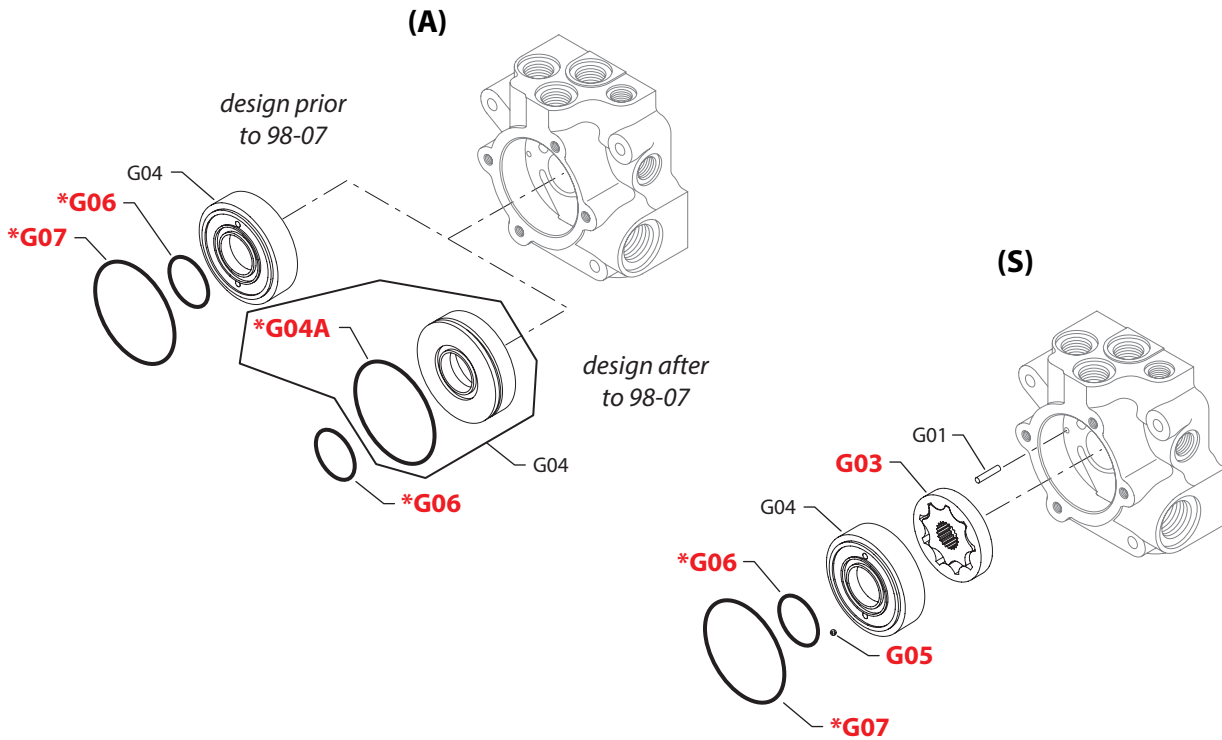
A	E01	95-45		4350397	Shaft, 13-tooth spline	1
G	E01	95-45		4350431	Shaft, 15-tooth spline	1
N	E01	95-45		4350398	Shaft, tapered	1
	E02	95-45		9003310-2514	Key, woodruff	1
Y	E01	95-45		4350399	Shaft, straight key	1
	E02	95-45		9003261-2524	Key, square	1

Rotation

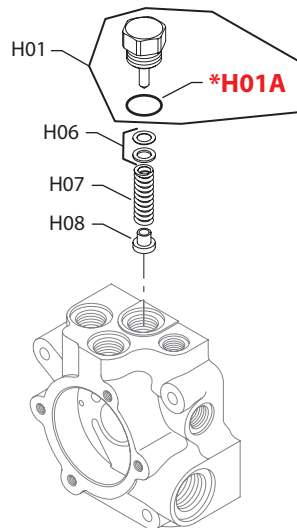
2	F01	98-12		4350729	Valve plate, CCW, 4° index	1
4	F01	98-43		4440076	Valve plate, CCW, low force	1
5	F01	98-43		4440075	Valve plate, CW, low force	1
7	F01	98-12		4350728	Valve plate, CW, 4° index	1
L	F01	95-45		4350158	Valve plate, CCW	1
R	F01	95-45		4350157	Valve plate, CW	1
W	F01	95-45		4350322	Valve plate, CW, quiet	1
Y	F01	95-45		4350323	Valve plate, CCW, quiet	1



Variable displacement pump



(C, E, F, G, H & M)



* = included in overhaul seal kit Q210

E100 549E

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement pump
Charge pump

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A	G04	98-07		4800670	Spacer assembly	1
	G04	95-45	98-06	4800179	Spacer	1
	G04A	98-07		673533	O-ring	1
	G06	98-07		5000352	O-ring	1
	G07	95-45	98-06	5000353	O-ring	1
S	G01	95-45		9004800-1908	Pin	1
	G03	95-45		4800170	Gerotor assembly	1
	G04	95-45		4800179	Spacer	1
	G05	95-45		018564 (9001210-1900)	Ball	1
	G06	95-45		5000352	O-ring	1
	G07	95-45		5000353	O-ring	1

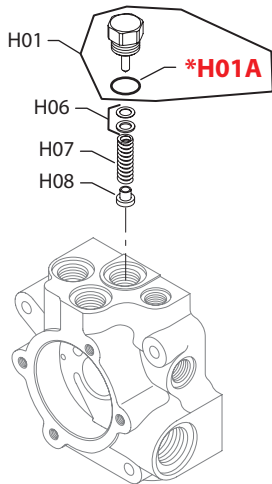
Charge pressure relief valve/setting

C	H01	95-50		4800308	Plug assembly/18 bar [260 psi]	1
	H01A	95-50		001149 (9004201-6200)	O-ring	1
	H06	95-50		4510027	Shim kit	1
	H07	95-50		4800176	Spring	1
	H08	95-50		4800134	Poppet	1
E	H01	95-45		4800308	Plug assembly/11 bar [160 psi]	1
	H01A	95-45		001149 (9004201-6200)	O-ring	1
	H06	95-45		4510027	Shim kit	1
	H07	95-45		4800176	Spring	1
	H08	95-45		4800134	Poppet	1
F	H01	95-45		4800308	Plug assembly/7.5 bar [110 psi]	1
	H01A	95-45		001149 (9004201-6200)	O-ring	1
	H06	95-45		4510027	Shim kit	1
	H07	95-45		4800714	Spring	1
	H08	95-45		4800134	Poppet	1
G	H01	95-45		4800308	Plug assembly/14 bar [200 psi]	1
	H01A	95-45		001149 (9004201-6200)	O-ring	1
	H06	95-45		4510027	Shim kit	1
	H07	95-45		4800176	Spring	1
	H08	95-45		4800134	Poppet	1
H	H01	03-26		4800308	Plug assembly/24 bar [348 psi]	1
	H01A	03-26		001149 (9004201-6200)	O-ring	1
	H06	03-26		4510027	Shim kit	1
	H07	03-26		11022448	Spring	1
	H08	03-26		4800134	Poppet	1
M	H01	95-45		4800308	Plug assembly/28.3 bar [410 psi]	1
	H01A	95-45		001149 (9004201-6200)	O-ring	1
	H06	95-45		4510027	Shim kit	1
	H07	95-45		11022448	Spring	1
	H08	95-45		4800134	Poppet	1

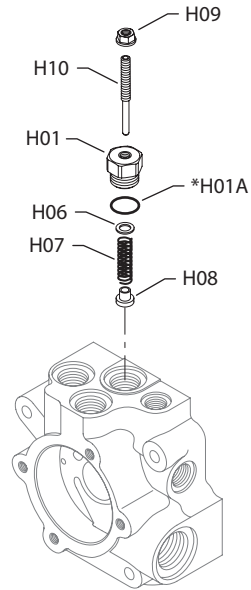


Variable displacement pump

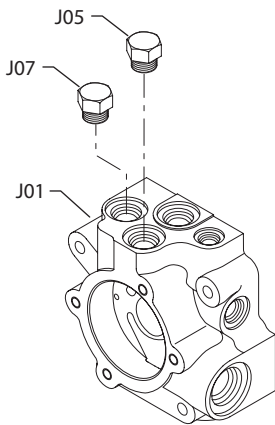
(N, R, S & W)



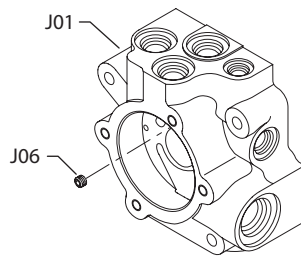
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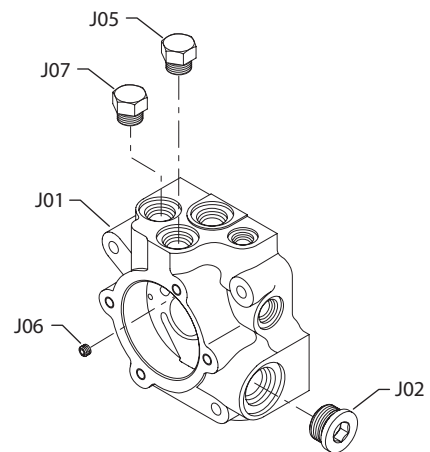
(AA)



(BA)



(NN)



E100 585E

* = included in overhaul seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement pump
Charge pressure relief valve/setting

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
N	H01	95-45		4800308	Plug assembly/9 bar [130 psi]	1	
	H01A	95-45		001149 (9004201-6200)	O-ring	1	
	H06	95-45		4510027	Shim kit	1	
	H07	95-45		4800149	Spring	1	
	H08	95-45		4800134	Poppet	1	
	P	H01	95-45	00-40	4350305	Plug, anti-stall	1
H01A		95-45	00-40	001149 (9004201-6200)	O-ring	1	
H06		95-45	00-40	356568 (9009625-0163)	Washer	1	
H07		95-45	00-40	8800496	Spring	1	
H08		95-45	00-40	4350299	Poppet	1	
H09		95-45	00-40	076042 (9003509-0012)	Nut	1	
H010		95-45	00-40	4350301	Antistall guide screw	1	
R		H01	98-40		4800308	Plug assembly/6.2 bar [90 psi]	1
		H01A	98-40		001149 (9004201-6200)	O-ring	1
		H06	98-40		4510027	Shim kit	1
	H07	98-40		4800714	Spring	1	
	H08	98-40		4800134	Poppet	1	
	S	H01	03-50		4350846	Plug assembly/18 bar [260 psi], low noise	1
H01A		03-50		001149 (9004201-6200)	O-ring	1	
H06		03-50		4510027	Shim kit	1	
H07		03-50		4800176	Spring	1	
H08		03-50		1732454	Poppet	1	
W		H01	99-28		4800308	Plug assembly/20 bar [290 psi]	1
	H01A	99-28		001149 (9004201-6200)	O-ring	1	
	H06	99-28		4510027	Shim kit	1	
	H07	99-28		4800176	Spring	1	
	H08	99-28		4800134	Poppet	1	

Filtration

AA	J01	95-45		4350257	End cap	1
	J05	95-45		001537 (9005100-8700)	Plug assembly	1
	J07	95-45		001537 (9005100-8700)	Plug assembly	1
BA	J01	95-45		4350257	End cap	1
	J06	95-45		001487 (9005001-2500)	Pipe plug	1
NN	J01	95-45		4350257	End cap	1
	J02	95-45		001537 (9005110-9200)	Plug assembly	1
	J05	95-45		001537 (9005100-8700)	Plug assembly	1
	J06	95-45		001487 (9005001-2500)	Pipe plug	1
	J07	95-45		001537 (9005100-8700)	Plug assembly	1

Displacement limitation

A	none
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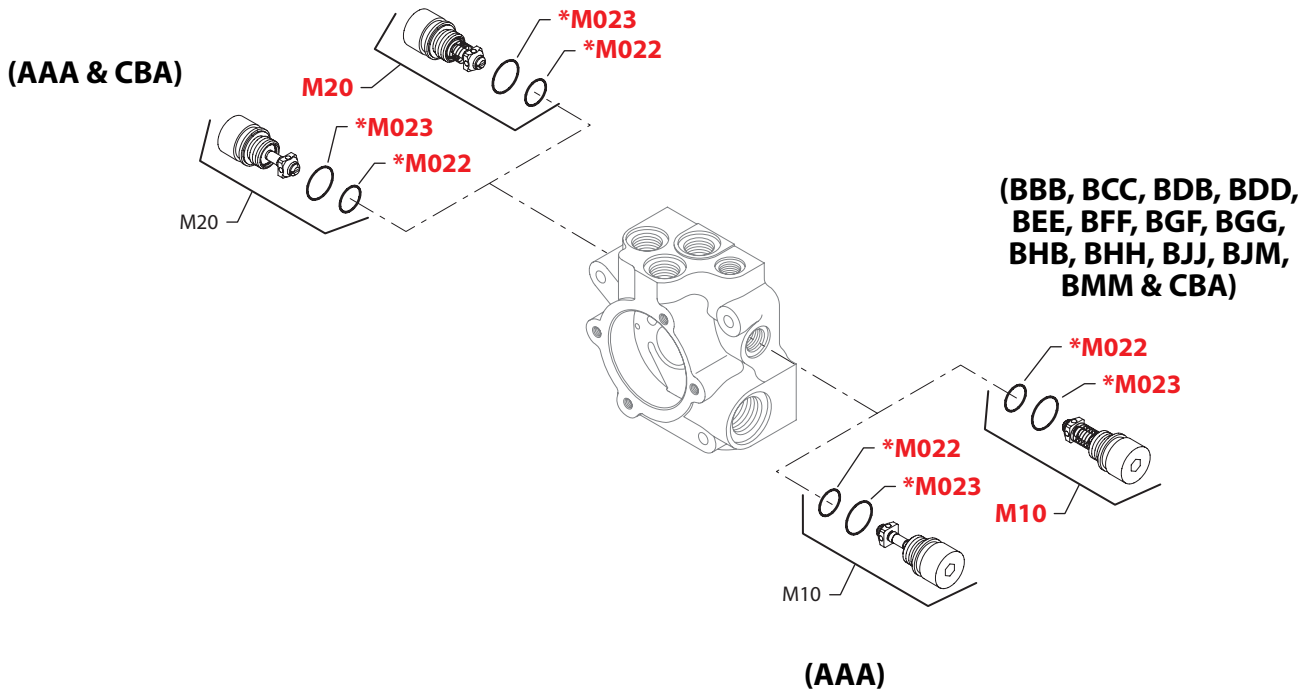
By pass valve

A	none
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Variable displacement pump

(BBB, BCC, BDB, BDD,
BEE, BFF, BGF, BGG, BHB,
BHH, BJJ, BJM, & BMM)



* = included in overhaul seal kit Q210

E100 550E

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement pump
System pressure protection

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	M022	95-45		001131 (9004201-5000)	O-ring	2
	M023	95-45		9004100-2110	O-ring	2

System pressure protection

AAA	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
BBB	M10	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
	M20	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
BCC	M10	95-45		4350642	SCR valve assembly, 190 bar [2755 psi] (SB-1996-014)	1
	M20	95-45		4350642	SCR valve assembly, 190 bar [2755 psi] (SB-1996-014)	1
BDB	M10	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
	M20	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
BDD	M10	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
	M20	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
BEE	M10	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
	M20	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
BFF	M10	95-45		4350639	SCR valve assembly, 250 bar [3625 psi] (SB-1996-014)	1
	M20	95-45		4350639	SCR valve assembly, 250 bar [3625psi] (SB-1996-014)	1
BGF	M10	96-28		4350638	SCR valve assembly, 280 bar [4060 psi]	1
	M20	96-28		4350639	SCR valve assembly, 250 bar [3625 psi]	1
BGG	M10	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
	M20	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
BHB	M10	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1
	M20	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
BHH	M10	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1
	M20	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1
BJJ	M10	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
	M20	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
BJM	M10	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
	M20	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
BMM	M10	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
	M20	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
CBA	M10	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1



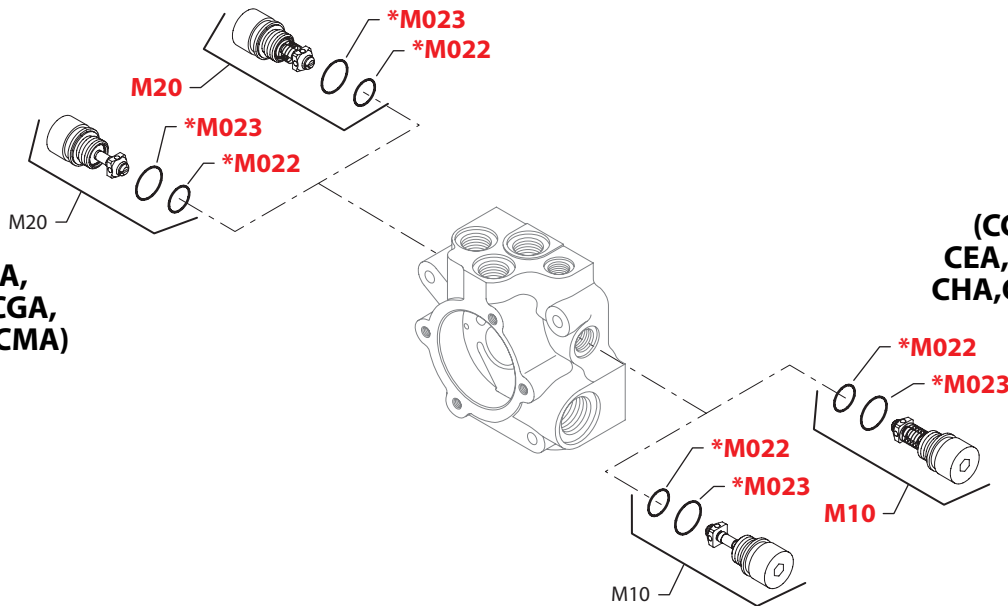
Variable displacement pump

(DAB, DAC, DAD, DAE,
DAF, DAG, & DAH)

(CCA, CDA,
CEA, CFA, CGA,
CHA, CJA & CMA)

(CCA, CDA,
CEA, CFA, CGA,
CHA, CJA & CMA)

(DAB, DAC, DAD, DAE,
DAF, DAG, & DAH)



E100 550E

* = included in overhaul seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement pump
System pressure protection

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	M022	95-45		001131 (9004201-5000)	O-ring	2
	M023	95-45		9004100-2110	O-ring	2

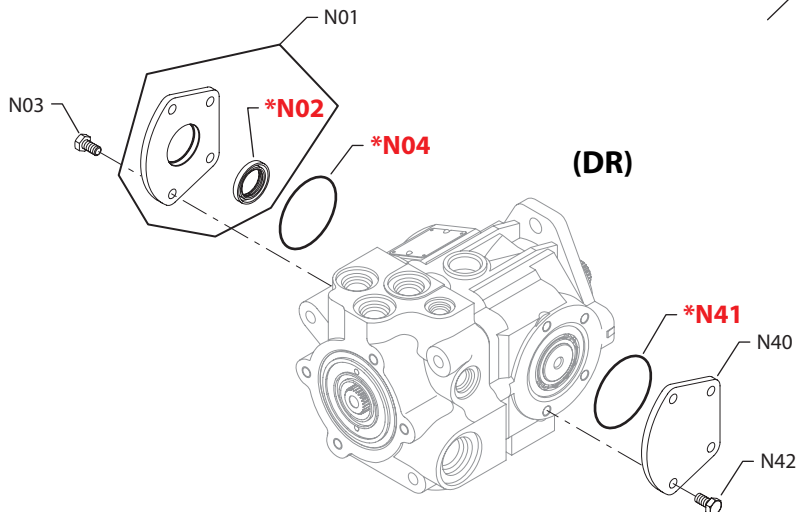
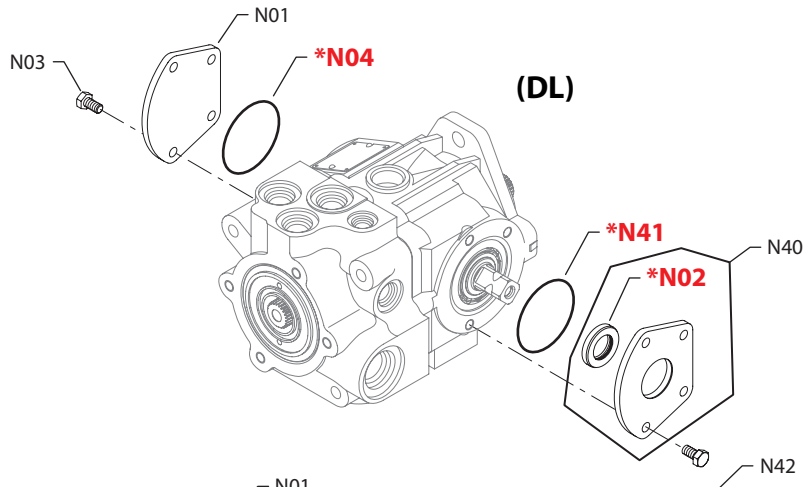
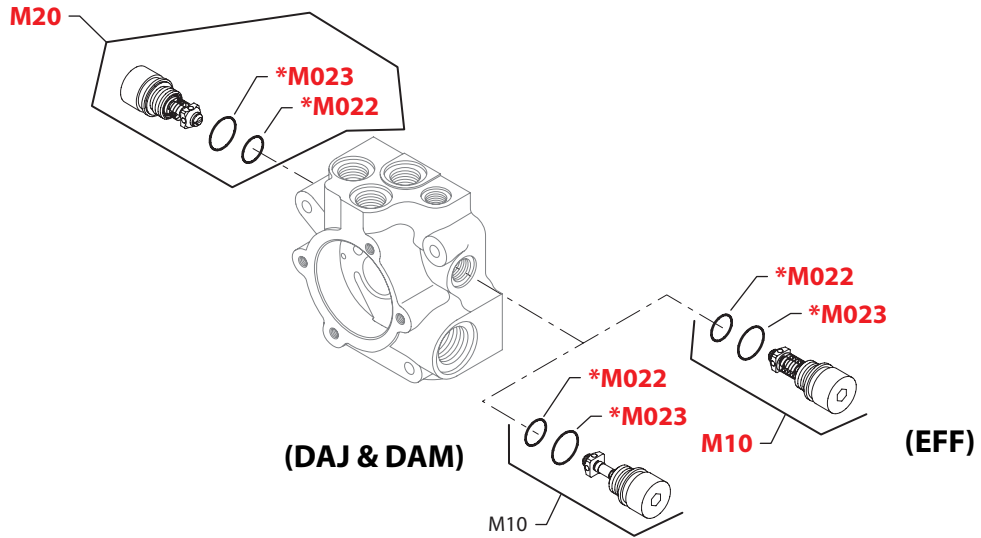
System pressure protection

CCA	M10	95-45		4350642	SCR valve assembly, 190 bar [2755 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CDA	M10	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CEA	M10	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CFA	M10	95-45		4350639	SCR valve assembly, 250 bar [3625 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CGA	M10	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CHA	M10	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CJA	M10	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CMA	M10	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
DAB	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
DAC	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350642	SCR valve assembly, 190 bar [2755 psi] (SB-1996-014)	1
DAD	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
DAE	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
DAF	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350639	SCR valve assembly, 250 bar [3625 psi] (SB-1996-014)	1
DAG	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
DAH	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1



Variable displacement pump

(DAJ, DAM & EFF)



E100 551E

* = included in overhaul seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement pump
System pressure protection

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	M022	95-45		001131 (9004201-5000)	O-ring	2
	M023	95-45		9004100-2110	O-ring	2

System pressure protection

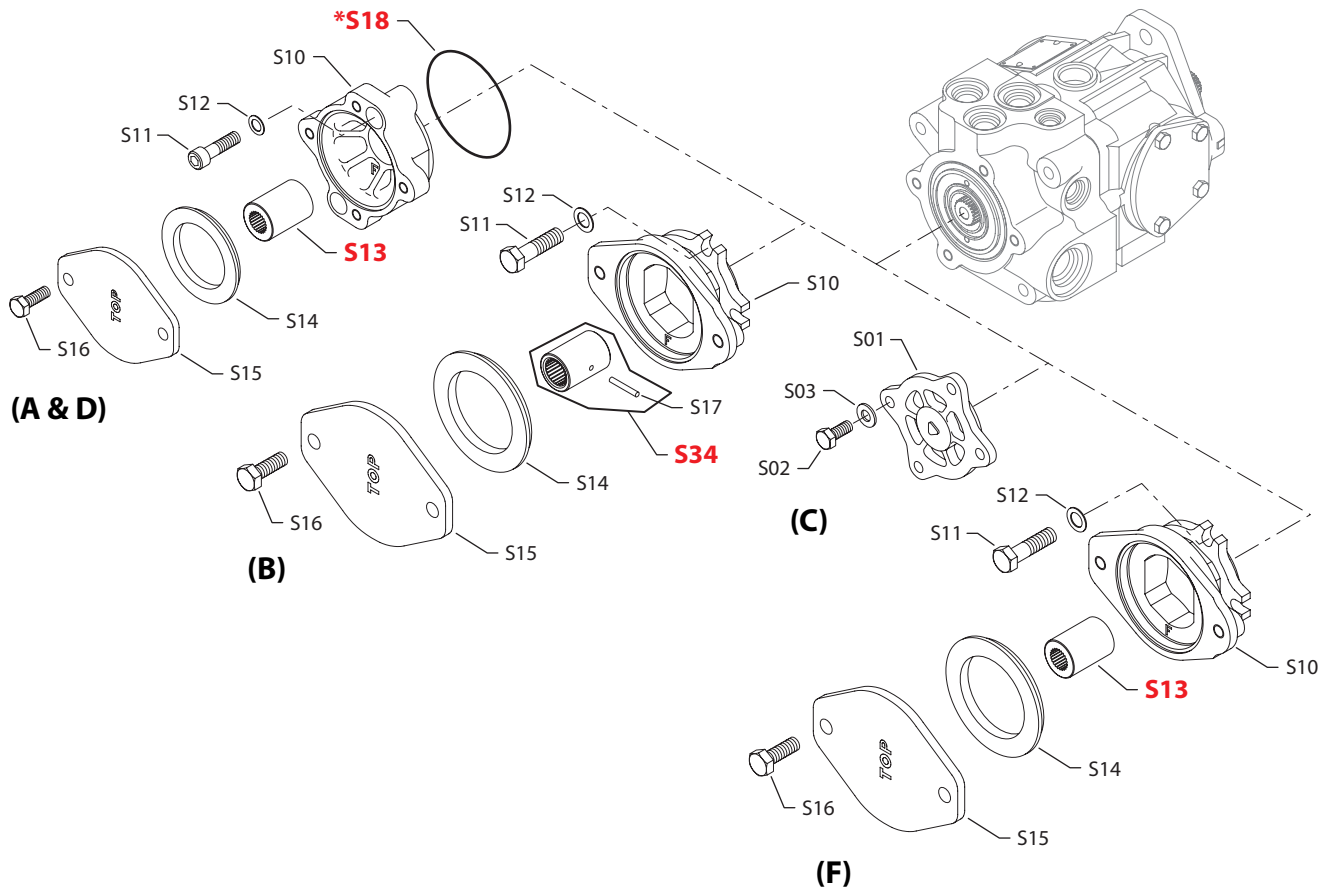
DAJ	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
DAM	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
EFF	M10	98-47		4250139	SCR valve assembly, 250 bar [3625 psi]	1
	M20	98-47		4250139	SCR valve assembly, 250 bar [3625 psi]	1

Direct displacement control

DL	N01	95-45		4250027	Trunnion cover	1
	N02	95-45		5000604	Trunnion lip seal (SB-2000-026)	1
	N03	95-45		378083 (9007210-0804)	Screw	4
	N04	95-45		9004300-1460	O-ring	1
	N40	95-45		4350732	Trunnion cover assembly, on left side (SB-1999-040)	1
	N41	95-45		9004300-1460	O-ring	1
	N42	95-45		378083 (9007210-0804)	Screw	4
DR	N01	95-45		4350732	Trunnion cover assembly, on right side (SB-1999-040)	1
	N02	95-45		5000604	Trunnion lip seal (SB-2000-026)	1
	N03	95-45		378083 (9007210-0804)	Screw	4
	N04	95-45		9004300-1460	O-ring	1
	N40	95-45		4250027	Trunnion cover	1
	N41	95-45		9004300-1460	O-ring	1
	N42	95-45		378083 (9007210-0804)	Screw	4



Variable displacement pump



E100 586E

* = included in overhaul seal kit Q210

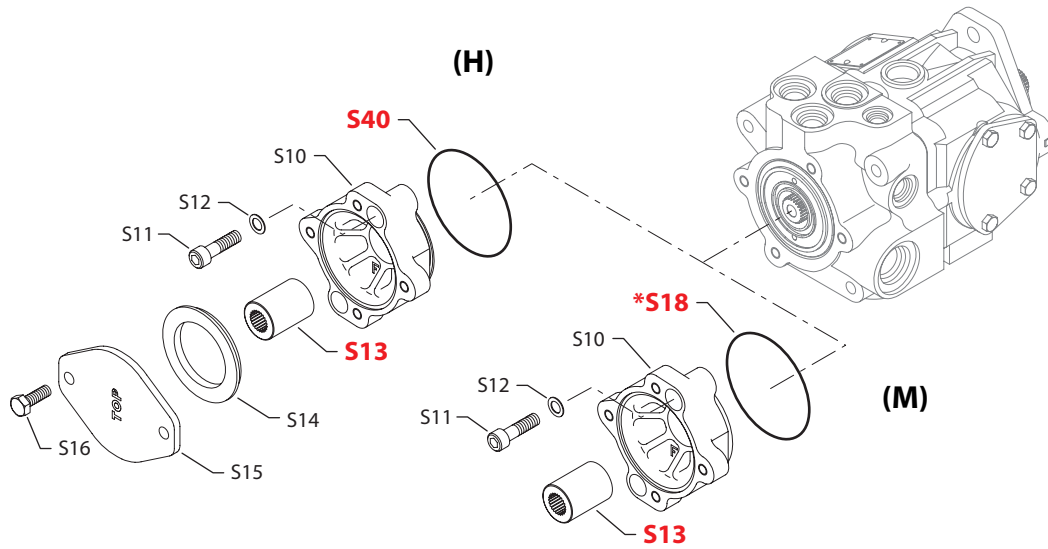
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement pump
Auxiliary mounting

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A	S10	95-45		4800156	Adapter flange, SAE A	1
	S11	95-45		732982 (9007314-1009)	Screw, M10 x 40	2
	S12	95-45		9009625-0154	Washer	2
	S13	95-45		4350113	Coupling, 9-tooth spline	1
	S14	95-45		4800482	A pad seal	1
	S15	95-45		4460586	Cover plate	1
	S16	95-45		9007200-3716	Screw	2
	S18	14-21		9004101-1530	O-ring	1
B	S10	95-45		4800157	Adapter flange, SAE B	1
	S11	95-45		9007210-1007	Screw, M10 x 30	4
	S12	95-45		9009600-4487	Washer	4
	S14	05-22		8801061	B pad seal	1
	S14	95-45	05-21	9004100-1550	O-ring	1
	S15	05-22		8801059	Cover plate	1
	S15	95-45	05-21	4460370	Cover plate	1
	S16	95-45		9007200-5022	Screw	2
	S17	95-45		9004700-1222	Pin	1
	S34	95-45		4350691	Coupling assembly, 13-tooth spline	1
C	S01	95-45		4800158	Gerotor cover	1
	S02	95-45		9007210-1006	Screw, M10 x 25	4
	S03	95-45		9009600-4487	Washer	4
D	S10	95-45		4800182	Adapter flange, SAE A	1
	S11	95-45		732982 (9007314-1009)	Screw, M10 x 40	2
	S12	95-45		9009625-0154	Washer	2
	S13	95-45		762534 (4350189)	Coupling, 11-tooth spline	1
	S14	95-45		4800482	A pad seal	1
	S15	95-45		4460586	Cover plate	1
	S16	95-45		9007200-3716	Screw	2
	S18	14-21		9004101-1530	O-ring	1
F	S10	95-45		4800157	Adapter flange, SAE B	1
	S11	95-45		9007210-1007	Screw, M10 x 30	4
	S12	95-45		9009600-4487	Washer	4
	S13	95-45		762534 (4350189)	Coupling, 11-tooth spline	1
	S14	01-14		8801061	B pad seal	1
	S14	95-45	01-13	9004100-1550	O-ring	1
	S15	01-14		8801059	Cover plate	1
	S15	95-45	01-13	4460370	Cover plate	1
	S16	95-45		9007200-5022	Screw	2



Variable displacement pump



E103 514E

* = included in overhaul seal kit Q210

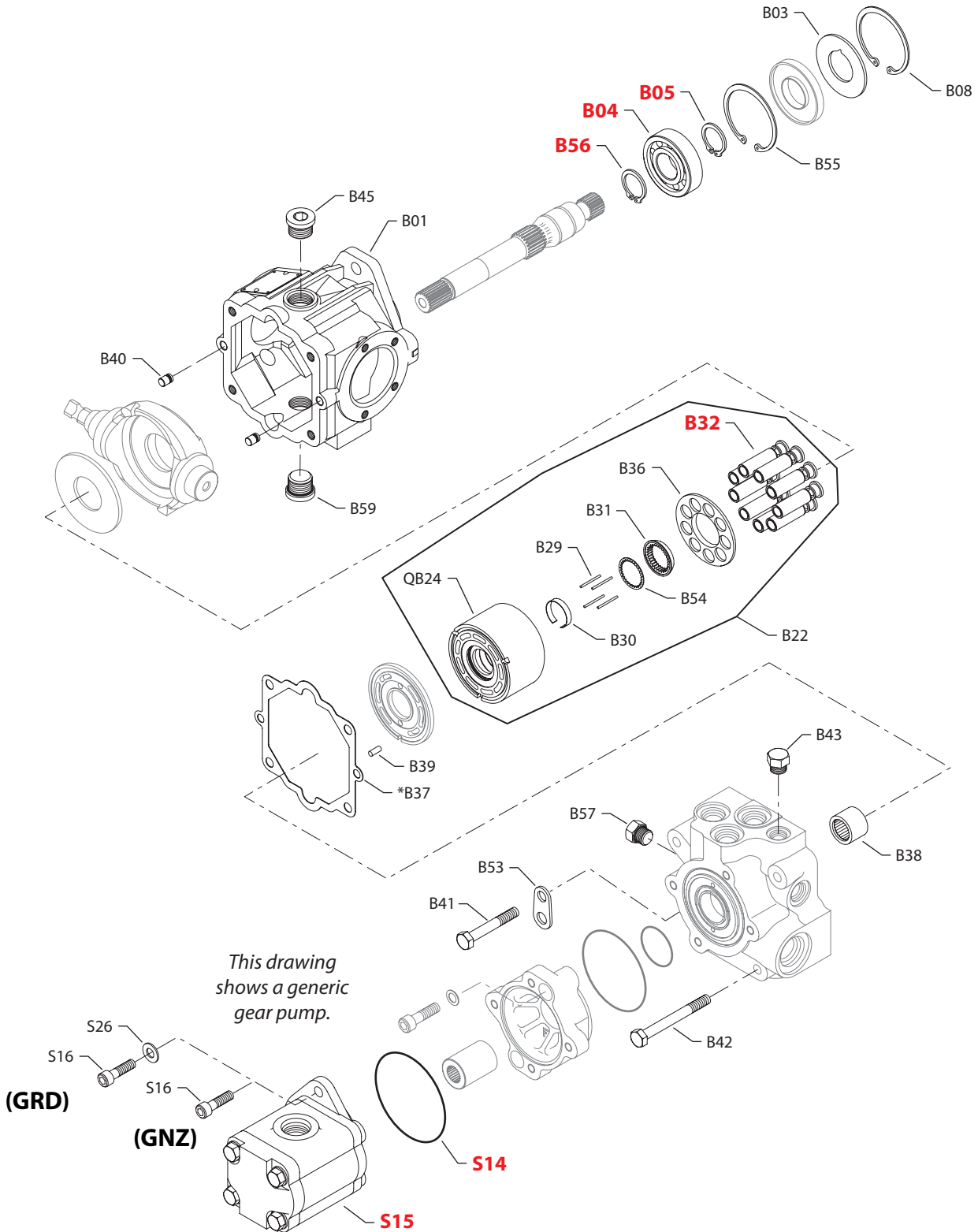
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement pump
Auxiliary mounting

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
H	S10	03-50		1712494-01	Adapter flange, SAE A	1
	S11	03-50		732982 (9007314-1009)	Screw, M10 x 40	2
	S12	03-50		9009625-0154	Washer	2
	S13	03-50		4350113	Coupling, 9-tooth spline	1
	S14	03-50		4800482	A pad seal	1
	S15	03-50		4460586	Cover plate	1
	S16	03-50		9007200-3716	Screw	2
	S40	03-50		9004100-2360	O-ring	1
M	S10	96-08		4800156	Adapter flange, SAE A	1
	S11	96-08		732982 (9007314-1009)	Screw, M10 x 40	2
	S12	96-08		9009625-0154	Washer	2
	S13	96-08		4350113	Coupling, 9-tooth spline	1
	S18	14-21		9004101-1530	O-ring	1



Variable displacement pump



* = included in overhaul seal kit Q210

E100 587E

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement pump
Common parts

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	B01	95-45		4350350	Housing	1
	B03	95-45		11083729	Seal support washer	1
	B04	95-45		5000731	Ball bearing	1
	B05	95-45		9006300-0137	Retaining ring	1
	B08	95-45		9006200-0281	Retaining ring	1
	B22	95-45		4350291	Cylinder block kit	1
	B29	95-45		9004875-0109	Slipper holddown pin	4
	B30	95-45		4350048	Slipper holddown pin retainer	1
	B31	95-45		4350186	Slipper retainer guide	1
	B32	95-45		4350253	Piston assembly	9
	B36	95-45		4350185	Slipper retainer	1
	B37	95-45		4350145	End cap gasket	1
	B38	95-45		9001465-0015	Needle bearing	1
	B39	95-45		9004700-1910	Slotted pin	1
	B40	95-45		5000529	Pin (SB-1998-092)	2
	B41	95-45		9007210-1014	Screw, M10 x 65	2
	B42	95-45		648444 (9007210-1018)	Screw, M10 x 90	2
	B43	95-45		046151 (9005100-5600)	Plug assembly	1
	B45	95-45		664524 (9005110-9000)	Plug assembly	1
	B53	95-45		8800565	Lifting bracket	1
	B54	95-45		4350187	Thrust washer	1
	B55	95-45		9006200-0281	Retaining ring	1
	B56	95-45		615245 (9006300-0137)	Retaining ring	1
	B57	95-45		046151 (9005100-5600)	Plug assembly	1
	B59	95-45		664524 (9005110-9000)	Plug assembly	1
	QB24	95-45		4350100	Cylinder block assembly	1

Special hardware

GNZ	S14	96-10	01-12	5000373	O-ring	1
	S15	96-10	01-12	550133511	Gear pump	1
	S16	96-10	01-12	9007300-3722	Screw	2
GRD	S14	98-31	01-12	5000373	O-ring	1
	S15	98-31	01-12	111.20.348.00	Gear pump	1
	S16	98-31	01-12	9007300-3722	Screw	2
	S26	98-31	01-12	9009610-4069	Washer	2

NNN & NOP	None
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Variable displacement pump

Overhaul seal kit

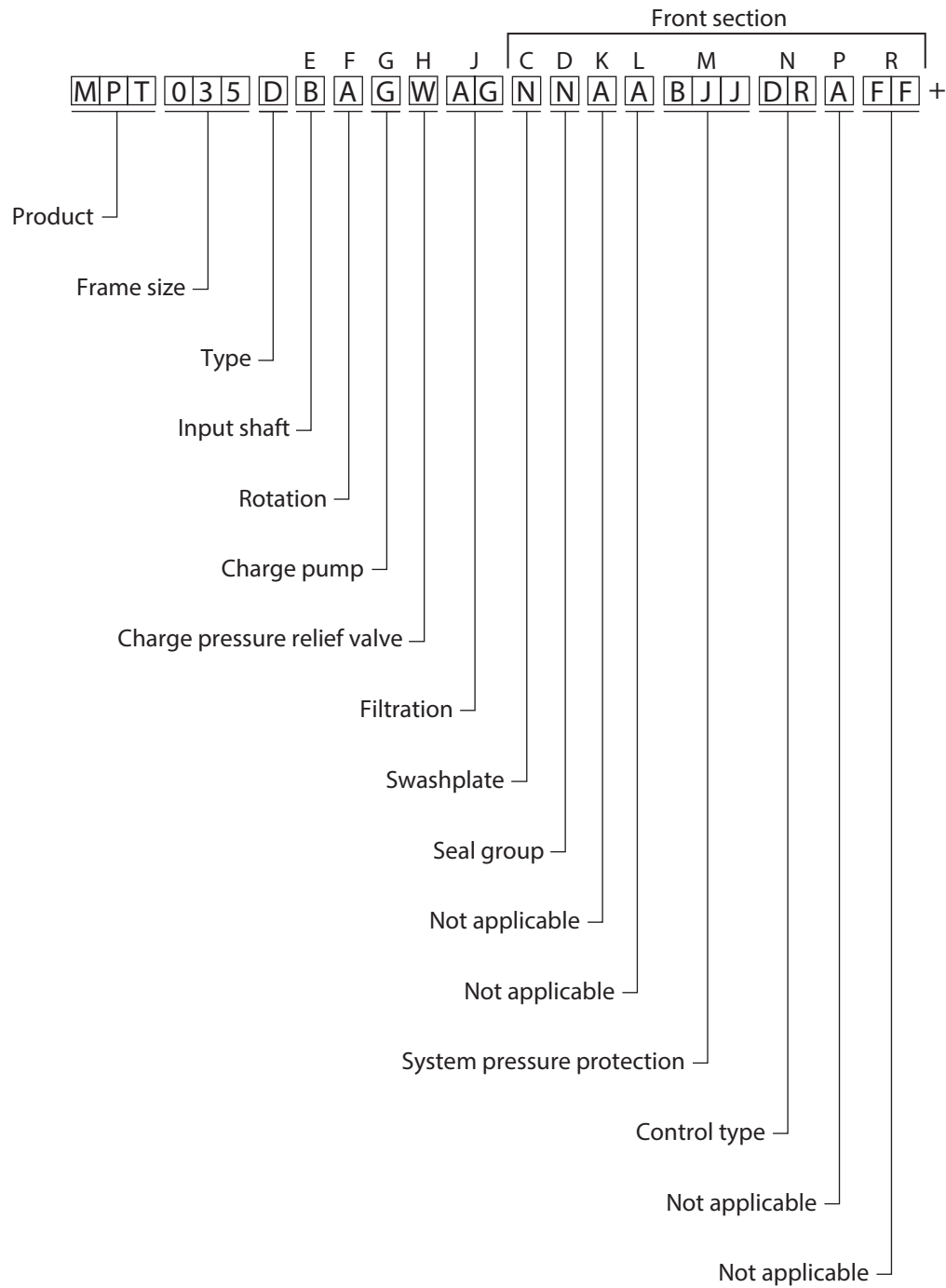
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	Q210	95-45		11181820	Overhaul seal kit, MPV035/44D	1
	B02	95-45		5000689	Lip seal (SB-2003-018)	1
	B37	95-45		4350145	End cap gasket	1
	G04A	98-07		673533	O-ring, .103 x 3.237, nitrile, 70D	1
	G06	95-45		5000352	O-ring, .139 x 1.609, nitrile, 90D	1
	G07	95-45		5000353	O-ring, .139 x 3.234, nitrile, 90D	1
	H01A	95-45		001149 (9004201-6200)	O-ring, .097 x .755, nitrile, 90D	1
	M022	95-45		001131 (9004201-5000)	O-ring, .087 x .644, nitrile, 90D	2
	M023	95-45		9004100-2110	O-ring, .139 x .796, nitrile, 70D	2
	N02	95-45		5000604	Trunnion lip seal (SB-2000-026)	1
	N04	95-45		9004300-1460	O-ring, .099 x 2.612, nitrile, 70D	1
	N41	95-45		9004300-1460	O-ring, .099 x 2.612, nitrile, 70D	1
	S18	95-45		9004101-1530	O-ring, .103 x 3.487, nitrile, 90D	1



Notes

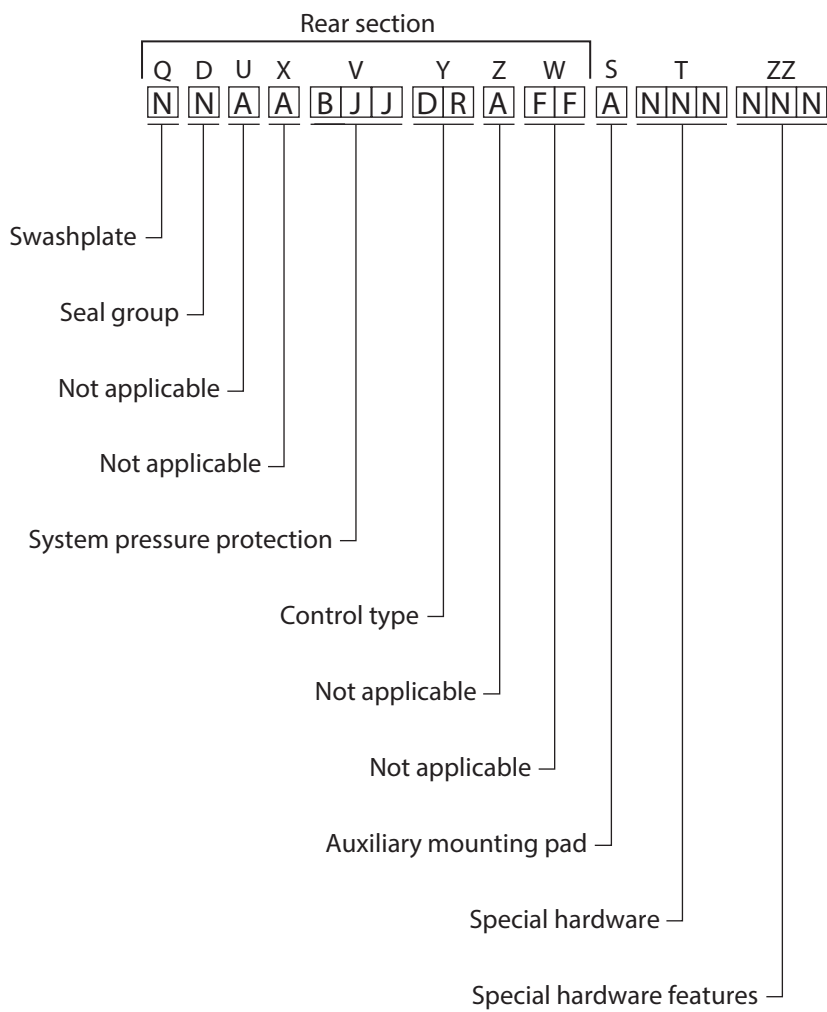


Order code



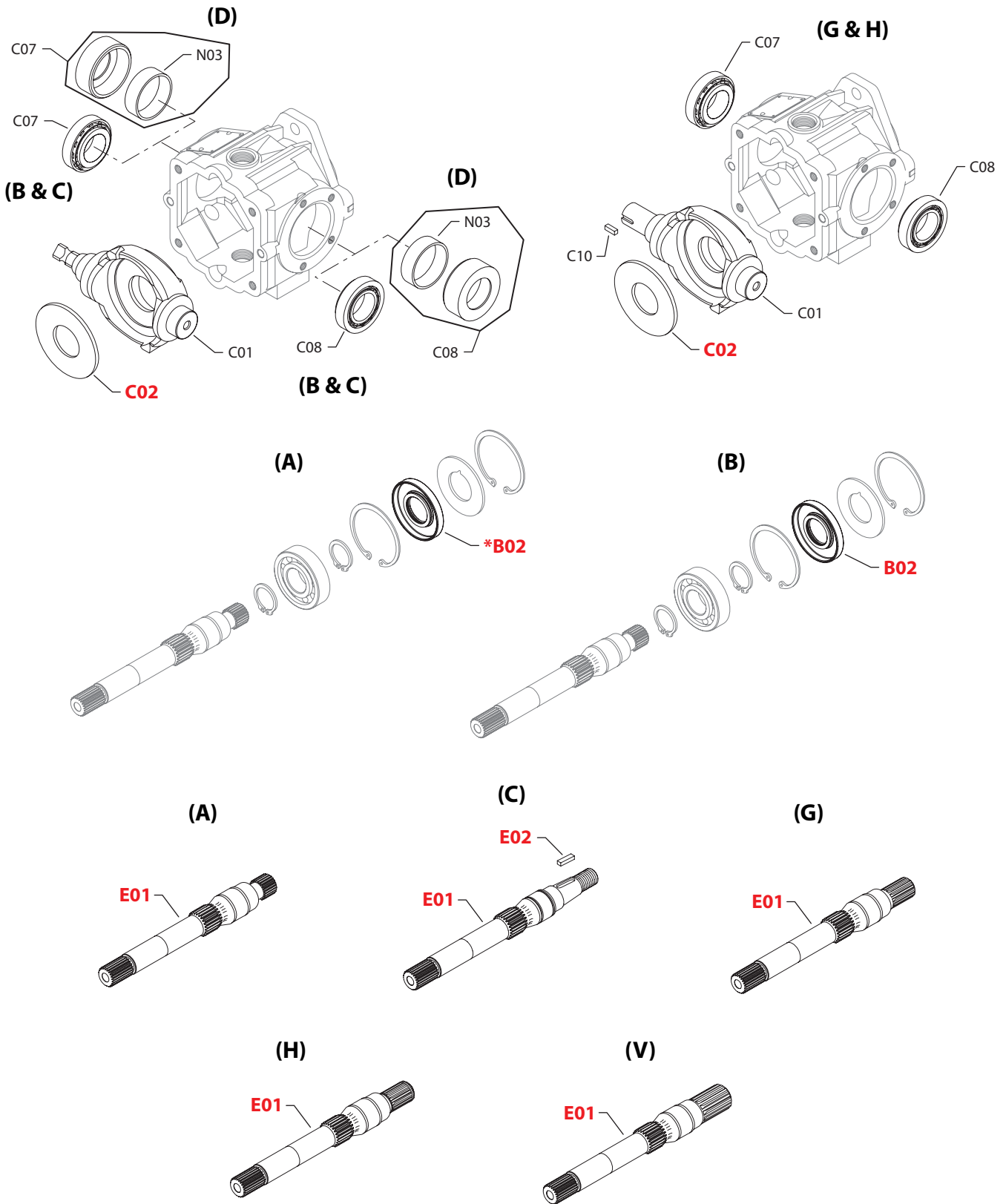


Order code





Variable displacement tandem pump



E100 589E

* = included in overhaul seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Swashplate

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B	C01	95-45		4350383	Swashplate, standard	1
	C02	95-45		4350148	Thrust plate	1
	C07	95-45		4800470	Bearing kit	1
	C08	95-45		4800470	Bearing kit	1
C	C01	95-45		11166719	Swashplate, tapped	1
	C02	95-45		4350148	Thrust plate	1
	C07	95-45		4800470	Bearing kit	1
	C08	95-45		4800470	Bearing kit	1
D	C01	99-24	07-18	4350738	Swashplate, DU bearing	1
	C02	99-24	07-18	4350148	Thrust plate	1
	C07	99-24	07-18	4250039	Bearing carrier assembly	1
	C08	99-24	07-18	4250039	Bearing carrier assembly	1
	N03	99-24	07-18	4700010	Journal bearing	2
G	C01	03-07		4350823	Swashplate, 24 mm diameter keyed, 14.6°	1
	C02	03-07		4350148	Thrust plate	1
	C07	03-07		4800470	Bearing kit	1
	C08	03-07		4800470	Bearing kit	1
	C10	05-05		1040275	Key	1
H	C01	03-07		4350822	Swashplate, 24 mm diameter keyed, 16°	1
	C02	03-07		4350148	Thrust plate	1
	C07	03-07		4800470	Bearing kit	1
	C08	03-07		4800470	Bearing kit	1
	C10	05-05		1040275	Key	1

Shaft seal

A	B02	95-45		5000689	Lip seal (SB-2003-018)	1
B	B02	13-03		11103135	Lip seal	1
C				None		

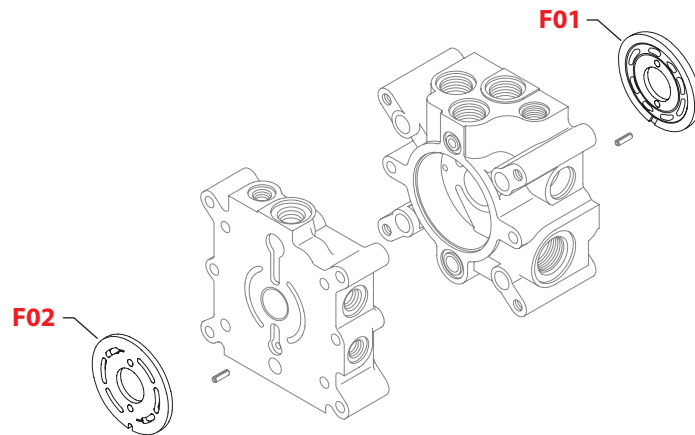
Input shaft

A	E01	95-45		4350425	Shaft, 15-tooth spline	1
C	E01	95-45		4350791	Shaft, tapered (SB-2002-021)	1
	E02	02-27		5000664	Key, square (SB-2002-021)	1
	E02	95-45	02-26	9003310-2514	Key, woodruff	1
G	E01	95-45		4350433	Shaft, 15-tooth spline, special	1
H	E01	95-45		11066019	Shaft, 15-tooth spline, no undercut, snap ring groove	1
V	E01	03-07		1715573	Shaft, 18-tooth	1



Variable displacement tandem pump

(2, 4, 5, 8, 9, B, J, K, L, M, N, R, W & Y)



E100 558E

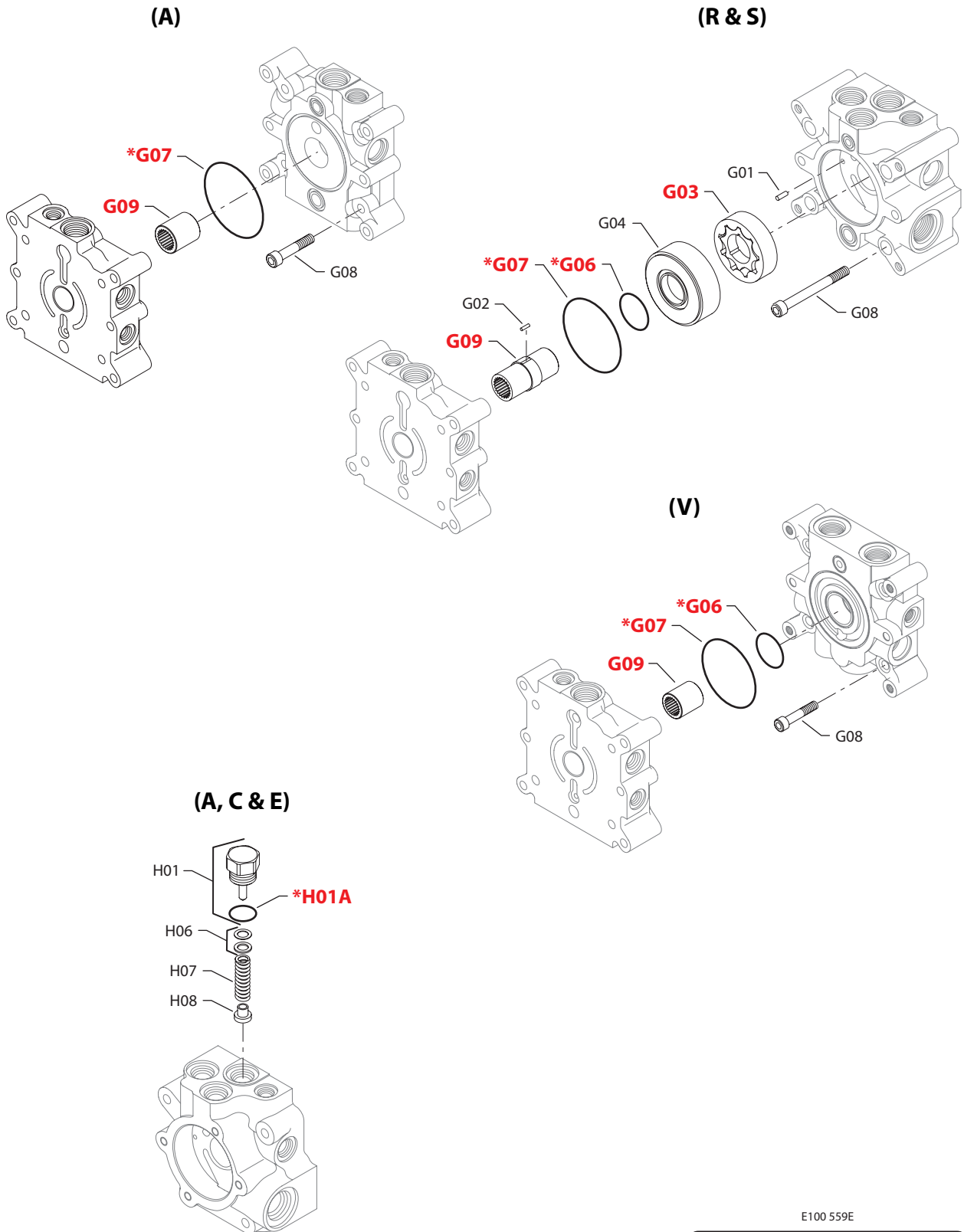
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Rotation

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
2	F01	95-50	03-29	4350729	Valve plate, CCW, 4° index	1
	F02	95-50	03-29	4350728	Valve plate, CW, 4° index	1
4	F01	97-06		4440076	Valve plate, CCW, low force	1
	F02	97-06		4440075	Valve plate, CW, low force	1
5	F01	97-11		4440075	Valve plate, CW, low force	1
	F02	97-11		4440076	Valve plate, CCW, low force	1
8	F01	03-34		4350730	Valve plate, CW, 6° index	1
	F02	03-34		4350731	Valve plate, CCW, 6° index	1
9	F01	03-21		4350728	Valve plate, CW, 4° index	1
	F02	03-21		4350729	Valve plate, CCW, 4° index	1
B	F01	95-45	03-29	4350728	Valve plate, CW, 4° index	1
	F02	95-45	03-29	4350729	Valve plate, CCW, 4° index	1
J	F01	14-38		11155056	Valve plate, CW, 5° index	1
	F02	14-38		11155058	Valve plate, CCW, 5° index	1
K	F01	14-38		11155058	Valve plate, CCW, 5° index	1
	F02	14-38		11155056	Valve plate, CW, 5° index	1
L	F01	95-45		4350158	Valve plate, CCW,	1
	F02	95-45		4350157	Valve plate, CW	1
M	F01	95-45		4350285	Valve plate, CW, 0° index	1
	F02	95-45		4350284	Valve plate, CCW, 0° index	1
N	F01	95-45		4350284	Valve plate, CCW, 0° index	1
	F02	95-45		4350285	Valve plate, CW, 0° index	1
R	F01	95-45		4350157	Valve plate, CW	1
	F02	95-45		4350158	Valve plate, CCW	1
W	F01	95-45		4350322	Valve plate, CW, quiet	1
	F02	95-45		4350323	Valve plate, CCW, quiet	1
Y	F01	95-45		4350323	Valve plate, CCW, quiet	1
	F02	95-45		4350322	Valve plate, CW, quiet	1



Variable displacement tandem pump



* = included in overhaul seal kit Q210

E100 559E

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Charge pump

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A	G07	95-45		9004100-1530	O-ring	1
	G08	95-45		654053 (9007314-1012)	Screw, M10 x 55	4
	G09	95-45		4350046	Coupling	1
R	G01	95-45		9004800-1908	Pin	1
	G02	95-45		9004800-1206	Pin	1
	G03	95-45		4800128-0001	Gerotor assembly, 16.4cc/rev	1
	G04	95-45		11111469	Gerotor spacer (SB-2013-002)	1
	G06	95-45		5000352	O-ring	1
	G07	95-45		9004100-2370	O-ring	1
	G08	95-45		9007314-1018	Screw, M10 x 90	4
	G09	95-45		11104848	Coupling (SB-2013-002)	1
	S	G01	95-45		9004800-1908	Pin
G02		95-45		9004800-1206	Pin	1
G03		95-45		4800128-0002	Gerotor assembly, 19.7cc/rev	1
G04		95-45		4800178	Gerotor spacer	1
G06		95-45		5000352	O-ring	1
G07		95-45		9004100-2370	O-ring	1
G08		95-45		9007314-1018	Screw, M10 x 90	4
G09		95-45		11104848	Coupling (SB-2013-002)	1
V		G06	03-05		9004100-1310	O-ring
	G07	03-05		9004100-1530	O-ring	1
	G08	03-05		654053 (9007314-1012)	Screw, M10 x 55	4
	G09	03-05		4350046	Coupling	1

Charge pressure relief valve/setting

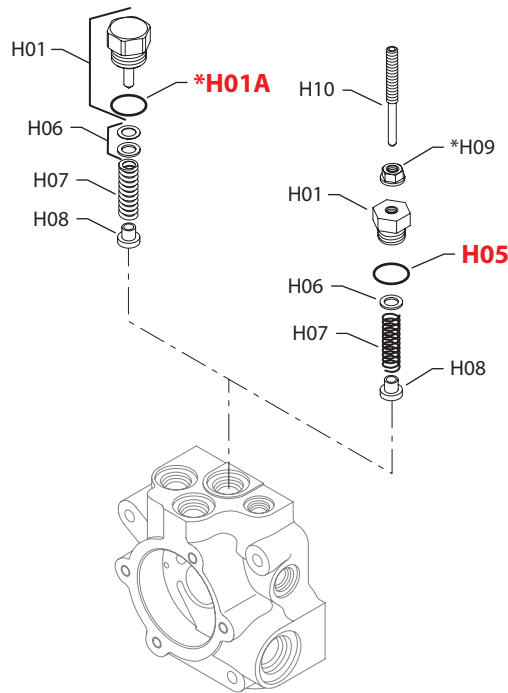
A	H01	95-45		4800308	Plug assembly/16 bar [230 psi]	1
	H01A	95-45		001149 (9004201-6200)	O-ring	1
	H06	95-45		4510027	Shim kit	1
	H07	95-45		4800176	Spring	1
	H08	95-45		4800134	Poppet	1
C	H01	95-50		4800308	Plug assembly/18 bar [260 psi]	1
	H01A	95-50		001149 (9004201-6200)	O-ring	1
	H06	95-50		4510027	Shim kit	1
	H07	95-50		4800176	Spring	1
	H08	95-50		4800134	Poppet	1
E	H01	95-45		4800308	Plug assembly/11 bar [160 psi]	1
	H01A	95-45		001149 (9004201-6200)	O-ring	1
	H06	95-45		4510027	Shim kit	1
	H07	95-45		4800176	Spring	1
	H08	95-45		4800134	Poppet	1



Variable displacement tandem pump

(F, G, H, J, N & R)

(P)



E100 588E

* = included in overhaul seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

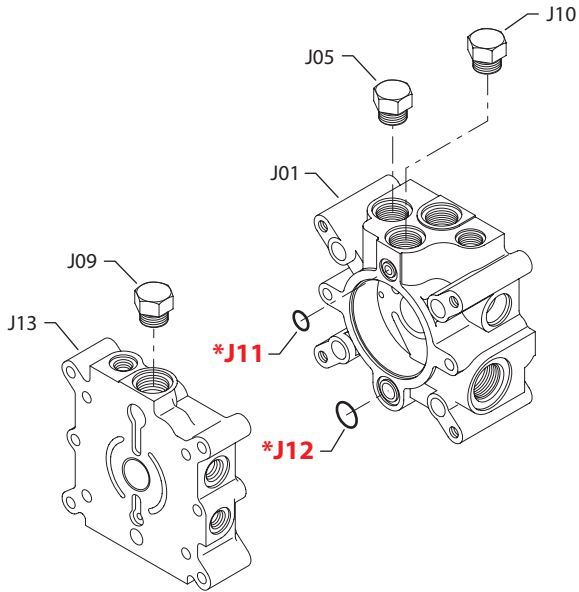

Variable displacement tandem pump
Charge pressure relief valve/setting

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
F	H01	95-45		4800308	Plug assembly/7.5 bar [110 psi]	1	
	H01A	95-45		001149 (9004201-6200)	O-ring	1	
	H06	95-45		4510027	Shim kit	1	
	H07	95-45		4800714	Spring	1	
	H08	95-45		4800134	Poppet	1	
	G	H01	95-45		4800308	Plug assembly/14 bar [200 psi]	1
H01A		95-45		001149 (9004201-6200)	O-ring	1	
H06		95-45		4510027	Shim kit	1	
H07		95-45		4800176	Spring	1	
H08		95-45		4800134	Poppet	1	
H		H01	95-45		4800308	Plug assembly/24 bar [348 psi]	1
	H01A	95-45		001149 (9004201-6200)	O-ring	1	
	H06	95-45		4510027	Shim kit	1	
	H07	95-45		11022448	Spring	1	
	H08	95-45		4800134	Poppet	1	
	J	H01	97-13		4800308	Plug assembly/22 bar [315 psi]	1
H01A		97-13		001149 (9004201-6200)	O-ring	1	
H06		97-13		4510027	Shim kit	1	
H07		97-13		4800176	Spring	1	
H08		97-13		4800134	Poppet	1	
M		H01	13-13		4800308	Plug assembly/24 bar [348 psi]	1
	H01A	13-13		001149 (9004201-6200)	O-ring	1	
	H06	13-13		4510027	Shim kit	1	
	H07	13-13		11022448	Spring	1	
	H08	13-13		4800134	Poppet	1	
	N	H01	95-45		4800308	Plug assembly/9 bar [130 psi]	1
H01A		98-25		001149 (9004201-6200)	O-ring	1	
H06		98-25		4510027	Shim kit	1	
H07		98-25		4800149	Spring	1	
H08		98-25		4800134	Poppet	1	
P		H01	95-45	00-40	4350305	Plug, anti-stall	1
	H05	95-45	00-40	001149 (9004201-6200)	O-ring	1	
	H06	95-45	00-40	356568 (9009625-0163)	Washer	1	
	H07	95-45	00-40	8800496	Spring	1	
	H08	95-45	00-40	4350299	Poppet	1	
	H09	95-45	00-40	076042 (9003509-0012)	Nut	1	
	H010	95-45	00-40	4350301	Anti-stall guide screw	1	
	R	H01	98-40		4800308	Plug assembly/6.2 bar [90 psi]	1
		H01A	98-40		001149 (9004201-6200)	O-ring	1
		H06	98-40		4510027	Shim kit	1
H07		98-40		4800714	Spring	1	
H08		98-40		4800134	Poppet	1	

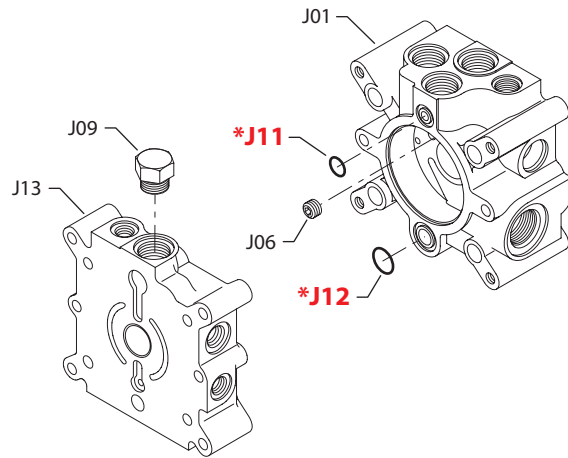


Variable displacement tandem pump

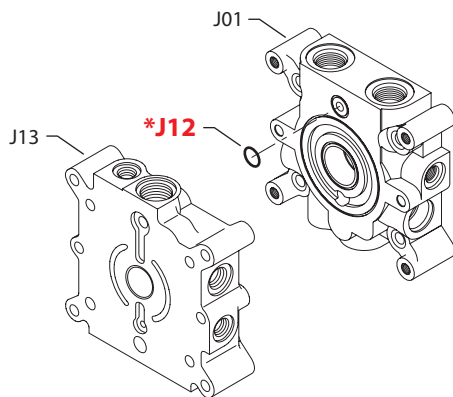
(AA & BD)



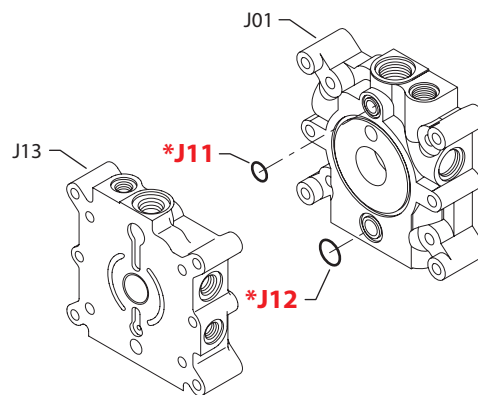
(BA)



(BE)



(NN)



E100 590E

* = included in overhaul seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Filtration

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
AA	J01	95-45		11089077	End cap (SB-2010-037)	1
	J05	95-45		001537 (9005100-8700)	Plug assembly	1
	J09	95-45		001537 (9005100-8700)	Plug assembly	1
	J10	95-45		001537 (9005100-8700)	Plug assembly	1
	J11	95-45		9004100-1140	O-ring	1
	J12	95-45		9004100-1180	O-ring	1
	J13	95-45		4350405	End cap	1
	BA	J01	95-45		11089077	End cap (SB-2010-037)
J06		95-45		001487 (9005001-2500)	Pipe plug	1
J09		95-45		001537 (9005100-8700)	Plug assembly	1
J11		95-45		9004100-1140	O-ring	1
J12		95-45		9004100-1180	O-ring	1
J13		95-45		4350405	End cap	1
BD		J01	01-22		4350713	End cap
	J05	01-22		001537 (9005100-8700)	Plug assembly	1
	J09	01-22		001537 (9005100-8700)	Plug assembly	1
	J10	01-22		001537 (9005100-8700)	Plug assembly	1
	J11	01-22		9004100-1140	O-ring	1
	J12	01-22		9004100-1180	O-ring	1
	J13	01-22		4350405	End cap	1
	BE	J01	03-05		11083594	End cap, opposing ports (SB-2010-037)
J12		03-05		511852 (9004100-1140)	O-ring	1
J13		03-05		4440222	End cap, opposing ports	1
NN	J01	95-45		11083596	End cap (SB-2010-037)	1
	J11	95-45		9004100-1140	O-ring	1
	J12	95-45		9004100-1180	O-ring	1
	J13	95-45		4350405	End cap	1

Displacement limitation

A	none
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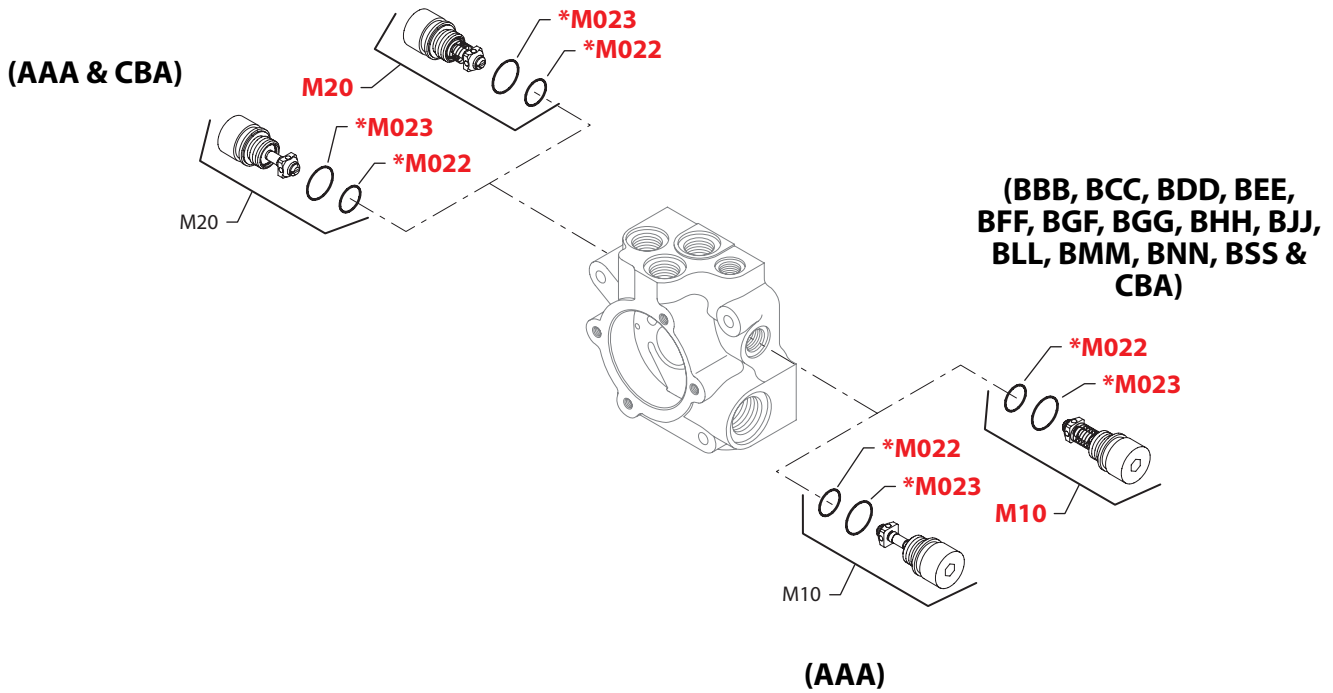
By pass valve

A	none
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Variable displacement tandem pump

(BBB, BCC, BDD, BEE,
BFF, BGF, BGG, BHH, BJJ,
BLL, BNN, BSS & BMM)



* = included in overhaul seal kit Q210

E100 550E

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
System pressure protection

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	M022	95-45		001131 (9004201-5000)	O-ring	2
	M023	95-45		9004100-2110	O-ring	2

System pressure protection

AAA	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
BBB	M10	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
	M20	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
BCC	M10	95-45		4350642	SCR valve assembly, 190 bar [2755 psi] (SB-1996-014)	1
	M20	95-45		4350642	SCR valve assembly, 190 bar [2755 psi] (SB-1996-014)	1
BDD	M10	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
	M20	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
BEE	M10	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
	M20	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
BFF	M10	95-45		4350639	SCR valve assembly, 250 bar [3625 psi] (SB-1996-014)	1
	M20	95-45		4350639	SCR valve assembly, 250 bar [3625psi] (SB-1996-014)	1
BGF	M10	96-28		4350638	SCR valve assembly, 280 bar [4060 psi]	1
	M20	96-28		4350639	SCR valve assembly, 250 bar [3625 psi]	1
BGG	M10	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
	M20	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
BHH	M10	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1
	M20	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1
BJJ	M10	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
	M20	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
BLL	M10	95-45		4350646	SCR valve assembly, 415 bar [6020 psi] (SB-1996-014)	1
	M20	95-45		4350646	SCR valve assembly, 415 bar [6020 psi] (SB-1996-014)	1
BMM	M10	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
	M20	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
BNN	M10	95-45		4350644	SCR valve assembly, 260 bar [3770 psi] (SB-1996-014)	1
	M20	95-45		4350644	SCR valve assembly, 260 bar [3770 psi] (SB-1996-014)	1
BSS	M10	95-45		4350694	SCR valve assembly, 385 bar [5580 psi]	1
	M20	95-45		4350694	SCR valve assembly, 385 bar [5580 psi]	1
CBA	M10	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1



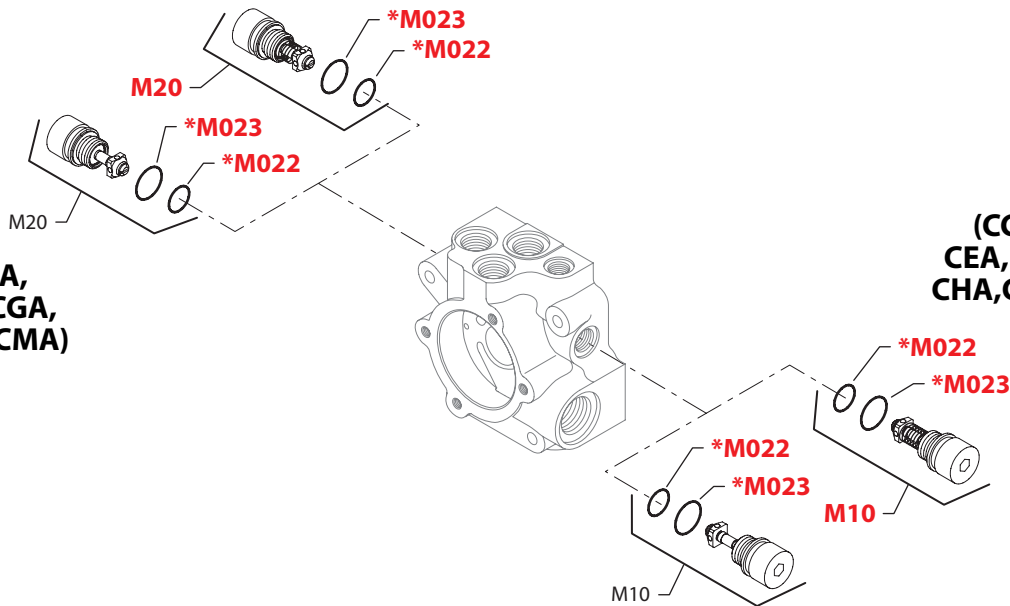
Variable displacement tandem pump

(DAB, DAC, DAD, DAE,
DAF, DAG, & DAH)

(CCA, CDA,
CEA, CFA, CGA,
CHA, CJA & CMA)

(CCA, CDA,
CEA, CFA, CGA,
CHA, CJA & CMA)

(DAB, DAC, DAD, DAE,
DAF, DAG, & DAH)



E100 550E

* = included in overhaul seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
System pressure protection

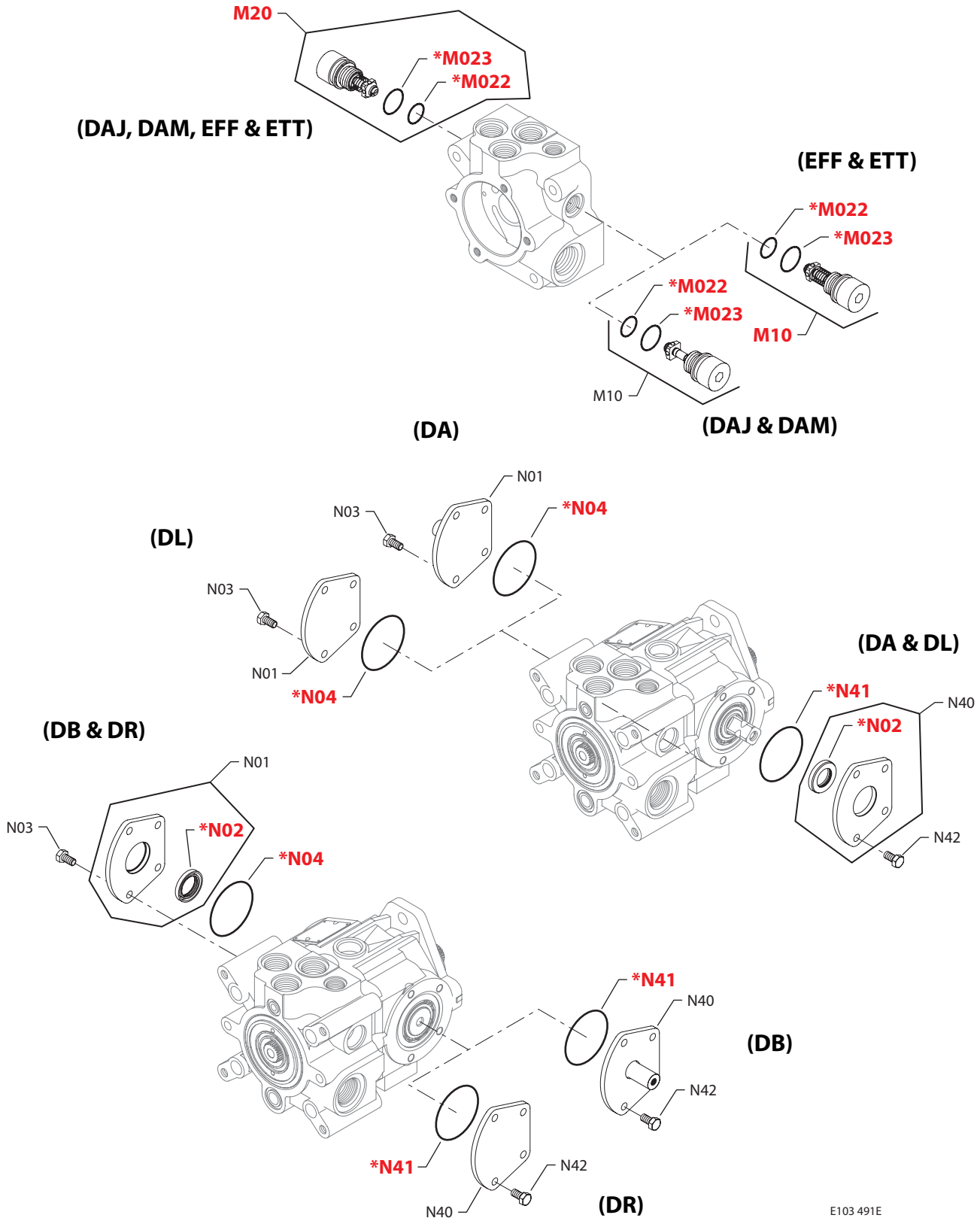
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	M022	95-45		001131 (9004201-5000)	O-ring	2
	M023	95-45		9004100-2110	O-ring	2

System pressure protection

CCA	M10	95-45		4350642	SCR valve assembly, 190 bar [2755 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CDA	M10	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CEA	M10	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CFA	M10	95-45		4350639	SCR valve assembly, 250 bar [3625 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CGA	M10	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CHA	M10	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CJA	M10	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CMA	M10	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
	M20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
DAB	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
DAC	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350642	SCR valve assembly, 190 bar [2755 psi] (SB-1996-014)	1
DAD	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
DAE	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
DAF	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350639	SCR valve assembly, 250 bar [3625 psi] (SB-1996-014)	1
DAG	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
DAH	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1



Variable displacement tandem pump



E103 491E

* = included in overhaul seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
System pressure protection

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	M022	95-45		001131 (9004201-5000)	O-ring	2
	M023	95-45		9004100-2110	O-ring	2

System pressure protection

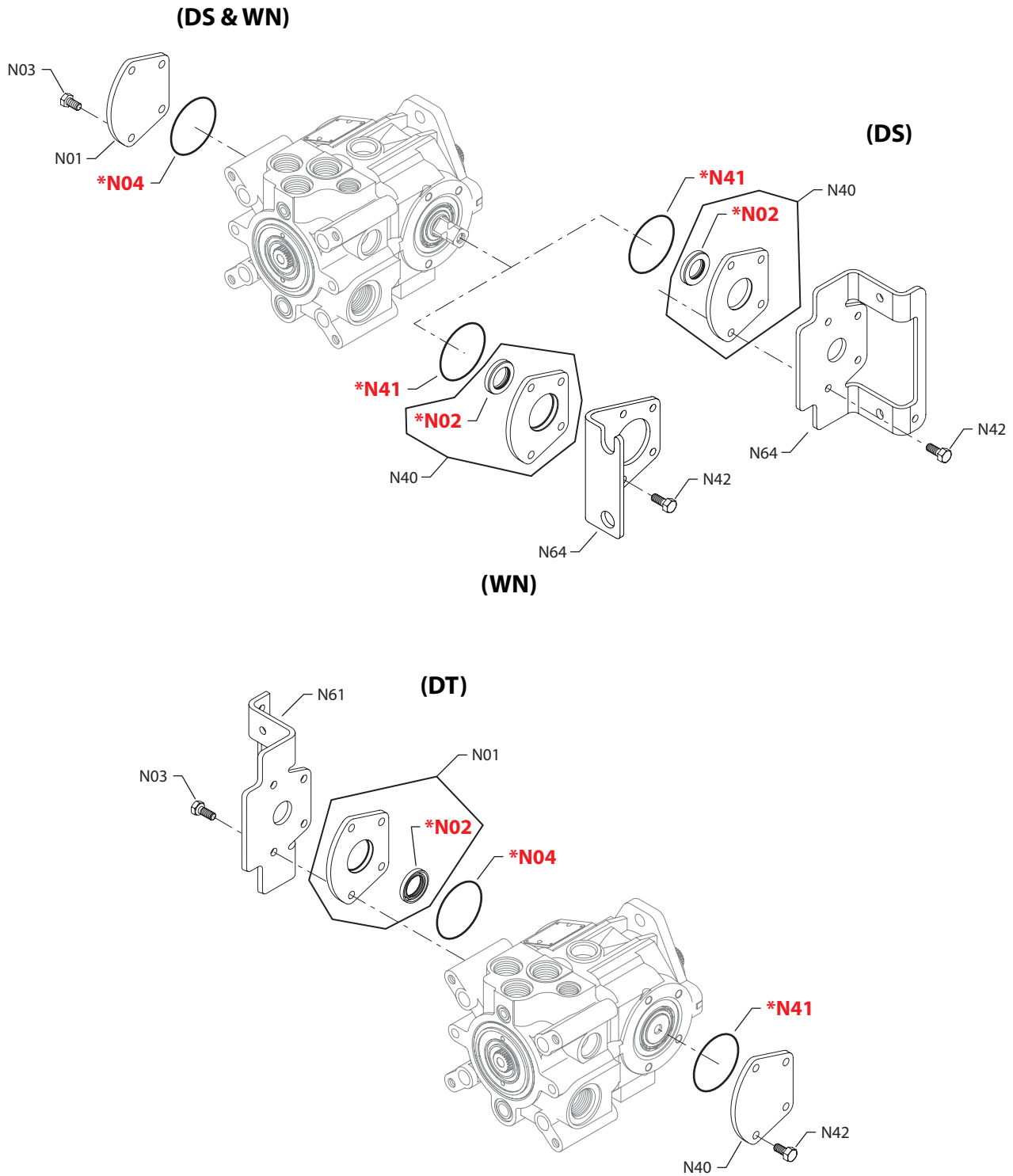
DAJ	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
DAM	M10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	M20	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
EFF	M10	98-47		4250139	SCR valve assembly, 250 bar [3625 psi]	1
	M20	98-47		4250139	SCR valve assembly, 250 bar [3625 psi]	1
ETT	M10	98-31		4350723	SCR valve assembly, 345 bar [5000 psi]	1
	M20	98-31		4350723	SCR valve assembly, 345 bar [5000 psi]	1

Direct displacement control, front pump

DA	N01	03-07		1732161-01	Trunnion cover w/support	1
	N02	03-07		5000604	Trunnion lip seal	1
	N03	03-07		378083 (9007210-0804)	Screw, M8 x 16	4
	N04	03-07		9004300-1460	O-ring	1
	N40	03-07		4350732	Trunnion cover assembly, on left side	1
	N41	03-07		9004300-1460	O-ring	1
	N42	03-07		378083 (9007210-0804)	Screw, M8 x 16	4
	DB	N01	03-07		4350732	Trunnion cover assembly, on right side
N02		03-07		5000604	Trunnion lip seal	1
N03		03-07		378083 (9007210-0804)	Screw, M8 x 16	4
N04		03-07		9004300-1460	O-ring	1
N40		03-07		1732161-01	Trunnion cover w/support	1
N41		03-07		9004300-1460	O-ring	1
N42		03-07		378083 (9007210-0804)	Screw, M8 x 16	4
DL		N01	95-45		4250027	Trunnion cover
	N02	95-45		5000604	Trunnion lip seal (SB-2000-026)	1
	N03	95-45		378083 (9007210-0804)	Screw, M8 x 16	4
	N04	95-45		9004300-1460	O-ring	1
	N40	95-45		4350732	Trunnion cover assembly, on left side (SB-1999-040)	1
	N41	95-45		9004300-1460	O-ring	1
	N42	95-45		378083 (9007210-0804)	Screw, M8 x 16	4
	DR	N01	95-45		4350732	Trunnion cover assembly, on right side (SB-1999-040)
N02		95-45		5000604	Trunnion lip seal (SB-2000-026)	1
N03		95-45		378083 (9007210-0804)	Screw, M8 x 16	4
N04		95-45		9004300-1460	O-ring	1
N40		95-45		4250027	Trunnion cover	1
N41		95-45		9004300-1460	O-ring	1
N42		95-45		378083 (9007210-0804)	Screw, M8 x 16	4



Variable displacement tandem pump



E100 591E

* = included in overhaul seal kit Q210

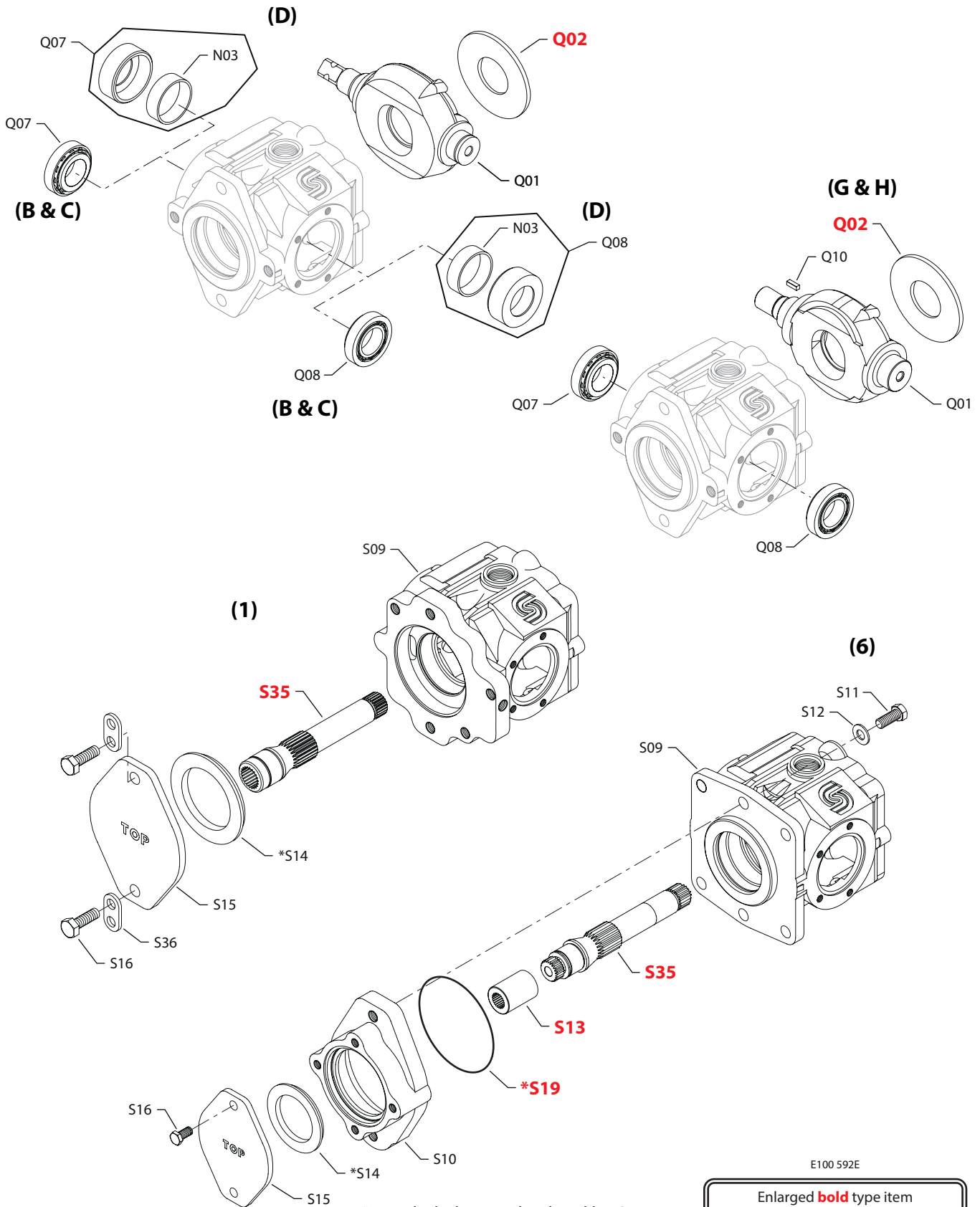
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Direct displacement control, front pump

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
DS	N01	96-07		4250027	Trunnion cover	1
	N02	96-07		5000604	Trunnion lip seal	1
	N03	96-07		378083 (9007210-0804)	Screw, M8 x 16	4
	N04	96-07		9004300-1460	O-ring	1
	N40	96-07		4350732	Trunnion cover assembly, on left side	1
	N41	96-07		9004300-1460	O-ring	1
	N42	96-07		507205	Screw, M8 x 20	4
	N64	96-07		4440413	Front guide bracket	1
	DT	N01	96-07		4350732	Trunnion cover assembly, on right side
N02		96-07		5000604	Trunnion lip seal	1
N03		96-07		507205	Screw, M8 x 20	4
N04		96-07		9004300-1460	O-ring	1
N40		96-07		4250027	Trunnion cover	1
N41		96-07		9004300-1460	O-ring	1
N42		96-07		378083 (9007210-0804)	Screw, M8 x 16	4
N61		96-07		4440413	Front guide bracket	1
WN		N01	15-44		4250027	Trunnion cover
	N02	15-44		5000604	Trunnion lip seal	1
	N03	15-44		378083 (9007210-0804)	Screw, M8 x 16	4
	N04	15-44		9004300-1460	O-ring	1
	N40	15-44		4350732	Trunnion cover assembly, on left side	1
	N41	15-44		9004300-1460	O-ring	1
	N42	15-44		507205	Screw, M8 x 20	4
	N64	15-44		11171922	Front guide bracket	1



Variable displacement tandem pump



* = included in overhaul seal kit Q210

E100 592E
 Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Swashplate

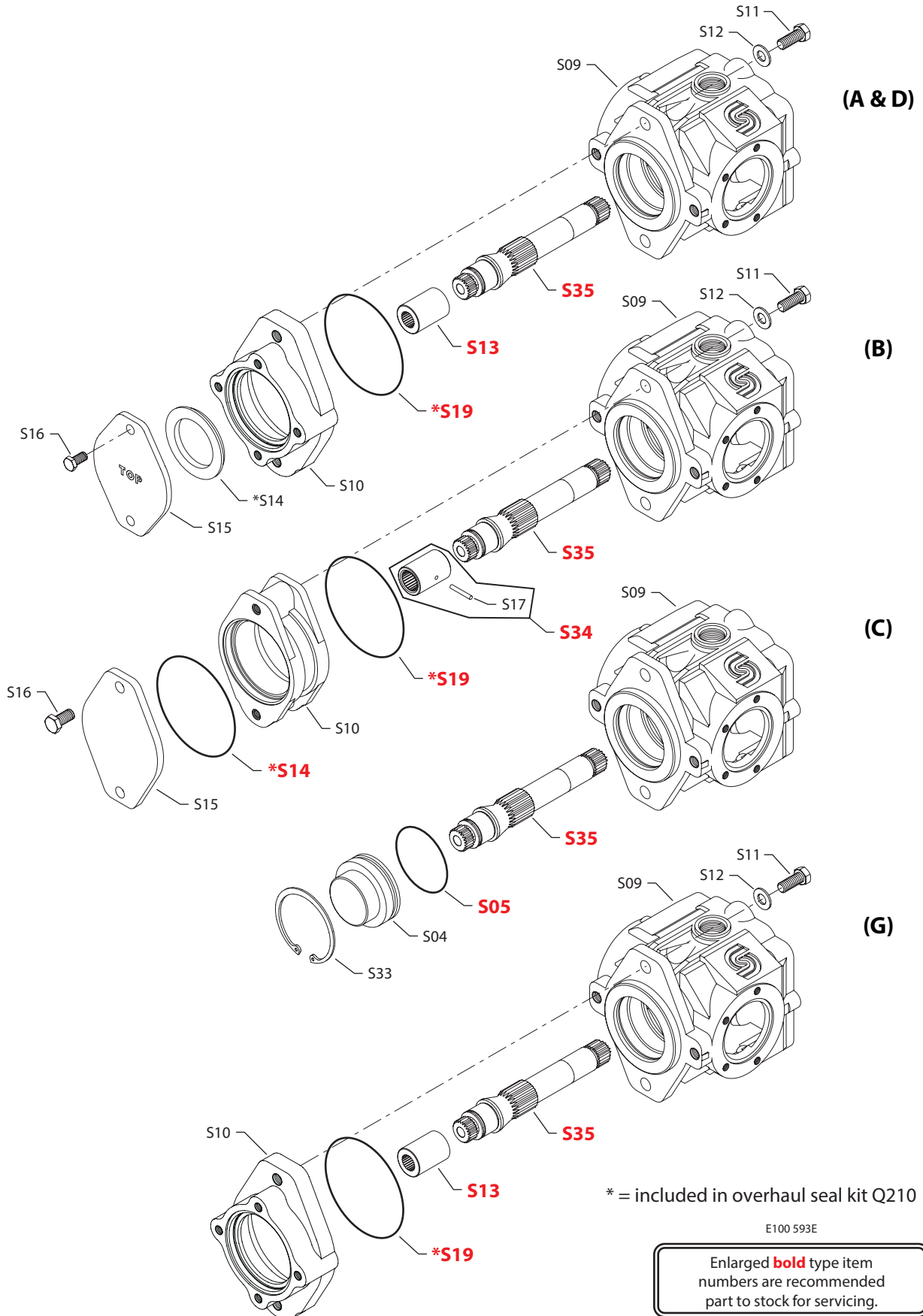
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B	Q01	95-45		4350383	Swashplate, standard	1
	Q02	95-45		4350148	Thrust plate	1
	Q07	95-45		4800470	Bearing kit	1
	Q08	95-45		4800470	Bearing kit	1
C	Q01	95-45		11166719	Swashplate, tapped	1
	Q02	95-45		4350148	Thrust plate	1
	Q07	95-45		4800470	Bearing kit	1
	Q08	95-45		4800470	Bearing kit	1
D	Q01	99-24	07-18	4350738	Swashplate, DU bearing	1
	Q02	99-24	07-18	4350148	Thrust plate	1
	Q07	99-24	07-18	4250039	Bearing carrier assembly	1
	Q08	99-24	07-18	4250039	Bearing carrier assembly	1
	N03	99-24	07-18	4700010	Journal bearing	2
G	Q01	03-07		4350823	Swashplate, 24 mm diameter keyed, 14.6°	1
	Q02	03-07		4350148	Thrust plate	1
	Q07	03-07		4800470	Bearing kit	1
	Q08	03-07		4800470	Bearing kit	1
	Q10	03-07		1040275	Key	1
H	Q01	03-07		4350822	Swashplate, 24 mm diameter keyed, 16°	1
	Q02	03-07		4350148	Thrust plate	1
	Q07	03-07		4800470	Bearing kit	1
	Q08	03-07		4800470	Bearing kit	1
	Q10	03-07		1040275	Key	1

Auxiliary mounting flange

1	S09	01-20		4440421	Housing	1
	S14	01-20		8801061	B pad seal	1
	S15	01-20		8801059	Cover plate	1
	S16	01-20		9007200-5022	Screw	2
	S35	01-20		4440194	Shaft, rear	1
	S36	01-20		9801000	Lifting bracket	2
	6	S09	03-18		4350824	Housing
S10		03-18		4800161	A flange adapter	1
S11		03-18		9007200-5022	Screw	2
S12		03-18		9009600-5391	Washer	2
S13		03-18		4350113	Coupling, 9-tooth spline	1
S14		03-18		4800482	A pad seal	1
S15		03-18		4460586	Cover plate	1
S16		03-18		9007200-3716	Screw	2
S19		03-18		9004100-1550	O-ring	1
S35		03-18		4350426	Shaft, rear	1



Variable displacement tandem pump

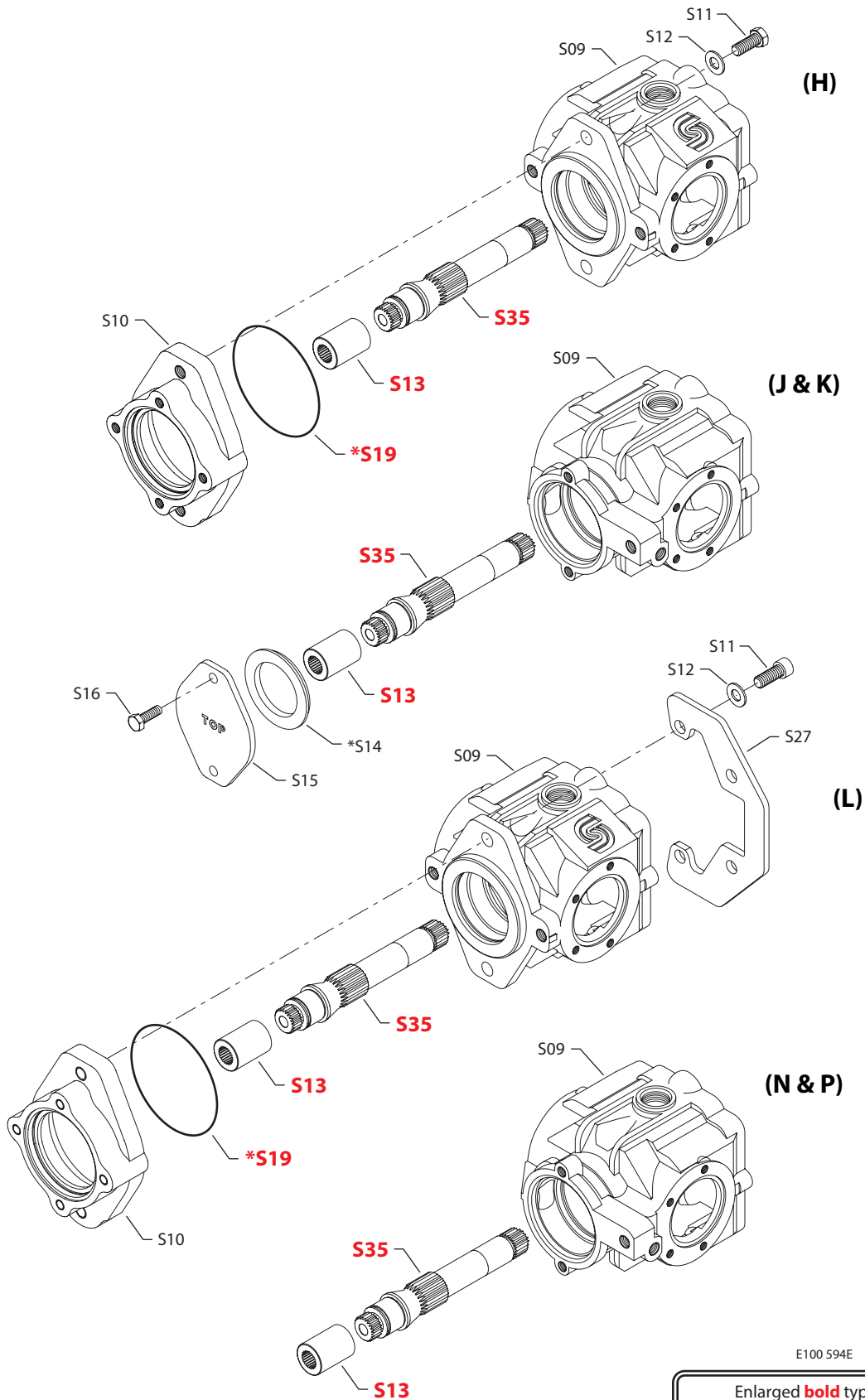



Variable displacement tandem pump
Auxiliary mounting flange

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A	S09	95-45		4350350	Housing	1
	S10	95-45		4800161	A flange adapter	1
	S11	95-45		9007200-5022	Screw	2
	S12	95-45		9009600-5391	Washer	2
	S13	95-45		4350113	Coupling, 9-tooth spline	1
	S14	95-45		4800482	A pad seal	1
	S15	95-45		4460586	Cover plate	1
	S16	95-45		9007200-3716	Screw	2
	S19	95-45		9004100-1550	O-ring	1
	S35	95-45		4350426	Shaft, rear	1
B	S09	95-45		4350350	Housing	1
	S10	95-45		4800162	B flange adapter	1
	S11	95-45		9007200-5022	Screw, with locking compound	2
	S12	95-45		9009600-5391	Washer	2
	S14	05-22		8801061	B pad seal	1
	S14	95-45	05-21	9004100-1550	O-ring	1
	S15	05-22		8801059	Cover plate	1
	S15	95-45	05-21	4460370	Cover plate	1
	S16	95-45		9007200-5022	Screw, with locking compound	2
	S17	95-45		9004700-1222	Pin	1
	S19	95-45		9004100-1550	O-ring	1
	S34	95-45		4350691	Coupling assembly, 13-tooth spline	1
	S35	95-45		4350426	Shaft, rear	1
	C	S04	95-45		4350689	Cover plate
S05		95-45		9004100-1460	O-ring	1
S09		95-45		4350350	Housing	1
S33		95-45		9006200-0281	Retaining ring	1
S35		95-45		4350426	Shaft, rear	1
D	S09	95-45		4350350	Housing	1
	S10	95-45		4800183	A flange adapter	1
	S11	95-45		9007200-5022	Screw, with locking compound	2
	S12	95-45		9009600-5391	Washer	2
	S13	95-45		4350189	Coupling, 11-tooth spline	1
	S14	95-45		4800482	A pad seal	1
	S15	95-45		4460586	Cover plate	1
	S16	95-45		9007200-3716	Screw	2
	S19	95-45		9004100-1550	O-ring	1
	S35	95-45		4350426	Shaft, rear	1
G	S09	97-06		4350350	Housing	1
	S10	97-06		4800183	A flange adapter	1
	S11	97-06		9007200-5022	Screw, with locking compound	2
	S12	97-06		9009600-5391	Washer	2
	S13	97-06		4350189	Coupling, 11-tooth spline	1
	S19	97-06		9004100-1550	O-ring	1
	S35	97-06		4350426	Shaft, rear	1



Variable displacement tandem pump



* = included in overhaul seal kit Q210

E100 594E

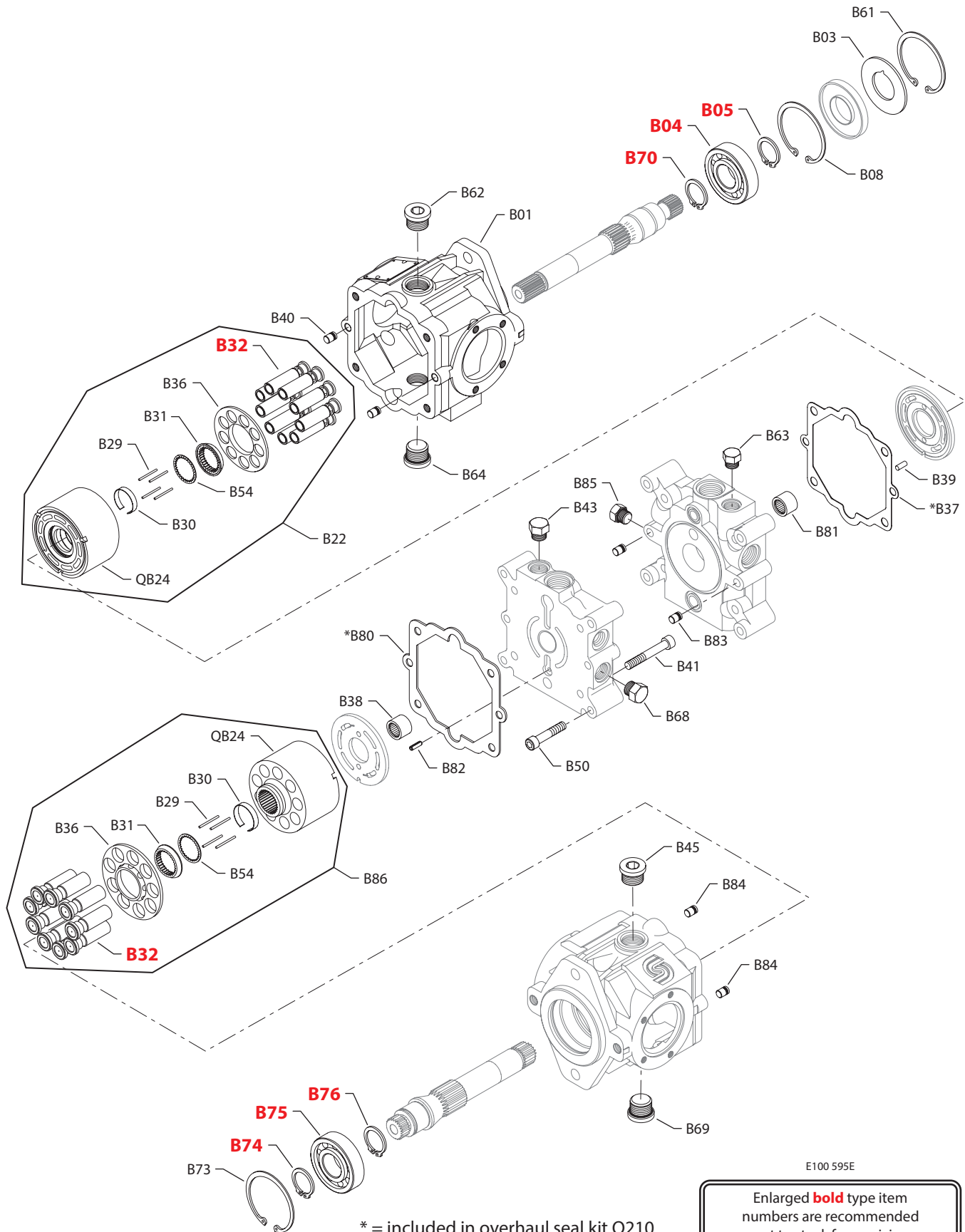
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Auxiliary mounting flange

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
H	S09	97-06		4350350	Housing	1
	S10	97-06		4800161	A flange adapter	1
	S11	97-06		9007200-5022	Screw, with locking compound	2
	S12	97-06		9009600-5391	Washer	2
	S13	97-06		4350113	Coupling, 9-tooth spline	1
	S19	97-06		9004100-1550	O-ring	1
	S35	97-06		4350426	Shaft, rear	1
	J	S09	96-22		4350382	Housing
S13		96-22		4350113	Coupling, 9-tooth spline	1
S14		96-22		4800482	A pad seal	1
S15		96-22		4460586	Cover plate	1
S16		96-22		9007200-3716	Screw	2
S35		96-22		4350426	Shaft, rear	1
K		S09	96-22		4350382	Housing
	S13	96-22		4350189	Coupling, 11-tooth spline	1
	S14	96-22		4800482	A pad seal	1
	S15	96-22		4460586	Cover plate	1
	S16	96-22		9007200-3716	Screw	2
	S35	96-22		4350426	Shaft, rear	1
	L	S09	97-13		4350350	Housing
S10		97-13		4800183	A flange adapter	1
S11		97-13		9007300-5024	Screw	2
S12		97-13		9009600-5391	Washer	2
S13		97-13		762534 (4350189)	Coupling, 11-tooth spline	1
S19		97-13		9004100-1550	O-ring	1
S27		97-13		6713377	Mounting bracket	1
S35		97-13		4350426	Shaft, rear	1
N		S09	95-45		4350382	Housing
	S13	95-45		4350113	Coupling, 9-tooth spline	1
	S35	95-45		4350426	Shaft, rear	1
P	S09	95-45		4350382	Housing	1
	S13	95-45		4350189	Coupling, 11-tooth spline	1
	S35	95-45		4350426	Shaft, rear	1



Variable displacement tandem pump



* = included in overhaul seal kit Q210

E100 595E
 Enlarged **bold** type item numbers are recommended part to stock for servicing.

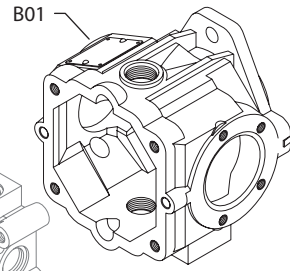

Variable displacement tandem pump
Common parts

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	B03	95-45		11083729	Seal support washer	1
	B04	95-45		5000731	Ball bearing	1
	B05	95-45		9006300-0137	Retaining ring	1
	B08	95-45		9006200-0281	Retaining ring	1
	B22	95-45		4350291	Cylinder block kit	1
	B29	95-45		9004875-0109	Holddown pin	8
	B30	95-45		4350048	Holddown pin retainer	2
	B31	95-45		4350186	Slipper retainer guide	2
	B32	95-45		4350253	Piston assembly	18
	B36	95-45		4350185	Slipper retainer	2
	B37	95-45		4350145	End cap gasket	1
	B38	95-45		510993 (9001465-0015)	Needle bearing	1
	B39	95-45		015701 (9004700-1910)	Slotted pin	1
	B40	95-45		5000529	Dowel pin (SB-1998-092)	2
	B41	95-45		654053 (9007314-1012)	Screw	4
	B43	95-45		046151 (9005100-5600)	Plug assembly	1
	B45	95-45		664524 (9005110-9000)	Plug assembly	1
	B50	11-14		5000122	Screw, M10 x 70	4
	B50	95-45	11-13	9007314-1014	Screw, M10 x 65	4
	B54	95-45		4350187	Thrust washer	2
	B61	95-45		9006200-0281	Retaining ring	1
	B62	95-45		664524 (9005110-9000)	Plug assembly	1
	B63	95-45		046151 (9005100-5600)	Plug assembly	1
	B64	95-45		664524 (9005110-9000)	Plug assembly	1
	B68	95-45		046151 (9005100-5600)	Plug assembly	1
	B69	95-45		664524 (9005110-9000)	Plug assembly	1
	B70	95-45		615245 (9006300-0137)	Retaining ring	1
	B73	95-45		9006200-0281	Retaining ring	1
	B74	95-45		615245 (9006300-0137)	Retaining ring	1
	B75	95-45		5000731	Ball bearing	1
	B76	95-45		615245 (9006300-0137)	Retaining ring	1
	B80	95-45		4350145	End cap gasket	1
	B81	95-45		510993 (9001465-0015)	Needle bearing	1
	B82	95-45		015701 (9004700-1910)	Slotted pin	1
	B83	95-45		5000529	Dowel pin (SB-1998-092)	2
	B84	95-45		5000529	Dowel pin (SB-1998-092)	2
	B85	95-45		046151 (9005100-5600)	Plug assembly	1
	B86	95-45		4350291	Cylinder block kit	1
	QB24	95-45		4350100	Cylinder block assembly	2

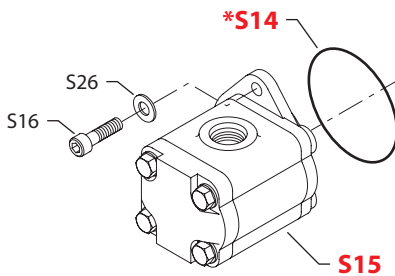


Variable displacement tandem pump

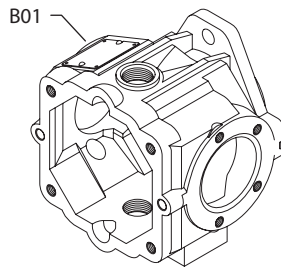
(GNJ, GNK, GNS,GSX & GUG



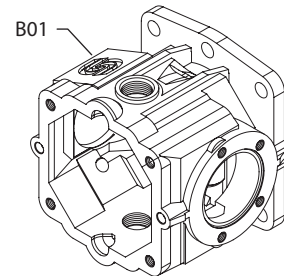
This drawing shows a generic gear pump.



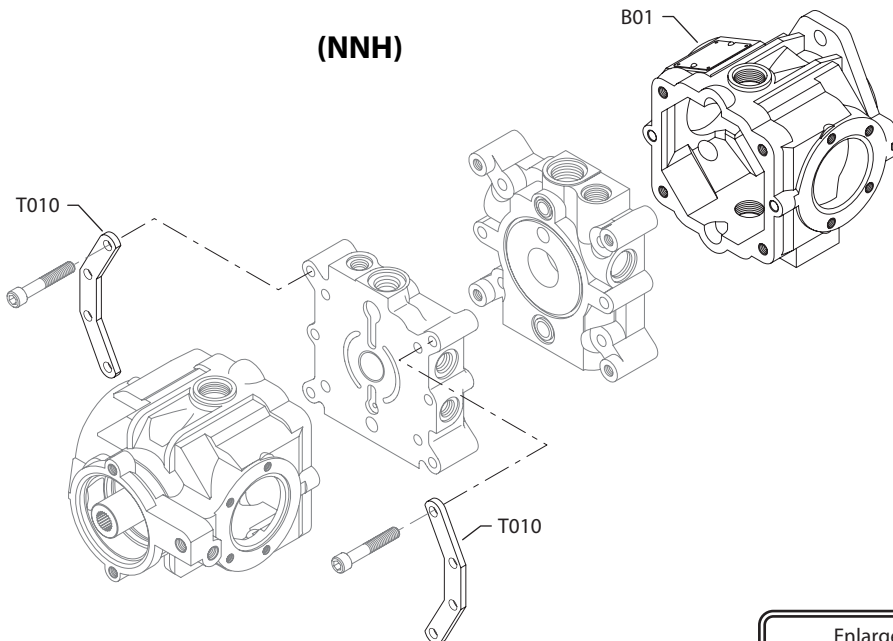
(NGC, NGV, NNC, NNK & NNN)



(NND & N0D)



(NNH)



* = included in overhaul seal kit Q210

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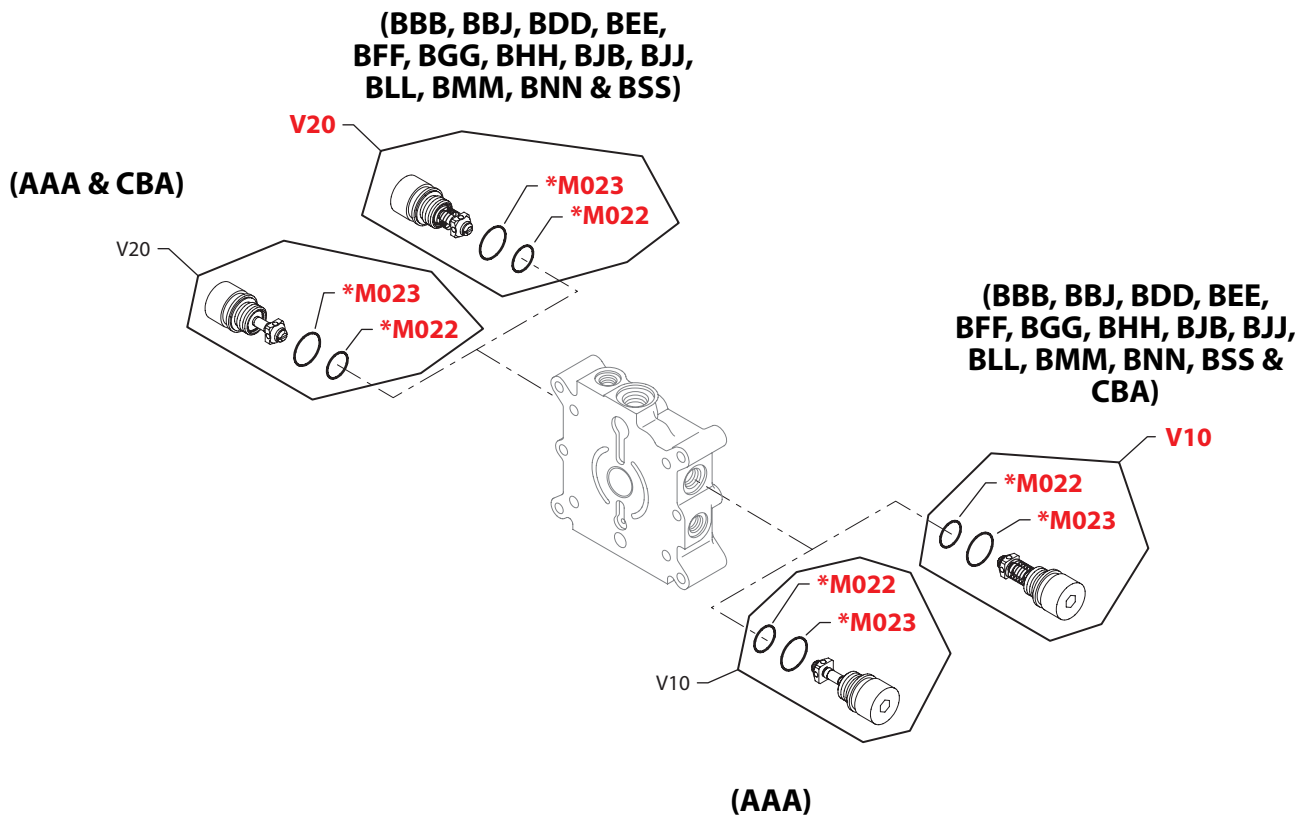
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Special hardware

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
GNJ	B01	95-45		4350350	Housing, front pump	1
	S14	95-45		5000373	O-ring	1
	S15	95-45		111.20.132.00	Gear pump	1
	S16	95-45		9007300-3722	Screw	2
	S26	95-45		9009610-4069	Washer	2
GNK	B01	95-45		4350350	Housing, front pump	1
	S14	95-45		5000373	O-ring	1
	S15	95-45		181.20.B06.00	Gear pump	1
	S16	95-45		9007300-3722	Screw	2
	S26	95-45		9009610-4069	Washer	2
GNS	B01	96-02		4350350	Housing, front pump	1
	S14	96-02		5000373	O-ring	1
	S15	96-02		111.20.347.00	Gear pump	1
	S16	96-02		9007300-3722	Screw	2
	S26	96-02		9009610-4069	Washer	2
GSX	B01	00-45		4350350	Housing, front pump	1
	S14	00-45		5000373	O-ring	1
	S15	00-45		111.20.134.00	Gear pump	1
	S16	00-45		9007300-3722	Screw	2
	S26	00-45		9009610-4069	Washer	2
GUG	B01	04-18		4350350	Housing, front pump	1
	S14	04-18		5000373	O-ring	1
	S15	04-18		163D71570	Gear pump	1
	S16	04-18		9007300-3716	Screw	2
NGC & NGV	B01	06-10		4350350	Housing, front pump	1
NNC	B01	06-10		4350350	Housing, front pump	1
NND	B01	06-10		4350824	Housing, front pump, 4 bolt	1
NNH	B01	10-29		4350350	Housing, front pump	1
	T010	10-29		11082636	Bracket	2
NNK & NNN	B01	95-45		4350350	Housing, front pump	1
NOD	B01	06-10		4350824	Housing, front pump, 4 bolt	1
NOP & NQR	B01	06-10		4350350	Housing, front pump	1
NVC	B01	11-45		4350350	Housing, front pump	1



Variable displacement tandem pump



E100 577E

* = included in overhaul seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
System pressure protection

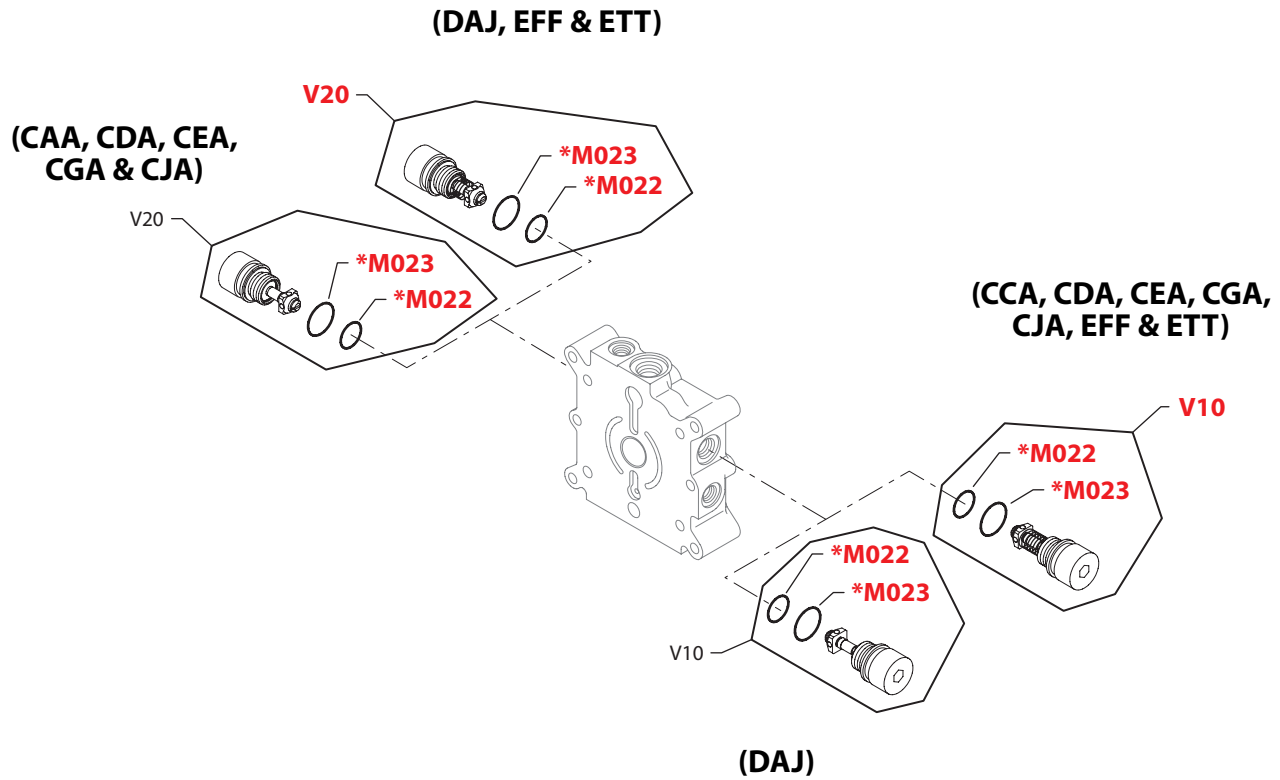
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	M022	95-45		001131 (9004201-5000)	O-ring	2
	M023	95-45		9004100-2110	O-ring	2

System pressure protection (rear pump)

AAA	V10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	V20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
BBB	V10	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
	V20	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
BBJ	V10	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
	V20	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
BDD	V10	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
	V20	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
BEE	V10	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
	V20	95-45		4350640	SCR valve assembly, 230 bar [3335 psi] (SB-1996-014)	1
BFF	V10	95-45		4350639	SCR valve assembly, 250 bar [3625 psi] (SB-1996-014)	1
	V20	95-45		4350639	SCR valve assembly, 250 bar [3625psi] (SB-1996-014)	1
BGG	V10	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
	V20	95-45		4350638	SCR valve assembly, 280 bar [4060 psi] (SB-1996-014)	1
BHH	V10	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1
	V20	95-45		4350637	SCR valve assembly, 300 bar [4350 psi] (SB-1996-014)	1
BJB	V10	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
	V20	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
BJJ	V10	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
	V20	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
BLL	V10	95-45		4350646	SCR valve assembly, 415 bar [6020 psi] (SB-1996-014)	1
	V20	95-45		4350646	SCR valve assembly, 415 bar [6020 psi] (SB-1996-014)	1
BMM	V10	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
	V20	95-45		4350635	SCR valve assembly, 140 bar [2030 psi] (SB-1996-014)	1
BNN	V10	95-45		4350644	SCR valve assembly, 260 bar [3770 psi] (SB-1996-014)	1
	V20	95-45		4350644	SCR valve assembly, 260 bar [3770 psi] (SB-1996-014)	1
BSS	V10	95-45		4350694	SCR valve assembly, 385 bar [5580 psi] (SB-1996-014)	1
	V20	95-45		4350694	SCR valve assembly, 385 bar [5580 psi] (SB-1996-014)	1
CBA	V10	95-45		4350643	SCR valve assembly, 175 bar [2528 psi] (SB-1996-014)	1
	V20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1



Variable displacement tandem pump



* = included in overhaul seal kit Q210

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Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
System pressure protection

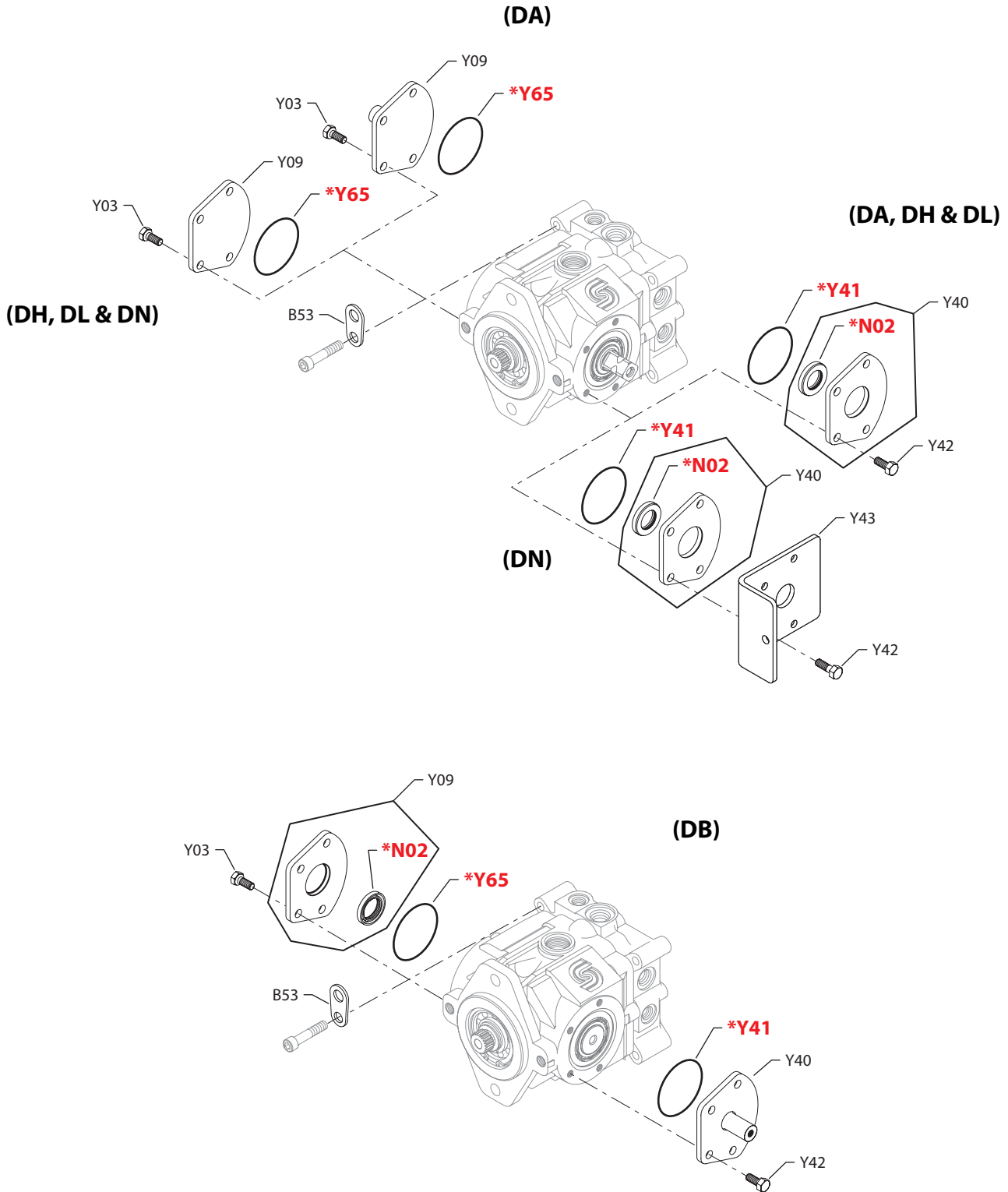
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	M022	95-45		001131 (9004201-5000)	O-ring	2
	M023	95-45		9004100-2110	O-ring	2

System pressure protection (rear pump)

CCA	V10	95-45		4350642	SCR valve assembly, 190 bar [2755 psi] (SB-1996-014)	1
	V20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CDA	V10	95-45		4350641	SCR valve assembly, 210 bar [3045 psi] (SB-1996-014)	1
	V20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
CEA	V10	99-17		4350640	SCR valve assembly, 230 bar [3335 psi]	1
	V20	99-17		4350634	Check valve poppet assembly	1
CGA	V10	98-24		4350638	SCR valve assembly, 280 bar [4060 psi]	1
	V20	98-24		4350634	Check valve poppet assembly	1
CJA	V10	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
	V20	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
DAJ	V10	95-45		4350634	Check valve poppet assembly (SB-1996-014)	1
	V20	95-45		4350636	SCR valve assembly, 345 bar [5000 psi] (SB-1996-014)	1
EFF	V10	98-47		4250139	SCR valve assembly, 250 bar [3625 psi]	1
	V20	98-47		4250139	SCR valve assembly, 250 bar [3625 psi]	1
ETT	V10	98-31		4350723	SCR valve assembly, 345 bar [5000 psi]	1
	V20	98-31		4350723	SCR valve assembly, 345 bar [5000 psi]	1



Variable displacement tandem pump



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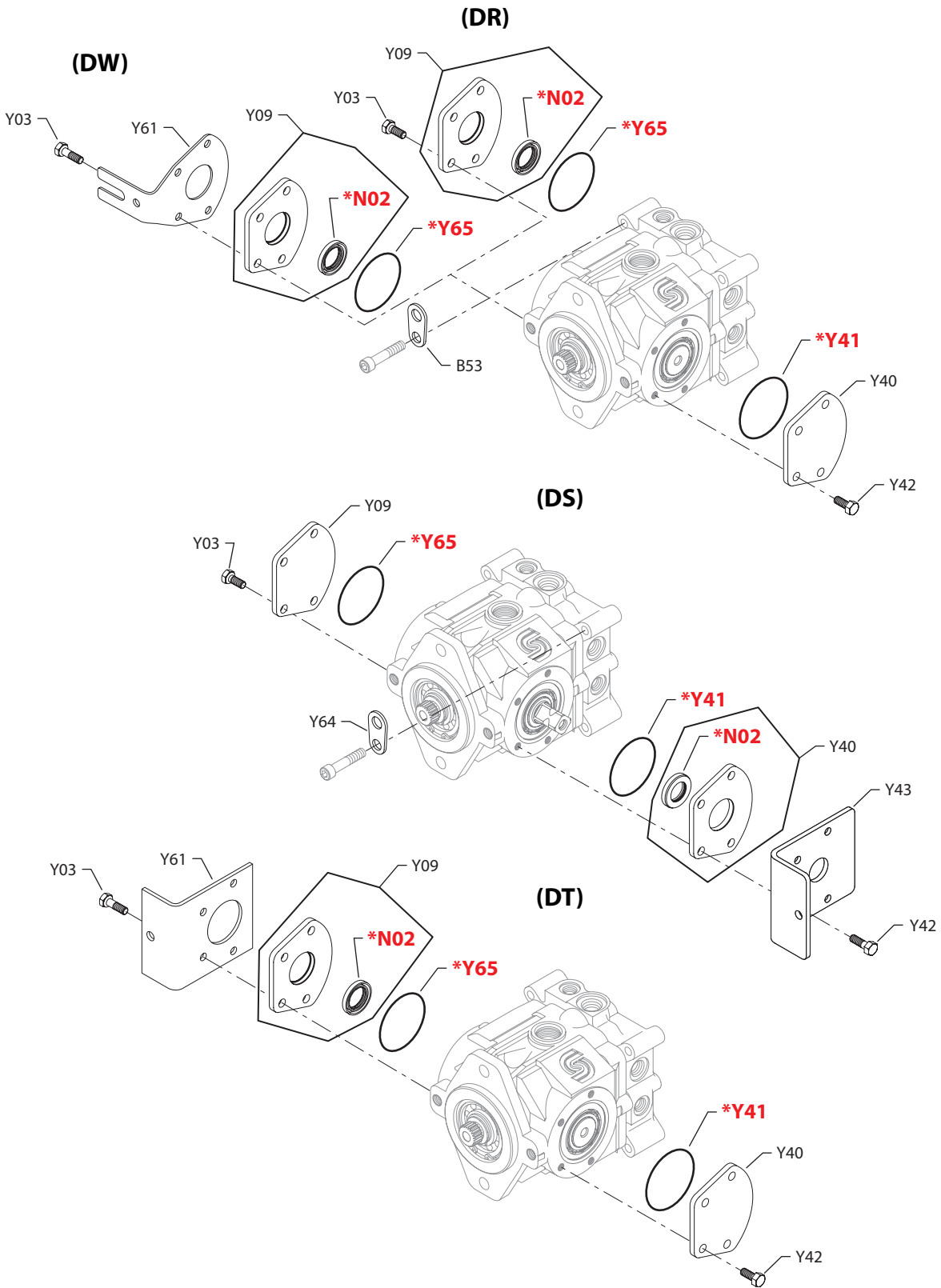
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Direct displacement control, rear pump

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
DA	B53	03-07		8800565	Lifting bracket	1
	N02	03-07		5000604	Trunnion lip seal	1
	Y03	03-07		378083 (9007210-0804)	Screw, M8 x 16	4
	Y09	03-07		1732161-01	Trunnion cover w/support	1
	Y40	03-07		4350732	Trunnion cover assembly, on left side	1
	Y41	03-07		9004300-1460	O-ring	1
	Y42	03-07		378083 (9007210-0804)	Screw, M8 x 16	4
	Y65	03-07		9004300-1460	O-ring	1
DB	B53	03-07		8800565	Lifting bracket	1
	N02	03-07		5000604	Trunnion lip seal	1
	Y03	03-07		378083 (9007210-0804)	Screw, M8 x 16	4
	Y09	03-07		4350732	Trunnion cover assembly, on right side	1
	Y40	03-07		1732161-01	Trunnion cover w/support	1
	Y41	03-07		9004300-1460	O-ring	1
	Y42	03-07		378083 (9007210-0804)	Screw, M8 x 16	4
	Y65	03-07		9004300-1460	O-ring	1
DH	N02	10-42		5000604	Trunnion lip seal (SB-2000-026)	1
	Y03	10-42		378083 (9007210-0804)	Screw, M8 x 16	4
	Y09	10-42		4250027	Trunnion cover	1
	Y40	10-42		4350732	Trunnion cover assembly, on left side (SB-1999-040)	1
	Y41	10-42		9004300-1460	O-ring	1
	Y42	10-42		378083 (9007210-0804)	Screw, M8 x 16	4
	Y65	10-42		9004300-1460	O-ring	1
DL	B53	95-45		8800565	Lifting bracket	1
	N02	95-45		5000604	Trunnion lip seal (SB-2000-026)	1
	Y03	95-45		378083 (9007210-0804)	Screw, M8 x 16	4
	Y09	95-45		4250027	Trunnion cover	1
	Y40	95-45		4350732	Trunnion cover assembly, on left side (SB-1999-040)	1
	Y41	95-45		9004300-1460	O-ring	1
	Y42	95-45		378083 (9007210-0804)	Screw, M8 x 16	4
	Y65	95-45		9004300-1460	O-ring	1
DN	N02	98-24		5000604	Trunnion lip seal (SB-2000-026)	1
	Y03	98-24		378083 (9007210-0804)	Screw, M8 x 16	4
	Y09	98-24		4250027	Trunnion cover	1
	Y40	98-24		4350732	Trunnion cover assembly, on left side (SB-1999-040)	1
	Y41	98-24		9004300-1460	O-ring	1
	Y42	98-24		507205	Screw, M8 x 20	4
	Y43	98-24		4440414	Guide bracket	1
	Y65	98-24		9004300-1460	O-ring	1



Variable displacement tandem pump



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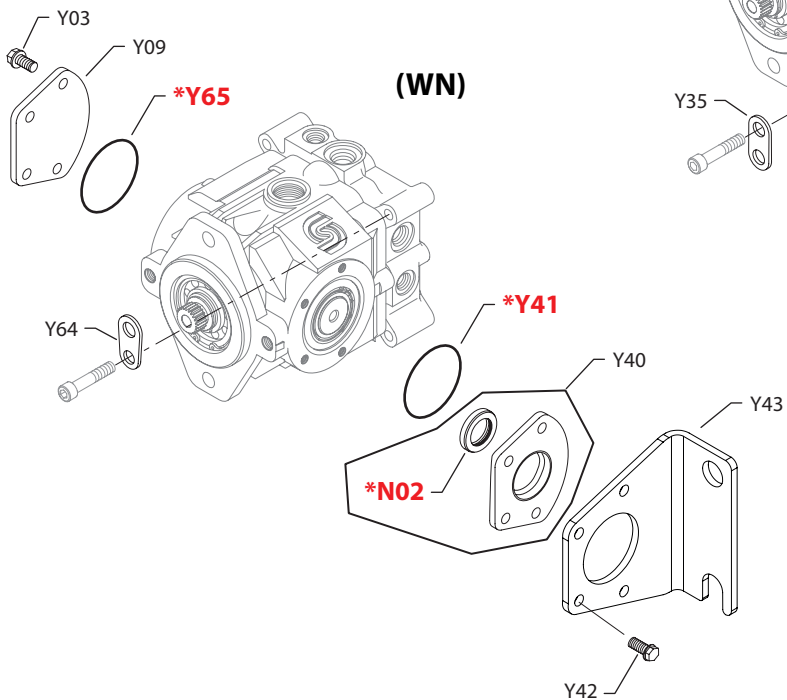
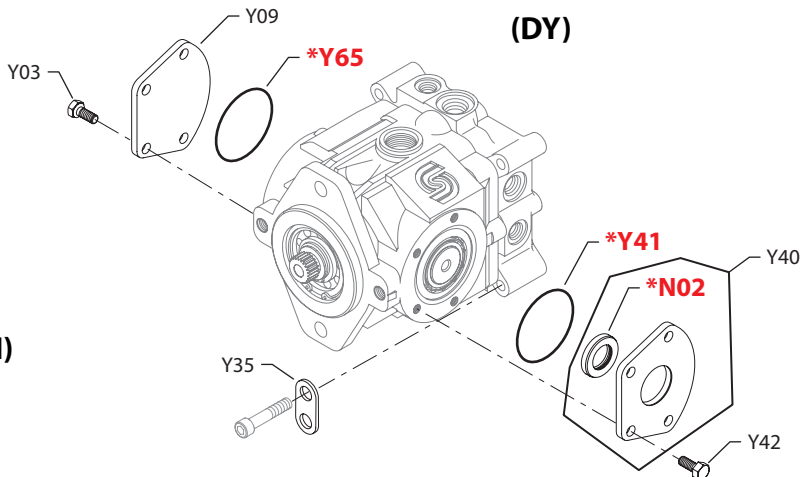
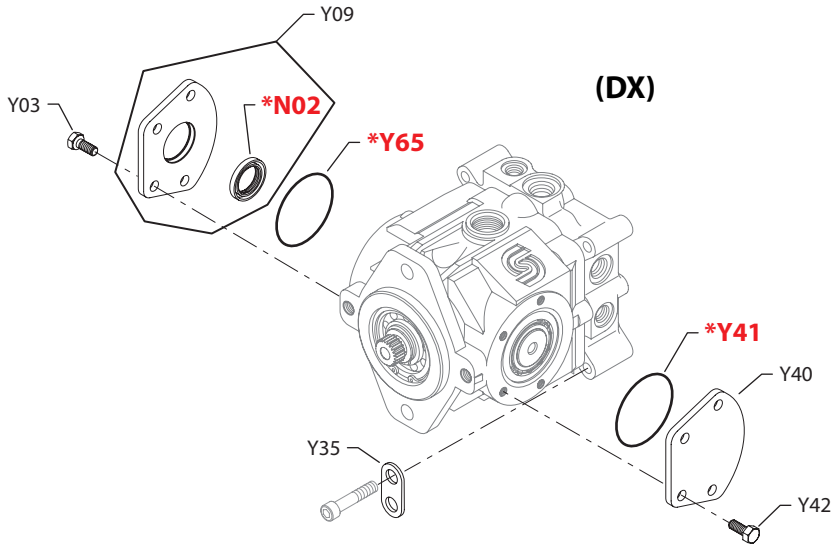
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Direct displacement control, rear pump

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
DR	B53	95-45		8800565	Lifting bracket	1
	N02	95-45		5000604	Trunnion lip seal (SB-2000-026)	1
	Y03	95-45		378083 (9007210-0804)	Screw, M8 x 16	4
	Y09	95-45		4350732	Trunnion cover assembly, on right side (SB-1999-040)	1
	Y40	95-45		4250027	Trunnion cover	1
	Y41	95-45		9004300-1460	O-ring	1
	Y42	95-45		378083 (9007210-0804)	Screw, M8 x 16	4
	Y65	95-45		9004300-1460	O-ring	1
	DS	N02	96-07		5000604	Trunnion lip seal
Y03		96-07		378083 (9007210-0804)	Screw, M8 x 16	4
Y09		96-07		4250027	Trunnion cover	1
Y40		96-07		4350732	Trunnion cover assembly, on left side	1
Y41		96-07		9004300-1460	O-ring	1
Y42		96-07		507205	Screw, M8 x 20	4
Y43		96-07		4440414	Guide bracket	1
Y64		96-07		8800565	Lifting bracket	1
Y65		96-07		9004300-1460	O-ring	1
DT		N02	96-07		5000604	Trunnion lip seal
	Y03	96-07		507205	Screw, M8 x 20	4
	Y09	96-07		4350732	Trunnion cover assembly, on left side	1
	Y40	96-07		4250027	Trunnion cover	1
	Y41	96-07		9004300-1460	O-ring	1
	Y42	96-07		378083 (9007210-0804)	Screw, M8 x 16	4
	Y61	98-24		4440414	Guide bracket	1
	Y65	96-07		9004300-1460	O-ring	1
	DW	B53	96-07		8800565	Lifting bracket
N02		96-07		5000604	Trunnion lip seal	1
Y03		96-07		507205	Screw, M8 x 20	4
Y09		96-07		4350732	Trunnion cover assembly, on left side	1
Y40		96-07		4250027	Trunnion cover	1
Y41		96-07		9004300-1460	O-ring	1
Y42		96-07		378083 (9007210-0804)	Screw, M8 x 16	4
Y61		98-24		4350761	Trunnion bracket	1
Y03		96-07		507205	Screw, M8 x 20	4
Y65		96-07		9004300-1460	O-ring	1



Variable displacement tandem pump



* = included in overhaul seal kit Q210

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Enlarged **bold** type item numbers are recommended part to stock for servicing.


Variable displacement tandem pump
Direct displacement control, rear pump

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
DX	N02	99-22		5000604	Trunnion lip seal (SB-2000-026)	1
	Y03	99-22		378083 (9007210-0804)	Screw, M8 x 16	4
	Y09	99-22		4350732	Trunnion cover assembly, on right side	1
	Y35	99-22		8800565	Lifting bracket	1
	Y40	99-22		4250027	Trunnion cover	1
	Y41	99-22		9004300-1460	O-ring	1
	Y42	99-22		378083 (9007210-0804)	Screw, M8 x 16	4
	Y65	99-22		9004300-1460	O-ring	1
	DY	N02	96-28		5000604	Trunnion lip seal (SB-2000-026)
Y03		96-28		378083 (9007210-0804)	Screw, M8 x 16	4
Y09		96-28		4250027	Trunnion cover	1
Y35		96-28		8800565	Lifting bracket	1
Y40		96-28		4350732	Trunnion cover assembly, on left side (SB-1999-040)	1
Y41		96-28		9004300-1460	O-ring	1
Y42		96-28		378083 (9007210-0804)	Screw, M8 x 16	4
Y65		96-28		9004300-1460	O-ring	1
WN		N02	96-07		5000604	Trunnion lip seal
	Y03	96-07		378083 (9007210-0804)	Screw, M8 x 16	4
	Y09	96-07		4250027	Trunnion cover	1
	Y40	96-07		4350732	Trunnion cover assembly, on left side	1
	Y41	96-07		9004300-1460	O-ring	1
	Y42	96-07		507205	Screw, M8 x 20	4
	Y43	96-07		11171922	Bracket	1
	Y64	96-07		8800565	Lifting bracket	1
	Y65	96-07		9004300-1460	O-ring	1


Variable displacement tandem pump
Overhaul seal kit

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	Q210	95-45		11181821	Overhaul seal kit, MPT035/44D	1
	B02	95-45		5000689	Lip seal (SB-2003-018)	1
	B37	95-45		4350145	End cap gasket	1
	B80	95-45		4350145	End cap gasket	1
	G06	95-45		5000352	O-ring, .139 x 1.609, nitrile, 90D	1
	G06	95-45		9004100-1310	O-ring, .103 x 1.674, nitrile, 70D	1
	G07	95-45		9004100-1530	O-ring, .103 x 3.487, nitrile, 70D	1
	G07	95-45		9004100-2370	O-ring, .139 x 3.359, nitrile, 70D	1
	H01A	95-45		001149 (9004201-6200)	O-ring, .097 x .755, nitrile, 90D	1
	J11	95-45		511852 (9004100-1140)	O-ring, .103 x .612, nitrile, 70D	1
	J12	95-45		511853 (9004100-1180)	O-ring, .103 x .862, nitrile, 70D	1
	M022	95-45		001131 (9004201-5000)	O-ring, .087 x .644, nitrile, 90D	2
	M023	95-45		9004100-2110	O-ring, .139 x .796, nitrile, 70D	2
	N02	95-45		5000604	Trunnion lip seal	2
	N04	95-45		9004300-1460	O-ring, rectangular	1
	N41	95-45		9004300-1460	O-ring, rectangular	1
	S05	95-45		9004100-1460	O-ring, .103 x 2.612, nitrile, 70D	1
	S14	95-45		5000373	O-ring, .103 x 3.237, nitrile, 90D	1
	S14	95-45		9004100-1550	O-ring, .103 x 3.987, nitrile, 70D	1
	S19	95-45		9004100-1550	O-ring, .103 x 3.987, nitrile, 70D	1
	Y41	95-45		9004300-1460	O-ring, rectangular	1
	Y65	95-45		9004300-1460	O-ring, rectangular	1



Service Bulletin: SB-1996-014

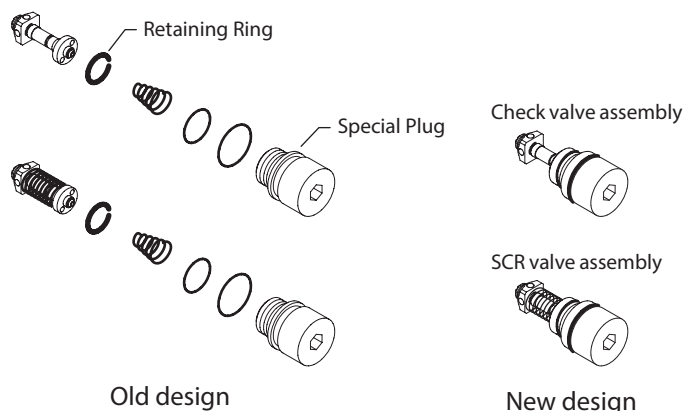
Products affected Series 40: M25, M35, M44 pumps, and tandem pumps

Subject Redesign the retention method in check valve assemblies

Description As a product improvement, Sauer-Danfoss changed the retention method in the check valve assembly, and SCR valve assembly. The old design allowed the check valve and SCR valve assembly to be disassembled. That retention method had the potential to hang up the valves on the retaining ring. The new design uses a different style. The retaining ring will not hang up on the valve; however, it does not allow the assembly to be taken apart.

All new repairs, conversions, or purchases of a check valve or SCR valve require the entire assembly be exchanged.

The new and old assemblies are totally interchangeable. The special plug part number 4350182, and the internal retaining ring part number 4350183, are obsolete. They are no longer available as service parts.



Models affected All Series 40: M25, M35, and M44 single and tandem pumps

Serial numbers This change became effective at serial number 96-40-xxxxx.

Part numbers affected

Description	Old part number	New part number	Relief valve set point
Poppet-check valve ass'y	3103348	4350634	N/A
SCR valve assembly	3103375-0140	4350635	140 bar [2030 psi]
SCR valve assembly	3103375-0175	4350643	175 bar [2528 psi]
SCR valve assembly	3103375-0190	4350642	190 bar [2755 psi]
SCR valve assembly	3103375-0210	4350641	210 bar [3045 psi]
SCR valve assembly	3103375-230	4350640	230 bar [3335 psi]
SCR valve assembly	3103375-250	4350639	250 bar [3625 psi]
SCR valve assembly	3103375-260	4350644	260 bar [3770 psi]
SCR valve assembly	3103375-0280	4350638	280 bar [4060 psi]
SCR valve assembly	3103375-0300	4350637	300 bar [4350 psi]
SCR valve assembly	3103375-0325	4350645	325 bar [4712 psi]
SCR valve assembly	3103375-0345	4350636	345 bar [5000 psi]
SCR valve assembly	3103375-0415	4350646	415 bar [6020 psi]

Parts disposition ■ Interchangeable



Service Bulletin: SB-1998-092

Products affected Series 40: M35 and M44 variable motors, variable pumps, and tandem pumps

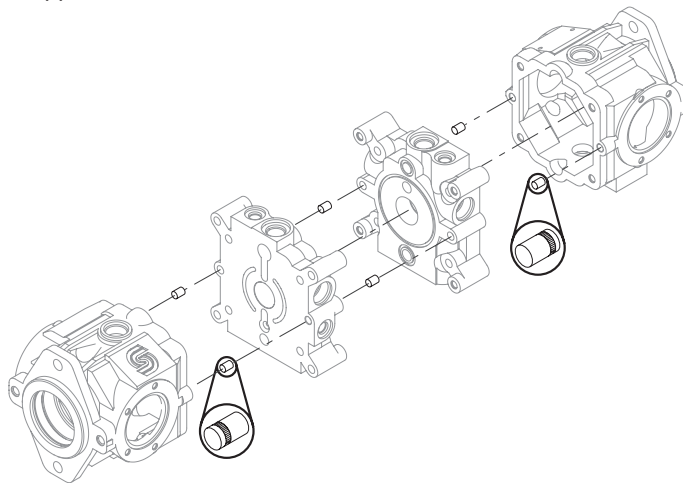
Subject Housing to end cap dowel pin change

Description Sauer-Danfoss introduced a design improvement to the dowel pins that align the variable housing and end cap for the Series 40: M35 and M44 variable motors, variable pumps, and tandem variable pumps.

Each variable motor and variable pump assembly uses two dowel pins to align the end cap to the pump housing. The assembly is designed so the dowel pin is installed in the variable housing before the end cap is positioned on the assembly. The tandem variable pump uses the same dowel pin to align the two halves of the tandem pump assembly. Previously, a slip fit existed between the holes in the variable housing and the pin.

The design of the dowel pin changed to incorporate a knurled section on the pin. The fit between the dowel pin and the pilot hole in the variable housing changed to a slight interference fit. This change improves the serviceability of the motor and pump assembly, by reducing the potential for the pins to dislodge from the housing when servicing the product.

To help identify this change, we have a new dowel pin part number. The new pin is completely interchangeable with the old pin. The old pin remains available as a service item, since it is in a variety of Sauer-Danfoss applications.



Models affected M35-4xxx, 4354xxx and 4444xxx variable displacement motors
M35-2xxx, 4352xxx and 4442xxx variable displacement pumps
M91-35xxx, 4355xxx and 4445xxx tandem pumps

Serial numbers This change became effective at serial number A-99-10-xxxxx

Part numbers affected	Old dowel pin	New dowel pin
	5000529	9004800-3708

Parts disposition

- Interchangeable
- Use parts in stock

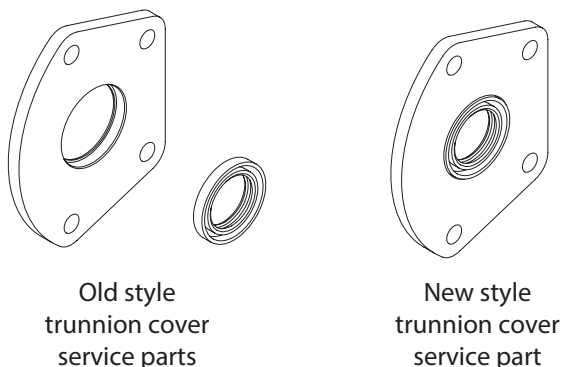


Service Bulletin: SB-1999-040

Products affected Series 40: M25, M35, and M44 pumps

Subject Trunnion cover/seals

Description As a quality improvement, Sauer-Danfoss is preassembling trunnion seals into the trunnion cover for all Series 40 variable and tandem direct displacement pumps. The trunnion cover/seal assembly and the trunnion seal is available as a service part. The trunnion cover is no longer available as a service part.



Models affected Service parts for all Series 40: M25, M35, and M44 pumps

Serial numbers Service part (not applicable).

Part numbers affected

Item description	Part number
Trunnion cover assembly	4350732
Lip seal	5000465
Trunnion cover	4250025 (no longer available as a service part)

Parts disposition

- Interchangeable
- Use parts in stock



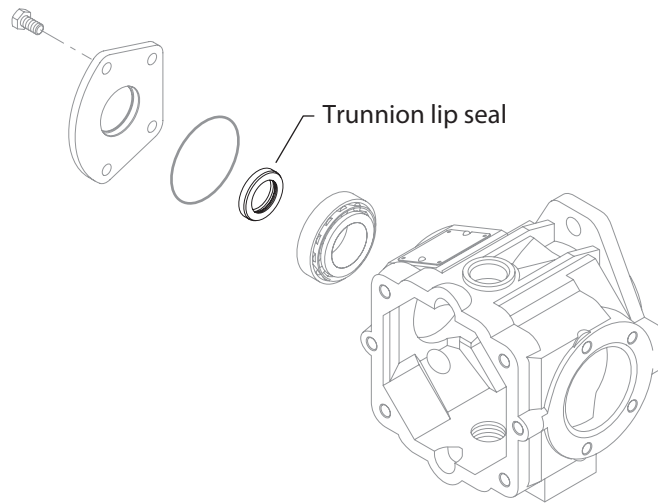
Service Bulletin: SB-2000-026A

Products affected Series 40: M25, M35, and M44 pumps and variable motors

Subject Trunnion seal change

Description As a product improvement, Sauer-Danfoss made a design change to the trunnion seal on Series 40: M25, M35, and M44 pumps and variable motors. The dust lip is extended, allowing more installation concentricity tolerance, and more forgiving during installation. Now there will be fewer low-hour trunnion seal failures caused by improper installation.

The new seal is interchangeable with the old seal. Sauer-Danfoss recommends that the seal be replaced when servicing these units. The old seal (5000465) remains available as it is in other Sauer-Danfoss product lines.



Models affected Series 40: M25, M35 and M44 pumps and variable motors

Serial numbers This change became effective at serial number K-00-46-xxxxx

Part numbers affected

Item description	Old part number	New part number
Trunnion seal	5000465	5000604

Parts disposition ■ Interchangeable

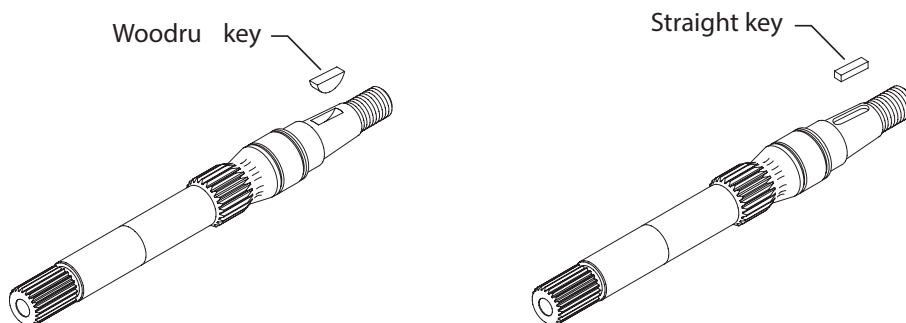


Service Bulletin: SB-2002-021

Products affected Series 40: M25, M35, M44, M46, and LV pumps and motors

Subject Change from woodruff key to straight key on tapered shaft

Description Sauer-Danfoss uses a straight key rather than a woodruff key in tapered shafts on all Series 40 pumps and motors. Tapered shafts requiring a woodruff key are obsolete. The woodruff key, however, remains available for service requirements. Customers requiring a replacement shaft need the straight key.



Models affected Series 40: M25, M35, M44, M46, and LV pumps and motors using tapered shafts

Serial numbers This change will become effective during the 2002 build year.

Part numbers affected

Old part number	New part number	Description
9003310-2514	-	Key-woodruff, .248 x .875
-	5000664	Key-square, .250 x .750
4250012	4250164	Shaft, tapered
4254500	4254568	Shaft, tapered
4350390	4350805	Shaft, tapered
4350432	4350791	Shaft, tapered
4460309	4461308	Shaft, tapered/9t. aux.
4461290	4461302	Shaft, tapered/13t. aux.
4460577	4461309	Shaft, tapered
4460804	4461306	Shaft, 13-tooth/tapered aux.
4460772	4461307	Shaft, tapered

Parts disposition

- Interchangeable if shaft and key are both replaced
- Use parts in stock
- Scrap new parts and apply for credit

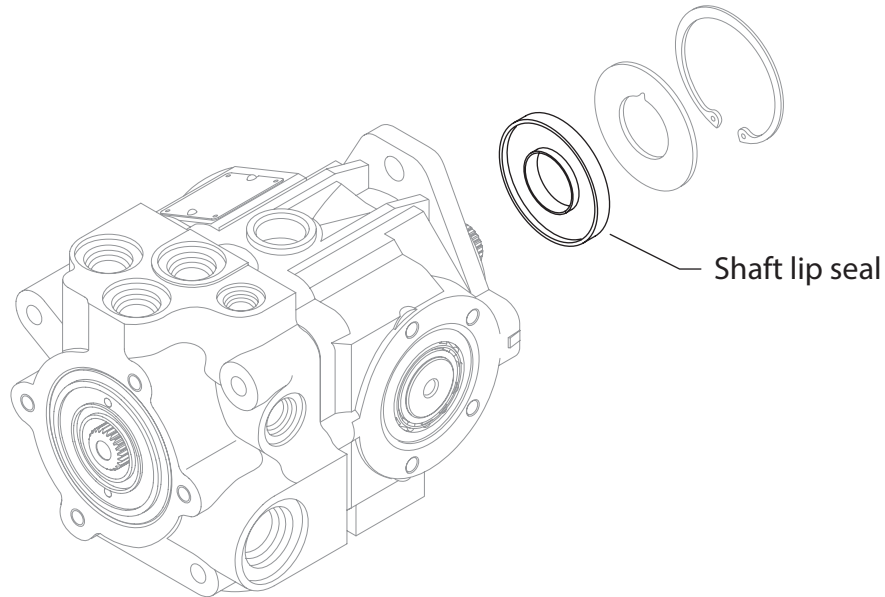


Service Bulletin: SB-2003-018

Products affected M35 and M44 pumps and variable motors

Subject Shaft seal change

Description As a product improvement, Sauer-Danfoss has improved the design of the shaft lip seal. The new seal is a single piece design instead of a crimped two-piece design.



Models affected M35, and M44 pumps and variable motors

Serial numbers This change became effective at serial number K-03-49-xxxxx.

Part numbers affected

Item description	Old part number	New part number
Lip seal	9008000-0121	5000689

Parts disposition ■ Interchangeable

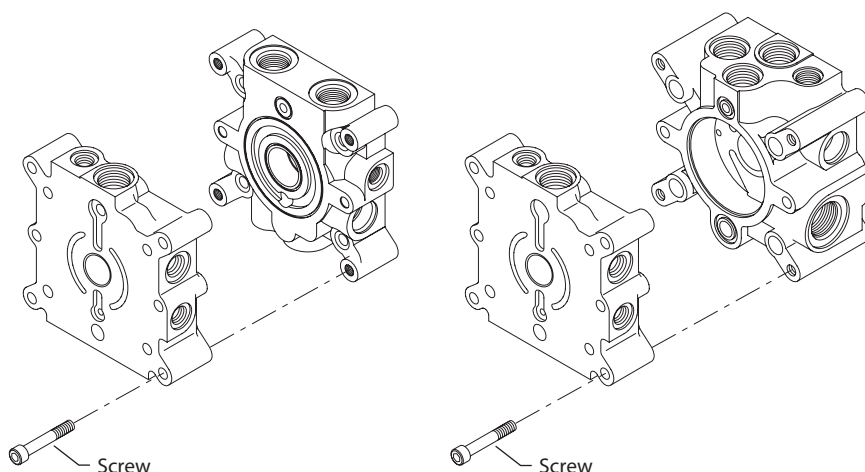


Service Bulletin: SB-2010-037

Products affected Series 40 M35 and M44 tandem pumps

Subject End cap tap depth and p/n changes

Description As a product improvement Sauer-Danfoss is changing the tap depth of the end cap to end cap mounting holes. In the case where you have to replace the end cap you will need to order the appropriate one as per the attached cross reference list because the old end cap design will no longer be produced. The new design has deeper tapped mounting holes.



Models affected All Series 40 M35 and M44 tandem pumps.

Serial numbers This change became effective at serial number A11-13-XXXXX . (1 Apr 2011)

Part numbers affected

Item description	Old part number	New part number
End cap	4440223	11083594
End cap	4350256	11089077
End cap	4350406	11083596
Screw	9007314-1014	5000122

When using an old end cap, the old screw must be used. When using a new end cap, either screw may be used.

Parts disposition

- Interchangeable - old to new
- Use parts in stock

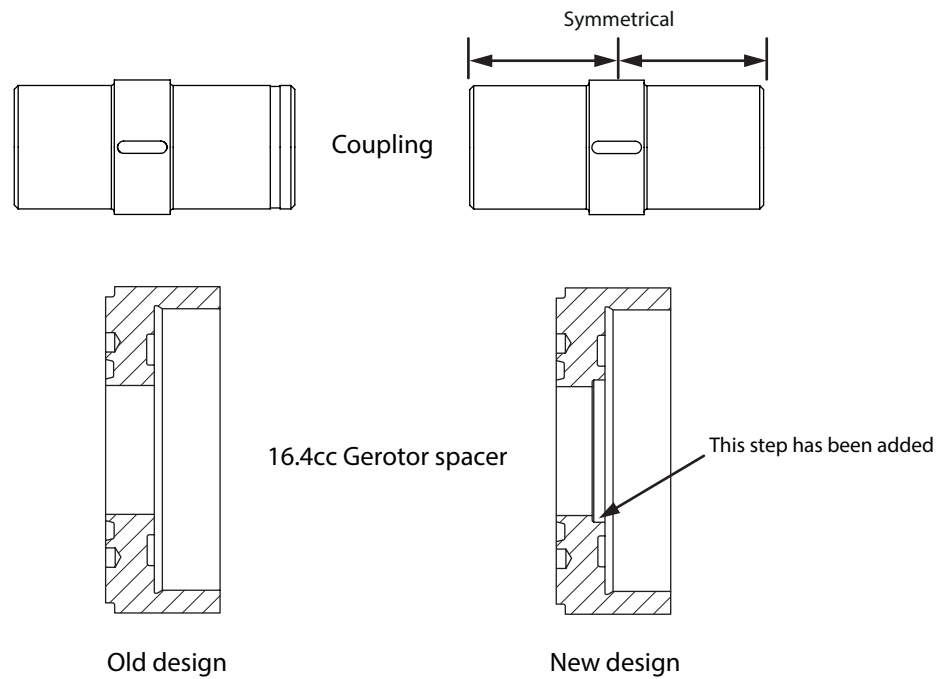


Service Bulletin: SB-2013-002

Products affected Series 40 M35 and M44 tandem pumps

Subject Charge pump coupling and gerotor spacer change

Description Sauer-Danfoss has changed the 16.4cc gerotor spacer and the charge pump coupling in Series 40 M35 and M44 tandem pumps as a product improvement. This change will eliminate the non-symmetrical coupling and the need for the coupling to be installed in the proper orientation.



Models affected All Series 40 M35 and M44 tandem pumps with integrated charge pump.

Serial numbers This change became effective at serial number A13-03-XXXXX . (23 Jan 2013)

Part numbers affected

Item description	Old part number	New part number
Charge pump coupling	4350090	11104848
Gerotor spacer, 16.4cc	4800177	11111469
Gerotor spacer, 19.7cc	4800178	4800178

Parts disposition Must use new 16.4cc gerotor spacer with new coupling
New coupling may be used with old 19.7cc gerotor spacer



Notes



Notes



Notes



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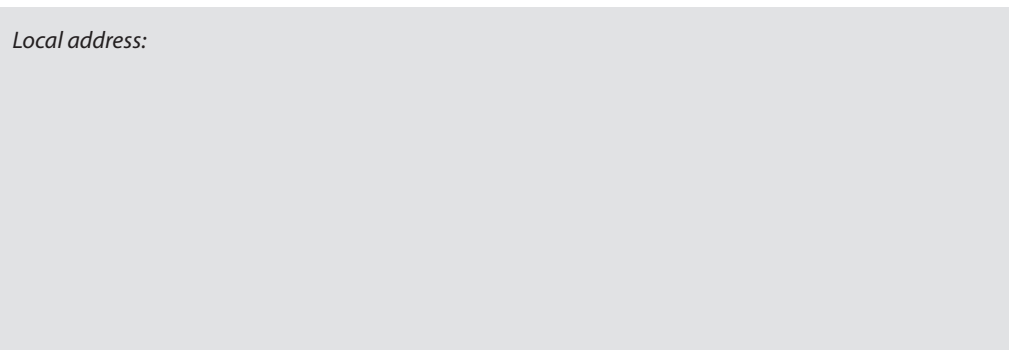
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