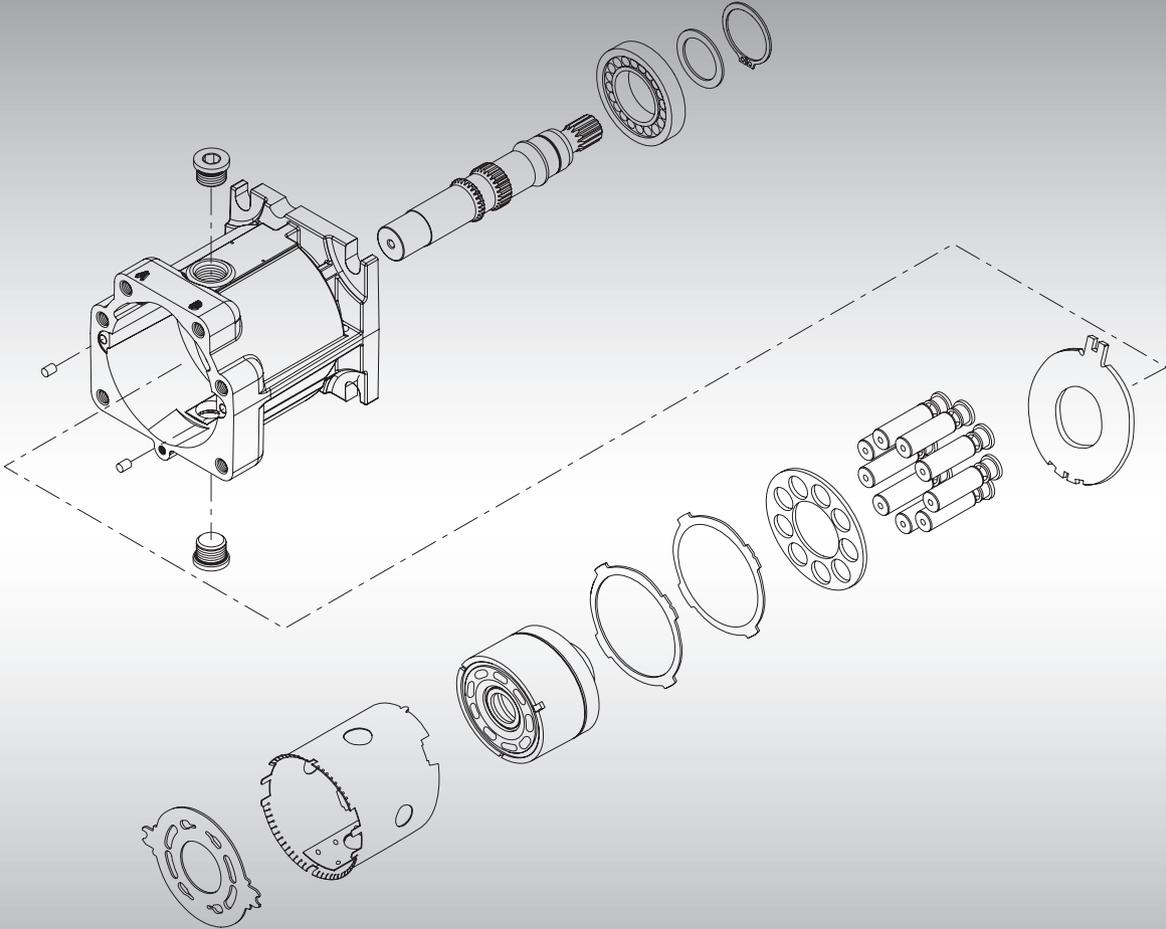




Parts Manual

# Series 90 130 cc Axial Piston Motor







**Contents**

<b>General information</b>	Service parts identification .....	4
	Nameplate .....	4
	Date code .....	5
	Service bulletins.....	5
	Procedure to identify a part.....	5
<b>Fixed displacement motor</b>	Order code .....	7
	Common parts .....	8-9
	Special hardware .....	8-19
	End cap.....	20-21
	Loop flushing.....	22-23
	Charge pressure.....	24-27
	Shaft .....	26-27
	Overhaul seal kit .....	28
<b>Service bulletin</b>	SB-1995-023 (slipper guide retainer) .....	30



## General information

### 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 90, 130 cc fixed displacement cartridge motor.

The parts listed include all parts which may be used when performing either “Minor Repairs”, “Major Repairs” or “Conversions” on the Series 90, 130 cc motor.

### Nameplate

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

#### Model Code

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

#### Model Number

The 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 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). “N” indicates the unit was originally assembled in Neumunster, Germany.

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.





## General information

### 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 H10

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Usage
N	H10	89-38		8800668	Loop flushing spool, defeated	1
	H10	87-02	89-37	8800021	Loop flushing spool, defeated (SB-1989-020)	1

All units using this order code with a date code of 87-02 and up to and including 89-37, must use part number "8800021". All units with a date code of 89-38 and newer must use part number "8800668".

### 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 90 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 L40 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: 515965 (9005110-5600), customers would order 9005110-5600 if ordering the part in the United States.)

#### Example of a part identification

The nameplate on a Series 90 motor has an Order Code of 90M130 NC 0 N 8 N 0 F1 W 00 EBA 00 00 G3. Use the following procedures to determine the part number of the drive shaft used on this motor.

1) Referring to the shaft module in the Order Code (see page 7), the shaft option for this motor is identified by the code "F1". (90M130 NC 0 N 8 N 0 **F1** W 00 EBA 00 00 G3)

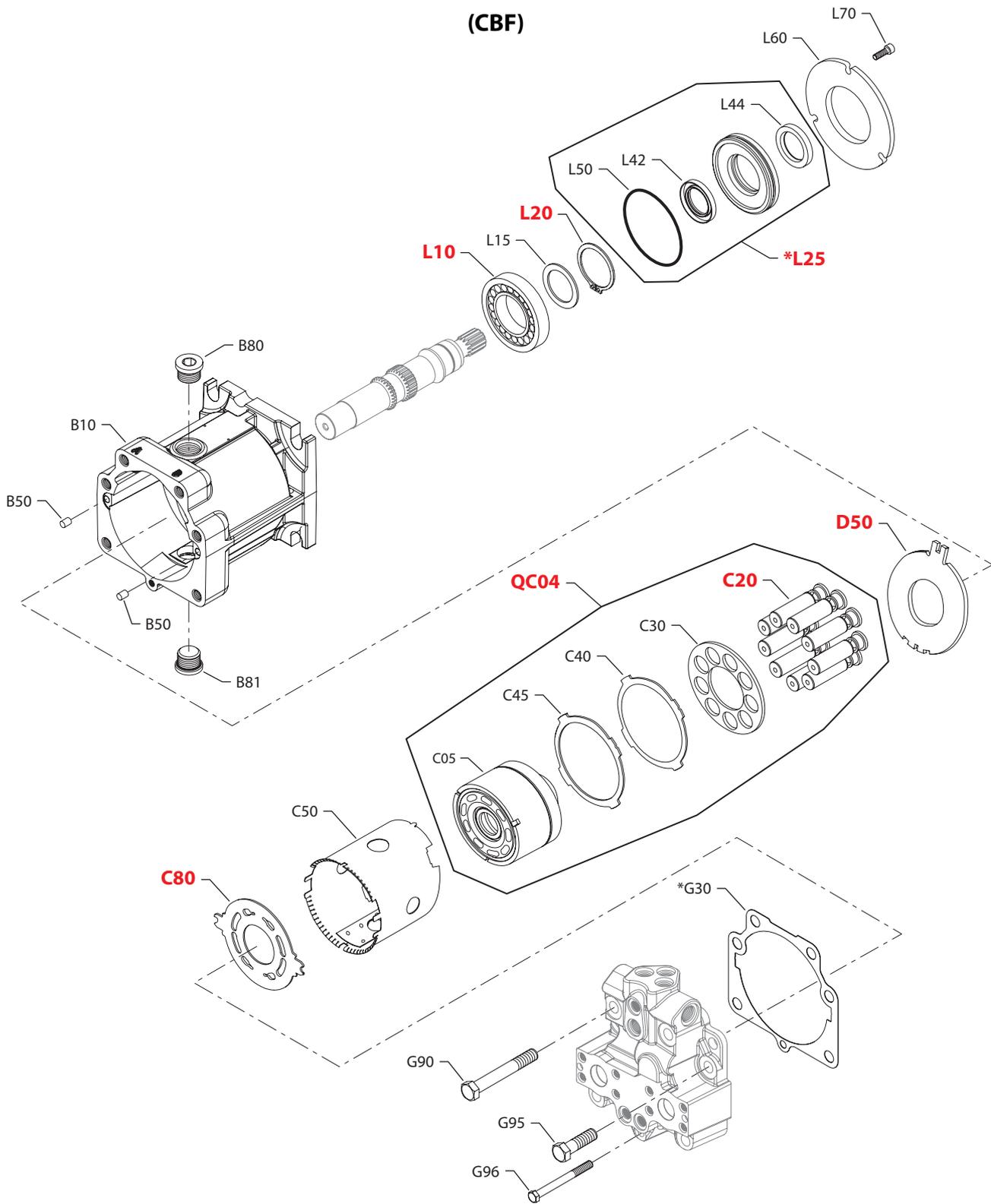
2) Referring to the Service Parts List, find the shaft group. Next find the order code that relates to this unit, which is "F1". The shaft is found to be item L100 and part number 310458.







Fixed displacement motor



\* = included in overhaul seal kit Q210

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


**Fixed displacement motor**
**Common parts**

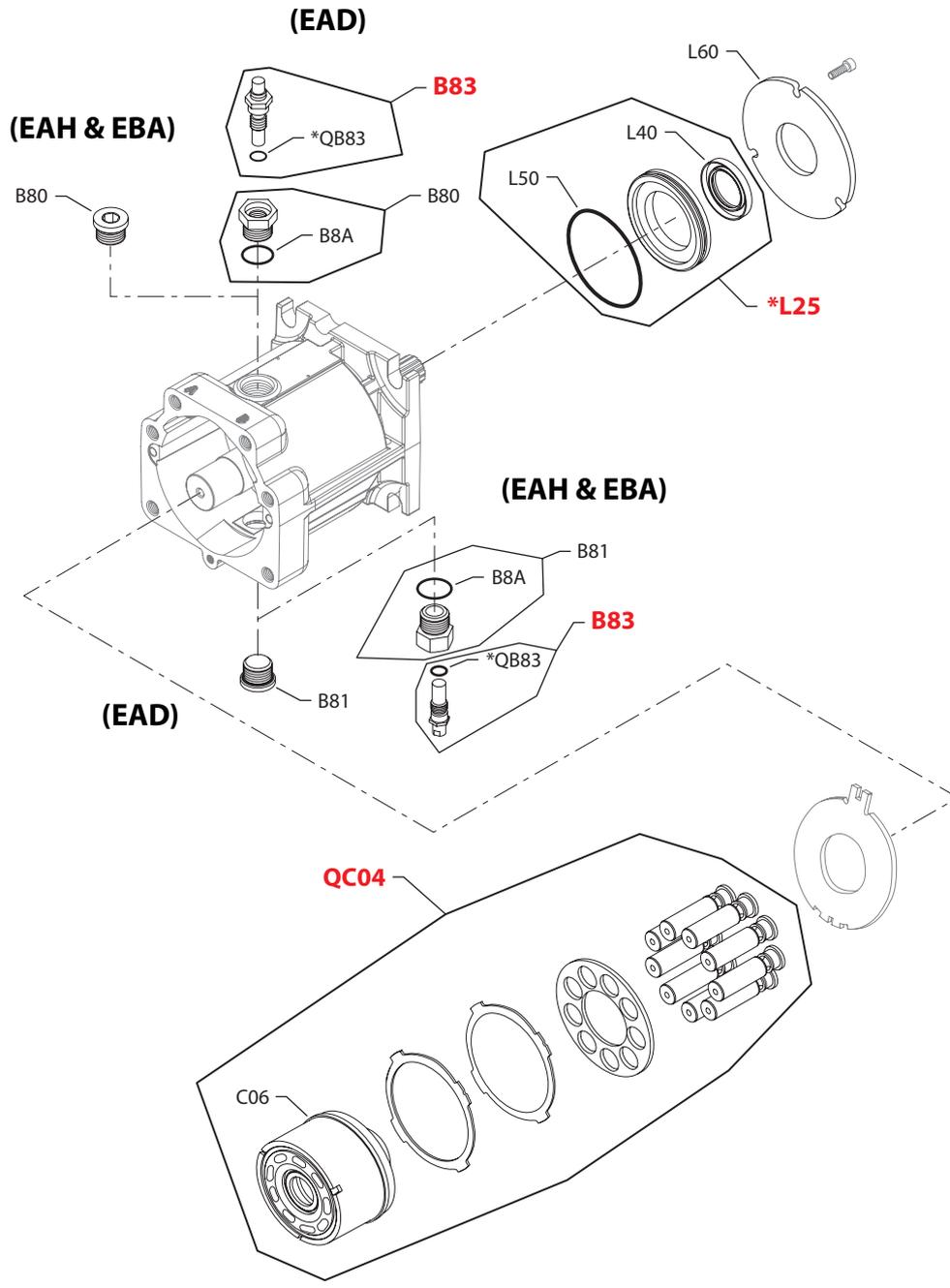
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	B10	89-04		11006997	Housing	1
	B50	89-04		9004800-3708	Pin	2
	C20	89-04		727750	Piston assembly, welded	9
	C30	89-04		11067352	Slipper guide	1
	C40	89-04		11057799	Slipper guide retainer (SB-1995-023)	1
	C45	89-04		11063830	Slipper guide retainer spacer (SB-1995-023)	1
	C50	89-04		761007	Hold down tube	1
	C80	89-04		502190	Valve plate	1
	D50	89-04		11136454	Thrust plate	1
	G30	89-04		304311	End cap gasket	1
	G90	89-04		309328 (9007210-1618)	Screw	4
	G95	89-04		674432 (9007210-1610)	Screw	2
	G96	89-04		648444 (9007210-1018)	Screw	1
	L10	89-04		11018484	Roller beraing	1
	L15	89-04		376319	Shim	1
	L20	89-04		392209	Retaining ring	1
	L70	89-04		395723 (9007315-0805)	Screw	3

**Special hardware**

CBF	B80	89-04		320002 (9005110-9200)	Plug assembly	1
	B81	89-04		320002 (9005110-9200)	Plug assembly	1
	C05	89-04		11033869	Cylinder block assembly	1
	L25	89-04		11031191	Seal assembly	1
	L42	89-04		11030919	Lip seal	1
	L44	89-04		11030919	Lip seal	1
	L50	89-04		509353	O-ring	1
	L60	89-04		11031202	Retainer plate	1
	QC04	89-04		519276	Cylinder block kit	1
	Q210	89-04		11134060	Overhaul seal kit, special	1



Fixed displacement motor



\* = included in overhaul seal kit Q210

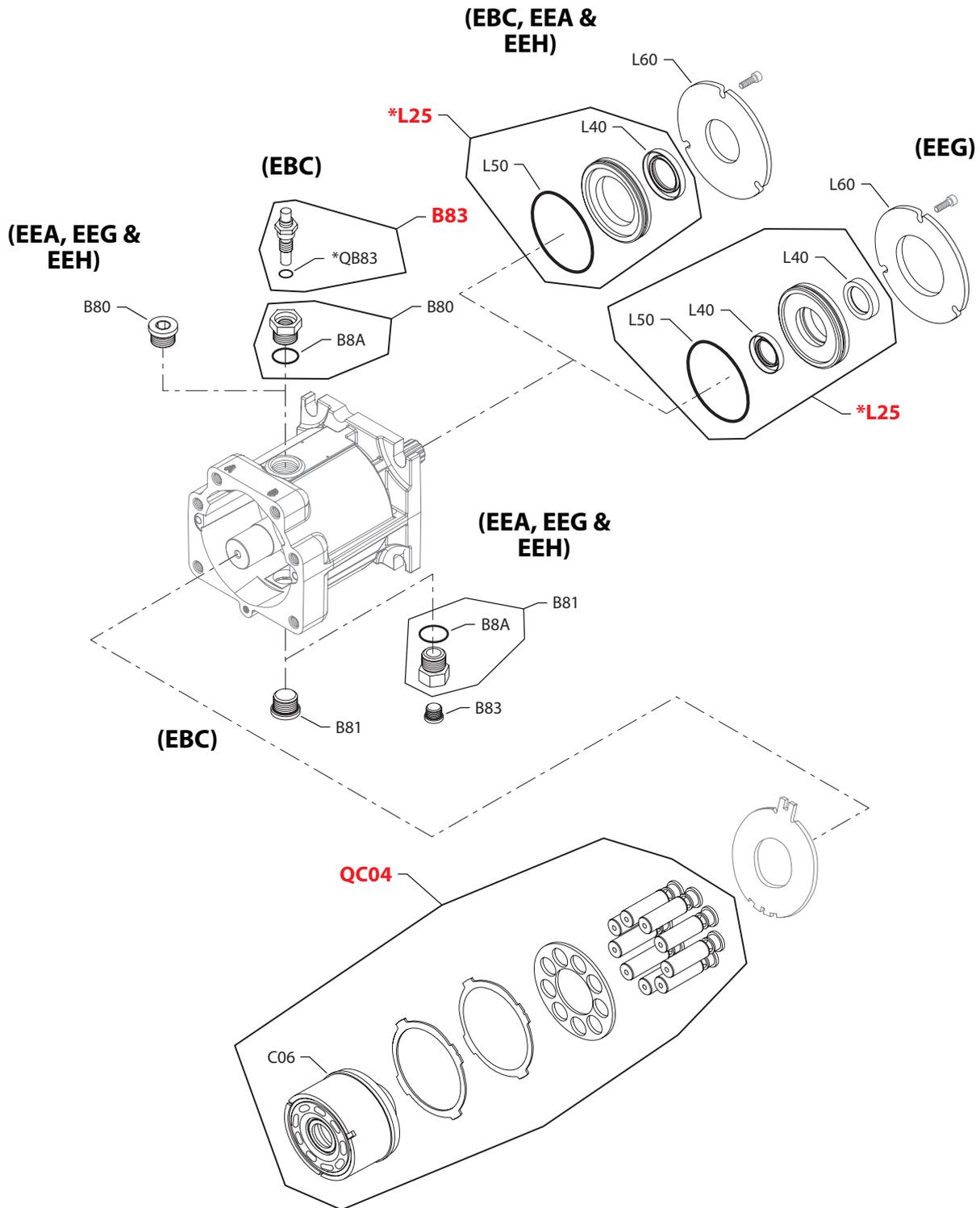
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 Enlarged **bold** type item numbers are recommended part to stock for servicing.


**Fixed displacement motor**
**Special hardware**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
EAD	B8A	89-04		001172 (9004201-9000)	O-ring	1	
	B80	89-04		511925	Adaptor assembly	1	
	B81	89-04		320002 (9005110-9200)	Plug assembly	1	
	B83	89-04		KPPG12508	Speed sensor assembly	1	
	C06	89-04		519259	Cylinder block assembly w/speed ring	1	
	L25	89-04		519732	Seal assembly	1	
	L40	89-04		519021	Lip seal	1	
	L50	89-04		509353	O-ring	1	
	L60	89-04		516769	Retainer plate	1	
	QB83	98-04		9004201-3700	O-ring	1	
	QC04	89-04		519277	Cylinder block kit w/speed ring	1	
	Q210	89-04		11134057	Overhaul seal kit, standard	1	
	EAH	B8A	89-04		001172 (9004201-9000)	O-ring	1
		B80	89-04		320002 (9005110-9200)	Plug assembly	1
B81		89-04		511925	Adaptor assembly	1	
B83		89-04		KPPG13808	Speed sensor assembly	1	
C06		89-04		519259	Cylinder block assembly w/speed ring	1	
L25		89-04		519732	Seal assembly	1	
L40		89-04		519021	Lip seal	1	
L50		89-04		509353	O-ring	1	
L60		89-04		516769	Retainer plate	1	
QB83		98-04		9004201-3700	O-ring	1	
QC04		89-04		519277	Cylinder block kit w/speed ring	1	
Q210		89-04		11134057	Overhaul seal kit, standard	1	
EBA		B8A	89-04		001172 (9004201-9000)	O-ring	1
		B80	89-04		320002 (9005110-9200)	Plug assembly	1
	B81	89-04		511925	Adaptor assembly	1	
	B83	89-04		KPPG13408	Speed sensor assembly	1	
	C06	89-04		519259	Cylinder block assembly w/speed ring	1	
	L25	89-04		519732	Seal assembly	1	
	L40	89-04		519021	Lip seal	1	
	L50	89-04		509353	O-ring	1	
	L60	89-04		516769	Retainer plate	1	
	QB83	98-04		9004201-3700	O-ring	1	
	QC04	89-04		519277	Cylinder block kit w/speed ring	1	
	Q210	89-04		11134057	Overhaul seal kit, standard	1	



Fixed displacement motor



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\* = included in overhaul seal kit Q210

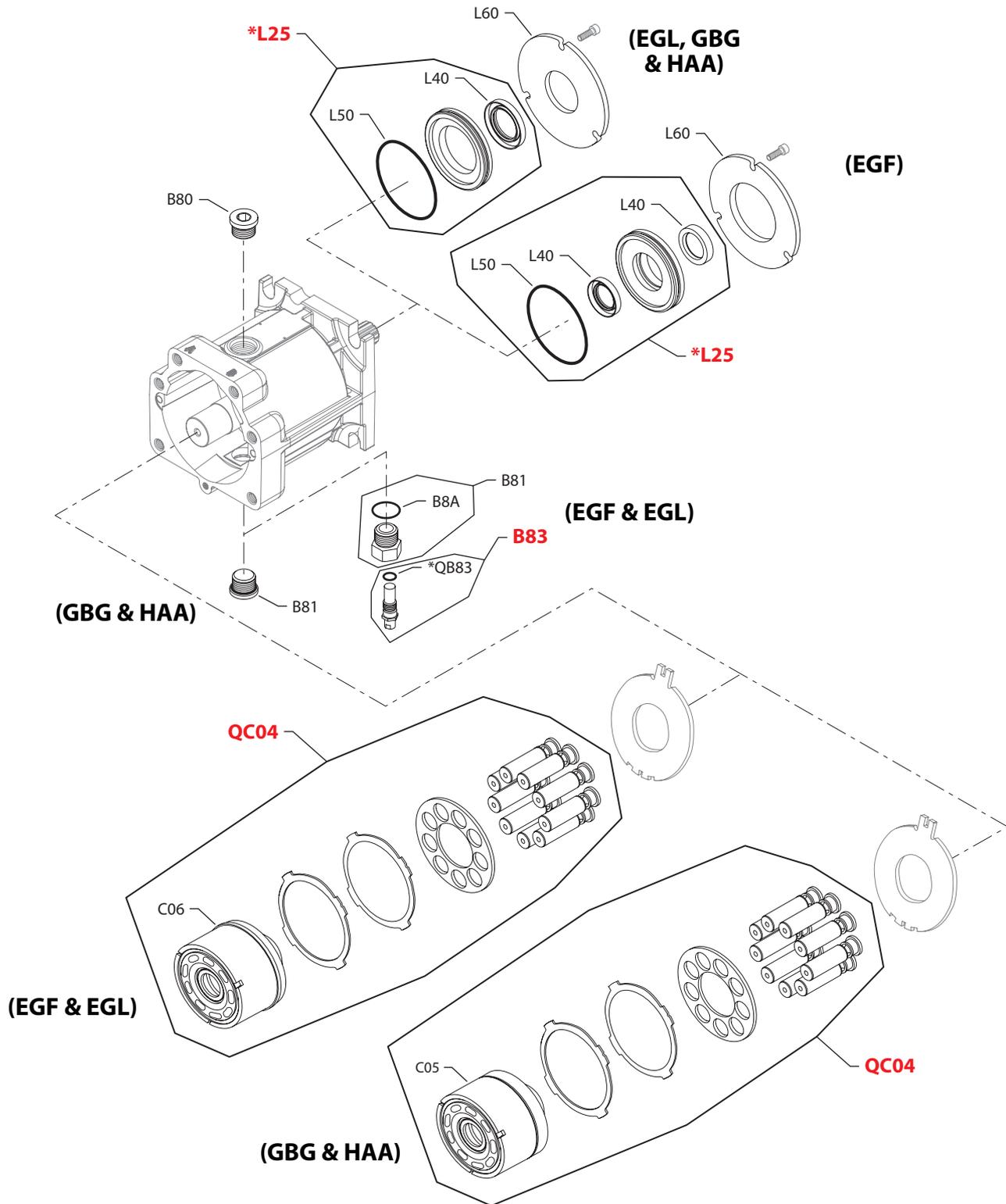
Enlarged **bold** type item numbers are recommended part to stock for servicing.


**Fixed displacement motor**
**Special hardware**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
EBC	B8A	89-04		001172 (9004201-9000)	O-ring	1	
	B80	89-04		511925	Adaptor assembly	1	
	B81	89-04		320002 (9005110-9200)	Plug assembly	1	
	B83	89-04		KPPG12408	Speed sensor assembly	1	
	C06	89-04		519259	Cylinder block assembly w/speed ring	1	
	L25	89-04		519732	Seal assembly	1	
	L40	89-04		519021	Lip seal	1	
	L50	89-04		509353	O-ring	1	
	L60	89-04		516769	Retainer plate	1	
	QB83	98-04		9004201-3700	O-ring	1	
	QC04	89-04		519277	Cylinder block kit w/speed ring	1	
	Q210	89-04		11134057	Overhaul seal kit, standard	1	
	EEA	B8A	89-04		001172 (9004201-9000)	O-ring	1
B80		89-04		320002 (9005110-9200)	Plug assembly	1	
B81		89-04		511925	Adaptor assembly	1	
B83		89-04		140644	Plug assembly	1	
C06		89-04		519259	Cylinder block assembly w/speed ring	1	
L25		89-04		519732	Seal assembly	1	
L40		89-04		519021	Lip seal	1	
L50		89-04		509353	O-ring	1	
L60		89-04		516769	Retainer plate	1	
QC04		89-04		519277	Cylinder block kit w/speed ring	1	
Q210		89-04		11134057	Overhaul seal kit, standard	1	
EEG		B8A	89-04		001172 (9004201-9000)	O-ring	1
		B80	89-04		320002 (9005110-9200)	Plug assembly	1
	B81	89-04		511925	Adaptor assembly	1	
	B83	89-04		140644	Plug assembly	1	
	C06	89-04		519259	Cylinder block assembly w/speed ring	1	
	L25	89-04		515842	Seal assembly, double lip seal	1	
	L40	89-04		9008000-0114	Lip seal	2	
	L50	89-04		509353	O-ring	1	
	L60	89-04		515343	Retainer plate	1	
	QC04	89-04		519277	Cylinder block kit w/speed ring	1	
	Q210	89-04		11134059	Overhaul seal kit, special	1	
	EEH	B8A	89-04		001172 (9004201-9000)	O-ring	1
		B80	89-04		320002 (9005110-9200)	Plug assembly	1
B81		89-04		511925	Adaptor assembly	1	
B83		89-04		140644	Plug assembly	1	
C06		89-04		519259	Cylinder block assembly w/speed ring	1	
L25		89-04		519732	Seal assembly	1	
L40		89-04		519021	Lip seal	1	
L50		89-04		509353	O-ring	1	
L60		89-04		516769	Retainer plate	1	
QC04		89-04		519277	Cylinder block kit w/speed ring	1	
Q210		89-04		11134057	Overhaul seal kit, standard	1	



Fixed displacement motor



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\* = included in overhaul seal kit Q210

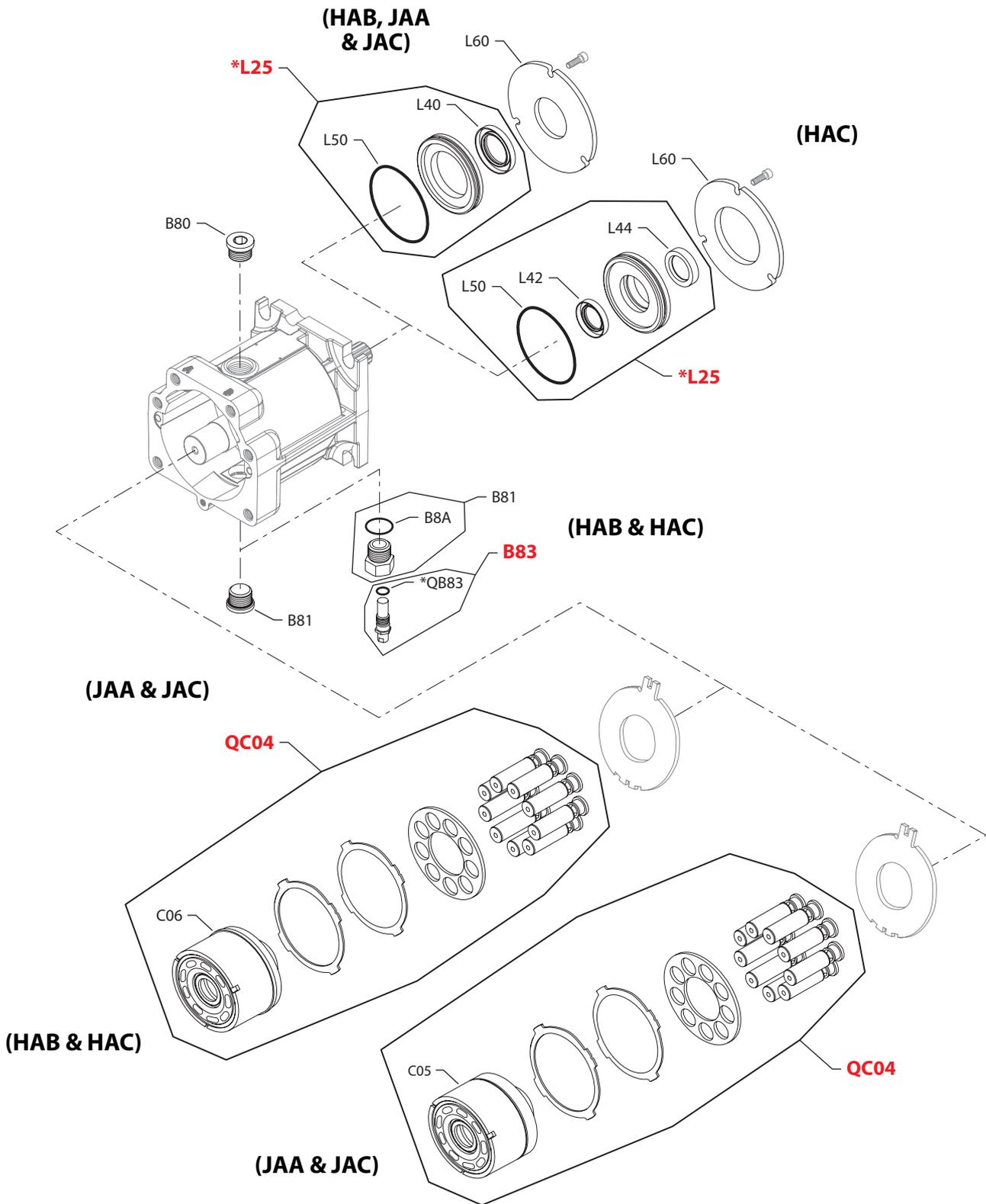
Enlarged **bold** type item numbers are recommended part to stock for servicing.


**Fixed displacement motor**
**Special hardware**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
EGF	B8A	89-04		001172 (9004201-9000)	O-ring	1
	B80	89-04		320002 (9005110-9200)	Plug assembly	1
	B81	89-04		511925	Adaptor assembly	1
	B83	89-04		KPPG13703	Speed sensor assembly	1
	C06	89-04		519259	Cylinder block assembly w/speed ring	1
	L25	89-04		515842	Seal assembly, double lip seal	1
	L40	89-04		9008000-0114	Lip seal	2
	L50	89-04		509353	O-ring	1
	L60	89-04		515343	Retainer plate	1
	QB83	98-04		9004201-3700	O-ring	1
	QC04	89-04		519277	Cylinder block kit w/speed ring	1
	Q210	89-04		11134059	Overhaul seal kit, special	1
	EGL	B8A	89-04		001172 (9004201-9000)	O-ring
B80		89-04		320002 (9005110-9200)	Plug assembly	1
B81		89-04		511925	Adaptor assembly	1
B83		89-04		KPPG16719	Speed sensor assembly	1
C06		89-04		519259	Cylinder block assembly w/speed ring	1
L25		89-04		519732	Seal assembly	1
L40		89-04		519021	Lip seal	1
L50		89-04		509353	O-ring	1
L60		89-04		516769	Retainer plate	1
QB83		98-04		9004201-3700	O-ring	1
QC04		89-04		519277	Cylinder block kit w/speed ring	1
Q210		89-04		11134057	Overhaul seal kit, standard	1
GBG		B80	89-04		320002 (9005110-9200)	Plug assembly
	B81	89-04		320002 (9005110-9200)	Plug assembly	1
	C05	89-04		11033869	Cylinder block assembly	1
	L25	89-04		519732	Seal assembly	1
	L40	89-04		519021	Lip seal	1
	L50	89-04		509353	O-ring	1
	L60	89-04		516769	Retainer plate	1
	QC04	89-04		519276	Cylinder block kit	1
	Q210	89-04		11134057	Overhaul seal kit, standard	1
	HAA	B80	89-04		320002 (9005110-9200)	Plug assembly
B81		89-04		320002 (9005110-9200)	Plug assembly	1
C05		89-04		11033869	Cylinder block assembly	1
L25		89-04		519732	Seal assembly	1
L40		89-04		519021	Lip seal	1
L50		89-04		509353	O-ring	1
L60		89-04		516769	Retainer plate	1
QC04		89-04		519276	Cylinder block kit	1
Q210		89-04		11134057	Overhaul seal kit, standard	1



Fixed displacement motor



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\* = included in overhaul seal kit Q210

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

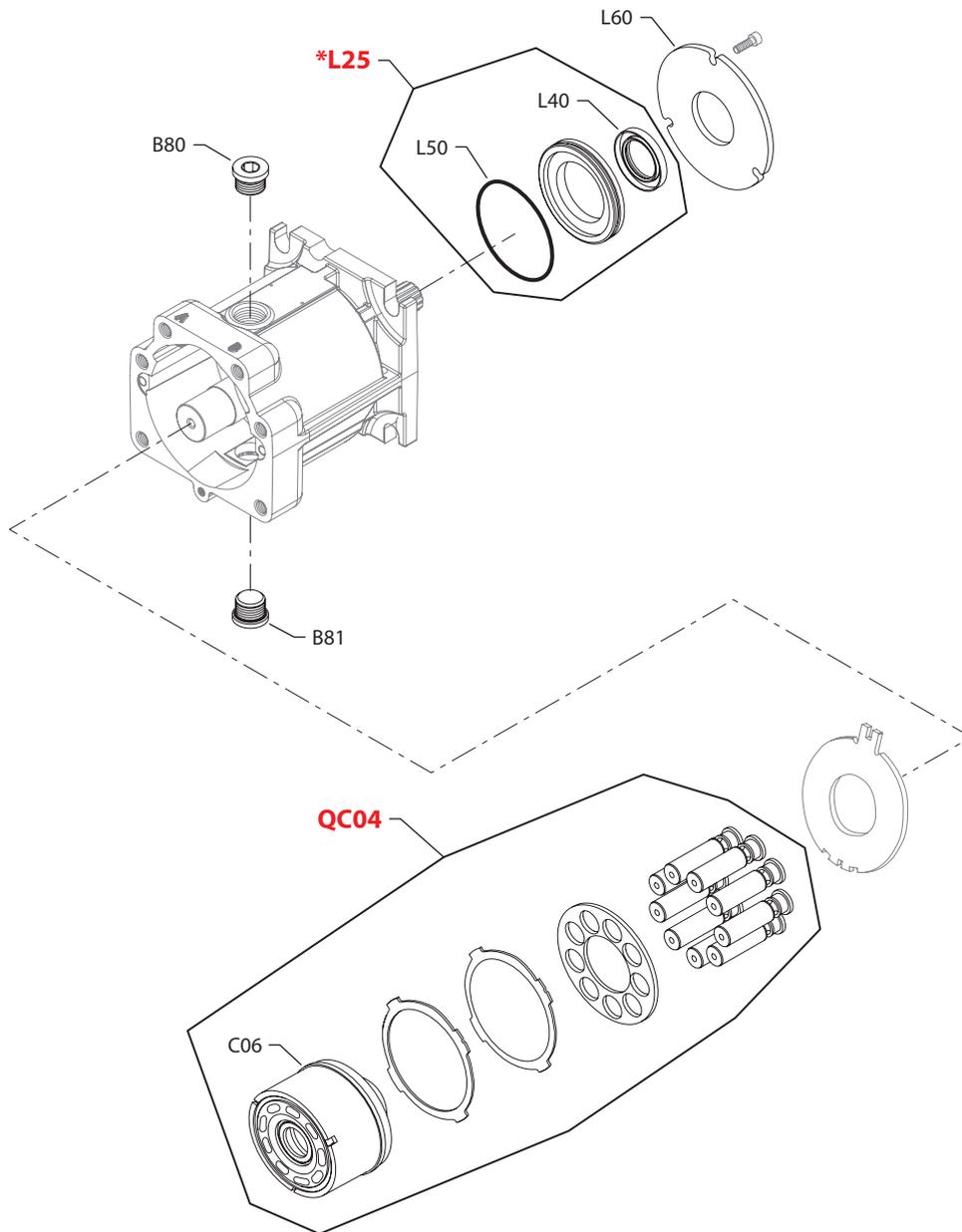

**Fixed displacement motor**
**Special hardware**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
HAB	B8A	89-04		001172 (9004201-9000)	O-ring	1	
	B80	89-04		320002 (9005110-9200)	Plug assembly	1	
	B81	89-04		511925	Adaptor assembly	1	
	B83	89-04		KPPG156	Speed sensor assembly	1	
	C06	89-04		519259	Cylinder block assembly w/speed ring	1	
	L25	89-04		519732	Seal assembly	1	
	L40	89-04		519021	Lip seal	1	
	L50	89-04		509353	O-ring	1	
	L60	89-04		516769	Retainer plate	1	
	QB83	98-04		9004201-3700	O-ring	1	
	QC04	89-04		519277	Cylinder block kit w/speed ring	1	
	Q210	89-04		11134057	Overhaul seal kit, standard	1	
	HAC	B8A	89-04		001172 (9004201-9000)	O-ring	1
		B80	89-04		320002 (9005110-9200)	Plug assembly	1
B81		89-04		511925	Adaptor assembly	1	
B83		89-04		KPPG156	Speed sensor assembly	1	
C06		89-04		519259	Cylinder block assembly w/speed ring	1	
L25		89-04		11031191	Seal assembly	1	
L42		89-04		11030919	Lip seal	1	
L44		89-04		11030919	Lip seal	1	
L50		89-04		509353	O-ring	1	
L60		89-04		11031202	Retainer plate	1	
QB83		98-04		9004201-3700	O-ring	1	
QC04		89-04		519277	Cylinder block kit w/speed ring	1	
Q210		89-04		11134060	Overhaul seal kit, special	1	
JAA		B80	89-04		320002 (9005110-9200)	Plug assembly	1
	B81	89-04		320002 (9005110-9200)	Plug assembly	1	
	C05	89-04		11033869	Cylinder block assembly	1	
	L25	89-04		519732	Seal assembly	1	
	L40	89-04		519021	Lip seal	1	
	L50	89-04		509353	O-ring	1	
	L60	89-04		516769	Retainer plate	1	
	QC04	89-04		519276	Cylinder block kit	1	
	Q210	89-04		11134057	Overhaul seal kit, standard	1	
	JAB	B80	89-04		320002 (9005110-9200)	Plug assembly	1
B81		89-04		320002 (9005110-9200)	Plug assembly	1	
C05		89-04		11033869	Cylinder block assembly	1	
L25		89-04		519732	Seal assembly	1	
L40		89-04		519021	Lip seal	1	
L50		89-04		509353	O-ring	1	
L60		89-04		516769	Retainer plate	1	
QC04		89-04		519276	Cylinder block kit	1	
Q210		89-04		11134057	Overhaul seal kit, standard	1	



Fixed displacement motor

(JAE, JAF, LAA & NNN)



\* = included in overhaul seal kit Q210

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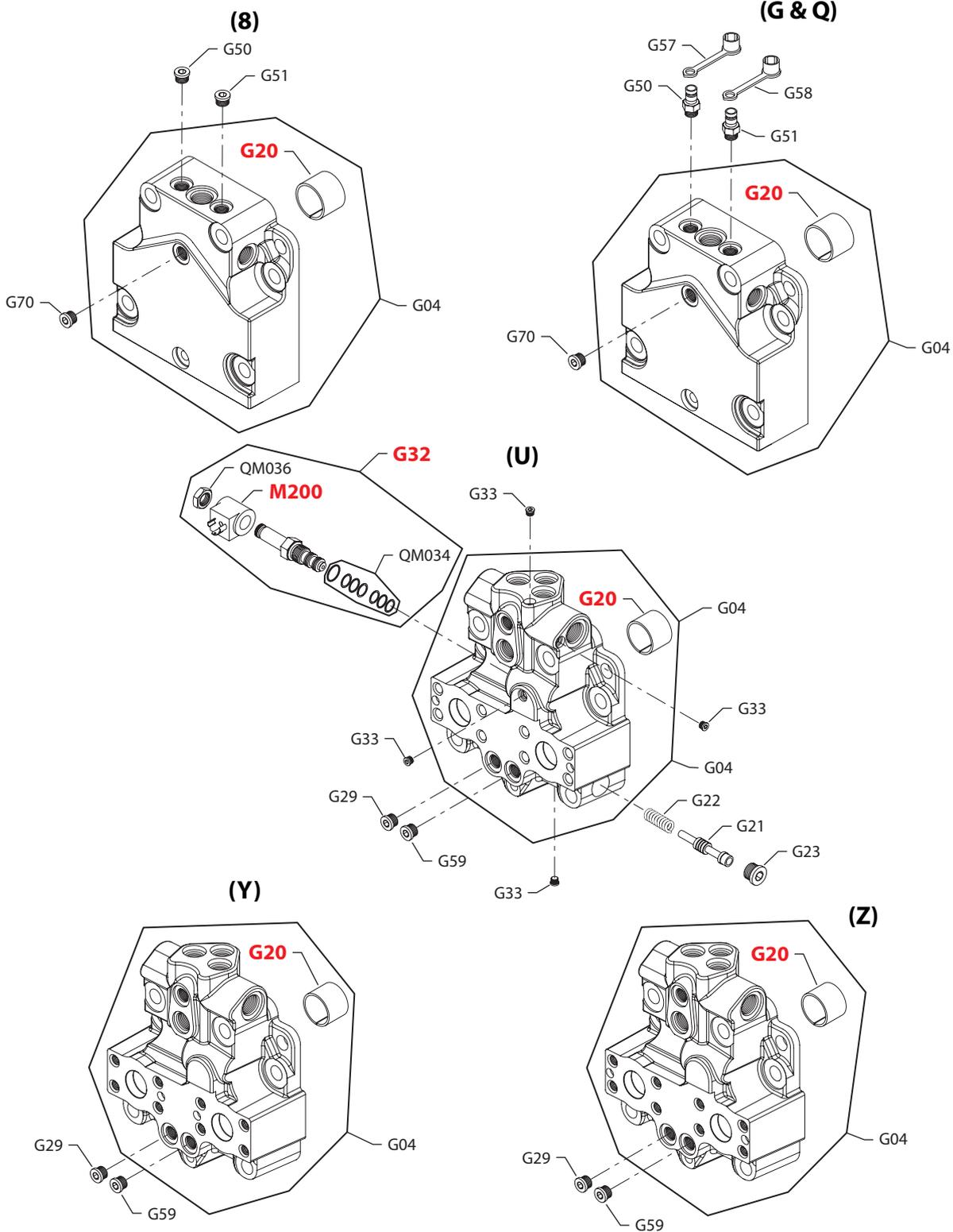
Enlarged **bold** type item numbers are recommended part to stock for servicing.


**Fixed displacement motor**
**Special hardware**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
JAE	B80	15-50		320002 (9005110-9200)	Plug assembly	1
	B81	15-50		320002 (9005110-9200)	Plug assembly	1
	C05	15-50		11033869	Cylinder block assembly	1
	L25	15-50		519732	Seal assembly	1
	L40	15-50		519021	Lip seal	1
	L50	15-50		509353	O-ring	1
	L60	15-50		516769	Retainer plate	1
	QC04	15-50		519276	Cylinder block kit	1
	Q210	15-50		11134057	Overhaul seal kit, standard	1
JAF	B80	89-04		320002 (9005110-9200)	Plug assembly	1
	B81	89-04		320002 (9005110-9200)	Plug assembly	1
	C05	89-04		11033869	Cylinder block assembly	1
	L25	89-04		519732	Seal assembly	1
	L40	89-04		519021	Lip seal	1
	L50	89-04		509353	O-ring	1
	L60	89-04		516769	Retainer plate	1
	QC04	89-04		519276	Cylinder block kit	1
	Q210	89-04		11134057	Overhaul seal kit, standard	1
LAA	B80	89-04		320002 (9005110-9200)	Plug assembly	1
	B81	89-04		320002 (9005110-9200)	Plug assembly	1
	C05	89-04		11033869	Cylinder block assembly	1
	L25	89-04		519732	Seal assembly	1
	L40	89-04		519021	Lip seal	1
	L50	89-04		509353	O-ring	1
	L60	89-04		516769	Retainer plate	1
	QC04	89-04		519276	Cylinder block kit	1
	Q210	89-04		11134057	Overhaul seal kit, standard	1
NNN	B80	89-04		320002 (9005110-9200)	Plug assembly	1
	B81	89-04		320002 (9005110-9200)	Plug assembly	1
	C05	89-04		11033869	Cylinder block assembly	1
	L25	89-04		519732	Seal assembly	1
	L40	89-04		519021	Lip seal	1
	L50	89-04		509353	O-ring	1
	L60	89-04		516769	Retainer plate	1
	QC04	89-04		519276	Cylinder block kit	1
	Q210	89-04		11134057	Overhaul seal kit, standard	1



Fixed displacement motor



\* = included in overhaul seal kit Q210

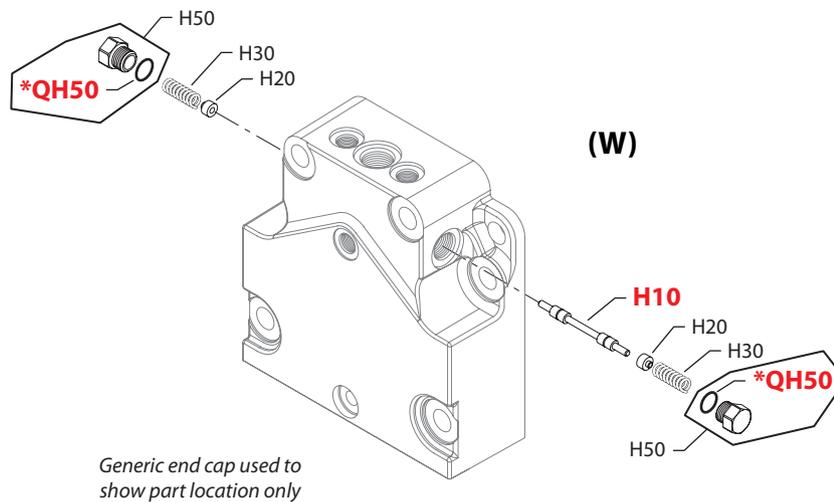
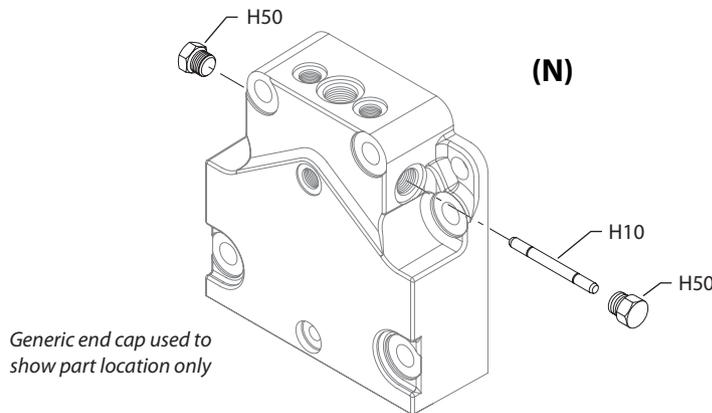
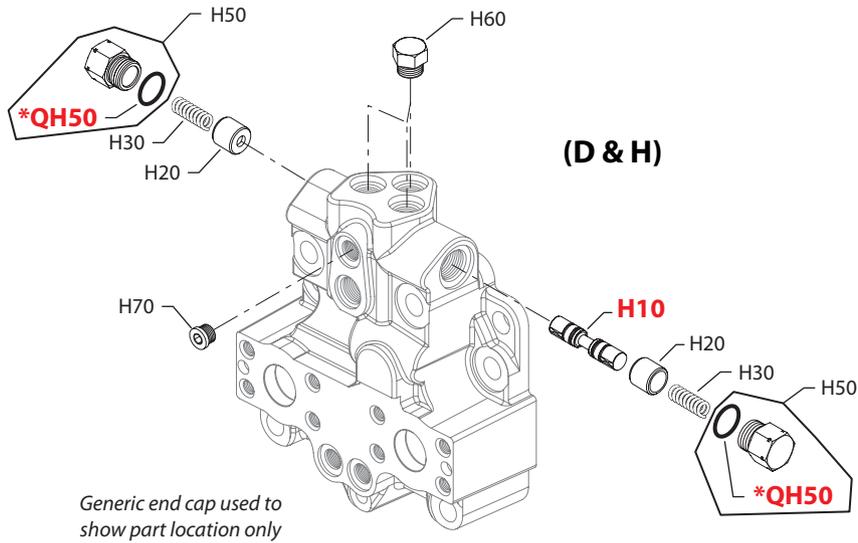
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 Enlarged **bold** type item numbers are recommended part to stock for servicing.


**Fixed displacement motor**
**End cap**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
8	G04	89-04		310706	End cap assembly, twin	1
	G20	89-04		303693	Journal bearing	1
	G50	89-04		140644	Plug assembly	1
	G51	89-04		140644	Plug assembly	1
	G70	89-04		140644	Plug assembly	2
G	G04	89-04		11054539	End cap assembly, twin	1
	G20	89-04		303693	Journal bearing	1
	G50	89-04		8700127	Diagnostic receptical assembly	1
	G51	89-04		8700127	Diagnostic receptical assembly	1
	G57	89-04		8700128	Dust cover	1
	G58	89-04		8700128	Dust cover	1
	G70	89-04		140644	Plug assembly	1
Q	G04	15-40		11054539	End cap assembly, twin	1
	G20	15-40		303693	Journal bearing	1
	G50	15-40		8700127	Diagnostic receptical assembly	1
	G51	15-40		8700127	Diagnostic receptical assembly	1
	G57	15-40		8700128	Dust cover	1
	G58	15-40		8700128	Dust cover	1
	G70	15-40		140644	Plug assembly	1
U	G04	89-04		515816/P	End cap assembly, axial	1
	G20	89-04		303693	Journal bearing	1
	G21	89-04		515824	Piston	1
	G22	89-04		515826	Spring	1
	G23	89-04		9005110-7500	Plug assembly	1
	G29	89-04		140644	Plug assembly	1
	G59	89-04		140644	Plug assembly	1
	G32	89-04		517171	Solenoid valve, 12 volt	1
	G33	89-04		11040532	Plug assembly	4
	M200	89-04		517167	Coil, 12 volt	1
	QM34	89-04		11144220	Solenoid valve seal kit	1
	QM36	89-04		11144221	Coil nut	1
	Y	G04	89-04		11040383	End cap assembly, axial
G20		89-04		303693	Journal bearing	1
G29		89-04		140644	Plug assembly	1
G59		89-04		140644	Plug assembly	1
Z	G04	89-04		11006400	End cap assembly, axial	1
	G20	89-04		303693	Journal bearing	1
	G29	89-04		140644	Plug assembly	1
	G59	89-04		140644	Plug assembly	1



Fixed displacement motor



\* = included in overhaul seal kit Q210

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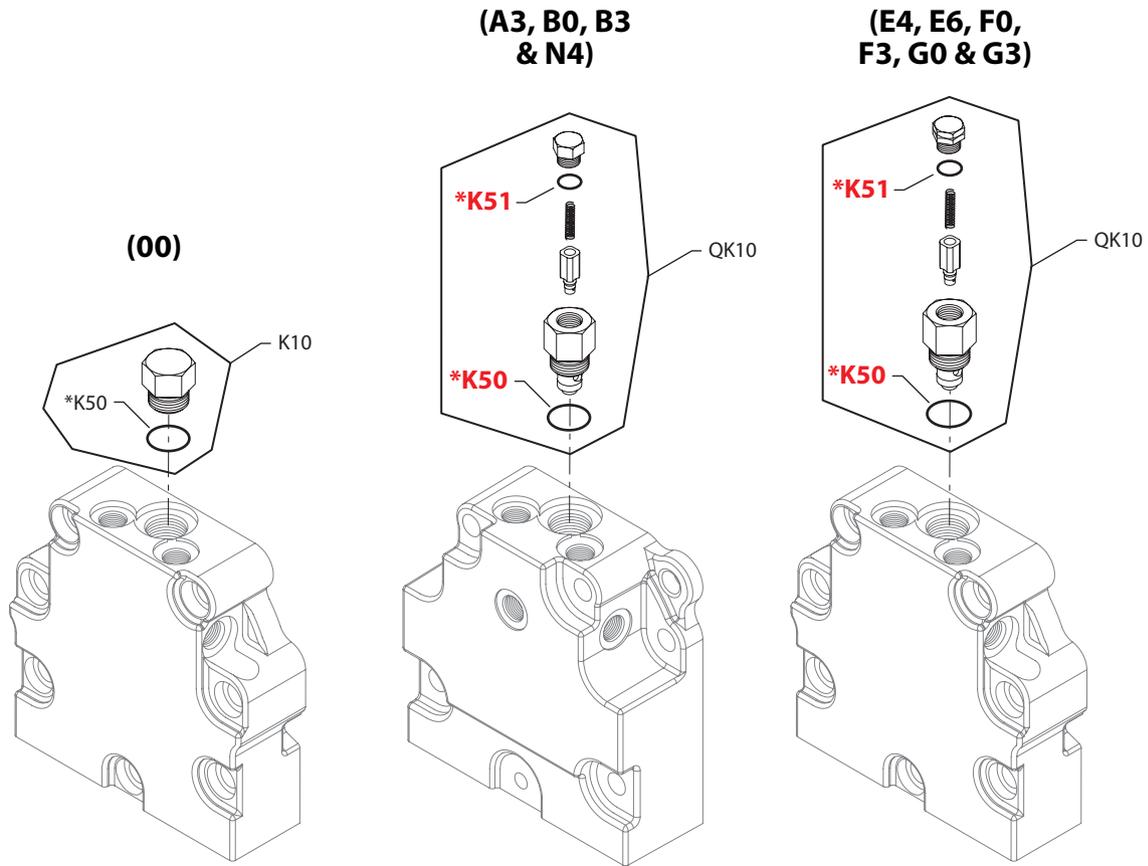
Enlarged **bold** type item numbers are recommended part to stock for servicing.


**Fixed displacement motor**
**Loop flushing**

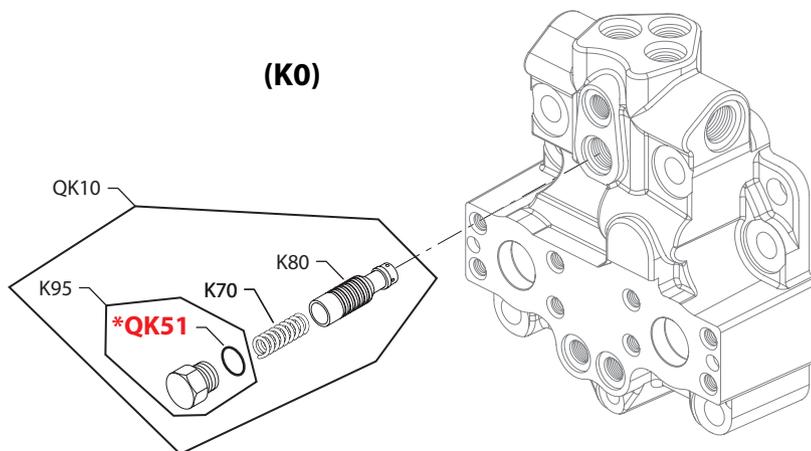
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D	H10	89-04		11140474	Shuttle spool	1
	H20	89-04		515828	Spring guide	2
	H30	89-04		515829	Spring	2
	H50	89-04		516119	Plug assembly	2
	H60	89-04		001529 (9005100-7500)	Plug assembly	3
	H70	89-04		140644	Plug assembly	1
	QH50	89-04		012559 (9004202-6200)	O-ring	2
H	H10	89-04		11140474	Shuttle spool	1
	H20	89-04		515828	Spring guide	2
	H30	89-04		515829	Spring	2
	H50	89-04		516119	Plug assembly	2
	H60	89-04		001529 (9005100-7500)	Plug assembly	3
	H70	89-04		140644	Plug assembly	1
	QH50	89-04		012559 (9004202-6200)	O-ring	2
N	H10	89-04		334565	Loop flushing spool, defeated	1
	H50	89-04		001529 (9005100-7500)	Plug assembly	2
W	H10	89-04		11140476	Shuttle spool	1
	H20	89-04		11140392	Spring guide	2
	H30	89-04		506829	Spring	2
	H50	89-38		508497	Plug assembly	2
	QH50	89-04		001131 (9004201-5000)	O-ring	2



Fixed displacement motor



Generic end caps used to show part location only



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\* = included in overhaul seal kit Q210

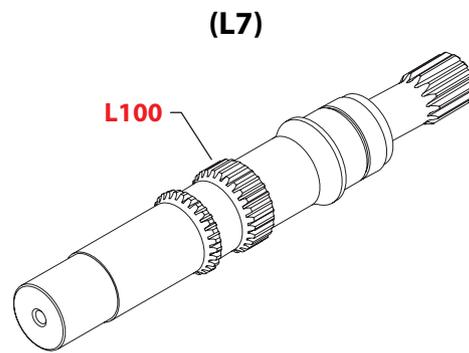
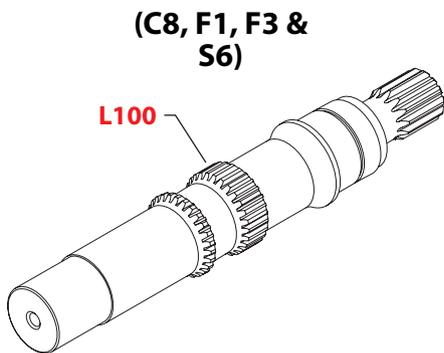
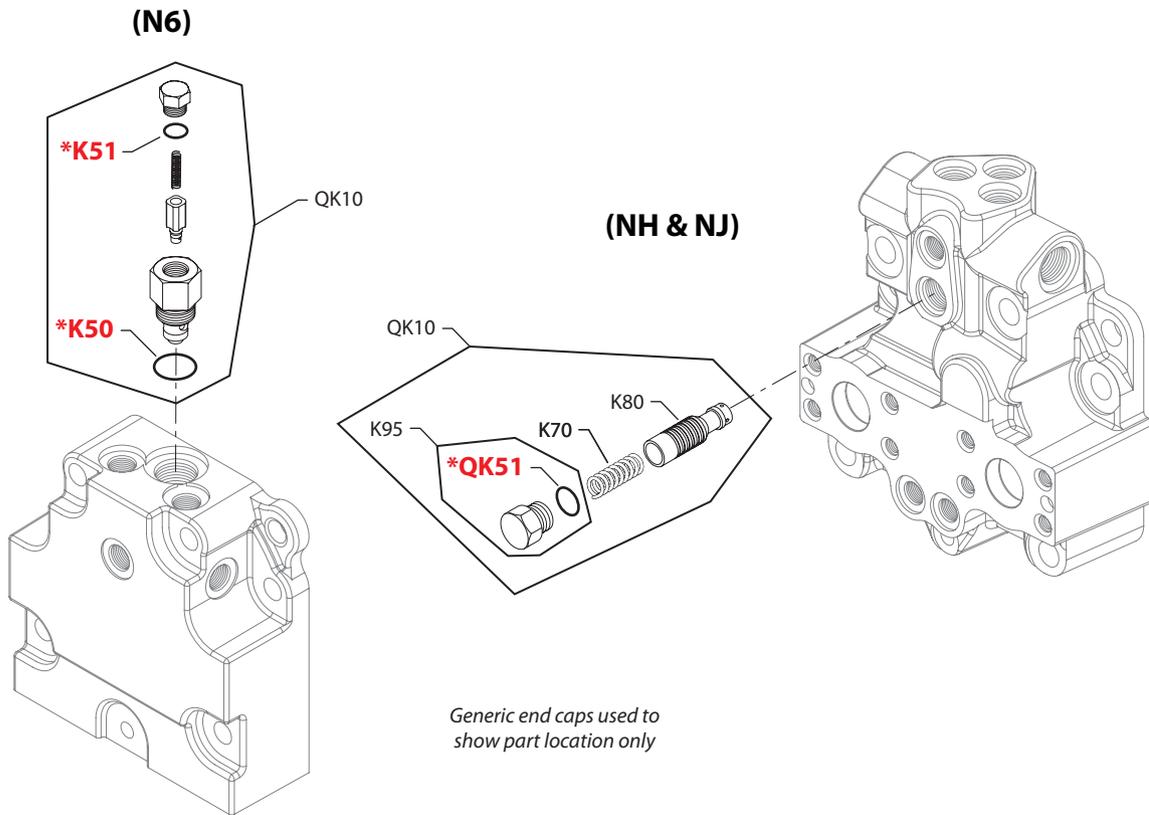
Enlarged **bold** type item numbers are recommended part to stock for servicing.

**Fixed displacement motor**
**Charge pressure setting**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
00	K10	97-11		001537 (9005110-8700)	Plug assembly	1
	K50	97-11		001149 (9004201-6200)	O-ring	1
A3	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		8510256	Cartridge CPRV kit, 13 bar, 16 L/min	1
B0	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		11020552	Cartridge CPRV kit, 13 bar, 22 L/min	1
B3	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		8510243	Cartridge CPRV kit, 13 bar, 27 L/min	1
E4	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		8510261	Cartridge CPRV kit, 16 bar, 4 L/min	1
E6	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		8510252	Cartridge CPRV kit, 16 bar, 7 L/min	1
F0	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		8510259	Cartridge CPRV kit, 16 bar, 11 L/min	1
F3	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		8510262	Cartridge CPRV kit, 16 bar, 16 L/min	1
G0	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		8510260	Cartridge CPRV kit, 16 bar, 22 L/min	1
G3	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		8510263	Cartridge CPRV kit, 16 bar, 27 L/min	1
K0	K70	97-11		519205	Spring	1
	K80	97-11		11140475	Shuttle	1
	K95	97-11		001529 (9005100-7500)	Plug assembly	1
	QK10	97-11		8510349	CPRV kit, special, 40 L/min	1
	QK51	97-11		001131 (9004201-5000)	O-ring	1
N4	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		8510255	Cartridge CPRV kit, 13 bar, 4 L/min	1



Fixed displacement motor



\* = included in overhaul seal kit Q210

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


**Fixed displacement motor**
**Charge pressure setting**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
N6	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	QK10	97-11		11097072	Cartridge CPRV kit, 13 bar, 7 L/min	1
NH	K70	97-11		517900	Spring	1
	K80	97-11		11140475	Shuttle	1
	K95	97-11		001529 (9005100-7500)	Plug assembly	1
	QK51	97-11		001131 (9004201-5000)	O-ring	1
	QK10	97-11		11134316	CPRV kit	1
NJ	K70	97-11		517900	Spring	1
	K80	97-11		518178	Shuttle	1
	K95	97-11		001529 (9005100-7500)	Plug assembly	1
	QK51	97-11		001131 (9004201-5000)	O-ring	1
	QK10	97-11		11134317	CPRV kit	1

**Shaft**

C8	L100	89-04		11046231	Shaft, 27 tooth spline, 16/32	1
F1	L100	89-04		310458	Shaft, 13 tooth spline, 8/16	1
F3	L100	89-04		515344	Shaft, 13 tooth spline, 8/16, special	1
L7	L100	89-04		515592	Shaft, 23 tooth spline, 16/32	1
S6	L100	89-04	01-11	310441	Shaft, 20 tooth spline, 12/24	1


**Fixed displacement motor**
**Overhaul seal kit**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	Q210	89-04		11134057	Overhaul seal kit, 90M130, standard	1
	G30	89-04		304311	End cap gasket	1
	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	L25	89-04		519732	Seal carrier assembly	1
	QB83	89-04		085043 (9004201-3700)	O-ring	1
	QH50	89-04		001131 (9004201-5000)	O-ring	2
	QH50	89-04		012559 (9004202-6200)	O-ring	2
	QK51	89-04		001131 (9004201-5000)	O-ring	1
	Q210	89-04		11134059	Overhaul seal kit, 90M130, special	1
	G30	89-04		304311	End cap gasket	1
	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	L25	89-04		515842	Seal carrier assembly, double lip seal	1
	QB83	89-04		085043 (9004201-3700)	O-ring	1
	QH50	89-04		001131 (9004201-5000)	O-ring	2
	QH50	89-04		012559 (9004202-6200)	O-ring	2
	QK51	89-04		001131 (9004201-5000)	O-ring	1
	Q210	89-04		11134060	Overhaul seal kit, 90M130, special	1
	G30	89-04		304311	End cap gasket	1
	K50	97-11		001149 (9004201-6200)	O-ring	1
	K51	97-11		085043 (9004201-3700)	O-ring	1
	L25	89-04		11031191	Seal carrier assembly, double lip seal	1
	QB83	89-04		085043 (9004201-3700)	O-ring	1
	QH50	89-04		001131 (9004201-5000)	O-ring	2
	QH50	89-04		012559 (9004202-6200)	O-ring	2
	QK51	89-04		001131 (9004201-5000)	O-ring	1



**Service bulletin: SB-1995-023**

**Products affected**

Series 90 130cc fixed motors

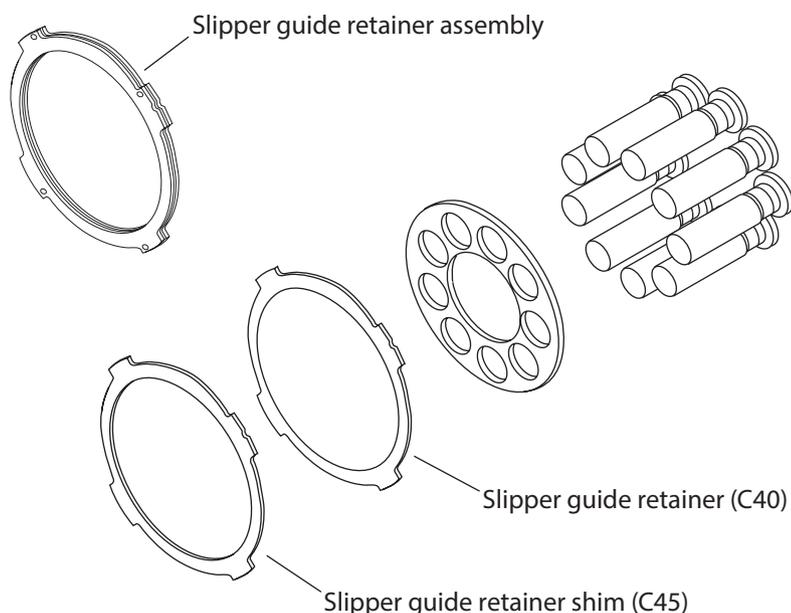
**Subject**

Change in slipper guide retainer

**Description**

Sauer-Danfoss has changed the slipper guide retainer from a one piece retainer assembly to a two piece retainer on all 130cc fixed motors. This change creates a uniform product design platform for the 100cc, 75cc, 55cc, and 130cc motors.

The new slipper guide retainer can be used with any vintage motor. The old slipper guide retainer assembly will be obsoleted and no longer available as a service part.



**Models affected**

All 97-3000 and 973xxx fixed displacement motors

**Serial numbers**

Units built with serial number N-95-26-xxxxx and after.

**Part numbers affected**

Description	Old p/n	New p/n
Slipper guide retainer assembly	309443	-
Slipper guide retainer	-	500445
Slipper guide retainer shim	-	505369

**Parts disposition**

■ Interchangeable



**Notes**



**Notes**



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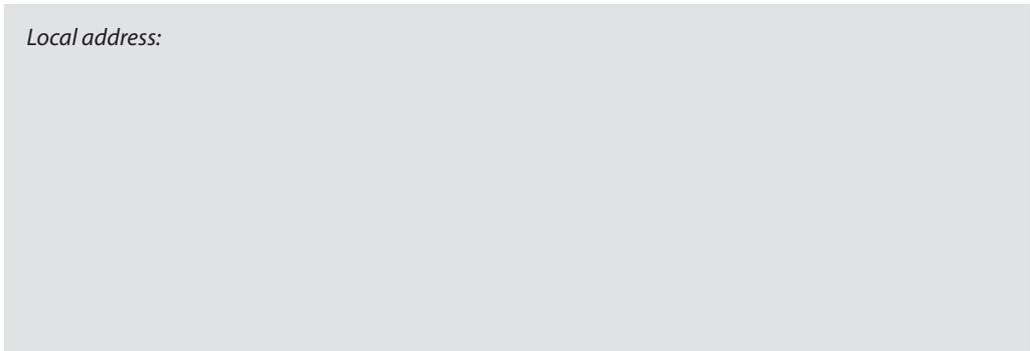
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