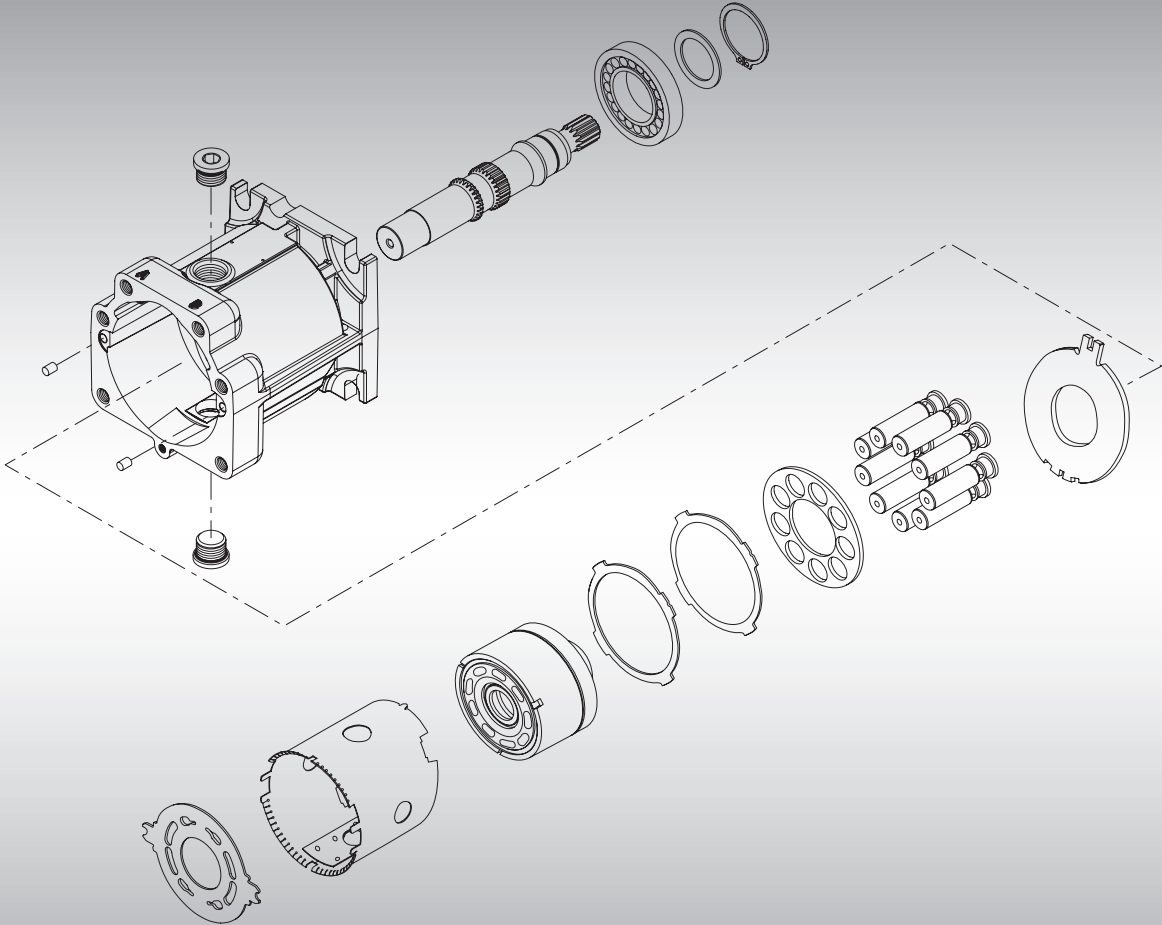




Parts Manual

Series 90 130 cc Axial Piston Motor







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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.

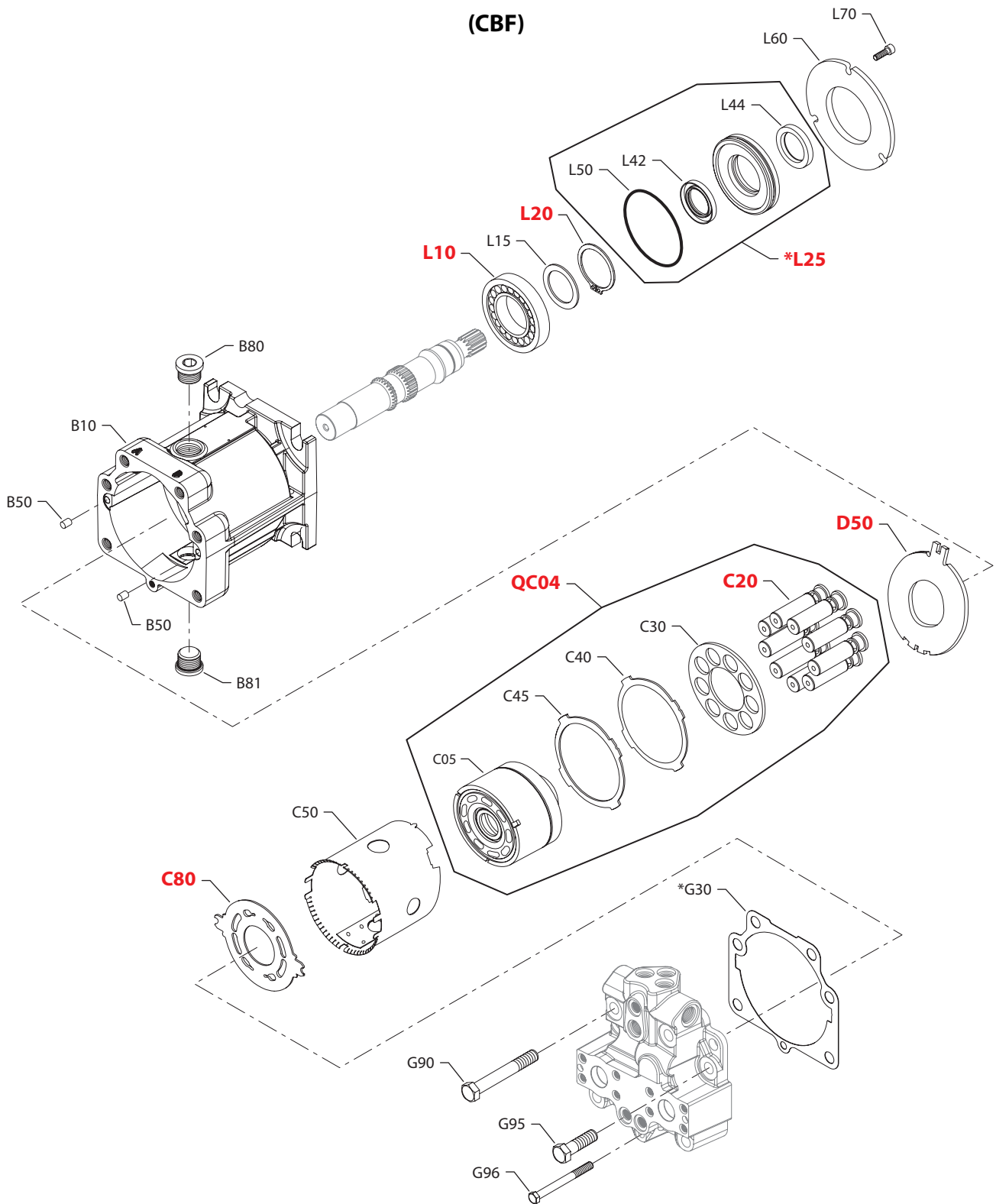
1) Referring to the shaft module in the Order Code (see page 7), the shaft option for this motor is identified by the code "F1". (90M130 NC 0 N 8 N 0 **F1** W 00 EBA 00 00 G3)

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



E103 011E

* = included in overhaul seal kit Q210

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


Fixed displacement motor
Common parts

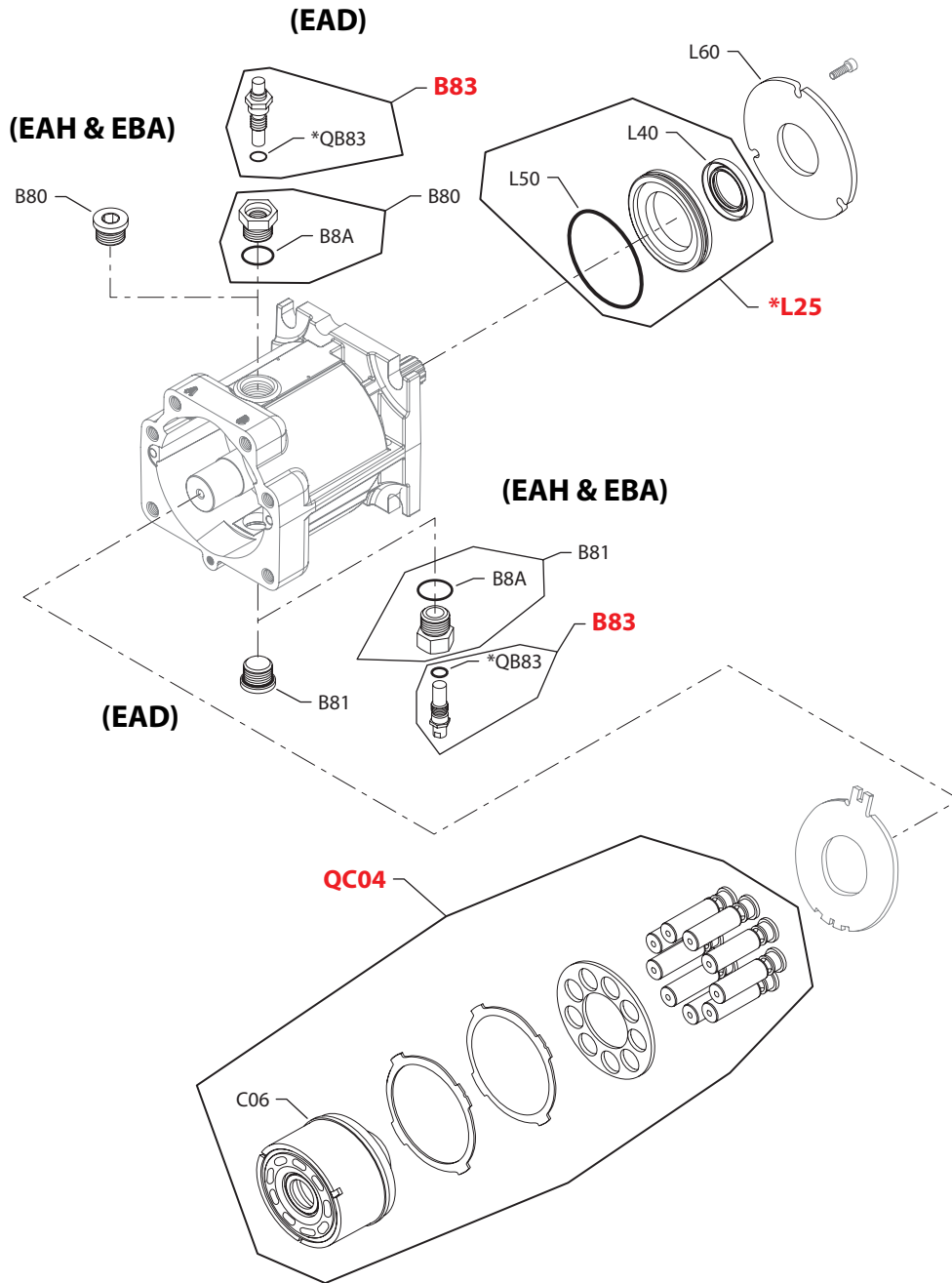
| Order Code | Item | Date Begin | Date End | Part Number | Part Name | Qty. per Model/Kit |
|------------|------|------------|----------|-----------------------|---|--------------------|
| | B10 | 89-04 | | 11006997 | Housing | 1 |
| | B50 | 89-04 | | 9004800-3708 | Pin | 2 |
| | C20 | 89-04 | | 727750 | 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



E100 871E

* = included in overhaul seal kit Q210

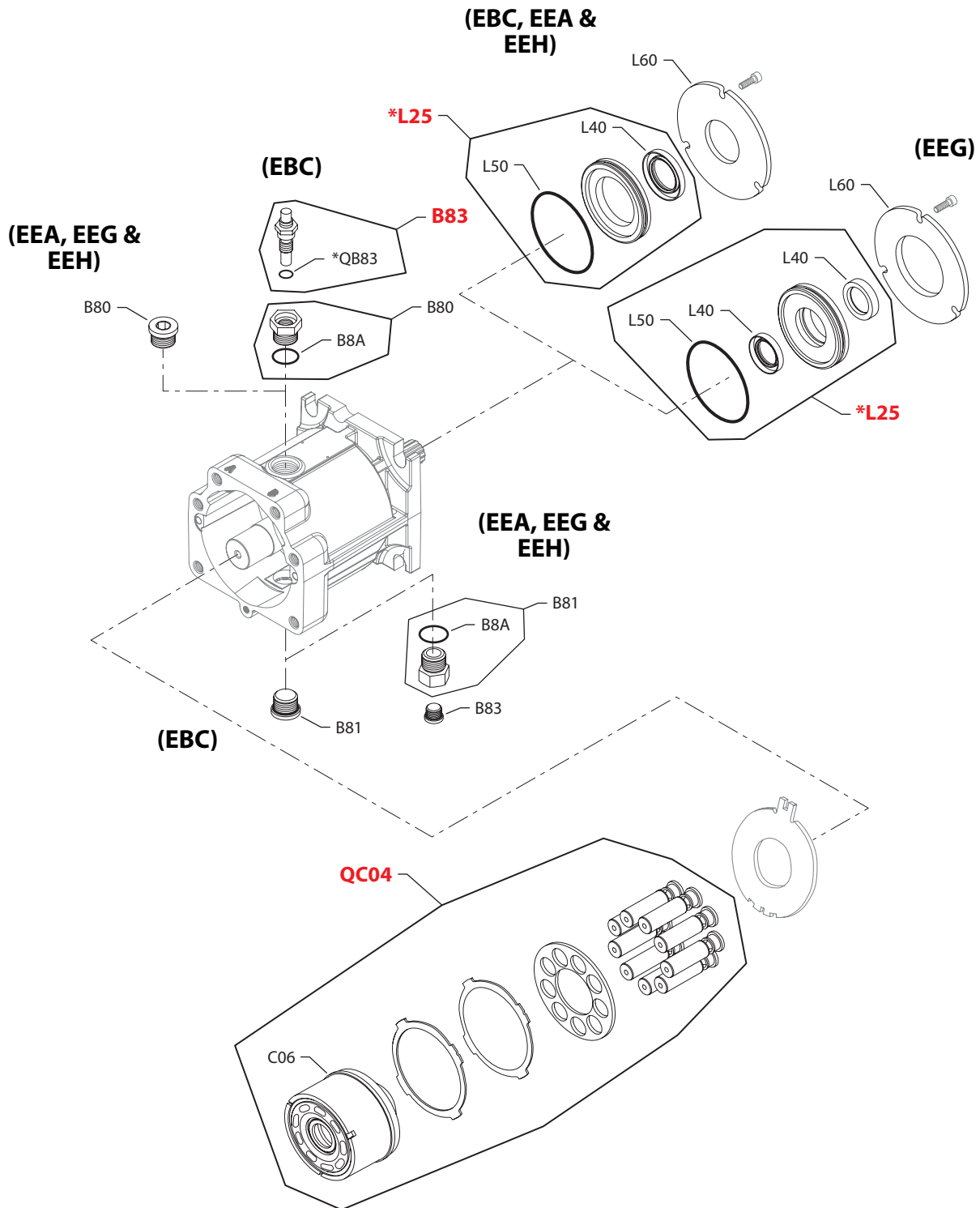
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Fixed displacement motor
Special hardware

| Order Code | Item | Date Begin | Date End | Part Number | Part Name | Qty. per Model/Kit | |
|------------|------|------------|----------|-----------------------|--------------------------------------|--------------------|---|
| 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



E100 872E

* = included in overhaul seal kit Q210

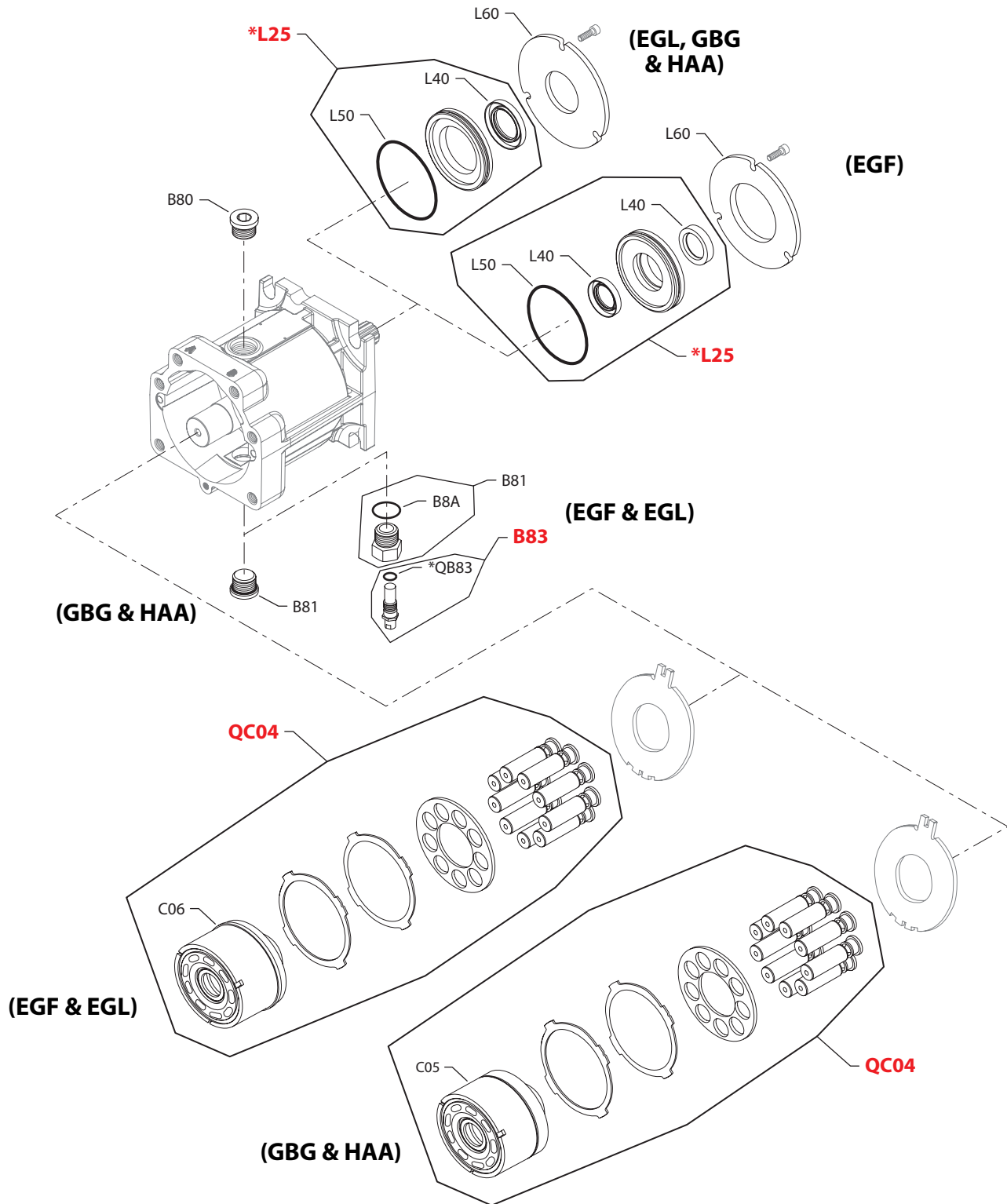
Enlarged **bold** type item numbers are recommended part to stock for servicing.


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



E100 873E

* = included in overhaul seal kit Q210

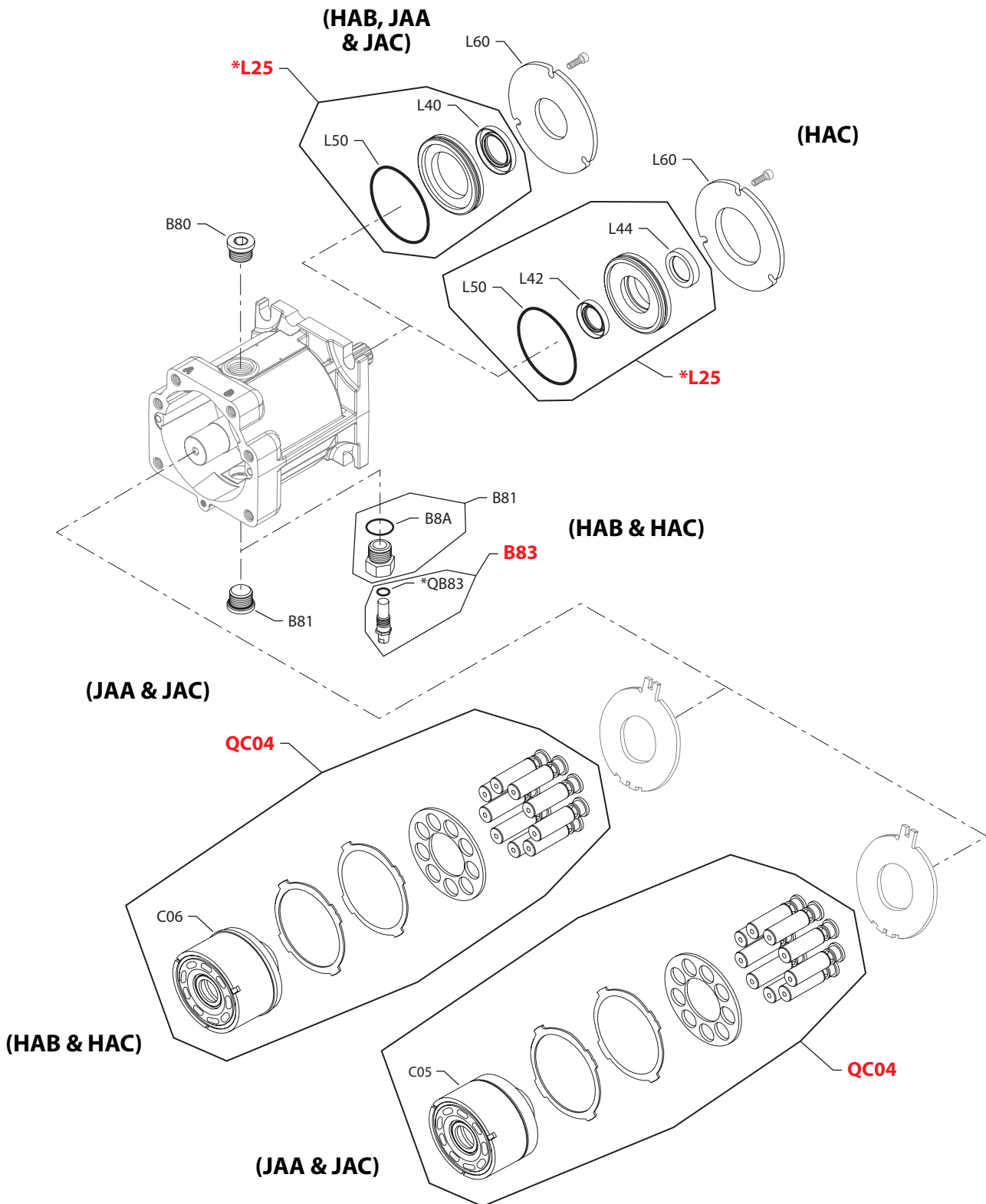
Enlarged **bold** type item numbers are recommended part to stock for servicing.


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



E100.874E

* = included in overhaul seal kit Q210

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

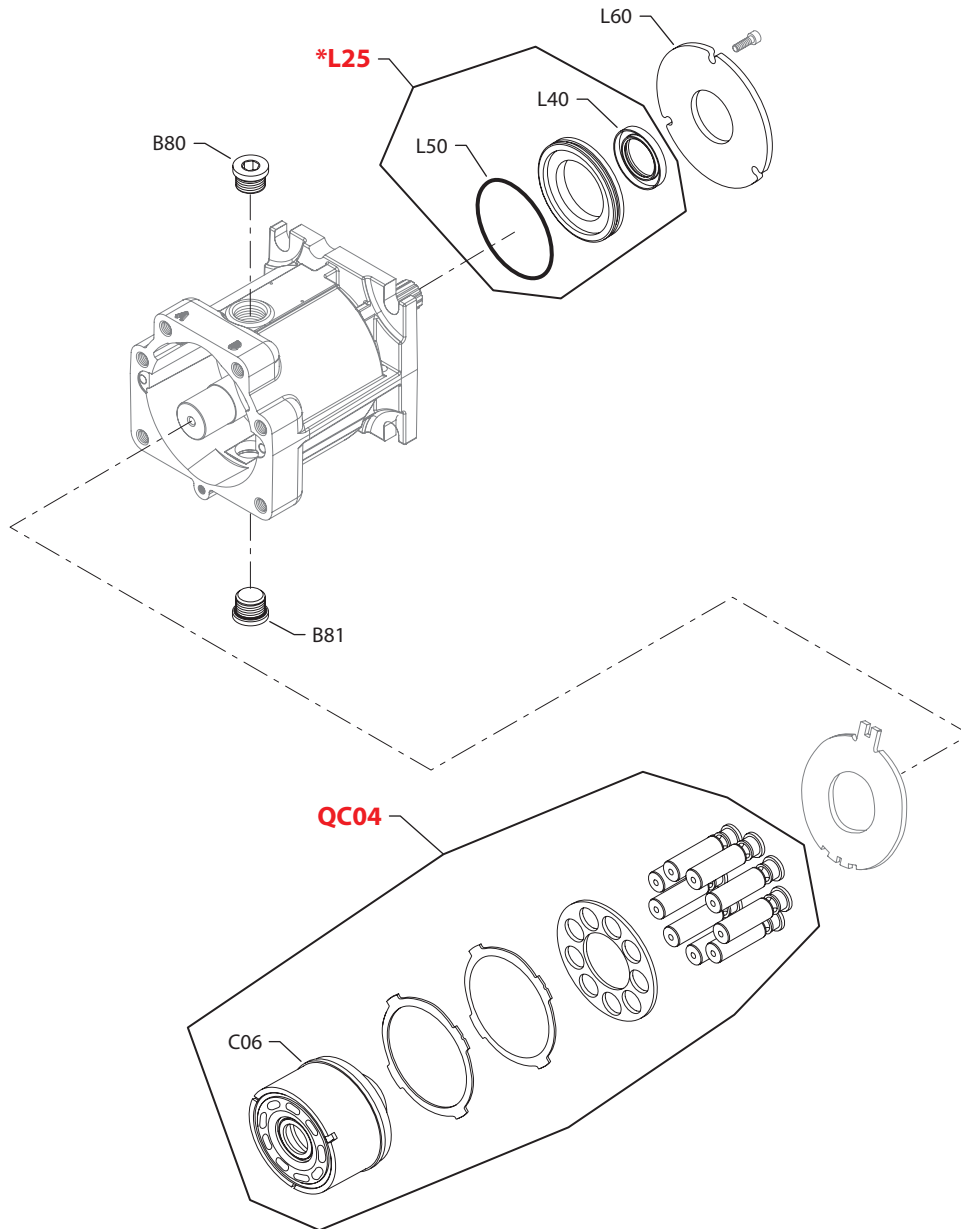

Fixed displacement motor
Special hardware

| 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

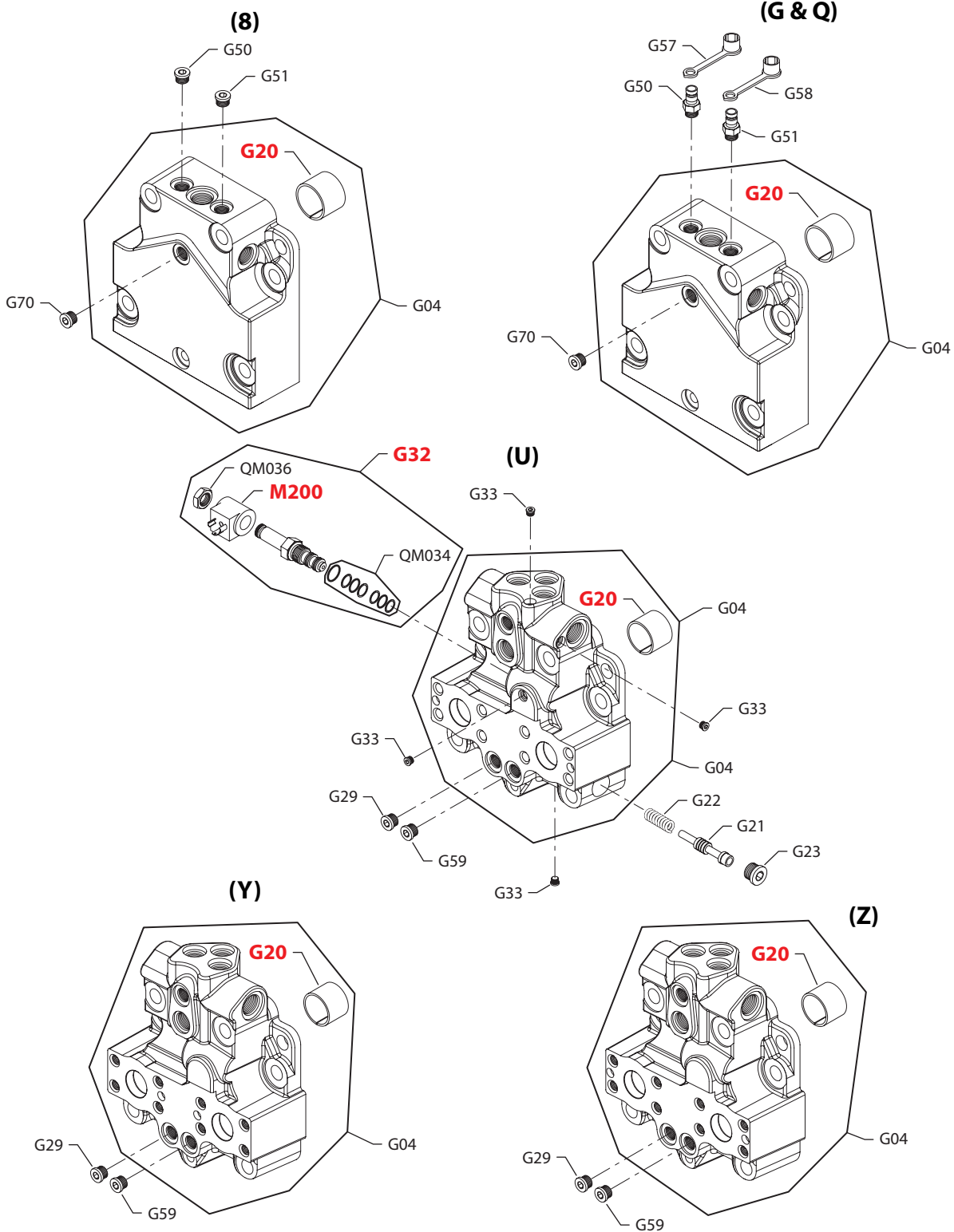
E103 012E
Enlarged **bold** type item numbers are recommended part to stock for servicing.


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

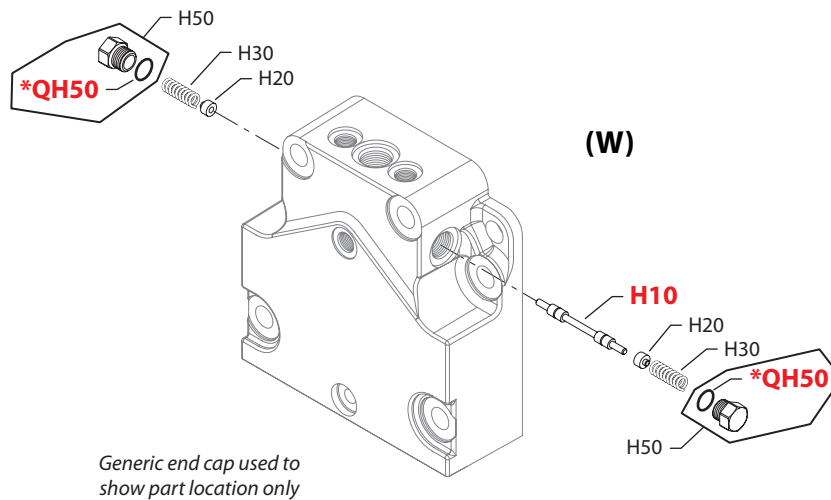
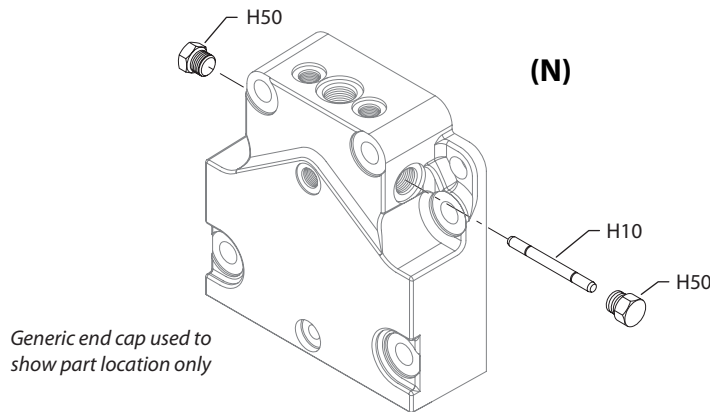
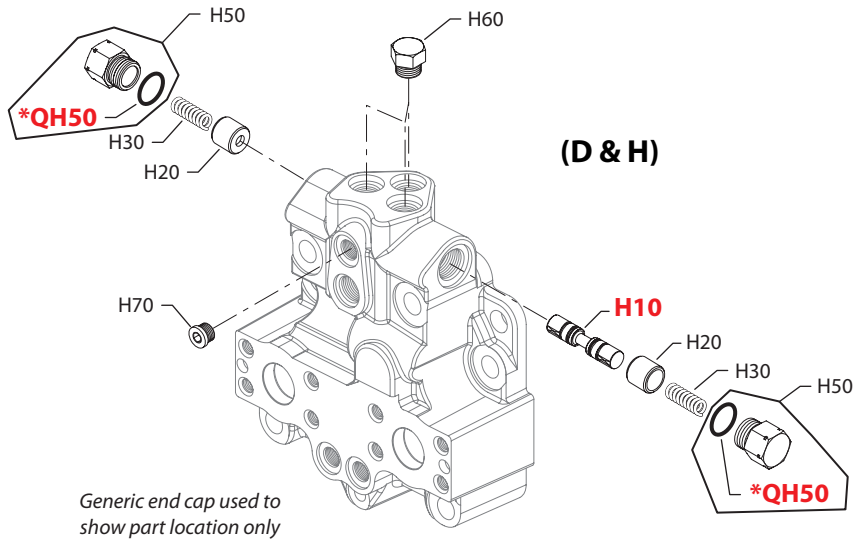
E100.875E
 Enlarged **bold** type item numbers are recommended part to stock for servicing.


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

E100.876E

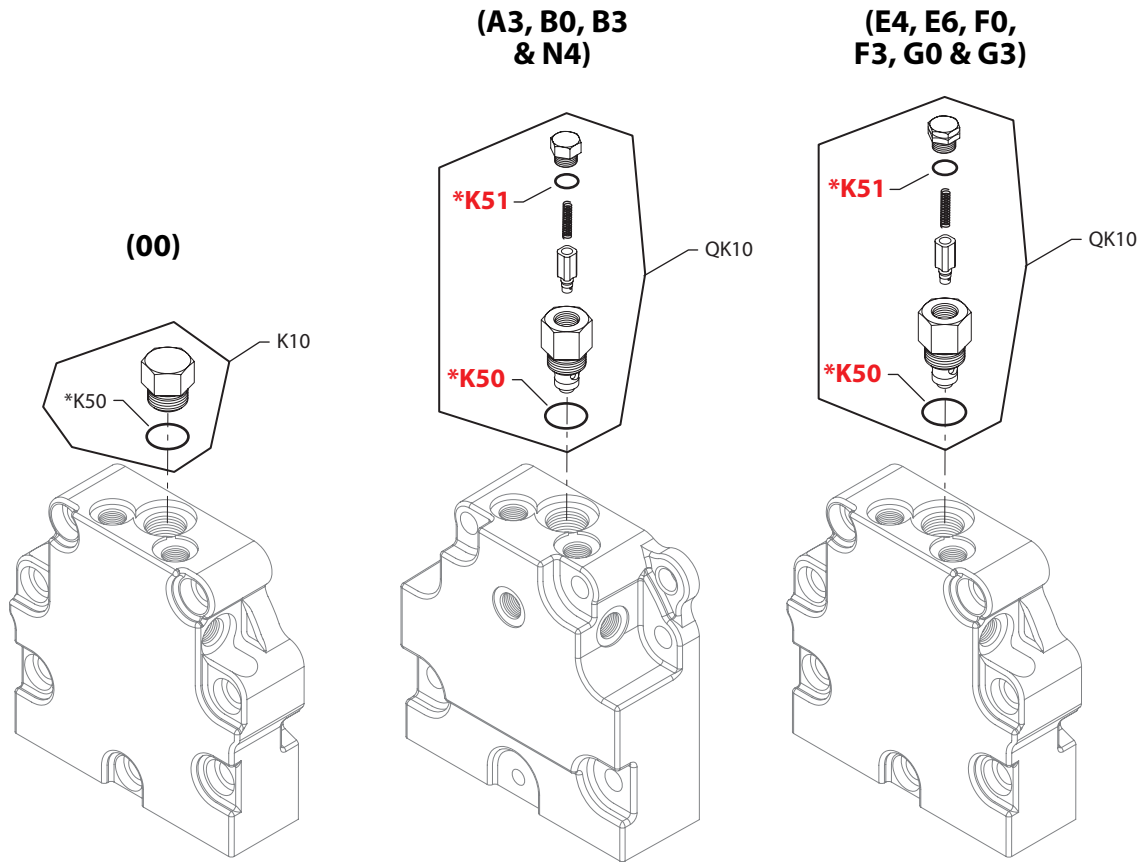
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Fixed displacement motor
Loop flushing

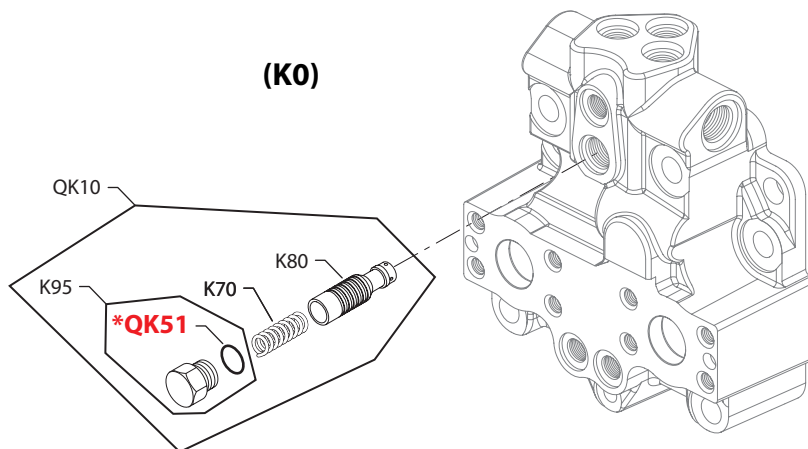
| Order Code | Item | Date Begin | Date End | Part Number | Part Name | Qty. per Model/Kit |
|------------|------|------------|----------|-----------------------|-------------------------------|--------------------|
| D | H10 | 89-04 | | 11140474 | Shuttle spool | 1 |
| | H20 | 89-04 | | 515828 | Spring 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



E100 878E

* = included in overhaul seal kit Q210

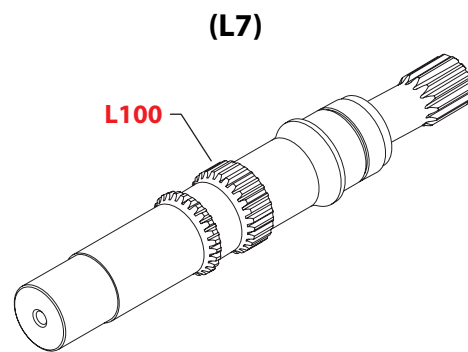
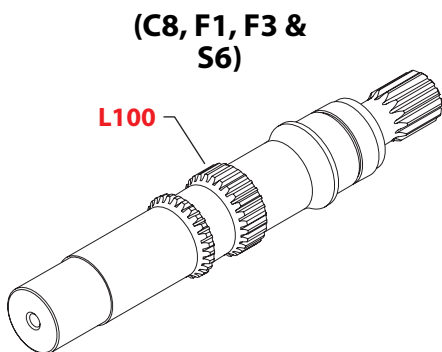
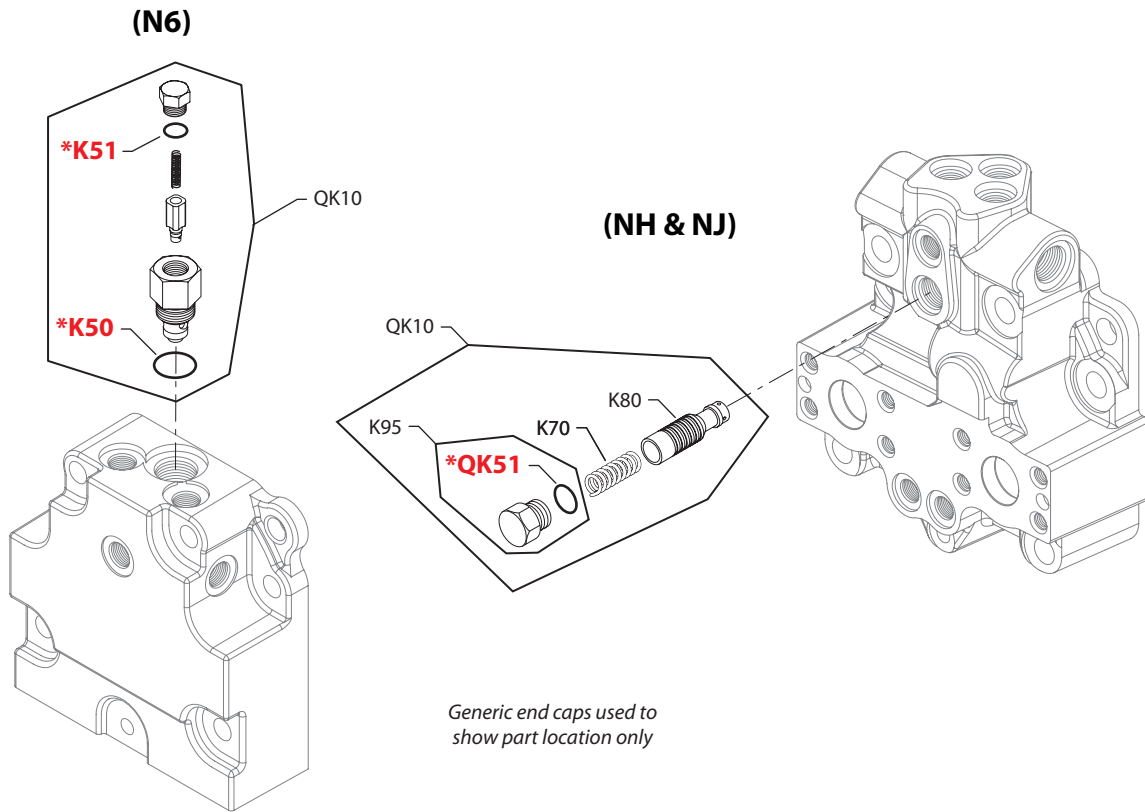
Enlarged **bold** type item numbers are recommended part to stock for servicing.


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

E100 775E

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

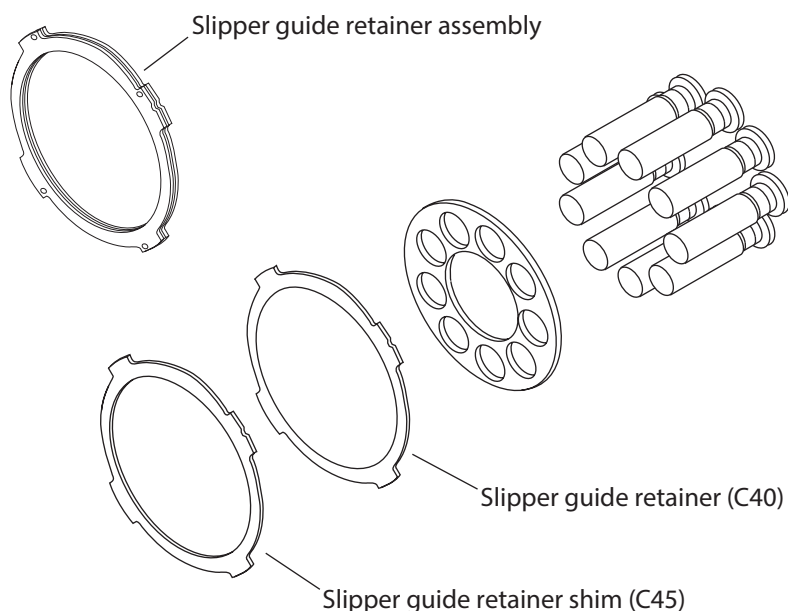
Subject

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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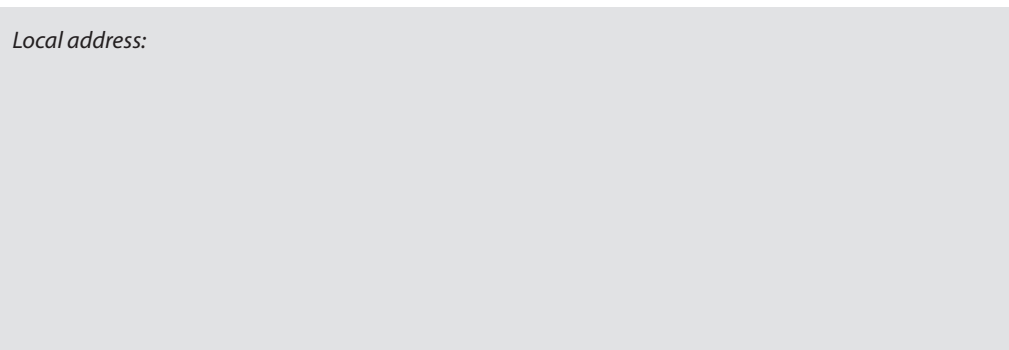
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