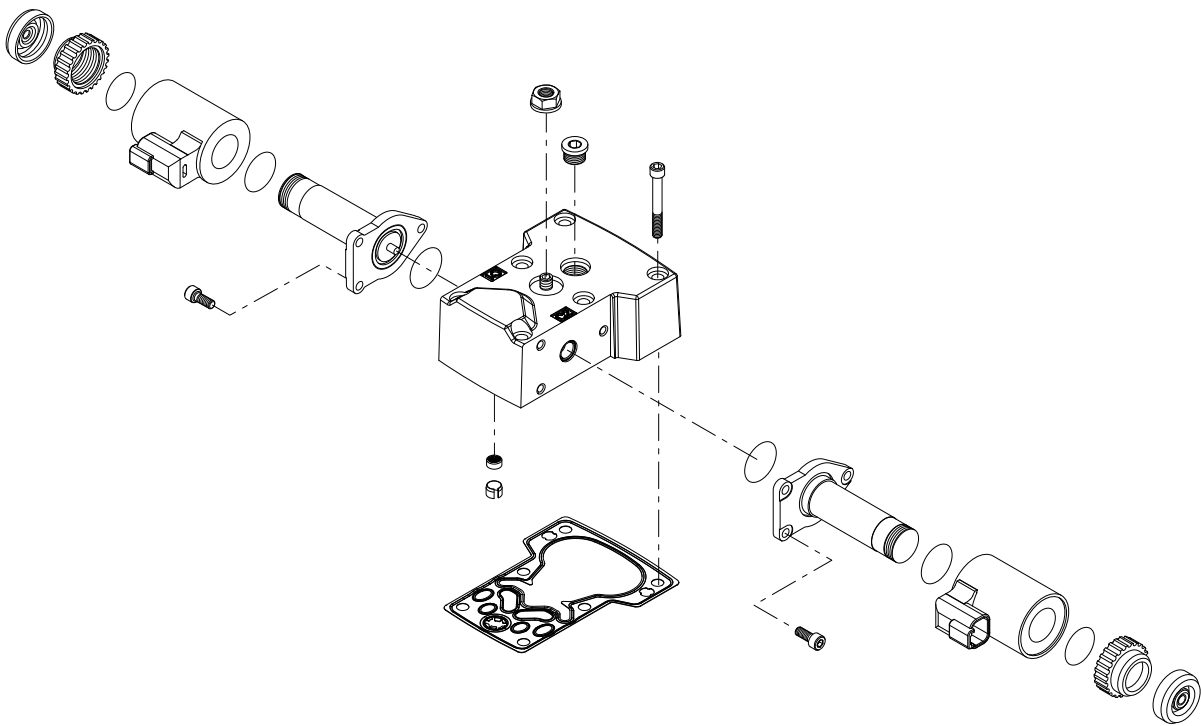


Parts Manual

H1P 45 and 53cc

Variable displacement pump



Revision history

Table of revisions

Date	Changed	Rev
November 2018	Added control options T6, T7, T8 and T9	0903
July 2018	Updated to Engineering Tomorrow format and added SB-2018-025	0902

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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

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

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).

The first number (2 digits) indicates the year of manufacture. 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 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		89-16	8000151	End cap gasket (SB-1995-006)	1

All units using this order code with a date code prior to 89-17 must use part number "8000151." All units with a date code of 89-17 and newer must use part number "8000243."

About 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.

General information

Procedure to identify a part

The modular design of this product 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. A part number that has another number following it in parentheses is done to make this a world wide manual.

Regional part numbers

Some part numbers are region specific and should be ordered accordingly.

As an example, the part number (example: 314583 (9008000-0118)) will be used. The first number is sold in Germany. The number in parentheses is sold in the United States. Customers would order 9008000-0118 if ordering the part in the United States.

Example of a part identification (H1P 45/53)

The nameplate on an H1 pump has an Order Code of H1P045 R A A A2 C3 N F1 F G5 NN J 35 J 35 B L 20 PN NNN NNN. Use the following procedures to determine the part number of the drive shaft used on this pump.

1. Referring to the input shaft module in the [Order code](#) on page 9, the input shaft option for this pump is identified by the code "G5."

H1P045 R A A A2 C3 N F1 F **G5** NN J 35 J 35 B L 20 PN NNN NNN

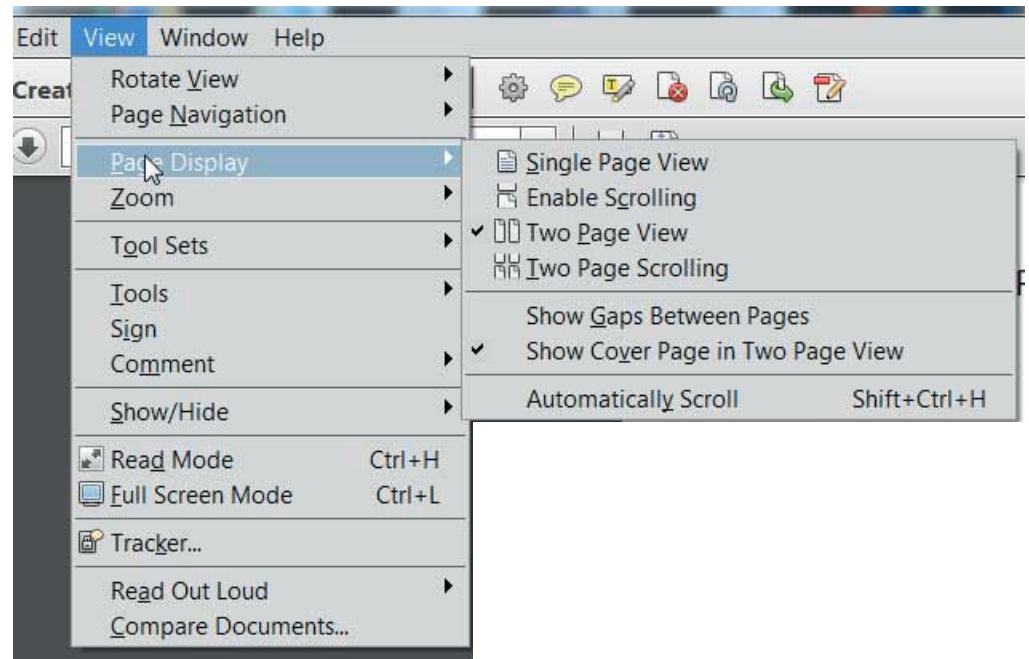
2. Referring to the service parts list, find the shaft group and the order code that relates to this unit (G5). The shaft is found to be item J100 and part number 141954.

General information

Adobe Acrobat 2-page viewing

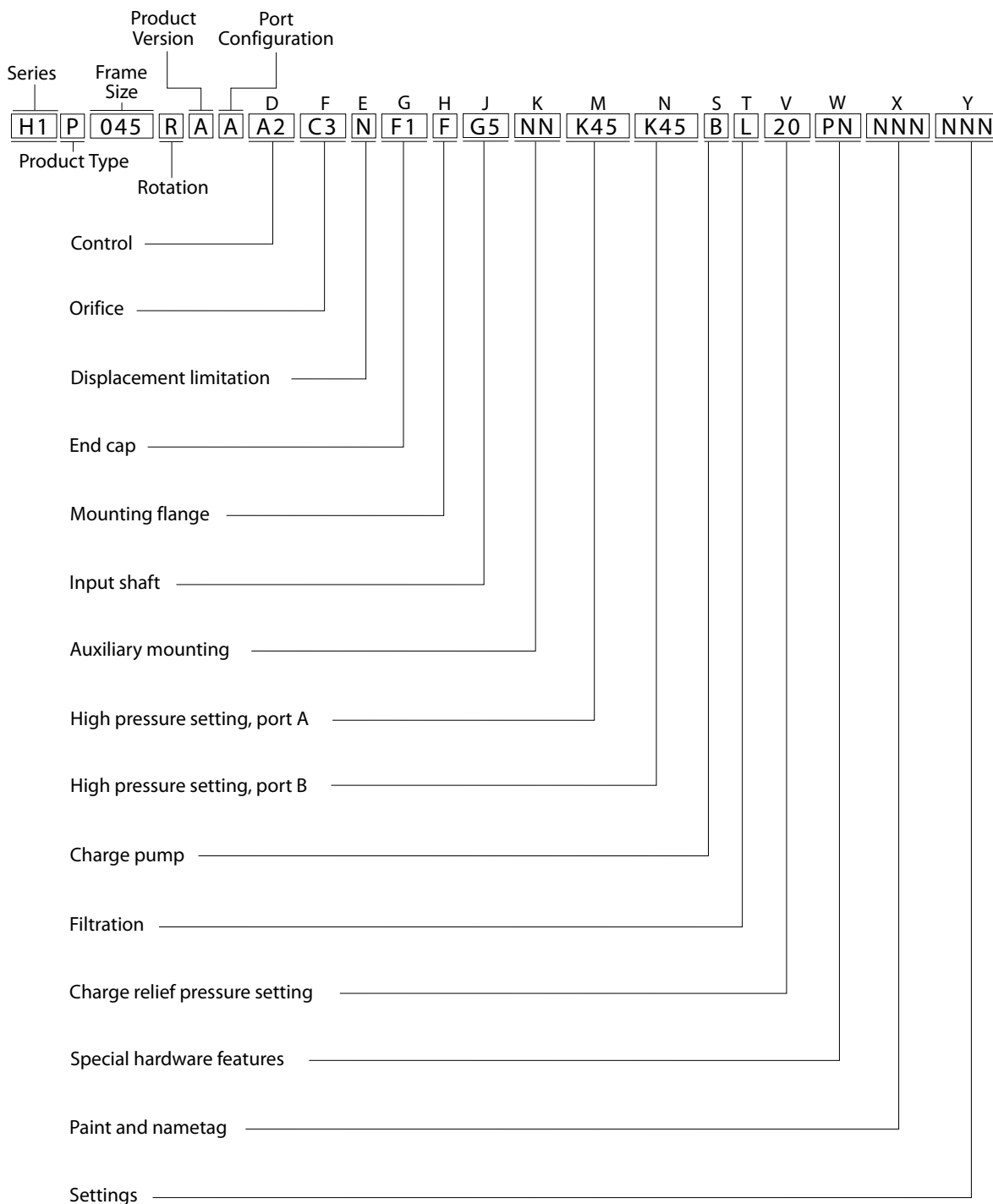
While viewing manual in Adobe Acrobat, the following settings need to be applied to ensure proper page display.

1. Select "View" → "Page Display" → "Two Page View"
2. Select "View" → "Page Display" → "Show Cover Page in Two Page View"



General information

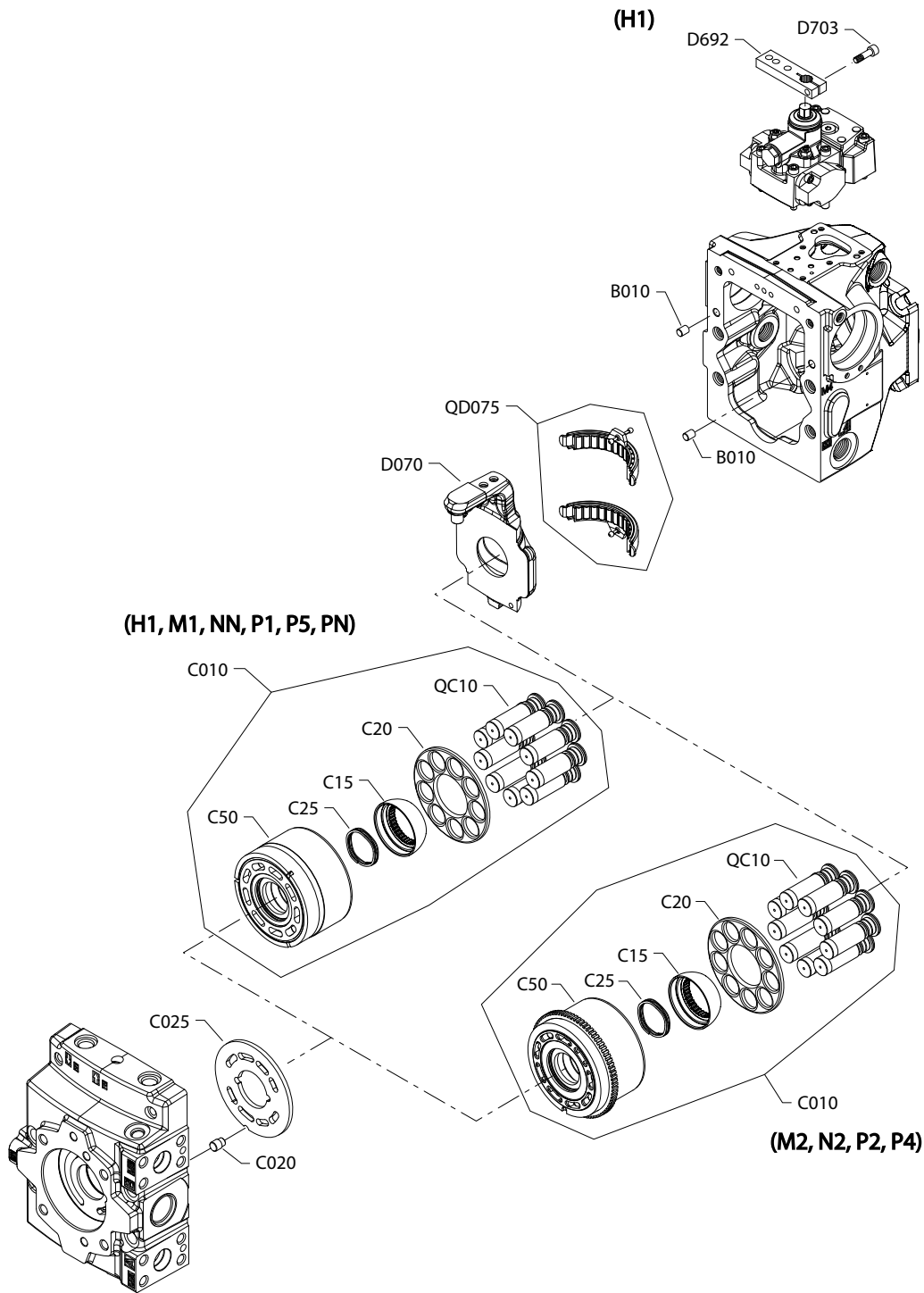
Order code



Common parts and special hardware

H1P 45/53 special hardware H1, M1, P1

Parts configuration



Common parts and special hardware

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B010	07-19		5000757	Dowel pin	2
C020	07-19		9004700-1907	Valve plate pin,	1
C20	07-19		141946	Slipper retainer	1
C25	07-19		4700091	Slipper hold down pin	3
D070	12-21		11068328	Swashplate (SB-2008-056 on page 144, SB-2009-043 on page 148 & SB-2011-020 on page 152)	1
D070	07-19	12-20	11098280	Swashplate replacement kit	1
QC10	07-19		11020841	Slipper/piston kit, 45cc	1
QC10	07-19		11020932	Slipper/piston kit, 53cc	1
QD075	07-19		11085533	Swashplate bearing kit (SB-2010-020 on page 151)	1

Special hardware

Order code: H1

C15	14-33		140625	Slipper retainer ball guide	1
C010	14-33		141631	Cylinder block kit, 45cc	1
C010	14-33		141632	Cylinder block kit, 53cc	1
C025	14-33		11071901	Valve plate kit, CW	1
C025	14-33		11071912	Valve plate kit, CCW	1
D692	14-33		11185958	Control handle	1
D703	14-33		11173701	Screw, M6 x 20	1
QC50	14-33		141553	Cylinder block assembly, 45cc	1
QC50	14-33		141554	Cylinder block assembly, 53cc	1

Order code: M1

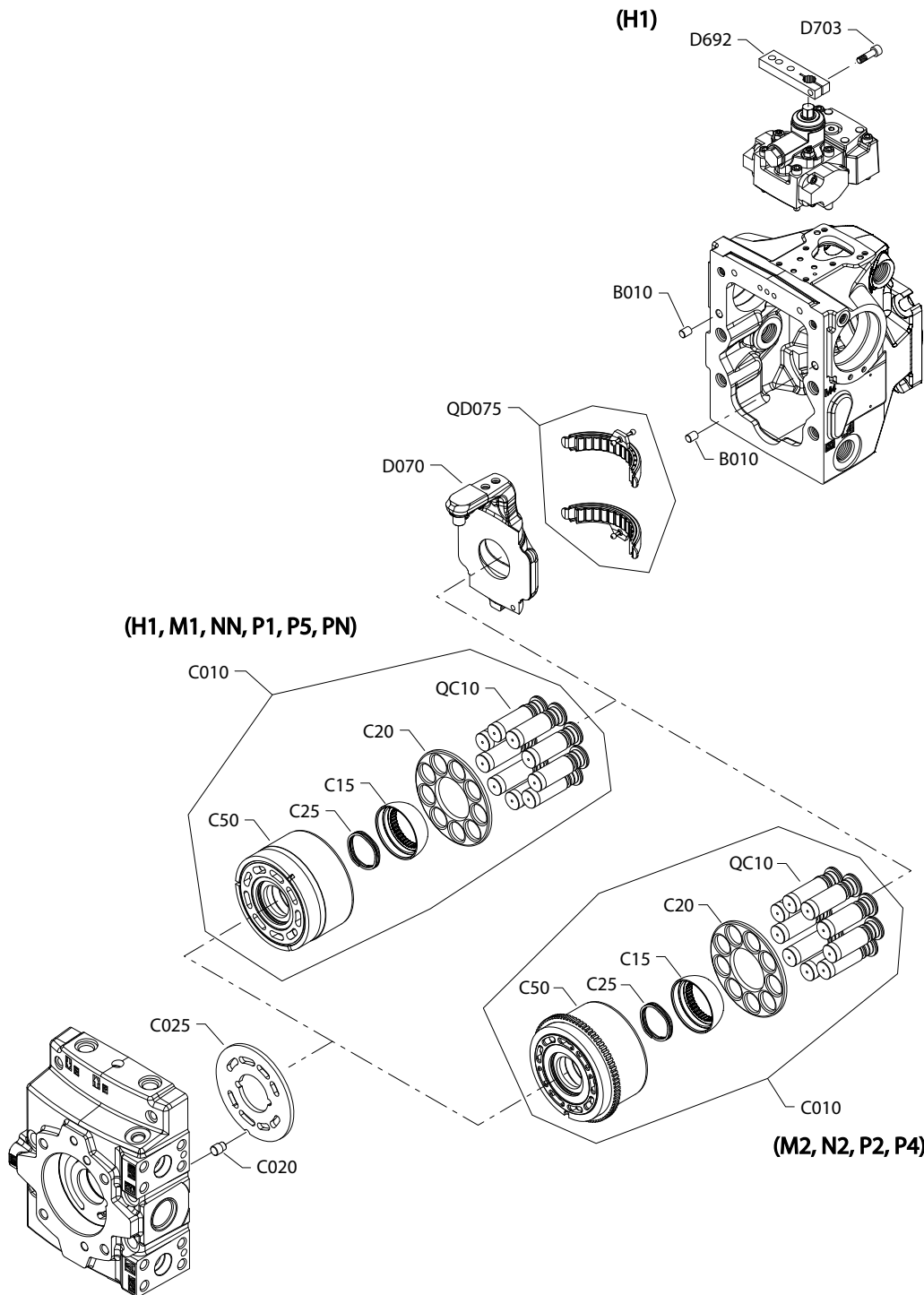
C15	07-19		140625	Slipper retainer ball guide	1
C010	07-19		141631	Cylinder block kit, 45cc	1
C025	07-19		11018336	Valve plate, CW	1
QC50	07-19		141553	Cylinder block assembly, 45cc	1

M1	Replaced with P1 (H1P045L, H1P053L, H1P053R)				
M2	Replaced with P2				
M4	Replaced with P4				
NN	Replaced with PN				

[Parts continue to the next two pages.](#)

Common parts and special hardware

Parts configuration



Generic control, housing, and end cap used to show part location only.

Common parts and special hardware

Order code: P1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C15	09-13		140625	Slipper retainer ball guide	1
C010	09-13		141631	Cylinder block kit, 45 cc	1
C010	09-13		141632	Cylinder block kit, 53 cc	1
C025	09-13		11071901	Valve plate kit, CW	1
C025	09-13		11071912	Valve plate kit, CCW	1
QC50	09-13		141553	Cylinder block assembly, 45 cc	1
QC50	09-13		141554	Cylinder block assembly, 53 cc	1

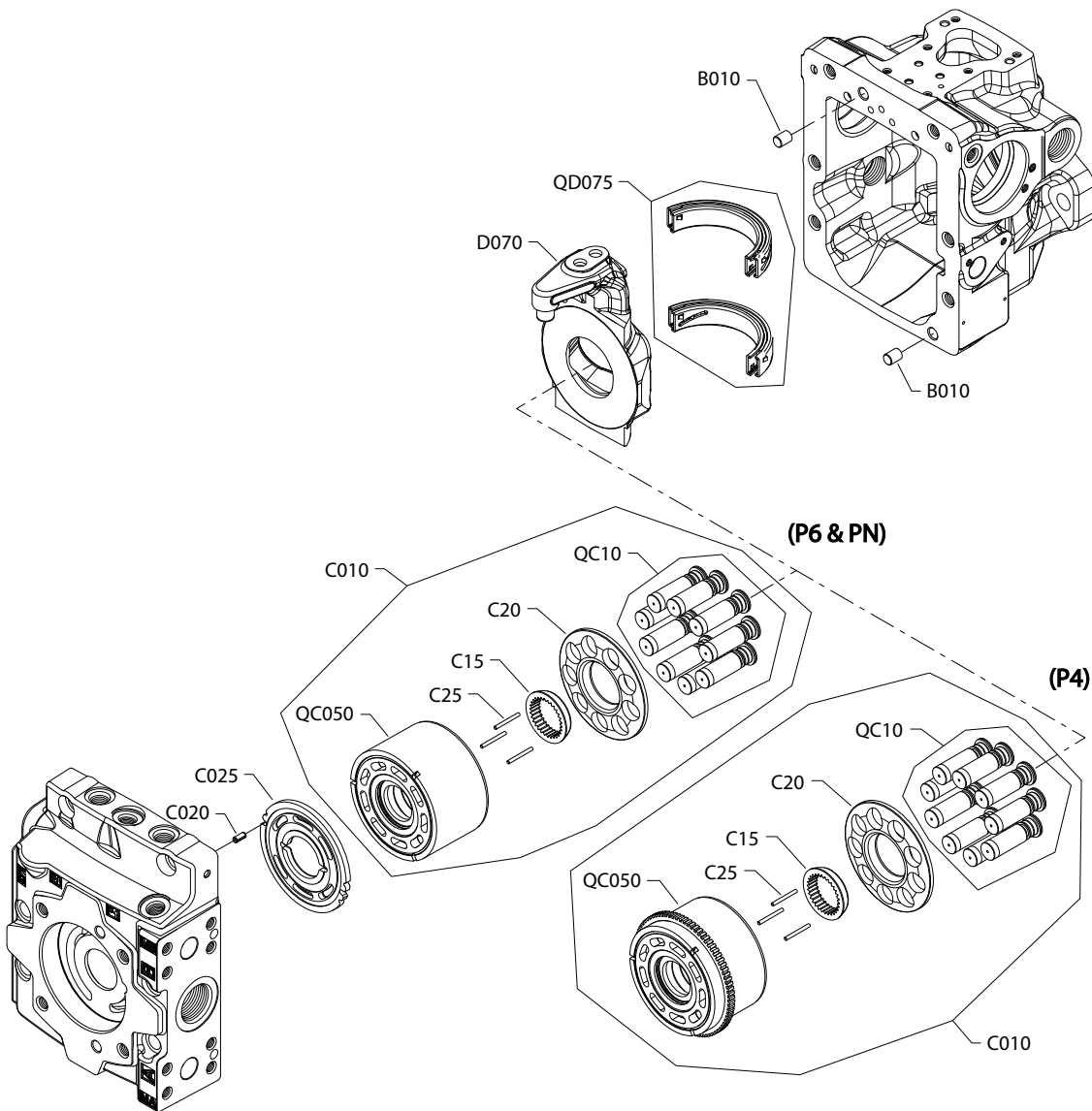
Order code: P2

C15	09-13		140625	Slipper retainer ball guide	1
C010	09-13		11030567	Cylinder block kit, 45 cc, with speed ring	1
C010	09-13		11030568	Cylinder block kit, 53 cc, with speed ring	1
C025	09-13		11071901	Valve plate kit, CW	1
C025	09-13		11071912	Valve plate kit, CCW	1
QC50	09-13		11030569	Cylinder block assembly, 45 cc, with speed ring	1
QC50	09-13		11030570	Cylinder block assembly, 53 cc, with speed ring	1

Common parts and special hardware

H1P 45/53 special hardware P4, P6, PN

Parts configuration



Generic housing, control, and end cap used to show part location only.

Common parts and special hardware

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B010	07-19		5000757	Dowel pin	2
C020	07-19		9004700-1907	Valve plate pin,	1
C20	07-19		141946	Slipper retainer	1
C25	07-19		4700091	Slipper hold down pin	3
D070	12-21		11068328	Swashplate (SB-2008-056 on page 144, SB-2009-043 on page 148 & SB-2011-020 on page 152)	1
D070	07-19	12-20	11098280	Swashplate replacement kit	1
QC10	07-19		11020841	Slipper/piston kit, 45 cc	1
QC10	07-19		11020932	Slipper/piston kit, 53 cc	1
QD075	07-19		11085533	Swashplate bearing kit (SB-2010-020 on page 151)	1

Special hardware

Order code: P4

C15	09-13		140625	Slipper retainer ball guide	1
C010	09-13		11030567	Cylinder block kit, 45 cc, with speed ring	1
C010	09-13		11030568	Cylinder block kit, 53 cc, with speed ring	1
C025	09-13		11071901	Valve plate kit, CW	1
C025	09-13		11071912	Valve plate kit, CCW	1
QC50	09-13		11030569	Cylinder block assembly, 45 cc, with speed ring	1
QC50	09-13		11030570	Cylinder block assembly, 53 cc, with speed ring	1

Order code: P6

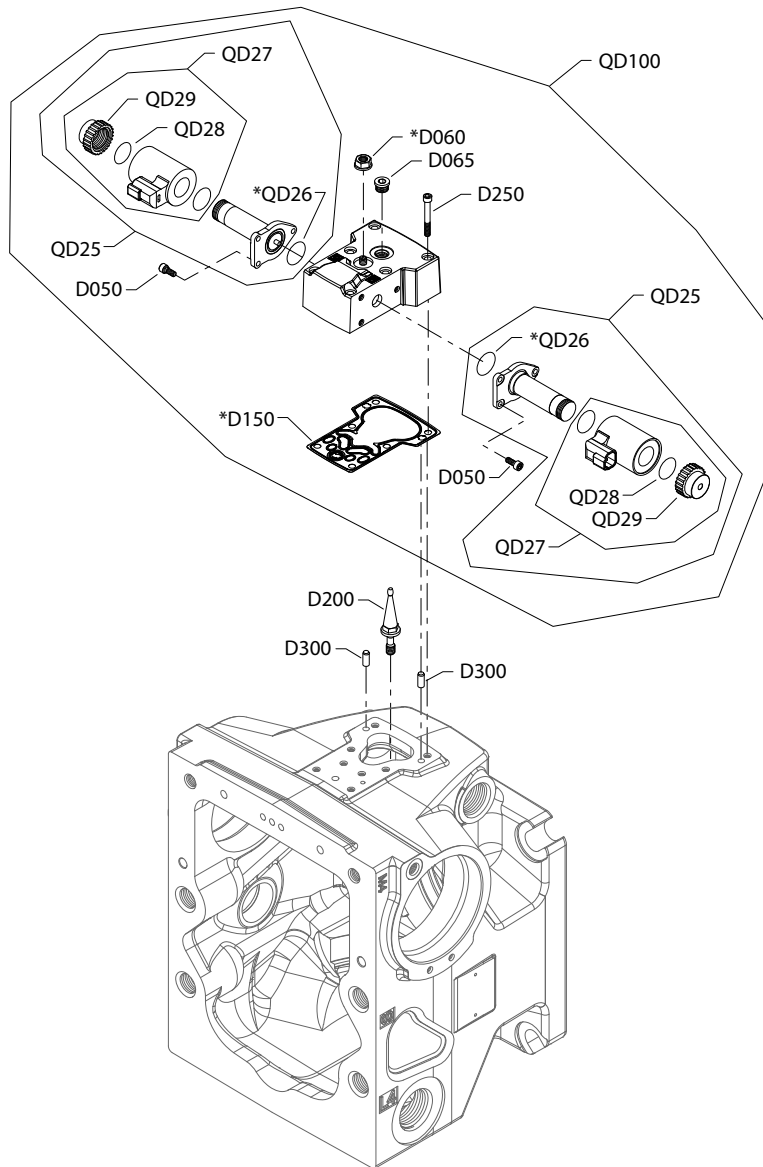
C15	13-20		11112897	Slipper retainer ball guide, coated	1
C010	13-20		11132003	Cylinder block kit, 45 cc	1
C010	13-20		11132004	Cylinder block kit, 53 cc	1
C025	09-13		11071912	Valve plate kit, CCW	1
QC50	13-20		141553	Cylinder block assembly, 45 cc	1
QC50	13-20		141554	Cylinder block assembly, 53 cc	1

Order code: PN

C15	09-13		140625	Slipper retainer ball guide	1
C010	09-13		141631	Cylinder block kit, 45 cc	1
C010	09-13		141632	Cylinder block kit, 53 cc	1
C025	09-13		11071901	Valve plate kit, CW	1
C025	09-13		11071912	Valve plate kit, CCW	1
QC50	09-13		141553	Cylinder block assembly, 45 cc	1
QC50	09-13		141554	Cylinder block assembly, 53 cc	1

Controls

H1P control A2, A3



E100 912E

Generic housing shown.

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-48		716860	Screw, M5 x 12	6
D060	10-48		612291 (9003508-0008)	Seal nut, M8	1
D065	10-48		327007	Plug assembly (SAE)	1
D150	10-48		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	10-48		11202172	Swash plate feedback link (SB-2018-025 on page 156)	1
D250	10-48		505038	Screw, M6 x 45	6
D300	10-48		310979	Dowel pin	2
QD26	10-48		11001952	O-ring	2
QD28	10-48		063172	O-ring	2

Order code: A2

QD25	10-48		11012457	Proportional solenoid, 12v	2
QD27	10-48		11028018	Coil kit, 12v, DEUTSCH connector	2
QD29	10-48		11027046	Coil nut	2
QD100	10-48		11019680	EDC kit, 12v, DEUTSCH connector, fast	1

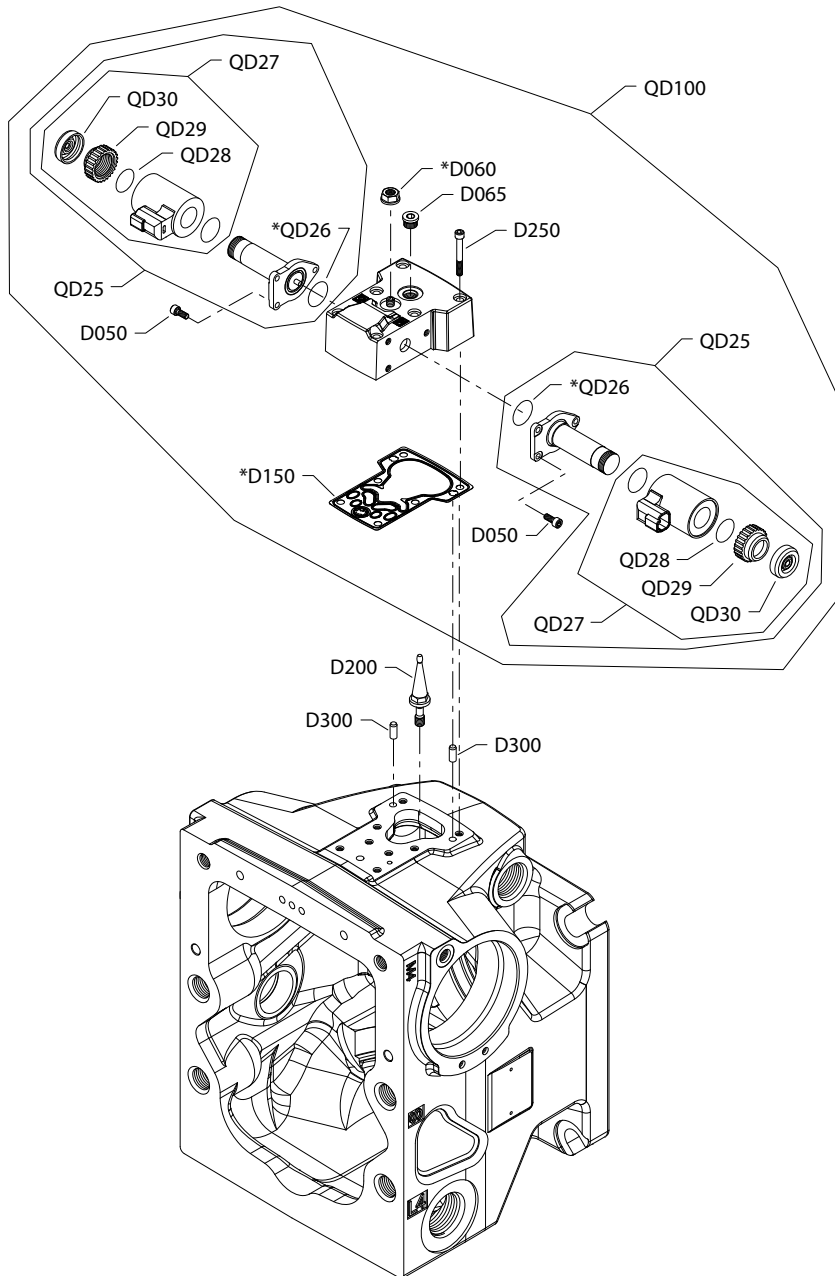
Order code: A3

QD25	10-48		11012459	Proportional solenoid, 24v	2
QD27	10-48		11028019	Coil kit, 24v, DEUTSCH connector	2
QD29	10-48		11028024	Coil nut	2
QD100	10-48		11019681	EDC kit, 24v, DEUTSCH connector, fast	1

Controls

H1P control A4, A5

A4 and A5 configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-48		716860	Screw, M5 x 12	6
D060	10-48		612291 (9003508-0008)	Seal nut, M8	1
D065	10-48		327007	Plug assembly	1
D150	10-48		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	10-48		11202172	Swash plate feedback link (SB-2018-025 on page 156)	1
D250	10-48		505038	Screw, M6 x 45	6
D300	10-48		310979	Dowel pin	2
QD26	10-48		11001952	O-ring	2
QD28	10-48		063172	O-ring	2
QD30	10-48		11027883	Cap	2

Order code: A4

QD25	10-48		140750	Proportional solenoid, 12v	2
QD27	10-48		11004698	Coil kit, 12v, DEUTSCH connector	2
QD29	10-48		11004749	Coil nut	2
QD100	10-48		11019732	EDC kit, 12v, DEUTSCH connector, fast, manual override	1

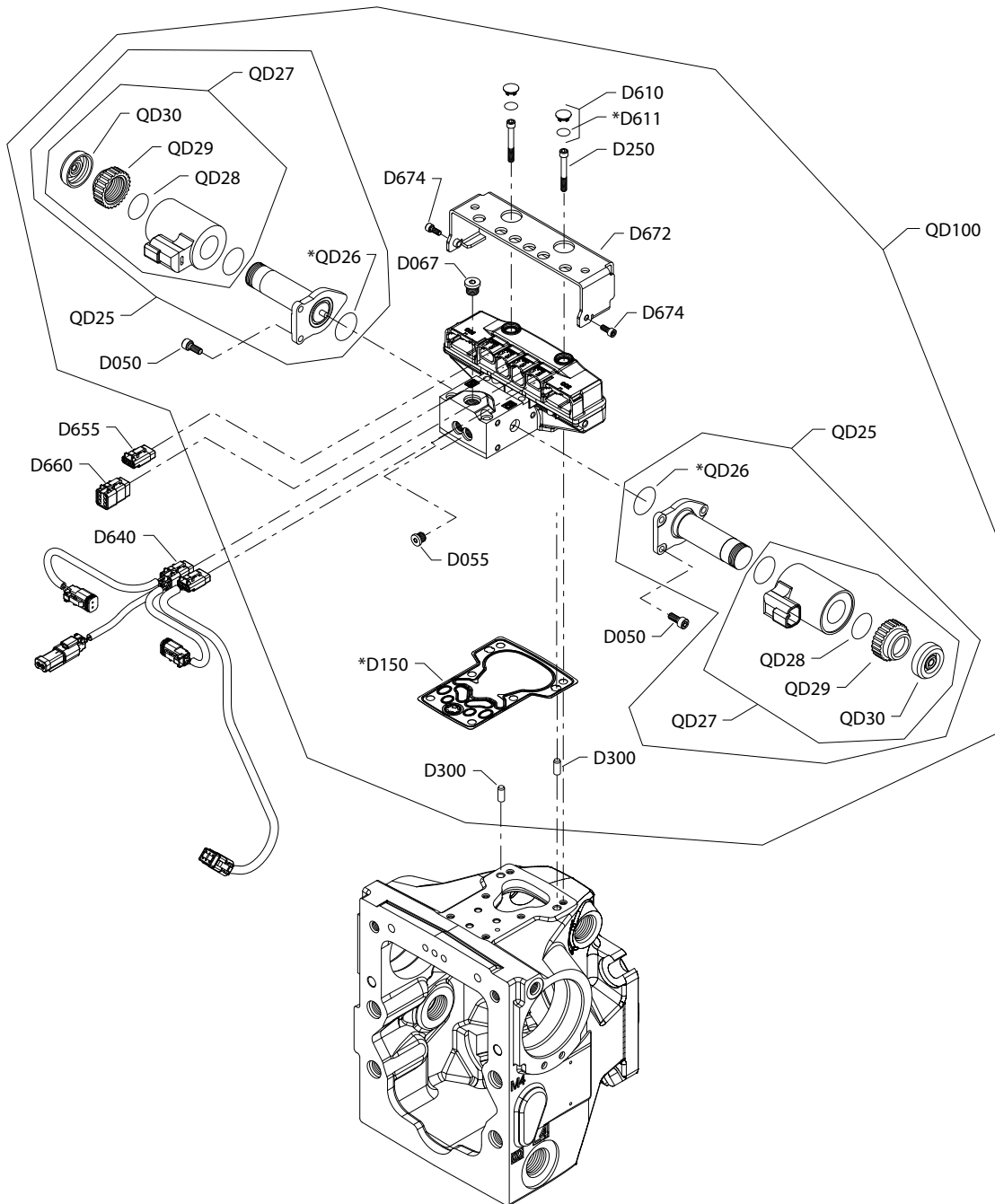
Order code: A5

QD25	10-48		140751	Proportional solenoid, 24v	2
QD27	10-48		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	10-48		11004750	Coil nut	2
QD100	10-48		11019733	EDC kit, 24v, DEUTSCH connector, fast, manual override	1

Controls

H1P control A7

Parts configuration



Generic housing shown

* Included in overhaul seal kit

Controls

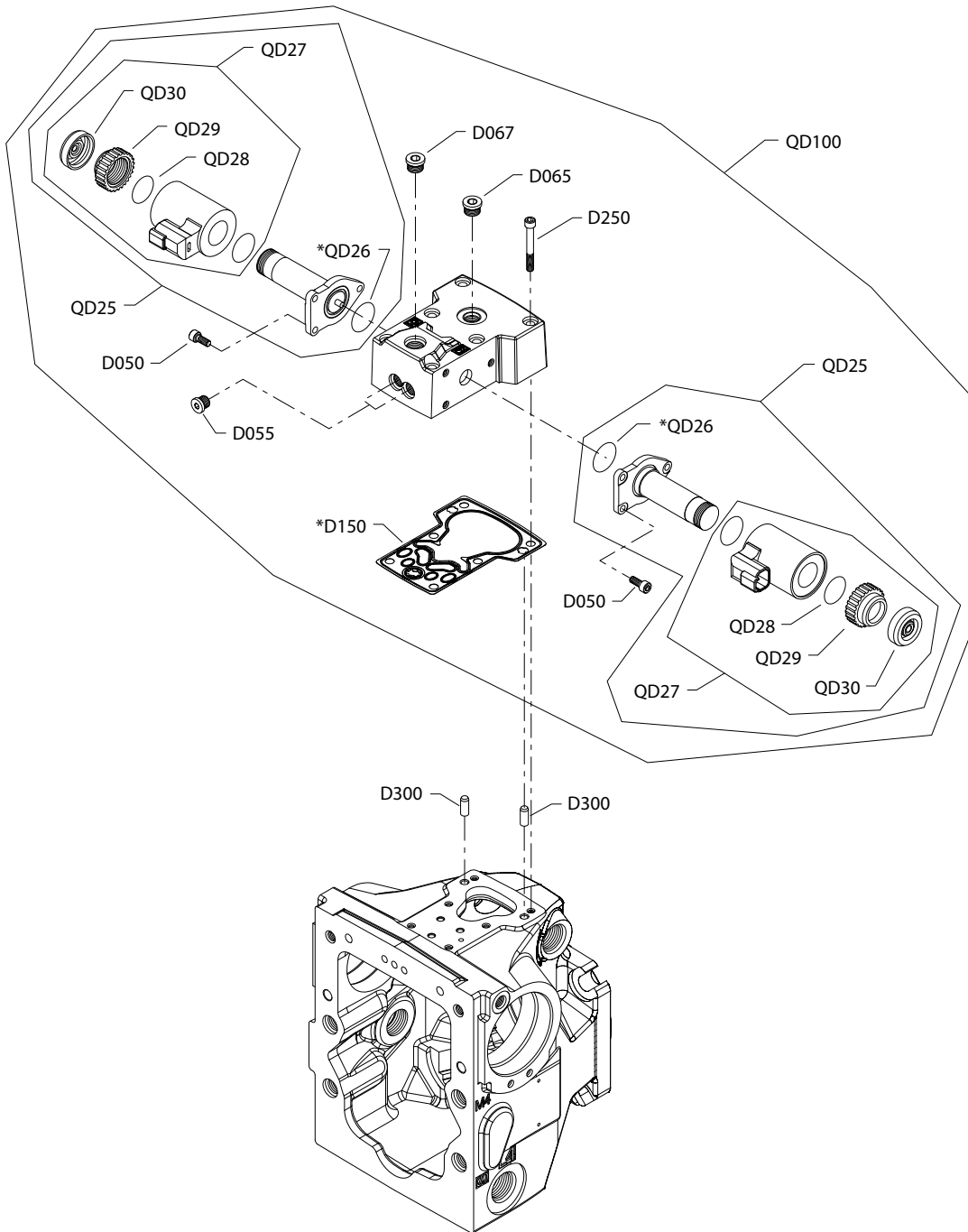
Order code: A7

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-04		716860	Screw, M5 x 12	6
D055	10-04		11040532	Plug assembly	2
D067	10-04		327007	Plug assembly	1
D150	10-04		11173377	Control gasket (SB-2016-033 on page 155)	1
D250	10-04		505038	Screw, M6 x 45	6
D300	10-04		11036469	Dowel pin	2
D610	10-04		11000467	Plug assembly	2
D611	10-04		11066774	O-ring	2
D640	10-04		11023348	AC wiring harness	1
D655	10-04		11084827	Connector DTM 06-3S	1
D660	10-04		11084822	Connector DTM 06-6S	1
D672	10-04		11151875	Protection	1
D674	10-04		716860	Screw, M5 x 12	2
QD25	10-04		140750	Proportional solenoid, 12 volt	2
QD26	10-04		11001952	O-ring	2
QD27	10-04		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	10-04		063172	O-ring	2
QD29	10-04		11004749	Coil nut	2
QD30	10-04		11027883	Cap	2
QD100	10-04		11065118	Automotive control kit, 12v, manual override	1

Controls

H1P control A8

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

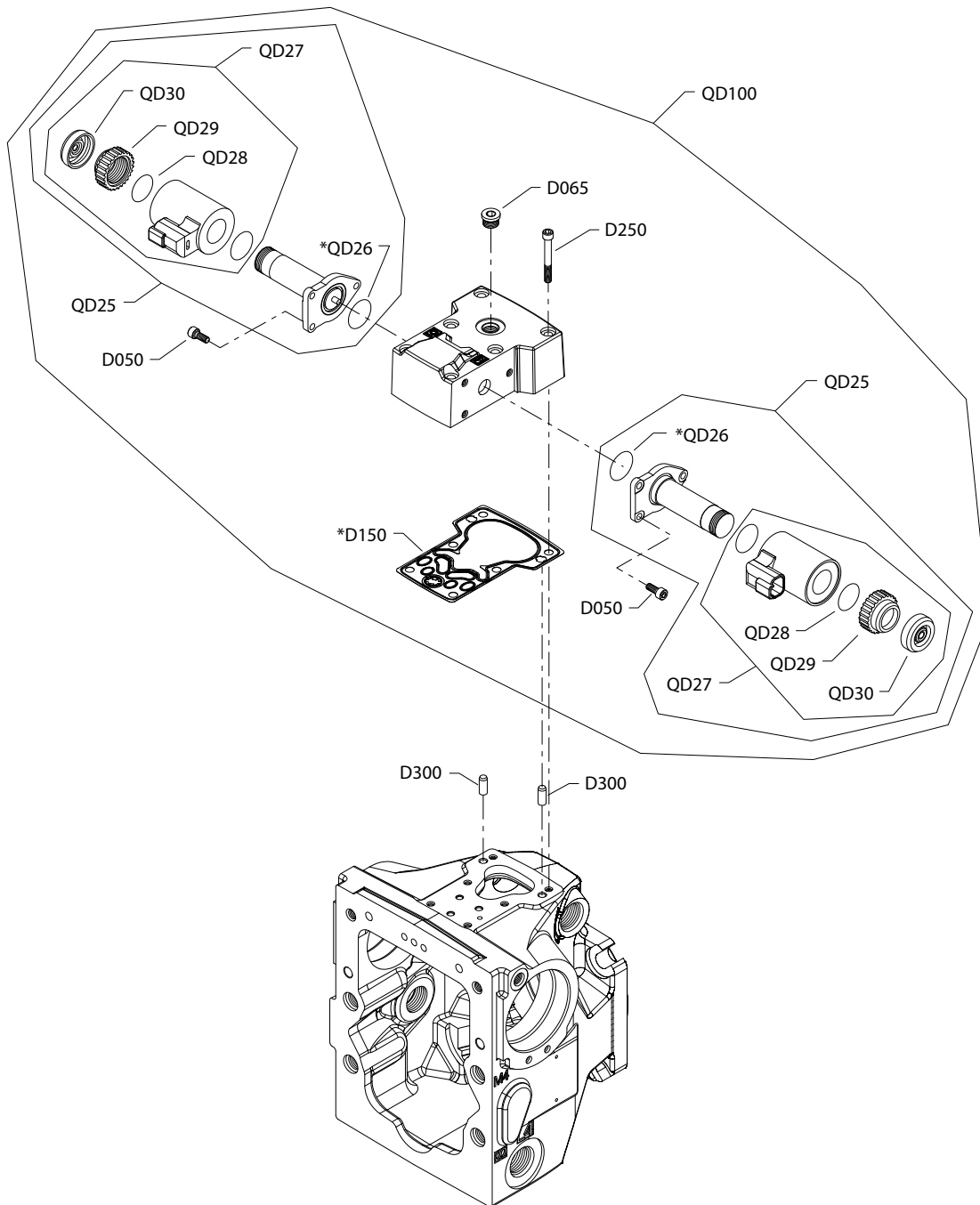
Order code: A8

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-48		716860	Screw, M5 x 12	6
D055	10-48		11040532	Plug assembly	2
D065	10-48		327007	Plug assembly	1
D067	10-48		327007	Plug assembly	1
D150	10-48		11173377	Control gasket (SB-2016-033 on page 155)	1
D250	10-48		505038	Screw, M6 x 45	6
D300	10-48		310979	Dowel pin	2
QD25	10-48		140750	Proportional solenoid, 12v, DEUTSCH connector	2
QD26	10-48		11001952	O-ring	2
QD27	10-48		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	10-48		063172	O-ring	2
QD29	10-48		11004749	Coil nut	2
QD30	10-48		11027883	Cap	2
QD100	10-48		11015803	NFPE control kit, 12V, manual override, DEUTSCH connector	1

Controls

H1P control A9, B1

Parts configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-48		716860	Screw, M5 x 12	6
D065	10-48		327007	Plug assembly	1
D150	10-48		11173377	Control gasket (SB-2016-033 on page 155)	1
D250	10-48		505038	Screw, M6 x 45	6
D300	10-48		310979	Dowel pin	2
QD26	10-48		11001952	O-ring	2
QD28	10-48		063172	O-ring	2
QD30	10-48		11027883	Cap	2

Order code: A9

QD25	10-48		141301	Proportional solenoid, 12v, DEUTSCH connector	2
QD27	10-48		11005222	Coil kit, 12v, DEUTSCH connector	2
QD29	10-48		11004749	Coil nut	2
QD100	10-48		11025905	FNR control kit, 12v, manual override, DEUTSCH connector	1

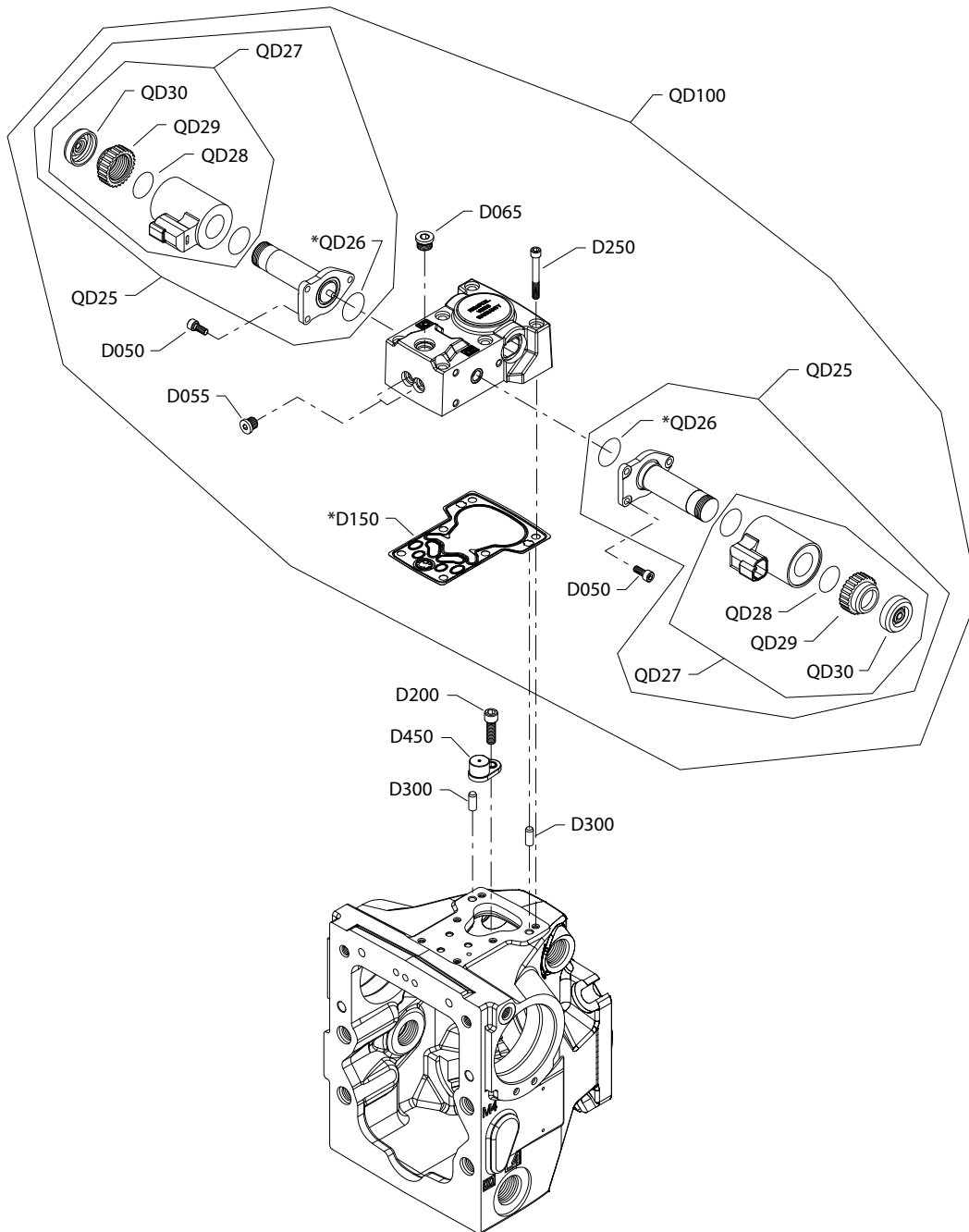
Order code: B1

QD25	10-48		141313	Proportional solenoid, 24v, DEUTSCH connector	2
QD27	10-48		11005223	Coil kit, 24v, DEUTSCH connector	2
QD29	10-48		11004750	Coil nut	2
QD100	10-48		11025906	FNR control kit, 24v, manual override, DEUTSCH connector	1

Controls

H1P control B5

Parts configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

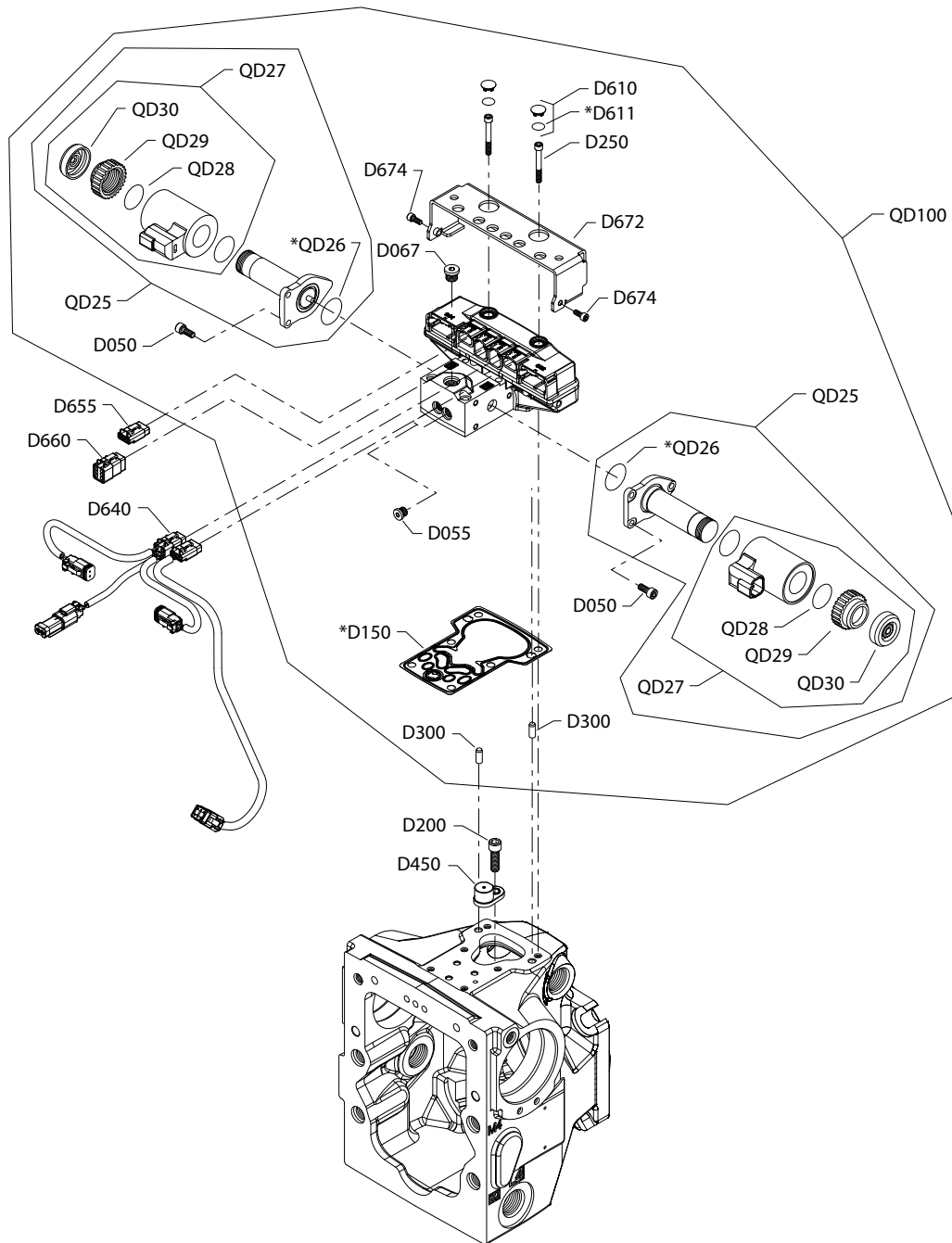
Order code: B5

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-04		716860	Screw	6
D055	10-04		11040532	Plug assembly	2
D067	10-04		327007	Plug assembly	1
D150	10-04		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	10-04		141472	Screw	1
D250	10-04		505038	Screw	6
D300	10-04		310979	Dowel pin	2
D450	10-04		11003097	Magnet carrier	1
QD25	10-04		140750	Proportional solenoid, 12 volt	2
QD26	10-04		11001952	O-ring	2
QD27	10-04		11004698	Coil kit, 12V, DEUTSCH connector	2
QD28	10-04		063172	O-ring	2
QD29	10-04		11004749	Coil nut	2
QD30	10-04		11027883	Cap	2
QD100	10-04		11050138	NFPE control kit, 12V, manual override	1

Controls

H1P control B7

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

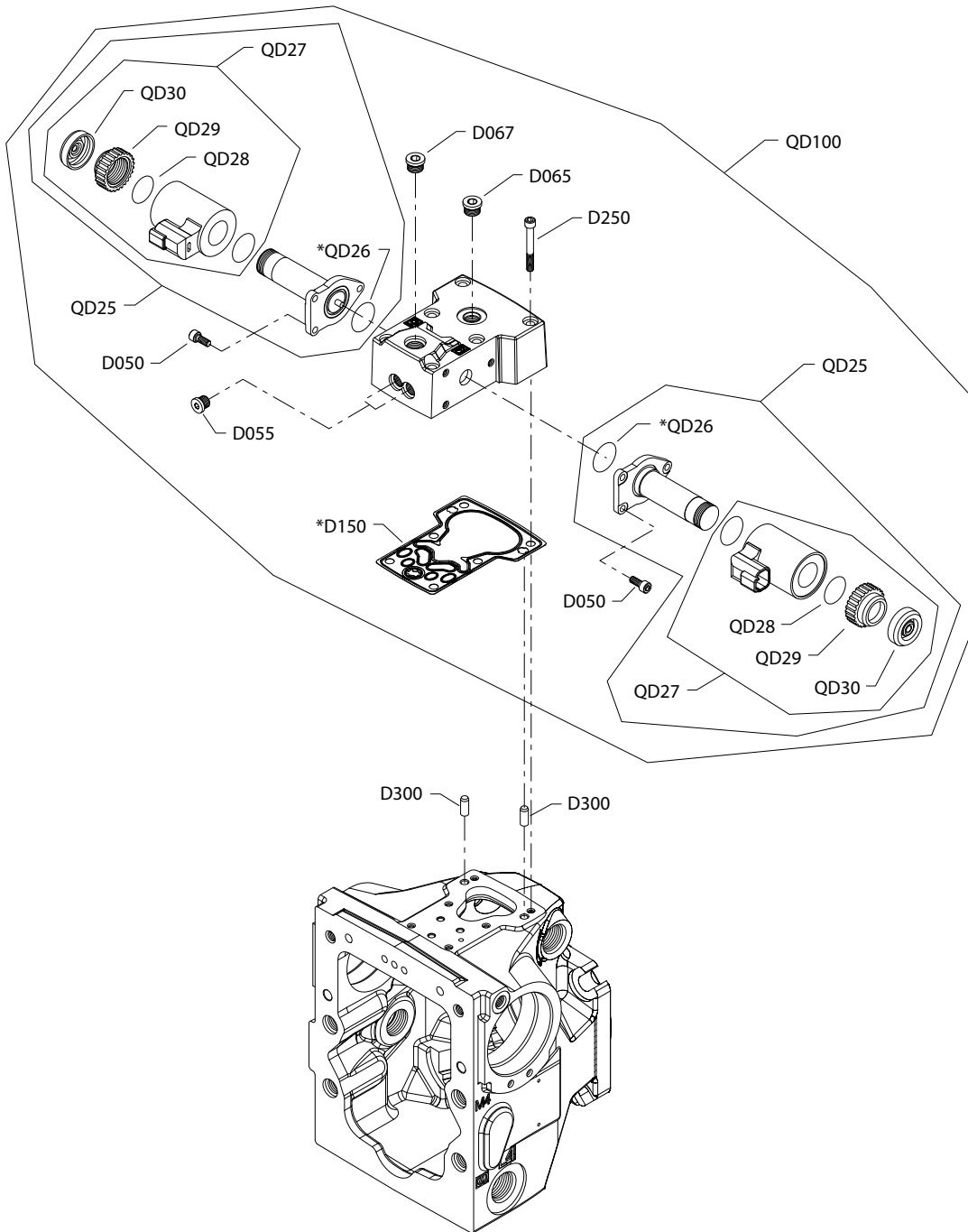
Order code: B7

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-04		716860	Screw, M5 x 12	6
D055	10-04		11040532	Plug assembly	2
D067	10-04		327007	Plug assembly	1
D150	10-04		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	10-04		141472	Screw, special	1
D250	10-04		505038	Screw, M6 x 45	6
D300	10-04		11036469	Dowel pin	2
D450	10-04		11003097	Magnet carrier	1
D610	10-04		11000467	Plug assembly	2
D611	10-04		11066774	O-ring	2
D640	10-04		11023348	AC wiring harness	1
D655	10-04		11084827	Connector DTM 06-3S	1
D660	10-04		11084822	Connector DTM 06-6S	1
D672	10-04		11151875	Protection	1
D674	10-04		716860	Screw, M5 x 12	2
QD25	10-04		140750	Proportional solenoid, 12 volt	2
QD26	10-04		11001952	O-ring	2
QD27	10-04		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	10-04		063172	O-ring	2
QD29	10-04		11004749	Coil nut	2
QD30	10-04		11027883	Cap	2
QD100	10-04		11065119	Automotive control kit, 12v, manual override	1

Controls

H1P control B8

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

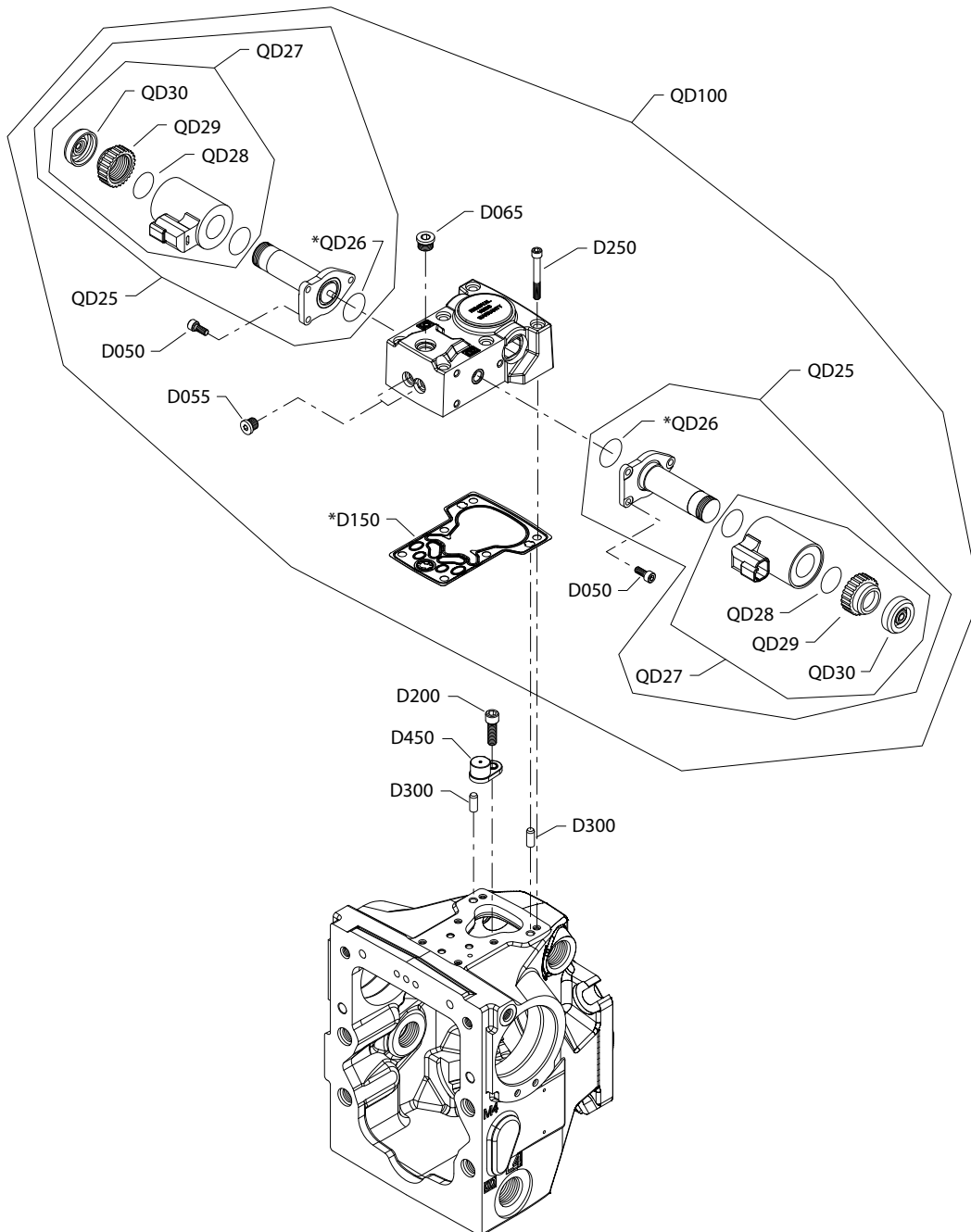
Order code: B8

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-48		716860	Screw, M5 x 12	6
D055	10-48		11040532	Plug assembly	2
D065	10-48		327007	Plug assembly	1
D067	10-48		327007	Plug assembly	1
D150	10-48		11173377	Control gasket (SB-2016-033 on page 155)	1
D250	10-48		505038	Screw, M6 x 45	6
D300	10-48		310979	Dowel pin	2
QD25	10-48		140751	Proportional solenoid, 24v, DEUTSCH connector	2
QD26	10-48		11001952	O-ring	2
QD27	10-48		1104700	Coil kit, 24v, DEUTSCH connector	2
QD28	10-48		063172	O-ring	2
QD29	10-48		11004750	Coil nut	2
QD30	10-48		11027883	Cap	2
QD100	10-48		11025904	NFPE control kit, 24v, manual override, DEUTSCH connector	1

Controls

H1P control B9

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

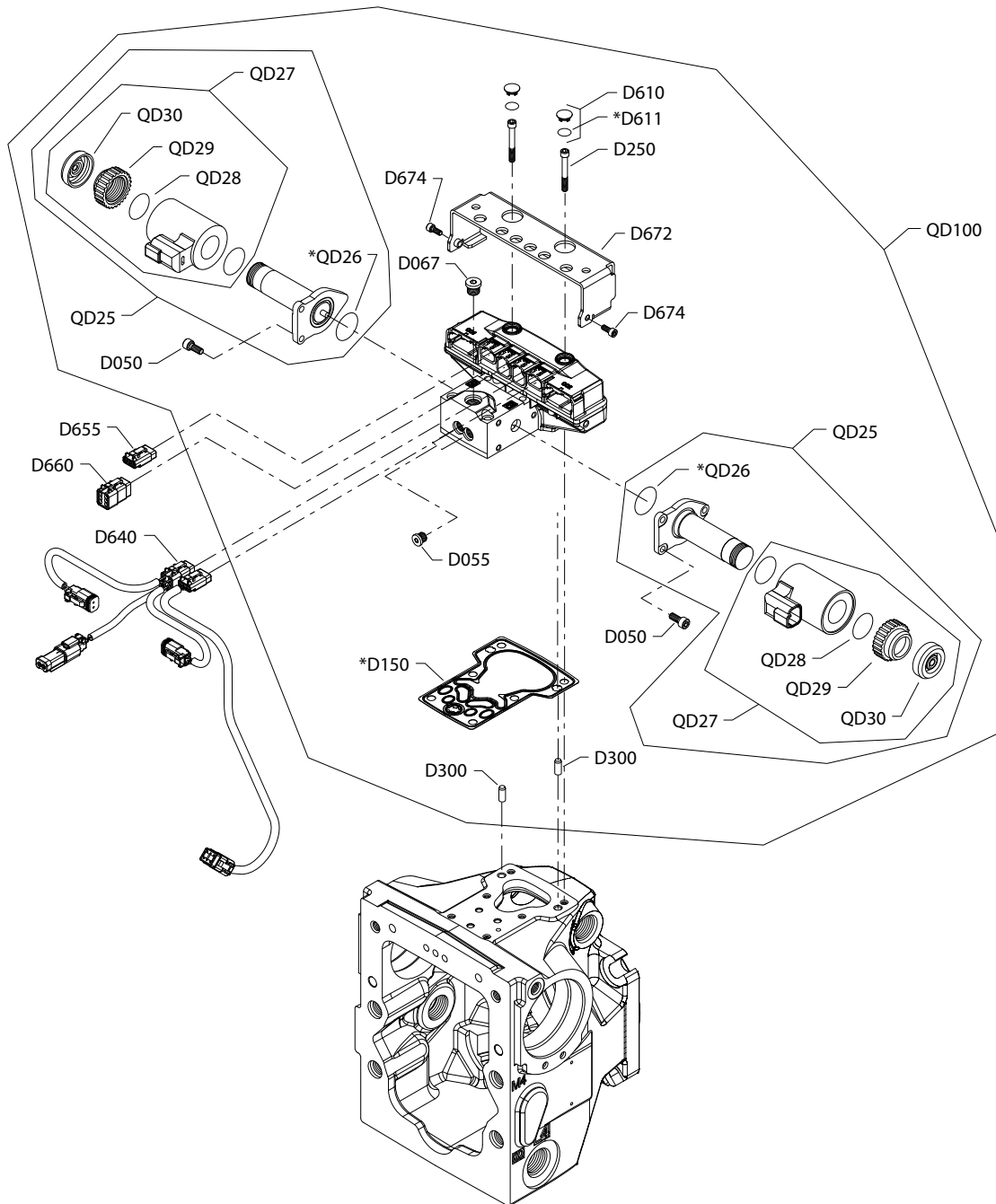
Order code: B9

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-48		716860	Screw	6
D055	10-48		11040532	Plug assembly	2
D067	10-48		327007	Plug assembly	1
D150	10-48		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	10-48		141472	Screw	1
D250	10-48		505038	Screw	6
D300	10-48		310979	Dowel pin	2
D450	10-48		11003097	Magnet carrier	1
QD25	10-48		140751	Proportional solenoid, 24v, DEUTSCH connector	2
QD26	10-48		11001952	O-ring	2
QD27	10-48		1104700	Coil kit, 24v, DEUTSCH connector	2
QD28	10-48		063172	O-ring	2
QD29	10-48		11004750	Coil nut	2
QD30	10-48		11027883	Cap	2
QD100	10-48		11050137	NFPE control kit,, 24V, manual override	1

Controls

H1P control C2

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

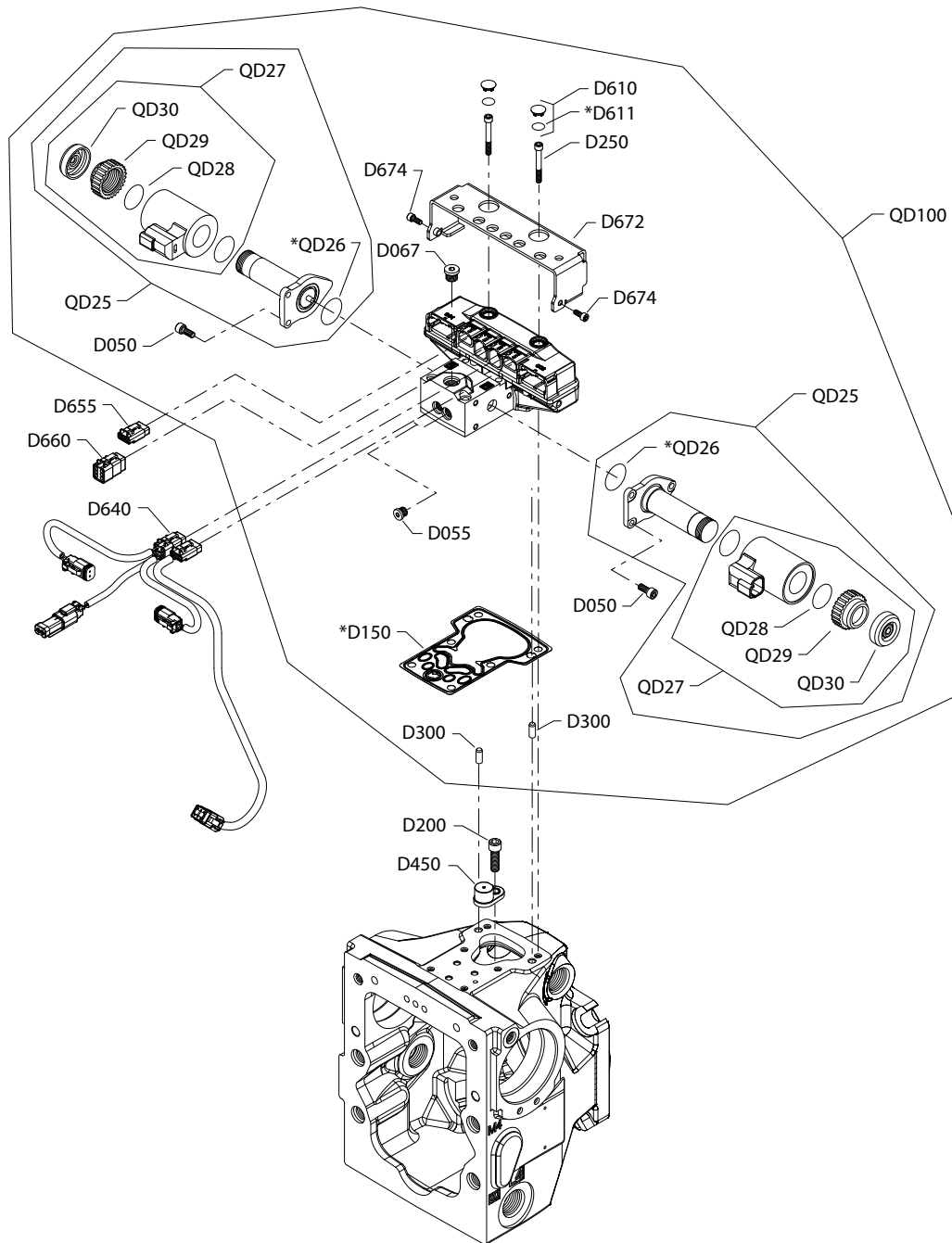
Order code: C2

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-04		716860	Screw, M5 x 12	6
D055	10-04		11040532	Plug assembly	2
D067	10-04		327007	Plug assembly	1
D150	10-04		11173377	Control gasket (SB-2016-033 on page 155)	1
D250	10-04		505038	Screw, M6 x 45	6
D300	10-04		11036469	Dowel pin	2
D610	10-04		11000467	Plug assembly	2
D611	10-04		11066774	O-ring	2
D640	10-04		11023348	AC wiring harness	1
D655	10-04		11084827	Connector DTM 06-3S	1
D660	10-04		11084822	Connector DTM 06-6S	1
D672	10-04		11151875	Protection	1
D674	10-04		716860	Screw, M5 x 12	2
QD25	10-04		140751	Proportional solenoid, 24 volt	2
QD26	10-04		11001952	O-ring	2
QD27	10-04		11004700	Coil kit, 24v, DEUTSCH connector	2
QD28	10-04		063172	O-ring	2
QD29	10-04		11004750	Coil nut	2
QD30	10-04		11027883	Cap	2
QD100	10-04		11065120	Automotive control kit, 24v, manual override	1

Controls

H1P control C3

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

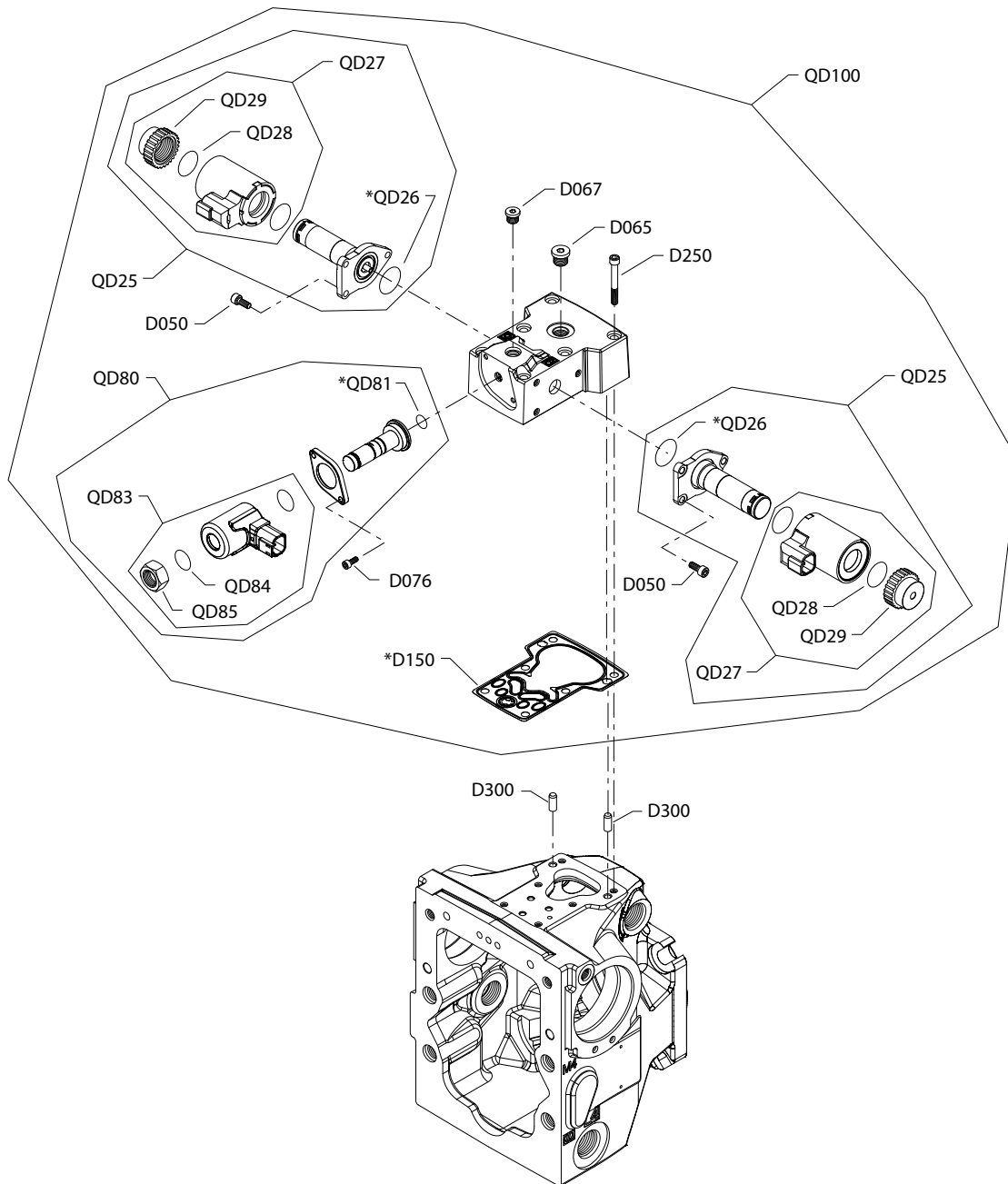
Order code: C3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-04		716860	Screw, M5 x 12	6
D055	10-04		11040532	Plug assembly	2
D067	10-04		327007	Plug assembly	1
D150	10-04		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	10-04		141472	Screw, special	1
D250	10-04		505038	Screw, M6 x 45	6
D300	10-04		11036469	Dowel pin	2
D450	10-04		11003097	Magnet carrier	1
D610	10-04		11000467	Plug assembly	2
D611	10-04		11066774	O-ring	2
D640	10-04		11023348	AC wiring harness	1
D655	10-04		11084827	Connector DTM 06-3S	1
D660	10-04		11084822	Connector DTM 06-6S	1
D672	10-04		11151875	Protection	1
D674	10-04		716860	Screw, M5 x 12	2
QD25	10-04		140751	Proportional solenoid, 24 volt	2
QD26	10-04		11001952	O-ring	2
QD27	10-04		11004700	Coil kit, 24v, DEUTSCH connector	2
QD28	10-04		063172	O-ring	2
QD29	10-04		11004750	Coil nut	2
QD30	10-04		11027883	Cap	2
QD100	10-04		11065121	Automotive control kit, 24v, manual override	1

Controls

H1P control E2

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

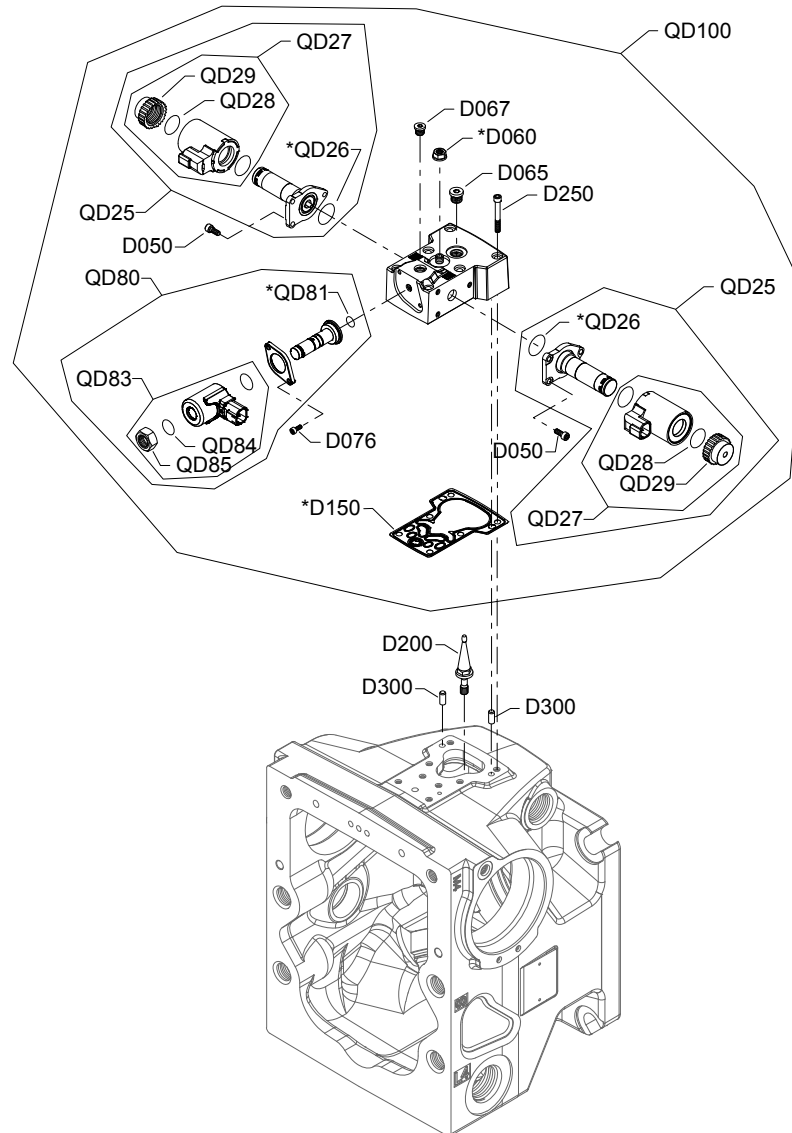
Order code: E2

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	13-45		716860	Screw M5 x 12	6
D065	13-45		327007	Plug assembly	2
D067	13-45		327007	Plug assembly	1
D076	13-45		067694	Screw, M4 x 10	2
D150	13-45		11173377	Control gasket (SB-2016-033 on page 155)	1
D250	13-45		505038	Screw, M6 x45	6
D300	13-45		310979	Dowel pin	2
QD25	13-45		11012457	Proportional solenoid, 12V	2
QD26	13-45		11001952	O-ring	2
QD27	13-45		11028018	Coil kit, 12V, DEUTSCH connector	2
QD28	13-45		063172	O-ring	2
QD29	13-45		11027046	Coil nut	2
QD80	13-45		11129914	Solenoid, 12V, DEUTSCH connector	1
QD81	13-45		11152257	O-ring	1
QD83	13-45		11147301	Coil kit, 12V, DEUTSCH connector	1
QD84	13-45		11140393	O-ring	1
QD85	13-45		11140394	Nut	1
QD100	13-45		11145115	NFPE kit, 12V, high gain spool, control override	1

Controls

H1P control E5

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

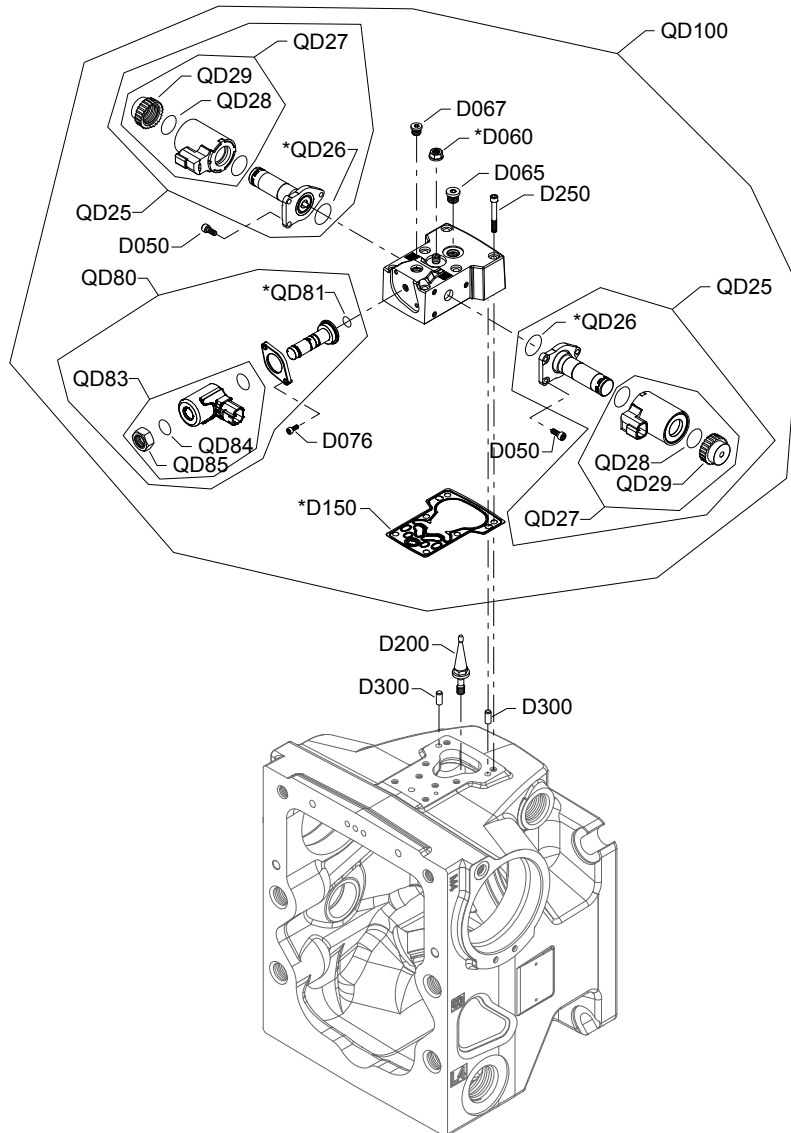
Order code: E5

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	14-25		716860	Screw M5 x 12	6
D060	14-25		612291	Seal nut	1
D065	14-25		327007	Plug assembly	2
D067	14-25		327007	Plug assembly	1
D076	14-25		067694	Screw, M4 x 10	2
D150	14-25		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	14-25		11202172	Swashplate feedback link (SB-2018-025 on page 156)	1
D250	14-25		505038	Screw	6
D300	14-25		310979	Dowel pin	2
QD25	14-25		11012457	Proportional solenoid, 12V	2
QD26	14-25		11001952	O-ring	2
QD27	14-25		11028018	Coil kit, 12V, DEUTSCH connector	2
QD28	14-25		063172	O-ring	2
QD29	14-25		11027046	Coil nut	2
QD80	14-25		11129914	Solenoid, 12V, DEUTSCH connector	1
QD81	14-25		11152257	O-ring	1
QD83	14-25		11147301	Coil kit, 12V, DEUTSCH connector	1
QD84	14-25		11140393	O-ring	1
QD85	14-25		11140394	Nut	1
QD100	14-25		11147422	EDC kit, 12V, control override	1

Controls

H1P control E6, E7

E6 and E7 configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	14-25		716860	Screw, M5 x 12	6
D060	14-25		612291 (9003508-0008)	Seal nut, M8	1
D065	14-25		327007	Plug assembly (SAE)	1
D067	14-25		327007	Plug assembly (SAE)	1
D076	14-25		067694	Screw, M4 x 10	2
D150	14-25		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	14-25		11202172	Swash plate feedback link (SB-2018-025 on page 156)	1
D250	14-25		505038	Screw, M6 x 45	6
D300	14-25		310979	Dowel pin	2
QD26	14-25		11001952	O-ring	2
QD28	14-25		063172	O-ring	2
QD81	14-25		11152257	O-ring	1
QD84	14-25		11140393	O-ring	1
QD85	14-25		11140394	Coil nut	1

Order code: E6

QD25	14-25		11012459	Proportional solenoid, 12v	2
QD27	14-25		11028019	Coil kit, 24v, DEUTSCH connector	2
QD29	14-25		11028024	Coil nut	2
QD80	14-25		11129915	Solenoid valve, on/off, 24v	1
QD83	14-25		11147332	Coil kit, 24v	1
QD100	14-25		11147423	EDC kit, 24v, CCO	1

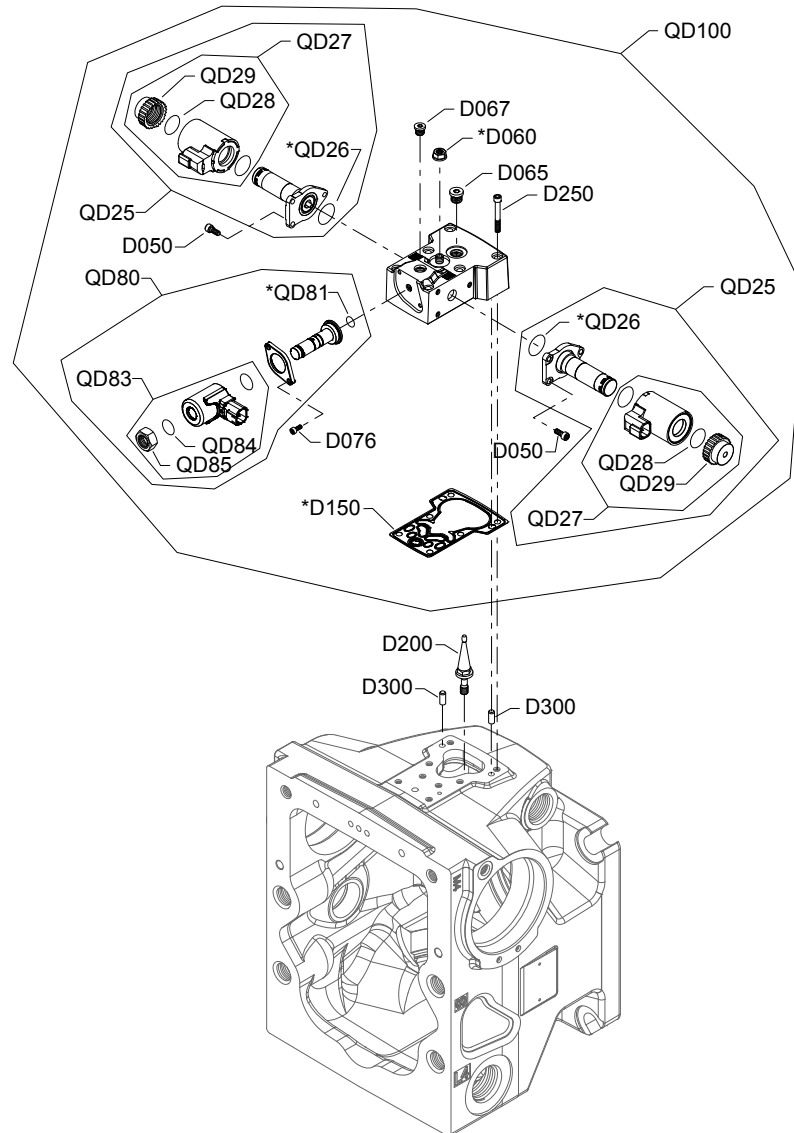
Order code: E7

QD25	14-25		11012457	Proportional solenoid, 12v	2
QD27	14-25		11028018	Coil kit, 124v, DEUTSCH connector	2
QD29	14-25		11027046	Coil nut	2
QD80	14-25		11129914	Solenoid valve, on/off, 12v	1
QD83	14-25		11147301	Coil kit, 12v	1
QD100	14-25		11147471	EDC kit, 12v, CCO (SAE)	1

Controls

H1P control E8

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

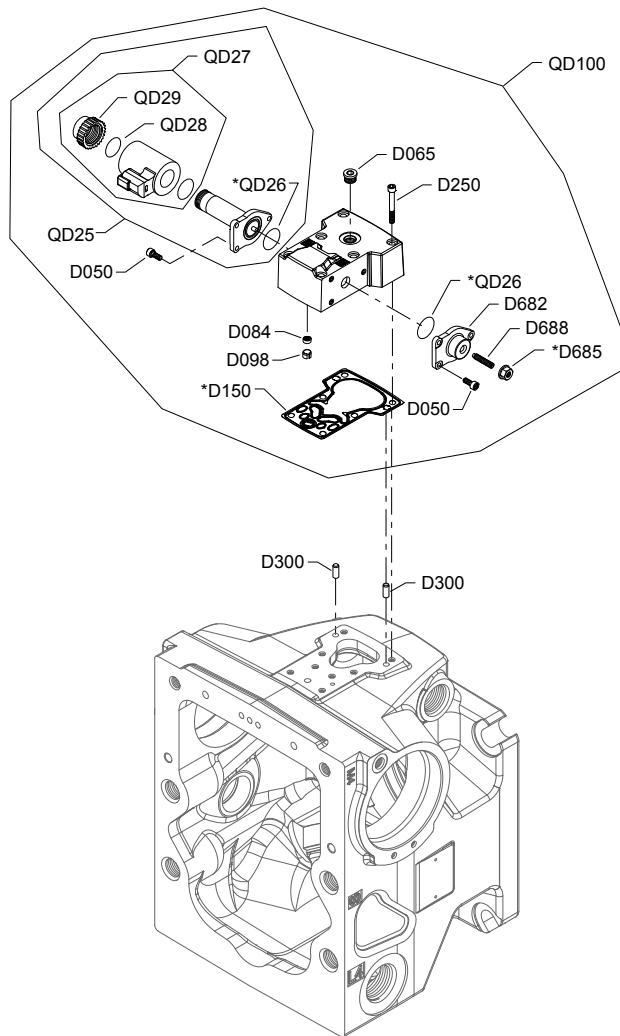
Order code: E8

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	14-25		716860	Screw, M5 x 12	6
D060	14-25		612291 (9003508-0008)	Seal nut, M8	1
D065	14-25		327007	Plug assembly	1
D067	14-25		327007	Plug assembly	1
D076	14-25		067694	Screw, M4 x 10	2
D150	14-25		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	14-25		11202172	Swashplate feedback link (SB-2018-025 on page 156)	1
D250	14-25		505038	Screw, M6 x 45	6
D300	14-25		310979	Dowel pin	2
QD25	14-25		11012459	Proportional solenoid, 24v	2
QD26	14-25		11001952	O-ring	2
QD27	14-25		11028019	Coil kit, 24v, DEUTSCH connector	2
QD28	14-25		063172	O-ring	2
QD29	14-25		11028024	Coil nut	2
QD80	14-25		11129915	Solenoid vale, on/off, 24v	1
QD81	14-25		11152257	O-ring	1
QD83	14-25		11147332	Coil kit, 24v	1
QD84	14-25		11140393	O-ring	1
QD85	14-25		11140394	Coil nut	1
QD100	14-25		11147472	EDC kit, 24v, CCO	1

Controls

H1P control F1, F2

F1 and F2 configuration



Generic housing shown.

⚠ Warning

This control is for Fan Drive systems only. Use in other systems could result in unintended movement of machine or its elements. Loss of the input signal to this control will cause the pump to produce maximum flow. Contact Danfoss or an authorized distributor with questions regarding the use of this product.

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	12-33		716860	Screw, M5 x 12	6
D065	12-33		327007	Plug assembly	1
D150	12-33		11173377	Control gasket (SB-2016-033 on page 155)	1
D250	12-33		505038	Screw, M6 x 45	6
D300	12-33		310979	Dowel pin	2
D682	12-33		11079441	Flange	1
D685	12-33		612291 (9003508-0008)	Seal nut, M8	1
D688	12-33		11079453	Adjusting screw	1
QD26	12-33		11001952	O-ring	2
QD28	12-33		063172	O-ring	1

Order code: F1

QD25	12-33		11012457	Proportional solenoid, 12v	1
QD27	12-33		11028018	Coil kit, 12v, DEUTSCH connector	1
QD29	12-33		11027046	Coil nut	1
QD100	12-33		11081306	FDC kit, 12v, DEUTSCH connector	1

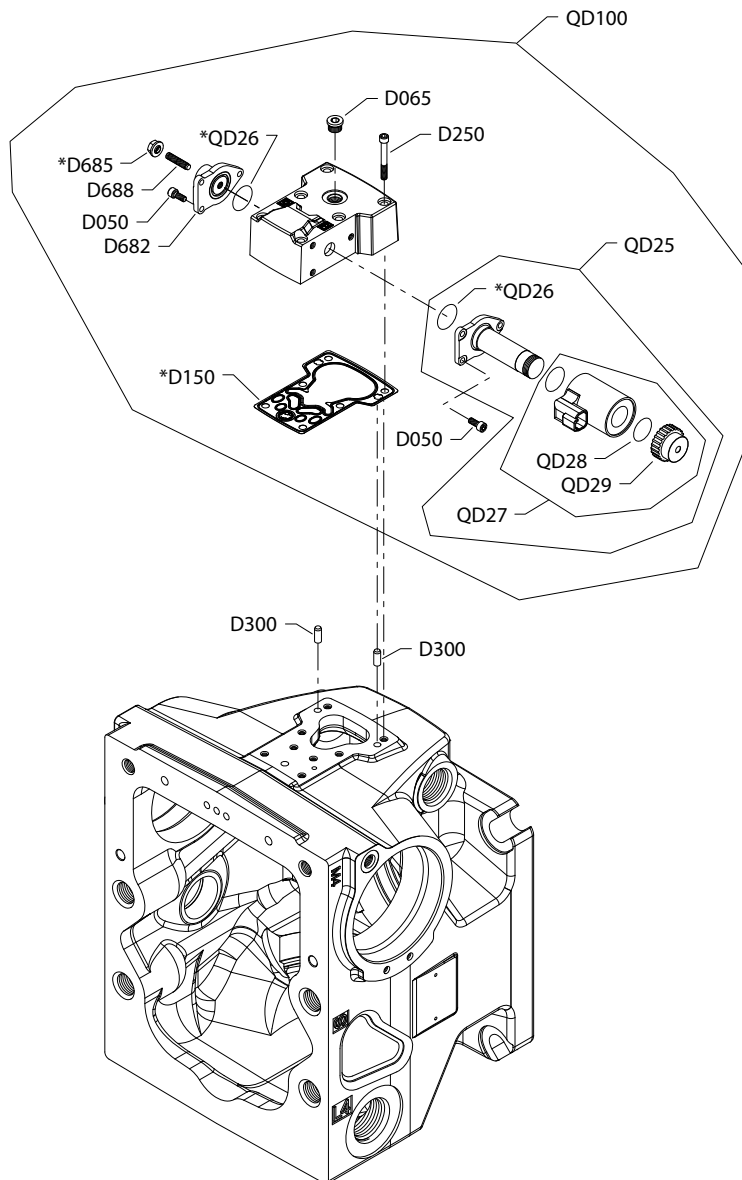
Order code: F2

QD25	12-33		11012459	Proportional solenoid, 24v	1
QD27	12-33		11028019	Coil kit, 24v, DEUTSCH connector	1
QD29	12-33		11028024	Coil nut	1
QD100	12-33		11081307	FDC kit, 24v, DEUTSCH connector	1

Controls

H1P control F4

F4 configuration



Generic housing shown.

* Included in overhaul seal kit

Controls

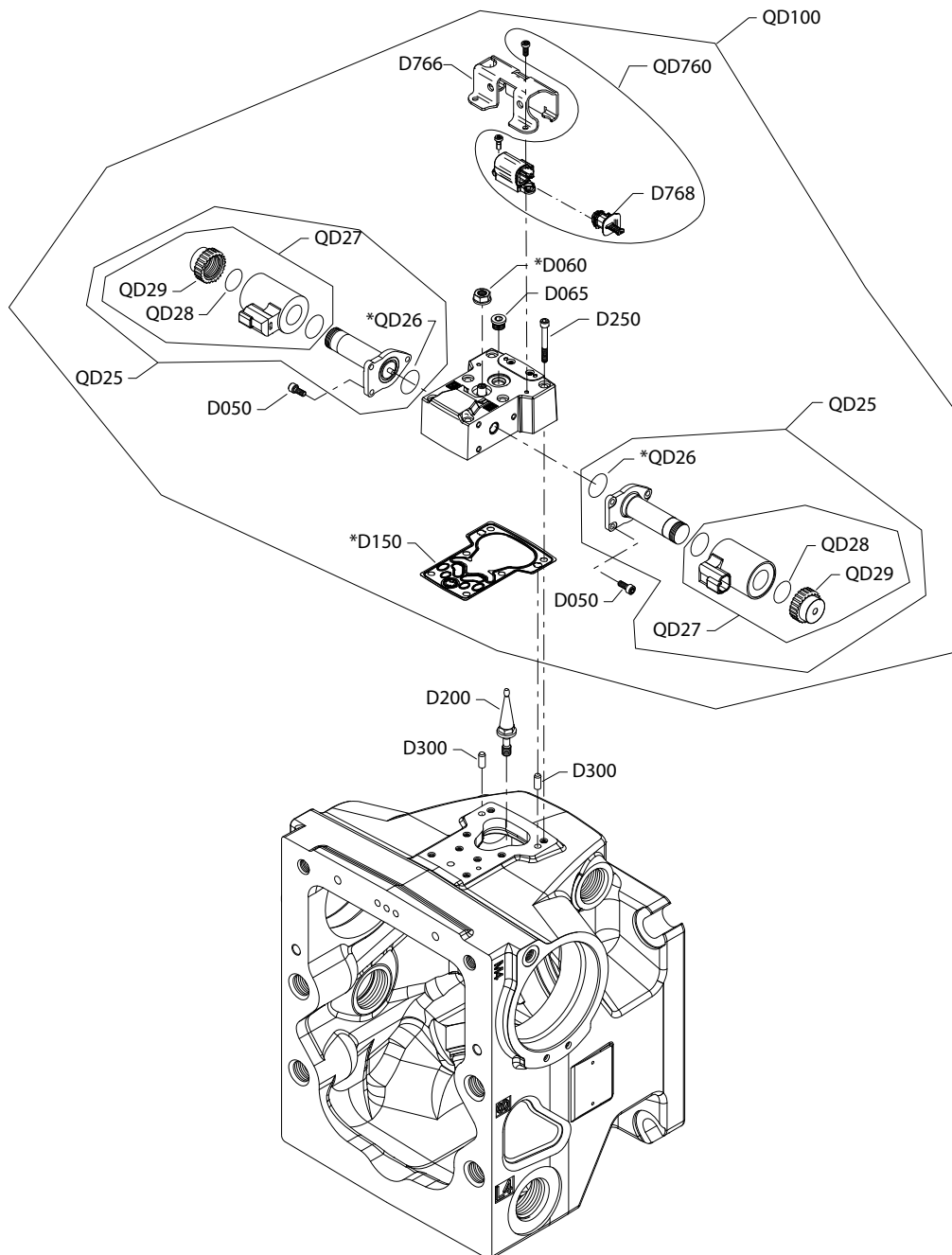
Order code: F4

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	18-12		716860	Screw, M5 x 12	6
D065	18-12		327007	Plug assembly	1
D150	18-12		11173377	Control gasket (SB-2016-033 on page 155)	1
D250	18-12		505038	Screw, M6 x 45	6
D300	18-12		310979	Dowel pin	2
D682	18-12		11079441	Flange	1
D685	18-12		612291 (9003508-0008)	Seal nut, M8	1
D688	18-12		11079453	Adjusting screw	1
QD25	18-12		11012459	Proportional solenoid, 24v	1
QD26	18-12		11001952	O-ring	2
QD27	18-12		11028019	Coil kit, 24v, DEUTSCH connector	1
QD28	18-12		063172	O-ring	1
QD29	18-12		11028024	Coil nut	1
QD100	18-12		11174982	FDC kit, 24v, DEUTSCH connector	1

Controls

H1P control H2, H3

Parts configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	18-11		716860	Screw, M5 x 12	6
D060	18-11		612291	Seal nut	1
D065	18-11		327007	Plug assembly	1
D150	18-11		11173377	Control gasket	1
D200	18-11		11202172	Swashplate feedback link	1
D250	18-11		505038	Screw, M6 x 45	6
D300	18-11		310979	Dowel pin	2
D766	18-11		11187406	Protection cover	1
D768	18-11		11184617	Paint cover	1
QD26	18-11		11001952	O-ring	2
QD28	18-11		063172	O-ring	2
QD760	18-11		11201819	EDC sensor service kit	1

Order code: H2

QD100	18-11		11196619	EDC kit, 12v, ASNSR	1
QD25	18-11		11012457	Proportional solenoid, 12v	2
QD27	18-11		11028018	Coil kit, 12V, DEUTSCH connector	2
QD29	18-11		11027046	Nut	2

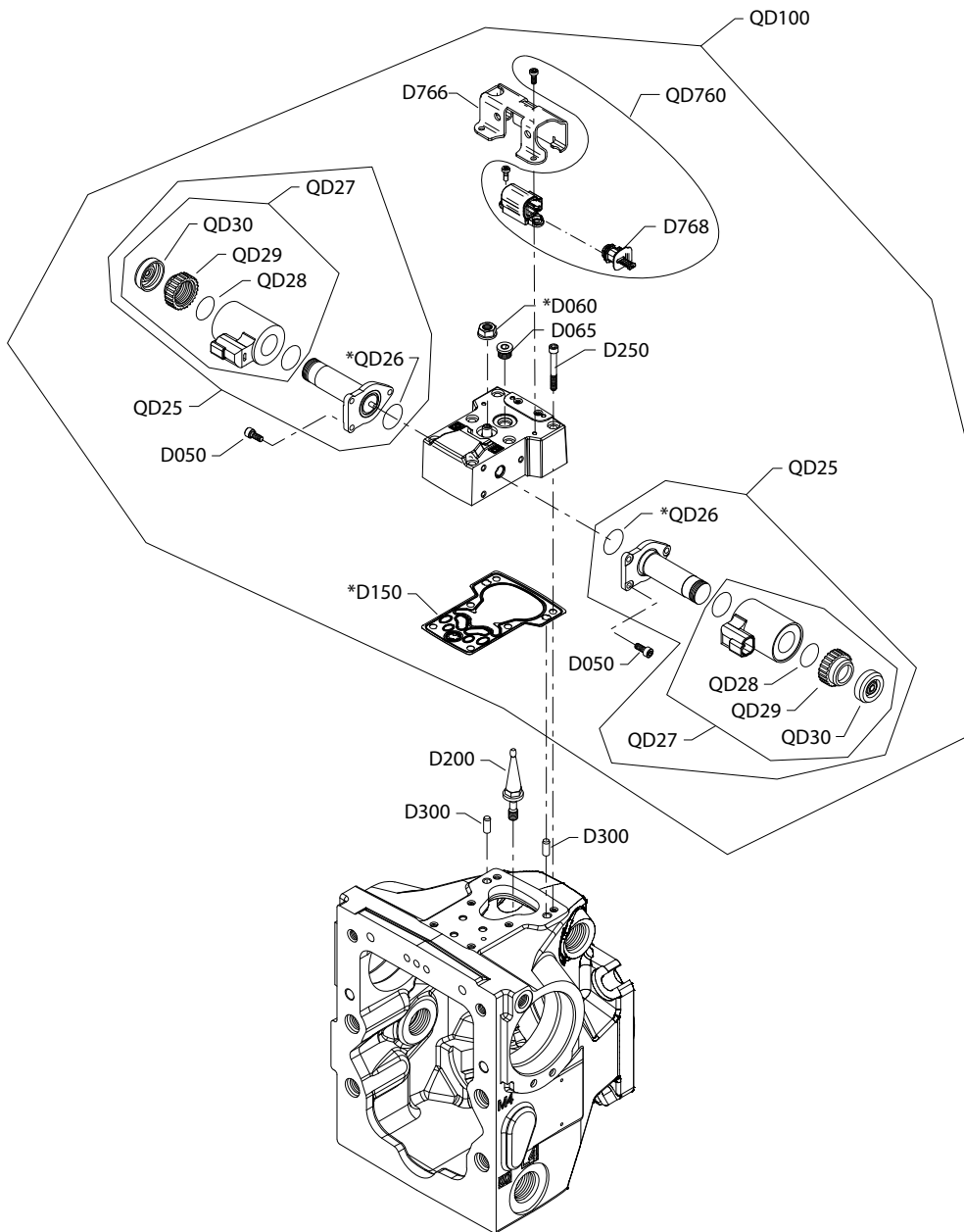
Order code: H3

QD100	18-11		11179280	EDC kit, 24v, ASNSR	1
QD25	18-11		11012459	Proportional solenoid, 24v	2
QD27	18-11		11028019	Coil kit, 24v DEUTSCH connector	2
QD29	18-11		11028024	Nut	2

Controls

H1P control H6, H7

Parts configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	18-13		716860	Screw, M5 x 12	6
D060	18-13		612291	Seal nut	1
D065	18-13		327007	Plug assembly	1
D150	18-13		11173377	Control gasket	1
D200	18-13		11202172	Swashplate feedback link	1
D250	18-13		505038	Screw, M6 x 45	6
D300	18-13		310979	Dowel pin	2
D766	18-13		11187406	Protection cover	1
D768	18-13		11184617	Paint cover	1
QD26	18-13		11001952	O-ring	2
QD28	18-13		063172	O-ring	2
QD30	18-13		11027883	Cap	2
QD760	18-13		11201819	EDC sensor service kit	1

Order code: H6

QD100	18-13		11179281	EDC kit, 12V	1
QD25	18-13		140750	Proportional solenoid, 12V	2
QD27	18-13		11004698	Coil kit, 12V, DEUTSCH connector	2
QD29	18-13		11004749	Coil nut	2

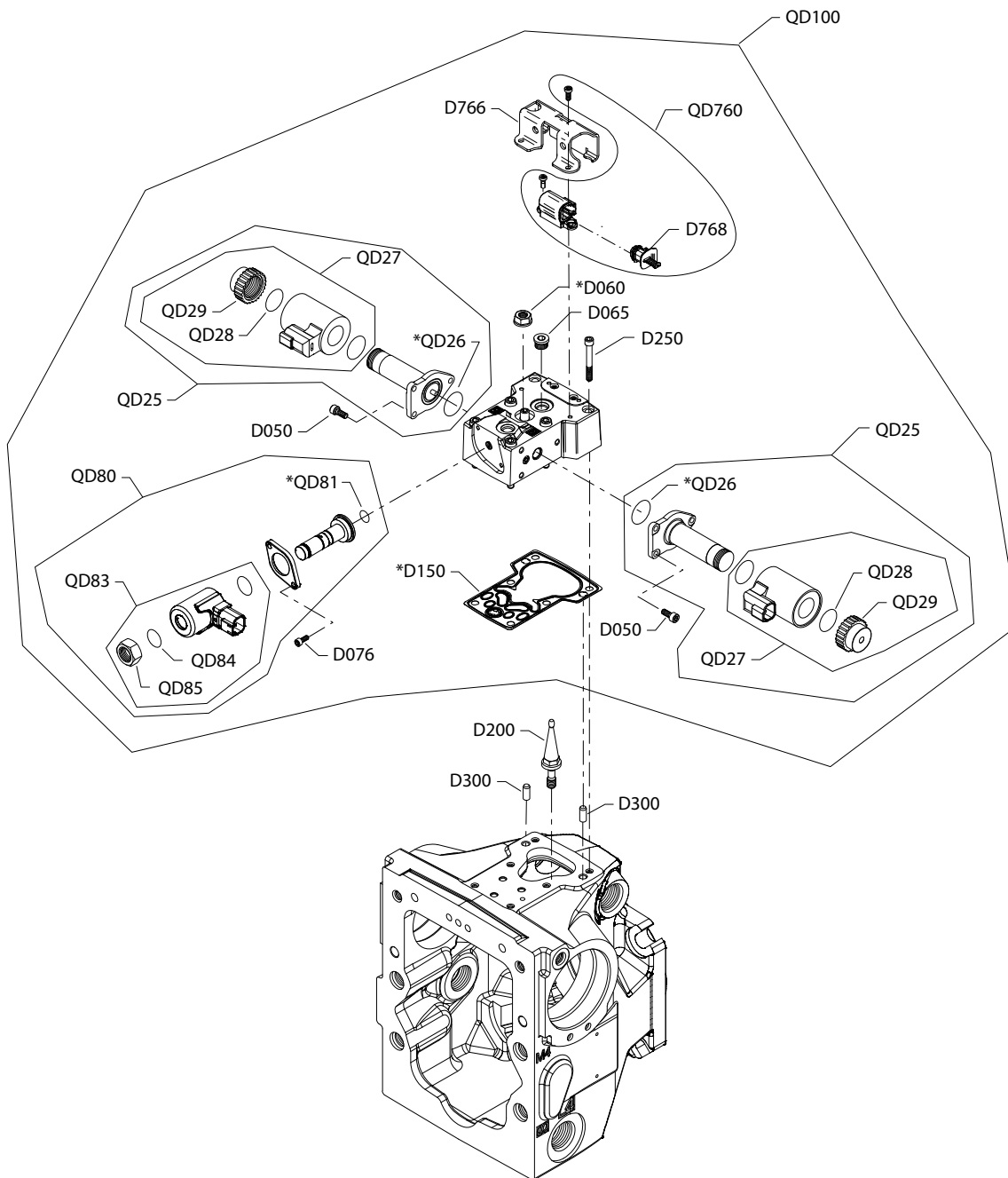
Order code: H7

QD100	18-13		11179292	EDC kit, 24V	1
QD25	18-13		140751	Proportional solenoid, 24V	2
QD27	18-13		11004700	Coil kit, 24V, DEUTSCH connector	2
QD29	18-13		11004750	Coil nut	2

Controls

H1P control H8, H9

Parts configuration



Generic housing shown

Option H8 is available in SAE and metric configurations. Please order accordingly.

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	18-13		716860	Screw, M5 x 12	6
D060	18-13		612291	Seal nut	1
D065	18-13		327007	Plug assembly	1
D067	18-13		327007	Plug assembly	1
D076	18-13		067694	Screw, M4 x 10	2
D150	18-13		11173377	Control gasket	1
D200	18-13		11202172	Swashplate feedback link	1
D250	18-13		505038	Screw, M6 x 45	6
D300	18-13		310979	Dowel pin	2
D766	18-13		11187406	Protection cover	1
D768	18-13		11184617	Paint cover	1
QD28	18-13		063172	O-ring	2
QD84	18-13		11140393	O-ring	1
QD85	18-13		11140394	Nut	1
QD760	18-13		11201819	EDC sensor service kit	1

Order code: H8

QD100	18-13		11179293	EDC kit, 12V	1
QD100	16-30		11182566	EDC kit, 12v ASNSR (metric)	1
QD25	18-13		11012457	Proportional solenoid, 12V	2
QD27	18-13		11028018	Coil kit, 12V, DEUTSCH connector	2
QD29	18-13		11027046	Coil nut	2
QD80	18-13		11129914	Solenoid, 12V, DEUTSCH connector	1
QD83	18-13		11136347	Coil kit, 12V, DEUTSCH connector	1

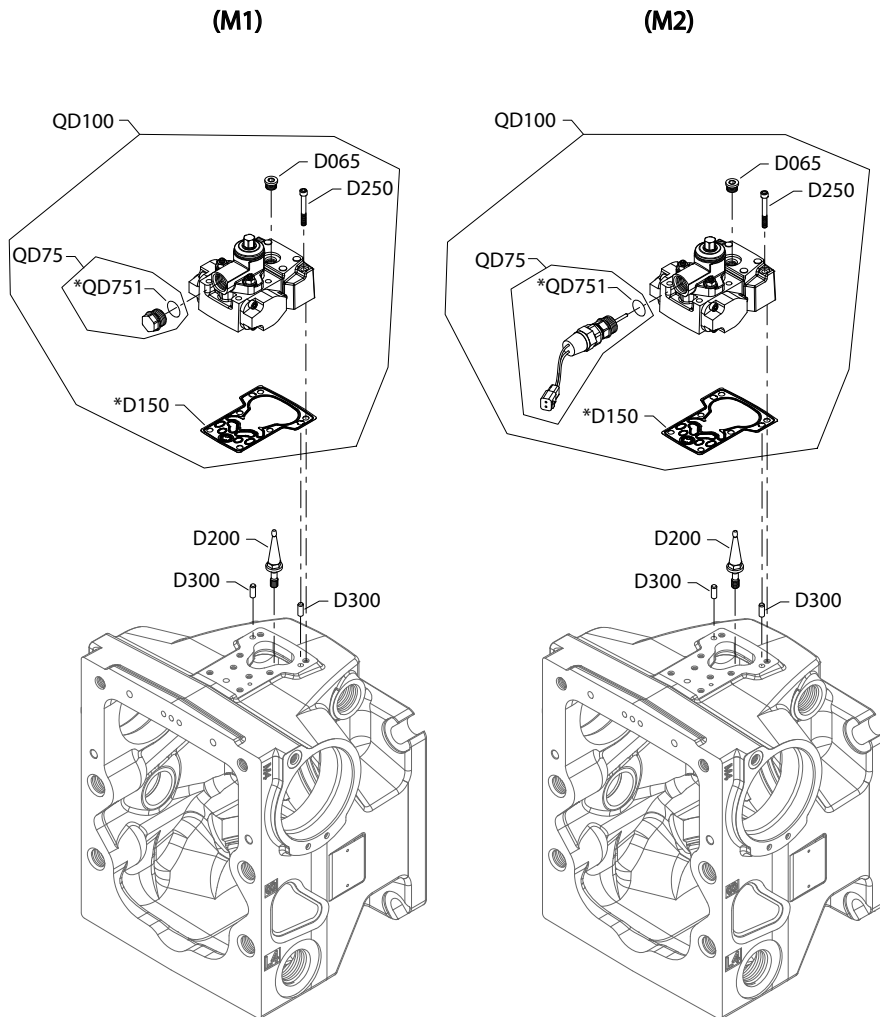
Order code: H9

QD100	18-13		11179296	EDC kit, 24V	1
QD25	18-13		11012459	Proportional solenoid, 24V	2
QD27	18-13		11028019	Coil kit, 24V, DEUTSCH connector	2
QD29	18-13		11028024	Coil nut	2
QD80	18-13		11129915	Solenoid, 24V, DEUTSCH connector	1
QD83	18-13		11147332	Coil kit, 24V, DEUTSCH connector	1

Controls

H1P control M1, M2

M1 and M2 configuration



Generic housing shown

* Included in overhaul seal kit

Controls

Order code: common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D065	14-01		327007	Plug assembly	1
D150	14-01		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	14-01		11202172	Swashplate feedback link (SB-2018-025 on page 156)	1
D250	14-01		505038	Screw, M6 x 45	6
D300	14-01		310979	Dowel pin	2
QD751	14-01		001131 (9004201-5000)	O-ring	1

Order code: M1

QD75	14-01		11119332	Spring seat assembly	1
QD100	14-01		11141225	MDC kit	1

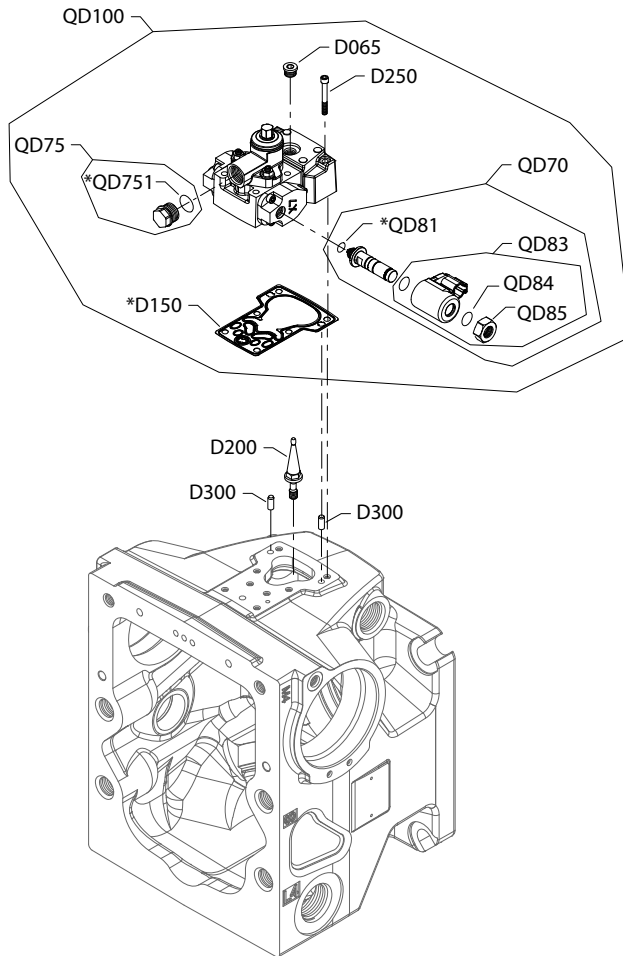
Order code: M2

QD75	14-01		11126847	Spring seat/neutral start switch assembly	1
QD100	14-01		11141236	MDC kit	1

Controls

H1P control M3, M4

M3 and M4 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D065	14-01		327007	Plug assembly	1
D150	14-01		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	14-01		11202172	Swashplate feedback link (SB-2018-025 on page 156)	1
D250	14-01		505038	Screw, M6 x 45	6
D300	14-01		310979	Dowel pin	2
QD81	14-01		11152257	O-ring	1
QD84	14-01		11140393	O-ring	1
QD85	14-01		11140394	Coil nut	1
QD751	14-01		001131 (9004201-5000)	O-ring	1

Order code: M3

QD70	14-01		11129916	Solenoid valve, 12v	1
QD75	14-01		11119332	Spring seat assembly	1
QD83	14-01		11136347	Coil kit, 12v	1
QD100	14-01		11141237	MDC kit, 12v, CCO	1

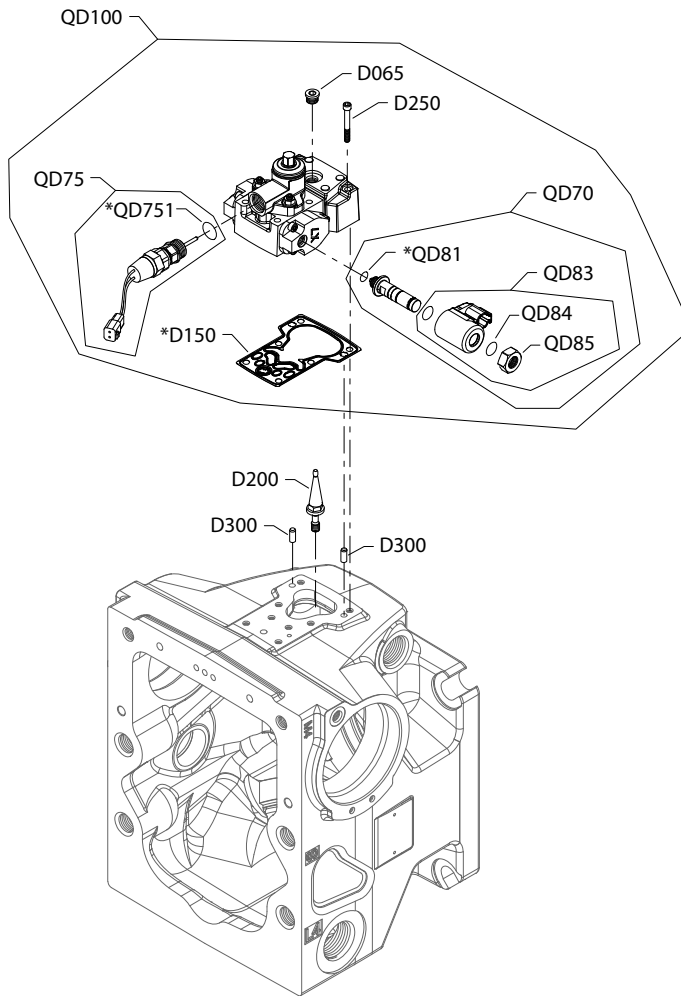
Order code: M4

QD70	14-01		11129917	Solenoid valve, 24v	1
QD83	14-01		11136348	Coil kit, 24v, CCO	1
QD100	14-01		11141238	MDC kit, 24v	1

Controls

H1P control M5, M6

M5 and M6 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D065	14-01		327007	Plug assembly	1
D150	14-01		11173377	Control gasket (SB-2016-033 on page 155)	1
D200	14-01		11202172	Swashplate feedback link (SB-2018-025 on page 156)	1
D250	14-01		505038	Screw, M6 x 45	6
D300	14-01		310979	Dowel pin	2
QD75	14-01		11126847	Spring seat/neutral start switch assembly	1
QD81	14-01		11152257	O-ring	1
QD84	14-01		11140393	O-ring	1
QD85	14-01		11140394	Coil nut	1
QD751	14-01		001131 (9004201-5000)	O-ring	1

Order code: M5

QD70	14-01		11129916	Solenoid valve, 12v	1
QD83	14-01		11136347	Coil kit, 12v	1
QD100	14-01		11141239	MDC kit, 12v, neutral start switch assembly, CCO	1

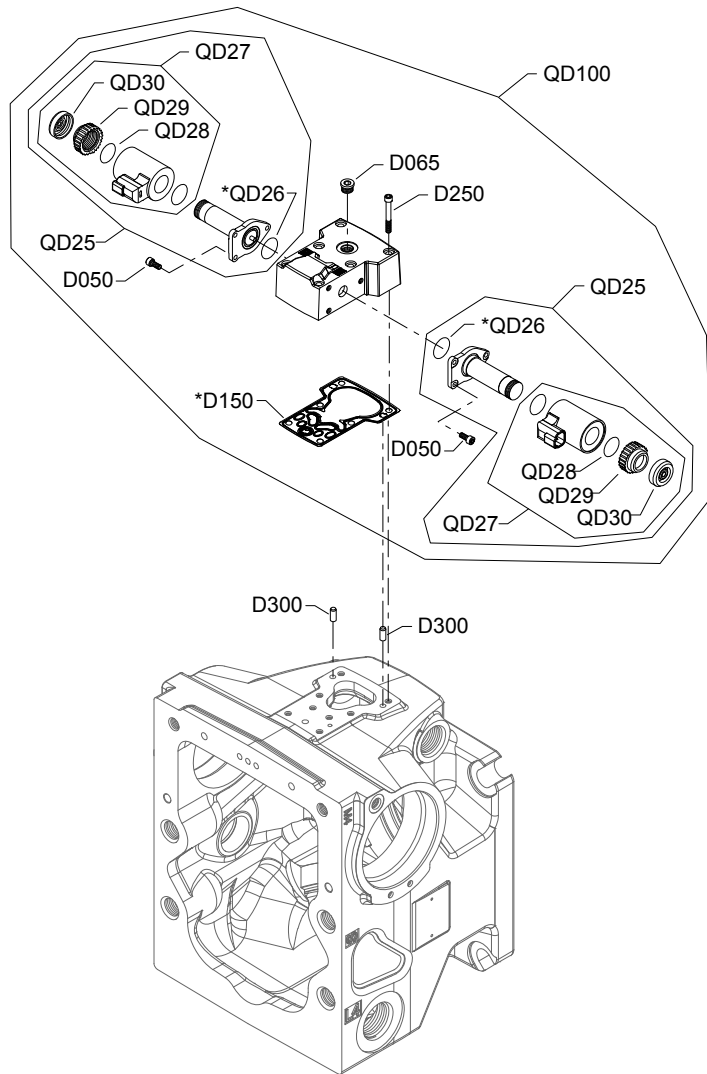
Order code: M6

QD70	14-01		11129917	Solenoid valve, 24v	1
QD83	14-01		11136348	Coil kit, 24v	1
QD100	14-01		11141240	MDC kit, 24v, neutral start switch assembly, CCO	1

Controls

H1P control N1, N2

N1 and N2 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-30		716860	Screw, M5 x 12	6
D065	16-30		327007	Plug assembly	1
D150	16-30		11173377	Control gasket	1
D250	16-30		505038	Screw, M6 x 45	6
D300	16-30		310979	Dowel pin	2
QD26	16-30		11001952	O-ring	2
QD28	16-30		063172	O-ring	2
QD30	16-30		11027883	Cap	2

Order code: N1

QD25	16-30		140750	Proportional solenoid, 12v, DEUTSCH connector	2
QD27	16-30		11004698	Coil kit, 12v, DEUTSCH connector	2
QD29	16-30		11004749	Coil nut	2
QD100	16-30		11147921	NFPE control kit, 12v, manual override, DEUTSCH connector	1

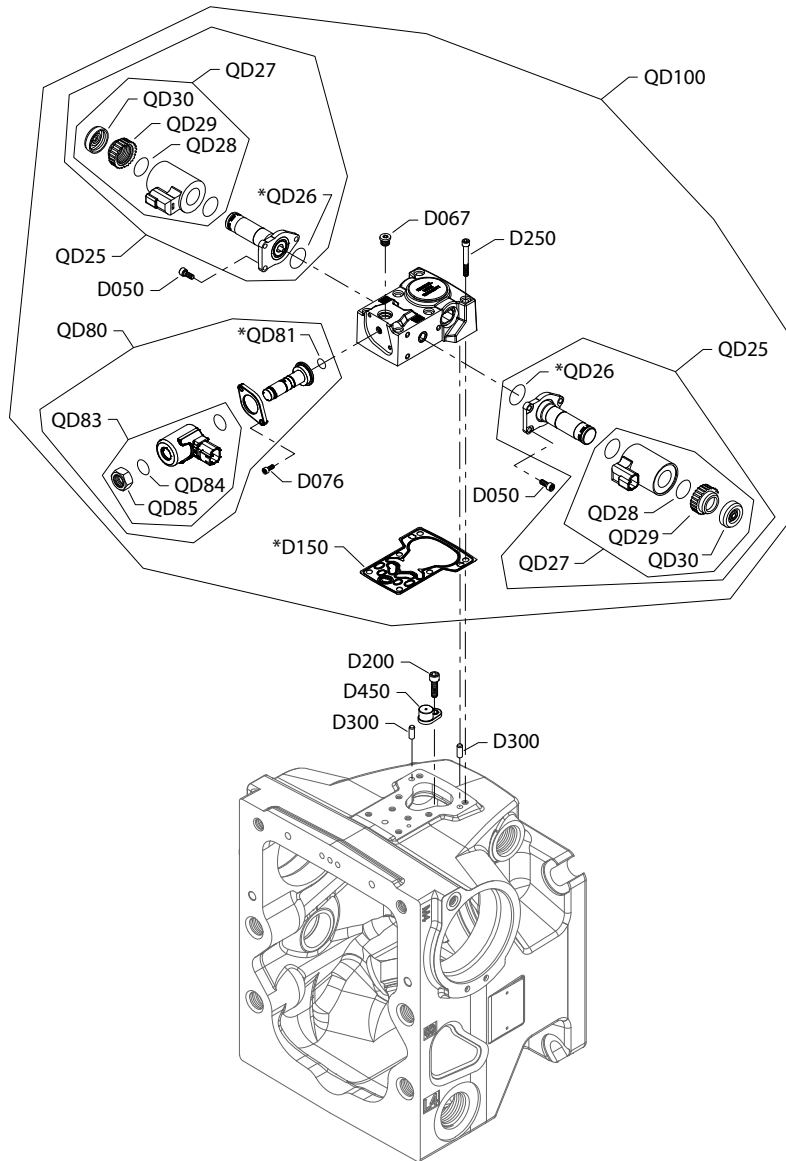
Order code: N2

QD25	16-30		140751	Proportional solenoid, 24v, DEUTSCH connector	2
QD27	16-30		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	16-30		11004750	Coil nut	2
QD100	16-30		11147925	NFPE control kit, 24v, manual override, DEUTSCH connector	1

Controls

H1P control N3, N4

N3 and N4 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-30		716860	Screw, M5 x 12	6
D067	16-30		327007	Plug assembly	1
D076	16-30		067694	Screw, M4 x 10	2
D150	16-30		11173377	Control gasket	1
D200	16-30		141472	Screw, special	1
D250	16-30		505038	Screw, M6 x 45	6
D300	16-30		310979	Dowel pin	2
D450	16-30		11003097	Magnetic carrier	1
QD26	16-30		11001952	O-ring	2
QD28	16-30		063172	O-ring	2
QD29	16-30		11004749	Coil nut	2
QD30	16-30		11027883	Cap	2
QD81	16-30		11152257	O-ring	1
QD84	16-30		11140393	O-ring	1
QD85	16-30		11140394	Nut	1

Order code: N3

QD25	16-30		140750	Proportional solenoid, 12v	2
QD27	16-30		11004698	Coil kit, 12v, DEUTSCH connector	2
QD80	16-30		11129914	Solenoid, 12V, DEUTSCH connector	1
QD83	16-30		11147301	Coil kit, 12V, DEUTSCH connector	1
QD100	16-30		11147920	NFPE control kit, 12v, CCO	1

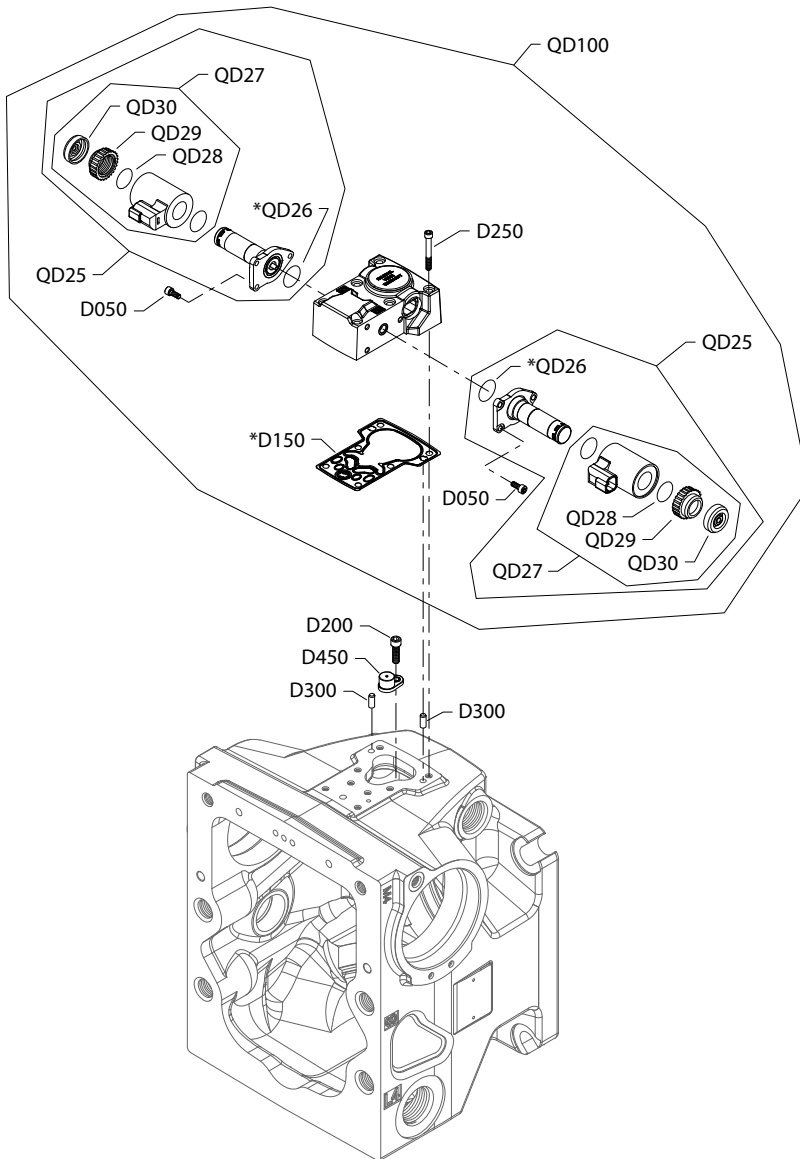
Order code: N4

QD25	16-30		140751	Proportional solenoid, 24v	2
QD27	16-30		11004700	Coil kit, 24v, DEUTSCH connector	2
QD80	16-30		11129915	Solenoid, 24V, DEUTSCH connector	1
QD83	16-30		11147332	Coil kit, 24V, DEUTSCH connector	1
QD100	16-30		11147924	NFPE control kit, 24v, CCO	1

Controls

H1P control N5, N6

N5 and N6 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-30		716860	Screw, M5 x 12	6
D150	16-30		11173377	Control gasket	1
D200	16-30		141472	Screw, special	1
D250	16-30		505038	Screw, M6 x 45	6
D300	16-30		310979	Dowel pin	2
D450	16-30		11003097	Magnetic carrier	1
QD26	16-30		11001952	O-ring	2
QD28	16-30		063172	O-ring	2
QD29	16-30		11004749	Coil nut	2
QD30	16-30		11027883	Cap	2

Order code: N5

QD25	16-30		140750	Proportional solenoid, 12v	2
QD27	16-30		11004698	Coil kit, 12v, DEUTSCH connector	2
QD100	16-30		11147918	NFPE control kit, 12v, manual override	1

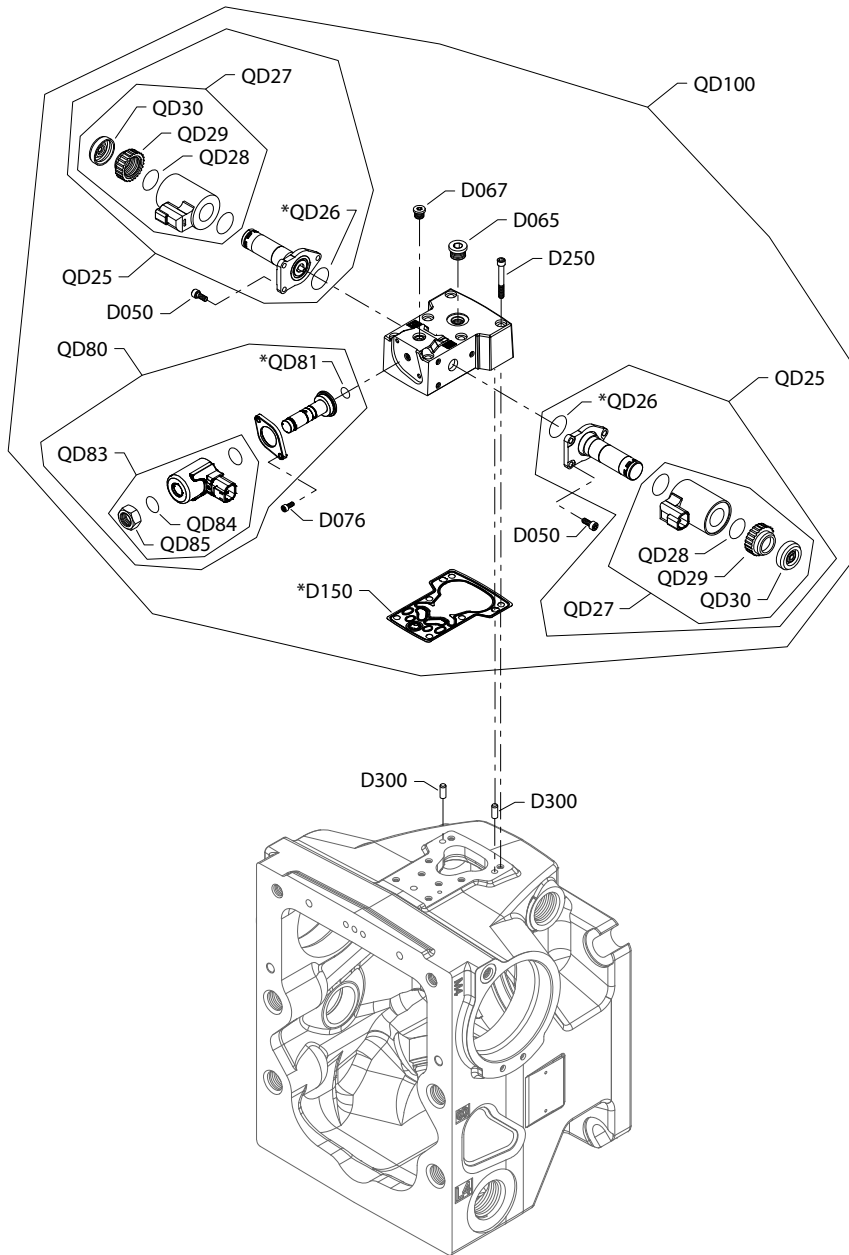
Order code: N6

QD25	16-30		140751	Proportional solenoid, 24v	2
QD27	16-30		11004700	Coil kit, 24v, DEUTSCH connector	2
QD100	16-30		11147922	NFPE control kit, 24v, manual override	1

Controls

H1P control N7, N8

N7 and N8 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-30		716860	Screw, M5 x 12	6
D067	16-30		327007	Plug assembly	1
D076	16-30		067694	Screw, M4 x 10	1
D150	16-30		11173377	Control gasket	1
D250	16-30		505038	Screw, M6 x 45	6
D300	16-30		310979	Dowel pin	2
QD26	16-30		11001952	O-ring	2
QD28	16-30		063172	O-ring	2
QD30	16-30		11027883	Cap	2
QD81	16-30		11152257	O-ring	1
QD84	16-30		11140393	O-ring	1
QD85	16-30		11140394	Nut	1

Order code: N7

QD25	16-30		140750	Proportional solenoid, 12v	2
QD27	16-30		11004698	Coil kit, 12v, DEUTSCH connector	2
QD29	16-30		11004749	Coil nut	2
QD80	16-30		11129914	Solenoid, 12V, DEUTSCH connector	1
QD83	16-30		11147301	Coil kit, 12V, DEUTSCH connector	1
QD100	16-30		11147919	NFPE control kit, 12v, CCO	1

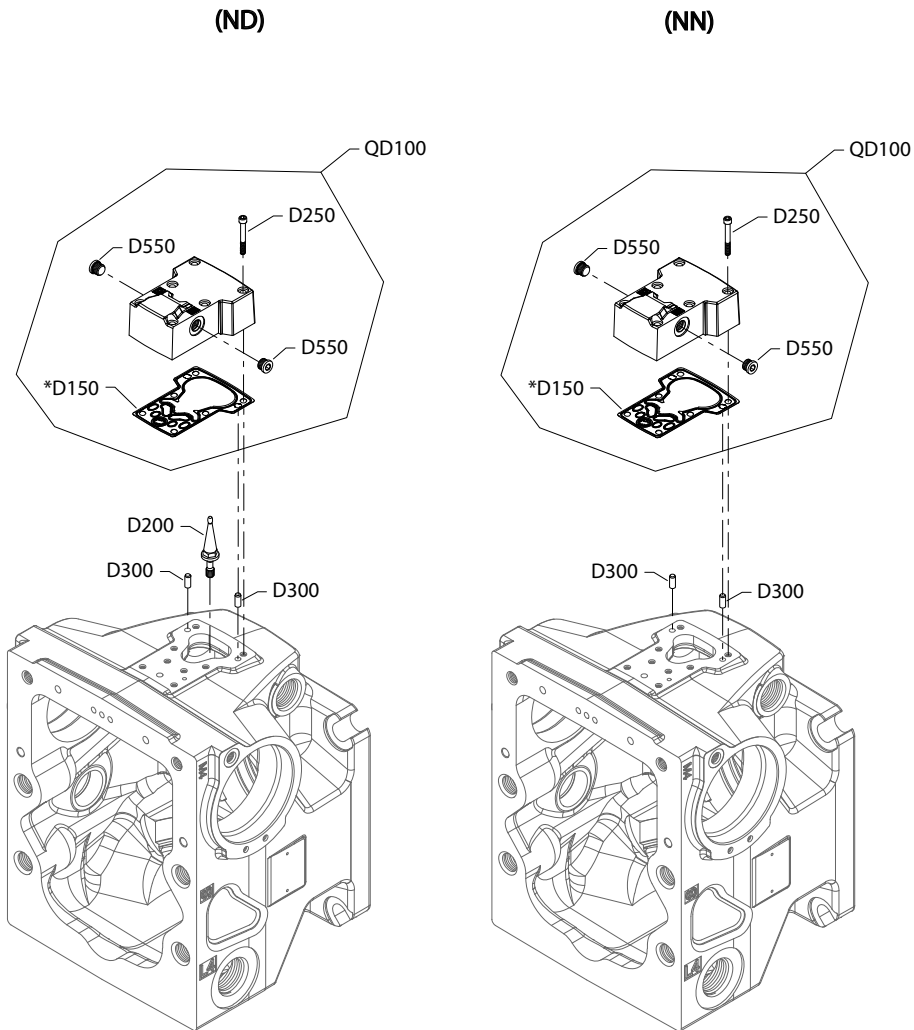
Order code: N8

QD25	16-30		140751	Proportional solenoid, 24v	2
QD27	16-30		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	16-30		11004750	Coil nut	2
QD80	16-30		11129915	Solenoid, 24V, DEUTSCH connector	1
QD83	16-30		11147332	Coil kit, 24V, DEUTSCH connector	1
QD100	16-30		11147923	NFPE control kit, 24v, CCO	1

Controls

H1P control ND, NN

ND and NN configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Order code: ND

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D150	16-02		11173377	Control gasket	1
D200	16-02		11202172	Swashplate feedback link	1
D250	16-02		505038	Screw, M6 x 45	6
D300	16-02		310979	Dowel pin	2
D550	16-02		140644	Plug assembly	2
QD100	16-02		11121984	Control cover kit	1

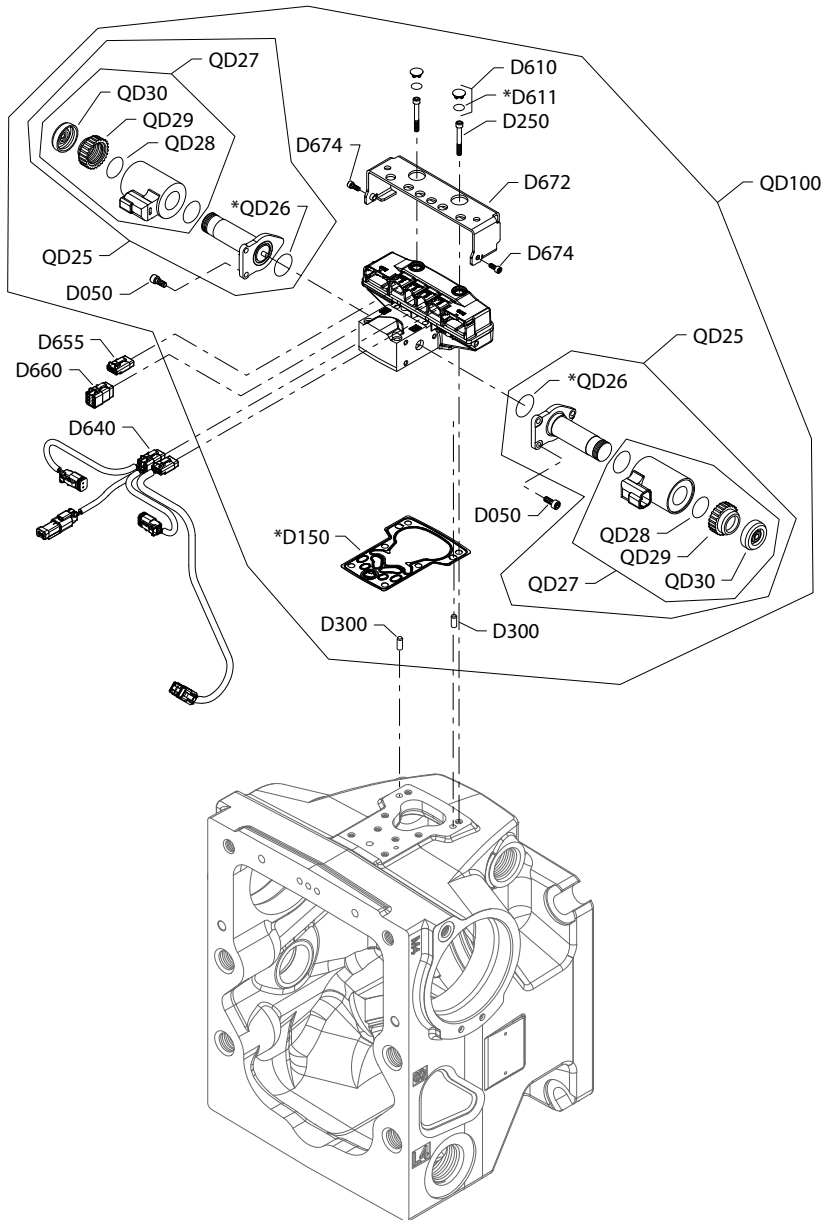
Order code: NN

D150	14-01		11173377	Control gasket (SB-2016-033 on page 155)	1
D250	14-01		505038	Screw, M6 x 45	6
D300	14-01		310979	Dowel pin	2
D550	14-01		140644	Plug assembly	2
QD100	14-01		11121984	Control cover kit	1

Controls

H1P control P6, P7

P6 and P7 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-30		716860	Screw, M5 x 12	6
D150	16-30		11173377	Control gasket	1
D250	16-30		505038	Screw, M6 x 45	6
D300	16-30		11036469	Dowel pin	2
D610	16-30		11000467	Plug assembly	2
D611	16-30		11066774	O-ring	2
D640	16-30		11023348	AC wiring harness	1
D655	16-30		11084827	Blank, connector DTM 06-3S	1
D660	16-30		11084822	Blank, connector DTM 06-6S	1
D672	16-30		11151875	Protection	1
D674	16-30		716860	Screw, M5 x 12	2
QD26	16-30		11001952	O-ring	2
QD28	16-30		063172	O-ring	2
QD29	16-30		11004749	Coil nut	2
QD30	16-30		11027883	Cap	2

Order code: P6

QD25	16-30		140750	Proportional solenoid, 12 volt	2
QD27	16-30		11004698	Coil kit, 12v, DEUTSCH connector	2
QD100	16-30		11147941	Automotive control kit, 12v, manual override	1

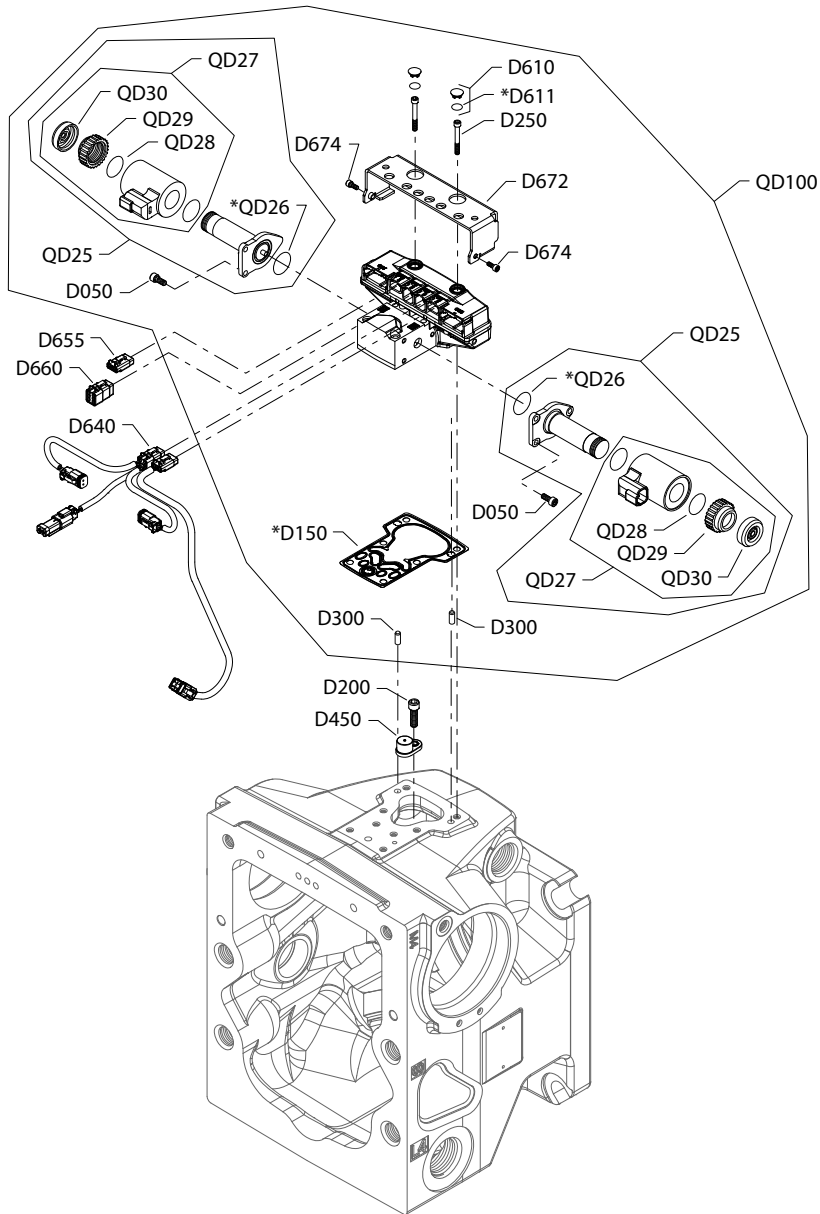
Order code: P7

QD25	16-30		140751	Proportional solenoid, 24 volt	2
QD27	16-30		11004700	Coil kit, 24v, DEUTSCH connector	2
QD100	16-30		11147943	Automotive control kit, 24v, manual override	1

Controls

H1P control P8, P9

P8 and P9 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-30		716860	Screw, M5 x 12	6
D150	16-30		11173377	Control gasket	1
D200	16-30		141472	Screw, special	1
D250	16-30		505038	Screw, M6 x 45	6
D300	16-30		11036469	Dowel pin	2
D450	16-30		11003097	Magnetic carrier	1
D610	16-30		11000467	Plug assembly	2
D611	16-30		11066774	O-ring	2
D640	16-30		11023348	AC wiring harness	1
D655	16-30		11084827	Blank, connector DTM 06-3S	1
D660	16-30		11084822	Blank, connector DTM 06-6S	1
D672	16-30		11151875	Protection	1
D674	16-30		716860	Screw, M5 x 12	2
QD26	16-30		11001952	O-ring	2
QD28	16-30		063172	O-ring	2
QD30	16-30		11027883	Cap	2

Order code: P8

QD25	16-30		140750	Proportional solenoid, 12 volt	2
QD27	16-30		11004698	Coil kit, 12v, DEUTSCH connector	2
QD29	16-30		11004749	Coil nut	2
QD100	16-30		11147940	Automotive control kit, 12v, manual override	1

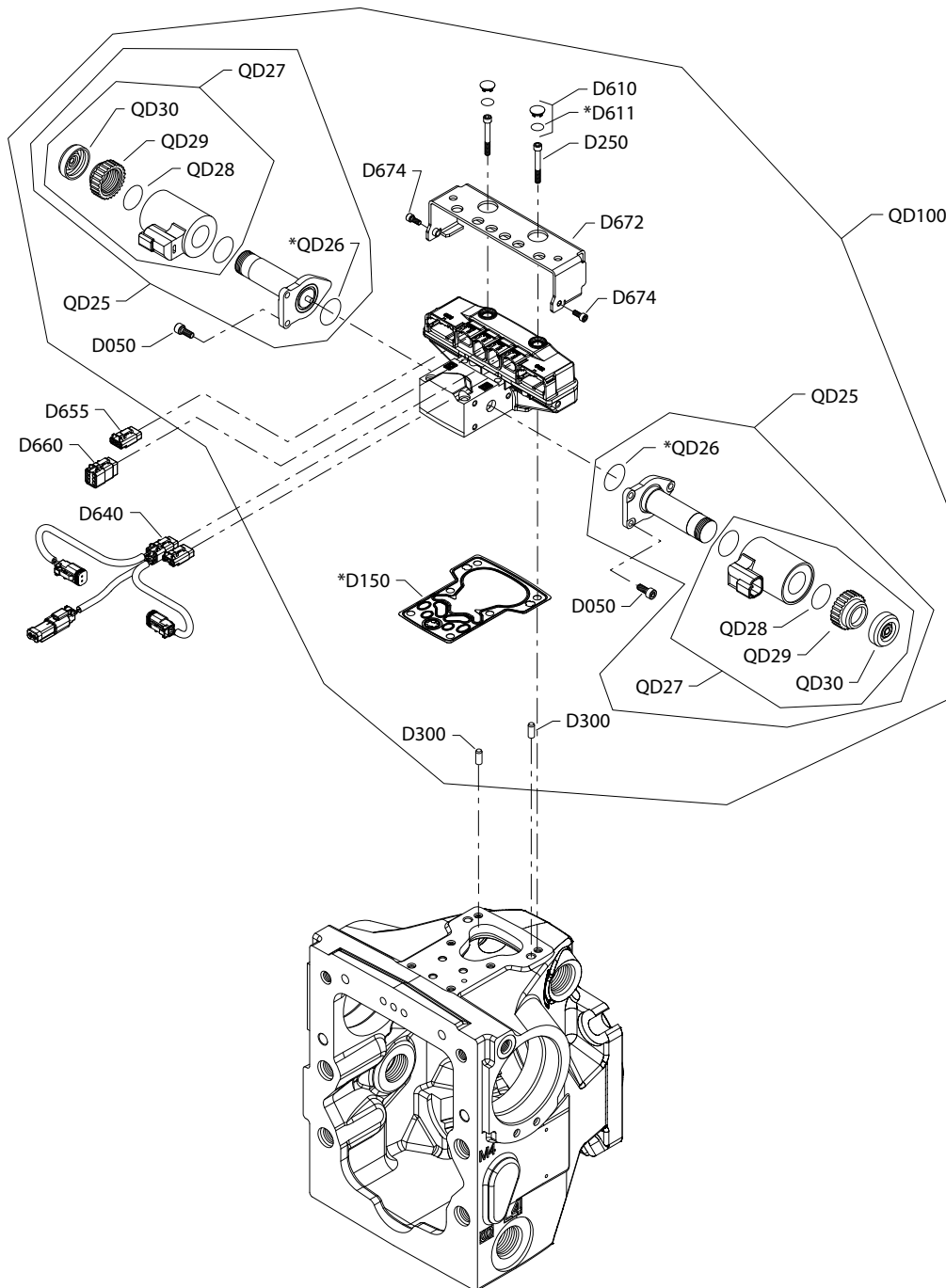
Order code: P9

QD25	16-30		140751	Proportional solenoid, 24 volt	2
QD27	16-30		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	16-30		11004750	Coil nut	2
QD100	16-30		11147942	Automotive control kit, 24v, manual override	1

Controls

H1P control T6, T7

Parts configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Order code: T6

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	18-15		716860	Screw, M5 x 12	6
D150	18-15		11173377	Control Gasket	1
D250	18-15		505038	Screw, M6 x 45	6
D300	18-15		11036469	Dowel pin	2
D610	18-15		11000467	Plug assembly	2
D611	18-15		11066774	O-ring	1
D640	18-15		11197432	AC wiring harness	1
D655	18-15		11084827	Blank, connector DTM 06-3S	1
D660	18-15		11084822	Blank, connector DTM 06-6S	1
D665	18-15		11084827	Blank, connector DTM 06-3S	1
D672	18-15		11151875	Protection	1
D674	18-15		716860	Screw, M5 x 12	2
QD100	18-15		11147941	Automotive control kit, 12v, manual override	1
QD25	18-15		140750	Proportional solenoid, 12v	2
QD26	18-15		11001952	O-ring	2
QD27	18-15		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	18-15		063172	O-ring	2
QD29	18-15		11004749	Coil nut	2
QD30	18-15		11027883	Cap	2

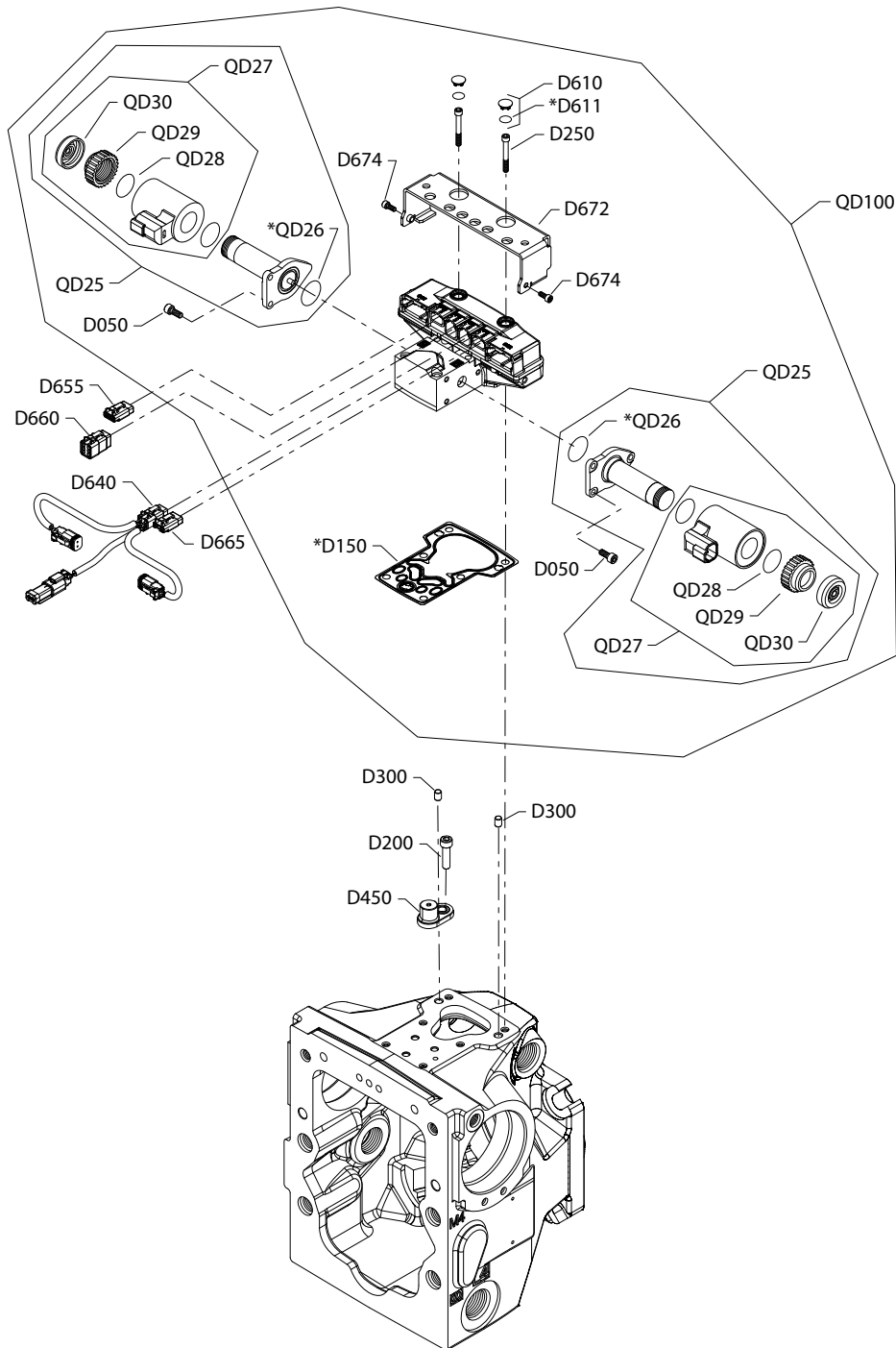
Order code: T7

D050	18-15		716860	Screw, M5 x 12	6
D150	18-15		11173377	Control gasket	1
D250	18-15		505038	Screw, M6 x 45	6
D300	18-15		11036469	Dowel pin	2
D610	18-15		11000467	Plug assembly	2
D611	18-15		11066774	O-ring	1
D640	18-15		11197432	AC wiring harness	1
D655	18-15		11084827	Blank, connector DTM 06-3S	1
D660	18-15		11084822	Blank, connector DTM 06-6S	1
D665	18-15		11084827	Blank, connector DTM 06-3S	1
D672	18-15		11151875	Protection	1
D674	18-15		716860	Screw, M5 x 12	2
QD100	18-15		11147943	Automotive control kit, 24v, manual override	1
QD25	18-15		140751	Proportional solenoid, 24v	2
QD26	18-15		11001952	O-ring	2
QD27	18-15		11004700	Coil kit, 24v, DEUTSCH connector	2
QD28	18-15		063172	O-ring	2
QD29	18-15		11004750	Coil nut	2
QD30	18-15		11027883	Cap	2

Controls

H1P control T8, T9

Parts configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

Order code: T8

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	18-12		716860	Screw, M5 x 12	6
D150	18-12		11173377	Control gasket	1
D200	18-12		141472	Screw, special	1
D250	18-12		505038	Screw, M6 x 45	6
D300	18-12		11036469	Dowel pin	2
D450	18-12		11003097	Magnet carrier	1
D610	18-12		11000467	Plug assembly	2
D611	18-12		11066774	O-ring	1
D640	18-12		11197432	AC wiring harness	1
D655	18-12		11084827	Blank, connector DTM 06-3S	1
D660	18-12		11084822	Blank, connector DTM 06-6S	1
D665	18-12		11084827	Blank, connector DTM 06-3S	1
D672	18-12		11151875	Protection	1
D674	18-12		716860	Screw, M5 x 12	2
QD100	18-12		11147940	Automotive control kit, 12v, manual override	1
QD25	18-12		140750	Proportional solenoid, 12v	2
QD26	18-12		11001952	O-ring	2
QD27	18-12		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	18-12		063172	O-ring	2
QD29	18-12		11004749	Coil nut	2
QD30	18-12		11027883	Cap	2

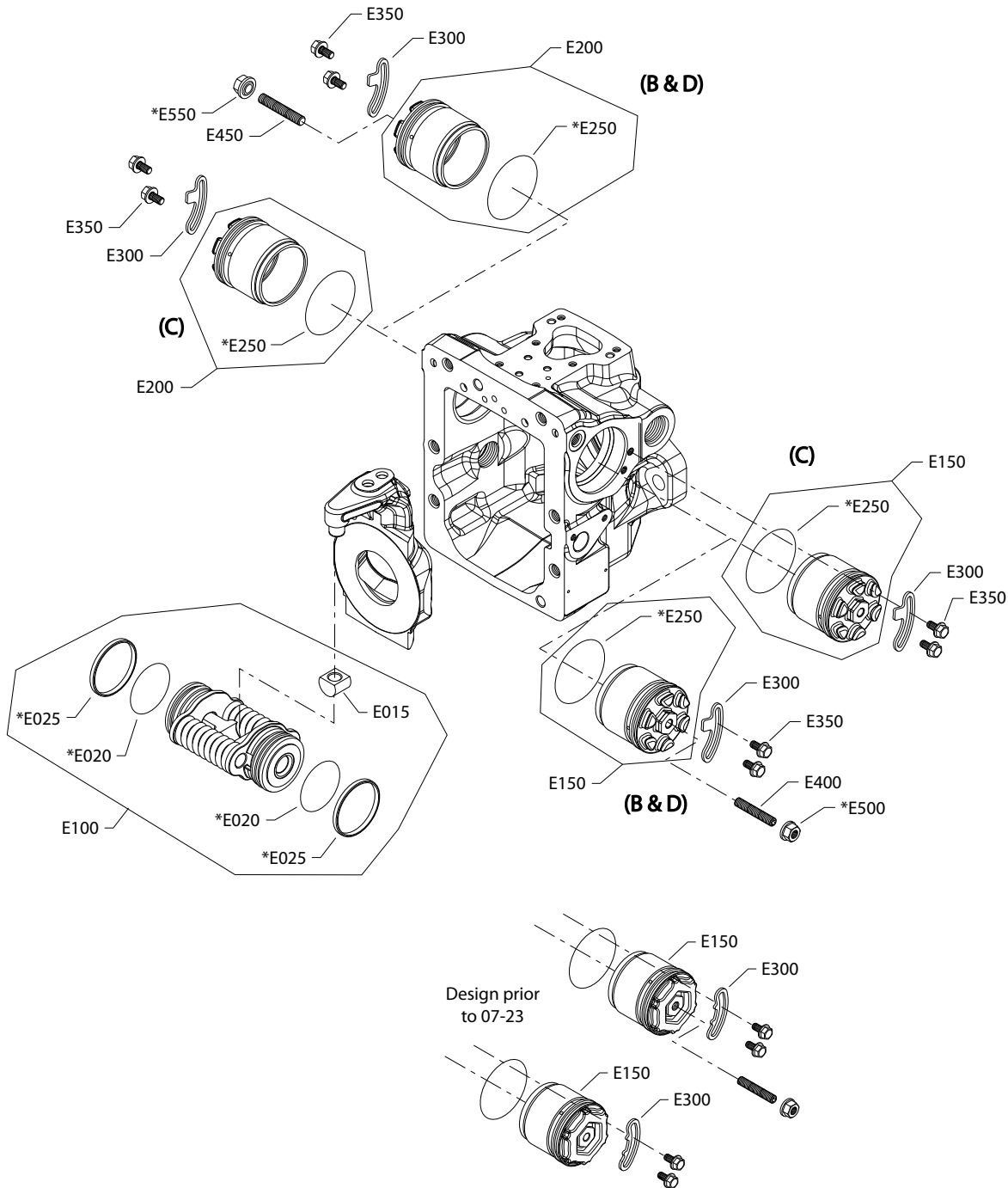
Order code: T9

D150	18-12		11173377	Control gasket	1
D200	18-12		141472	Screw, special	1
D250	18-12		505038	Screw, M6 x 45	6
D450	18-12		11003097	Magnet carrier	1
D610	18-12		11000467	Plug assembly	2
D611	18-12		11066774	O-ring	1
D640	18-12		11197432	AC wiring harness	1
D655	18-12		11084827	Blank, connector DTM 06-3S	1
D660	18-12		11084822	Blank, connector DTM 06-6S	1
D665	18-15		11084827	Blank, connector DTM 06-3S	1
D672	18-12		11151875	Protection	1
D674	18-12		716860	Screw, M5 x 12	2
QD100	18-12		11147942	Automotive control kit, 24v, manual override	1
QD25	18-12		140751	Proportional solenoid, 24v	2
QD26	18-12		11001952	O-ring	2
QD27	18-12		11004700	Coil kit, 24v, DEUTSCH connector	2
QD28	18-12		063172	O-ring	2
QD29	18-12		11004750	Coil nut	2
QD30	18-12		11027883	Cap	2

Displacement limitation

H1P 45/53 displacement limitation B-D

Parts configuration



* Included in overhaul seal kit Q210

Displacement limitation

Order code: B

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E015	12-21		11014805	Slider block (SB-2011-020 on page 152)	1
E015	07-19	12-20	141939	Slider block	1
E020	07-19		5000732	O-ring	2
E025	07-19		11028034	Piston seal ring (SB-2007-026 on page 139)	2
E100	12-21		11094107	Servo piston assembly (SB-2011-020 on page 152)	1
E100	07-19	12-20	11098278	Servo piston assembly replacement kit	1
E150	07-19		11059648	Servo cylinder assembly, adjustable (SB-2007-004 on page 137)	1
E200	07-19		11059648	Servo cylinder assembly, adjustable (SB-2007-004 on page 137)	1
E250	07-19		5000709	O-ring	2
E300	07-23		11013910	Locking plate	2
E300	07-19	07-22	141940	Locking plate (SB-2007-004 on page 137)	2
E350	07-19		508438	Screw, M6 x 12	4
E400	07-19		5000747	Set screw, M8 x 45	1
E450	07-19		5000747	Set screw, M8 x 45	1
E500	07-19		505412 (9003509-0008)	Seal nut, M8	1
E550	07-19		505412 (9003509-0008)	Seal nut, M8	1

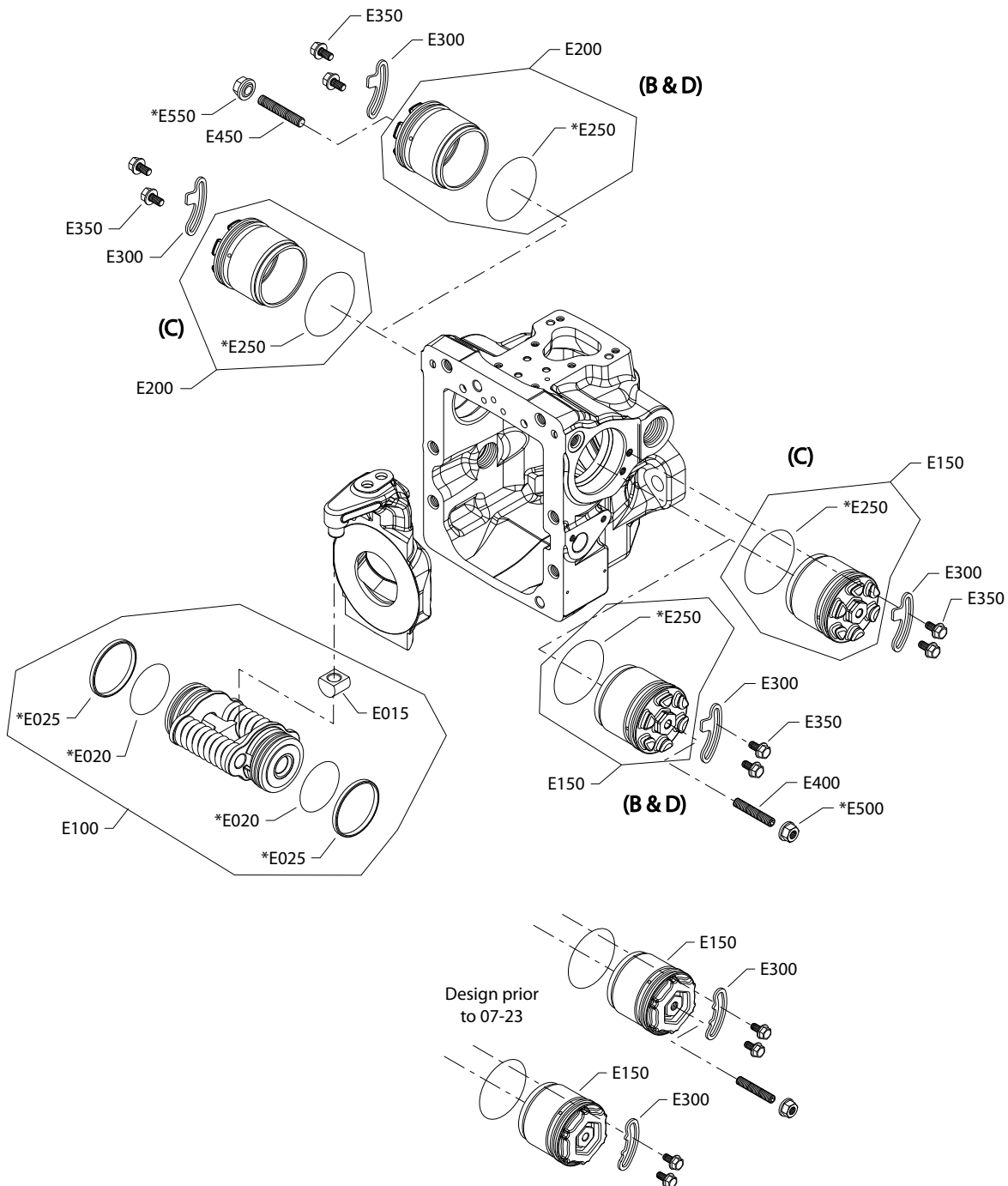
Order code: C

E015	12-21		11014805	Slider block (SB-2011-020 on page 152)	1
E015	07-19	12-20	141939	Slider block	1
E020	07-19		5000732	O-ring	2
E025	07-19		11028034	Piston seal ring (SB-2007-026 on page 139)	2
E100	12-21		11094283	Servo piston assembly, nested spring (SB-2011-020 on page 152)	1
E100	07-19	12-20	11098279	Servo piston assembly replacement kit	1
E150	07-30		11059647	Servo cylinder assembly (SB-2007-004 on page 137)	1
E200	07-30		11059647	Servo cylinder assembly (SB-2007-004 on page 137)	1
E250	07-19		5000709	O-ring	2
E300	07-30		11013910	Locking plate	2
E300	07-19	07-29	141940	Locking plate (SB-2007-004 on page 137)	2
E350	07-19		508438	Screw, M6 x 12	4

[Parts continue to the next 2 pages.](#)

Displacement limitation

Parts configuration



* Included in overhaul seal kit Q210

Displacement limitation

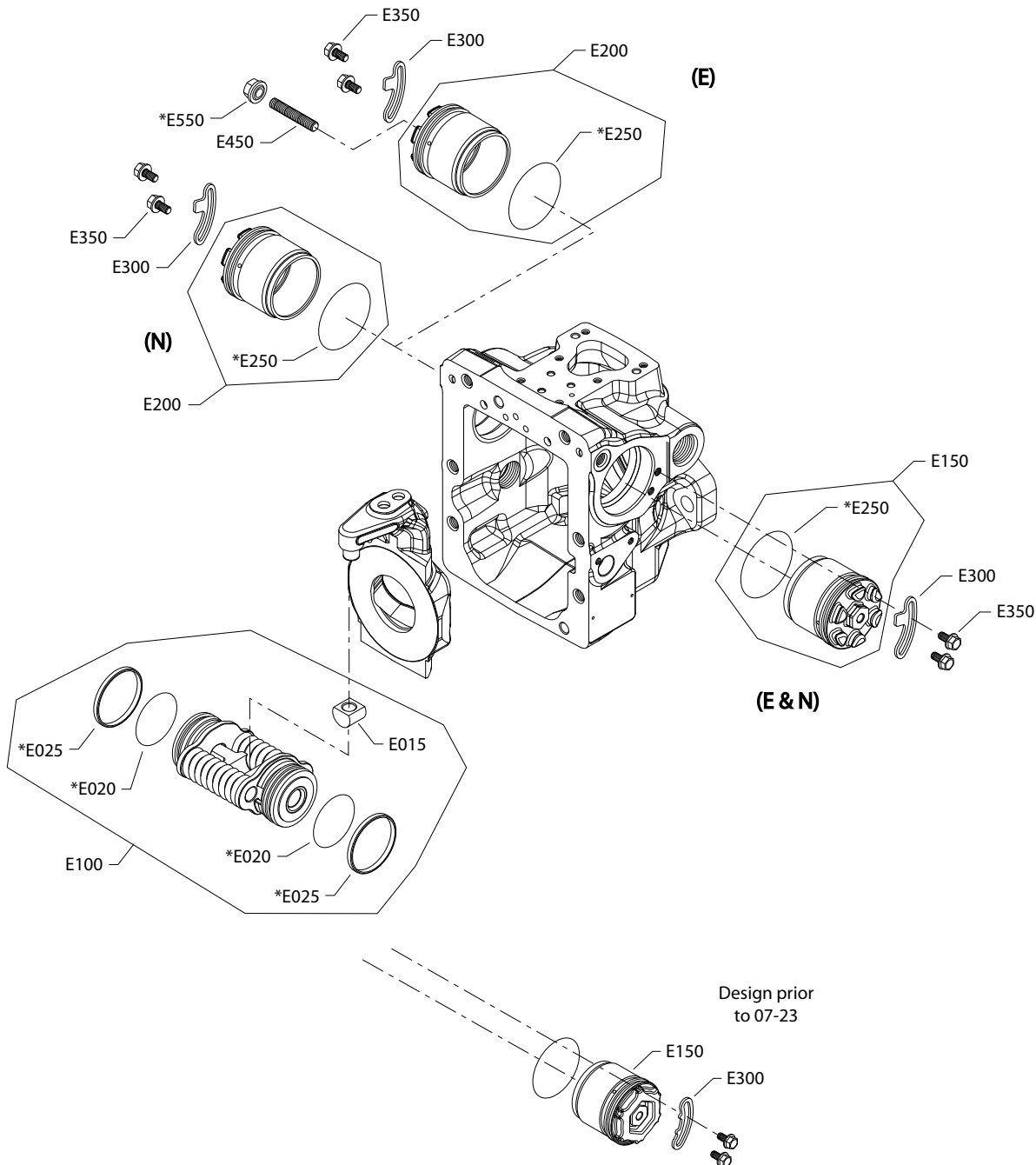
Order code: D

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E015	12-21		11014805	Slider block (SB-2011-020 on page 152)	1
E015	07-19	12-20	141939	Slider block	1
E020	07-19		5000732	O-ring	2
E025	07-19		11028034	Piston seal ring (SB-2007-026 on page 139)	2
E100	12-21		11094283	Servo piston assembly, nested spring (SB-2011-020 on page 152)	1
E100	07-19	12-20	11098279	Servo piston assembly replacement kit	1
E150	07-19		11059648	Servo cylinder assembly, adjustable (SB-2007-004 on page 137)	1
E200	07-19		11059648	Servo cylinder assembly, adjustable (SB-2007-004 on page 137)	1
E250	07-19		5000709	O-ring	2
E300	07-23		11013910	Locking plate	2
E300	07-19	07-22	141940	Locking plate (SB-2007-004 on page 137)	2
E350	07-19		508438	Screw, M6 x 12	4
E400	07-19		5000747	Set screw, M8 x 45	1
E450	07-19		5000747	Set screw, M8 x 45	1
E500	07-19		505412 (9003509-0008)	Seal nut, M8	1
E550	07-19		505412 (9003509-0008)	Seal nut, M8	1

Displacement limitation

H1P 45/53 displacement limitation E-N

Parts configuration



Generic housing shown

* Included in overhaul seal kit Q210

Displacement limitation

Order code: E

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E015	15-07		11014805	Slider block	1
E020	15-07		5000732	O-ring	2
E025	15-07		11028034	Piston seal ring	2
E100	15-07		11094283	Servo piston assembly, nested spring	1
E150	15-07		11059647	Servo cylinder assembly	1
E200	15-07		11059648	Servo cylinder assembly, adjustable	1
E250	15-07		5000709	O-ring	2
E300	15-07		11013910	Locking plate	2
E350	15-07		508438	Screw, M6 x 12	4
E450	15-07		719401	Set screw, M8 x 50	1
E550	15-07		505412 (9003509-0008)	Seal nut, M8	1

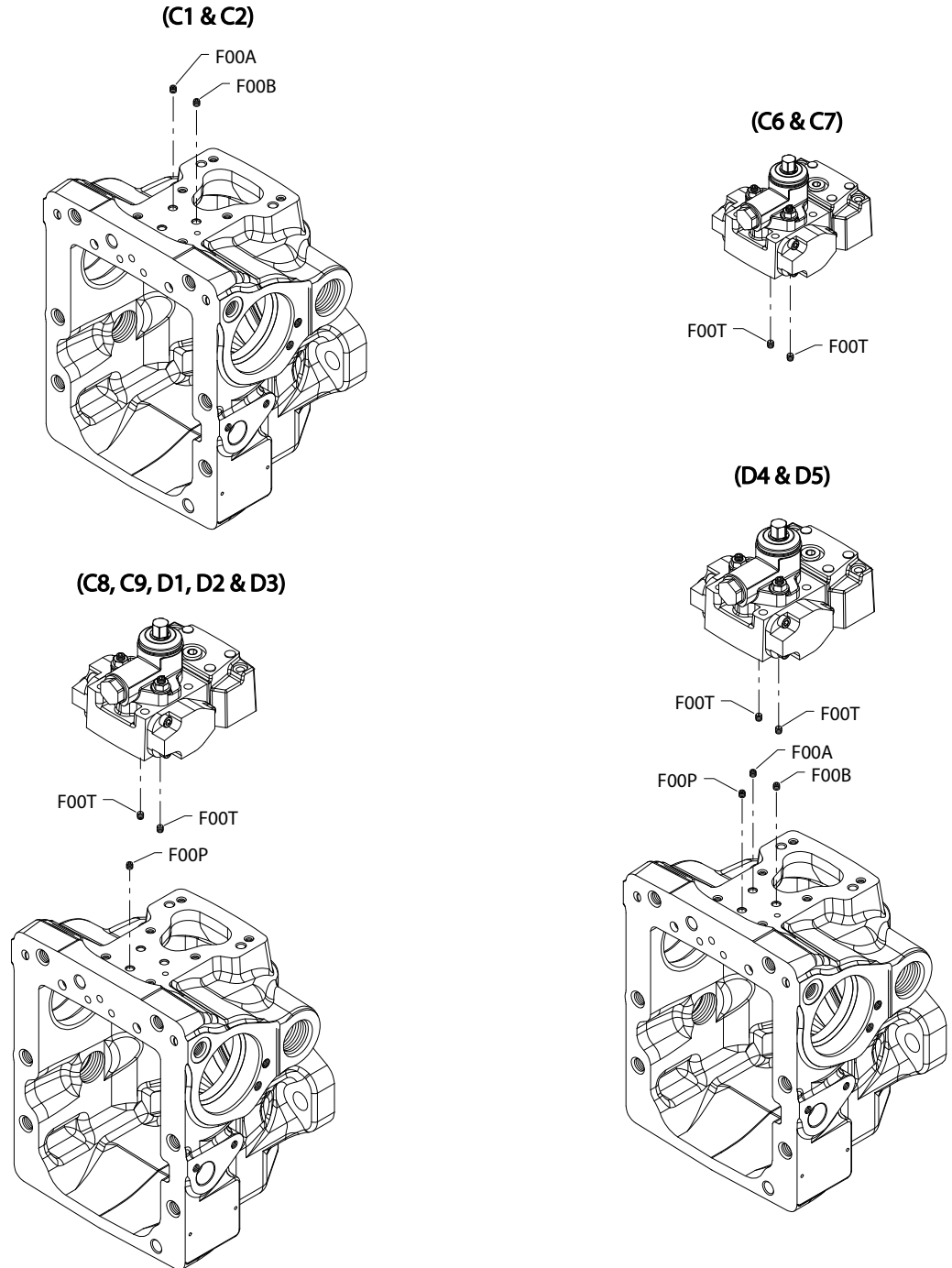
Order code: N

E015	12-21		11014805	Slider block (SB-2011-020 on page 152)	1
E015	07-19	12-20	141939	Slider block	1
E020	07-19		5000732	O-ring	2
E025	07-19		11028034	Piston seal ring (SB-2007-026 on page 139)	2
E100	12-21		11094107	Servo piston assembly (SB-2011-020 on page 152)	1
E100	07-19	12-20	11098278	Servo piston assembly replacement kit	1
E150	07-30		11059647	Servo cylinder assembly (SB-2007-004 on page 137)	1
E200	07-30		11059647	Servo cylinder assembly (SB-2007-004 on page 137)	1
E250	07-19		5000709	O-ring	2
E300	07-30		11013910	Locking plate	2
E300	07-19	07-29	141940	Locking plate (SB-2007-004 on page 137)	2
E350	07-19		508438	Screw	4

Orifice

H1P 45/53 orifice

Parts configuration



Generic housings and control shown.

* Included in overhaul seal kit Q210

Orifice

Order code: C1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
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

Order code: C2

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

Order code: C3

No parts					
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Order code: C6

F00T	14-44		11151734	Orifice, 1.0 M6 x 0.75 mm	2
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Order code: C7

F00T	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	2
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Order code: C8

F00P	14-44		140611	Orifice, 0.8 M6 x 0.75 mm	1
F00T	14-44		11151733	Orifice, 0.6 M6 x 0.75 mm	2

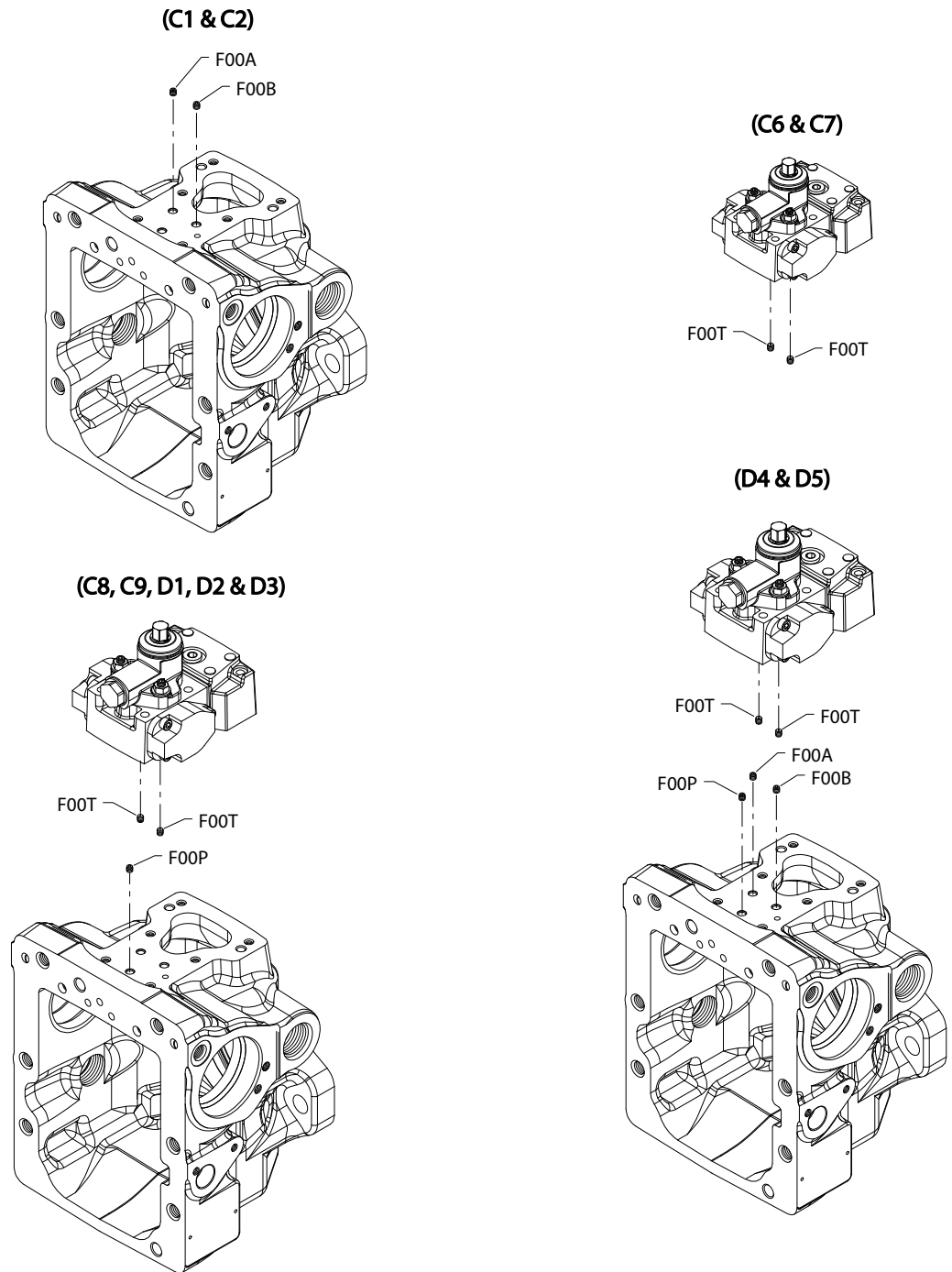
Order code: C9

F00P	14-44		11151734	Orifice, 1.0 M6 x 0.75 mm	1
F00T	14-44		11151733	Orifice, 0.6 M6 x 0.75 mm	2

[Parts continue to the next 2 pages.](#)

Orifice

Parts configuration



Generic housings and control shown.

* Included in overhaul seal kit Q210

Orifice

Order code: D1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
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

Order code: D2

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

Order code: D3

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

Order code: D4

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

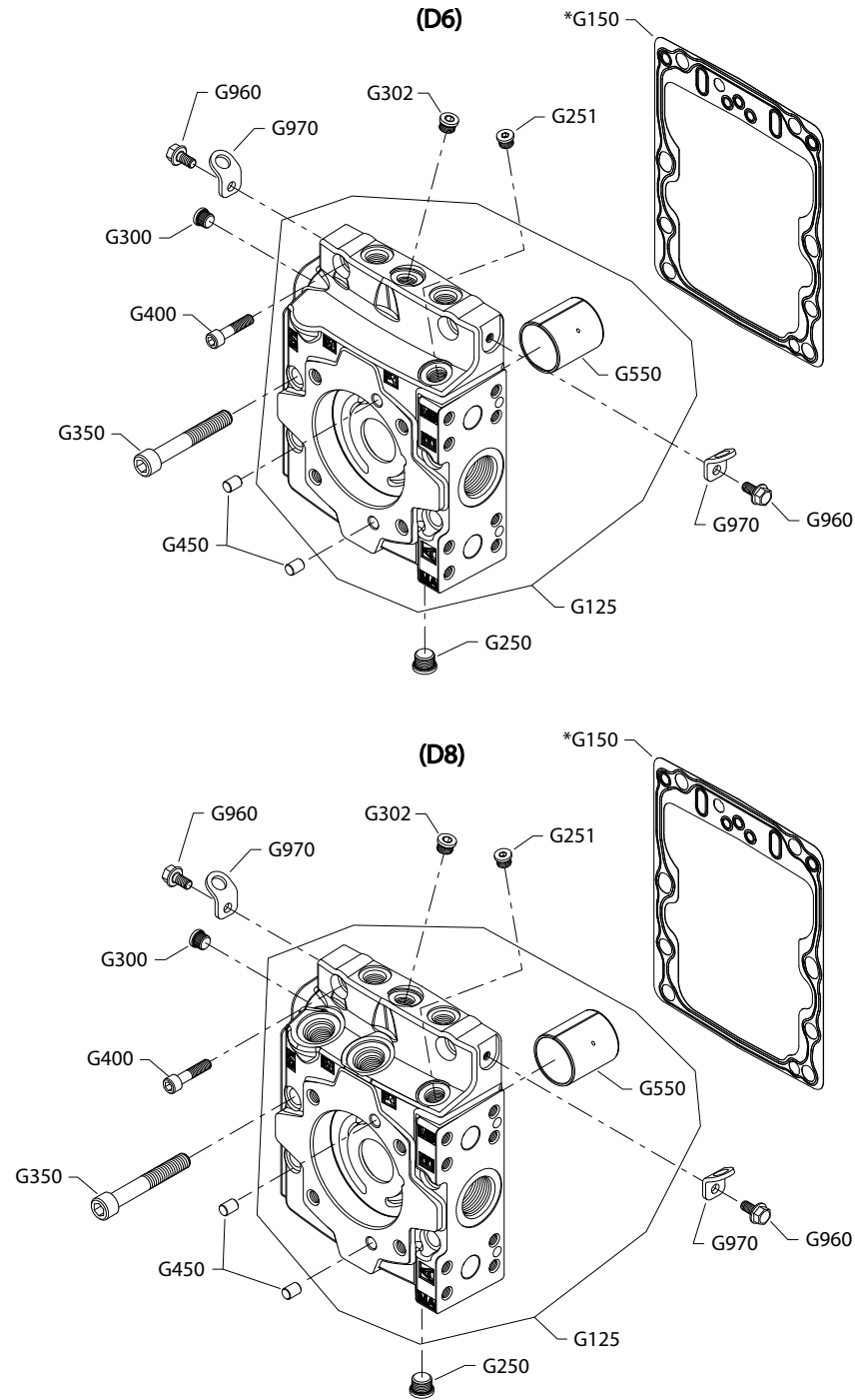
Order code: D5

F00A	14-44		140611	Orifice, 0.8 M6 x 0.75 mm	1
F00B	14-44		140611	Orifice, 0.8 M6 x 0.75 mm	1
F00P	14-44		11151733	Orifice, 0.6 M6 x 0.75 mm	1
F00T	14-44		11151733	Orifice, 0.6 M6 x 0.75 mm	2

End cap

H1P 45/53 end cap D3, D6

Parts configuration



* Included in overhaul seal kit Q210

End cap

Order code: D6

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G125	10-11		11013562	End cap assembly, CW, suction filtration	1
G125	10-11		11013554	End cap assembly, CCW, suction filtration	1
G150	10-11		141504	End cap gasket	1
G250	10-11		140644	Plug assembly	1
G251	10-11		140644	Plug assembly	1
G300	10-11		140644	Plug assembly	1
G302	10-11		140644	Plug assembly	1
G350	10-11		010850	Screw, M12 x 80	4
G400	10-11		290502	Screw, M12 x 40	2
G450	10-11		5000757	Dowel pin	2
G550	10-11		141593	Journal bearing	1
G960	10-11		508438	Screw, M6 x 12	2
G970	10-11		4800754	Lifting bracket	2

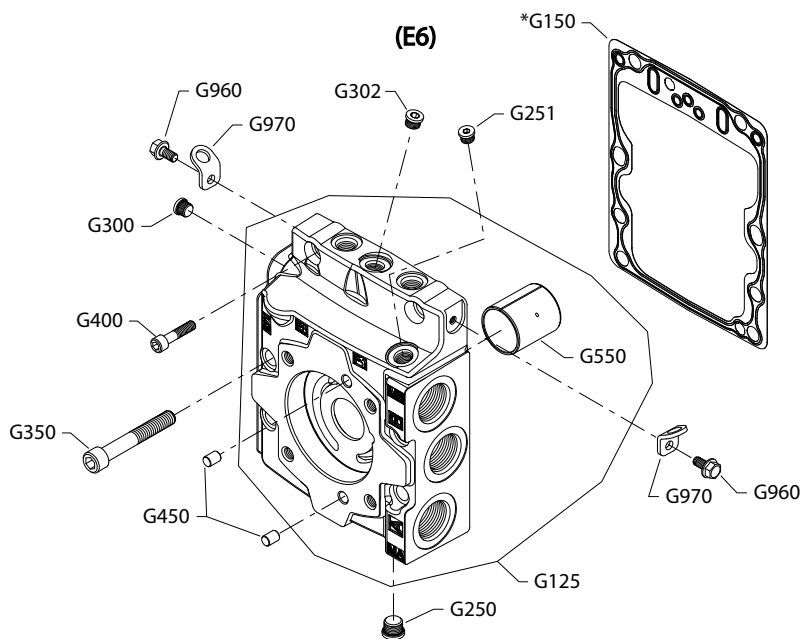
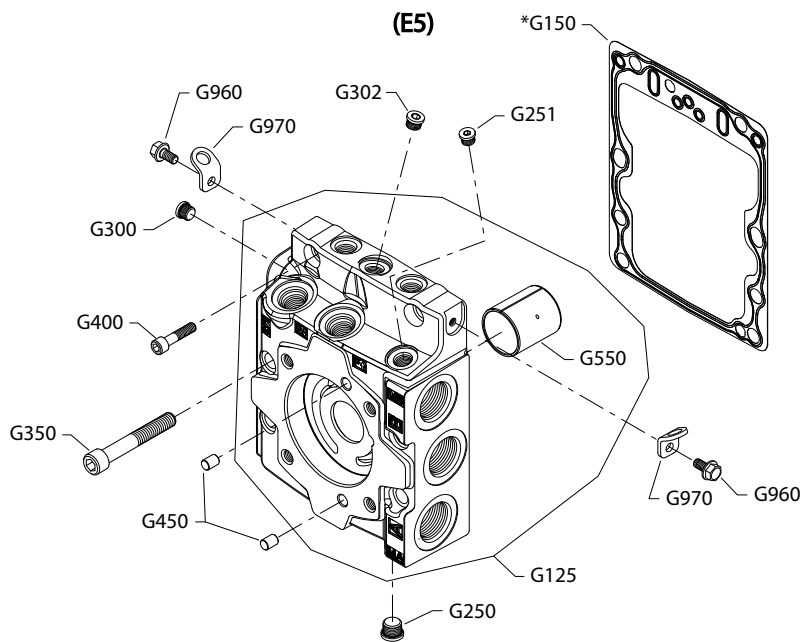
Order code: D8

G125	10-11		11013563	End cap assembly, CW, remote filtration	1
G125	10-11		11013555	End cap assembly, CCW, remote filtration	1
G150	10-11		141504	End cap gasket	1
G250	10-11		140644	Plug assembly	1
G251	10-11		140644	Plug assembly	1
G300	10-11		140644	Plug assembly	1
G302	10-11		140644	Plug assembly	1
G350	10-11		010850	Screw, M12 x 80	4
G400	10-11		290502	Screw, M12 x 40	2
G450	10-11		5000757	Dowel pin	2
G550	10-11		141593	Journal bearing	1
G960	10-11		508438	Screw, M6 x 12	2
G970	10-11		4800754	Lifting bracket	2

End cap

H1P 45/53 end cap E5, E6

Parts configuration



* Included in overhaul seal kit Q210

End cap

Order code: E5

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G125	10-11		11013564	End cap assembly, CW, remote filtration	1
G125	10-11		11013556	End cap assembly, CCW, remote filtration	1
G150	10-11		141504	End cap gasket	1
G250	10-11		140644	Plug assembly	1
G251	10-11		140644	Plug assembly	1
G300	10-11		140644	Plug assembly	1
G302	10-11		140644	Plug assembly	1
G350	10-11		010850	Screw, M12 x 80	4
G400	10-11		290502	Screw, M12 x 40	2
G450	10-11		5000757	Dowel pin	2
G550	10-11		141593	Journal bearing	1
G960	10-11		508438	Screw, M6 x 12	2
G970	10-11		4800754	Lifting bracket	2

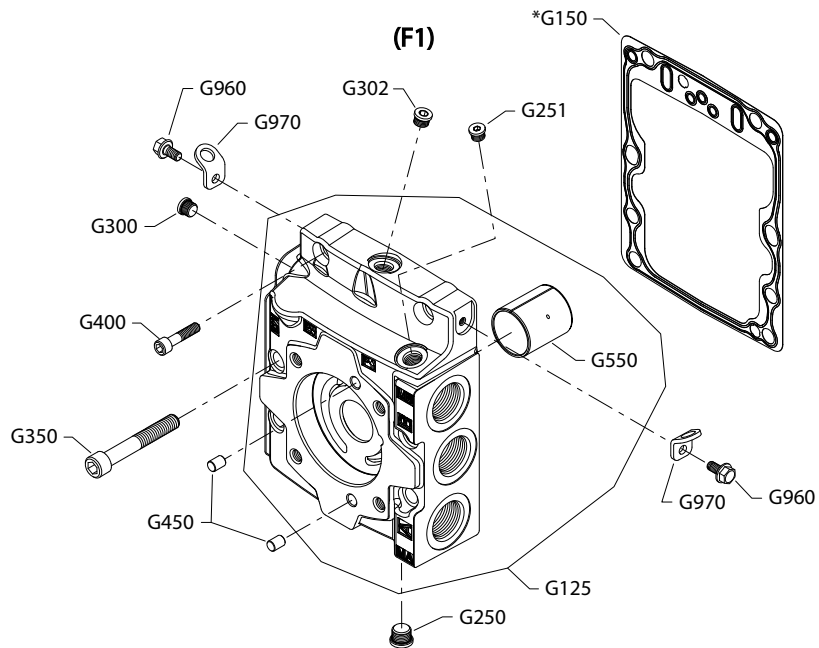
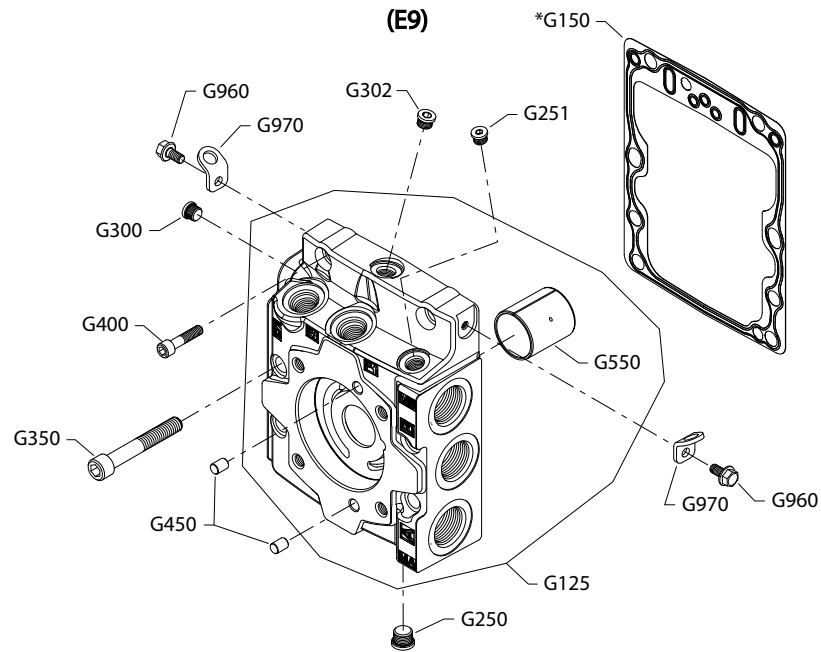
Order code: E6

G125	10-11		11013565	End cap assembly, CW, suction filtration	1
G125	10-11		11013557	End cap assembly, CCW, suction filtration	1
G150	10-11		141504	End cap gasket	1
G250	10-11		140644	Plug assembly	1
G251	10-11		140644	Plug assembly	1
G300	10-11		140644	Plug assembly	1
G302	10-11		140644	Plug assembly	1
G350	10-11		010850	Screw, M12 x 80	4
G400	10-11		290502	Screw, M12 x 40	2
G450	10-11		5000757	Dowel pin	2
G550	10-11		141593	Journal bearing	1
G960	10-11		508438	Screw, M6 x 12	2
G970	10-11		4800754	Lifting bracket	2

End cap

H1P 45/53 end cap E9, F1

Parts configuration



* Included in overhaul seal kit Q210

End cap

Order code: E9

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G125	10-11		11013566	End cap assembly, CW, 1 5/16, remote, HPRV only	1
G125	10-11		11013558	End cap assembly, CCW, 1 5/16, remote, HPRV only	1
G150	10-11		141504	End cap gasket	1
G250	10-11		140644	Plug assembly	1
G251	10-11		140644	Plug assembly	1
G300	10-11		140644	Plug assembly	1
G302	10-11		140644	Plug assembly	1
G350	10-11		010850	Screw, M12 x 80	4
G400	10-11		290502	Screw, M12 x 40	2
G450	10-11		5000757	Dowel pin	2
G550	10-11		141593	Journal bearing	1
G960	10-11		508438	Screw, M6 x 12	2
G970	10-11		4800754	Lifting bracket	2

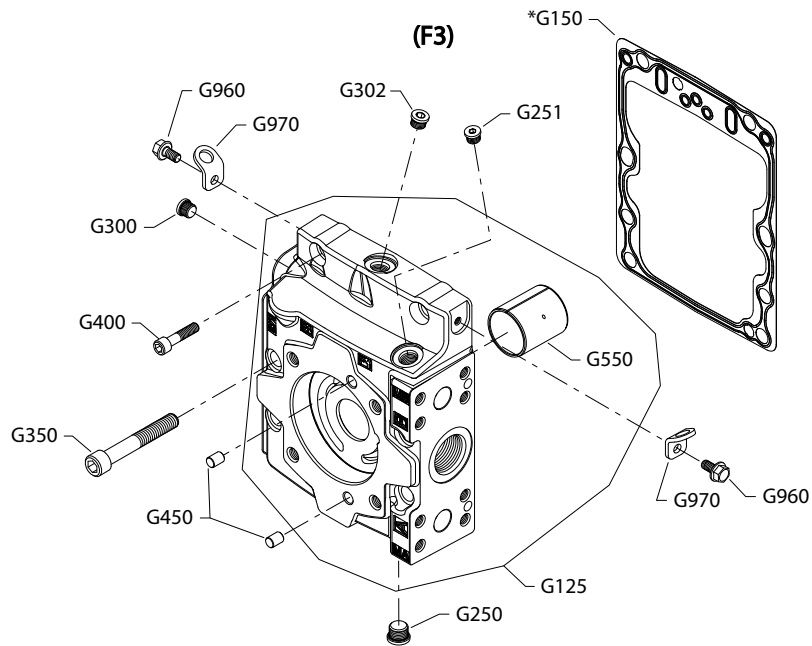
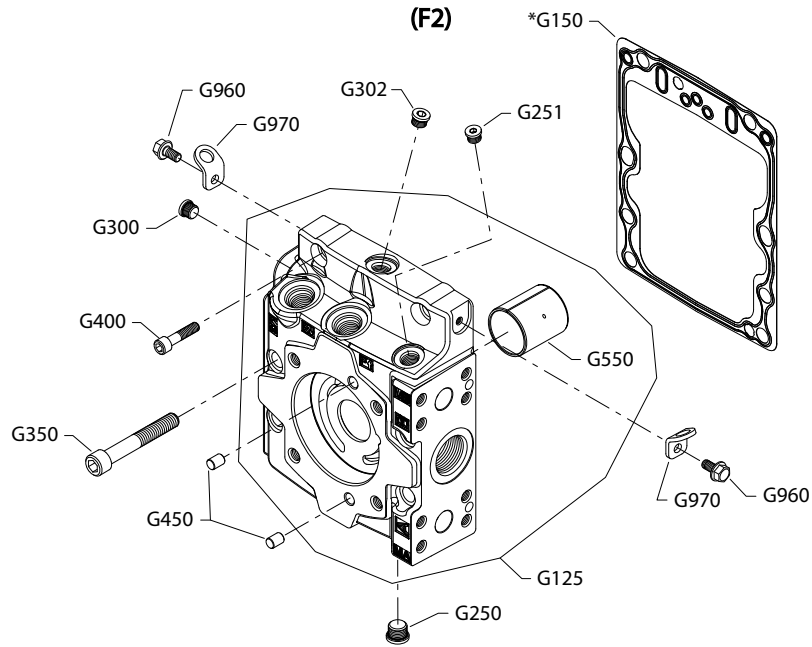
Order code: F1

G125	10-11		11013567	End cap assembly, CW, 1 5/16, suction, HPRV only	1
G125	10-11		11013559	End cap assembly, CCW, 1 5/16, suction, HPRV only	1
G150	10-11		141504	End cap gasket	1
G250	10-11		140644	Plug assembly	1
G251	10-11		140644	Plug assembly	1
G300	10-11		140644	Plug assembly	1
G302	10-11		140644	Plug assembly	1
G350	10-11		010850	Screw, M12 x 80	4
G400	10-11		290502	Screw, M12 x 40	2
G450	10-11		5000757	Dowel pin	2
G550	10-11		141593	Journal bearing	1
G960	10-11		508438	Screw, M6 x 12	2
G970	10-11		4800754	Lifting bracket	2

End cap

H1P 45/53 end cap F2, F3

Parts configuration



* Included in overhaul seal kit Q210

End cap

Order code: F2

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G125	10-11		11013568	End cap assembly, CW,, remote, HPRV only	1
G125	10-11		11013560	End cap assembly, CCW, remote, HPRV only	1
G150	10-11		141504	End cap gasket	1
G250	10-11		140644	Plug assembly	1
G251	10-11		140644	Plug assembly	1
G300	10-11		140644	Plug assembly	1
G302	10-11		140644	Plug assembly	1
G350	10-11		010850	Screw, M12 x 80	4
G400	10-11		290502	Screw, M12 x 40	2
G450	10-11		5000757	Dowel pin	2
G550	10-11		141593	Journal bearing	1
G960	10-11		508438	Screw, M6 x 12	2
G970	10-11		4800754	Lifting bracket	2

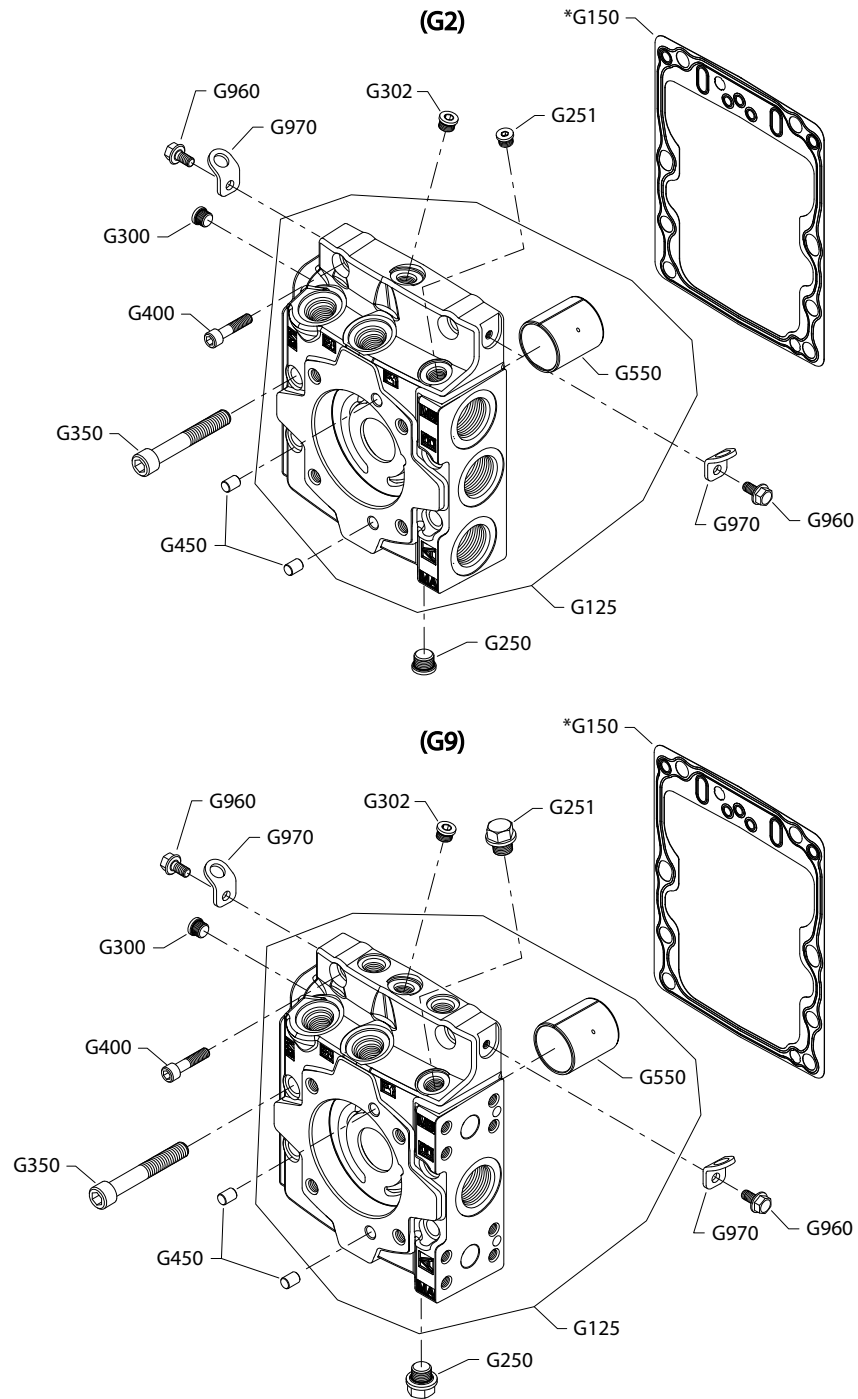
Order code: F3

G125	10-11		11013569	End cap assembly, CW, suction, HPRV only	1
G125	10-11		11013561	End cap assembly, CCW, suction, HPRV only	1
G150	10-11		141504	End cap gasket	1
G250	10-11		140644	Plug assembly	1
G251	10-11		140644	Plug assembly	1
G300	10-11		140644	Plug assembly	1
G302	10-11		140644	Plug assembly	1
G350	10-11		010850	Screw, M12 x 80	4
G400	10-11		290502	Screw, M12 x 40	2
G450	10-11		5000757	Dowel pin	2
G550	10-11		141593	Journal bearing	1
G960	10-11		508438	Screw, M6 x 12	2
G970	10-11		4800754	Lifting bracket	2

End cap

H1P 45/53 end cap G2, G9

Parts configuration



* Included in overhaul seal kit Q210

End cap

Order code: G2

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G125	10-11		11081215	End cap assembly, CW, remote, HPRV only	1
G125	10-11		11081214	End cap assembly, CCW, remote, HPRV only	1
G150	10-11		141504	End cap gasket	1
G250	10-11		140644	Plug assembly	1
G251	10-11		140644	Plug assembly	1
G300	10-11		140644	Plug assembly	1
G302	10-11		140644	Plug assembly	1
G350	10-11		010850	Screw, M12 x 80	4
G400	10-11		290502	Screw, M12 x 40	2
G450	10-11		5000757	Dowel pin	2
G550	10-11		141593	Journal bearing	1
G960	10-11		508438	Screw, M6 x 12	2
G970	10-11		4800754	Lifting bracket	2

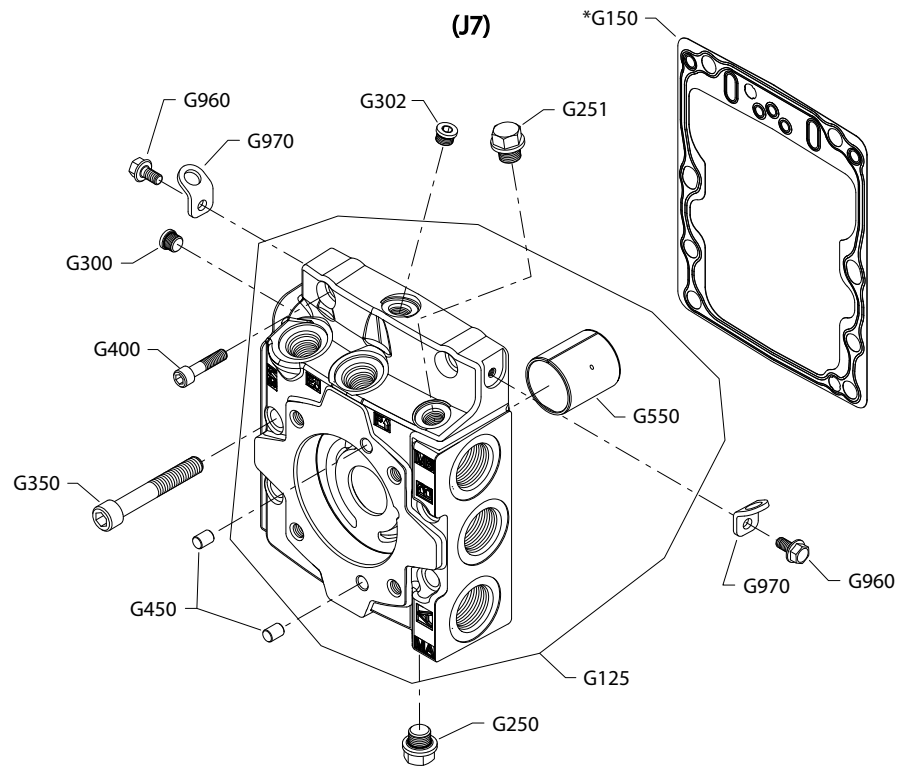
Order code: G9

G125	16-14		11013563	End cap assembly, CW, remote filtration	1
G150	16-14		141504	End cap gasket	1
G250	16-14		11147119	Plug assembly, special	1
G251	16-14		11147119	Plug assembly, special	1
G300	16-14		140644	Plug assembly	1
G302	16-14		140644	Plug assembly	1
G350	16-14		010850	Screw, M12 x 80	4
G400	16-14		290502	Screw, M12 x 40	2
G450	16-14		5000757	Dowel pin	2
G550	16-14		141593	Journal bearing	1
G960	16-14		508438	Screw, M6 x 12	2
G970	16-14		4800754	Lifting bracket	2

End cap

H1P 45/53 end cap J7

Parts configuration



* Included in overhaul seal kit Q210

End cap

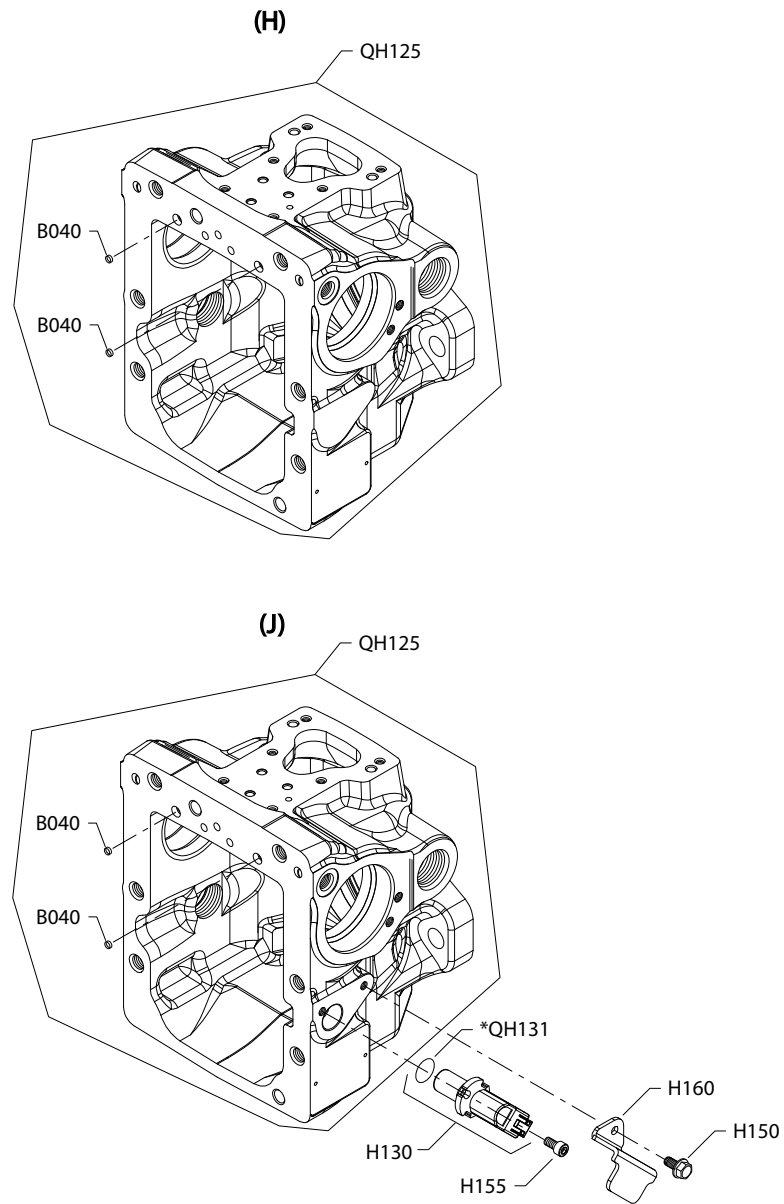
Order code: J7

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G125	16-31		11013566	End cap assembly, CW, 1 5/16, remote, HPRV only	1
G150	16-31		141504	End cap gasket	1
G250	16-31		11147119	Plug assembly, special	1
G251	16-31		11147119	Plug assembly, special	1
G300	16-31		140644	Plug assembly	1
G302	16-31		140644	Plug assembly	1
G350	16-31		010850	Screw, M12 x 80	4
G400	16-31		290502	Screw, M12 x 40	2
G450	16-31		5000757	Dowel pin	2
G550	16-31		141593	Journal bearing	1
G960	16-31		508438	Screw, M6 x 12	2
G970	16-31		4800754	Lifting bracket	2

Housing

H1P 45/53 housing H, J

Parts configuration



* Included in overhaul seal kit Q210

Housing

Order code: F

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B015	07-19		327007 (9005110-4400)	Plug assembly	2
B020	07-19		664524 (9005110-9000)	Plug assembly	2
B040	07-19		140967	Screen	2
QH125	07-19		11144976	Housing assembly	1

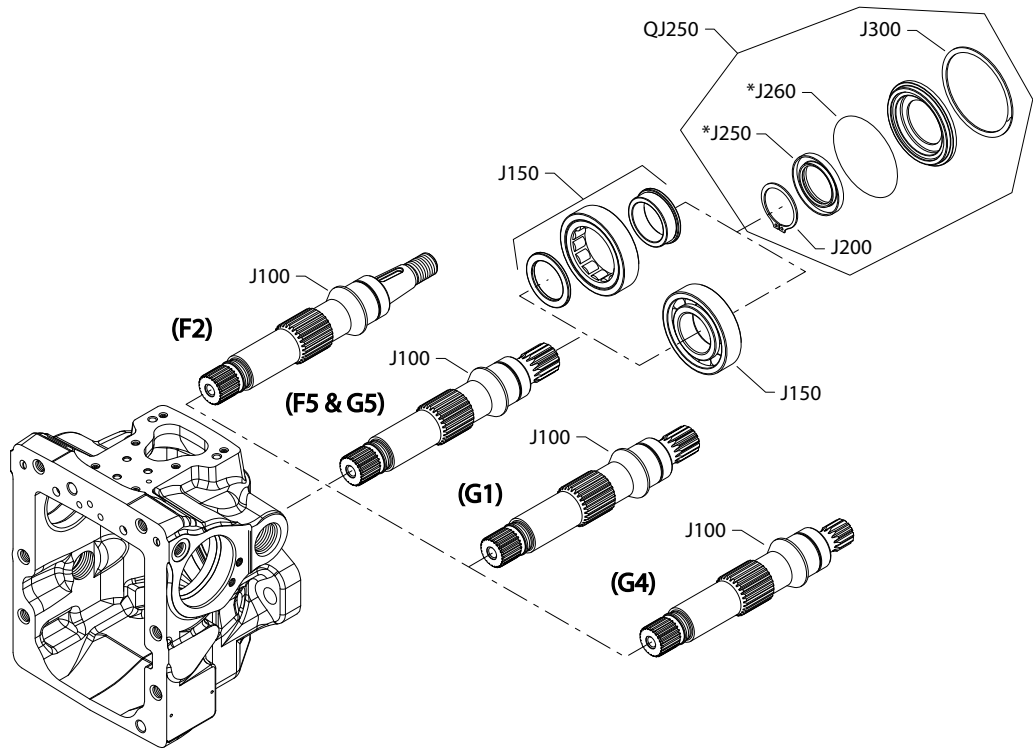
Order code: J

B015	07-19		327007 (9005110-4400)	Plug assembly	2
B020	07-19		664524 (9005110-9000)	Plug assembly	2
B040	10-04		140967	Screen	2
H130	10-04		149055	Speed sensor assembly	1
H150	10-04		508438	Screw, M6 x 12	1
H155	10-04		376749	Screw, M6 x 12	1
H160	10-04		11186383	Speed sensor protector	1
QH125	10-04		11144977	Housing assembly	1
QH131	10-04		11013397	O-ring	1

Shaft

H1P 45/53 shaft F2-G5

Parts configuration



* Included in overhaul seal kit Q210

Shaft

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
J200	07-19		9006300-0137	Retaining ring	1
J250	07-19		141936	Lip seal	1
J260	07-19		9004104-2310	O-ring	1
J300	07-19		9006200-0281	Retaining ring	1
QJ250	07-19		4510479	Shaft seal kit	1

Order code: F2

J100	07-19		141961	Shaft, tapered	1
J150	07-19		357616	Roller bearing	1

Order code: F5

J100	07-19		141954	Shaft, 15 tooth spline	1
J150	07-19		5000731	Ball bearing	1

Order code: G1

J100	07-19		141942	Shaft, 14 tooth spline	1
J150	07-19		357616	Roller bearing	1

Order code: G4

J100	07-19		141953	Shaft, 13 tooth spline	1
J150	07-19		357616	Roller bearing	1

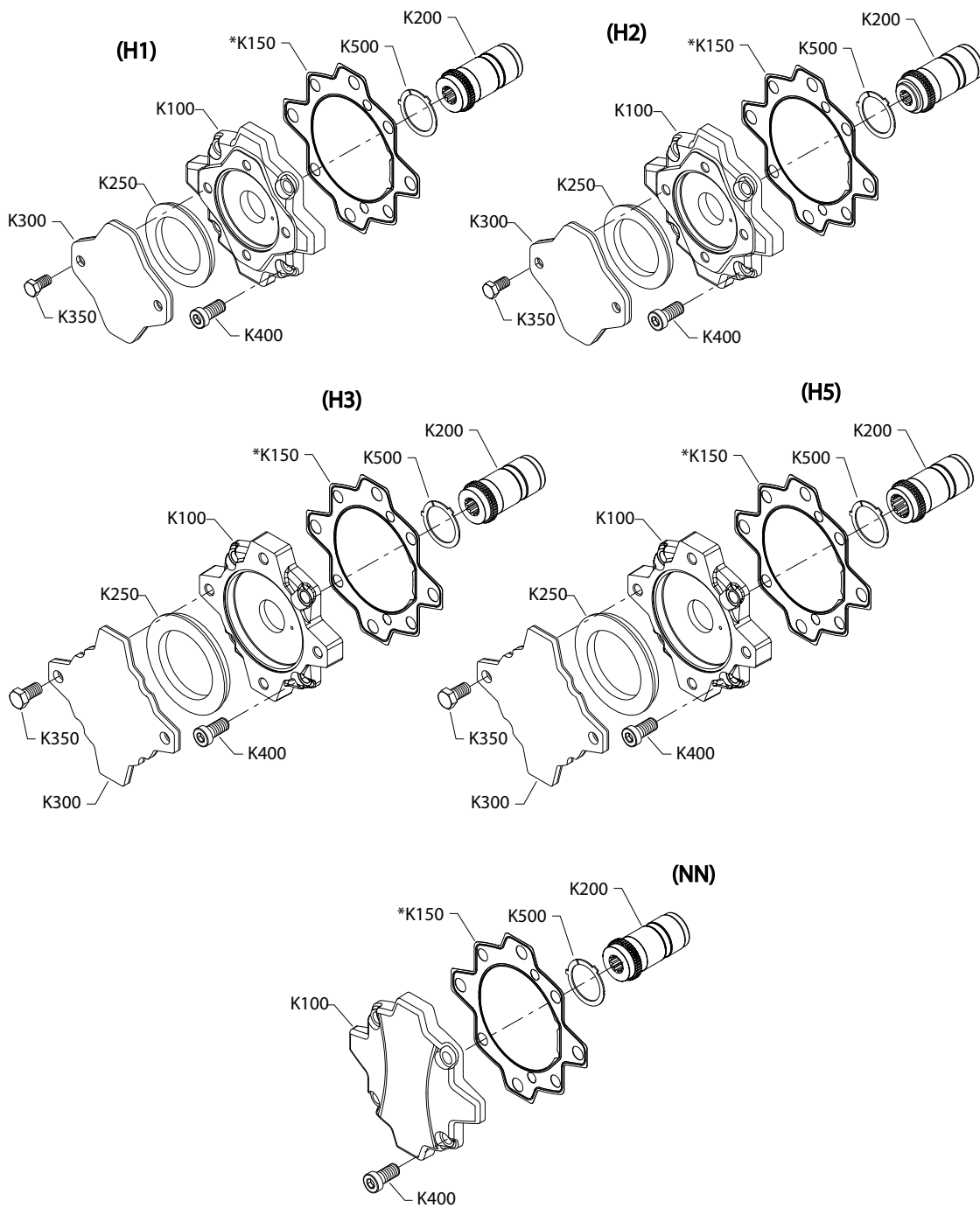
Order code: G5

J100	07-19		141954	Shaft, 15 tooth spline	1
J150	07-19		357616	Roller bearing	1

Auxiliary mounting

H1P 45/53 Aux mounting H1-NN

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

Order code: H1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K100	07-19		140927	Adapter flange, SAE A	1
K150	07-19		11029873	Adapter flange gasket (SB-2007-023 on page 138)	1
K200	07-19		141613	Coupling, 11 tooth	1
K250	07-19	08-32	4800432	A pad seal (SB-2008-038 on page 142)	1
K300	07-19		11017125	Flange cover, A pad (SB-2008-038 on page 142)	1
K350	07-19		370247	Screw	2
K400	07-19		11000819	Screw	4
K500	07-19		141105	Thrust plate	1

Order code: H2

K100	07-19		140927	Adapter flange, SAE A	1
K150	07-19		11029873	Adapter flange gasket (SB-2007-023 on page 138)	1
K200	07-19		141505	Coupling, 9 tooth	1
K250	07-19	08-32	4800432	A pad seal (SB-2008-038 on page 142)	1
K300	07-19		11017125	Flange cover, A pad (SB-2008-038 on page 142)	1
K350	07-19		370247	Screw	2
K400	07-19		11000819	Screw	4
K500	07-19		141105	Thrust plate	1

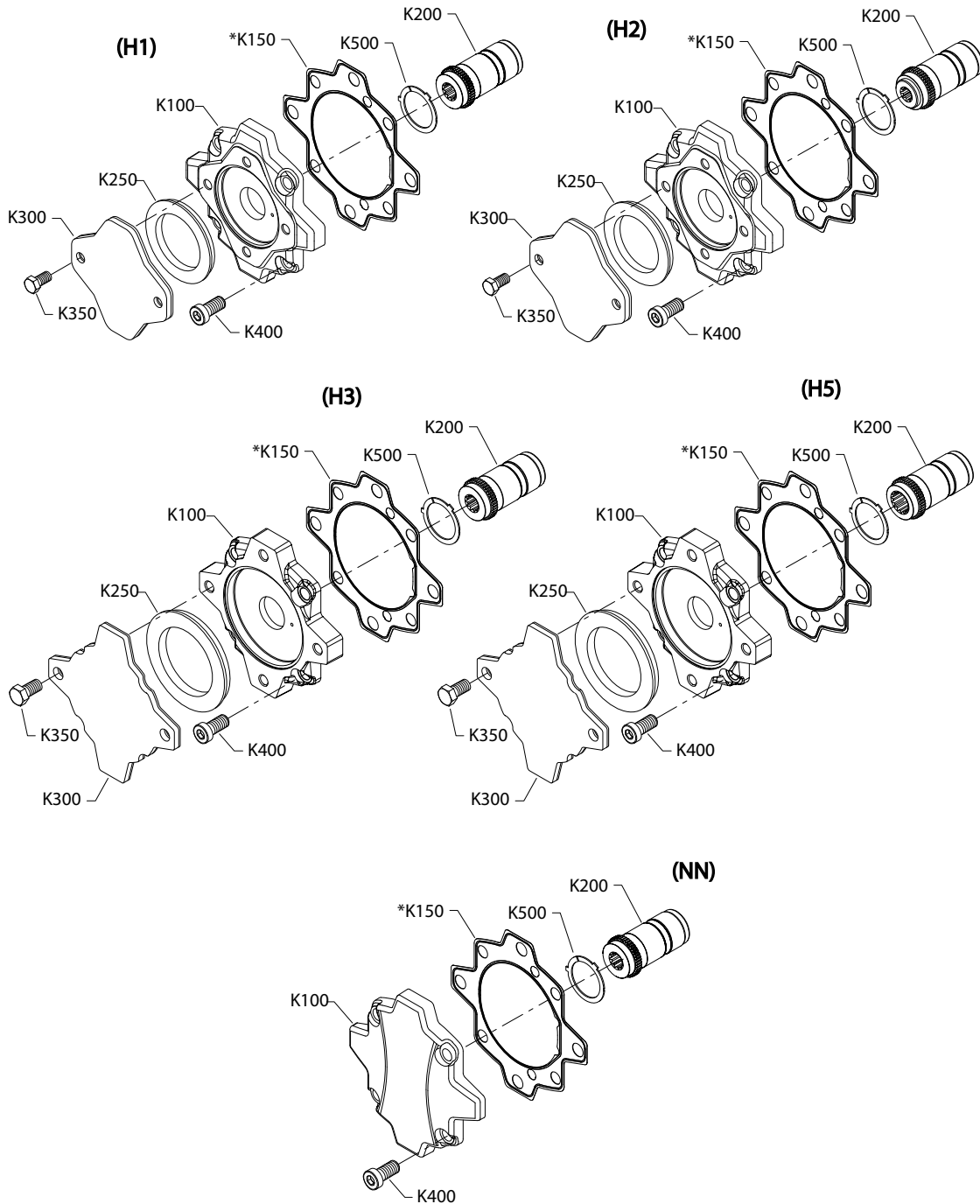
Order code: H3

K100	07-19		141240	Adapter flange, SAE B	1
K150	07-19		11029873	Adapter flange gasket (SB-2007-023 on page 138)	1
K200	07-19		141591	Coupling, 13 tooth	1
K250	07-19	08-32	8801061	B pad seal (SB-2008-038 on page 142)	1
K300	07-19		11023746	Flange cover, B pad (SB-2008-038 on page 142)	1
K350	07-19		5000760	Screw	2
K400	07-19		11000819	Screw	4
K500	07-19		141105	Thrust plate	1

[Parts continue to the next 2 pages.](#)

Auxiliary mounting

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

Order code: H5

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K100	07-19		141240	Adapter flange, SAE B	1
K150	07-19		11029873	Adapter flange gasket (SB-2007-023 on page 138)	1
K200	07-19		141592	Coupling, 15 tooth	1
K250	07-19	08-32	8801061	B pad seal (SB-2008-038 on page 142)	1
K300	07-19		11023746	Flange cover, B pad (SB-2008-038 on page 142)	1
K350	07-19		5000760	Screw	2
K400	07-19		11000819	Screw	4
K500	07-19		141105	Thrust plate	1

Order code: NN

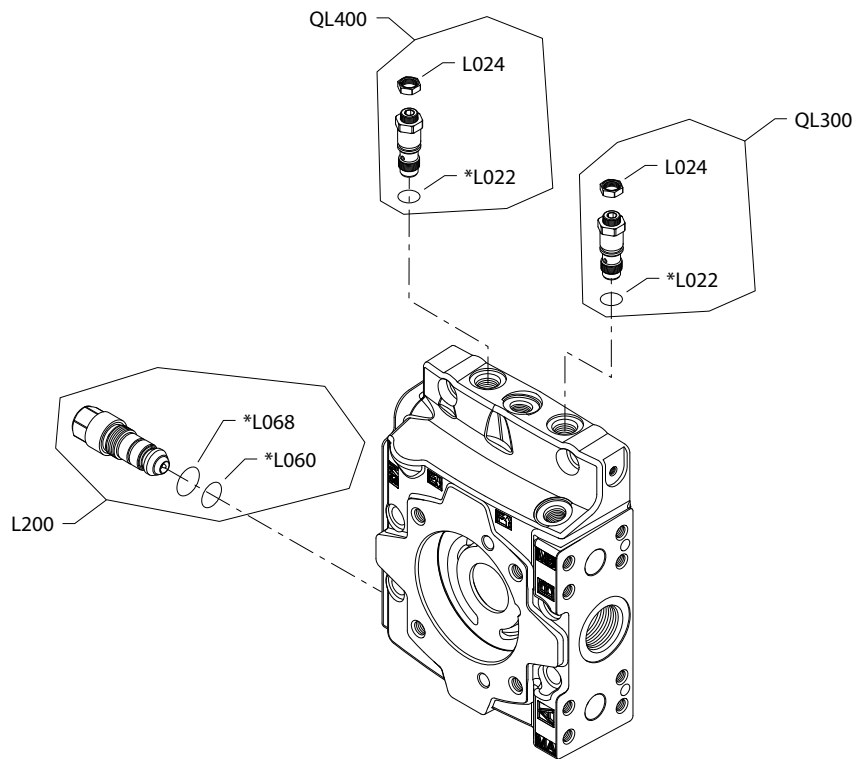
K100	07-19		141249	Adapter flange, no pad	1
K150	07-19		11029873	Adapter flange gasket (SB-2007-023 on page 138)	1
K200	07-19		141591	Coupling, 13 tooth	1
K400	07-19		11000819	Screw	4
K500	07-19		141105	Thrust plate	1

High pressure setting

Port A

H1P HPS F01-F07

Parts configuration



Generic end cap shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L022	10-48		041152	O-ring	1
L024	13-14		11054668	Nut	1
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
QL300	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: F01

L100	13-14		11049123	High pressure relief valve, 300 bar	1
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Order code: F02

L100	13-14		11049125	High pressure relief valve, 300 bar	1
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Order code: F03

L100	13-14		11049127	High pressure relief valve, 350 bar	1
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Order code: F04

L100	13-14		11049129	High pressure relief valve, 400 bar	1
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Order code: F05

L100	13-14		11049125	High pressure relief valve, 300 bar	1
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Order code: F06

L100	13-14		11049123	High pressure relief valve, 250 bar	1
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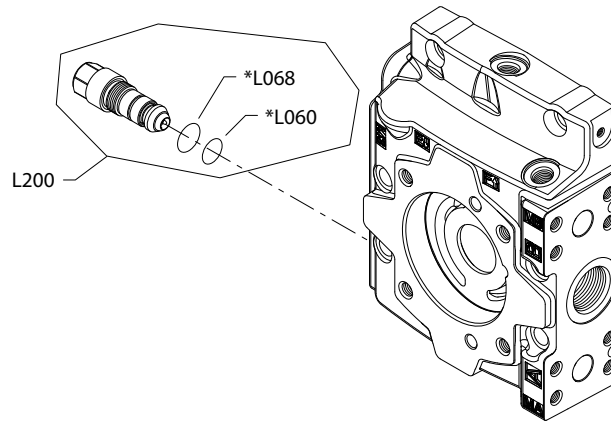
Order code: F07

L100	13-14		11049125	High pressure relief valve, 300 bar	1
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High pressure setting

H1P 45/53 HPS J18-J48

Parts configuration



Generic end cap shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1

Order code: J18

L100	10-34		11049120	High pressure relief valve, 180 bar	1
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Order code: J20

L100	10-34		11049121	High pressure relief valve, 200 bar	1
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Order code: J23

L100	10-34		11049122	High pressure relief valve, 230 bar	1
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Order code: J25

L100	10-34		11049123	High pressure relief valve, 250 bar	1
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Order code: J28

L100	10-34		11049124	High pressure relief valve, 280 bar	1
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Order code: J30

L100	10-48		11049125	High pressure relief valve, 300 bar	1
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Order code: J33

L100	10-34		11049126	High pressure relief valve, 330 bar	1
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Order code: J35

L100	10-34		11049127	High pressure relief valve, 350 bar	1
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Order code: J38

L100	10-34		11049128	High pressure relief valve, 380 bar	1
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Order code: J40

L100	10-34		11049129	High pressure relief valve, 400 bar	1
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Order code: J42

L100	10-34		11049130	High pressure relief valve, 420 bar	1
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Order code: J45

L100	10-34		11049131	High pressure relief valve, 450 bar	1
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Order code: J48

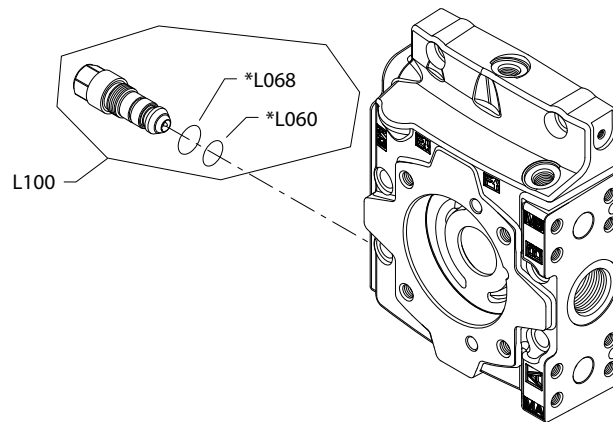
L100	10-34		11049132	High pressure relief valve, 480 bar	1
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High pressure setting

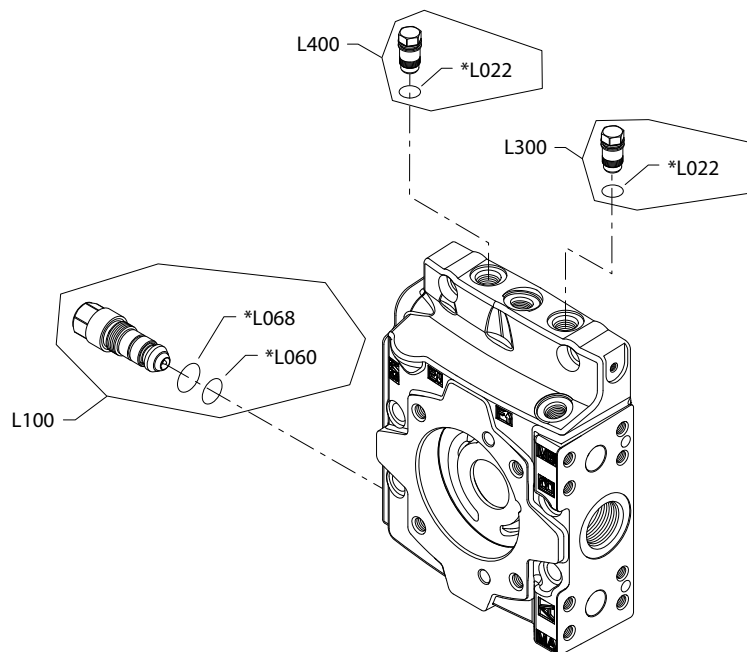
H1P 45/53 HPS K18-K48

Parts configuration

(K18-K48 prior to 15-04)



(K18-K48 after 15-04)



Generic end caps shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
L022	15-11		041152	O-ring	1
L300	15-11		11002291	Pressure limiter plug assembly CCW rotation pump	1
L400	15-11		11002291	Pressure limiter plug assembly CW rotation pump	1

Order code: K18

L100	07-19	15-03	11049120	High pressure relief valve, 180 bar (SB-2009-007)	1
L100	15-11		11049120	High pressure relief valve, 180 bar	1

Order code: K20

L100	07-19	15-03	11049121	High pressure relief valve, 200 bar (SB-2009-007)	1
L100	15-11		11049121	High pressure relief valve, 200 bar	1

Order code: K23

L100	07-19	15-03	11049122	High pressure relief valve, 230 bar (SB-2009-007)	1
L100	15-11		11049122	High pressure relief valve, 230 bar	1

Order code: K25

L100	07-19	15-03	11049123	High pressure relief valve, 250 bar (SB-2009-007)	1
L100	15-11		11049123	High pressure relief valve, 250 bar	1

Order code: K28

L100	07-19	15-03	11049124	High pressure relief valve, 280 bar (SB-2009-007)	1
L100	15-11		11049124	High pressure relief valve, 280 bar	1

Order code: K30

L100	15-11		11049125	High pressure relief valve, 300 bar	1
L100	07-19	15-03	11049125	High pressure relief valve, 300 bar (SB-2009-007)	1

Order code: K33

L100	15-11		11049126	High pressure relief valve, 330 bar	1
L100	07-19	15-03	11049126	High pressure relief valve, 330 bar (SB-2009-007)	1

Order code: L35

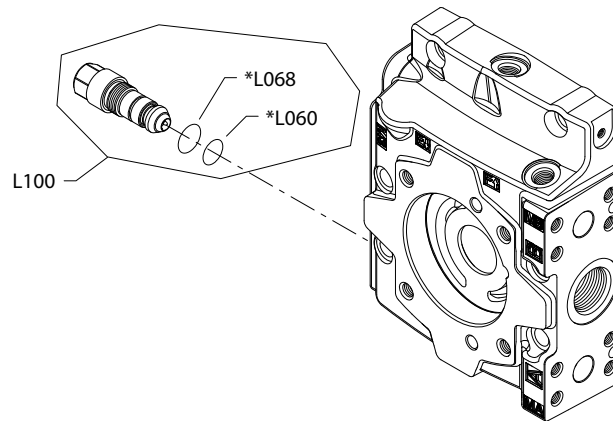
L100	15-11		11049127	High pressure relief valve, 350 bar	1
L100	07-19	15-03	11049127	High pressure relief valve, 350 bar (SB-2009-007)	1

[Parts continue to the next 2 pages.](#)

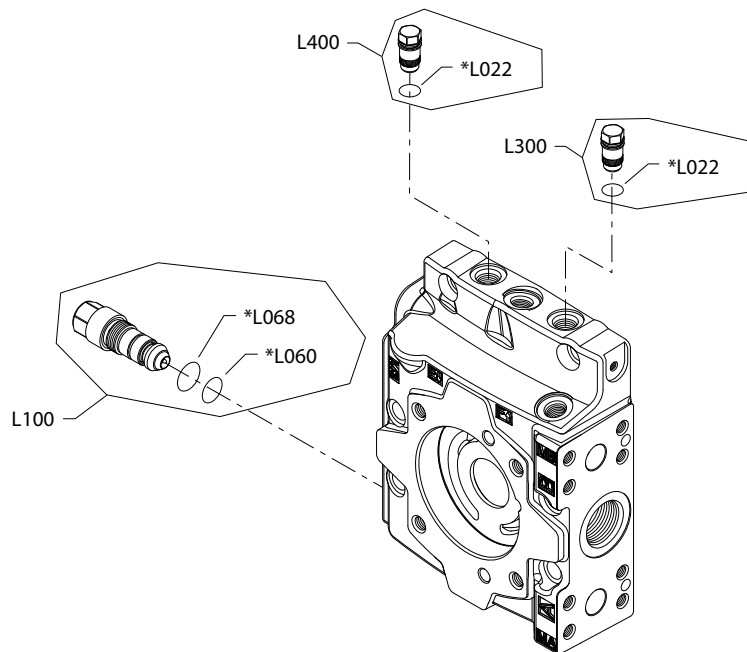
High pressure setting

Parts configuration

(K18-K48 prior to 15-04)



(K18-K48 after 15-04)



Generic end caps shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
L022	15-11		041152	O-ring	1
L300	15-11		11002291	Pressure limiter plug assembly CCW rotation pump	1
L400	15-11		11002291	Pressure limiter plug assembly CW rotation pump	1

Order code: K38

L100	15-11		11049128	High pressure relief valve, 380 bar	1
L100	07-19	15-03	11049128	High pressure relief valve, 380 bar (SB-2009-007)	1

Order code: K40

L100	15-11		11049129	High pressure relief valve, 400 bar	1
L100	07-19	15-03	11049129	High pressure relief valve, 400 bar (SB-2009-007)	1

Order code: K42

L100	15-11		11049130	High pressure relief valve, 420 bar	1
L100	07-19	15-03	11049130	High pressure relief valve, 420 bar (SB-2009-007)	1

Order code: K45

L100	15-11		11049131	High pressure relief valve, 450 bar	1
L100	07-19	15-03	11049131	High pressure relief valve, 450 bar (SB-2009-007)	1

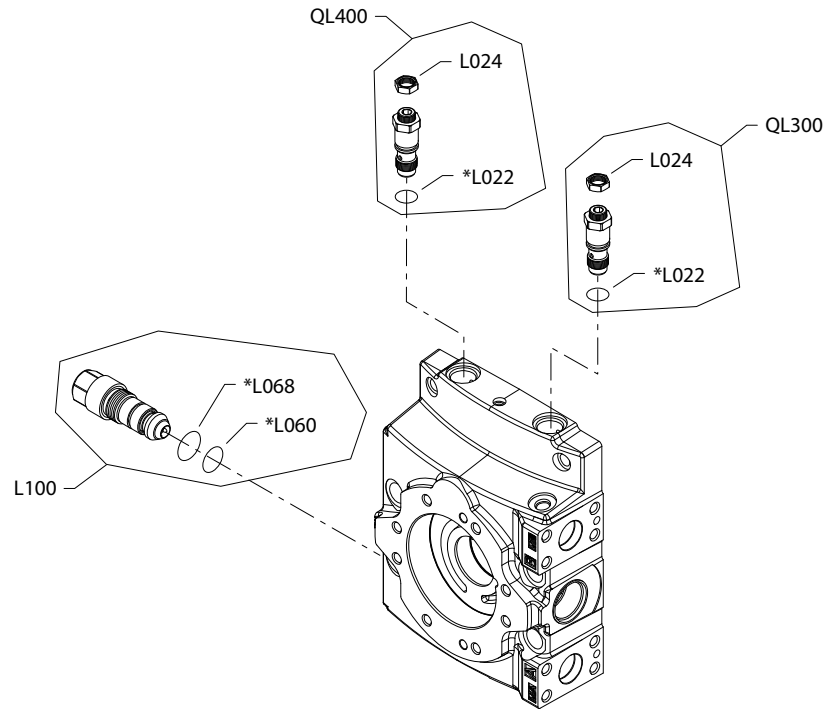
Order code: K48

L100	15-11		11049132	High pressure relief valve, 480 bar	1
L100	07-19	15-03	11049132	High pressure relief valve, 480 bar (SB-2009-007)	1

High pressure setting

H1P HPS L15-L48

Parts configuration



Generic end cap shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L022	10-48		041152	O-ring	1
L024	10-48		11054668	Nut	1
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L15

L100	10-48		11049121	High pressure relief valve, 200 bar	1
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Order code: L18, L20

L100	10-48		11049123	High pressure relief valve, 250 bar	1
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Order code: L23

L100	10-48		11049124	High pressure relief valve, 280 bar	1
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Order code: L25

L100	10-48		11049125	High pressure relief valve, 300 bar	1
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Order code: L28

L100	10-48		11049126	High pressure relief valve, 330 bar	1
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Order code: L30

L100	10-48		11049127	High pressure relief valve, 350 bar	1
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Order code: L33

L100	10-48		11049128	High pressure relief valve, 380 bar	1
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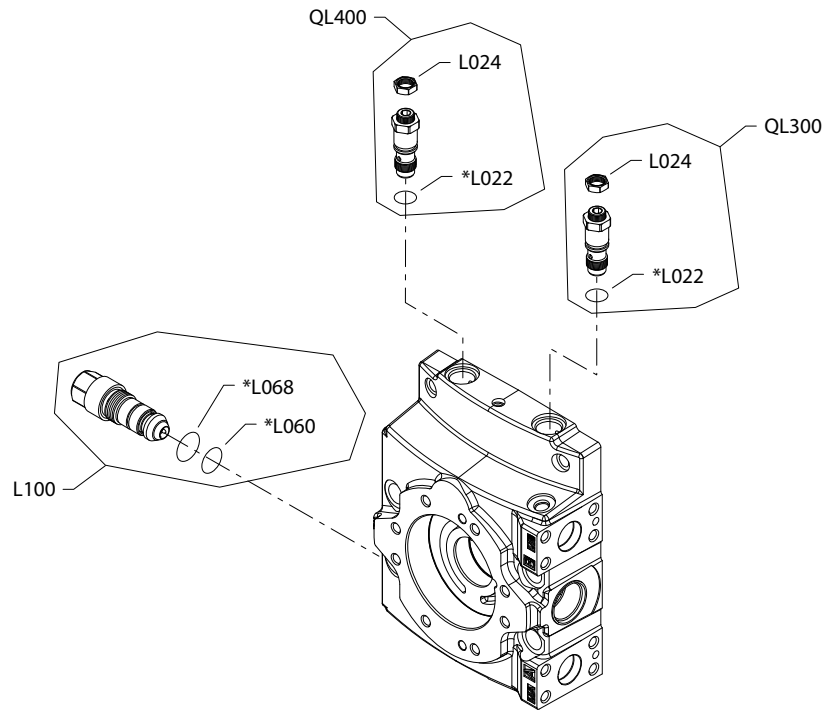
Order code: L35

L100	10-48		11049129	High pressure relief valve, 400 bar	1
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[Parts continue to the next 2 pages.](#)

High pressure setting

Parts configuration



Generic end cap shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L022	10-48		041152	O-ring	1
L024	10-48		11054668	Nut	1
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L38

L100	10-48		11049130	High pressure relief valve, 420 bar	1
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Order code: L40, L41, L42

L100	10-48		11049131	High pressure relief valve, 400 bar	1
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Order code: L43, L44, L45

L100	10-48		11049132	High pressure relief valve, 480 bar	1
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Order code: L46, L47, L48

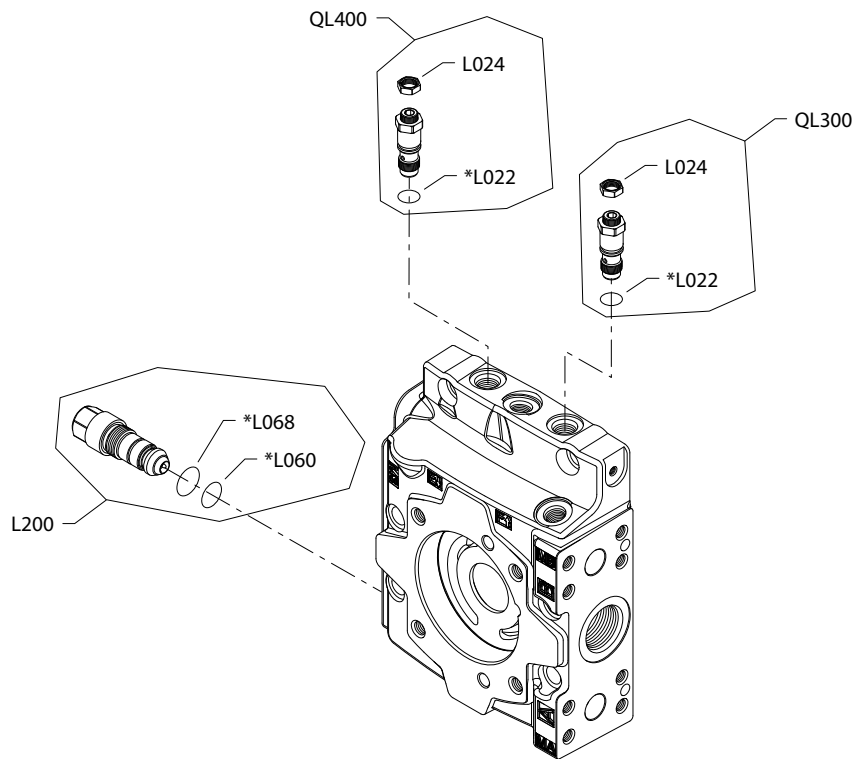
L100	07-19		11049133	High pressure relief valve, 510 bar (SB-2009-007 on page 145)	1
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High pressure setting

Port B

H1P HPS F01-F07

Parts configuration



Generic end cap shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L022	10-48		041152	O-ring	1
L024	13-14		11054668	Nut	1
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
QL300	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: F01

L200	13-14		11049123	High pressure relief valve, 300 bar	1
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Order code: F02

L200	13-14		11049125	High pressure relief valve, 300 bar	1
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Order code: F03

L200	13-14		11049127	High pressure relief valve, 350 bar	1
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Order code: F04

L200	13-14		11049129	High pressure relief valve, 400 bar	1
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Order code: F05

L200	13-14		11049125	High pressure relief valve, 300 bar	1
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Order code: F06

L200	13-14		11049123	High pressure relief valve, 250 bar	1
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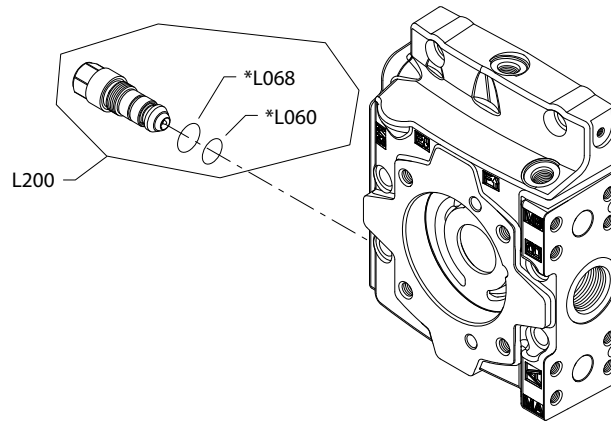
Order code: F07

L200	13-14		11049125	High pressure relief valve, 300 bar	1
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High pressure setting

H1P 45/53 HPS J18-J48

Parts configuration



Generic end cap shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1

Order code: J18

L200	10-34		11049120	High pressure relief valve, 180 bar	1
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Order code: J20

L200	10-34		11049121	High pressure relief valve, 200 bar	1
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Order code: J23

L200	10-34		11049122	High pressure relief valve, 230 bar	1
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Order code: J25

L200	10-34		11049123	High pressure relief valve, 250 bar	1
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Order code: J28

L200	10-34		11049124	High pressure relief valve, 280 bar	1
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Order code: J30

L200	10-48		11049125	High pressure relief valve, 300 bar	1
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Order code: J33

L200	10-34		11049126	High pressure relief valve, 330 bar	1
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Order code: J35

L200	10-34		11049127	High pressure relief valve, 350 bar	1
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Order code: J38

L200	10-34		11049128	High pressure relief valve, 380 bar	1
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Order code: J40

L200	10-34		11049129	High pressure relief valve, 400 bar	1
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Order code: J42

L200	10-34		11049130	High pressure relief valve, 420 bar	1
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Order code: J45

L200	10-34		11049131	High pressure relief valve, 450 bar	1
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Order code: J48

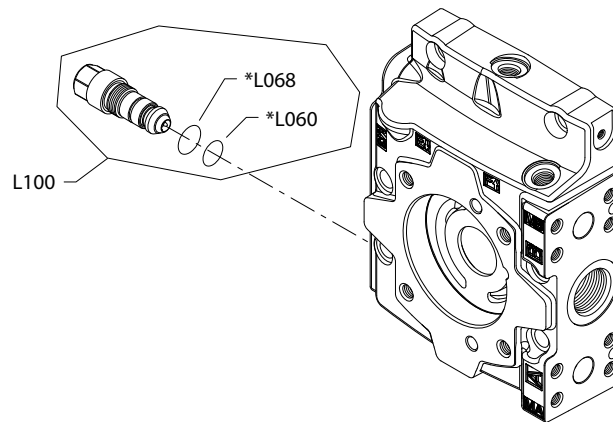
L200	10-34		11049132	High pressure relief valve, 480 bar	1
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High pressure setting

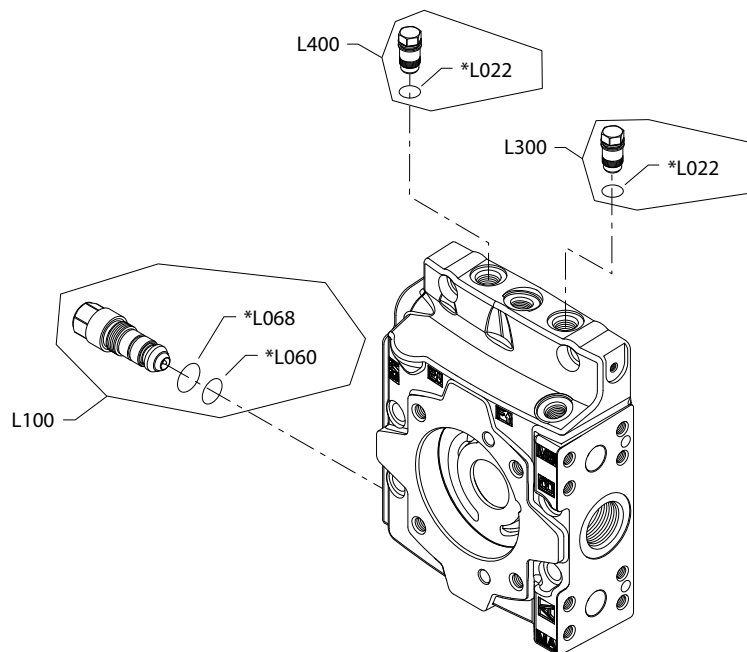
H1P 45/53 HPS K18-K48

Parts configuration

(K18-K48 prior to 15-04)



(K18-K48 after 15-04)



Generic end caps shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
L022	15-11		041152	O-ring	1
L300	15-11		11002291	Pressure limiter plug assembly CCW rotation pump	1
L400	15-11		11002291	Pressure limiter plug assembly CW rotation pump	1

Order code: K18

L200	07-19	15-03	11049120	High pressure relief valve, 180 bar (SB-2009-007)	1
L200	15-11		11049120	High pressure relief valve, 180 bar	1

Order code: K20

L200	07-19	15-03	11049121	High pressure relief valve, 200 bar (SB-2009-007)	1
L200	15-11		11049121	High pressure relief valve, 200 bar	1

Order code: K23

L200	07-19	15-03	11049122	High pressure relief valve, 230 bar (SB-2009-007)	1
L200	15-11		11049122	High pressure relief valve, 230 bar	1

Order code: K25

L200	07-19	15-03	11049123	High pressure relief valve, 250 bar (SB-2009-007)	1
L200	15-11		11049123	High pressure relief valve, 250 bar	1

Order code: K28

L200	07-19	15-03	11049124	High pressure relief valve, 280 bar (SB-2009-007)	1
L200	15-11		11049124	High pressure relief valve, 280 bar	1

Order code: K30

L200	15-11		11049125	High pressure relief valve, 300 bar	1
L200	07-19	15-03	11049125	High pressure relief valve, 300 bar (SB-2009-007)	1

Order code: K33

L200	15-11		11049126	High pressure relief valve, 330 bar	1
L200	07-19	15-03	11049126	High pressure relief valve, 330 bar (SB-2009-007)	1

Order code: L35

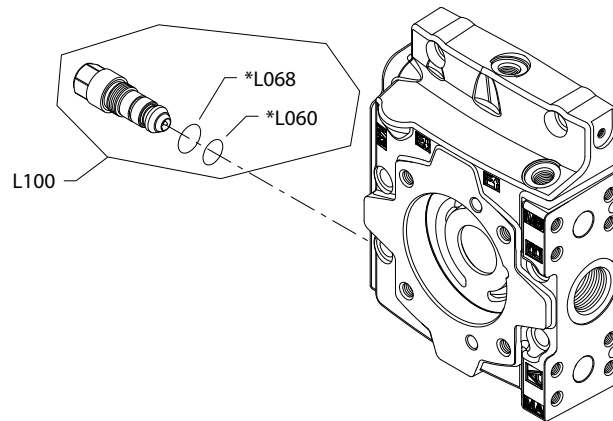
L200	15-11		11049127	High pressure relief valve, 350 bar	1
L200	07-19	15-03	11049127	High pressure relief valve, 350 bar (SB-2009-007)	1

[Parts continue to the next 2 pages.](#)

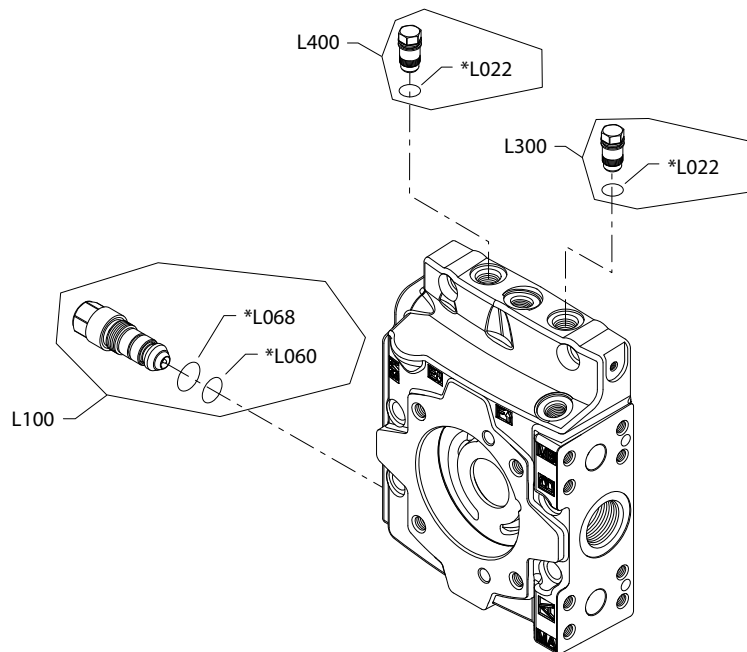
High pressure setting

Parts configuration

(K18-K48 prior to 15-04)



(K18-K48 after 15-04)



Generic end caps shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
L022	15-11		041152	O-ring	1
L300	15-11		11002291	Pressure limiter plug assembly CCW rotation pump	1
L400	15-11		11002291	Pressure limiter plug assembly CW rotation pump	1

Order code: K38

L200	15-11		11049128	High pressure relief valve, 380 bar	1
L200	07-19	15-03	11049128	High pressure relief valve, 380 bar (SB-2009-007)	1

Order code: K40

L200	15-11		11049129	High pressure relief valve, 400 bar	1
L200	07-19	15-03	11049129	High pressure relief valve, 400 bar (SB-2009-007)	1

Order code: K42

L200	15-11		11049130	High pressure relief valve, 420 bar	1
L200	07-19	15-03	11049130	High pressure relief valve, 420 bar (SB-2009-007)	1

Order code: K45

L200	15-11		11049131	High pressure relief valve, 450 bar	1
L200	07-19	15-03	11049131	High pressure relief valve, 450 bar (SB-2009-007)	1

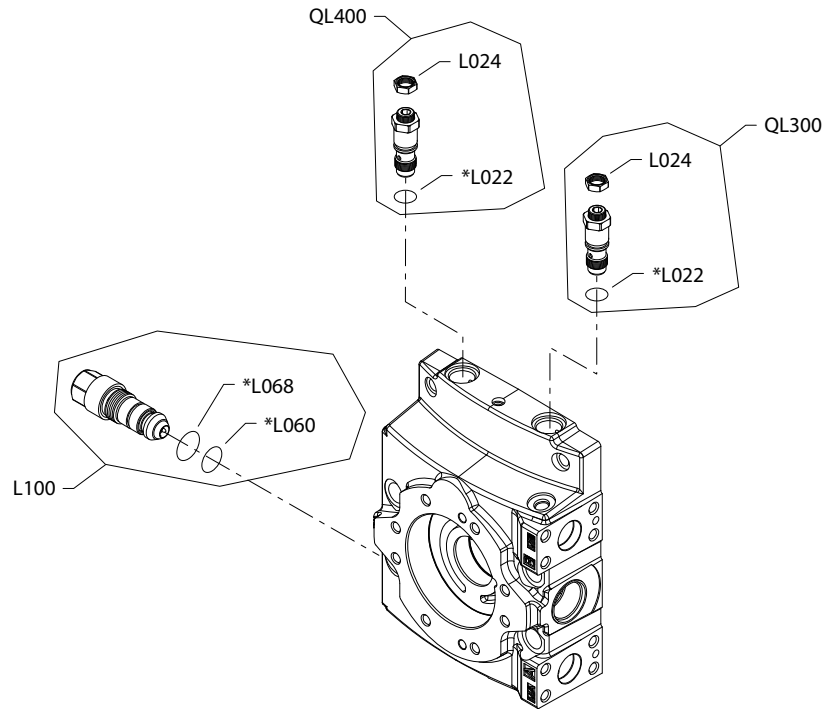
Order code: K48

L200	15-11		11049132	High pressure relief valve, 480 bar	1
L200	07-19	15-03	11049132	High pressure relief valve, 480 bar (SB-2009-007)	1

High pressure setting

H1P HPS L15-L48

Parts configuration



Generic end cap shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L022	10-48		041152	O-ring	1
L024	10-48		11054668	Nut	1
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L15

L200	10-48		11049121	High pressure relief valve, 200 bar	1
------	-------	--	----------	-------------------------------------	---

Order code: L18, L20

L200	10-48		11049123	High pressure relief valve, 250 bar	1
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Order code: L23

L200	10-48		11049124	High pressure relief valve, 280 bar	1
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Order code: L25

L200	10-48		11049125	High pressure relief valve, 300 bar	1
------	-------	--	----------	-------------------------------------	---

Order code: L28

L200	10-48		11049126	High pressure relief valve, 330 bar	1
------	-------	--	----------	-------------------------------------	---

Order code: L30

L200	10-48		11049127	High pressure relief valve, 350 bar	1
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Order code: L33

L200	10-48		11049128	High pressure relief valve, 380 bar	1
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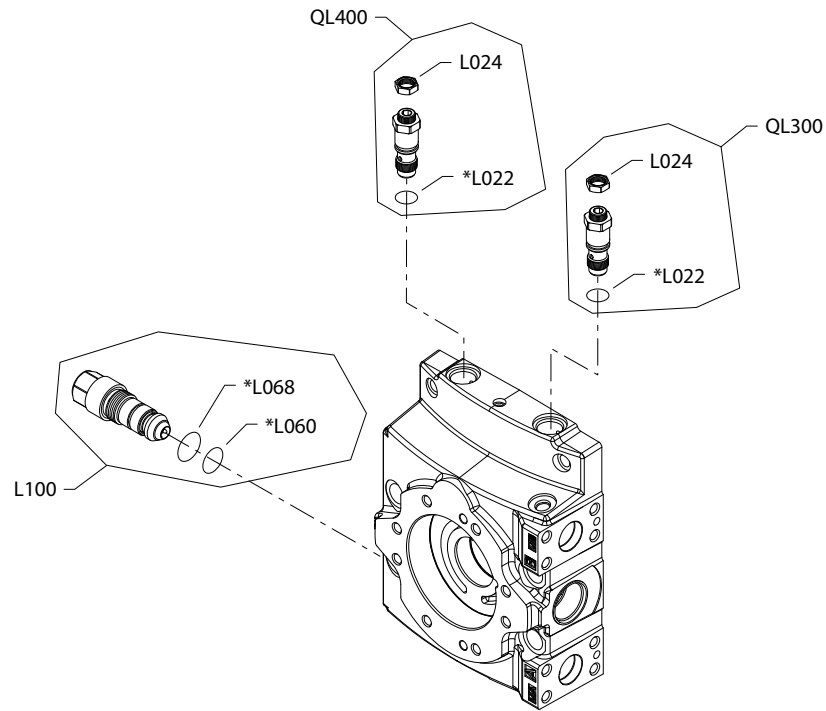
Order code: L35

L200	10-48		11049129	High pressure relief valve, 400 bar	1
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[Parts continue to the next 2 pages.](#)

High pressure setting

Parts configuration



Generic end cap shown

* Included in overhaul seal kit Q210

High pressure setting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L022	10-48		041152	O-ring	1
L024	10-48		11054668	Nut	1
L060	10-48		141109	O-ring	1
L068	10-48		11052215	O-ring	1
QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L38

L200	10-48		11049130	High pressure relief valve, 420 bar	1
------	-------	--	----------	-------------------------------------	---

Order code: L40, L41, L42

L200	10-48		11049131	High pressure relief valve, 400 bar	1
------	-------	--	----------	-------------------------------------	---

Order code: L43, L44, L45

L200	10-48		11049132	High pressure relief valve, 480 bar	1
------	-------	--	----------	-------------------------------------	---

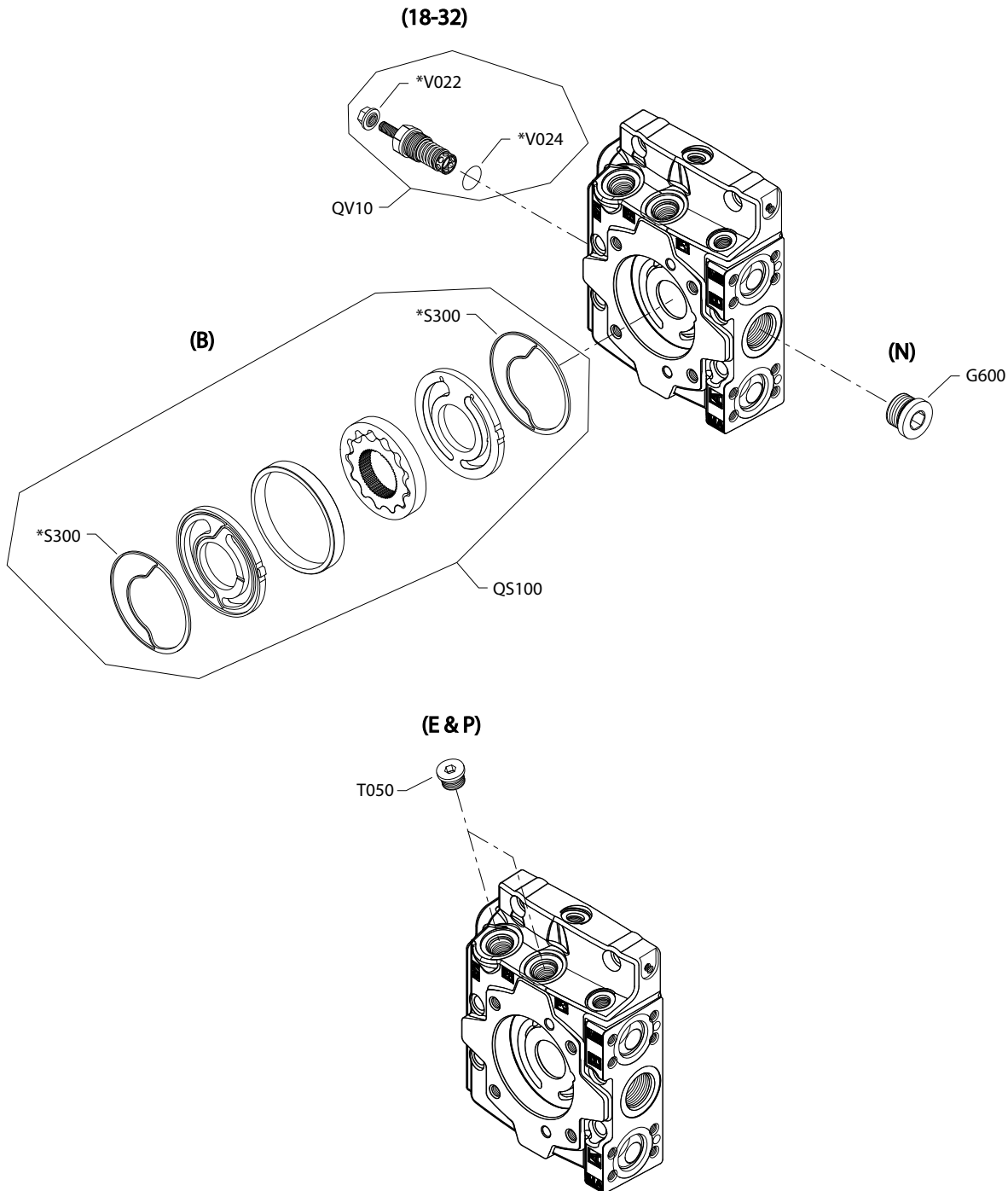
Order code: L46, L47, L48

L200	07-19		11049133	High pressure relief valve, 510 bar (SB-2009-007 on page 145)	1
------	-------	--	----------	--	---

Charge pump

H1P 45/53 charge pump, charge pressure relief, filtration

Parts configuration



Generic end caps shown

* Included in overhaul seal kit Q210

Charge pump

Charge pump

Order code: B

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
QS100	07-19		11016545	Charge pump kit, 12 cc	1
S300	07-19		11126777	Seal ring (SB-2009-028 on page 147 & SB-2013-019 on page 154)	2

Order code: N

G600	07-19		320002 (9005110-9200)	Plug assembly	1
------	-------	--	-----------------------	---------------	---

Charge pressure relief

Order code: 18-32

QV10	07-19		11017127	Charge relief valve kit	1
V022	07-19		612291 (9003508-0008)	Seal nut	1
V024	07-19		001149 (9004201-6200)	O-ring	1

Filtration

Order code: E

T050	07-19		315325 (9005110-8700)	Plug assembly	2
------	-------	--	-----------------------	---------------	---

Order code: L

None					
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Order code: P

T050	07-19		315325 (9005110-8700)	Plug assembly	2
------	-------	--	-----------------------	---------------	---

Overhaul seal kit

H1P 45/53 seal kit

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
Q210	07-19		11178402	Overhaul seal kit	1
D060	06-01		612291 (9003508-0008)	Seal nut, M8 x 1	1
D150	07-19		11173377	Control gasket	1
D611	07-19		11066774	O-ring, 10.82 x 1.78, viton	2
E020	07-19		5000732	O-ring, 45.47 x 1.78, nitrile	2
E025	07-19		11028034	Piston seal ring	2
E250	07-19		5000709	O-ring, 56.82 x 2.62, viton	2
E500	07-19		505412 (9003509-0008)	Seal nut, M8 x 1.25, coarse thread	1
E550	07-19		505412 (9003509-0008)	Seal nut, M8 x 1.25, coarse thread	1
G150	07-19		141504	End cap gasket	1
J250	07-19		141936	Lip seal	1
J260	07-19		9004104-2310	O-ring, 66.27 x 3.53, viton	1
K150	07-19		11029873	Adapter flange gasket	1
L022	07-19		041152	O-ring, 12.00 x 2.00, nitrile	2
L060	07-19		141109	O-ring, 16.00 x 1.50, viton	2
L068	07-19		11052215	O-ring, 19.30 x 2.46, viton	2
QD26	07-19		11001952	O-ring, 18.00 x 1.50, viton	2
QD81	10-27		11059551	O-ring, 9.50 x 1.78, viton	1
QD81	10-27		11152257	O-ring, 9.00 x 1.80, nitrile	1
QD751	10-27		001131 (9004201-5000)	O-ring, 16.36 x 2.21, nitrile	1
QH131	10-04		11013397	O-ring, 15.60 x 1.78, viton	1
S300	07-19		11126777	Ring seal	2
V022	07-19		612291 (9003508-0008)	Seal nut, M8 x 1, fine thread	1
V024	07-19		001149 (9004201-6200)	O-ring, 19.18 x 2.46, nitrile	1

Service bulletin

SB-2007-004

Products affected

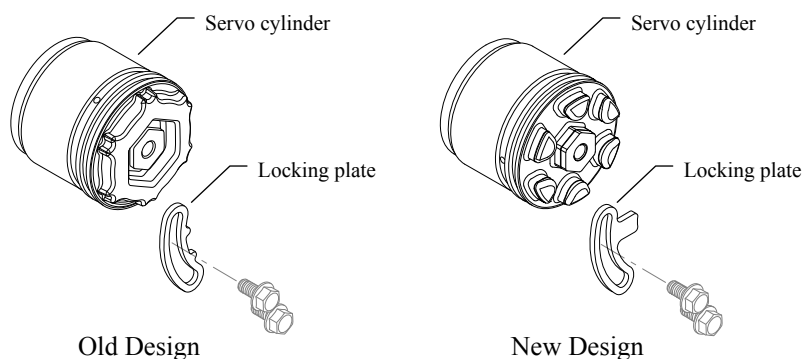
H1 45 and 53cc single and tandem pumps

Subject

Servo cylinder and locking plate change

Description

As a product improvement, Danfoss has changed the servo cylinder and locking plate. The old servo cylinder locking plate wasn't strong enough to hold the servo cylinder while tightening the seal nut on the displacement limiters. The new servo cylinder has a larger locking area to allow for a larger locking plate tab for added strength. The old servo cylinders are obsolete and no longer available for service. The old locking plate will remain available for repair. The new and old designs are interchangeable.



Models affected

All H1 45 and 53cc single and tandem pumps.

Serial numbers

This change became effective at serial number A-07-23-xxxxx for adjustable servo cylinders and at serial number A-07-30-xxxxx for non-adjustable servo cylinders.

Part numbers affected

Description	Old part number	New part number
Servo cylinder, non-adjustable	142040	11013883
Servo cylinder, adjustable	142041	11015561
Locking plate	141940	11013910

Parts disposition

Interchangeable

Service bulletin

SB-2007-023

Products affected

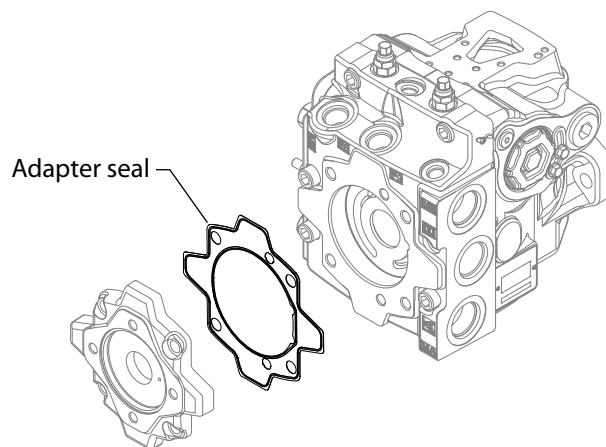
H1 45 and 53cc single and tandem pumps

Subject

Adapter pad seal

Description

As a product improvement, Danfoss has changed the adapter seal on H1 45 and 53cc pumps. The new seal helps protect the adapter pad area from rust. The new and old adapter seal are interchangeable. The old adapter seal is obsolete and no longer available for service.



Models affected

All H1 45cc single pumps.

Serial numbers

This change became effective at serial number A-08-11-xxxx.

Part numbers affected

Description	Old part number	New part number
Adapter pad seal	140929	11029873

Parts disposition

Interchangeable

Service bulletin

SB-2007-026

Products affected

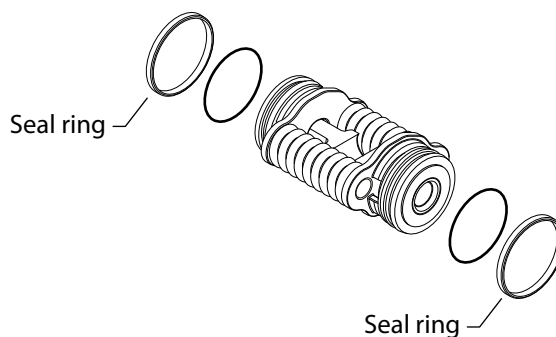
H1 45 and 53cc single and tandem pumps

Subject

Servo piston seal ring

Description

As a product improvement, Danfoss has changed the servo piston seal rings. The new and old seal rings are interchangeable. The old servo piston seal ring and assembly are obsolete and no longer available for service. A new servo piston assembly has been created.



Models affected

All H1 45 and 53cc single and tandem pumps.

Serial numbers

This change became effective at serial number A-07-44-xxxxx.

Part numbers affected

Description	Old part number	New part number
Servo piston	141965	11016260
Nested servo piston	141730	11016261
Seal ring	141962	11028034

Parts disposition

Interchangeable

Service bulletin

SB-2007-033

Products affected

H1 pumps

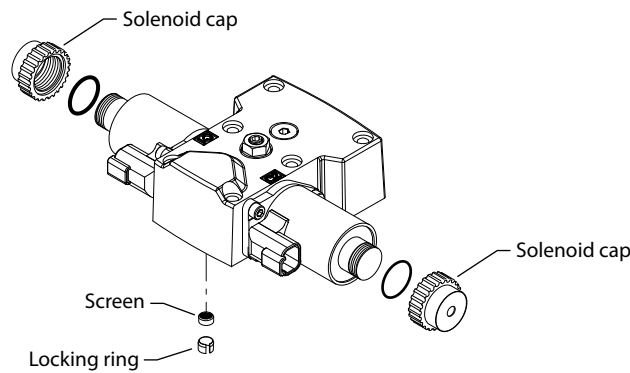
Subject

Control solenoid nut and screen locking ring

Description

As a product improvement, Danfoss changed the design of the EDC solenoids to avoid potential corrosion by changing the nut that holds the coil on the solenoid tube. The new nut has a closed cap design, which eliminates the potential of moisture to ingress past the solenoid tube threads. The new EDC and nut are functionally and physically interchangeable in all applications

A locking ring was also added to the controls. The locking ring will prevent the screen from falling out of the control during installation to the pump. The new locking ring can not be used in older style controls as the port is not drilled deep enough.



Models affected

All H1 pumps.

Serial numbers

Locking ring and solenoid nut.

Part numbers affected

Locking ring and solenoid nut

Option	45/53cc	78cc	147/165cc
A2	08-11-xxxxx	07-50-xxxxx	07-50-xxxxx
A3	08-11-xxxxx	07-50-xxxxx	07-50-xxxxx
A6	08-11-xxxxx	07-50-xxxxx	07-50-xxxxx
C1		07-39-xxxxx	07-39-xxxxx

Locking ring only

Option	45/53cc	78cc	147/165cc
A4	08-11-xxxxx	08-16-xxxxx	08-16-xxxxx
A5	08-11-xxxxx	08-16-xxxxx	08-16-xxxxx

Service bulletin

Part numbers affected

Description	New part number
Locking ring	11012505

Parts disposition

- Interchangeable
- Use parts in stock

Service bulletin

SB-2008-038

Products affected

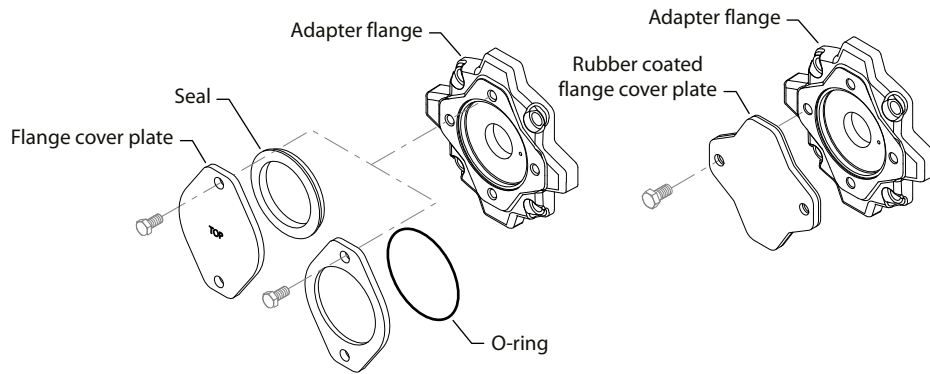
H1 pumps

Subject

Rubber coated auxiliary flange cover

Description

Danfoss has replaced the H1 pump auxiliary flange cover plate with a new rubber coated plate for all auxiliary flanges. The O-ring or donut style seal is no longer needed. The adapter flange interface to the auxiliary pump did not change, making this an interchangeable change. The new rubber coated cover plate can not be used as a running cover, if an auxiliary pump is not installed. The old cover and seal will need to be used for a running cover.



Models affected

All H1 pumps.

Serial numbers

Pad type	45/53cc	78cc	147/165cc
A	A-08-33-xxxxx	N-07-32-xxxxx	N-08-12-xxxxx
B	A-08-33-xxxxx	N-08-36-xxxxx	N-08-36-xxxxx
C	N/A	N-08-36-xxxxx	N-08-36-xxxxx
D	N/A	N/A	N-08-36-xxxxx

Part numbers affected

Pump size	Pad type	Description	Old part number	New part number
45 and 53cc	A	Cover plate	4460586	11017125
		Seal	4800482	
78cc	A	Cover plate	9802336	11017125
		O - ring	9004104-1520	
147 and 165cc	A	Cover plate	9802336	11017125
		O-ring	9004104-1520	
45 and 53cc	B	Cover plate	8801059	11023746
		Seal	8801061	

Service bulletin

Pump size	Pad type	Description	Old part number	New part number
78cc	B	Cover plate	4460370	11023746
		O-ring	9004104-1540	
147 and 165cc	B	Cover plate	4460370	11023747
		O-ring	9004104-1540	
45 and 53cc	C	Cover plate	8800406	11023750
		O-ring	9004104-1580	
78cc	C	Cover plate	8800406	11023748
		O-ring	9004104-1580	
147 and 165cc	D	Cover plate	338400	11023751
		O-ring	726927	

Parts disposition

Interchangeable

Service bulletin

SB-2008-056

Products affected

H1 variable pumps

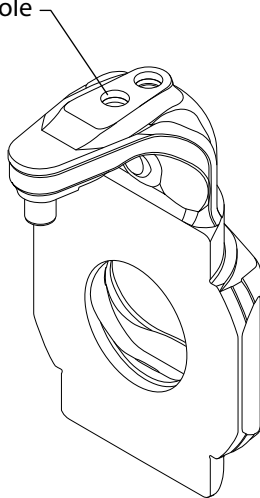
Subject

Swashplate angle sensor

Description

Danfoss has added a 10mm hole to the swashplate for mounting an optional swashplate angle sensor. The new swashplate can be used in place of the old swashplate, but the old swashplate can not be used in place of the new swashplate if the pump has an optional swashplate angle sensor. The old swashplate will become obsolete and no longer available for service.

Additional 10mm hole



Models affected

All H1 045/053 cc single and tandem pumps.

Serial numbers

This change became effective at serial number A-09-10-xxxxx.

Part numbers affected

Description	Old part number	New part number
Swashplate	141696	11036038

Parts disposition

- Non-interchangeable
- Use parts in stock

Service bulletin

SB-2009-007

Products affected

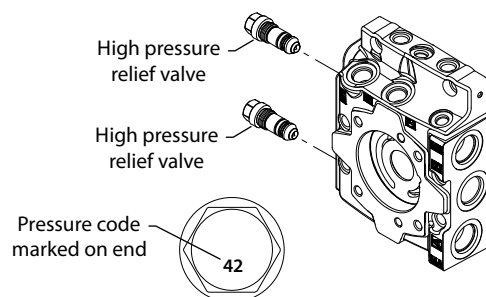
H1 pumps, 45 thru 100 cc

Subject

High pressure relief valve

Description

As a continuous improvement, Danfoss is changing the H1 high pressure relief valves used in 45 thru 100 cc pumps. The new valves will have a different weld process that locks the pressure setting. The new valves are completely interchangeable with the old valves. The part numbers for the valves are being changed to better track this change. The part number for the different settings will be incorporated into the system at different dates over the next 12 to 14 months. The old part numbers will become obsolete.



Models affected

All H1 45 thru 100 cc variable pumps.

Serial numbers

The part number for the different settings will be incorporated into the system at different dates over the next 12 to 14 months.

Part numbers affected

High pressure relief valves

Old part number	New part number	Pressure setting
11006825	11049130	420 bar
11006826	11049131	450 bar
11006827	11049132	480 bar
11006828	11049133	510 bar
11006822	11049127	350 bar
11006817	11049123	250 bar
11006821	11049126	330 bar
11006823	11049128	380 bar
11006824	11049129	400 bar
11006813	11049120	180 bar
11006816	11049122	230 bar

Service bulletin

High pressure relief valves (continued)

Old part number	New part number	Pressure setting
11006819	11049125	300bar
11006814	11049121	200 bar
11006818	11049124	280 bar

Parts disposition

- Interchangeable
- Order replacement parts
- Revise existing part orders

Service bulletin

SB-2009-028

Products affected

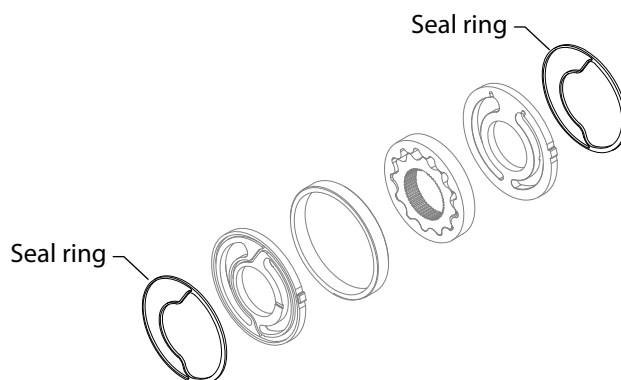
H1 pumps with 9, 12, 14 or 17 cc charge pumps

Subject

Material change to port plate seal rings

Description

The material of the seal-ring for the charge pump port plates has changed. This change was previously done to the larger frame size pumps. To better track this change, the part number has changed. The new part number is completely interchangeable with the old part number. The old part number will become obsolete and not available for service.



Models affected

All H1 pumps using 9, 12, 14 or 17 cc charge pumps

Serial numbers

This change became effective at serial number A09-22-xxxxx.

Part numbers affected

Description	Old part number	New part number
Seal	140918	11009457

Parts disposition

- Interchangeable
- Order replacement parts
- Revise existing part orders

Service bulletin

SB-2009-043

Products affected

H1 pumps, 45 and 53 cc pumps

Subject

Swashplate supplier change

Description

The supplier has changed, for the swashplate used in H1 45 and 53 cc pumps. The new swashplate is interchangeable with the old swashplate. A new part number has been assigned to the new swashplate to better track this change. The old swashplate has become obsolete.

Models affected

All H1 45 and 53 cc variable pumps

Serial numbers

This change became effective at serial number A10-07-xxxxx. (15 February 2010)

Part numbers affected

Description	Old part number	New part number
Swashplate	141696	11068797
Swashplate	11036038	11068797

Parts disposition

- Interchangeable
- Use parts in stock
- Order replacement parts
- Revise existing part orders

Service bulletin

SB-2009-051

Products affected

H145/53 cc single and tandem pumps

Subject

Valve plate change

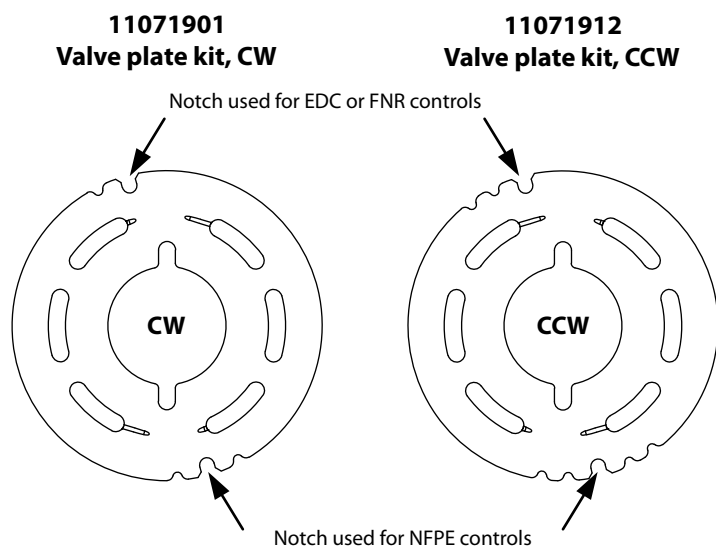
Description

As part of continuing product improvement efforts, Danfoss is implementing a design change to the valve plates used in H1 45 and 53 cc single and tandem pumps. The old valve plate should be replaced at first repair. The new valve plates are interchangeable with the old valve plate, but the old valve plate should not replace the new valve plate. The old valve plates are replaced with kits that include the valve plate and instructions on how to orientate the valve plate for proper operation. The old valve plate will become obsolete and not available.

This valve plate change also requires a change to the Special Hardware Features order code. The code is specified as PN, replacing the NN call out. See Product Information Bulletin (PIB) number HY2009- 015 for more details.

Proper orientation of valve plates:

These valve plates are manufactured with large locator pin notches on opposite sides from each other and smaller identification notches. The large notches are to fit over the locator pin in the pump end cap or center section. The large notch on one side is to be used with Electric Displacement Control (EDC) or Forward-Neutral-Reverse (FNR) controls, and the large notch on the opposite side is to be used with Non-Feedback Proportional Electric (NFPE) controls (different timing). The large notch that has small notches at one side of it is to be used with EDC or FNR controls. The large notch that has small notches on both sides of it is to be used with NFPE controls. The small notches are also used to identify valve plate rotation. Three small notches indicate a CW (right hand) rotation valve plate, and a valve plate with six small notches indicates CCW (left hand) rotation.



Models affected

All H1 45 and 53 cc, single and tandem pumps

Service bulletin

Serial numbers

This change became effective at serial number A09-37-xxxxx. (8 September 2009)

Part numbers affected

Description	Old part number	New part number
Valve plate, CW	141324	11071901 (kit)
Valve plate, CCW	141555	11071912 (kit)

Parts disposition

- Interchangeable for new to replace old
- Non-interchangeable for old to replace new
- Return new parts for credit
- Order replacement parts
- Revise existing part orders

Service bulletin

SB-2010-020

Products affected

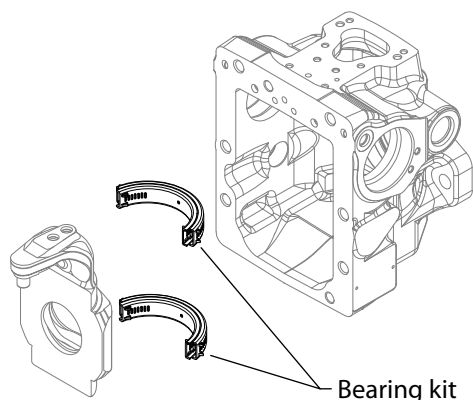
H1 45cc and 53cc pumps and tandem pumps

Subject

Swashplate bearing change

Description

The supplier has changed for the swashplate bearing kits used in the H1, 45cc and 53cc pumps and tandem pumps. New part numbers have been assigned for tracking purposes. The old swashplate bearing kits and the new swashplate bearing kits are interchangeable. The old swashplate bearing kits are obsolete and no longer available for service.



Models affected

All H1, 45 and 53cc pumps and tandem pumps

Serial numbers

This change became effective at serial number: A-10-41-XXXXX (11-Oct-2010)

Part numbers affected

Description	Old part number	New part number
Swashplate bearing kit	4510465	11085533

Parts disposition

- Interchangeable - only new for old, but not old bearing for new
- Scrap used parts
- Order replacement parts
- Revise existing part orders

Service bulletin

SB-2011-020

Products affected

H1 45 and 53cc pumps

Subject

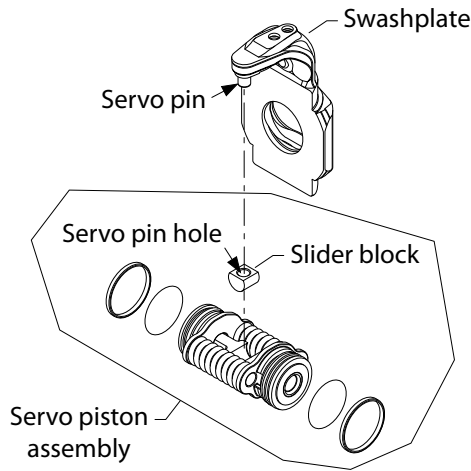
Swashplate change

Description

This design change for H1 45 and 53cc pumps replaces the forged swashplate which has an 11mm diameter servo pin with a cast swashplate of 13mm diameter servo pin. The servo slider block will also change to accommodate the new pin diameter. The old swashplate is interchangeable with the new swashplate, if the new slider block is also used.

A swashplate replacement kit with a 13mm slider block was created for service. Servo piston assembly replacement kits have also been created. These kits contain both 10mm and 13mm slider blocks to accommodate old or new swashplate.

The old swashplate and servo piston assemblies are obsolete and no longer available. The old slider block will remain available.



Models affected

H1 45 and 53cc pumps

Serial numbers

This change became effective at serial number A-12-21-105568 (20-May-2012)

Part numbers affected

Description	Old part number	New part number	Replacement kit
Slider block	141939	11014805	none
Swashplate	11068797	11068328	11098280
Servo piston assembly	11016260	11094107	11098278
Servo piston assy, nested	11016261	11094283	11098279

Service bulletin

Parts disposition

Non-interchangeable

Service bulletin

SB-2013-019

Products affected

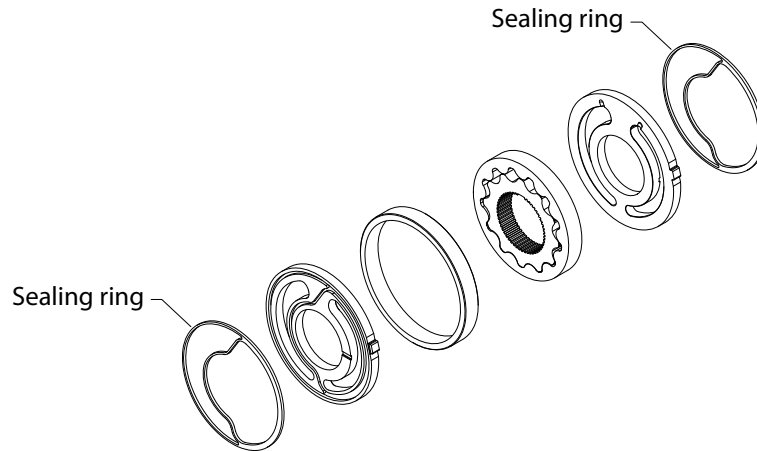
H1 pumps

Subject

Charge pump seal

Description

As a product improvement, Danfoss has changed the material on the sealing ring in the charge pump port plates of H1 pumps. The part number was changed for tracking purposes because the parts look similar. The old part numbers will become obsolete and no longer available as service parts.



Models affected

H1 pumps

Serial numbers

Part 11126778 took effect at serial number: N-13-23-00773 (04June2013)

Part 11126777 took effect at serial number: N-13-22-25411 (28 May2013)

Part numbers affected

Description	Old part number	New part number
Seal Ring, H1P115-165 port plate	11008462	11126778
Seal Ring, H1P045-100 port plate	11009457	11126777

Parts disposition

Interchangeable

Scrap used parts

Service bulletin

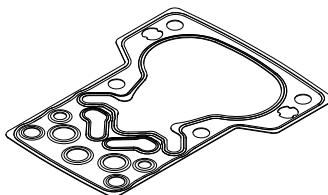
SB-2016-033

Products affected H1 pumps and tandems, MP1 and M46 control kits

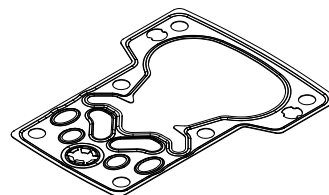
Subject Control Gasket

Description Danfoss Power Solutions has made a two-part design change to the control gasket used on H1 pumps and tandems and in MP1 and M46 control kits. The electrical displacement controls (EDC) have changed from an 8mm port to 12mm with tabs on the pressure port. The interim gasket used in the manual displacement controls has changed from a 10mm port to 12mm with tabs in the pressure port.

The gasket is now a common part to all pump models and control service kits. The new part can be substituted for the old part, but the old part cannot be substituted for the new part.



Old gasket



New gasket

Models affected H1 pumps and tandems, MP1 control kits, M46 control kits

Serial numbers
 H1 Pumps - This change became effective on N-16-36-30132
 H1 Tandems - This change became effective on N-16-37-30132
 MP1 Control Kits - This change became effective on N-16-32-xxxxx
 M46 Control Kits - This change became effective on N-16-32-xxxxx

Part numbers affected

Description	Old part number	New part number
Electrical displacement control gasket	140879	11173377
Manual displacement control gasket	11159911	11173377

Parts disposition Non-interchangeable - can substitute new for old

Service bulletin

SB-2018-025

Products affected

H1 pumps

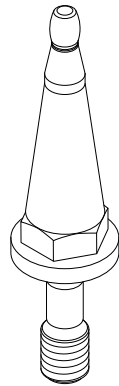
Subject

Swashplate feedback link

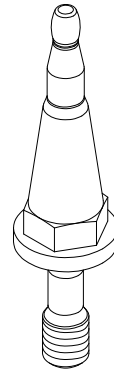
Description

Danfoss has made a design change to the swashplate feedback link on H1 pumps. To improve the compatibility of the controls that uses the angle sensor. The contact point on the feedback link, to the spring linkage on the angle sensor, has increased in width.

The new part can be substituted for the old part, but the old part cannot be substituted for the new. Old parts will be obsolete.



Old feedback link



New feedback link

Models affected

H1 45/53cc, 60/68cc, 69/78cc, 89/100cc, 115/130cc, 147/165cc, 210/250cc Pumps and Tandems

Serial numbers

This change became effective in Ames A-18-09-xxxxx

This change became effective in Germany N-18-06-xxxxx

Part numbers affected

Description	Old Part Number	New Part Number
Link-Swashplate feedback, H1P	11167724	11202172
Link-Swashplate feedback, H1P	11148827	11202172

Parts disposition

Non-interchangeable

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