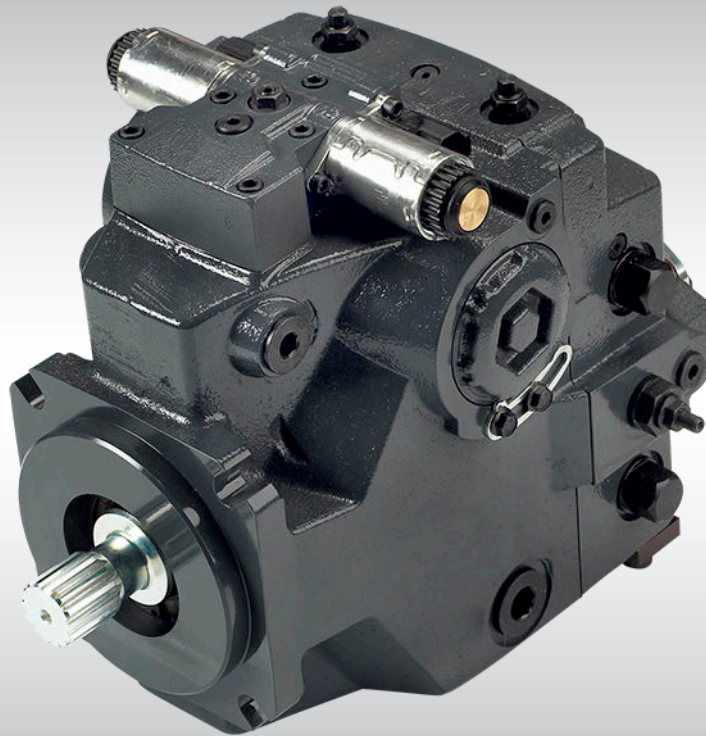




Conversion Manual  
Closed Circuit Axial Piston Pumps  
**H1 115/130 cc**



**Revision history***Table of revisions*

<b>Date</b>	<b>Changed</b>	<b>Rev</b>
December 2015	First edition	0000

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**Variable displacement pump**

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## General Information

### Base model description

The H1 pumps base model program is intended to help our partners reduce inventory, reduce lead time, and increase customer service. The H1 115/130 frame size offers 4 standard base models. Each model offers a unique set of options that can be tailored to the customer's need. This conversion manual provides the associated parts and kits that can be used to convert the base models to a customized hydraulic solution.

### Additional information and tools

Danfoss H1P 115/130 Base Model Conversion Tool	—
H1P 115/130 Technical Information	11063346
H1P 115/130 Data Sheet	11032030
H1P 078/089/100/115/130/147/165/210/250 Service Manual	520L0848
H1P 115/130 Parts Manual	11042928
H1P 078/115/130/147/165 Repair Instructions	520L0874

### 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 H1 115/130 cc variable displacement pumps.

The parts listed include all parts which may be used when performing either “Minor Repairs”, “Major Repairs” or “Conversions” on the H1 115/130 cc pump.

### 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 No./Ident No.

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

## General Information

### 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. ("08" would indicate the unit was manufactured in 2008).

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 G30

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
80	G30	89-17		8000243	End cap gasket	1
	G30	87-02	89-16	8000151	End cap gasket (SB-1995-006)	1

### Service bulletins

All units using this order code with a date code of 87-02 and up to and including 89-16, must use part number "8000151". All units with a date code of 89-17 and newer must use part number "8000243".

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 H1 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 J250 has the same item number on all pumps.)

A part number that has another number following it in parentheses is done to make this a worldwide manual. The first number is sold in Germany. The number in parentheses is sold in the United States. (Example: 314583 (9008000-0118), customers would order 9008000-0118 if ordering the part in the United States.)

#### Part Identification

The nameplate on an H1 pump has an Order Code of H1P115 R A A B8 C2 C D3 G G2 H6 L40 L40 A M 30 M1 NNN NNN. Use the following procedures to determine the part number of the drive shaft used on this pump.

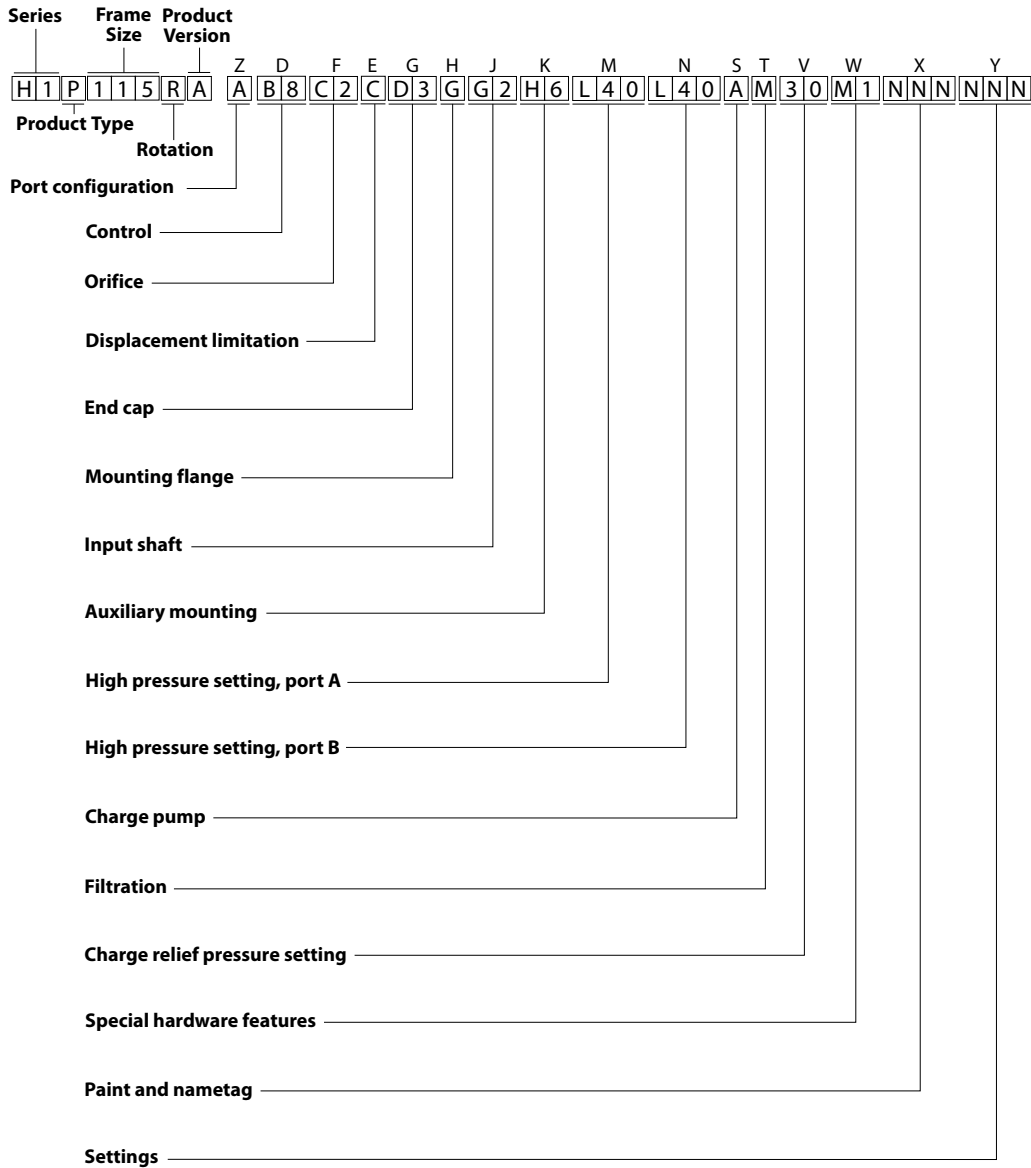
**General Information**

1. Referring to the input shaft module in the Order Code, the input shaft option for this pump is identified by the code "G2". (H1P115 R A A B8 C2 C D3 G **G2** H6 L40 L40 A M 30 M1 NNN NNN)
2. Referring to the Service Parts List, find the shaft group. Next find the order code that relates to this unit, which is "G2". The shaft is found to be item J100 and part number 140667.

**Conversion Manual      Axial Piston Pump H1 115 and 130 cc**

**General Information**

**Order code**



P100 721E

**General Information**
*Displacement*

<b>115</b>	115 cc/rev [7.03 in <sup>3</sup> /rev]
<b>130</b>	130 cc/rev [7.93 in <sup>3</sup> /rev]

*A – Rotation*

<b>L</b>	Left hand (counter clockwise)
<b>R</b>	Right hand (clockwise)

*B – Product version*

<b>B</b>	Revision code
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*Z – Port configuration*

<b>A</b>	Inch, Customer O-ring port sealing according to ISO 11926-1
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*D – Control*

<b>A2</b>	Electric Displacement Control ( <b>EDC</b> ) 12V, DEUTSCH connector
<b>A3</b>	Electric Displacement Control ( <b>EDC</b> ) 24V, DEUTSCH connector
<b>A4</b>	Electric Displacement Control ( <b>EDC</b> ) 12V, DEUTSCH connector, Manual override
<b>A5</b>	Electric Displacement Control ( <b>EDC</b> ) 24V, DEUTSCH connector, Manual override
<b>A9</b>	Forward-Neutral-Reverse ( <b>FNR</b> ) 12V, DEUTSCH connector, Manual override
<b>B1</b>	Forward-Neutral-Reverse ( <b>FNR</b> ) 24V, DEUTSCH connector, Manual override
<b>E7</b>	Electric Displacement Control ( <b>EDC</b> ) 12V, with keyed CCO
<b>E8</b>	Electric Displacement Control ( <b>EDC</b> ) 24V, with keyed CCO
<b>M1</b>	Manual Displacement Control ( <b>MDC</b> ) <sup>*</sup>
<b>M2</b>	Manual Displacement Control ( <b>MDC</b> ) with Neutral Start Switch, DEUTSCH Connector <sup>*</sup>
<b>M3</b>	Manual Displacement Control ( <b>MDC</b> ) with 12V CCO, DEUTSCH Connector <sup>*</sup>
<b>M4</b>	Manual Displacement Control ( <b>MDC</b> ) with 24V CCO, DEUTSCH Connector <sup>*</sup>
<b>M5</b>	Manual Displacement Control ( <b>MDC</b> ) with 12V CCO and Neutral Start Switch, DEUTSCH Connector <sup>*</sup>
<b>M6</b>	Manual Displacement Control ( <b>MDC</b> ) with 24V CCO and Neutral Start Switch, DEUTSCH Connector <sup>*</sup>

<sup>\*</sup> Align with option: **F**: Orifices.

*F – Orifices (mm)*

Code	Tank (A+B)	P	A / B	Note
<b>C1</b>	–	–	0.8	
<b>C2</b>	–	–	1.3	
<b>C3</b>	–	–	–	No orifice. Not recommended for mobile applications.



**General Information**
*F – Orifices (mm) (continued)*

Code	Tank (A+B)	P	A / B	Note
C6	1	–	–	To be used with <b>MDC</b> controls <u>only</u> .
C7	1.3	–	–	
D1	0.8	1	–	
D2	0.8	1.3	–	
D3	1	1.3	–	
D4	1	1.3	1.3	
D6	1.3	1.3	–	

*E – Displacement limiter*

N	None
B	Adjustable externally

*G – Endcap options (Twin port)*

D8	Remote or external charge endcap with ISO 6162 split flange ports
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*H – Mounting*

G	ISO 3019-1, flange 152-4 (SAE-D)
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*J – Input shaft*

G3	ISO 3019-1, outer Ø44 mm - 4 (SAE D, 13 teeth splined shaft 8/16 pitch)
G2	ISO 3019-1, outer Ø44 mm - 4 (SAE D, 27 teeth splined shaft 16/32 pitch)
F3	Conical keyed shaft end similar to ISO 3019-1 code 44-3, taper 1:8 (key not supplied with pump)

*K – Auxiliary mounting pad (align with option G: Endcap selection)*

NN	None	Shipping cover
H2	ISO 3019-1, flange 82 - 2, outer Ø16 mm - 4 (SAE A, 9 teeth 16/32 coupling)	
H1	ISO 3019-1, flange 82 - 2, outer Ø19 mm - 4 (SAE A, 11 teeth 16/32 coupling)	
H3	ISO 3019-1, flange 101 - 2, outer Ø22 mm - 4 (SAE B, 13 teeth 16/32 coupling)	
H5	ISO 3019-1, flange 101 - 2, outer Ø25 mm - 4 (SAE B-B, 15 teeth 16/32 coupling)	
S1	ISO 3019-1, flange 101 - 2, outer Ø22 mm - 4 (SAE B, 14 teeth 12/24 coupling)	
H6	ISO 3019-1, flange 127 - 4, outer Ø32 mm - 4 (SAE C, 14 teeth 12/24 coupling)	
H4	ISO 3019-1, flange 152 - 4, outer dia 44 mm - 4 (SAE D, 13 teeth 8/16 coupling)	

*M – Overpressure protection type, side “A” / N – Overpressure protection type, side “B”*

High pressure relief valve with bypass, pressure protection type <b>must be the same</b> for side “A” and “B”		
L	PL setting <sup>#</sup>	HPRV setting
L18	180 bar [2610 psi]	250 bar [3630 psi]
L20	200 bar [2900 psi]	250 bar [3630 psi]
L23	230 bar [3336 psi]	280 bar [4061 psi]

General Information

*M – Overpressure protection type, side “A” / N – Overpressure protection type, side “B” (continued)*

<b>High pressure relief valve with bypass, pressure protection type must be the same for side “A” and “B”</b>		
<b>L</b>	<b>PL setting<sup>#</sup></b>	<b>HPRV setting</b>
<b>L25</b>	250 bar [3630 psi]	300 bar [4350 psi]
<b>L28</b>	280 bar [4061 psi]	330 bar [4786 psi]
<b>L30</b>	300 bar [4350 psi]	350 bar [5080 psi]
<b>L33</b>	330 bar [4786 psi]	380 bar [5510 psi]
<b>L35</b>	350 bar [5080 psi]	400 bar [5800 psi]
<b>L38</b>	380 bar [5510 psi]	420 bar [6090 psi]
<b>L40</b>	400 bar [5800 psi]	450 bar [6526 psi]
<b>L42</b>	420 bar [6090 psi]	450 bar [6526 psi]
<b>L43</b>	430 bar [6235 psi]	480 bar [6960 psi]
<b>L44</b>	440 bar [6380 psi]	480 bar [6960 psi]
<b>L45</b>	450 bar [6525 psi]	480 bar [6960 psi]

<sup>#</sup> Please contact Danfoss Power Solutions for pressures not shown or for applied pressure above max. working pressure.

*M – Overpressure protection type, side “A” / N – Overpressure protection type, side “B”*

<b>High pressure relief valve with bypass, pressure protection type must be the same for side “A” and “B”</b>	
<b>K *</b>	<b>Pressure setting<sup>#</sup></b>
<b>K18</b>	180 bar [2610 psi]
<b>K20</b>	200 bar [2900 psi]
<b>K23</b>	230 bar [3336 psi]
<b>K25</b>	250 bar [3630 psi]
<b>K28</b>	280 bar [4061 psi]
<b>K30</b>	300 bar [4350 psi]
<b>K33</b>	330 bar [4786 psi]
<b>K35</b>	350 bar [5080 psi]
<b>K38</b>	380 bar [5510 psi]
<b>K40</b>	400 bar [5800 psi]
<b>K42</b>	420 bar [6090 psi]
<b>K45</b>	450 bar [6525 psi]

\* Without pressure limiters

<sup>#</sup> Please contact Danfoss Power Solutions for pressures not shown or for applied pressure above max. working pressure.

*S – Charge pump*

<b>A</b>	26 cc/rev [1.69 in <sup>3</sup> /rev]
<b>L</b>	34 cc/rev [2.07 in <sup>3</sup> /rev]
<b>N</b>	No charge pump, external charge supply*

\* Align with option: **T**

**General Information**
*T – Filtration*

<b>P</b>	Remote full charge flow filtration
<b>E</b>	External charge flow filtration

*V – Charge pressure relief setting*

<b>18</b>	18 bar [261 psi]
<b>20</b>	20 bar [290 psi]
<b>22</b>	22 bar [319 psi]
<b>24</b>	24 bar [348 psi]
<b>26</b>	26 bar [377 psi]
<b>28</b>	28 bar [406 psi]
<b>30</b>	30 bar [435 psi]
<b>32</b>	32 bar [464 psi]

*W – Special hardware features*

<b>PN</b>	EDC/FNR/MDC valve plate
<b>H1</b>	MDC valve plate with MDC handle

*X – Paint and nametag*

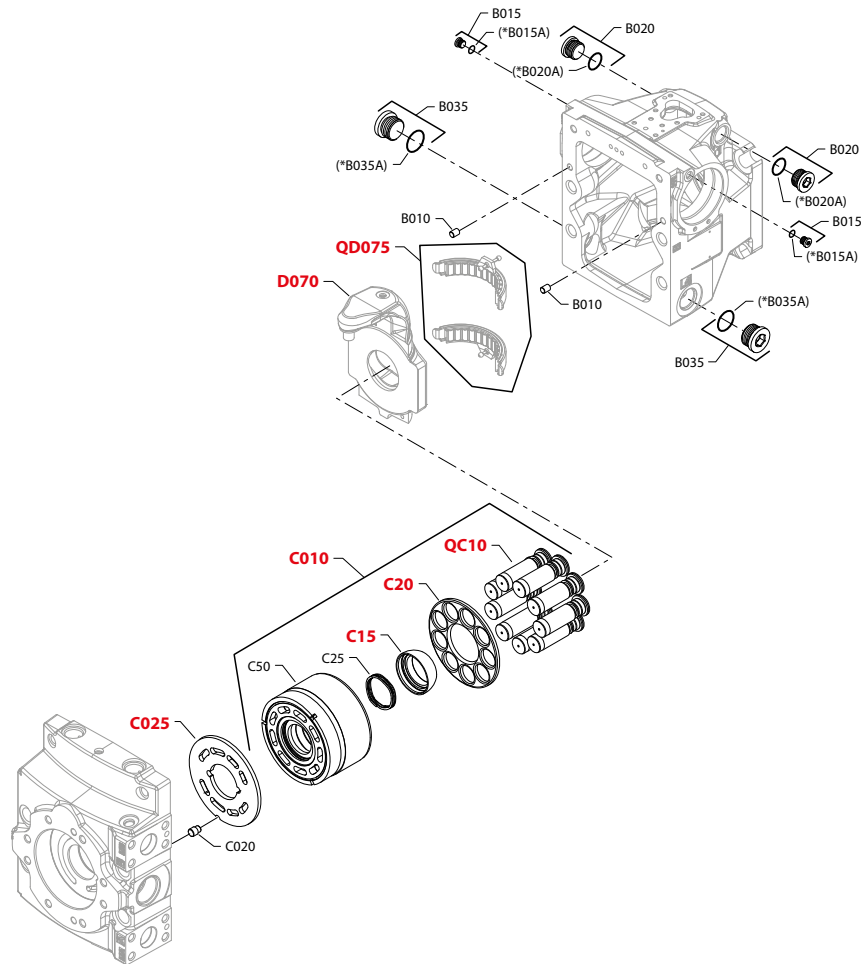
<b>C08</b>	No paint and Danfoss nametag
<b>NNN</b>	Black paint and Danfoss nametag

*Y – Special settings*

<b>Code</b>	<b>Description</b>
<b>NNN</b>	None

Variable displacement pump

Common parts



\* = included in overhaul seal kit Q210  
 ( ) = not available individually

E100 732E

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

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**Conversion Manual      Axial Piston Pump H1 115 and 130 cc**


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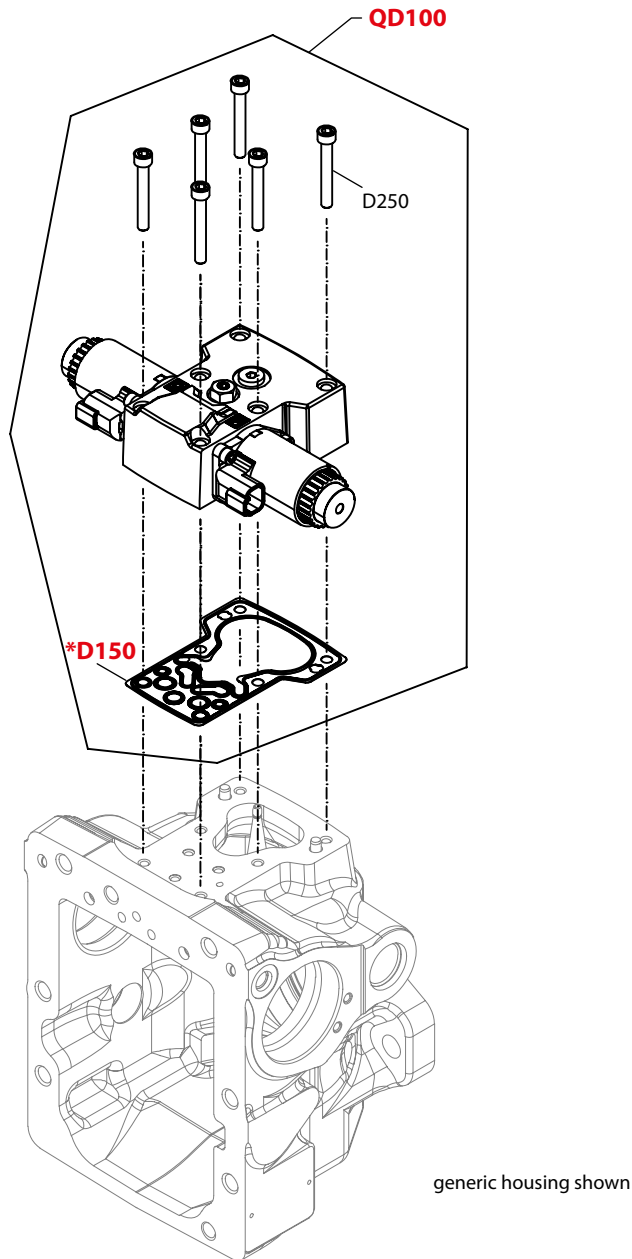
**Variable displacement pump**
*Common parts*

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	B010	08-10		9004800-3708	Dowel pin	2
	B015	08-10		140642	Plug assembly	2
	B020	08-10		664524 (9005110-9000)	Plug assembly	2
	B035	08-10		320002 (9005110-9200)	Plug assembly	2
	C020	08-10		141128	Valve plate pin, CCW	1
	C020	08-10		141126	Valve plate pin, CW	1
	C15	11-38		11121504	Slipper retainer ball guide, 115cc (SB-2011-039)	1
	C15	11-35		11121504	Slipper retainer ball guide, 130cc (SB-2011-039)	1
	C20	08-10		141254	Slipper retainer	1
	C25	11-38		11063561	Spring washer, 115cc (SB-2011-039)	1
	C25	11-35		11063561	Spring washer, 130cc (SB-2011-039)	1
	D070	08-10		11105986	Swashplate	1
	QC10	08-10		11046044	Slipper/piston kit, 115 cc	1
	QC10	08-10		11046045	Slipper/piston kit, 130 cc	1
	QD075	08-10		11046046	Swashplate bearing kit	1
PN	C010	09-51		141393/P	Cylinder block kit, 115 cc	1
	C010	09-51		141252/P	Cylinder block kit, 130 cc	1
	C025	09-51		11125571	Valve plate, CCW (SB-2013-003)	1
	C025	09-51		11123707	Valve plate, CW (SB-2013-003)	1
	C50	11-38		11124490	Cylinder block assembly, 115 cc	1
	C50	11-35		11126003	Cylinder block assembly, 130 cc	1

Variable displacement pump

Control kits

12V EDC (A2), 24V EDC (A3)



\* = included in overhaul seal kit Q210

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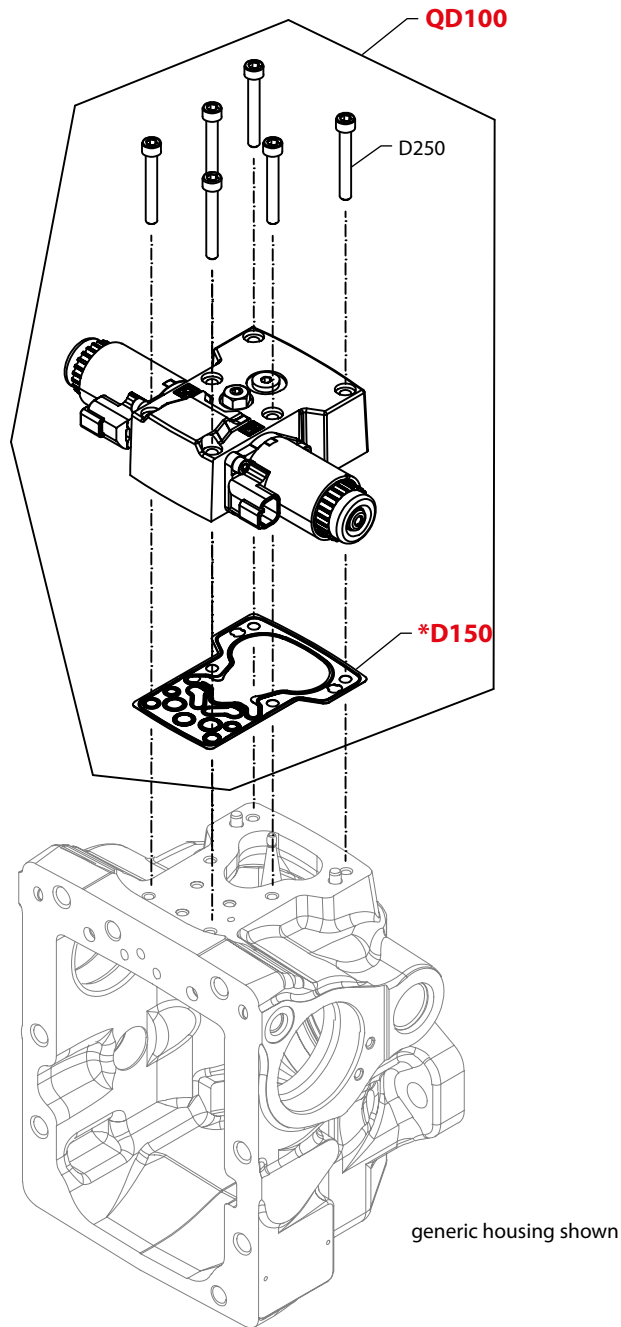
Enlarged **bold** type item numbers are recommended part to stock for servicing.

**Variable displacement pump***12V/24V EDC kit*

<b>Order Code</b>	<b>Item</b>	<b>Date Begin</b>	<b>Date End</b>	<b>Part Number</b>	<b>Part Name</b>	<b>Qty. per Model/Kit</b>
<b>A2</b>	D150	06-01		140879	Control gasket, H1	1
	D250	06-01		505038	Screw	6
	QD100	06-01		11019680	EDC kit, 12V, high gain spool	1
<b>A3</b>	D150	06-01		140879	Control gasket, H1	1
	D250	06-01		505038	Screw	6
	QD100	06-01		11019681	EDC kit, 24V, high gain spool	1

Variable displacement pump

12V EDC with MOR (A4), 24V EDC with MOR (A5)



\* = included in overhaul seal kit Q210

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

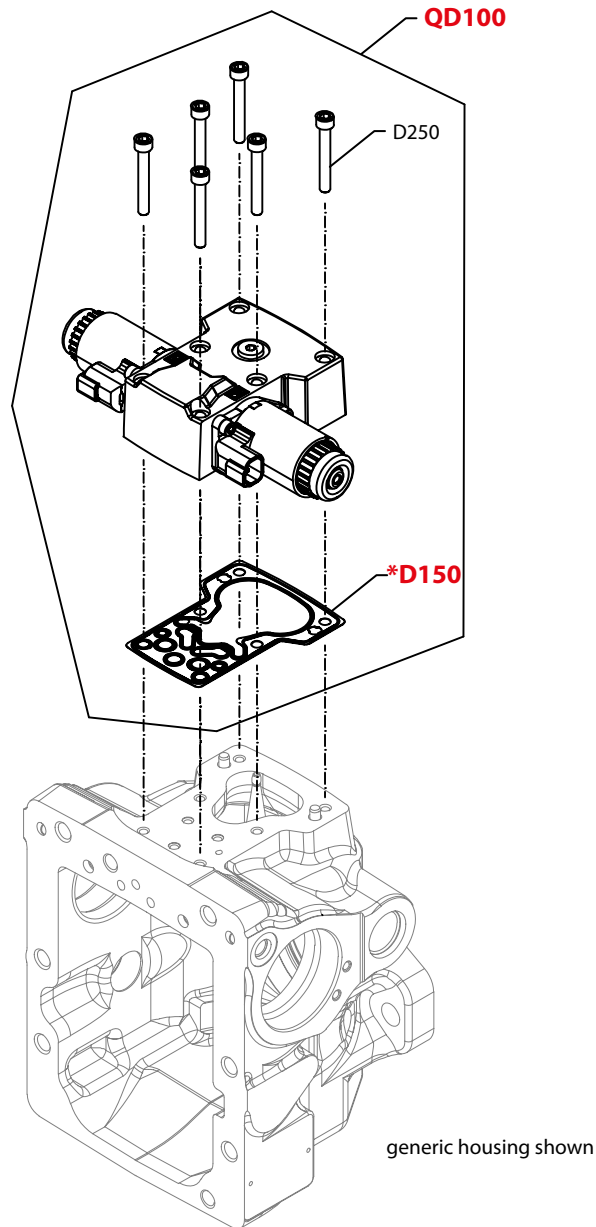


**Variable displacement pump***12V/24V EDC kit with MOR*

<b>Order Code</b>	<b>Item</b>	<b>Date Begin</b>	<b>Date End</b>	<b>Part Number</b>	<b>Part Name</b>	<b>Qty. per Model/Kit</b>
<b>A4</b>	D150	06-01		140879	Control gasket, H1	1
	D250	06-01		505038	Screw	6
	QD100	06-01		11019732	EDC kit, 12V, high gain spool,manual override	1
<b>A5</b>	D150	06-01		140879	Control gasket, H1	1
	D250	06-01		505038	Screw	6
	QD100	06-01		11019733	EDC kit, 24V, high gain spool, manual override	1

Variable displacement pump

12V FNR (A9), 24V FNR (B1)



\* = included in overhaul seal kit Q210

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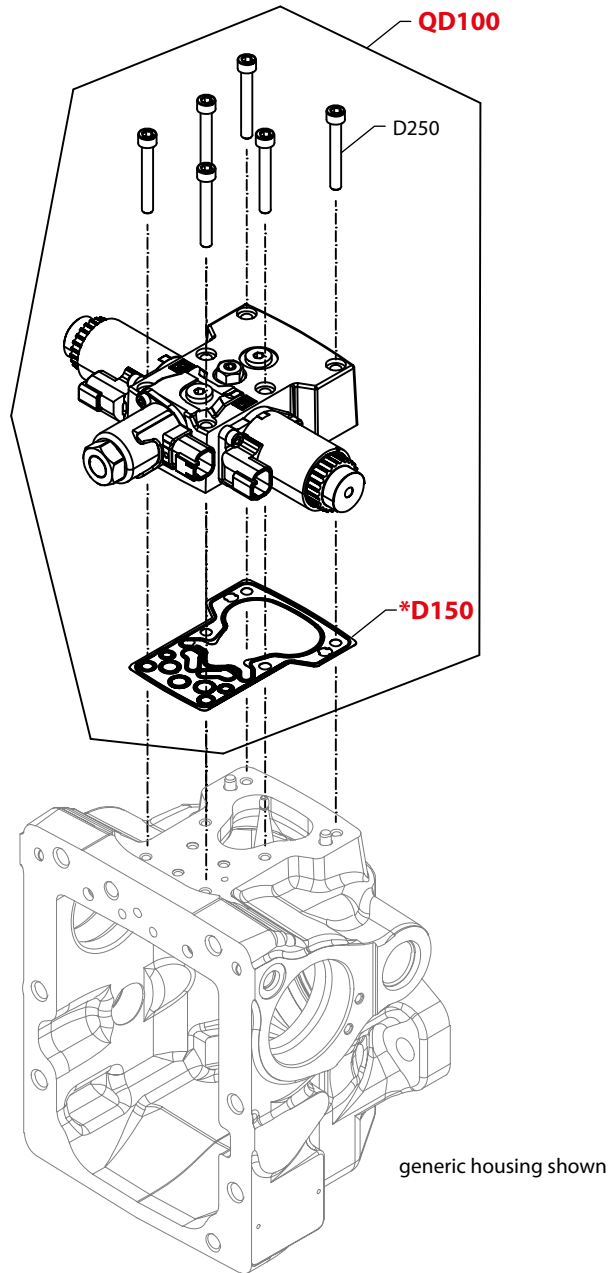
Enlarged **bold** type item numbers are recommended part to stock for servicing.

**Variable displacement pump***12V/24V FNR control kit*

<b>Order Code</b>	<b>Item</b>	<b>Date Begin</b>	<b>Date End</b>	<b>Part Number</b>	<b>Part Name</b>	<b>Qty. per Model/Kit</b>
<b>A9</b>	D150	06-01		140879	Control gasket, H1	1
	D250	06-01		505038	Screw	6
	QD100	06-01		11019733	FNR control kit, 12V, manual override, DEUTSCH conn.	1
<b>B1</b>	QD100	06-01		140879	Control gasket, H1	1
	D250	06-01		505038	Screw	6
	QD100	07-19		11019733	FNR control kit, 24V, manual override, DEUTSCH conn.	1

Variable displacement pump

12V EDC with 12V CCO (E7), 24V EDC with 24V CCO (E8)



\* = included in overhaul seal kit Q210

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

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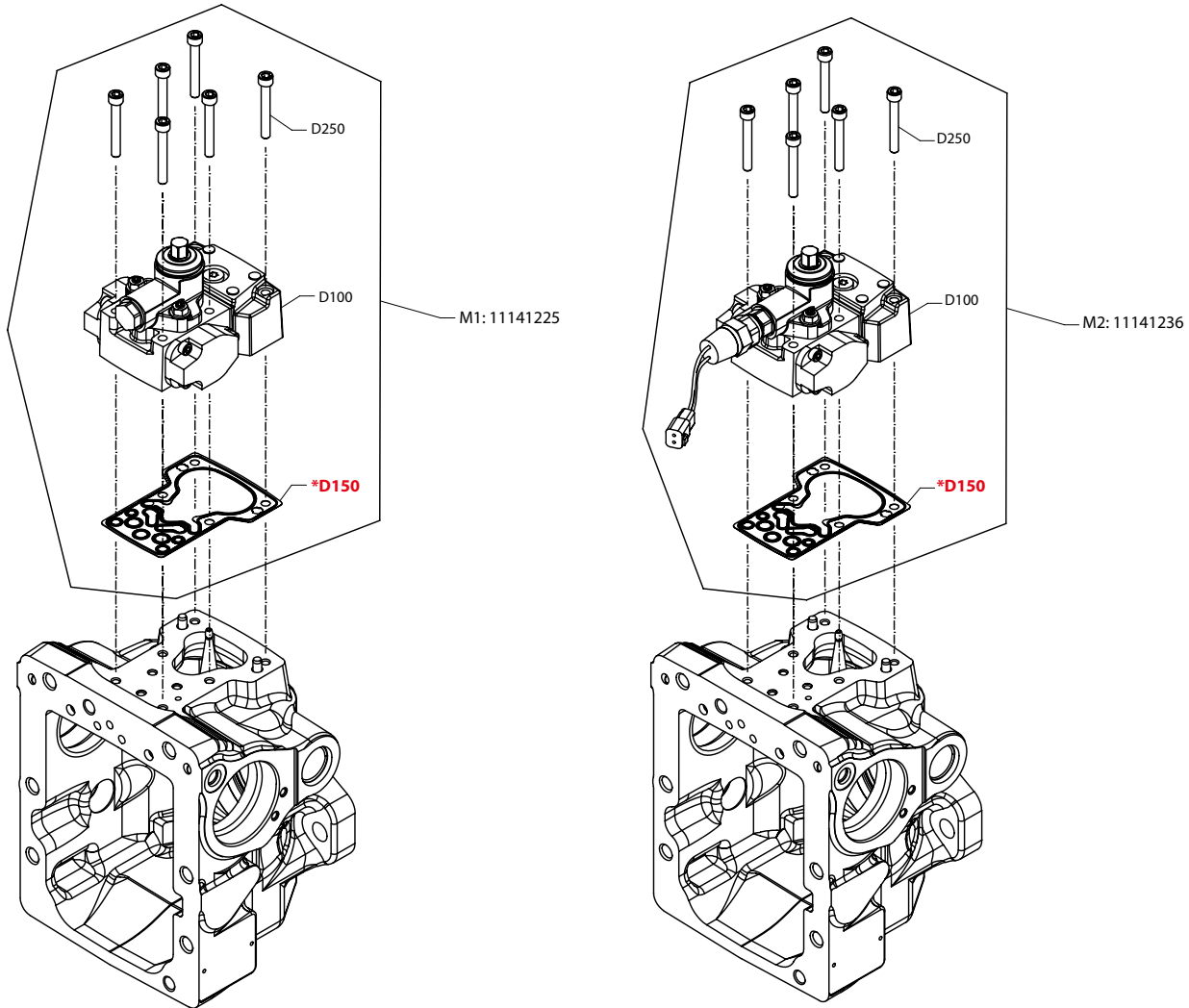
**Variable displacement pump**

*12V EDC with 12V CCO, 24V EDC with 24V CCO*

<b>Order Code</b>	<b>Item</b>	<b>Date Begin</b>	<b>Date End</b>	<b>Part Number</b>	<b>Part Name</b>	<b>Qty. per Model/Kit</b>
<b>E7</b>	D150	10-27		140879	Control gasket, H1	1
	D250	10-27		505038	Screw	6
	QD100			11147471	EDC kit 12V with keyed CCO	1
<b>E8</b>	D150	10-27		140879	Control gasket, H1	1
	D250	10-27		505038	Screw	6
	QD100			11147472	EDC kit 24V with keyed CCO	1

Variable displacement pump

MDC (M1), MDC with NSS (M2)



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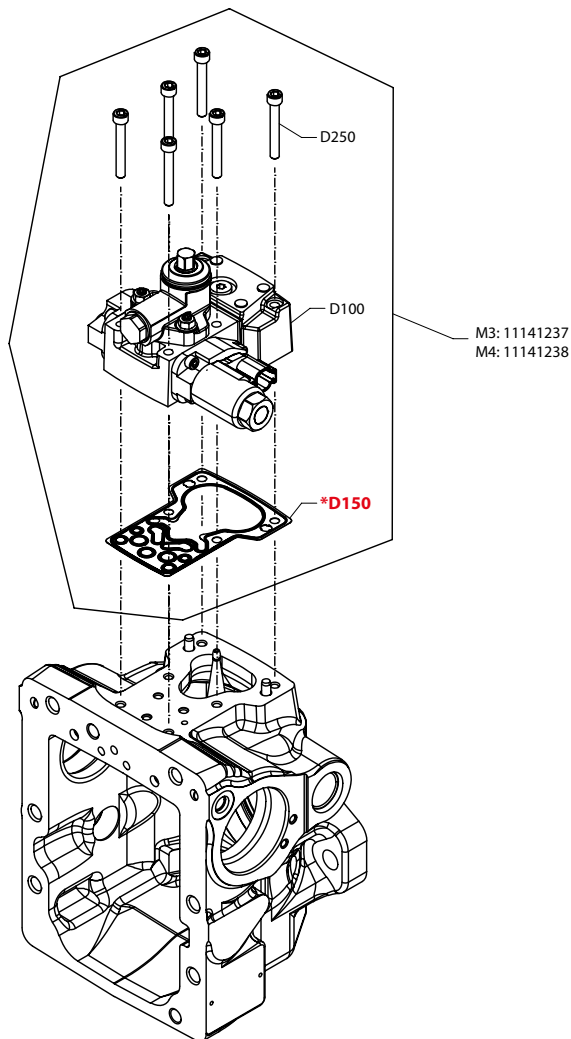
Enlarged **bold** type item numbers are recommended part to stock for servicing.

MDC, MDC with NSS

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
<b>M1</b>	QD100	14-01		11141225	MDC kit	1
<b>M2</b>	QD100	14-01		11141236	MDC with NSS kit	1

Variable displacement pump

MDC with 12V CCO (M3), MDC with 24V CCO (M4)



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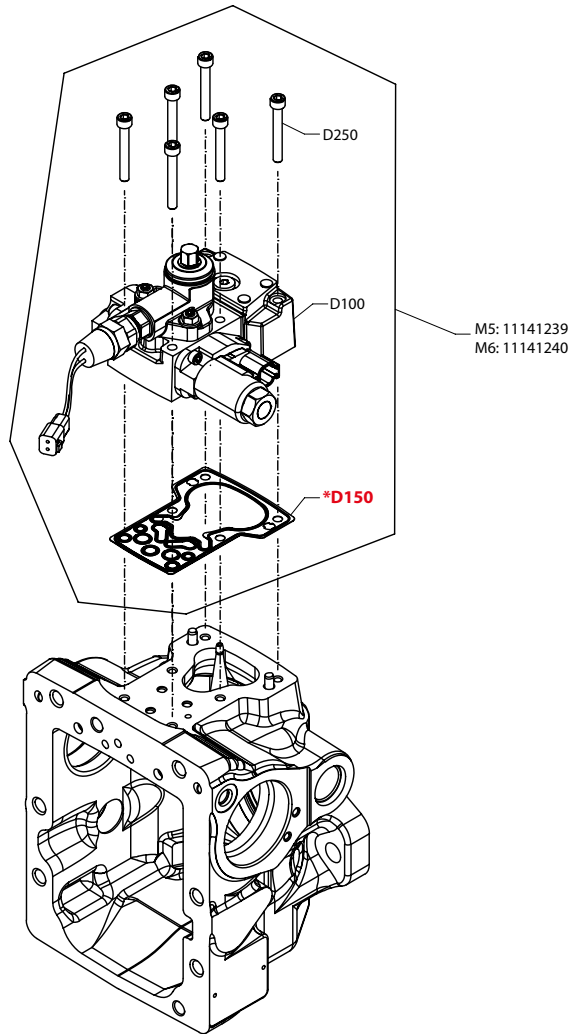
Enlarged **bold** type item numbers are recommended part to stock for servicing.

MDC with 12V CCO, MDC with 24V CCO

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
<b>M3</b>	QD100	14-01		11141237	MDC with 12V CCO kit	1
<b>M4</b>	QD100	14-01		11141238	MDC with 24V CCO kit	1

Variable displacement pump

MDC with NSS and 12V CCO (M5), MDC with NSS and 24V CCO (M6)



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

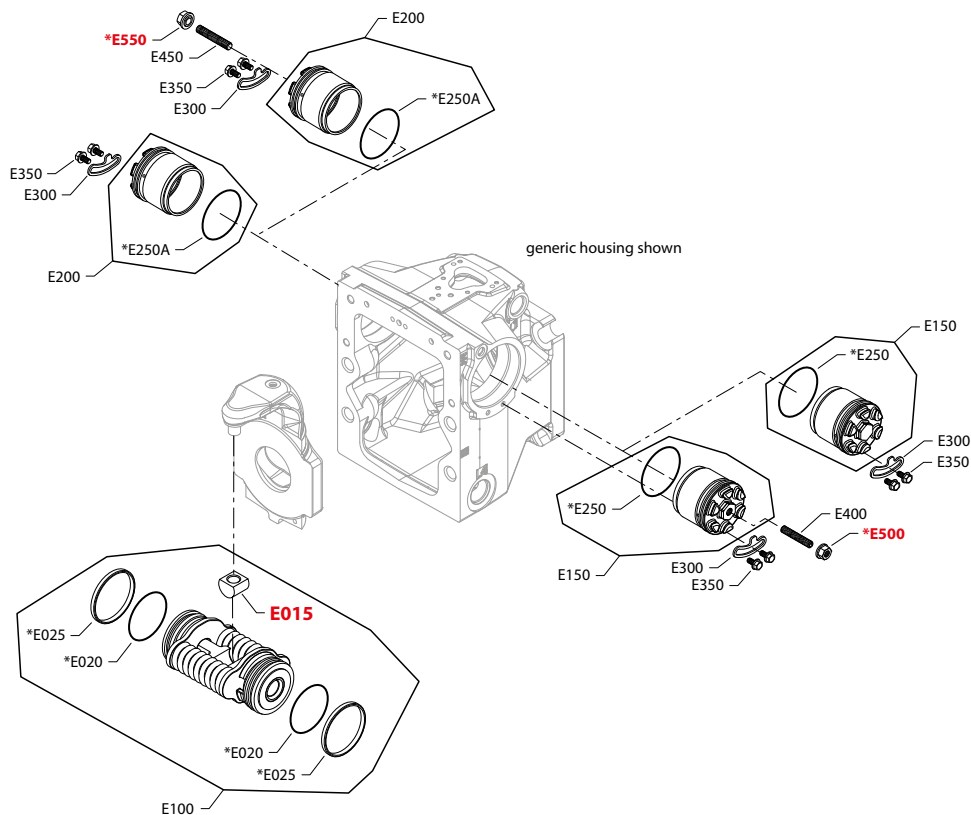
MDC with NSS and 12V CCO, MDC with NSS and 24V CCO

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
<b>M5</b>	QD100	14-01		11141239	MDC with NSS and 12V CCO	1
<b>M6</b>	QD100	14-01		11141240	MDC with NSS and 24V CCO	1



Variable displacement pump

Displacement limitation



\* = included in overhaul seal kit Q210

E100 915E

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

Displacement limitation

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	E015	08-10		140519	Slider block	1
	E020	08-10		11075557	O-ring	2
	E025	08-10		11075556	Piston seal ring	2
	E250	08-10		071845 (9004104-1510)	O-ring	2
	E300	10-35		11033382	Locking plate	2
	E300	08-10	10-34	140513	Locking plate (SB-2009-046)	2
	E350	08-10		508438	Screw	4

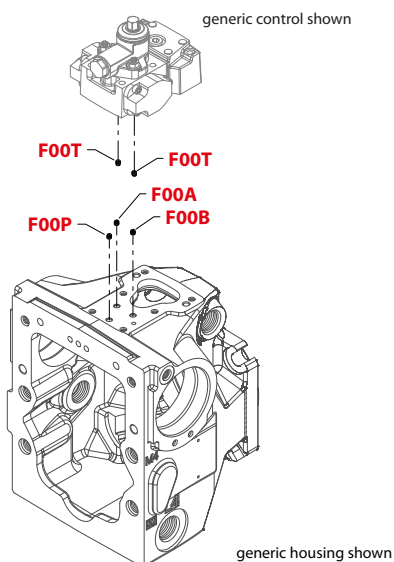
**Variable displacement pump**
*Displacement limitation (continued)*

<b>Order Code</b>	<b>Item</b>	<b>Date Begin</b>	<b>Date End</b>	<b>Part Number</b>	<b>Part Name</b>	<b>Qty. per Model/Kit</b>
<b>B</b>	E100	08-10		141243	Servo piston assembly	1
	E150	08-10		11089772	Servo cylinder assembly (SB-2009-046)	1
	E200	08-10		11089772	Servo cylinder assembly (SB-2009-046)	1
	E400	08-10		11000798	Set screw	1
	E450	08-10		11000798	Set screw	1
	E500	08-10		649822	Seal nut	1
	E550	08-10		649822	Seal nut	1
<b>N</b>	E100	08-10		141243	Servo piston assembly	1
	E150	08-10		11089773	Servo cylinder assembly (SB-2009-046)	1
	E200	08-10		11089773	Servo cylinder assembly (SB-2009-046)	1

Variable displacement pump

Orifice

The orifice position options F00P and FPPT shown below are only available with the MDC control.



P108941

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

Orifice

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
<b>C1</b>	F00A	10-48		140611	Orifice, 0.8, M6 x 0.75 mm	1
	F00B	10-48		140611	Orifice, 0.8, M6 x 0.75 mm	1
<b>C2</b>	F00A	10-48		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00B	10-48		140754	Orifice, 1.3, M6 x 0.75 mm	1
<b>C3</b>	None					
<b>C6</b>	F00T	14-44		11151734	Orifice, 1.0, M6 x 0.75 mm	2
<b>C7</b>	F00T	14-44		11151734	Orifice, 1.0, M6 x 0.75 mm	2
<b>D1</b>	F00P	14-44		11151734	Orifice, 1.0, M6 x 0.75 mm	1
	F00T	14-44		140611	Orifice, 0.8, M6 x 0.75 mm	2
<b>D2</b>	F00P	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-44		140611	Orifice, 0.8, M6 x 0.75 mm	2
<b>D3</b>	F00P	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-44		11151734	Orifice, 1.0, M6 x 0.75 mm	2
<b>D4</b>	F00A	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00B	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00P	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-44		11151734	Orifice, 1.0, M6 x 0.75 mm	2

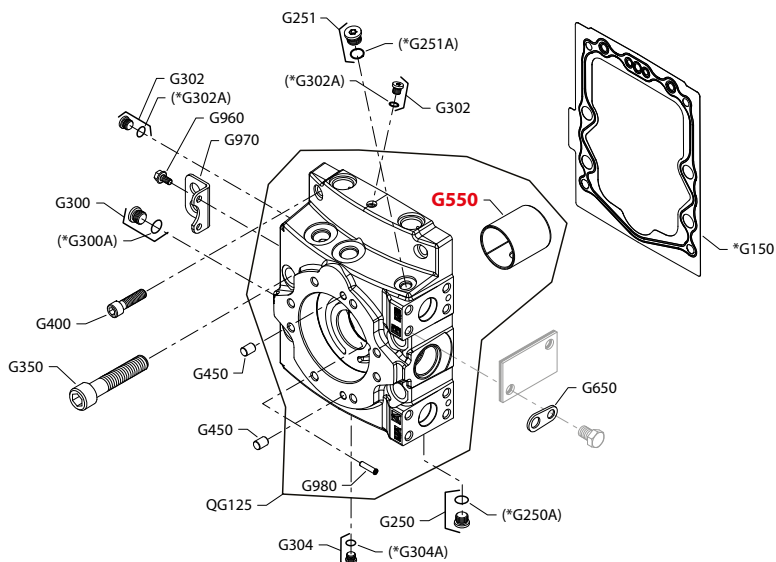
**Variable displacement pump***Orifice (continued)*

<b>Order Code</b>	<b>Item</b>	<b>Date Begin</b>	<b>Date End</b>	<b>Part Number</b>	<b>Part Name</b>	<b>Qty. per Model/Kit</b>
<b>D6</b>	F00P	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	2

Variable displacement pump

End cap

End cap (D8)



E100 996E

\* = included in overhaul seal kit Q210  
 () = not available individually

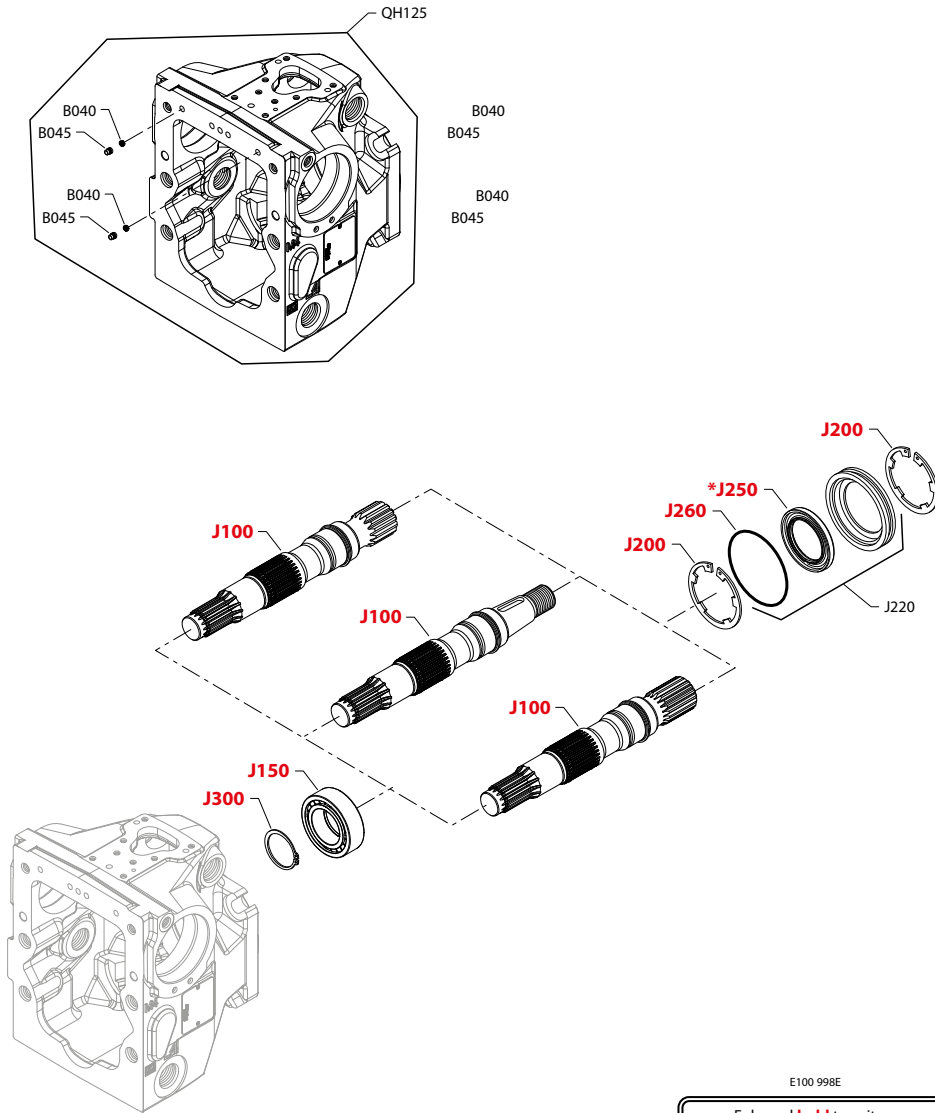
Enlarged **bold** type item numbers are recommended part to stock for servicing.

End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
<b>D8</b>	QG125	08-10		11003669	Endcap assembly, CW	1
	QG125	08-10		11003647	Endcap assembly, CCW	1
	G150	08-10		11001894	End cap gasket	1
	G250	08-10		140644	Plug assembly	1
	G251	08-10		140644	Plug assembly	1
	G300	08-10		140644	Plug assembly	1
	G302	08-10		11040532	Plug assembly	2
	G304	08-10		11040532	Plug assembly	1
	G350	08-10		519508	Screw	4
	G400	08-10		147900	Screw	2
	G450	08-10		9004800-3708	Dowel pin	2
	G550	08-10		11070150	Journal bearing	1
	G650	08-10		8800565	Lifting bracket	1
	G960	08-10		508438	Screw	2
	G970	08-10		4460311	Lifting bracket	1
	G980	08-10		11000229	Lubrication orifice	1

Variable displacement pump

Housing and Shaft



\* = included in overhaul seal kit Q210

E100 998E  
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Housing

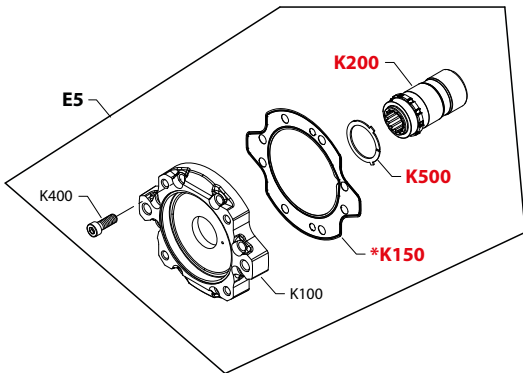
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
<b>G</b>	B040	08-10		140967	Screen, 8 mm, 125 micron	2
	B045	09-25		11062684	Screen retainer	2
	QH125	08-10		11005070	Housing assembly	1

**Variable displacement pump**
*Shaft*

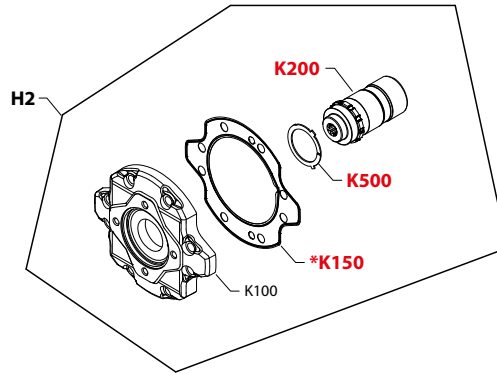
<b>F3</b>	J100	08-10		11119637	Shaft, tapered (SB-2012-026)	1
	J150	08-10		11045851	Roller bearing	1
	J200	08-10		140063	Retaining ring	2
	J250	08-10		11024711	Lip seal	1
	J300	08-10		392209	Retaining ring	1
<b>G2</b>	J100	08-10		11123698	Shaft, 27 tooth spline (SB-2012-026)	1
	J150	08-10		11045851	Roller bearing	1
	J200	08-10		140063	Retaining ring	2
	J250	08-10		11024711	Lip seal	1
	J300	08-10		392209	Retaining ring	1
<b>G3</b>	J100	08-10		11119634	Shaft, 13 tooth spline (SB-2012-026)	1
	J150	08-10		11045851	Roller bearing	1
	J200	08-10		140063	Retaining ring	2
	J250	08-10		11024711	Lip seal	1
	J300	08-10		392209	Retaining ring	1

Variable displacement pump

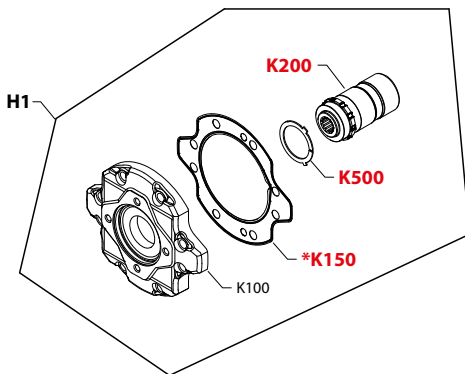
Auxiliary mounting kits



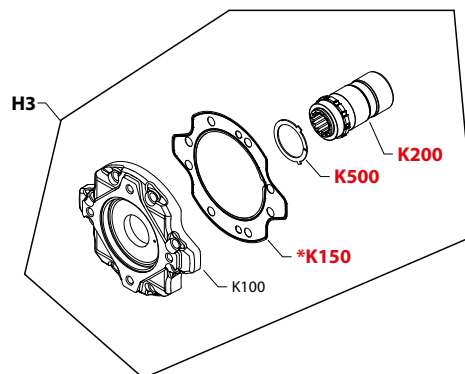
P108945\_E5



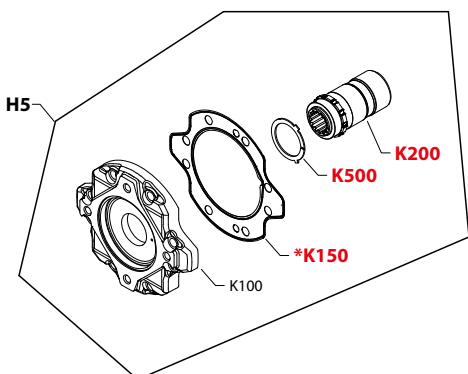
P108945\_H2



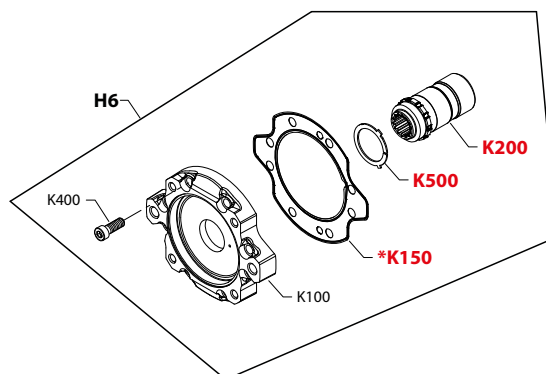
P108945\_H1



P108945\_H3



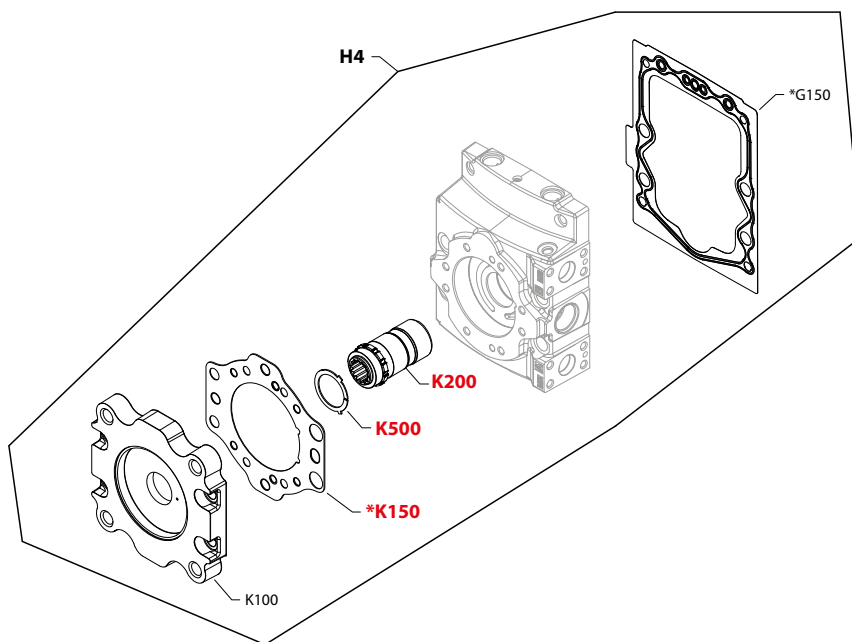
P108945\_H5



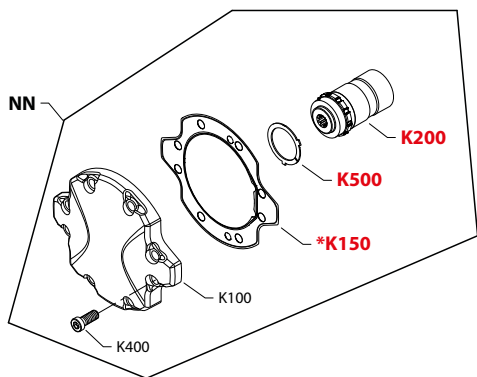
P108945\_H6



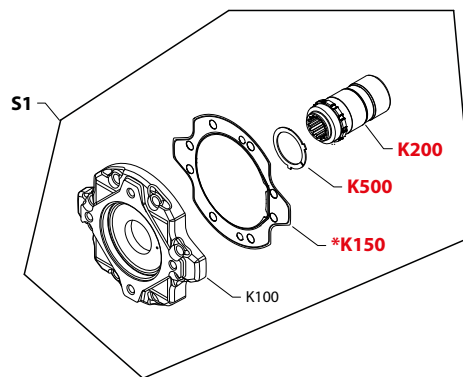
Variable displacement pump



P108945\_H4



P108945\_NN



P108945\_S1

Auxiliary mounting

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
H1				11170912	A-Auxiliary pad with 11T coupling	1
H2				11170901	A-Auxiliary pad with 9T coupling	1
H3				11170913	B-Auxiliary pad with 13T coupling	1
H4				11170920	D-Auxiliary pad with 13T coupling	1
H5				11170915	B-Auxiliary pad with 15T coupling	1
H6				11170917	C-Auxiliary pad with 14T coupling	1
S1				11170914	B-Auxiliary pad with 14T coupling	1
E5				11170916	C-Auxiliary pad with 13T coupling	1

**Variable displacement pump***Auxiliary mounting (continued)*

<b>Order Code</b>	<b>Item</b>	<b>Date Begin</b>	<b>Date End</b>	<b>Part Number</b>	<b>Part Name</b>	<b>Qty. per Model/Kit</b>
<b>NN</b>	K100	07-19		141249	Adapter flange, no pad	1
	K150	07-19		11029873	Adapter flange gasket (SB-2007-023)	1
	K200	07-19		141591	Coupling, 13 tooth	1
	K400	07-19		11000819	Screw	4
	K500	07-19		141105	Thrust plate	1

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Mounting hardware from the base models can be reused once with kits that do not contain mounting hardware.

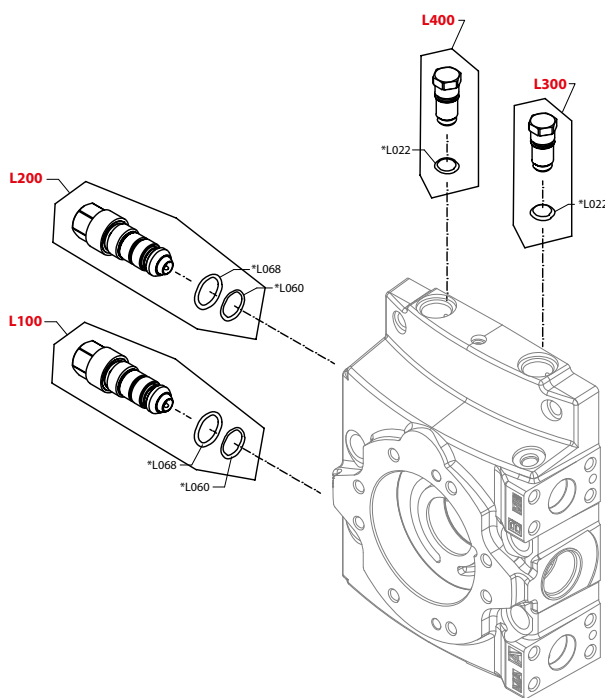
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Variable displacement pump

High pressure setting, port A and port B

Pressure protection replacement seals

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Valve
all	L022	08-10		504207	O-ring (pump with pressure limiter)	1
	L060	08-10		365023	O-ring	1
	L068	08-10		11052201	O-ring	1



P108942

\* = included in overhaul seal kit Q210

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

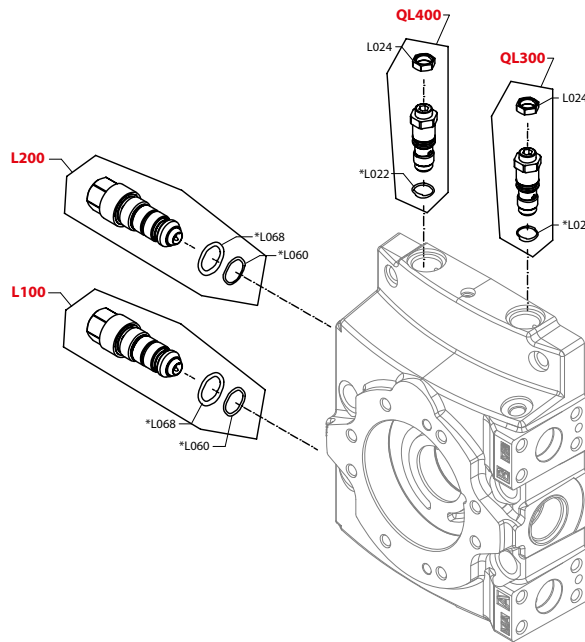
Hardware location for all "K" pressure protection type per pump rotation				
Pump Rotation	PL Plug Port A	PL PlugPort B	HPRV Port A	HPRV Port B
CW (R)	L400	L300	L100	L200
CCW (L)	L300	L400	L100	L200

Order Code	Part Type	Pressure Setting	Part Number	Qty. Per Port
All	PL Plug	All K options require a PL plug in the endcap	11002302	1
K20	HPRV	200 Bar (2900 psi)	11049144	1
K23	HPRV	230 Bar (3335 psi)	11049146	1
K25	HPRV	250 Bar (3625 psi)	11049147	1
K28	HPRV	280 Bar (4060 psi)	11049148	1
K30	HPRV	300 Bar (4350 psi)	11049149	1
K33	HPRV	330 Bar (4785 psi)	11049150	1
K35	HPRV	350 Bar (5075 psi)	11049151	1

**Conversion Manual      Axial Piston Pump H1 115 and 130 cc**

**Variable displacement pump**

Order Code	Part Type	Pressure Setting	Part Number	Qty. Per Port
<b>K38</b>	HPRV	380 Bar (5510 psi)	11049152	1
<b>K40</b>	HPRV	400 Bar (5800 psi)	11049153	1
<b>K42</b>	HPRV	420 Bar (6090 psi)	11049154	1
<b>K45</b>	HPRV	450 Bar (6525 psi)	11049155	1



P108943

\* = included in overhaul seal kit Q210

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

<b>Hardware Location for All "L" Pressure Protection Type per Pump Rotation</b>				
Pump Rotation	PL Port A	PL Port B	HPRV Port A	HPRV Port B
CW (R)	QL400	QL300	L100	L200
CCW (L)	QL300	QL400	L100	L200

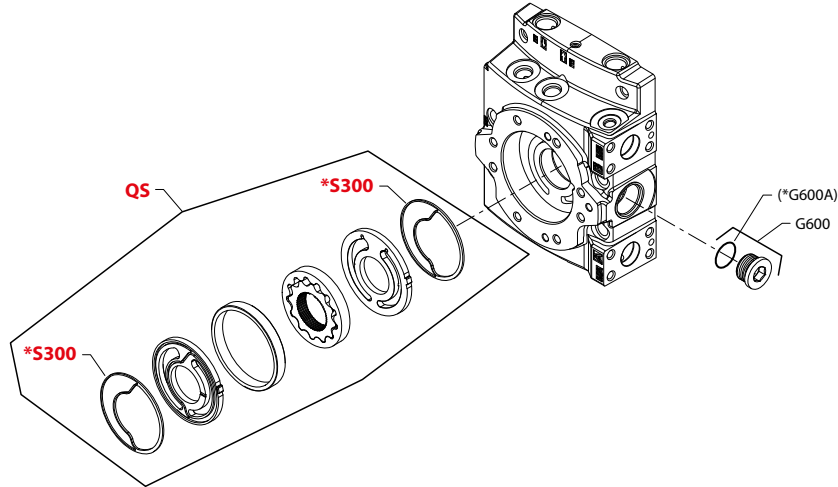
Order Code	Part type	Pressure setting	Part number	Qty. Per Port
<b>L20</b>	PL	Adjust PL to 200 Bar (2900 psi)	11004709	1
	HPRV	250 Bar (3625 psi)	11049147	1
<b>L23</b>	PL	Adjust PL to 230 Bar (3335 psi)	11004709	1
	HPRV	280 Bar (4060 psi)	11049148	1

**Variable displacement pump**

Order Code	Part type	Pressure setting	Part number	Qty. Per Port
<b>L25</b>	PL	Adjust PL to 250 Bar (3625 psi)	11004709	1
	HPRV	300 Bar (4350 psi)	11049149	1
<b>L28</b>	PL	Adjust PL to 280 Bar (4060 psi)	11004709	1
	HPRV	330 Bar (4785 psi)	11049150	1
<b>L30</b>	PL	Adjust PL to 300 Bar (4350 psi)	11004709	1
	HPRV	350 Bar (5075 psi)	11049151	1
<b>L33</b>	PL	Adjust PL to 330 Bar (4785 psi)	11004709	1
	HPRV	380 Bar (5510 psi)	11049152	1
<b>L35</b>	PL	Adjust PL to 350 Bar (5075 psi)	11004709	1
	HPRV	400 Bar (5800 psi)	11049153	1
<b>L38</b>	PL	Adjust PL to 380 Bar (5510 psi)	11004709	1
	HPRV	420 Bar (6090 psi)	11049154	1
<b>L40</b>	PL	Adjust PL to 400 Bar (5800 psi)	11004709	1
	HPRV	450 Bar (6525 psi)	11049155	1
<b>L41</b>	PL	Adjust PL to 410 Bar (5945 psi)	11004709	1
	HPRV	450 Bar (6525 psi)	11049155	1
<b>L42</b>	PL	Adjust PL to 420 Bar (6090 psi)	11004709	1
	HPRV	450 Bar (6525 psi)	11049155	1
<b>L43</b>	PL	Adjust PL to 430 Bar (6235 psi)	11004709	1
	HPRV	480 Bar (6960 psi)	11049156	1
<b>L44</b>	PL	Adjust PL to 440 Bar (6380 psi)	11004709	1
	HPRV	480 Bar (6960 psi)	11049156	1
<b>L45</b>	PL	Adjust PL to 450 Bar (6525 psi)	11004709	1
	HPRV	480 Bar (6960 psi)	11049156	1

Variable displacement pump

Charge pump and Charge pressure relief



E101 597E

\* = included in overhaul seal kit Q210  
 () = not available individually

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

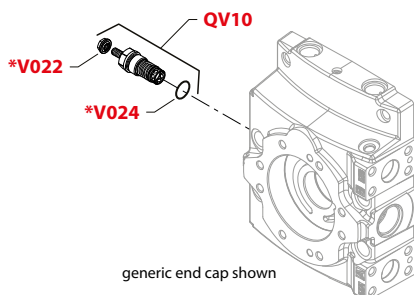
Charge pump

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
<b>A</b>	QS	10-36		11075695	Charge pump kit, 26 cc (SB-2011-022)	1
	S300	08-10		11008462	Seal ring	2
<b>L</b>	QS	10-36		11069135	Charge pump kit, 34 cc (SB-2011-022)	1
	S300	08-10		11008462	Seal ring	1

Filtration

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
<b>N</b>	G600	08-10		676734 (900511-9500)	Plug assembly	1
<b>E</b>	T050	08-10		664524 (9005110-9000)	Plug assembly	2
<b>P</b>	T050	08-10		664524 (9005110-9000)	Plug assembly	2

Variable displacement pump



\* = included in overhaul seal kit Q210

E100758E

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

Charge pressure relief

<b>18-22</b>	QV10	08-10		11004711	Charge relief valve kit	1
	V022	08-10		612291 (9003508-0008)	Seal nut	1
	V024	08-10		001149 (9004201-6200)	O-ring	1
<b>24-34</b>	V10	08-10		11017127	Charge relief valve kit	1
	V022	08-10		612291 (9003508-0008)	Seal nut	1
	V024	08-10		001149 (9004201-6200)	O-ring	1

**Conversion Manual      Axial Piston Pump H1 115 and 130 cc**
**Variable displacement pump**
**Overhaul seal kit**
*Overhaul seal kit*

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
		08-10		11003522	Overhaul seal kit, H1 115/130	1

*Parts contained in overhaul seal kit (11003522)*

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B015A	08-10		001123 (9004201-2500)	O-ring, 8.92 x 1.83, nitrile	2
B020A	08-10		001156 (9004201-7500)	O-ring, 23.47 x 2.95, nitrile	2
B035A	08-10		001172 (9004201-9000)	O-ring, 29.74 x 2.95, nitrile	2
D25A	08-10		11001952	O-ring, 18.00 x 1.50, viton	2
D055A	08-10		039297 (9004201-1200)	O-ring, 6.07 x 1.63, nitrile	2
D060	08-10		612291 (9003508-0008)	Seal nut	1
D065A	08-10		001123 (9004201-2500)	O-ring, 8.92 x 1.83, nitrile	1
D067A	08-10		039297 (9004201-1200)	O-ring, 6.07 x 1.63, nitrile	1
D067A	08-10		001123 (9004201-2500)	O-ring, 8.92 x 1.83, nitrile	1
D080A	08-10		11059551	O-ring, 9.50 x 1.78, nitrile	1
D150	08-10		140879	Control gasket, H1	1
D610A	08-10		11066774	O-ring	2
E020	08-10		11075557	O-ring	2
E025	08-10		11075556	Piston seal ring	2
E250	08-10		071845 (9004104-1510)	O-ring, 75.86 x 2.62, viton	2
E500	08-10		649822	Seal nut, M14 x 1.5	1
E550	08-10		649822	Seal nut, M14 x 1.5	1
G150	08-10		111001894	End cap gasket	1
G250A	08-10		085043 (9004201-3700)	O-ring, 11.89 x 1.98, nitrile	1
G251A	08-10		085043 (9004201-3700)	O-ring, 11.89 x 1.98, nitrile	1
G255A	08-10		085043 (9004201-3700)	O-ring, 11.89 x 1.98, nitrile	1
G300A	08-10		085043 (9004201-3700)	O-ring, 11.89 x 1.98, nitrile	1
G302A	08-10		039297 (9004201-1200)	O-ring, 6.07 x 1.63, nitrile	4
G304A	08-10		039297 (9004201-1200)	O-ring, 6.07 x 1.63, nitrile	1
G600A	08-10		093823 (9004201-9200)	O-ring, 37.46 x 3.00, nitrile	1
G750A	08-10		140866	O-ring, 38.70 x 2.80, nitrile	1



**Variable displacement pump**
*Parts contained in overhaul seal kit (11003522) (continued)*

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G850A	08-10		001131 (9004201-5000)	O-ring, 16.36 x 2.21, nitrile	1
H130A	08-10		11013397	O-ring, 15.60 x 1.78, viton	1
J250	08-10		11024711	Lip seal	1
K150	08-10		11002236	Adapter seal	1
K250	08-10		327627 (9004104-1540)	O-ring, 94.92 x 2.62, viton	1
K250	08-10		9004104-1520	O-ring, 82.22 x 2.62, viton	1
K250	08-10		726927	O-ring, 150.00 x 3.00, viton	1
K250	08-10		056739 (9004104-1580)	O-ring, 120.32 x 2.62, viton	1
L022	08-10		504207	O-ring, 20.29 x 2.62, nitrile	2
L024	08-10		336826	Seal nut, M10 x 1	2
L 0 6 0	08-10		365023	O-ring, 23.52 x 1.78, viton	2
L 0 6 8	08-10		11052201	O-ring, 25.30 x 2.40, viton	2
S300	08-10		11008462	Seal ring	2
T025A	08-10		085043 (9004201-3700)	O-ring, 11.89 x 1.98, nitrile	2
T035	08-10		761148 (9004100-0260)	O-ring, 31.47 x 1.78, nitrile	1
T045	08-10		314500 (9004100-1250)	O-ring, 32.99 x 2.62, nitrile	1
T050A	08-10		001156 (9004201-7500)	O-ring, 23.47 x 2.95, nitrile	2
T350	08-10		140737	Filter adapter gasket	1
T650	08-10		140737	Filter adapter gasket	1
V022	08-10		612291 (9003508-0008)	Seal nut, M8 x 1, fine thread	1







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