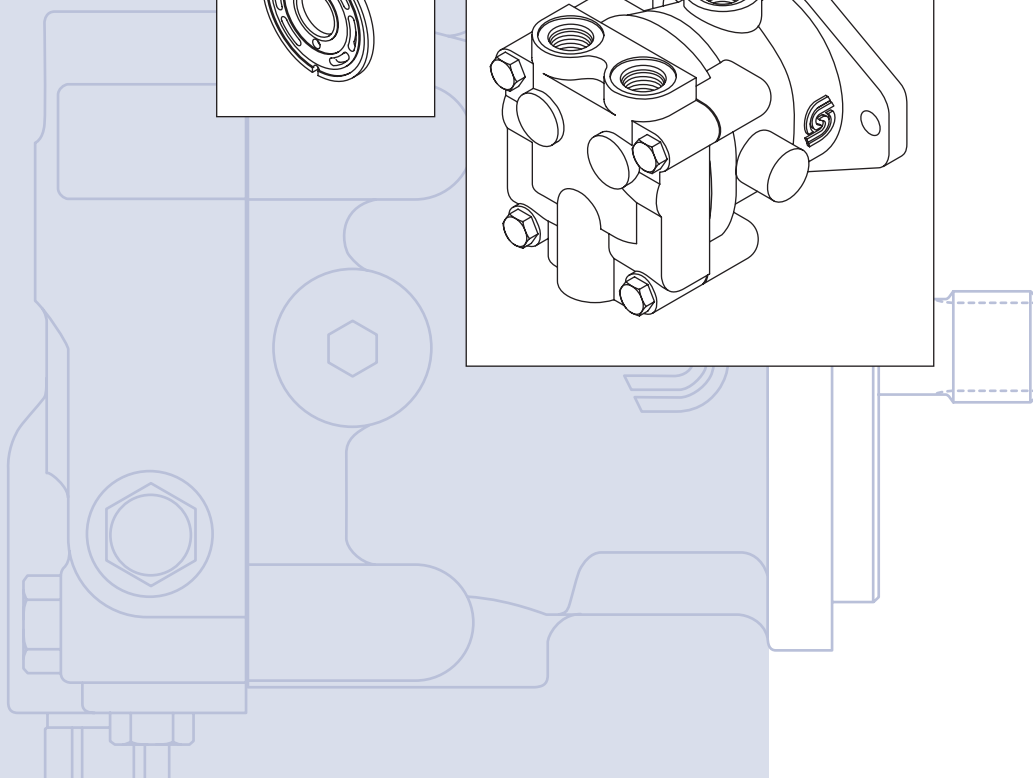
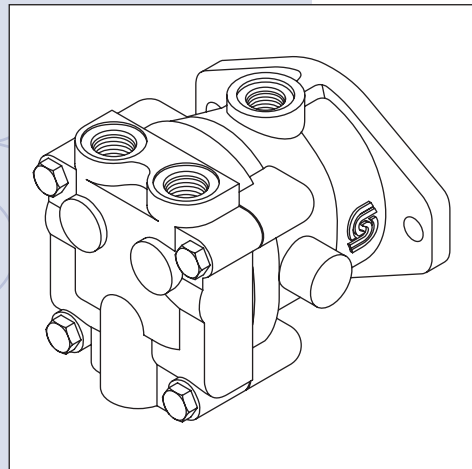
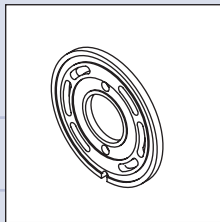
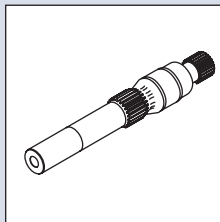
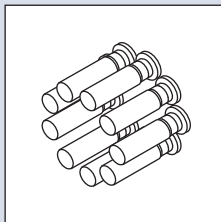




Series 40
M25 Axial Piston
Motor

Service Parts
Manual





Series 40 M25 Axial Piston Motor Service Parts Manual

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Front cover illustrations: P100 606, P100 607, P100 608, P100 609



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Service Parts Manual
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**SERVICE PARTS
 IDENTIFICATION**

The following information and procedure is used to identify the module group, item number, manufacture date, part number, and part name of the parts included in the Series 40, M25 fixed displacement motors.

The parts listed include all parts which may be used when performing either "Minor Repairs," "Major Repairs" or "Conversions" on the Series 40, M25 motor.

NAMEPLATE

Each unit will have a nameplate affixed to the housing. The nameplate will include the following information.

Model Code

The Sauer-Danfoss model code completely defines the specific unit and must be used when ordering parts to service this product.

Model Number

The Sauer-Danfoss model number is used by the factory in manufacturing. On repeat orders, a complete unit can be ordered by the model number.

Serial Number

The Sauer-Danfoss serial number is used to identify the manufacture date and the unit sequence in the build. The serial number is also used to identify the units 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" would indicate 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 used to identify a specific unit.



DATE CODE

The date code is defined as 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 the different part numbers. Find the date code of your unit from the nameplate to determine which 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
	"	96-32	02-47	532432 (9003310-2514)	Woodruff key	1

All units using this order code with a date code of 96.32 and 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. You must read that Service Bulletin prior to ordering that part. The information contained in these Service Bulletins, as of the print date of this bulletin, are included at the end of this manual. Service Bulletins contain more detailed information such as interchangeability, what additional parts are involved, etc. It is suggested 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 lip seal - Item B02 has the same item number on all motors.)

A part number that has another number following it in parentheses is done to make this a world wide manual. The first number is sold in Germany. The number in parentheses is sold in the United States. (Example: 5000093 (9008000-0132), customers would order 9008000-0132 if ordering the part in the United States.)

Example of a Part Identification

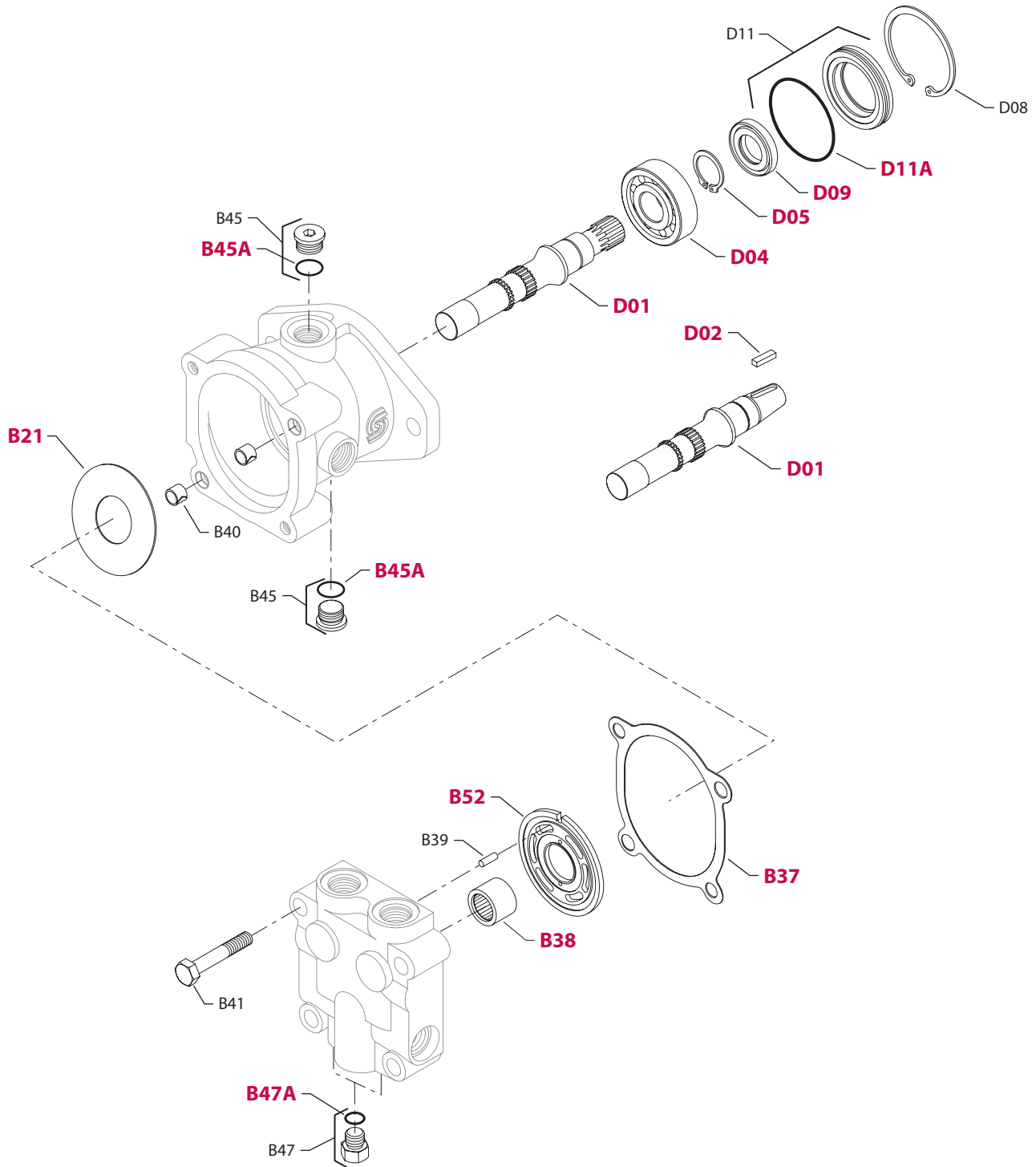
The nameplate on a Series 40 motor has an Order Code of MMF025C A E G A C NNN. Use the following procedures to determine the part number of the drive shaft used on this motor.

1) Referring to the output shaft module in the Order Code (see page 7), the output shaft option for this motor is identified by the code "E". (MMF025C A E G A C NNN)

2) Referring to the Service Parts List, find the shaft group. Next find the order code that relates to this unit, which is "E". The shaft is found to be item D01 and part number 4250078.



Series 40 M25 Axial Piston Motor
Service Parts Manual
Notes



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

COMMON PARTS

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	B21	93-07		3103218	Thrust plate	1
	B37	93-07		4250068	End cap gasket	1
	B38	93-07		5000046	Needle bearing	1
	B39	93-07		015701 (9004700-1910)	Pin	1
	B40	93-07		688606 (9004875-0100)	Pin	2
	B41	93-07		5000091	Screw	4
	B45	93-07		681296 (9005110-7500)	Plug	2
	B45A	93-07		001131 (9004201-5000)	O-ring	2
	B47	93-07		001511 (9005100-4400)	Plug	2
	B47A	93-07		001123 (9004201-2500)	O-ring	2
	B52	93-07		4250143	Valve plate (SB-1999-058)	1

SEAL GROUP

				see output shaft		
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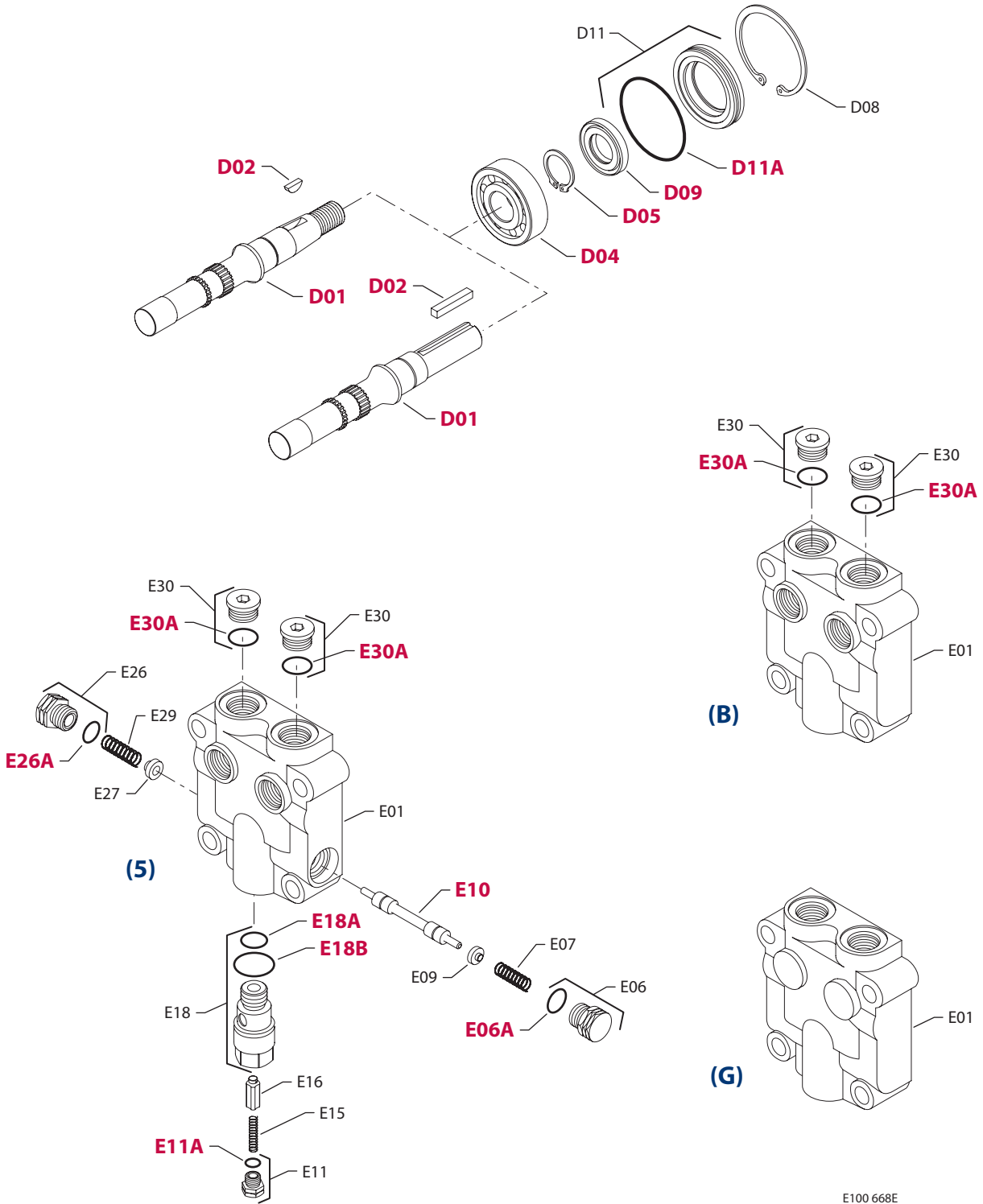
OUTPUT SHAFT

2	D01	00-31		4250146	Shaft, tapered	1
	D02	00-31		5000626	Square key	1
	D04	00-31		374447 (9001310-0008)	Ball bearing	1
	D05	00-31		5000660	Retaining ring	1
	D08	00-31		5000097 (9006200-0256)	Retaining ring	1
	D09	00-31		5000093 (9008000-0132)	Lip seal	1
	D11	00-31		4250176	Seal carrier assembly	1
	D11A	00-31		505536 (9004100-0350)	O-ring	1

4	D01	02-17		4250154	Shaft, 15 tooth spline	1
	D04	02-17		374447 (9001310-0008)	Ball bearing	1
	D05	02-17		5000660	Retaining ring	1
	D08	02-17		5000097 (9006200-0256)	Retaining ring	1
	D09	02-17		506515 (9008000-0131)	Lip seal	1
	D11	02-17		4250178	Seal carrier assembly	1
	D11A	02-17		505536 (9004100-0350)	O-ring	1

5	D01	02-46		4250150	Shaft, 13 tooth spline	1
	D04	02-46		374447 (9001310-0008)	Ball bearing	1
	D05	02-46		5000660	Retaining ring	1
	D08	02-46		5000097 (9006200-0256)	Retaining ring	1
	D09	02-46		5000093 (9008000-0132)	Lip seal	1
	D11	02-46		4250176	Seal carrier assembly	1
	D11A	02-46		505536 (9004100-0350)	O-ring	1

E	D01	94-09		4250078	Shaft, 13 tooth spline	1
	D04	94-09		374447 (9001310-0008)	Ball bearing	1
	D05	94-09		5000660	Retaining ring	1
	D08	94-09		5000097 (9006200-0256)	Retaining ring	1
	D09	94-09		5000093 (9008000-0132)	Lip seal	1
	D11	94-09		4250176	Seal carrier assembly	1
	D11A	94-09		505536 (9004100-0350)	O-ring	1



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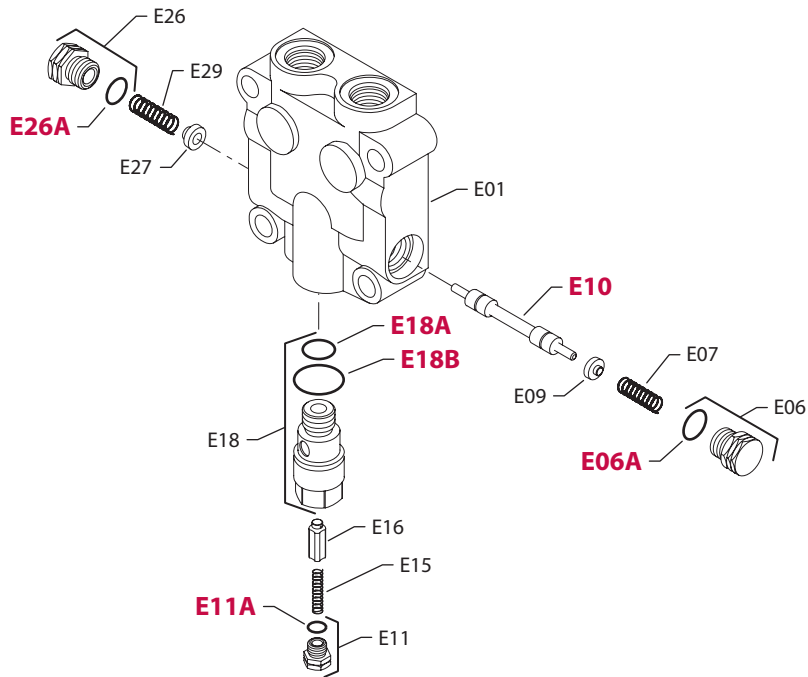
Enlarged **bold** type item numbers are recommended part to stock for servicing.

OUTPUT SHAFT

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
N	D01	96-49		4250129	Shaft, tapered	1
	D02	96-49		532432 (9003310-2514)	Woodruff key	1
	D04	96-49		374447 (9001310-0008)	Ball bearing	1
	D05	96-49		5000660	Retaining ring	1
	D08	96-49		5000097 (9006200-0256)	Retaining ring	1
	D09	96-49		5000093 (9008000-0132)	Lip seal	1
	D11	96-49		4250176	Seal carrier assembly	1
	D11A	96-49		505536 (9004100-0350)	O-ring	1
	S	D01	93-50		4250190	Shaft, straight key
D02		93-50		5000158 (9003261-2524)	Square key	1
D04		93-50		374447 (9001310-0008)	Ball bearing	1
D05		93-50		5000660	Retaining ring	1
D08		93-50		5000097 (9006200-0256)	Retaining ring	1
D09		93-50		5000093 (9008000-0132)	Lip seal	1
D11		93-50		4250176	Seal carrier assembly	1
D11A		93-50		505536 (9004100-0350)	O-ring	1

END CAP

5	E01	99-18		4250142	End cap, axial ports with loop flushing	1
	E06	99-18		4800365	Plug assembly	1
	E06A	99-18		085043 (9004201-3700)	O-ring	1
	E07	99-18		4800225	Spring	1
	E09	99-18		512257	Spring guide	1
	E10	99-18		8800550	Shuttle spool	1
	E11	99-18		4800280	Plug assembly	1
	E11A	99-18		015818 (9004201-3100)	O-ring	1
	E15	99-18		768853	Spring	1
	E16	99-18		4800397	Poppet	1
	E18	99-18		4800366	Adaptor plug assembly	1
	E18A	99-18		085043 (9004201-3700)	O-ring	1
	E18B	99-18		000836 (9004100-0200)	O-ring	1
	E26	99-18		4800365	Plug assembly	1
	E26A	99-18		085043 (9004201-3700)	O-ring	1
	E27	99-18		4800225	Spring	1
	E29	99-18		512257	Spring guide	1
	E30	99-18		315325 (9005100-8700)	Plug assembly	2
	E30A	99-18		001149 (9004201-6200)	O-ring	2
	B	E01	96-47		4250122	End cap, axial ports
E30		96-47		315325 (9005100-8700)	Plug assembly	2
E30A		96-47		001149 (9004201-6200)	O-ring	2
G	E01	96-47		4250067	End cap, radial ports	1

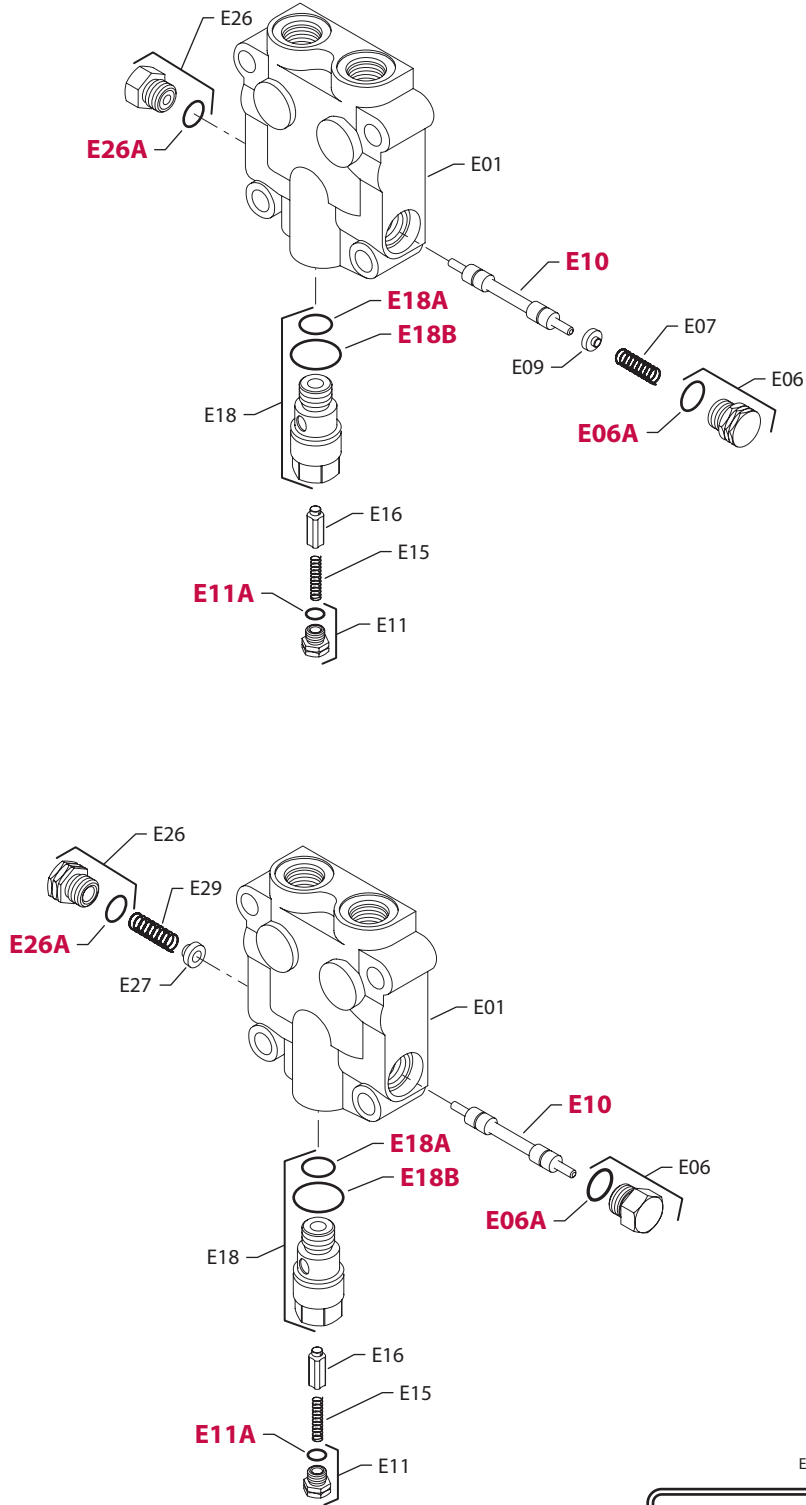


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Enlarged **bold** type item numbers are recommended part to stock for servicing.

END CAP

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
M	E01	01-37		4250079	End cap, radial ports with loop flushing	1
	E06	01-37		4800365	Plug assembly	1
	E06A	01-37		085043 (9004201-3700)	O-ring	1
	E07	01-37		4800225	Spring	1
	E09	01-37		512257	Spring guide	1
	E10	01-37		8800550	Shuttle spool	1
	E11	01-37		4800280	Plug assembly	1
	E11A	01-37		015818 (9004201-3100)	O-ring	1
	E15	01-37		768853	Spring	1
	E16	01-37		4800396	Poppet	1
	E18	01-37		4800366	Adaptor plug assembly	1
	E18A	01-37		085043 (9004201-3700)	O-ring	1
	E18B	01-37		000836 (9004100-0200)	O-ring	1
	E26	01-37		4800365	Plug assembly	1
	E26A	01-37		085043 (9004201-3700)	O-ring	1
	E27	01-37		4800225	Spring	1
	E29	01-37		512257	Spring guide	1
R	E01	94-08		4250079	End cap, radial ports with loop flushing	1
	E06	94-08		4800365	Plug assembly	1
	E06A	94-08		085043 (9004201-3700)	O-ring	1
	E07	94-08		4800225	Spring	1
	E09	94-08		512257	Spring guide	1
	E10	94-08		8800550	Shuttle spool	1
	E11	94-08		4800280	Plug assembly	1
	E11A	94-08		015818 (9004201-3100)	O-ring	1
	E15	94-08		768853	Spring	1
	E16	94-08		4800397	Poppet	1
	E18	94-08		4800366	Adaptor plug assembly	1
	E18A	94-08		085043 (9004201-3700)	O-ring	1
	E18B	94-08		000836 (9004100-0200)	O-ring	1
	E26	94-08		4800365	Plug assembly	1
	E26A	94-08		085043 (9004201-3700)	O-ring	1
	E27	94-08		4800225	Spring	1
	E29	94-08		512257	Spring guide	1

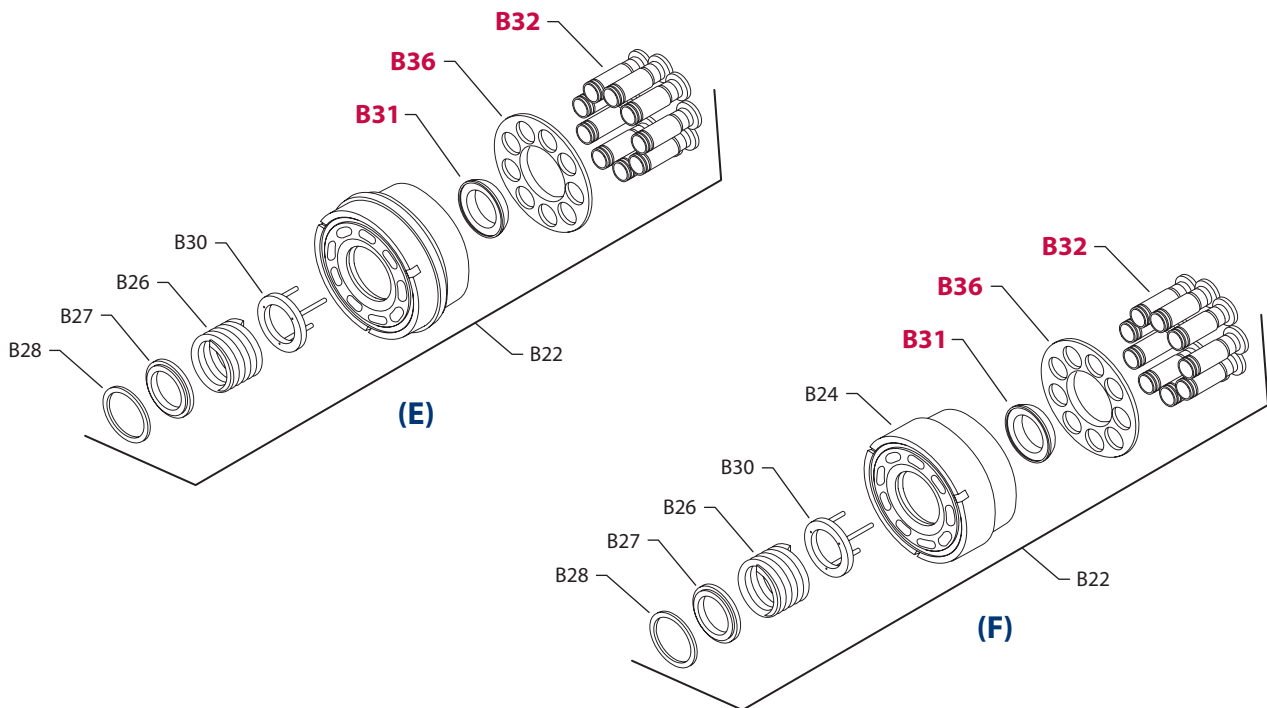
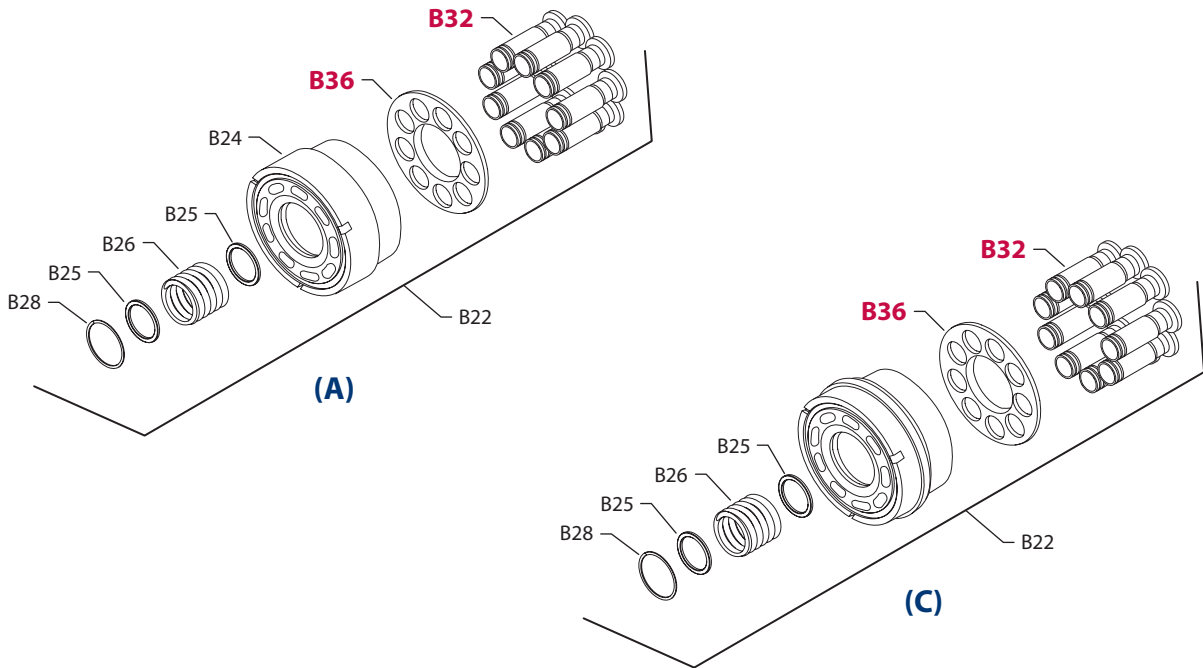


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Enlarged **bold** type item numbers are recommended part to stock for servicing.

END CAP

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
S	E01	94-08		4250079	End cap, radial ports with loop flushing	1	
	E06	94-08		4800365	Plug assembly	1	
	E06A	94-08		085043 (9004201-3700)	O-ring	1	
	E07	94-08		4800225	Spring	1	
	E09	94-08		512257	Spring guide	1	
	E10	94-08		8800550	Shuttle spool	1	
	E11	94-08		4800280	Plug assembly	1	
	E11A	94-08		015818 (9004201-3100)	O-ring	1	
	E15	94-08		768853	Spring	1	
	E16	94-08		4800396	Poppet	1	
	E18	94-08		4800366	Adaptor plug assembly	1	
	E18A	94-08		085043 (9004201-3700)	O-ring	1	
	E18B	94-08		000836 (9004100-0200)	O-ring	1	
	E26	94-08		4800362	Plug assembly, defeated	1	
	E26A	94-08		085043 (9004201-3700)	O-ring	1	
	T	E01	94-08		4250079	End cap, radial ports with loop flushing	1
		E06	94-08		4800362	Plug assembly, defeated	1
E06A		94-08		085043 (9004201-3700)	O-ring	1	
E10		94-08		8800550	Shuttle spool	1	
E11		94-08		4800280	Plug assembly	1	
E11A		94-08		015818 (9004201-3100)	O-ring	1	
E15		94-08		768853	Spring	1	
E16		94-08		4800396	Poppet	1	
E18		94-08		4800366	Adaptor plug assembly	1	
E18A		94-08		085043 (9004201-3700)	O-ring	1	
E18B		94-08		000836 (9004100-0200)	O-ring	1	
E26		94-08		4800365	Plug assembly	1	
E26A		94-08		085043 (9004201-3700)	O-ring	1	
E27		94-08		4800225	Spring	1	
E29		94-08		512257	Spring guide	1	

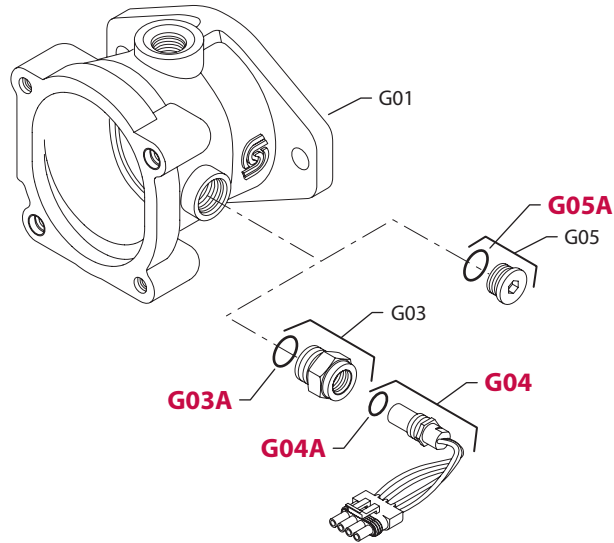


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Enlarged **bold** type item numbers are recommended part to stock for servicing.

CYLINDER BLOCK KIT

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A	B22	93-07		4250062	Cylinder block kit	1
	B24	93-07		4250095	Cylinder block	1
	B25	93-07		9009625-0106	Washer	2
	B26	93-07		3103199	Spring	1
	B28	93-07		5000462 (9006250-0131)	Retaining ring	1
	B32	93-07		4250127	Piston assembly	9
	B36	93-07		3103197	Slipper retainer	1
	<hr/>					
C	B22	96-14		4250097	Cylinder block kit with speed ring	1
	B25	96-14		9009625-0106	Washer	2
	B26	96-14		3103199	Spring	1
	B28	96-14		9006250-0131	Retaining ring	1
	B32	96-14		4250127	Piston assembly	9
	B36	96-14		3103197	Slipper retainer	1
	<hr/>					
E	B22	02-17		4250160	Cylinder block kit with keel holddown, speed ring	1
	B26	02-17		3103199	Spring	1
	B27	02-17		5000455	Washer	1
	B28	02-17		5000462 (9006250-0131)	Retaining ring	1
	B30	02-17		4250121	Slipper holddown washer assembly	1
	B31	02-17		4250140	Slipper retainer guide	1
	B32	02-17		4250127	Piston assembly	9
	B36	02-17		4250117	Slipper retainer	1
	<hr/>					
F	B22	02-50		4250119	Cylinder block kit with keel holddown	1
	B24	02-50		4250115	Cylinder block	1
	B26	02-50		3103199	Spring	1
	B27	02-50		5000455	Washer	1
	B28	02-50		5000462 (9006250-0131)	Retaining ring	1
	B30	02-50		4250121	Slipper holddown washer assembly	1
	B31	02-50		4250140	Slipper retainer guide	1
	B32	02-50		4250127	Piston assembly	9
	B36	02-50		4250117	Slipper retainer	1



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

HOUSING

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B	G01	93-07		4250096	Housing	1
	G05	96-17		315325 (9005110-8700)	Plug	1
	G05A	96-17		001149 (9004201-6200)	O-ring	1
C	G01	93-45		4250137	Housing, 20 cc (SB-1998-040)	1
	G05	98-38		315325 (9005110-8700)	Plug	1
	G05A	98-38		001149 (9004201-6200)	O-ring	1
D	G01	97-15		4250096	Housing	1
	G03	97-45		4800432	Adapter assembly	1
	G03A	97-45		001149 (9004201-6200)	O-ring	1
	G04	97-45		KPPG13408	Speed sensor	1
	G04A	97-45		085043 (9004201-3700)	O-ring	1
	G05	97-45		315325 (9005110-8700)	Plug	1
	G05A	97-45		001149 (9004201-6200)	O-ring	1
F	G01	96-38		4250096	Housing	1
	G03	97-45		4800432	Adapter assembly	1
	G03A	97-45		001149 (9004201-6200)	O-ring	1
	G04	97-45		KPPG156	Speed sensor	1
	G04A	97-45		085043 (9004201-3700)	O-ring	1
J	G01	98-31		4250137	Housing, 20 cc	1
	G03	98-31		4800432	Adapter assembly	1
	G03A	98-31		001149 (9004201-6200)	O-ring	1
	G04	98-31		KPPG12703A	Speed sensor	1
	G04A	98-31		085043 (9004201-3700)	O-ring	1
N	G01	00-14		4250096	Housing	1
	G03	00-14		4800432	Adapter assembly	1
	G03A	00-14		001149 (9004201-6200)	O-ring	1
	G04	00-14		KPPG16008	Speed sensor	1
	G04A	00-14		085043 (9004201-3700)	O-ring	1

OVERHAUL SEAL KIT

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
				4510035	Overhaul seal kit, MMF035C	1
	B37	93-07		4250068	End cap gasket	1
	B45A	93-07		001131 (9004201-5000)	O-ring	2
	D09	93-07		5000093 (9008000-0132)	Lip seal	1
	D11A	93-07		505536 (9004100-0350)	O-ring	1
	E06A	93-07		085043 (9004201-3700)	O-ring	1
	E11A	93-07		015818 (9004201-3100)	O-ring	1
	E18A	93-07		000836 (9004100-0200)	O-ring	1
	E18B	93-07		058043 (9004201-3700)	O-ring	1
	E26A	93-07		085043 (9004201-3700)	O-ring	1
	G03A	93-07		001149 (9004201-6200)	O-ring	1
	G05A	93-07		001149 (9004201-6200)	O-ring	1

PRODUCTS AFFECTED M25 fixed motors

SUBJECT Housing

DESCRIPTION As a product improvement and in order to limit the quantity of part numbers, Sauer-Danfoss has made a change to the M25 fixed motor housing. The new housing includes a PPU (Pulse Pick Up) port for the insertion of a speed sensor.

The new housing is interchangeable with the old housing, and the old housing will become obsolete.

MODELS AFFECTED M25-3xxx

SERIAL NUMBERS This change will become effective at serial number A-98-24-xxxxx.

PART NUMBERS AFFECTED

Item description	Old part number	New part number
M25 fixed motor housing	4250077	4250137

PARTS DISPOSITION ■ Interchangeable

PRODUCTS AFFECTED Series 40 motors (M25 fixed and U-style, M35, M44, and M46 fixed and variable)

SUBJECT Valve plate change

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

In order to track this change, all Series 40 motor valve plate numbers have been changed. This is an interchangeable change and the old part numbers have been obsoleted.

MODELS AFFECTED All Series 40 - M25 fixed motors and M25 motor section within M25 U-style transmissions
 All Series 40 - M35 and M44 fixed motors
 All 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 section 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 vale plate	4250073	4250143
M35 and M44	Motor valve plate	4350159	4350754
M46	Motor valve plate	4460119	4461105

PARTS DISPOSITION ■ Interchangeable



Series 40 M25 Axial Piston Motor
Service Parts Manual
Notes



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