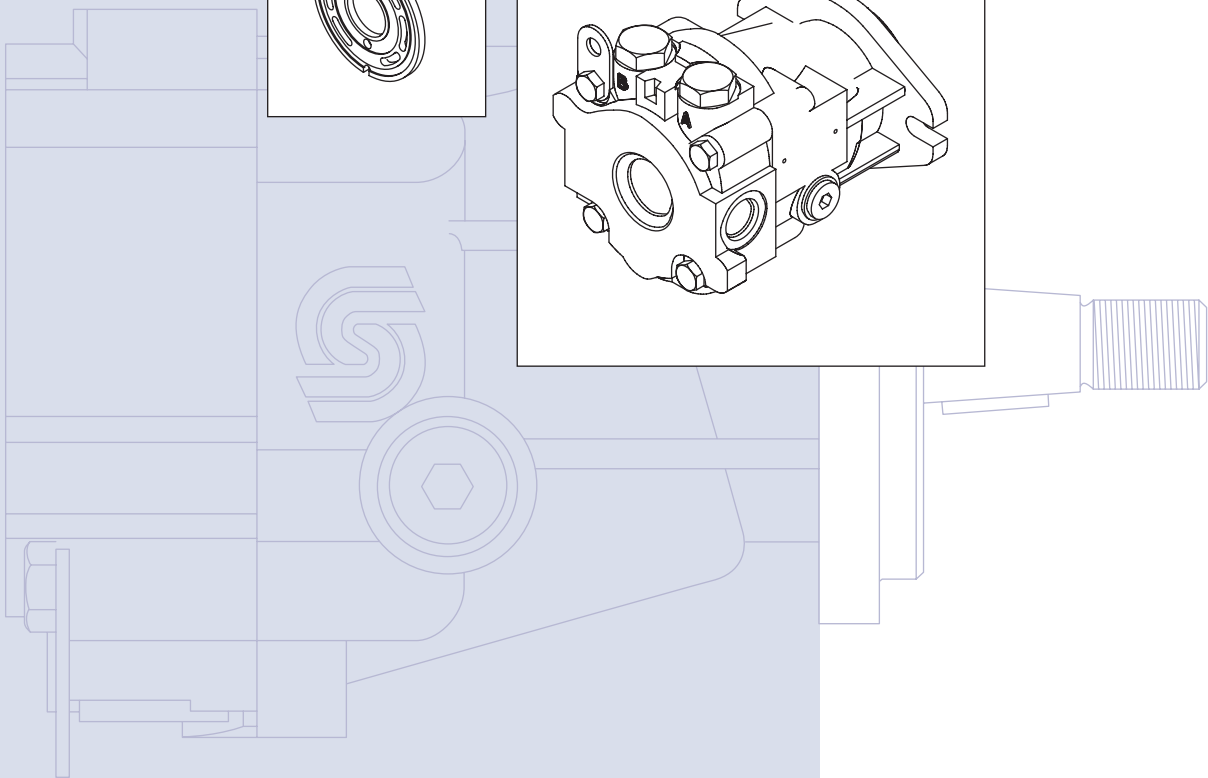
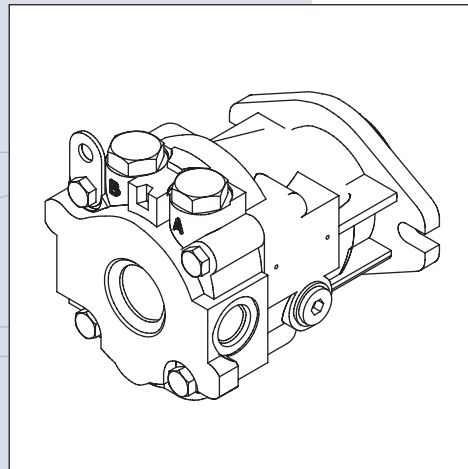
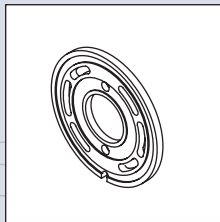
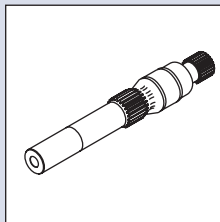
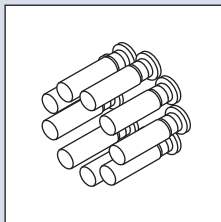


Series 40
MMF035D and
MMV035D
Axial Piston Motors

Parts Manual





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**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 fixed and variable displacement motors. Use the parts listed when performing minor repairs, major repairs, or conversions on the Series 40: M35 motors.

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

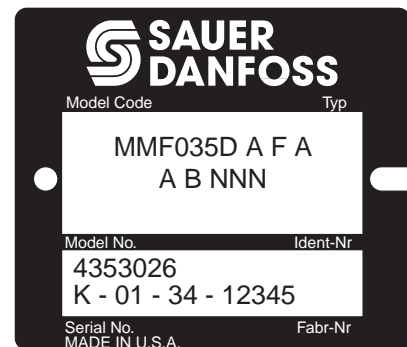
The Sauer-Danfoss serial number identifies the manufacture date and unit sequence in the build. The serial number also identifies the unit's warranty time period.

The letter code indicates the location of original manufacture (assembly). **K** indicates the unit was originally assembled in Lawrence, Kansas, 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.





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	532432 (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**

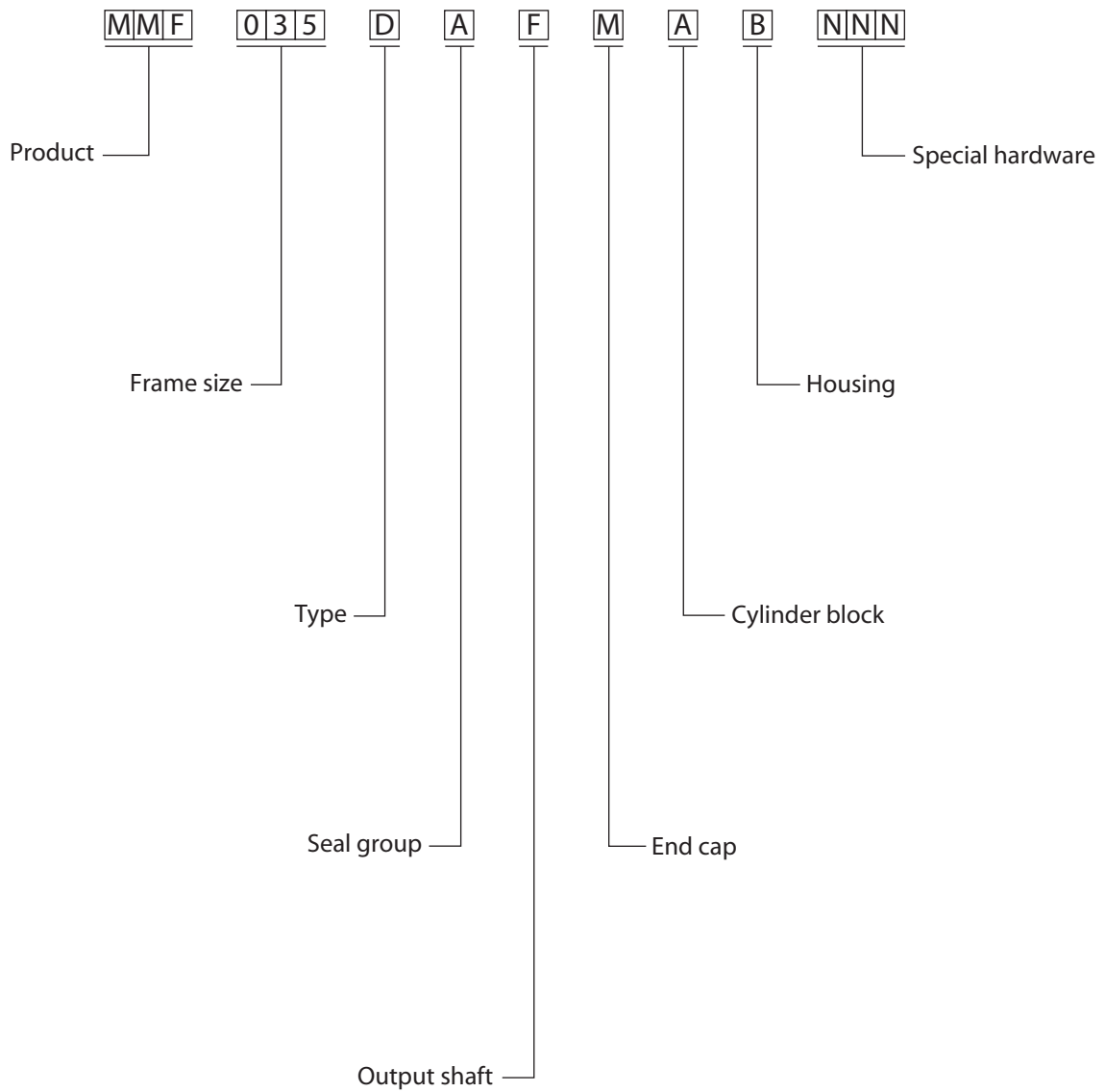
The modular design of Series 40 units results in a simplified service parts list and part number identification procedure. The same item numbers are used for same part names on all units within a product type. (Example: The shaft lip seal, Item C01, has the same item number on all motors.)

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.)

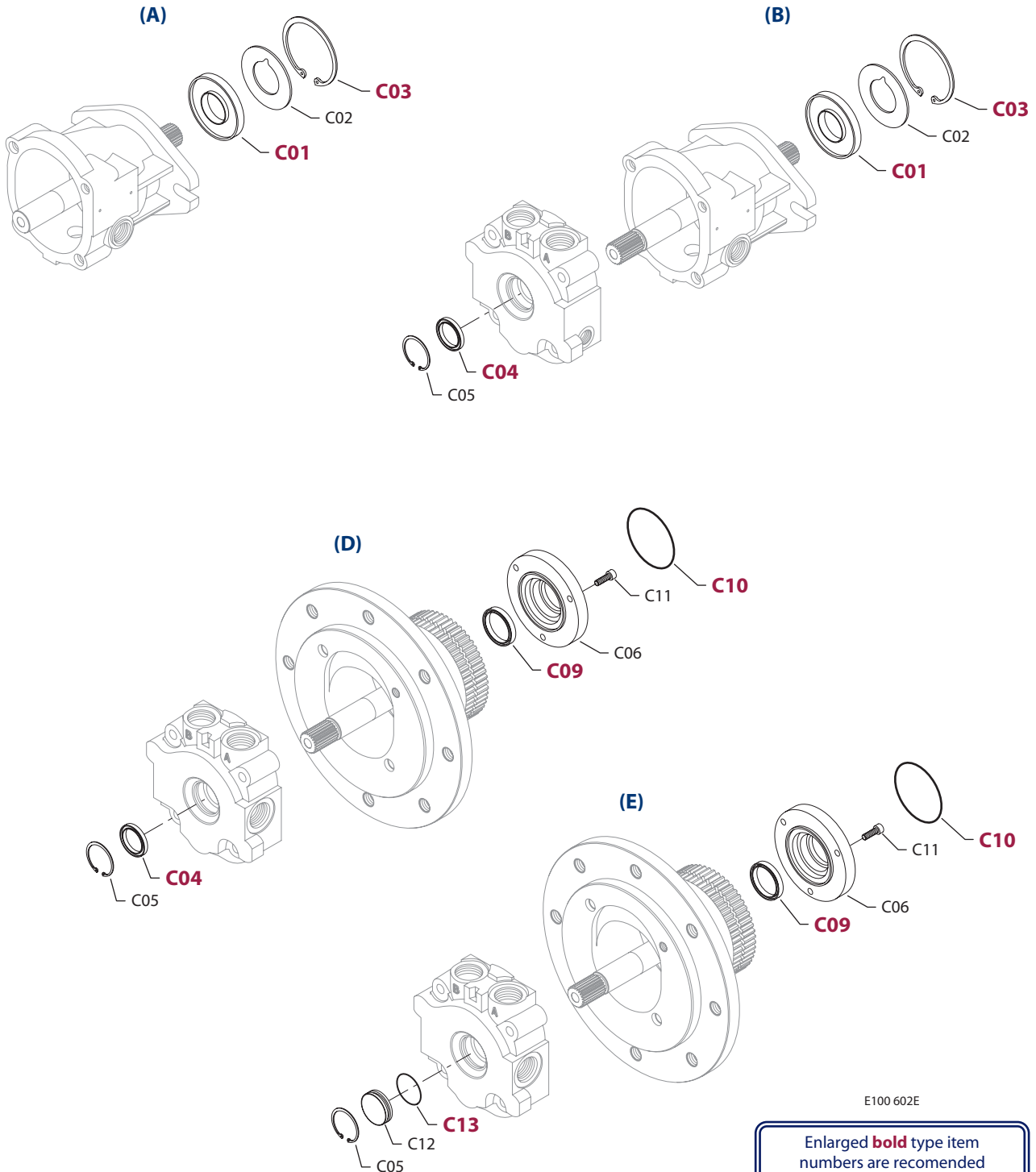
Example of a part identification

The nameplate on a Series 40 motor has an Order Code of MMF035D A F A A B 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 **F**. (MMF035D A **F** A A B NNN)
- 2) Referring to the Service Parts List, find the shaft group.
- 3) Find the order code that relates to this unit, which is **F**.
- 4) The shaft is Item D01.
- 5) The part number 4350427.



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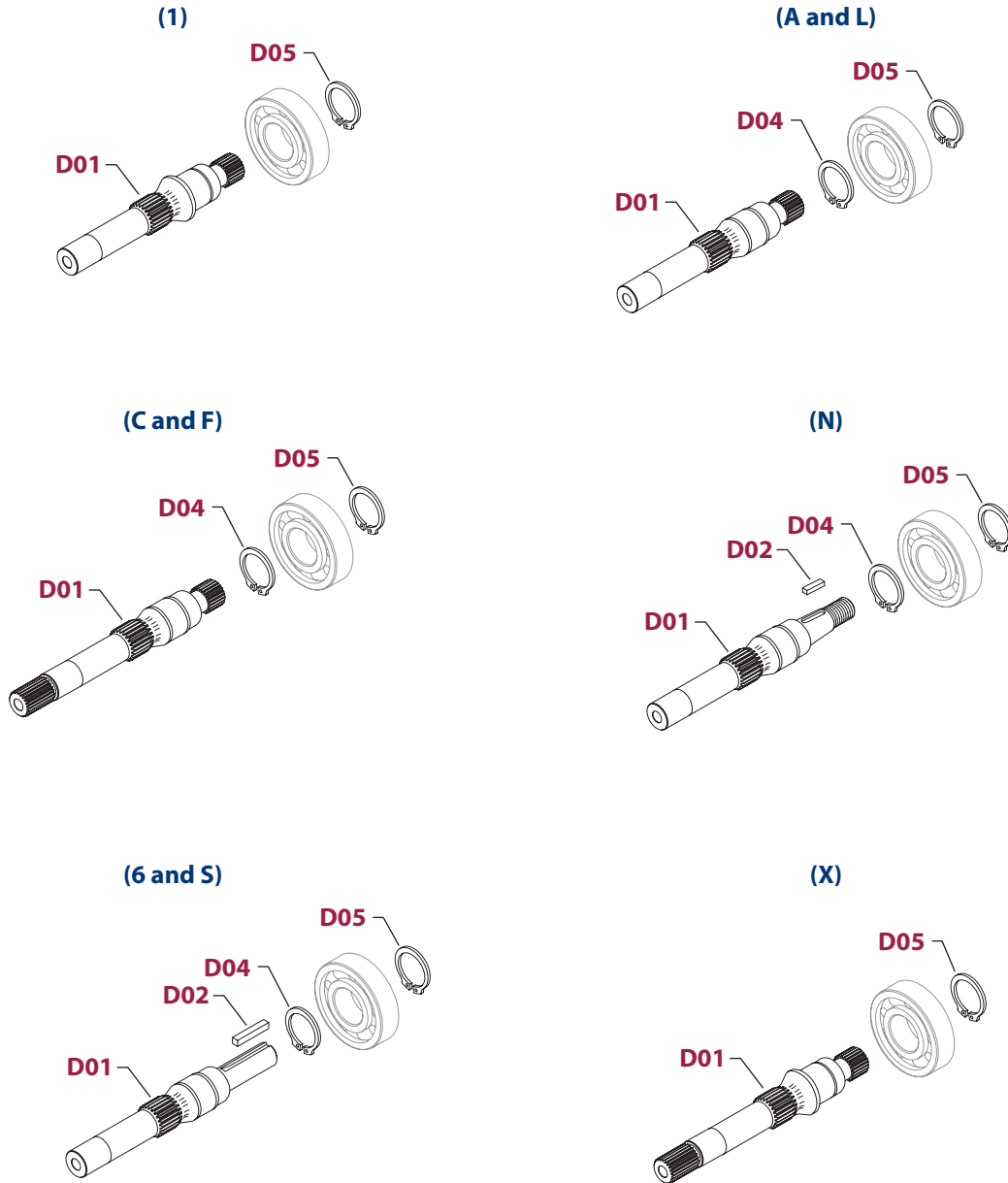


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Enlarged **bold** type item numbers are recommended parts to stock for servicing.

INPUT SHAFT SEAL

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A	C01	96-24		5000689	Lip seal (SB-2007-015)	1
	C02	96-24		4350455	Support washer	1
	C03	96-24		9006200-0281	Retaining ring	1
B	C01	96-24		5000689	Lip seal (SB-2007-015)	1
	C02	96-24		4350455	Support washer	1
	C03	96-24		9006200-0281	Retaining ring	1
	C04	96-24		5000465	Lip seal	1
	C05	96-24		9006200-0156	Retaining ring	1
D	C04	00-32		5000465	Lip seal	1
	C05	00-32		9006200-0156	Retaining ring	1
	C06	00-32		4350277	Seal carrier	1
	C09	00-32		9008000-0131	Lip seal	1
	C10	00-32		9004301-2320	O-ring	1
	C11	00-32		913954 (9007315-0604)	Screw	3
E	C05	00-31		9006200-0156	Retaining ring	1
	C06	00-31		4350277	Seal carrier	1
	C09	00-31		9008000-0131	Lip seal	1
	C10	00-31		9004301-2320	O-ring	1
	C11	00-31		913954 (9007315-0604)	Screw	3
	C12	00-31		4350096	End cap plug	1
	C13	00-31		9004100-0280	O-ring	1

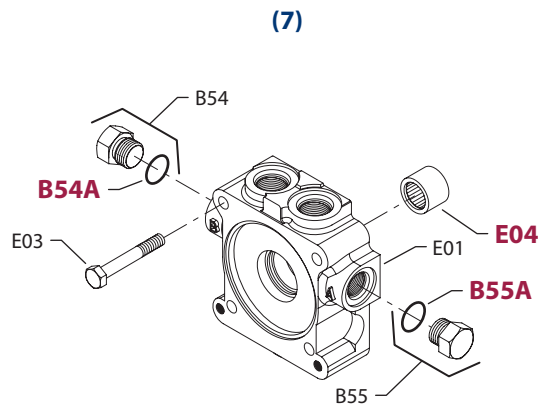
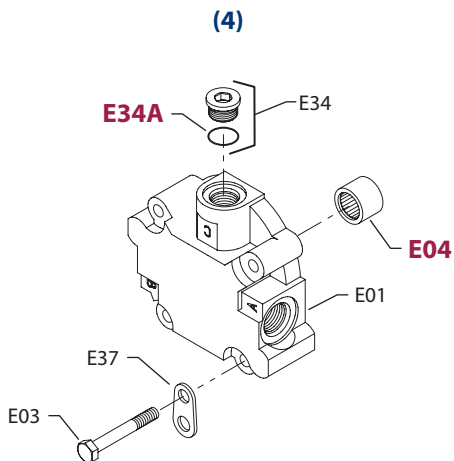
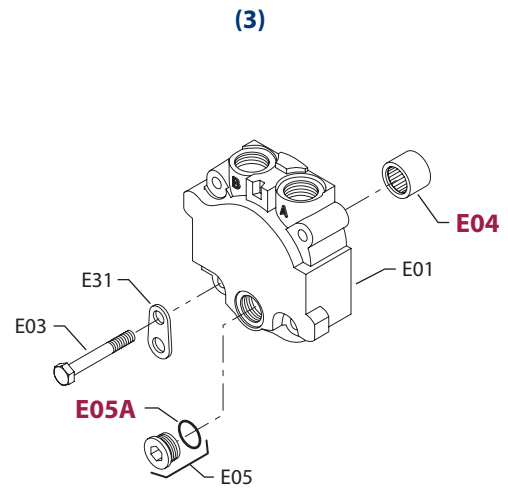
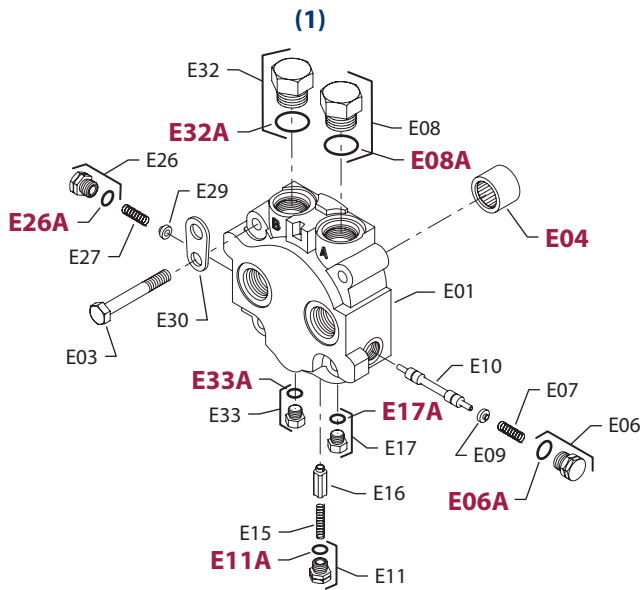


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Enlarged **bold** type item numbers are recommended parts to stock for servicing.

INPUT SHAFT

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
1	D01	00-31		4350279	Shaft, 23-tooth spline/no auxiliary	1
	D05	00-31		9006325-0118	Retaining ring	1
6	D01	04-04		4350843	Shaft, straight keyed, 1.125 dia.	1
	D02	04-04		9003261-3116	Key	1
	D04	04-04		9006300-0137	Retaining ring	1
	D05	04-04		9006300-0137	Retaining ring	1
A	D01	95-42		4350428	Shaft, 13-tooth spline/no auxiliary	1
	D04	95-42		9006300-0137	Retaining ring	1
	D05	95-42		9006300-0137	Retaining ring	1
C	D01	95-42		4350430	Shaft, 13-tooth spline/13-tooth auxiliary	1
	D04	95-42		9006300-0137	Retaining ring	1
	D05	95-42		9006300-0137	Retaining ring	1
F	D01	95-42		4350427	Shaft, 15-tooth spline/no auxiliary	1
	D04	95-42		9006300-0137	Retaining ring	1
	D05	95-42		9006300-0137	Retaining ring	1
L	D01	96-27		4350653	Shaft, 13-tooth spline with M8 tapped hole	1
	D04	96-27		9006300-0137	Retaining ring	1
	D05	96-27		9006300-0137	Retaining ring	1
N	D01	96-27		4350805	Shaft, tapered (SB-2002-021)	1
	D02	96-27		5000664	Square key (SB-2002-021)	1
	D02	96-27	02-47	9003310-2514	Woodruff key	1
	D04	96-27		9006300-0137	Retaining ring	1
	D05	96-27		9006300-0137	Retaining ring	1
S	D01	95-42		4350429	Shaft, straight keyed, .875 dia.	1
	D02	95-42		9003261-2524	Key	1
	D04	95-42		9006300-0137	Retaining ring	1
	D05	95-42		9006300-0137	Retaining ring	1
X	D01	00-32		4350319	Shaft, 23-tooth spline/20-tooth auxiliary	1
	D05	00-32		9006325-0118	Retaining ring	1

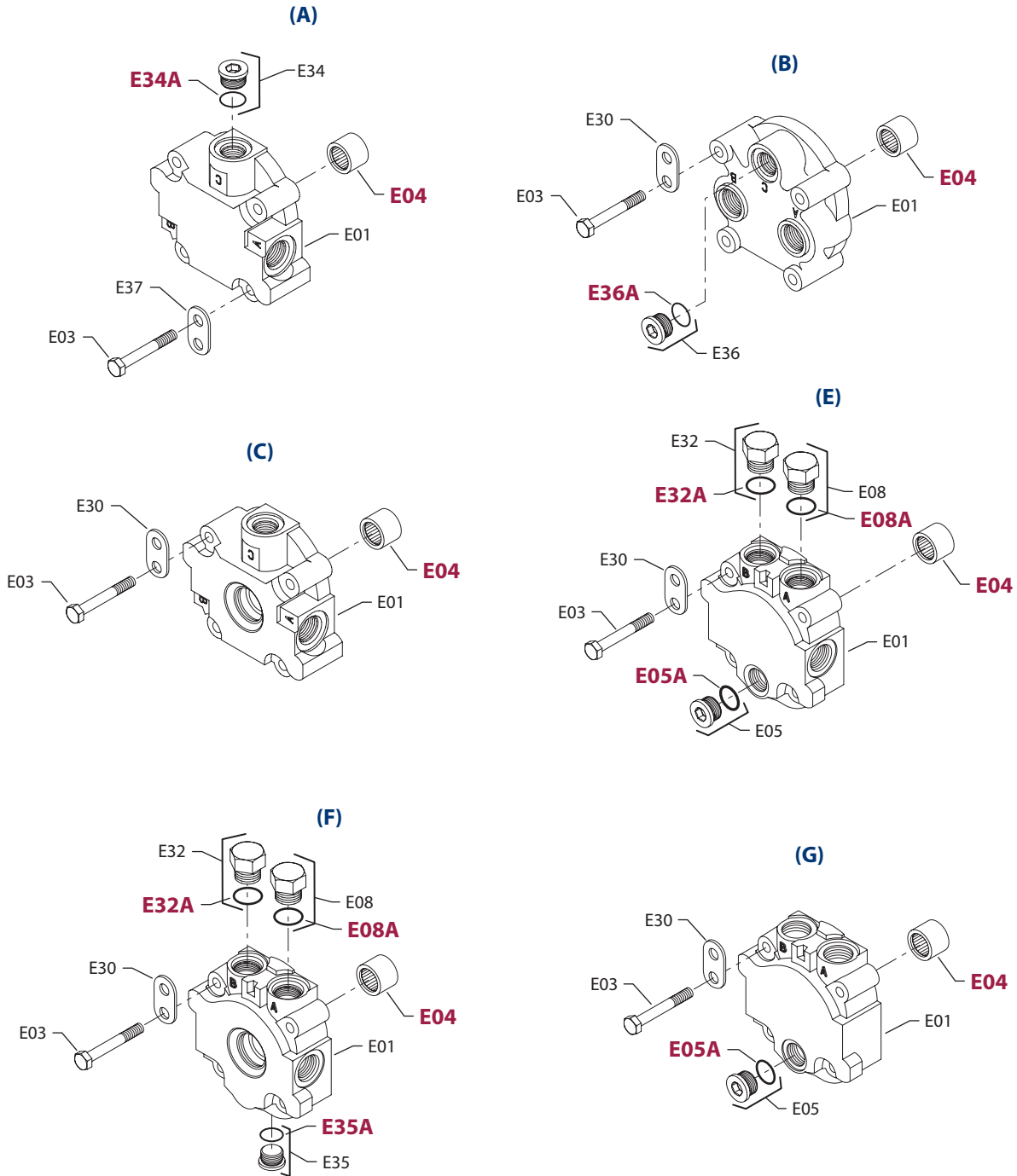


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Enlarged **bold** type item numbers are recommended parts to stock for servicing.

END CAP

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
1	E01	96-47		4350656	End cap,axial ports w/loop flushing	1
	E03	96-47		9007210-1015	Screw	4
	E04	96-47		9001465-0015	Needle bearing	1
	E06	96-47		4800365	Plug assembly	1
	E06A	96-47		085043 (9004201-3700)	O-ring	1
	E07	96-47		4800887	Spring (SB-2005-015)	1
	E08	96-47		664524 (9005110-9000)	Plug assembly	1
	E08A	96-47		001156 (9004201-7500)	O-ring	1
	E09	96-47		512257	Spring guide	1
	E10	96-47		8800550	Spool	1
	E11	96-47		4800280	Plug assembly	1
	E11A	96-47		015818 (9004201-3100)	O-ring	1
	E15	96-47		768853	Spring	1
	E16	96-47		4800396	Poppet	1
	E17	96-47		001511 (9005100-4400)	Plug assembly	1
	E17A	96-47		001123 (9004201-2500)	O-ring	1
	E26	96-47		4800365	Plug assembly	1
	E26A	96-47		085043 (9004201-3700)	O-ring	1
	E27	96-47		4800887	Spring (SB-2005-015)	1
	E29	96-47		512257	Spring guide	1
	E30	96-47		8800565	Lifting bracket	1
	E32	96-47		664524 (9005110-9000)	Plug assembly	1
	E32A	96-47		001156 (9004201-7500)	O-ring	1
	E33	96-47		001511 (9005100-4400)	Plug assembly	1
	E33A	96-47		001123 (9004201-2500)	O-ring	1
	3	E01	98-49		4350418	End cap,twin ports
E03		98-49		9007210-1015	Screw	4
E04		98-49		9001465-0015	Needle bearing	1
E05		98-49		315325 (9005110-8700)	Plug assembly	1
E05A		98-49		001149 (9004201-6200)	O-ring	1
E31		98-49		8800565	Lifting bracket	1
4	E01	99-07		4350278	End cap,radial ports	1
	E03	99-07		9007210-1015	Screw	4
	E04	99-07		9001465-0015	Needle bearing	1
	E34	99-07		315325 (9005110-8700)	Plug assembly	1
	E34A	99-07		001149 (9004201-6200)	O-ring	1
	E37	99-07		8800565	Lifting bracket	1
7	B54	99-07		315325 (9005100-8700)	Plug assembly	1
	B54A	99-07		001149 (9004201-6200)	O-ring	1
	B55	99-07		315325 (9005100-8700)	Plug assembly	1
	B55A	99-07		001149 (9004201-6200)	O-ring	1
	E01	99-07		4350760	End cap,twin ports, auxiliary drive	1
	E03	99-07		9007510-3734	Screw	4
	E04	99-07		9001465-0015	Needle bearing	1



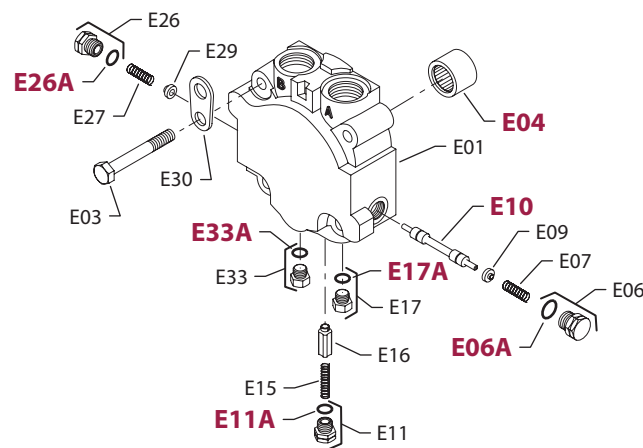
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Enlarged **bold** type item numbers are recommended parts to stock for servicing.

END CAP

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit	
A	E01	95-48		4350278	End cap,radial ports	1	
	E03	95-48		9007210-1015	Screw	4	
	E04	95-48		9001465-0015	Needle bearing	1	
	E30	95-48		8800565	Lifting bracket	1	
	E34	95-48		315325 (9005110-8700)	Plug assembly	1	
	E34A	95-48		001149 (9004201-6200)	O-ring	1	
	B	E01	95-48		4350165	End cap,axial ports	1
E03		95-48		307686 (9007210-1017)	Screw	4	
E04		95-48		9001465-0015	Needle bearing	1	
E30		95-48		8800565	Lifting bracket	1	
E36		95-48		315325 (9005110-8700)	Plug assembly	1	
E36A		95-48		001149 (9004201-6200)	O-ring	1	
C		E01	95-48		4350288	End cap,radial ports, thru shaft	1
	E03	95-48		9007210-1015	Screw	4	
	E04	95-48		9001465-0015	Needle bearing	1	
	E30	95-48		8800565	Lifting bracket	1	
	E34	95-48		315325 (9005110-8700)	Plug assembly	1	
	E34A	95-48		001149 (9004201-6200)	O-ring	1	
	E	E01	95-42		4350409	End cap,radial ports	1
E03		95-42		9007210-1015	Screw	4	
E04		95-42		9001465-0015	Needle bearing	1	
E05		95-42		315325 (9005110-8700)	Plug assembly	1	
E05A		95-42		001149 (9004201-6200)	O-ring	1	
E08		95-42		664524 (9005110-9000)	Plug assembly	1	
E08A		95-42		001156 (9004201-7500)	O-ring	1	
E30		95-42		8800565	Lifting bracket	1	
E32		95-42		664524 (9005110-9000)	Plug assembly	1	
E32A		95-42		001156 (9004201-7500)	O-ring	1	
F		E01	95-42		4350408	End cap,radial ports	1
		E03	95-42		9007210-1015	Screw	4
		E04	95-42		9001465-0015	Needle bearing	1
	E08	95-42		664524 (9005110-9000)	Plug assembly	1	
	E08A	95-42		001156 (9004201-7500)	O-ring	1	
	E30	95-42		8800565	Lifting bracket	1	
	E32	95-42		664524 (9005110-9000)	Plug assembly	1	
	E32A	95-42		001156 (9004201-7500)	O-ring	1	
	E35	95-42		315325 (9005110-8700)	Plug assembly	1	
	E35A	95-42		001149 (9004201-6200)	O-ring	1	
	G	E01	95-42		4350418	End cap,twin ports	1
		E03	95-42		9007210-1015	Screw	4
		E04	95-42		9001465-0015	Needle bearing	1
E05		95-42		315325 (9005110-8700)	Plug assembly	1	
E05A		95-42		001149 (9004201-6200)	O-ring	1	
E30		95-42		8800565	Lifting bracket	1	

(H and M)



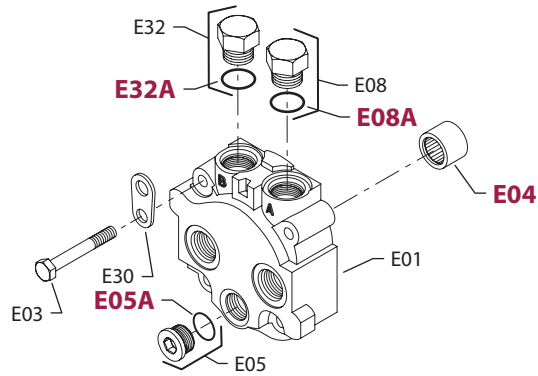
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Enlarged **bold** type item numbers are recommended parts to stock for servicing.

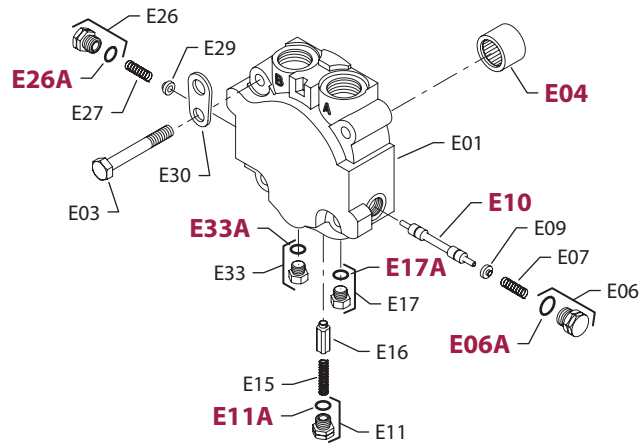
END CAP

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
H	E01	96-14		4350353	End cap, twin ports w/loop flushing	1
	E03	96-14		9007210-1015	Screw	4
	E04	96-14		9001465-0015	Needle bearing	1
	E06	96-14		4800365	Plug assembly	1
	E06A	96-14		085043 (9004201-3700)	O-ring	1
	E07	96-14		4800887	Spring (SB-2005-015)	1
	E09	96-14		512257	Spring guide	1
	E10	96-14		8800550	Spool	1
	E11	96-14		4800280	Plug assembly	1
	E11A	96-14		015818 (9004201-3100)	O-ring	1
	E15	96-14		768853	Spring	1
	E16	96-14		4800397	Poppet	1
	E17	96-14		001511 (9005100-4400)	Plug assembly	1
	E17A	96-14		001123 (9004201-2500)	O-ring	1
	E26	96-14		4800365	Plug assembly	1
	E26A	96-14		085043 (9004201-3700)	O-ring	1
	E27	96-14		4800887	Spring (SB-2005-015)	1
	E29	96-14		512257	Spring guide	1
	E30	96-14		8800565	Lifting bracket	1
	E33	96-14		001511 (9005100-4400)	Plug assembly	1
	E33A	96-14		001123 (9004201-2500)	O-ring	1
M	E01	95-42		4350353	End cap, twin ports w/loop flushing	1
	E03	95-42		9007210-1015	Screw	4
	E04	95-42		9001465-0015	Needle bearing	1
	E06	95-42		4800365	Plug assembly	1
	E06A	95-42		085043 (9004201-3700)	O-ring	1
	E07	95-42		4800887	Spring (SB-2005-015)	1
	E09	95-42		512257	Spring guide	1
	E10	95-42		8800550	Spool	1
	E11	95-42		4800280	plug assembly	1
	E11A	95-42		015818 (9004201-3100)	O-ring	1
	E15	95-42		768853	Spring	1
	E16	95-42		4800396	Poppet	1
	E17	95-42		001511 (9005100-4400)	Plug assembly	1
	E17A	95-42		001123 (9004201-2500)	O-ring	1
	E26	95-42		4800365	Plug assembly	1
	E26A	95-42		085043 (9004201-3700)	O-ring	1
	E27	95-42		4800887	Spring (SB-2005-015)	1
	E29	95-42		512257	Spring guide	1
	E30	95-42		8800565	Lifting bracket	1
	E33	95-42		001511 (9005100-4400)	Plug assembly	1
	E33A	95-42		001123 (9004201-2500)	O-ring	1

(U)



(Y)

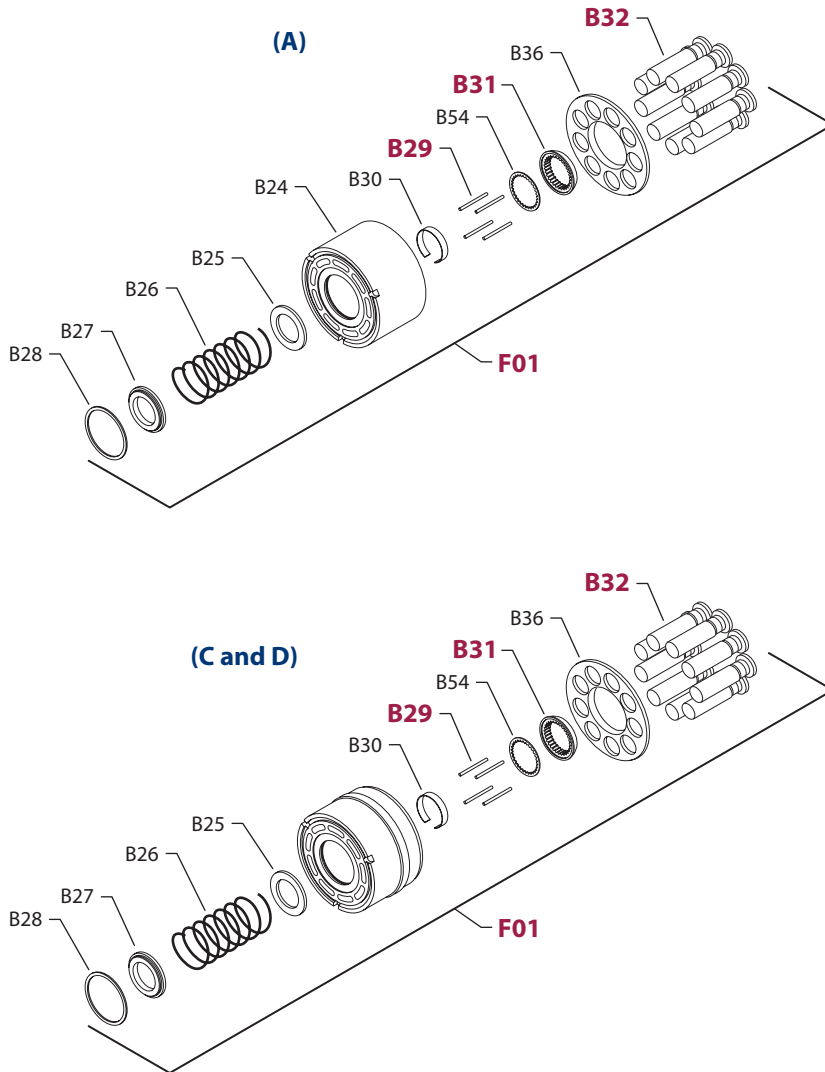


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Enlarged **bold** type item numbers are recommended parts to stock for servicing.

END CAP

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
U	E01	95-42		4350407	End cap,axial ports	1
	E03	95-42		9007210-1015	Screw	4
	E04	95-42		9001465-0015	Needle bearing	1
	E05	95-42		315325 (9005110-8700)	Plug assembly	1
	E05A	95-42		001149 (9004201-6200)	O-ring	1
	E08	95-42		664524 (9005110-9000)	Plug assembly	1
	E08A	95-42		001156 (9004201-7500)	O-ring	1
	E30	95-42		8800565	Lifting bracket	1
	E32	95-42		664524 (9005110-9000)	Plug assembly	1
	E32A	95-42		001156 (9004201-7500)	O-ring	1
Y	E01	96-14		4350353	End cap, twin ports w/loop flushing	1
	E03	96-14		9007210-1015	Screw	4
	E04	96-14		9001465-0015	Needle bearing	1
	E06	96-14		4800365	Plug assembly	1
	E06A	96-14		085043 (9004201-3700)	O-ring	1
	E07	96-14		4800887	Spring (SB-2005-015)	1
	E09	96-14		512257	Spring guide	1
	E10	96-14		8800550	Spool	1
	E11	96-14		4800280	Plug assembly	1
	E11A	96-14		015818 (9004201-3100)	O-ring	1
	E15	96-14		768853	Spring	1
	E16	96-14		4800389	Poppet	1
	E17	96-14		001511 (9005100-4400)	Plug assembly	1
	E17A	96-14		001123 (9004201-2500)	O-ring	1
	E26	96-14		4800365	Plug assembly	1
	E26A	96-14		085043 (9004201-3700)	O-ring	1
	E27	96-14		4800887	Spring (SB-2005-015)	1
	E29	96-14		512257	Spring guide	1
	E30	96-14		8800565	Lifting bracket	1
	E33	96-14		001511 (9005100-4400)	Plug assembly	1
	E33A	96-14		001123 (9004201-2500)	O-ring	1



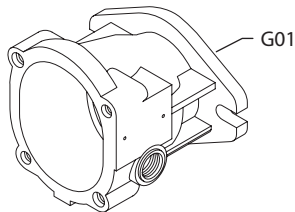
E100 510E

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

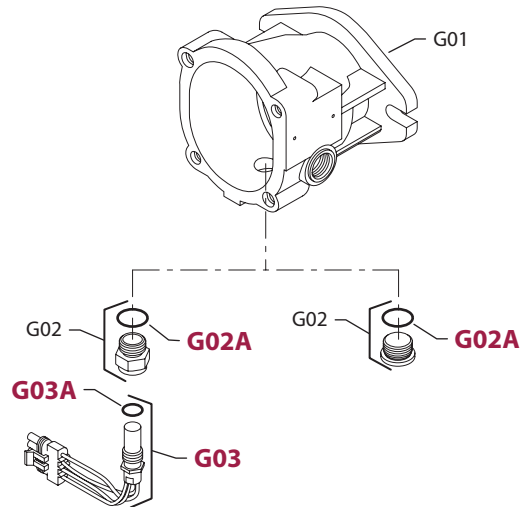
CYLINDER BLOCK KIT

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit	
A	F01	95-42		4350291	Cylinder block kit	1	
	B24	95-42		4350628	Cylinder block	1	
	B25	96.26		4350012	Washer	1	
	B26	96.26		4350172	Spring	1	
	B27	95-42		9009625-0105	Washer	1	
	B28	95-42		9006250-0162	Retaining ring	1	
	B29	95-42		9004875-0109	Holddown pin	4	
	B30	95-42		4350048	Holddown pin retainer	1	
	B31	95-42		4350186	Slipper retainer guide	1	
	B32	95-42		4350253	Piston assembly	9	
	B36	95-42		4350185	Slipper retainer	1	
	B54	95-42		4350187	Thrust washer	1	
	C	F01	96-22		4350422	Cylinder block kit, w/magnetic speed ring	1
B25		96.26		4350012	Washer	1	
B26		96.26		4350172	Spring	1	
B27		96-22		9009625-0105	Washer	1	
B28		96-22		9006250-0162	Retaining ring	1	
B29		96-22		9004875-0109	Holddown pin	4	
B30		96-22		4350048	Holddown pin retainer	1	
B31		96-22		4350186	Slipper retainer guide	1	
B32		96-22		4350253	Piston assembly	9	
B36		96-22		4350185	Slipper retainer	1	
B54		96-22		4350187	Thrust washer	1	
D		F01	00-24		4350773	Cylinder block kit, w/pulse speed ring	1
		B25	96.26		4350012	Washer	1
	B26	96.26		4350172	Spring	1	
	B27	00-24		9009625-0105	Washer	1	
	B28	00-24		9006250-0162	Retaining ring	1	
	B29	00-24		9004875-0109	Holddown pin	4	
	B30	00-24		4350048	Holddown pin retainer	1	
	B31	00-24		4350186	Slipper retainer guide	1	
	B32	00-24		4350253	Piston assembly	9	
	B36	00-24		4350185	Slipper retainer	1	
	B54	00-24		4350187	Thrust washer	1	

(B)



(D, F, G, K, N, P, S, T,
and U)

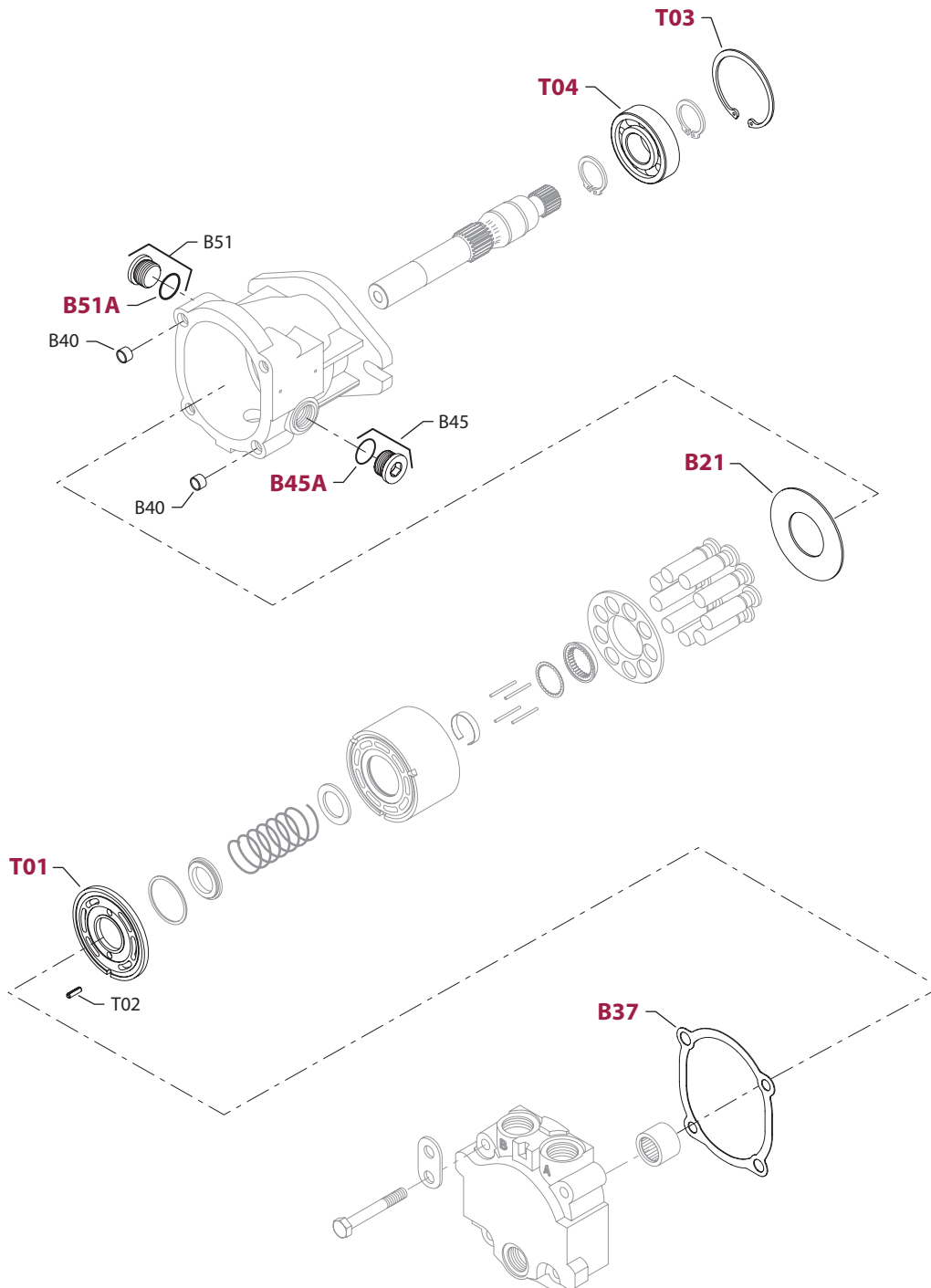


E100 608E

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

HOUSING

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
B	G01	95-42		4350351	Fixed motor housing	1
D	G01	95-42		4350420	Fixed motor housing w/speed sensor port	1
	G02	95-42		4800432	Adapter assembly	1
	G02A	95-42		001149 (9004201-6200)	O-ring	1
	G03	95-42		KPPG13408	Speed sensor	1
	G03A	95-42		085043 (9004201-3700)	O-ring	1
F	G01	99-17		4350420	Fixed motor housing w/speed sensor port	1
	G02	99-17		4800432	Adapter assembly	1
	G02A	99-17		001149 (9004201-6200)	O-ring	1
	G03	99-17		KPPG156	Speed sensor	1
	G03A	99-17		085043 (9004201-3700)	O-ring	1
G	G01	98-28		4350420	Fixed motor housing w/speed sensor port	1
	G02	98-28		9005110-8700	Plug assembly	1
	G02A	98-28		001149 (9004201-6200)	O-ring	1
K	G01	99-08		4350420	Fixed motor housing w/speed sensor port	1
	G02	99-08		4800432	Adapter assembly	1
	G02A	99-08		001149 (9004201-6200)	O-ring	1
	G03	99-08		KPPG16511	Speed sensor	1
	G03A	99-08		085043 (9004201-3700)	O-ring	1
N	G01	07-30		4350420	Fixed motor housing w/speed sensor port	1
	G02	07-30		4800432	Adapter assembly	1
	G02A	07-30		001149 (9004201-6200)	O-ring	1
	G03	07-30		KPPG16008	Speed sensor	1
	G03A	07-30		085043 (9004201-3700)	O-ring	1
P	G01	01-09		4350420	Fixed motor housing w/speed sensor port	1
	G02	01-09		4800432	Adapter assembly	1
	G02A	01-09		001149 (9004201-6200)	O-ring	1
	G03	01-09		KPPG16408	Speed sensor	1
	G03A	01-09		085043 (9004201-3700)	O-ring	1
S	G01	02-40		4350797	Fixed motor housing w/speed sensor port	1
	G02	02-40		9005110-8700	Plug assembly	1
	G02A	02-40		001149 (9004201-6200)	O-ring	1
T	G01	07-30		4350420	Fixed motor housing w/speed sensor port	1
	G02	07-30		4800432	Adapter assembly	1
	G02A	07-30		001149 (9004201-6200)	O-ring	1
	G03	07-30		KPPG16708	Speed sensor	1
	G03A	07-30		085043 (9004201-3700)	O-ring	1
U	G01	04-04		4350842	Fixed motor housing, 33/41cc	1
	G02	04-04		9005110-8700	Plug assembly	1
	G02A	04-04		001149 (9004201-6200)	O-ring	1



E100 512E

Enlarged **bold** type item numbers are recommended parts to be stocked for servicing

COMMON PARTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	B21	95-42		4350148	Thrust plate	1
	B37	95-42		4350089	End cap gasket	1
	B40	95-42		9004875-0100	Spring pin	2
	B45	06-10		315325 (9005110-8700)	Plug assembly	1
	B45A	06-10		001149 (9004201-6200)	O-ring	1
	B51	06-10		315325 (9005110-8700)	Plug assembly	1
	B51A	06-10		001149 (9004201-6200)	O-ring	1
	T01	95-42		4350754	Motor valve plate (SB-1999-058)	1
	T02	95-42		9004700-1910	Slotted pin	1

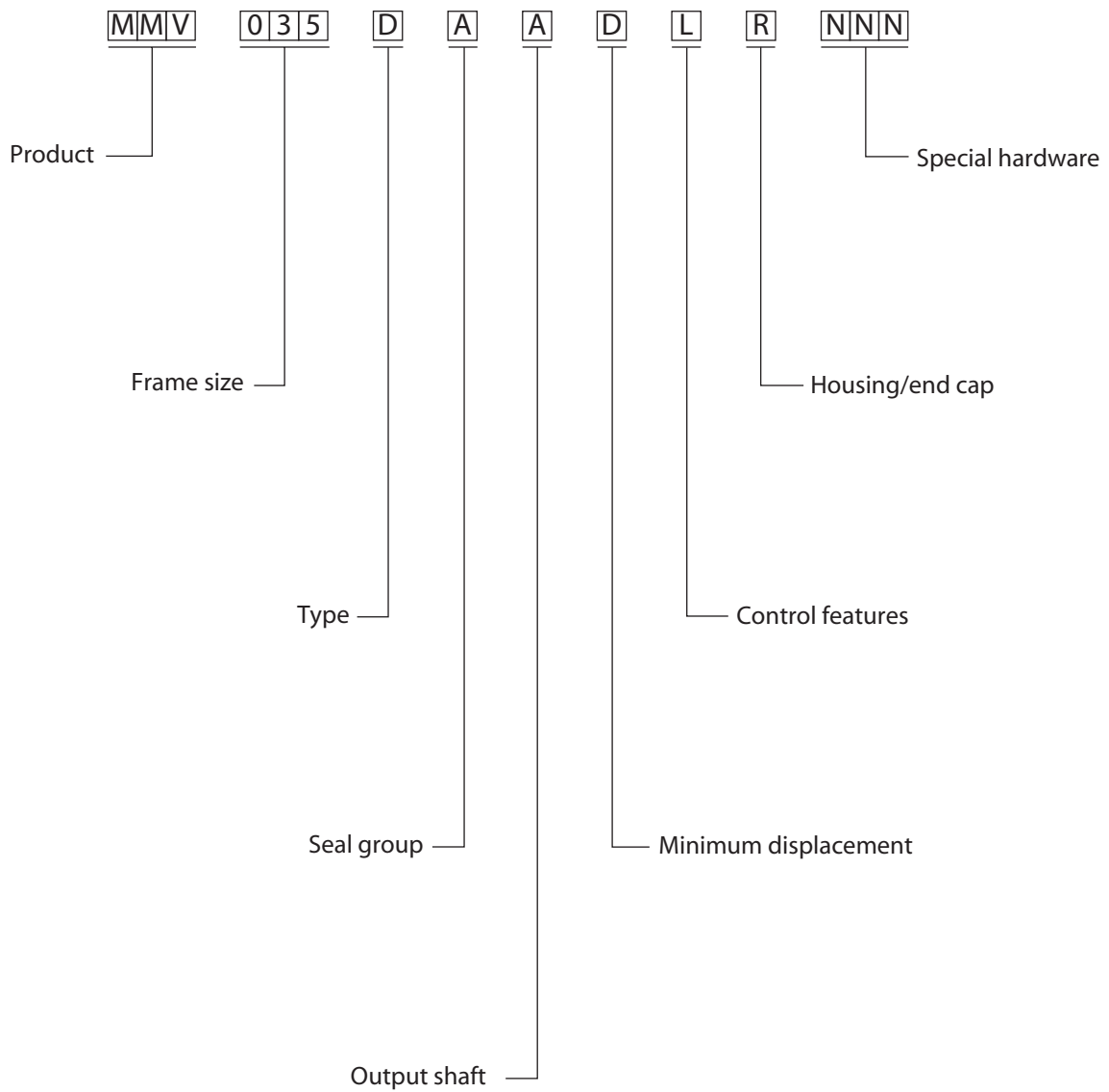
SPECIAL HARDWARE

NBJ	T03	06-10		9006200-0281	Retaining ring	1
	T04	06-10		373282 (9001315-0011)	Ball bearing	1
NNB	T03	06-10		9006200-0281	Retaining ring	1
	T04	06-10		357616	Roller bearing (SB-1998-008)	1
NNN	T03	95-42		9006200-0281	Retaining ring	1
	T04	95-42		373282 (9001315-0011)	Ball bearing	1
NNO	T03	06-10		9006200-0281	Retaining ring	1
	T04	06-10		357616	Roller bearing (SB-1998-008)	1
NNR	T03	95-42		9006200-0281	Retaining ring	1
	T04	95-42		357616	Roller bearing (SB-1998-008)	1
NNV	T03	96-44		9006200-0281	Retaining ring	1
	T04	96-44		357616	Roller bearing (SB-1998-008)	1
NNY	T03	06-10		9006200-0281	Retaining ring	1
	T04	06-10		357616	Roller bearing (SB-1998-008)	1
NYJ	T03	06-16		9006200-0281	Retaining ring	1
	T04	06-16		373282 (9001315-0011)	Roller bearing	1

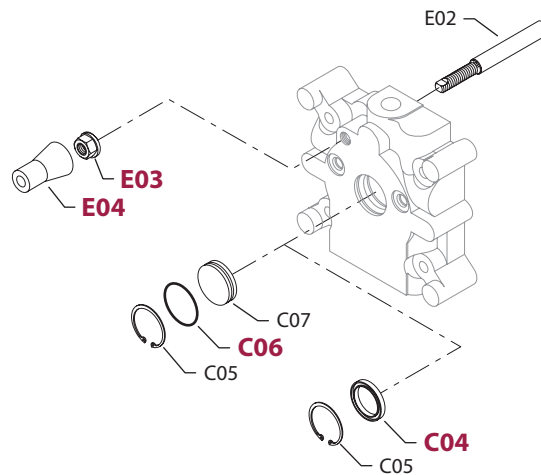
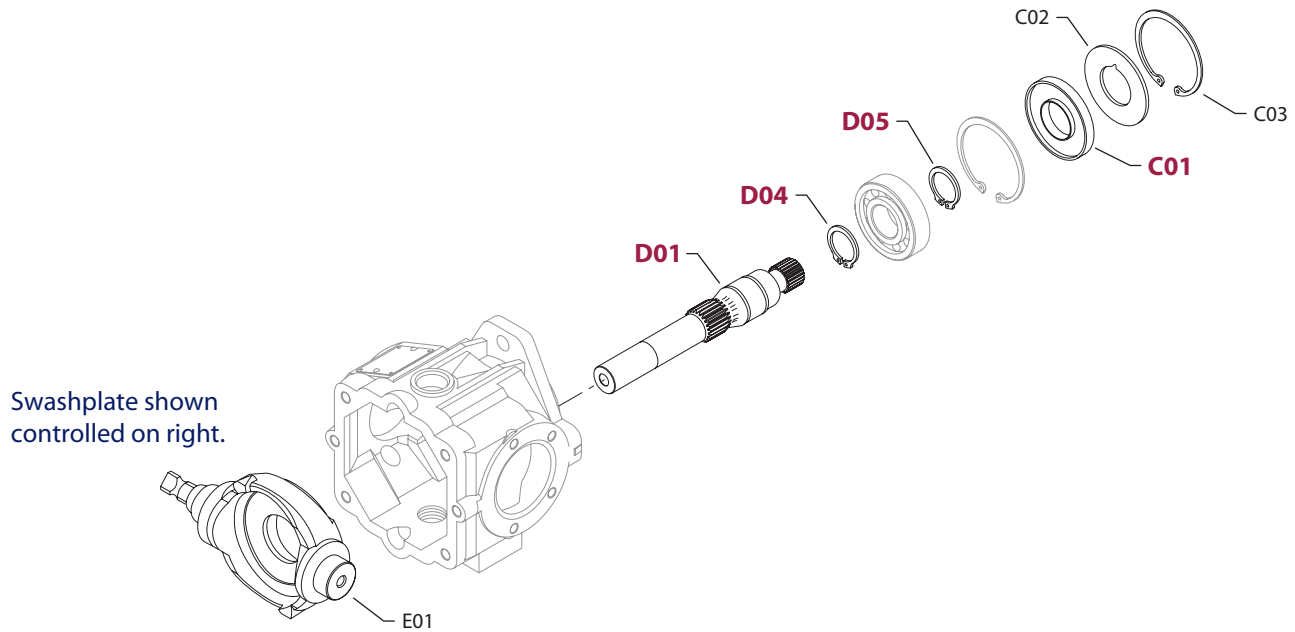


OVERHAUL SEAL KIT

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
				4510147	Overhaul seal kit, MMF035/44D	1
	B37	95-42		4350089	End cap gasket	1
	B45A	95-42		001149 (9004201-6200)	O-ring, .755 x .097, nitrile, 90D	1
	B51A	95-42		001149 (9004201-6200)	O-ring, .755 x .097, nitrile, 90D	1
	C01	95-42		5000689	Lip seal (SB-2007-015)	1
	C04	95-42		5000465	Lip seal	1
	C09	95-42		506515 (9008000-0131)	Lip seal	1
	E05A	95-42		001149 (9004201-6200)	O-ring, .755 x .097, nitrile, 90D	1
	E06A	95-42		085043 (9004201-3700)	O-ring, .468 x .078, nitrile, 90D	1
	E08A	95-42		001156 (9004201-7500)	O-ring, .9.24 x .116, nitrile, 90D	1
	E11A	95-42		015818 (9004201-3100)	O-ring, .414 x .072, nitrile, 90D	1
	E17A	95-42		001123 (9004201-2500)	O-ring, .351 x .072, nitrile, 90D	1
	E26A	95-42		085043 (9004201-3700)	O-ring, .468 x .078, nitrile, 90D	1
	E32A	95-42		001156 (9004201-7500)	O-ring, .9.24 x .116, nitrile, 90D	1
	E33A	95-42		001123 (9004201-2500)	O-ring, .351 x .072, nitrile, 90D	1
	G02A	95-42		001149 (9004201-6200)	O-ring, .755 x .097, nitrile, 90D	1
	G03A	95-42		085043 (9004201-3700)	O-ring, .468 x .078, nitrile, 90D	1



P100 648E



E100 610E

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

INPUT SHAFT SEAL

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A	C01	95-42		5000689	Lip seal (SB-2003-018)	1
	C02	95-42		4350455	Support washer	1
	C03	95-42		9006200-0281	Retaining ring	1
	C05	95-42		9006200-0156	Retaining ring	1
	C06	95-42		9004100-0280	O-ring	1
	C07	95-42		4350096	End cap plug	1
	B	C01	95-42		5000689	Lip seal (SB-2003-018)
C02		95-42		4350455	Support washer	1
C03		95-42		9006200-0281	Retaining ring	1
C04		95-42		5000465	Lip seal	1
C05		95-42		9006200-0156	Retaining ring	1

INPUT SHAFT

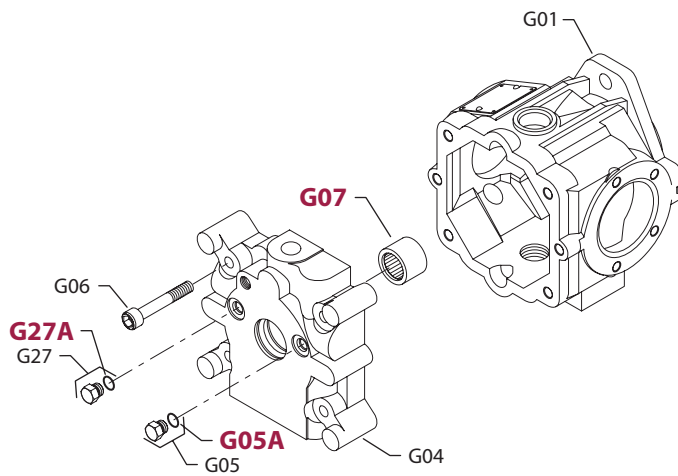
A	D01	95-42		4350393	Shaft, 13-tooth spline	1
	D04	95-42		9006300-0137	Retaining ring	1
	D05	95-42		9006300-0137	Retaining ring	1

SWASHPLATE/MINIMUM DISPLACEMENT

D	E01	95-42		4440019	Swashplate	
	E02	95-42		4350092	Swashplate stop, set at 6°	1
	E03	95-42		076042 (9003509-0012)	Seal nut, M12	1
	E04	95-42		750679	Plastic cap	1
J	E01	96-02		4440019	Swashplate	
	E02	96-02		4350092	Swashplate stop, set at 13°	1
	E03	96-02		076042 (9003509-0012)	Seal nut, M12	1
	E04	96-02		750679	Plastic cap	1
V	E01	98-31		4350383	Swashplate	1
	E02	95-42		4350092	Swashplate stop, set at 6°	1
	E03	95-42		076042 (9003509-0012)	Seal nut, M12	1
	E04	95-42		750679	Plastic cap	1

CONTROL FEATURES

L	Swashplate control shaft on left side
R	Swashplate control shaft on right side

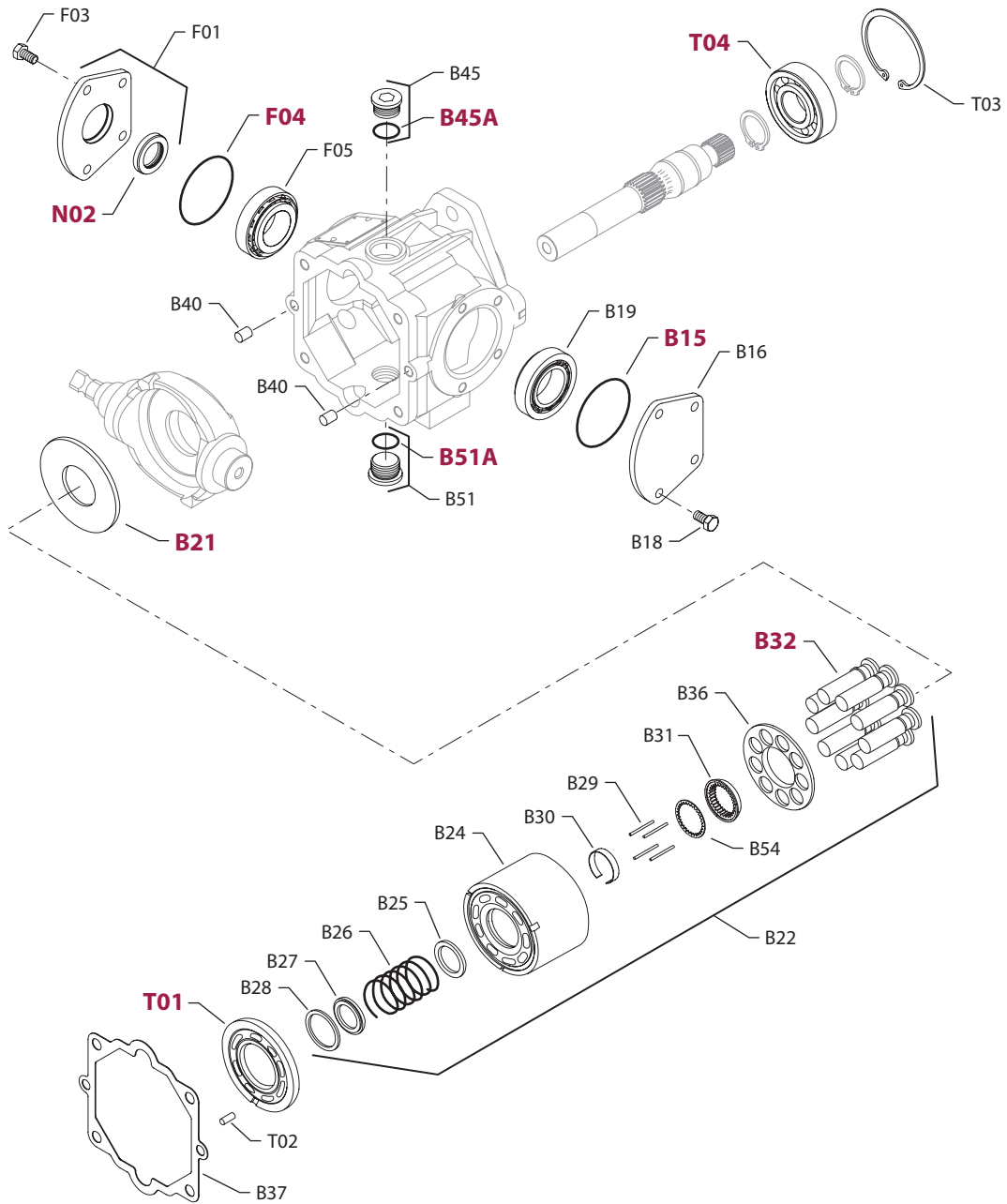


E100 611E

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

HOUSING/END CAP

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
R	G01	95-42		4350350	Variable motor housing	1
	G04	95-42		4350404	End cap	1
	G05	95-42		046151 (9005100-5600)	Plug assembly	1
	G05A	95-42		085043 (9004201-3700)	O-ring	1
	G06	95-42		9007314-1012	Screw	4
	G07	95-42		9001465-0015	Needle bearing	1
	G27	95-42		046151 (9005100-5600)	Plug assembly	1
	G27A	95-42		085043 (9004201-3700)	O-ring	1
	W	G01	95-42		4350350	Variable motor housing
G04		95-42		4350404	End cap	1
G05		95-42		046151 (9005100-5600)	Plug assembly	1
G05A		95-42		085043 (9004201-3700)	O-ring	1
G06		95-42		9007314-1012	Screw	4
G07		95-42		9001465-0015	Needle bearing	1
G27		95-42		046151 (9005100-5600)	Plug assembly	1
G27A		95-42		085043 (9004201-3700)	O-ring	1



E100 515E

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

COMMON PARTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	B15	95-42		9004300-1460	O-ring	1
	B16	95-42		4250027	Trunnion cover	1
	B18	95-42		378083 (9007210-0804)	Screw	4
	B19	95-42		4800470	Bearing kit	1
	B21	95-42		4350148	Thrust plate	1
	B22	95-42		4350291	Cylinder block kit	1
	B24	95-42		4350628	Cylinder block	1
	B25	95-42		4350012	Washer	1
	B26	95-42		4350172	Spring	1
	B27	95-42		9009625-0105	Washer	1
	B28	95-42		9006250-0162	Retaining ring	1
	B29	95-42		9004875-0109	Holddown pin	4
	B30	95-42		4350048	Holddown pin retainer	1
	B31	95-42		4350186	Slipper retainer guide	1
	B32	95-42		4350253	Piston assembly	9
	B36	95-42		4350185	Slipper retainer	1
	B37	95-42		4350145	End cap gasket	1
	B40	95-42		5000529	Pin (SB-1998-092)	2
	B45	95-42		664524 (9005110-9000)	Plug assembly	1
	B45A	95-42		001156 (9004201-7500)	O-ring	1
	B51	95-42		664524 (9005110-9000)	Plug assembly	1
	B51A	95-42		001156 (9004201-7500)	O-ring	1
	B54	95-42		4350187	Thrust washer	1
	F01	95-42		4350732	Trunnion cover assembly	1
	F03	95-42		378083 (9007210-0804)	Screw	4
	F04	95-42		9004300-1460	O-ring	1
	F05	95-42		4800470	Bearing kit	1
	N02	95-42		5000604	Lip seal (SB-2000-026)	1
	T01	95-42		4350754	Valve plate (SB-1999-058)	1
	T02	95-42		9004700-1910	Slotted pin	1

SPECIAL HARDWARE

NNN	T03	95-42		9006200-0281	Retaining ring	1
	T04	95-42		373282 (9001315-0011)	Ball bearing	1
NNR	T03	95-42		9006200-0281	Retaining ring	1
	T04	95-42		357616	Roller bearing (SB-1998-008)	1



OVERHAUL SEAL KIT

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
				4510148	Overhaul seal kit, MMV035/44D	1
	B15	95-42		9004300-1460	O-ring, 2.612 x .099, nitrile, 70D	1
	B37	95-42		4350145	End cap gasket	1
	B45A	95-42		001156 (9004201-7500)	O-ring, .9.24 x .116, nitrile, 90D	1
	B51A	95-42		001156 (9004201-7500)	O-ring, .9.24 x .116, nitrile, 90D	1
	C01	95-42		5000689	Lip seal (SB-2003-018)	1
	C04	95-42		5000465	Lip seal	1
	C06	95-42		9004100-0280	O-ring, 1.364 x .070, nitrile, 70D	1
	E03	95-42		076042 (9003509-0012)	Seal nut, M12	1
	F04	95-42		9004300-1460	O-ring, 2.612 x .099, nitrile, 70D	1
	G05A	95-42		085043 (9004201-3700)	O-ring, .468 x .078, nitrile, 90D	1
	G08A	95-42		085043 (9004201-3700)	O-ring, .468 x .078, nitrile, 90D	2
	G27A	95-42		085043 (9004201-3700)	O-ring, .468 x .078, nitrile, 90D	1
	N02	95-42		5000604	Lip seal (SB-2000-026)	1

PRODUCTS AFFECTED

Series 40: M35 and M44 motors

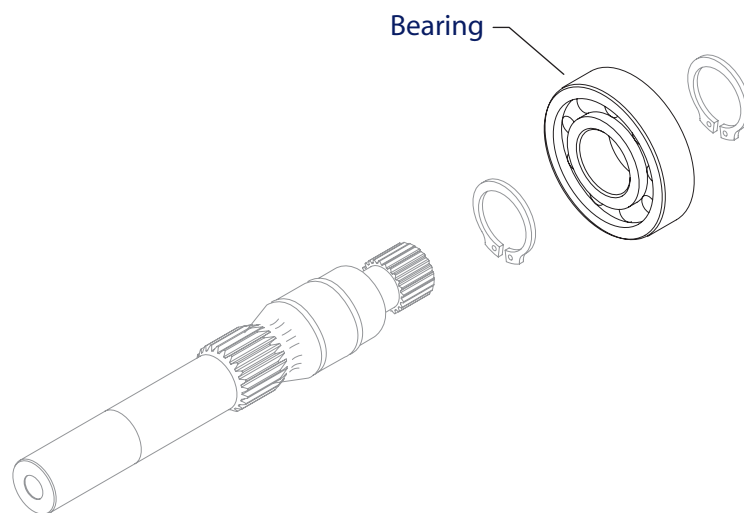
SUBJECT

Shaft bearing in high capacity special hardware option

DESCRIPTION

As a product improvement, Sauer-Danfoss changed the roller bearing Series 40: M35 and M44 motors equipped with the high capacity special hardware option. This change allows for motors equipped with this option to withstand a greater thrust load.

The new bearing is interchangeable with the old bearing.



MODELS AFFECTED

M35 motors		M44 motors
4353025	4353049	4443026
4353033	4353052	4443028
4353034	4353053	4443029
4353042	4353055	4443032
4353043	4354027	

SERIAL NUMBERS

This change became effective at serial number A-98-06-xxxxx.

PART NUMBERS AFFECTED

Item description	Old part number	New part number
Roller bearing	5000461	357616

PARTS DISPOSITION

- Interchangeable

PRODUCTS AFFECTED

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

SUBJECT

Housing to end cap dowel pin change

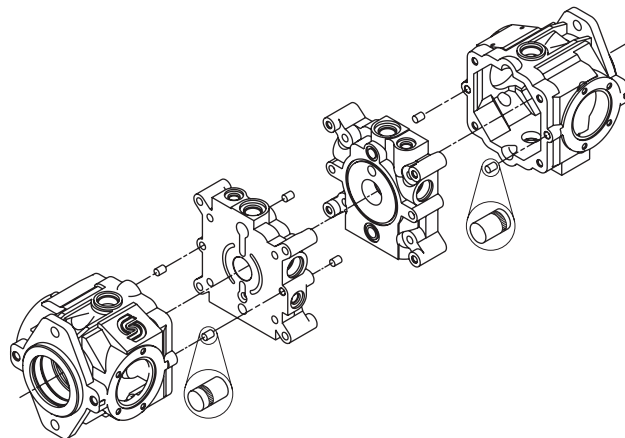
DESCRIPTION

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

PRODUCTS AFFECTED

Series 40: M25 fixed and U-style, M35, M44, and M46 fixed and variable motors

SUBJECT

Valve plate change

DESCRIPTION

As a product improvement, Sauer-Danfoss modified the finish on Series 40 motor valve plates. This change improves the plate's ability to develop and retain a suitable oil film, especially at initial start-up.

New part numbers for all Series 40 motor valve plates identify this change. This is an interchangeable change. The old part numbers are obsolete. They are no longer available as a service part.

MODELS AFFECTED

Series 40: M25 fixed motors and M25 motor sections within M25 U-style transmissions

Series 40: M35 and M44 fixed motors

Series 40: M46 fixed and variable motors

SERIAL NUMBERS

This change became effective at serial number A-99-34-xxxxx for all Series 40 M25 fixed motors and M25 motor sections of U-style transmissions.

This change became effective at serial number K-00-18-xxxxx for all Series 40 M35 and M44 fixed motors and all M46 fixed and variable motors

PART NUMBERS AFFECTED

Frame size	Item description	Old part number	New part number
M25	Motor valve plate	4250073	4250143
M35 and M44	Square key	4350159	4350754
M46	Motor valve plate	4460119	4461105

PARTS DISPOSITION

■ Interchangeable

PRODUCTS AFFECTED

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

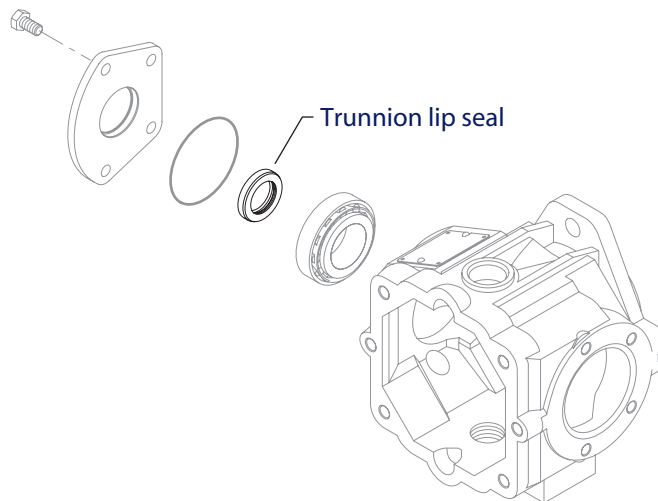
SUBJECT

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

PRODUCTS AFFECTED

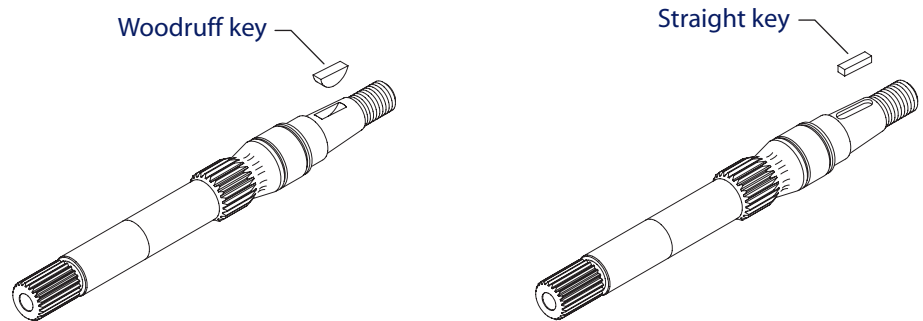
Series 40: M25, M35, M44, M46, and LV pumps and motors

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

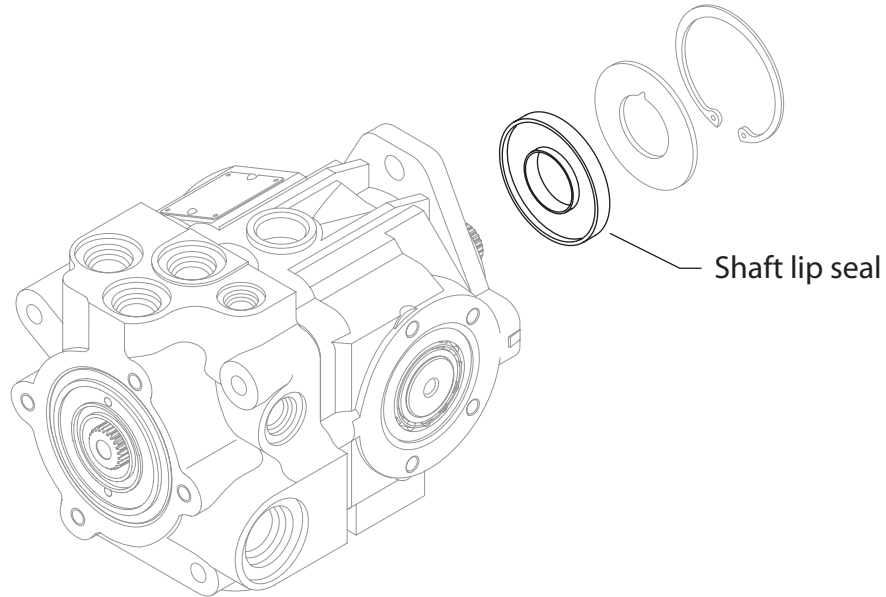
PARTS DISPOSITION

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

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

PRODUCTS AFFECTED

Series 40 fixed motors with loop flushing option (M25, M35, M44)

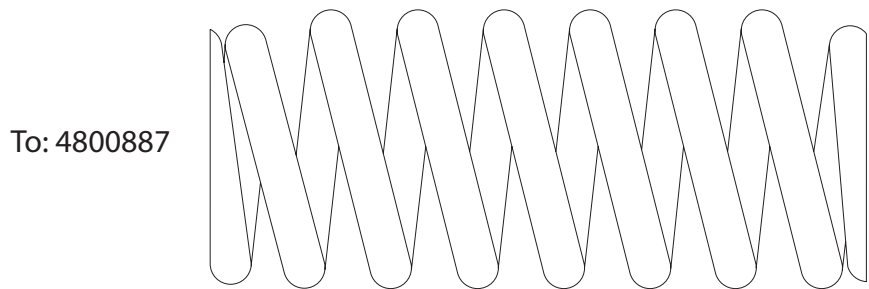
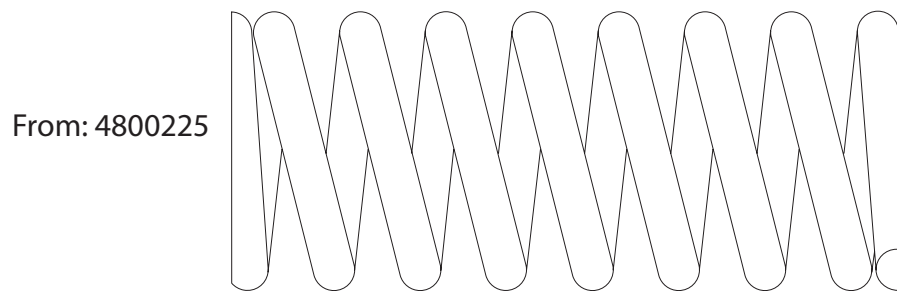
SUBJECT

Loop flush return spring.

DESCRIPTION

As a product improvement aimed at reducing assembly risk and increasing quality, Sauer-Danfoss is making the following change to series 40 fixed motors with loop flushing option (M25, M35, M44): Spring-helical compression (Old P/N 4800225) will change to spring-helical compression (New P/N 4800887). This change will be visually detectible as that the ends of the new spring will be tapered smaller allowing it to snap onto the spring guide (P/N 512257) holding the two parts together.

All parts are completely interchangeable in fit and function.



MODELS AFFECTED

All series 40 fixed motors with loop flushing option (M25, M35, M44)

SERIAL NUMBERS

Change will go into effect starting: K-06-03-XXXXX

PART NUMBERS AFFECTED

Old part number	New part number	Description
4800225	4800887	Spring

PARTS DISPOSITION

■ Interchangeable



PRODUCTS AFFECTED Series 40 M35 M44 fixed motors

SUBJECT Shaft seal

DESCRIPTION As a product improvement, Sauer-Danfoss has changed the shaft seal used in the series 40 M35 and M44 fixed motors. The new shaft seal and old shaft seal are completely interchangeable. The old shaft seal is obsolete and no longer available for service.

MODELS AFFECTED Series 40 M35 and M44 fixed motors using tapered shafts

SERIAL NUMBERS This change will become effective at serial number A-05-07-xxxxx

PART NUMBERS AFFECTED

Description	Old part number	New part number
Seal	9008000-0121	5000689

PARTS DISPOSITION ■ Interchangeable



Series 40 MMF035D and MMV035D Axial Piston Motors
Parts Manual
Notes





OUR PRODUCTS

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- Electric power steering
- Electrohydraulic power steering
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- Gear pumps and motors
- Bent axis motors
- Orbital motors
- Transit mixer drives
- Proportional valves
- Directional spool valves
- Cartridge valves
- Hydraulic integrated circuits
- Hydrostatic transaxles
- Integrated systems
- Fan drive systems
- Electrohydraulics
- Microcontrollers and software
- Electric motors and inverters
- Joysticks and control handles
- Displays
- Sensors

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