

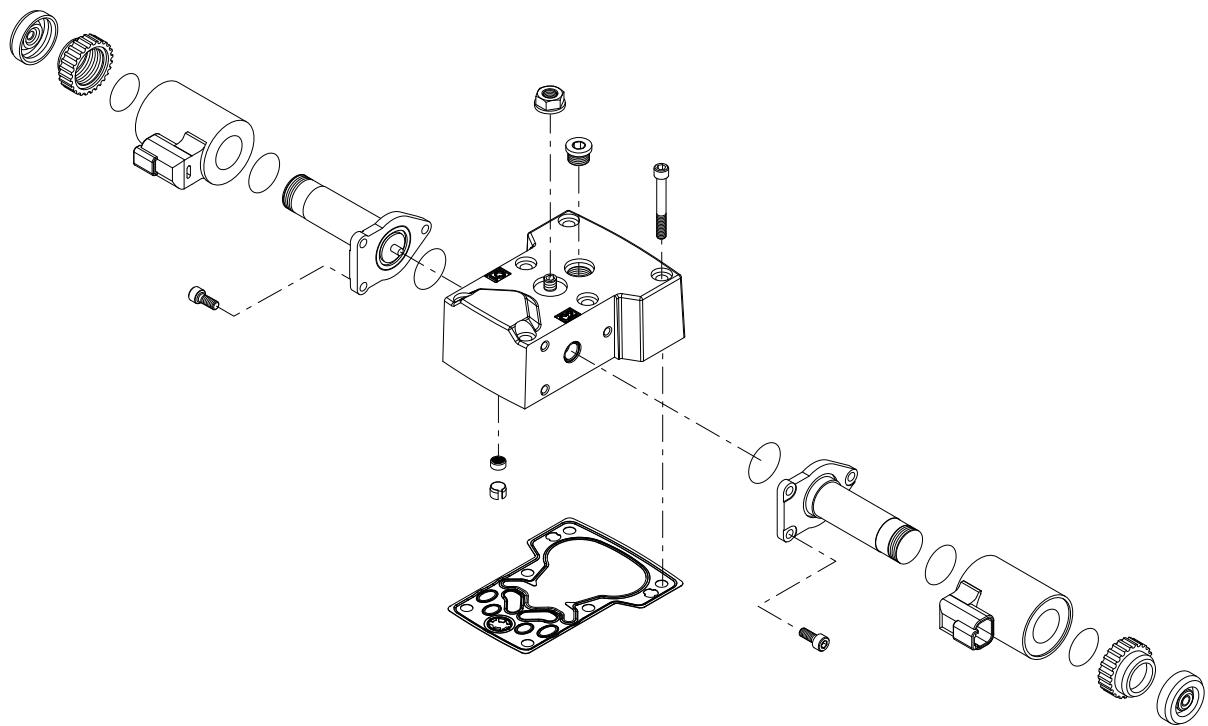
ENGINEERING
TOMORROW



Parts Manual

H1P 147 and 165cc

Variable Displacement Pump



Revision history*Table of revisions*

Date	Changed	Rev
February 2019	Added various new options; changed part numbers for CPRV 18-34	0901
November 2018	Added control options T6, T7, T8 and T9	0805
August 2018	Minor updates	0804
May 2018	Added new high pressure setting options	0803
May 2018	Updated to Engineering Tomorrow	0802

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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 147cc)

The nameplate on an H1 pump has an Order Code of H1P147R C A A2 C2 N D8 G G2 NN L 42 L 42 A P 24 NN 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 10, the input shaft option for this pump is identified by the code "G2". (H1P147R C A A2 C2 N D8 G **G2**NN L 42 L 42 A P 24 NN NNN NNN).
2. Referring to the Service Parts List, find the shaft group.
3. Next find the order code that relates to this unit, which is "G2".

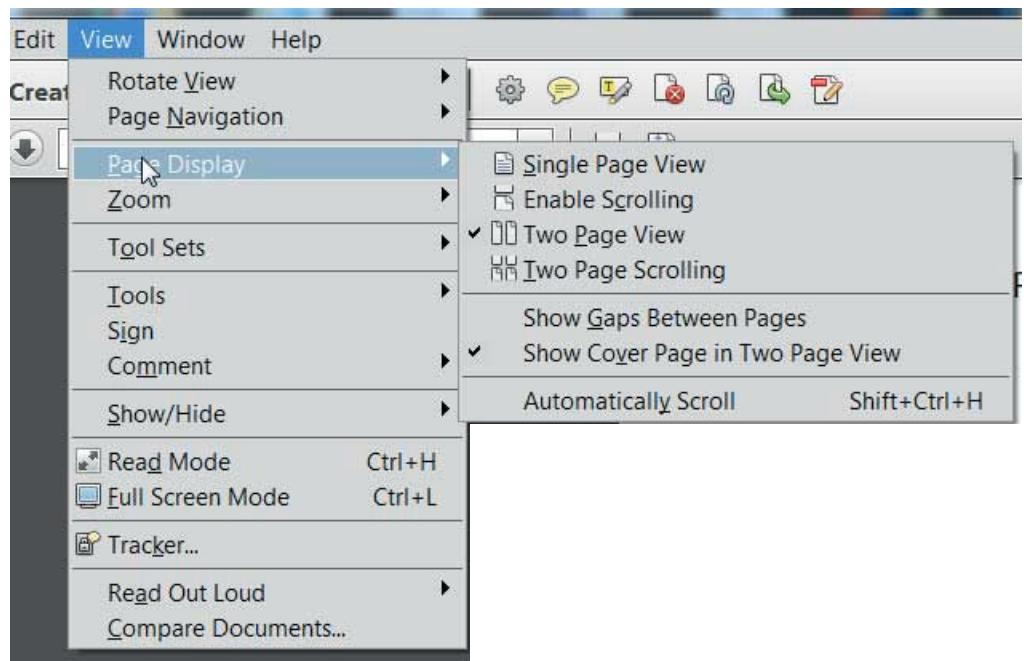
The shaft is found to be item J100 and part number 11123699.

General information

Adobe Acrobat 2-page viewing

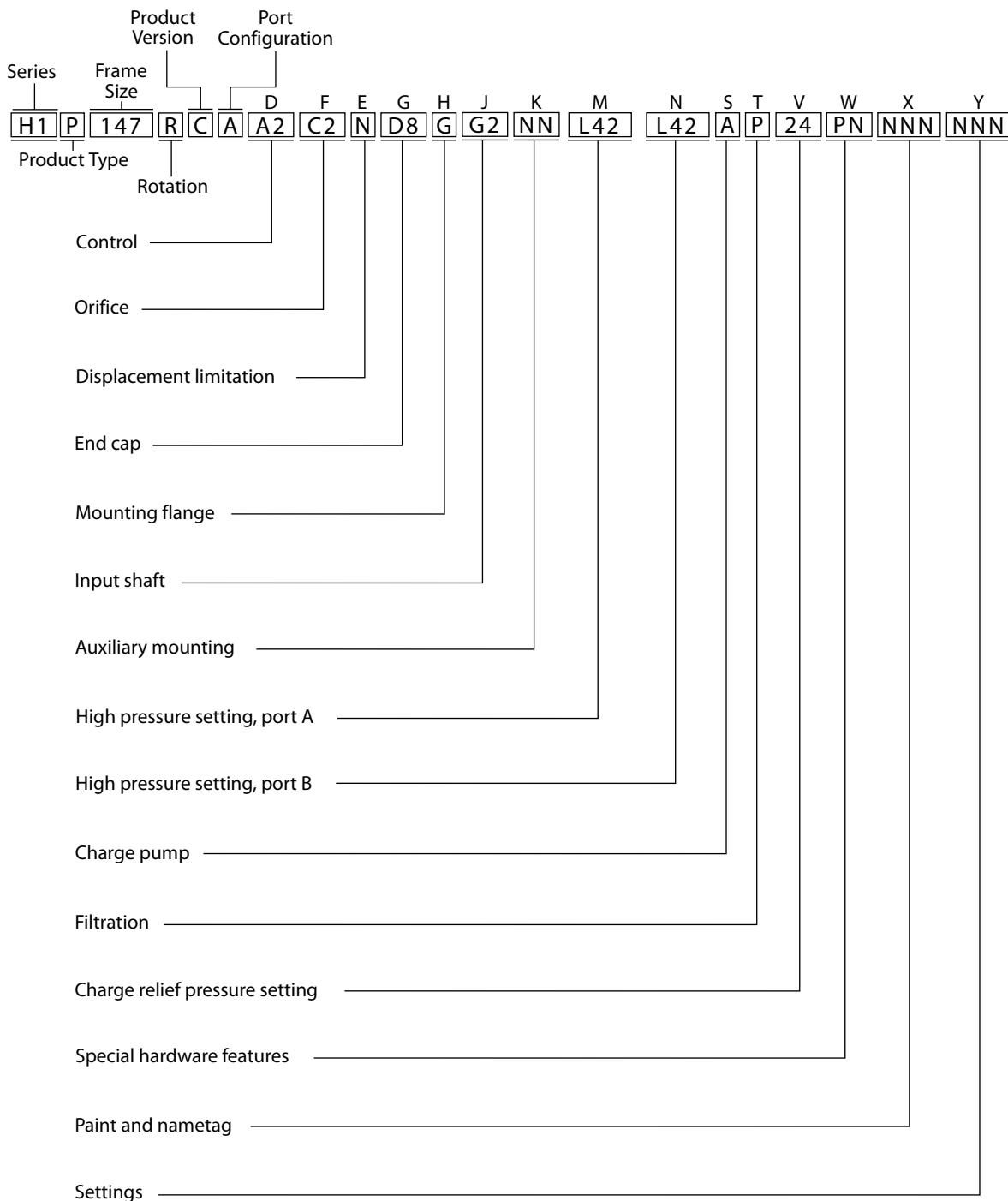
While viewing manual in Adobe Acrobat, the following settings need to be applied to ensure proper page display.

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



General information

Order code



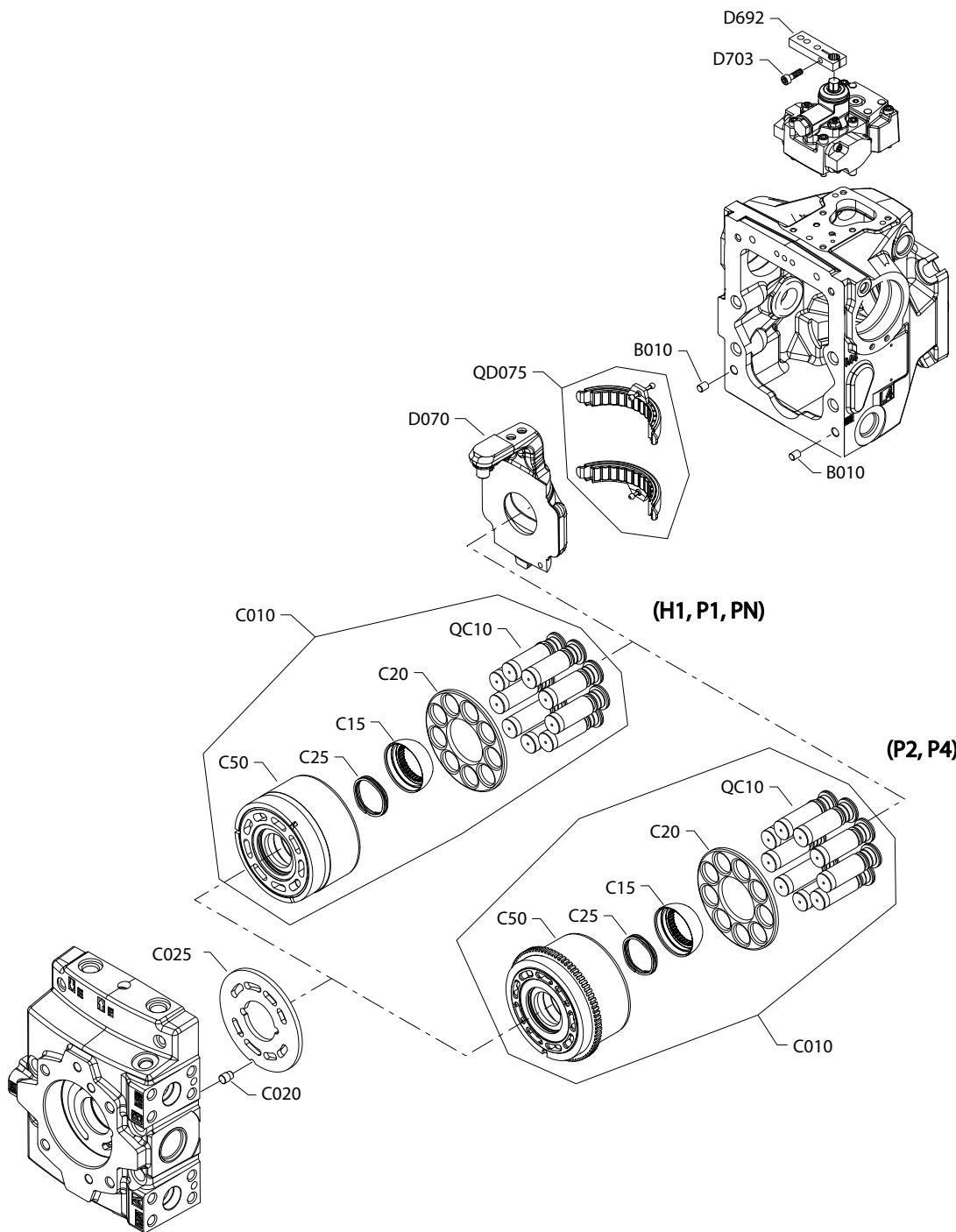
General information

Notes

Common parts and special hardware

H1P 147/165cc special hardware H1-P4

Parts configuration



Generic housing and control used to show part location only.

* Included in overhaul seal kit Q210

Common parts and special hardware

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B010	05-18		9004800-3708	Dowel pin	2
C15	17-46		11148927	Slipper retainer ball guide (SB-2018-007 on page 211)	1
C20	05-18		140292	Slipper retainer	1
C25	11-15		11180936	Spring washer (SB-2016-040 on page 210)	1
C020	05-18		141128	Valve plate pin, CCW	1
C020	05-18		141126	Valve plate pin, CW	1
D070	05-18		11105987	Swashplate (SB-2012-035 on page 203)	1
QC10	05-18		11021922	Slipper/piston assembly kit, 147cc	1
QC10	05-18		11021924	Slipper/piston assembly kit, 165cc	1
QD075	05-18		11004705	Swashplate bearing kit	1

Order code: H1

C010	17-46		11190005	Cylinder block kit, 147cc (SB-2018-007 on page 211)	1
C010	17-46		11190006	Cylinder block kit, 165cc (SB-2018-007 on page 211)	1
C025	13-28		11125575	Valve plate, CCW	1
C025	13-28		11123708	Valve plate, CW	1
C50	13-28		11124494	Cylinder block assembly, 147cc	1
C50	13-28		11126004	Cylinder block assembly, 165cc	1
D692	13-28		11185938	Control handle	1
D703	13-28		11173701	Screw, M6 x 20	1

Order code: NN, PN

C010	17-46		11190005	Cylinder block kit, 147cc (SB-2018-007 on page 211)	1
C010	17-46		11190006	Cylinder block kit, 165cc (SB-2018-007 on page 211)	1
C025	05-18		11125575	Valve plate, CCW	1
C025	05-18		11123708	Valve plate, CW	1
C50	11-15		11124494	Cylinder block assembly, 147cc	1
C50	11-15		11126004	Cylinder block assembly, 165cc	1

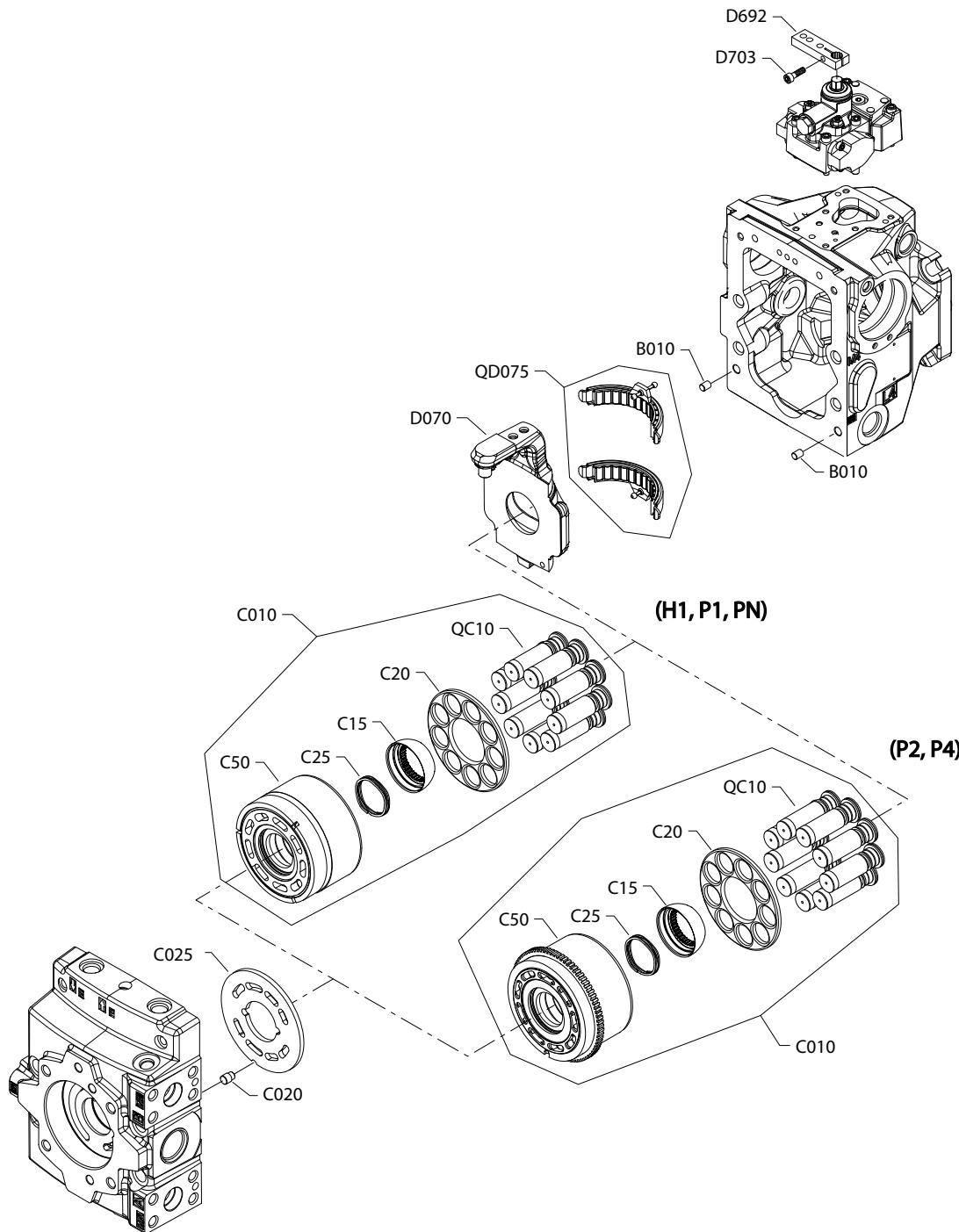
Order code: P1

C010	17-46		11190005	Cylinder block kit, 147cc (SB-2018-007 on page 211)	1
C010	17-46		11190006	Cylinder block kit, 165cc (SB-2018-007 on page 211)	1
C025	10-11		11125574	Valve plate, CCW	1
C025	10-11		11125576	Valve plate, CW	1
C50	11-15		11124494	Cylinder block assembly, 147cc	1
C50	11-15		11126004	Cylinder block assembly, 165cc	1

Parts continue to the next 2 pages.

Common parts and special hardware

Parts configuration



Generic housing and control used to show part location only.

* Included in overhaul seal kit Q210

Common parts and special hardware

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B010	05-18		9004800-3708	Dowel pin	2
C15	17-46		11148927	Slipper retainer ball guide (SB-2018-007 on page 211)	1
C20	05-18		140292	Slipper retainer	1
C25	11-15		11180936	Spring washer (SB-2016-040 on page 210)	1
C25	05-18	11-14	11091046	Slipper retainer ball guide/spring washer replacement kit	1
C020	05-18		141128	Valve plate pin, CCW	1
C020	05-18		141126	Valve plate pin, CW	1
D070	05-18		11105987	Swashplate (SB-2012-035 on page 203)	1
QC10	05-18		11021922	Slipper/piston assembly kit, 147cc	1
QC10	05-18		11021924	Slipper/piston assembly kit, 165cc	1
QD075	05-18		11004705	Swashplate bearing kit	1

Order code: P2

C010	17-46		11191007	Cylinder block kit with speed ring, 147cc (SB-2018-007 on page 211)	1
C010	17-46		11191008	Cylinder block kit with speed ring, 165cc (SB-2018-007 on page 211)	1
C025	10-11		11125574	Valve plate, CCW	1
C025	10-11		11125576	Valve plate, CW	1
C50	11-15		11124495	Cylinder block assembly w/speed ring, 147cc	1
C50	11-15		11124497	Cylinder block assembly w/speed ring, 165cc	1

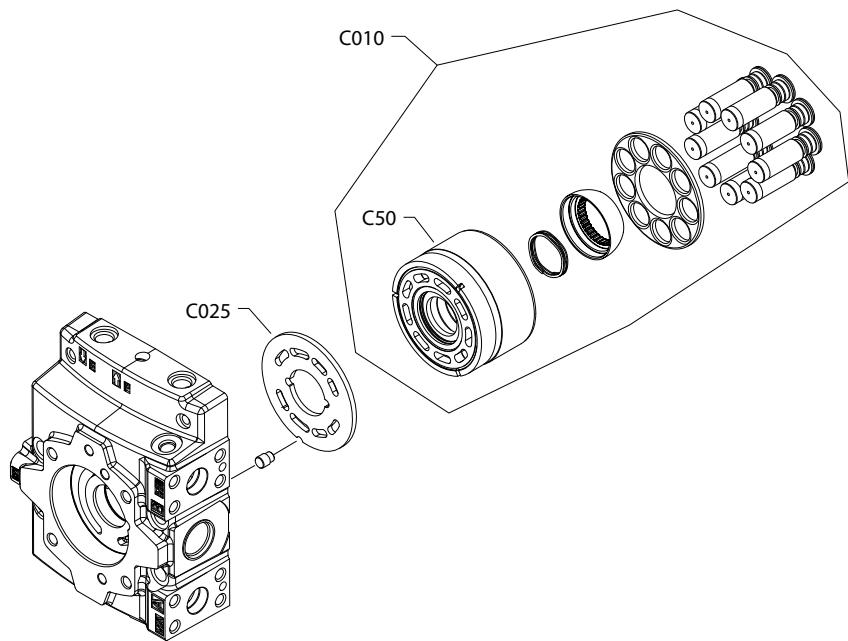
Order code: P4

C010	17-46		11191007	Cylinder block kit with speed ring, 147cc (SB-2018-007 on page 211)	1
C010	17-46		11191008	Cylinder block kit with speed ring, 165cc (SB-2018-007 on page 211)	1
C025	11-28		11125575	Valve plate, CCW	1
C025	11-28		11123708	Valve plate, CW	1
C50	11-28		11124495	Cylinder block assembly w/speed ring, 147cc	1
C50	11-28		11124497	Cylinder block assembly w/speed ring, 165cc	1

Common parts and special hardware

H1P 147/165cc special hardware P5

Parts configuration



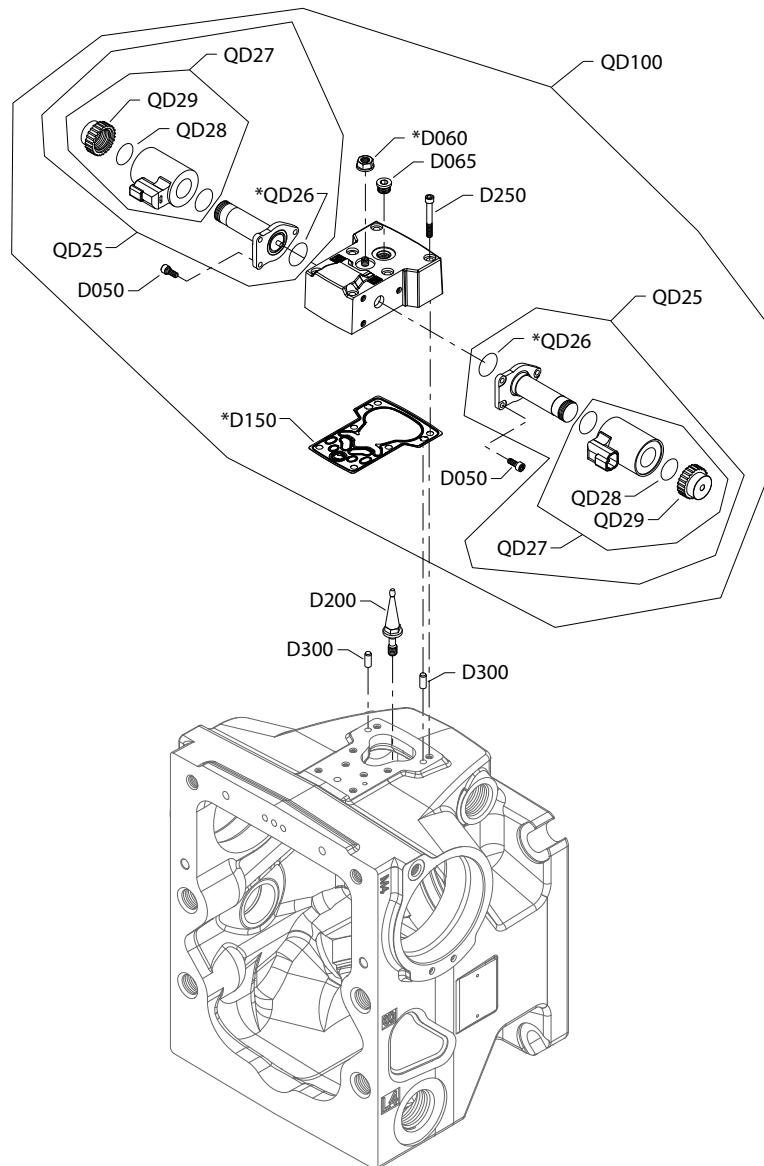
Common parts and special hardware

Order code: P5

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C010	17-46		11190006	Cylinder block kit, 165cc (SB-2018-007 on page 211)	1
C025	11-45		11126989	Valve plate, CW	1
C50	11-45		11126004	Cylinder block assembly, 165 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	05-18		716860	Screw, M5 x 12	6
D055	05-18	06-52	11040532	Plug assembly	2
D060	05-18		612291 (9003508-0008)	Seal nut, M8	1
D065	05-18		327007	Plug assembly (SAE)	1
D150	05-18		11173377	Control gasket (SB-2016-033 on page 209)	1
D150	05-18	06-52	140722	Control gasket (SB-2006-030 on page 183)	1
D200	05-18		11202172	Swash plate feedback link (SB-2018-025 on page 213)	1
D250	05-18		505038	Screw, M6 x 45	6
D250	05-18	06-52	510382	Screw, M6 x 45 (SB-2006-030 on page 183)	
D300	05-18		310979	Dowel pin	2
QD26	05-18		11001952	O-ring	2
QD28	05-18		063172	O-ring	2

Order code: A2

QD25	05-18		11012457	Proportional solenoid, 12v	2
QD27	05-18		11028018	Coil kit, 12v, DEUTSCH connector	2
QD29	05-18		11027046	Coil nut	2
QD100	05-18		11019680	EDC kit, 12v, DEUTSCH connector, fast	1
QD100	05-18	06-52	11004693	EDC kit, 12v, DEUTSCH connector, fast (SB-2006-030 on page 183)	1

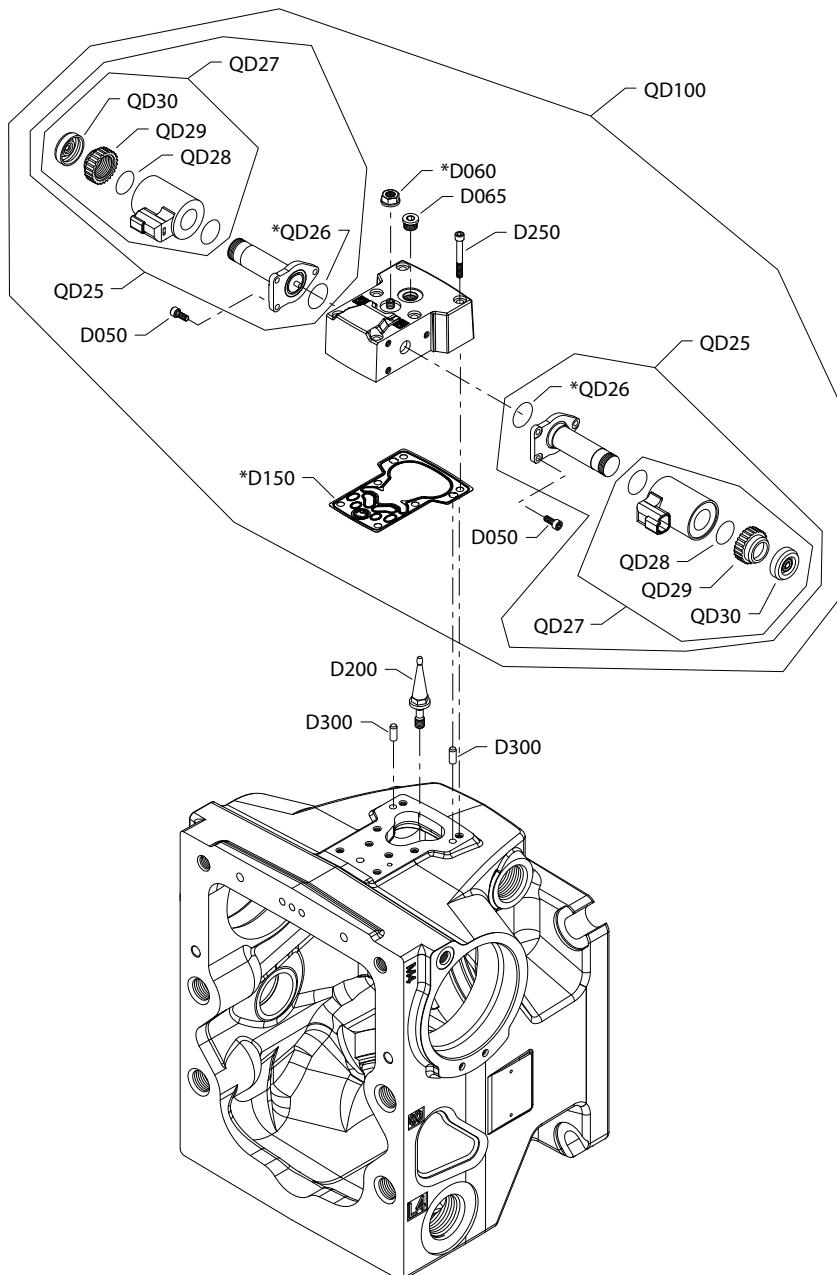
Order code: A3

QD25	05-18		11012459	Proportional solenoid, 24v	2
QD27	05-18		11028019	Coil kit, 24v, DEUTSCH connector	2
QD29	05-18		11028024	Coil nut	2
QD100	07-01		11019681	EDC kit, 24v, DEUTSCH connector, fast	1
QD100	05-18	06-52	11004695	EDC kit, 24v, DEUTSCH connector, fast (SB-2006-030 on page 183)	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	05-18		716860	Screw, M5 x 12	6
D055	05-18	06-52	716860	Plug assembly	2
D060	05-18		612291 (9003508-0008)	Seal nut, M8	1
D065	05-18		327007	Plug assembly	1
D150	05-18		11173377	Control gasket (SB-2016-033 on page 209)	1
D150	05-18	06-52	140722	Control gasket (SB-2006-030 on page 183)	
D200	05-18		11202172	Swash plate feedback link (SB-2018-025 on page 213)	1
D250	05-18		505038	Screw, M6 x 45	6
D250	05-18	06-52	510382	Screw, M6 x 40 (SB-2006-030 on page 183)	
D300	05-18		310979	Dowel pin	2
QD26	05-18		11001952	O-ring	2
QD28	05-18		063172	O-ring	2
QD30	05-18		11027883	Cap	2

Order code: A4

QD25	05-18		140750	Proportional solenoid, 12v	2
QD27	05-18		11004698	Coil kit, 12v, DEUTSCH connector	2
QD29	05-18		11004749	Coil nut	2
QD100	05-18		11019732	EDC kit, 12v, DEUTSCH connector, fast, manual override	1
QD100	05-18	06-52	11004697	EDC kit, 12v, DEUTSCH connector, fast (SB-2006-030 on page 183)	1

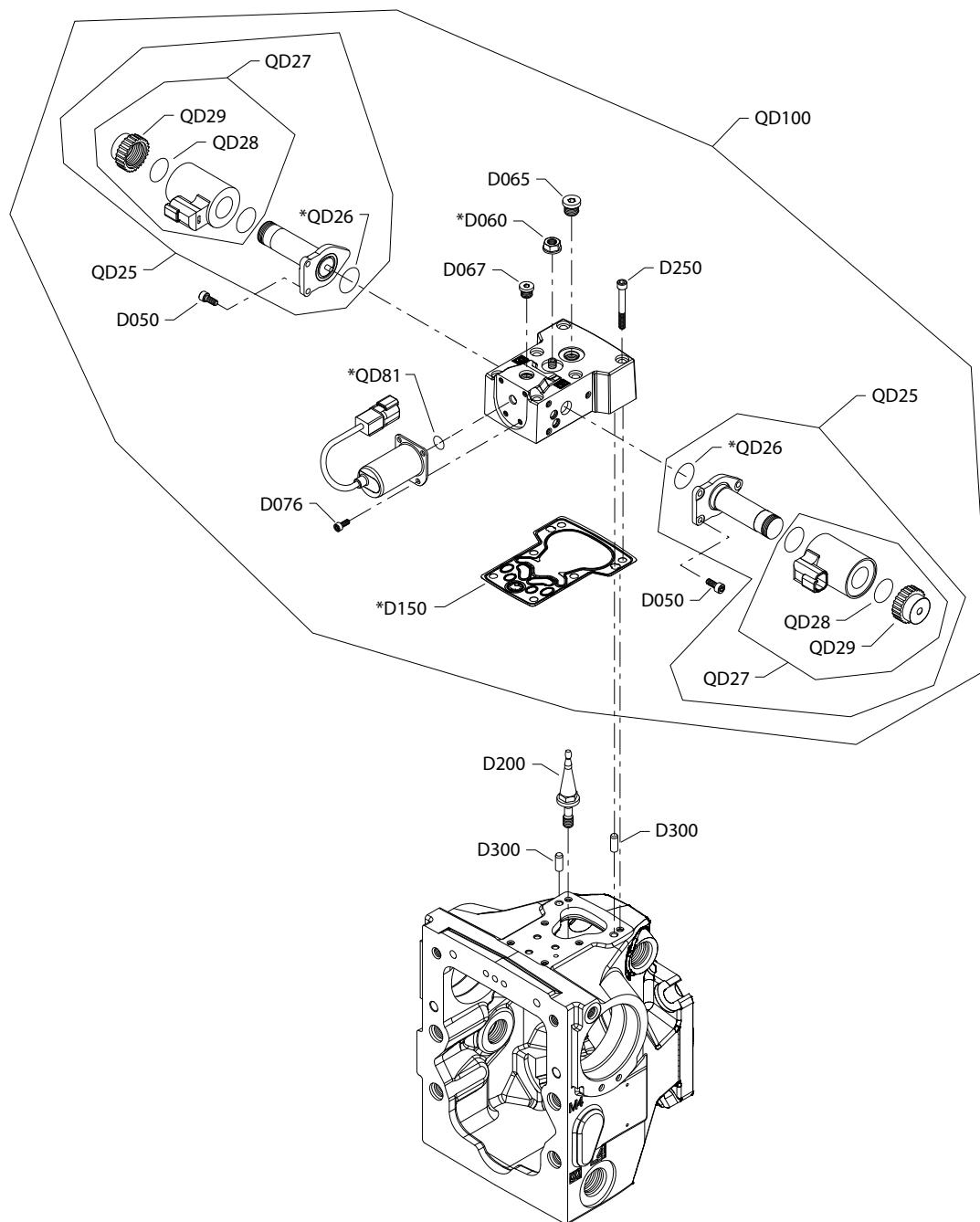
Order code: A5

QD25	05-18		140751	Proportional solenoid, 24v	2
QD27	05-18		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	05-18		11004750	Coil nut	2
QD100	05-18		11019733	EDC kit, 24v, DEUTSCH connector, fast, manual override	1
QD100	05-18	06-52	11004699	EDC kit, 24v, DEUTSCH connector, fast (SB-2006-030 on page 183)	

Controls

H1P control A6

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

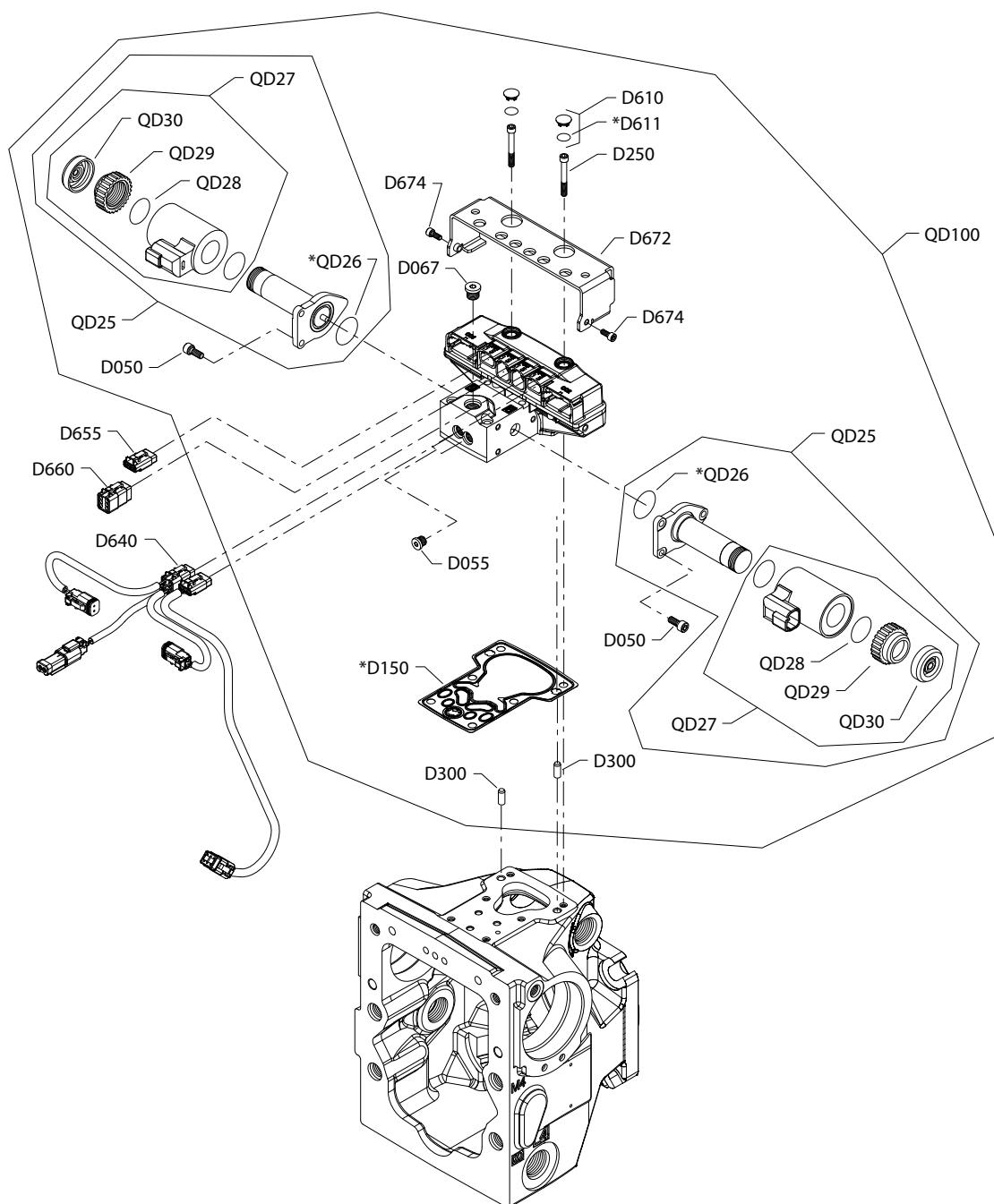
Order code: A6

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	05-18	13-01	716860	Screw, M5 x 12	6
D060	05-18	13-01	612291 (9003508-0008)	Seal nut, M8	1
D065	05-18	13-01	327007	Plug assembly	1
D067	05-18	13-01	11040532	Plug assembly	1
D076	05-18	13-01	346957	Screw, M4 x 8	4
D150	05-18	13-01	11173377	Control gasket (SB-2016-033 on page 209)	1
D200	05-18	13-01	11202172	Swashplate feedback link (SB-2018-025 on page 213)	1
D250	05-18	13-01	505038	Screw, M6 x 45	6
D300	05-18	13-01	310979	Dowel pin	2
QD25	05-18	13-01	11012457	Proportional solenoid, 12V	2
QD26	05-18	13-01	11001952	O-ring	2
QD27	05-18	13-01	11028018	Coil kit, 12V, DEUTSCH connector	2
QD28	05-18	13-01	063172	O-ring	2
QD29	05-18	13-01	11027046	Coil nut	2
QD081	05-18	13-01	11059551	O-ring	1
QD100	05-18	13-01	11152574	EDC kit, 12V, high gain spool, control override (SB-2015-035 on page 207)	1

Controls

H1P control A7

Parts configuration



Generic housing shown

* Included in overhaul seal kit

Controls

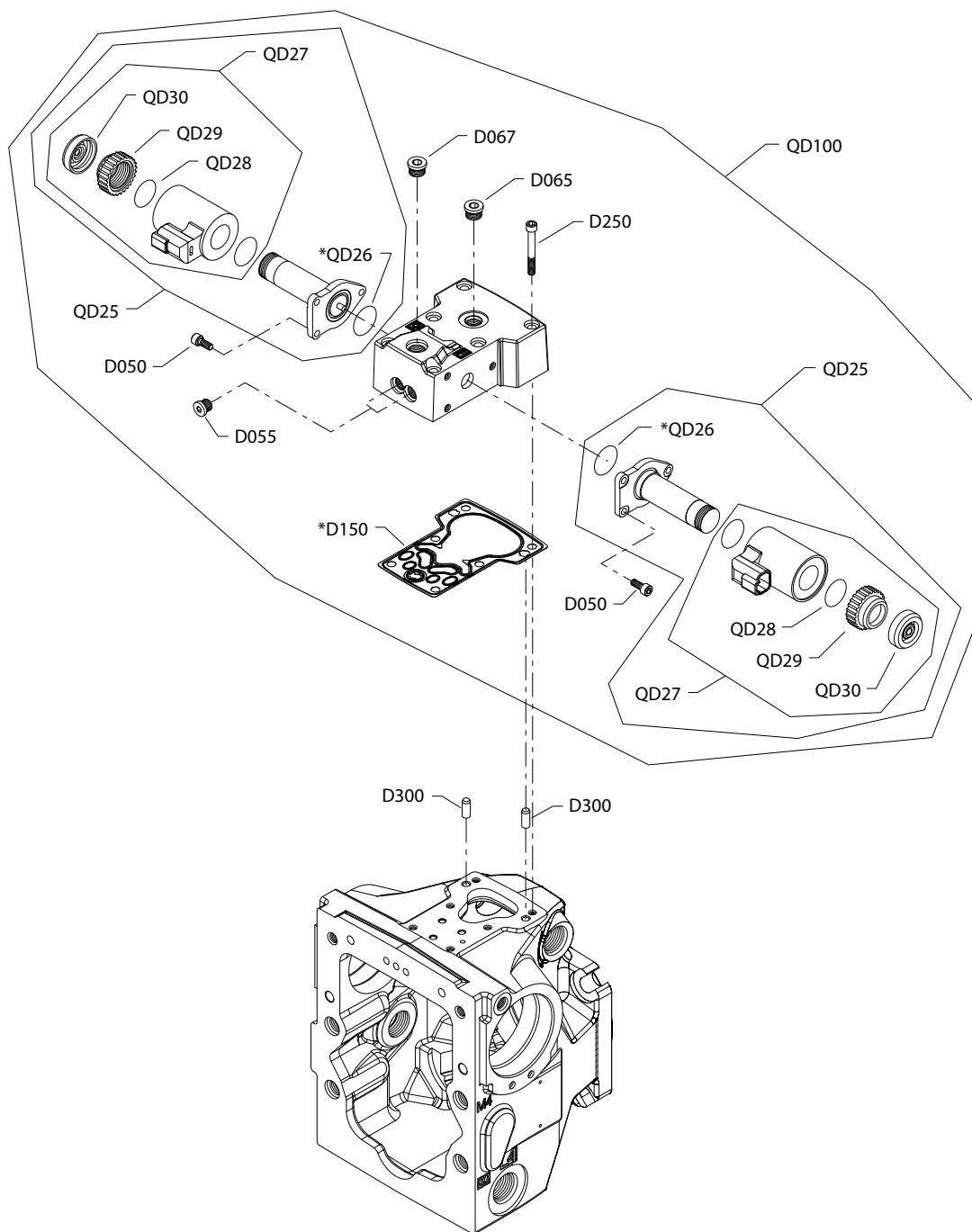
Order code: A7

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-14		716860	Screw, M5 x 12	6
D055	10-14		11040532	Plug assembly	2
D067	10-14		327007	Plug assembly	1
D150	10-14		11173377	Control gasket (SB-2016-033 on page 209)	1
D250	10-14		505038	Screw, M6 x 45	6
D300	10-14		11036469	Dowel pin	2
D610	10-14		11000467	Plug assembly	2
D611	10-14		11066774	O-ring	2
D640	10-14		11023348	AC wiring harness	1
D655	10-14		11084827	Connector DTM 06-3S	1
D660	10-14		11084822	Connector DTM 06-6S	1
D672	10-14		11151875	Protection	1
D674	10-14		716860	Screw, M5 x 12	2
QD25	10-14		140750	Proportional solenoid, 12 volt	2
QD26	10-14		11001952	O-ring	2
QD27	10-14		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	10-14		063172	O-ring	2
QD29	10-14		11004749	Coil nut	2
QD30	10-14		11027883	Cap	2
QD100	10-14		11065118	Automotive control kit, 12v, manual override	1

Controls

H1P control A8

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

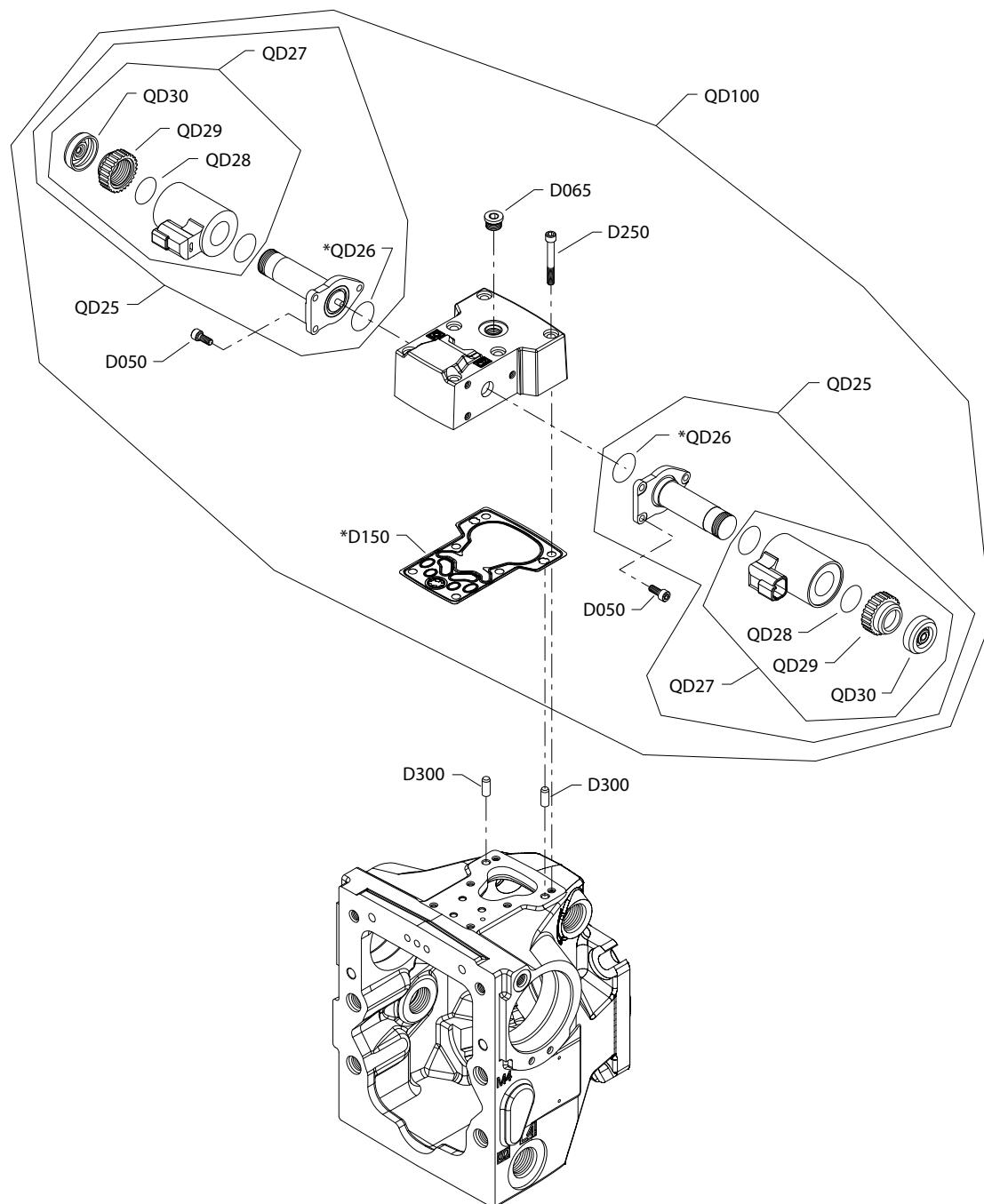
Order code: A8

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	05-18		716860	Screw, M5 x 12	6
D055	05-18		11040532	Plug assembly	2
D065	05-18		327007	Plug assembly	1
D067	05-18		327007	Plug assembly	1
D150	05-18		11173377	Control gasket (SB-2016-033 on page 209)	1
D250	05-18		505038	Screw, M6 x 45	6
D300	05-18		310979	Dowel pin	2
QD25	05-18		140750	Proportional solenoid, 12v, DEUTSCH connector	2
QD26	05-18		11001952	O-ring	2
QD27	05-18		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	05-18		063172	O-ring	2
QD29	05-18		11004749	Coil nut	2
QD30	05-18		11027883	Cap	2
QD100	05-18		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	05-18		716860	Screw, M5 x 12	6
D065	05-18		327007	Plug assembly	1
D150	05-18		11173377	Control gasket (SB-2016-033 on page 209)	1
D250	05-18		505038	Screw, M6 x 45	6
D300	05-18		310979	Dowel pin	2
QD26	05-18		11001952	O-ring	2
QD28	05-18		063172	O-ring	2
QD30	05-18		11027883	Cap	2

Order code: A9

QD25	05-18		141301	Proportional solenoid, 12v, DEUTSCH connector	2
QD27	05-18		11005222	Coil kit, 12v, DEUTSCH connector	2
QD29	05-18		11004749	Coil nut	2
QD100	05-18		11025905	FNR control kit, 12v, manual override, DEUTSCH connector	1

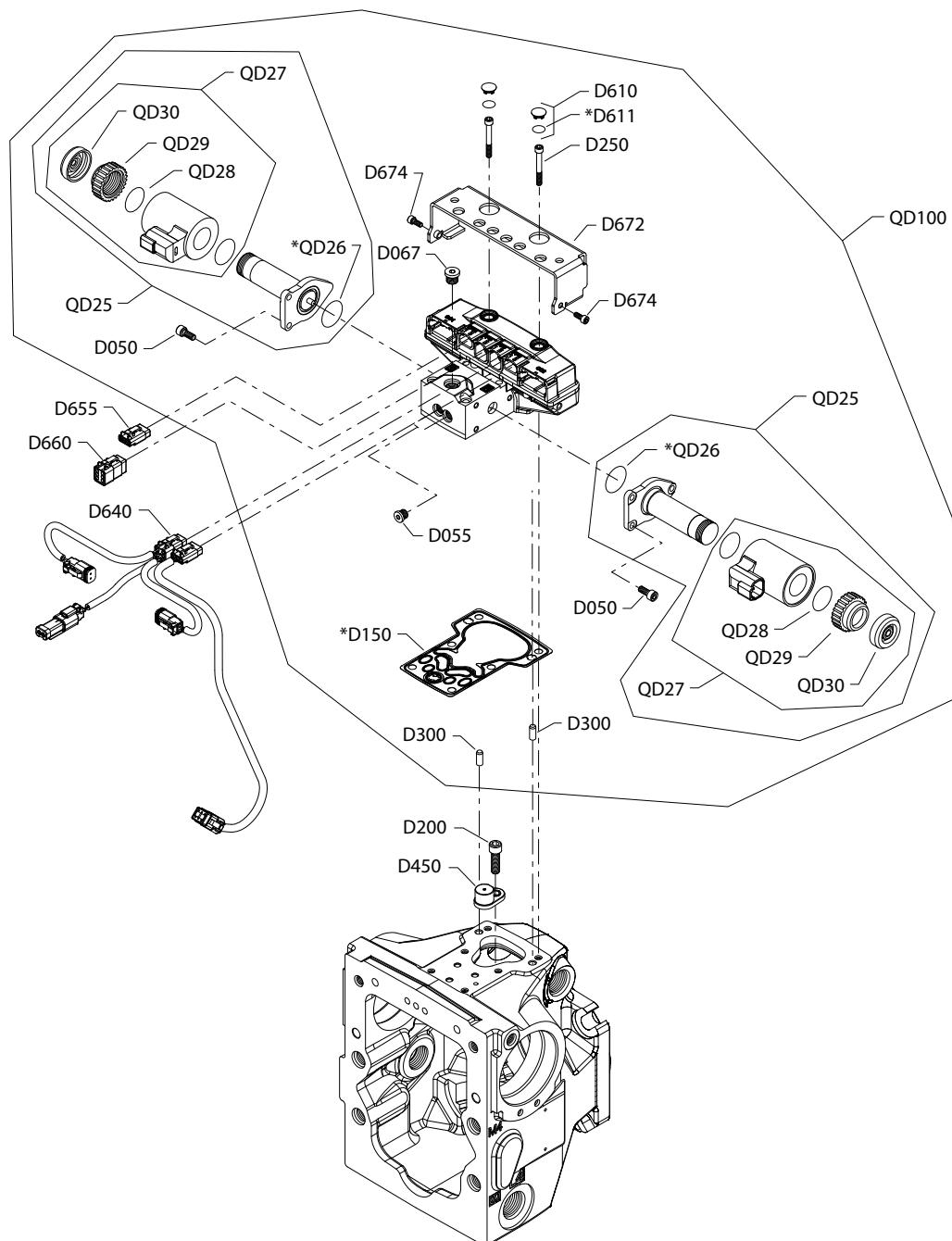
Order code: B1

QD25	05-18		141313	Proportional solenoid, 24v, DEUTSCH connector	2
QD27	05-18		11005223	Coil kit, 24v, DEUTSCH connector	2
QD29	05-18		11004750	Coil nut	2
QD100	05-18		11025906	FNR control kit, 24v, manual override, DEUTSCH connector	1

Controls

H1P control B7

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

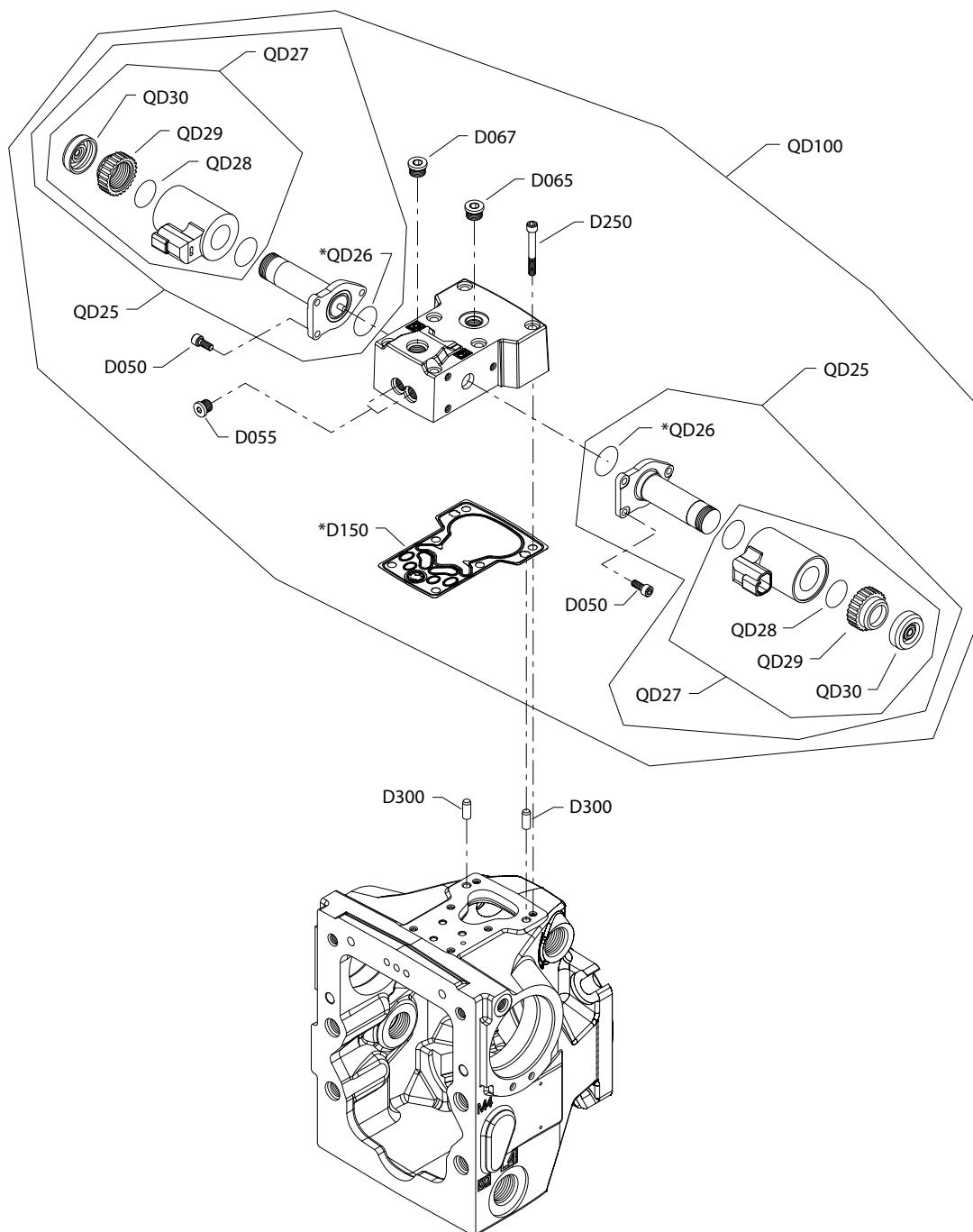
Order code: B7

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-14		716860	Screw, M5 x 12	6
D055	10-14		11040532	Plug assembly	2
D067	10-14		327007	Plug assembly	1
D150	10-14		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	10-14		141472	Screw, special	1
D250	10-14		505038	Screw, M6 x 45	6
D300	10-14		11036469	Dowel pin	2
D450	10-14		11003097	Magnet carrier	1
D610	10-14		11000467	Plug assembly	2
D611	10-14		11066774	O-ring	2
D640	10-14		11023348	AC wiring harness	1
D655	10-14		11084827	Connector DTM 06-3S	1
D660	10-14		11084822	Connector DTM 06-6S	1
D672	10-14		11151875	Protection	1
D674	10-14		716860	Screw, M5 x 12	2
QD25	10-14		140750	Proportional solenoid, 12 volt	2
QD26	10-14		11001952	O-ring	2
QD27	10-14		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	10-14		063172	O-ring	2
QD29	10-14		11004749	Coil nut	2
QD30	10-14		11027883	Cap	2
QD100	10-14		11065119	Automotive control kit, 12v, manual override	1

Controls

H1P control B8

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

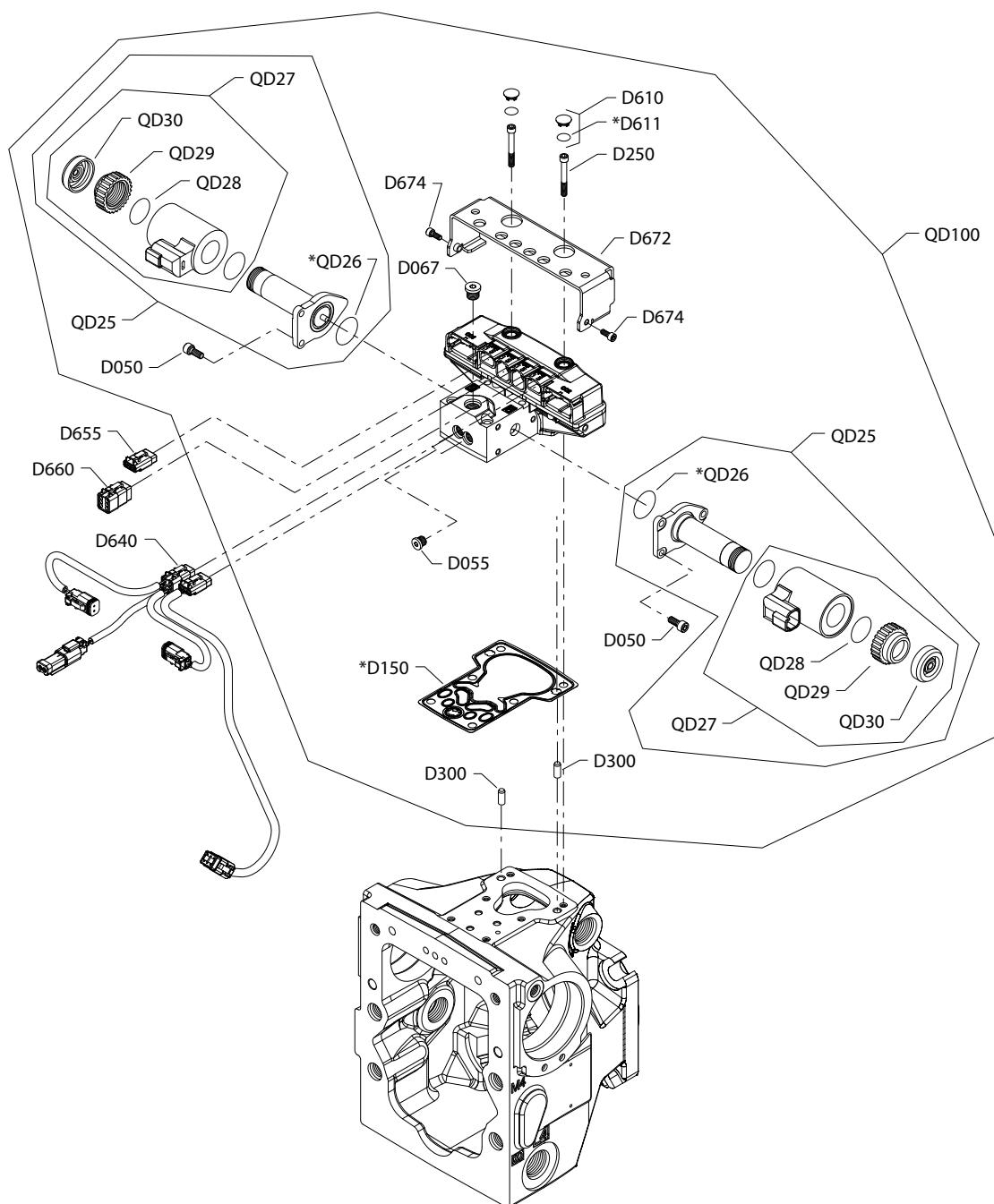
Order code: B8

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	05-18		716860	Screw, M5 x 12	6
D055	05-18		11040532	Plug assembly	2
D065	05-18		327007	Plug assembly	1
D067	05-18		327007	Plug assembly	1
D150	05-18		11173377	Control gasket (SB-2016-033 on page 209)	1
D250	05-18		505038	Screw, M6 x 45	6
D300	05-18		310979	Dowel pin	2
QD25	05-18		140751	Proportional solenoid, 24v, DEUTSCH connector	2
QD26	05-18		11001952	O-ring	2
QD27	05-18		1104700	Coil kit, 24v, DEUTSCH connector	2
QD28	05-18		063172	O-ring	2
QD29	05-18		11004750	Coil nut	2
QD30	05-18		11027883	Cap	2
QD100	05-18		11025904	NFPE control kit, 24v, manual override, DEUTSCH connector	1

Controls

H1P control C2

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

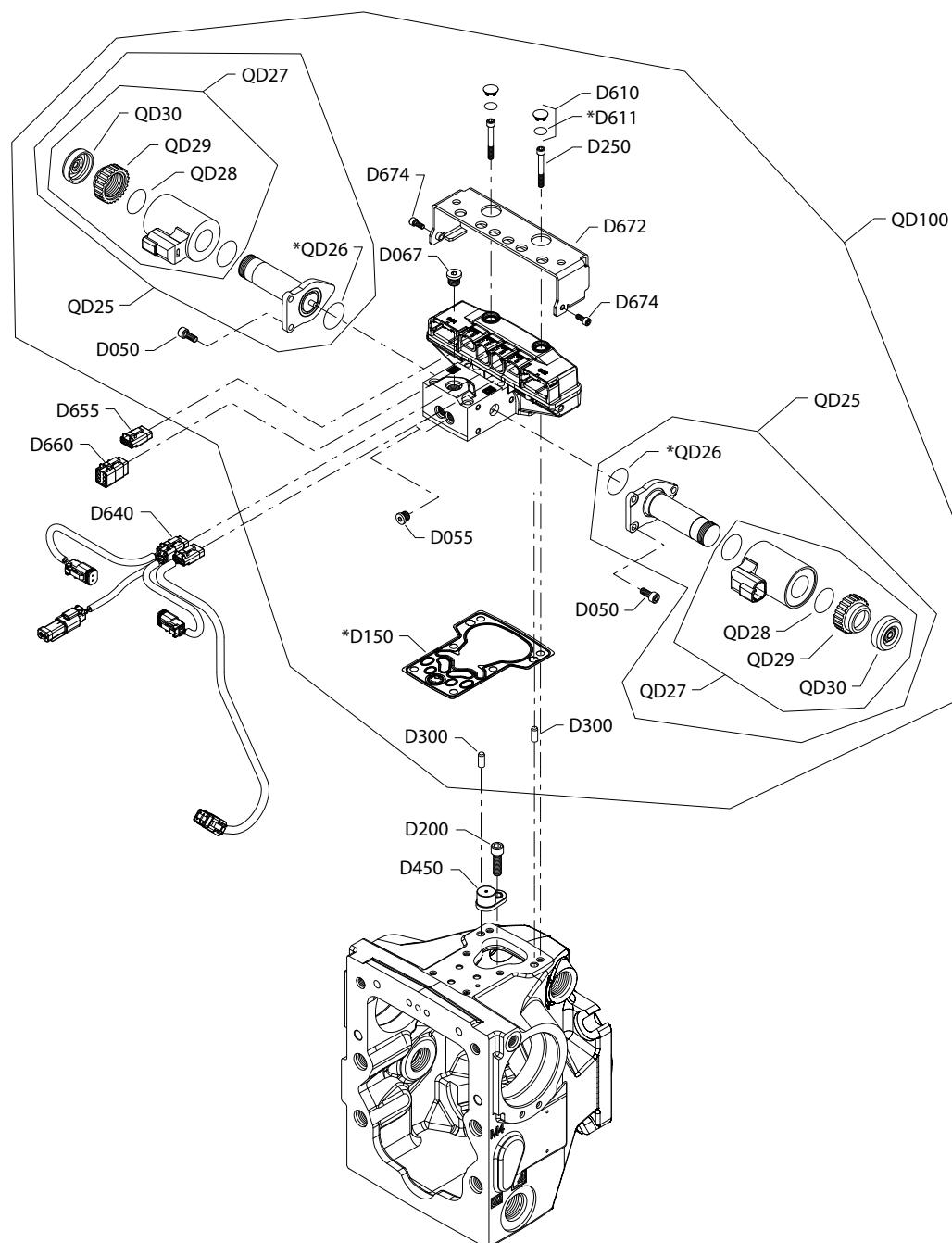
Order code: C2

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-14		716860	Screw, M5 x 12	6
D055	10-14		11040532	Plug assembly	2
D067	10-14		327007	Plug assembly	1
D150	10-14		11173377	Control gasket (SB-2016-033 on page 209)	1
D250	10-14		505038	Screw, M6 x 45	6
D300	10-14		11036469	Dowel pin	2
D610	10-14		11000467	Plug assembly	2
D611	10-14		11066774	O-ring	2
D640	10-14		11023348	AC wiring harness	1
D655	10-14		11084827	Connector DTM 06-3S	1
D660	10-14		11084822	Connector DTM 06-6S	1
D672	10-14		11151875	Protection	1
D674	10-14		716860	Screw, M5 x 12	2
QD25	10-14		140751	Proportional solenoid, 24 volt	2
QD26	10-14		11001952	O-ring	2
QD27	10-14		11004700	Coil kit, 24v, DEUTSCH connector	2
QD28	10-14		063172	O-ring	2
QD29	10-14		11004750	Coil nut	2
QD30	10-14		11027883	Cap	2
QD100	10-14		11065120	Automotive control kit, 24v, manual override	1

Controls

H1P control C3

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

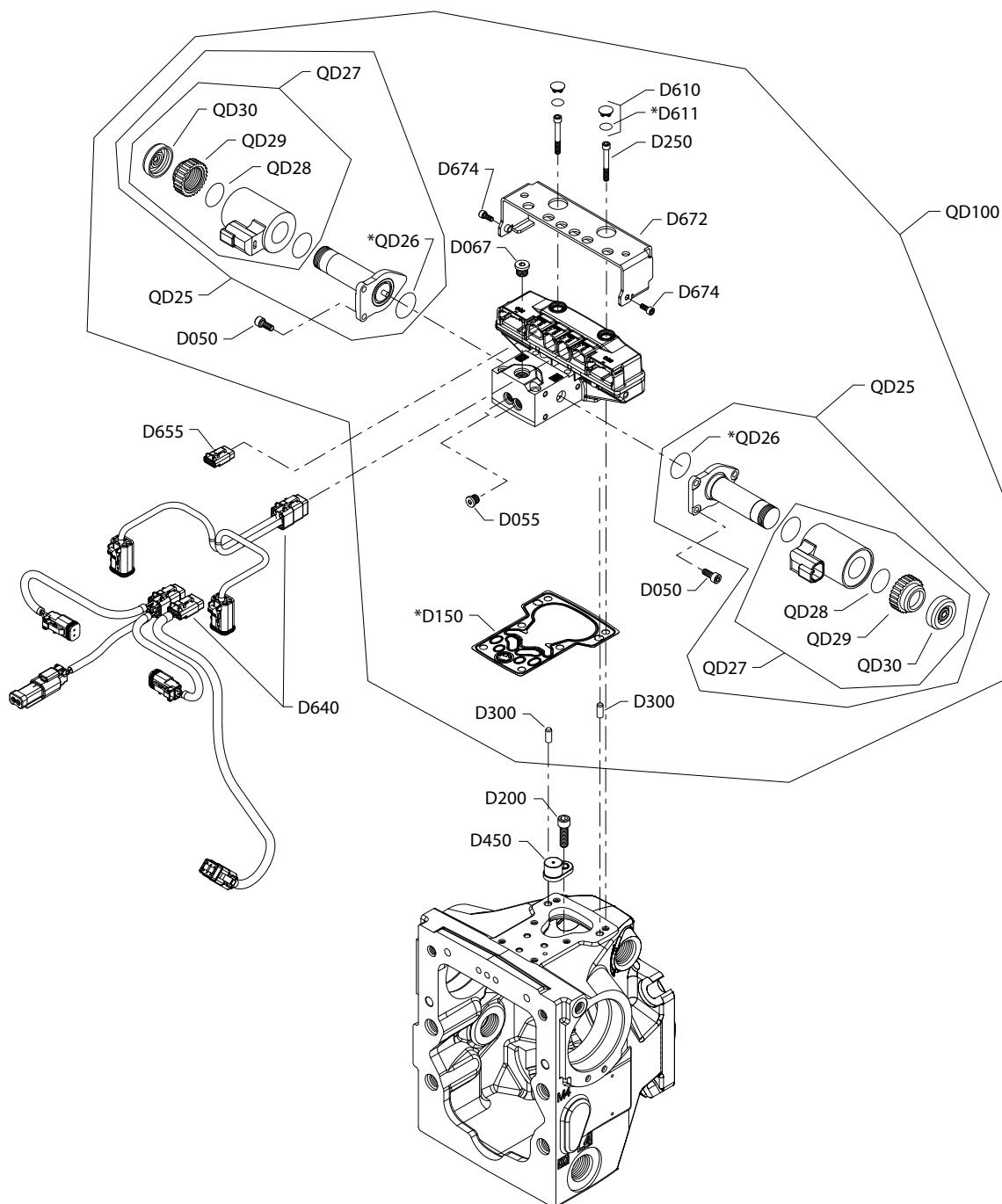
Order code: C3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	10-14		716860	Screw, M5 x 12	6
D055	10-14		11040532	Plug assembly	2
D067	10-14		327007	Plug assembly	1
D150	10-14		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	10-14		141472	Screw, special	1
D250	10-14		505038	Screw, M6 x 45	6
D300	10-14		11036469	Dowel pin	2
D450	10-14		11003097	Magnet carrier	1
D610	10-14		11000467	Plug assembly	2
D611	10-14		11066774	O-ring	2
D640	10-14		11023348	AC wiring harness	1
D655	10-14		11084827	Connector DTM 06-3S	1
D660	10-14		11084822	Connector DTM 06-6S	1
D672	10-14		11151875	Protection	1
D674	10-14		716860	Screw, M5 x 12	2
QD25	10-14		140751	Proportional solenoid, 24 volt	2
QD26	10-14		11001952	O-ring	2
QD27	10-14		11004700	Coil kit, 24v, DEUTSCH connector	2
QD28	10-14		063172	O-ring	2
QD29	10-14		11004750	Coil nut	2
QD30	10-14		11027883	Cap	2
QD100	10-14		11065121	Automotive control kit, 24v, manual override	1

Controls

H1P control C9, D1

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	12-02		716860	Screw, M5 x 12	6
D055	12-02		11040532	Plug assembly	2
D067	12-02		327007	Plug assembly	1
D150	12-02		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	12-02		141472	Screw, special	1
D250	12-02		505038	Screw, M6 x 45	6
D300	12-02		11036469	Dowel pin	2
D450	12-02		11003097	Magnet carrier	1
D610	12-02		11000467	Plug assembly	2
D611	12-02		11066774	O-ring	2
D640	12-02		11105876	AC wiring harness	1
D655	12-02		11084827	Connector DTM 06-3S	1
D672	12-02		11151875	Protection	1
D674	12-02		716860	Screw, M5 x 12	2
QD26	12-02		11001952	O-ring	2
QD28	12-02		063172	O-ring	2
QD30	12-02		11027883	Cap	2

Order code: C9

QD25	12-02		140751	Proportional solenoid, 24v	2
QD27	12-02		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	12-02		11004750	Coil nut	2
QD100	12-02		11065121	Automotive control kit, 24v, manual override	1

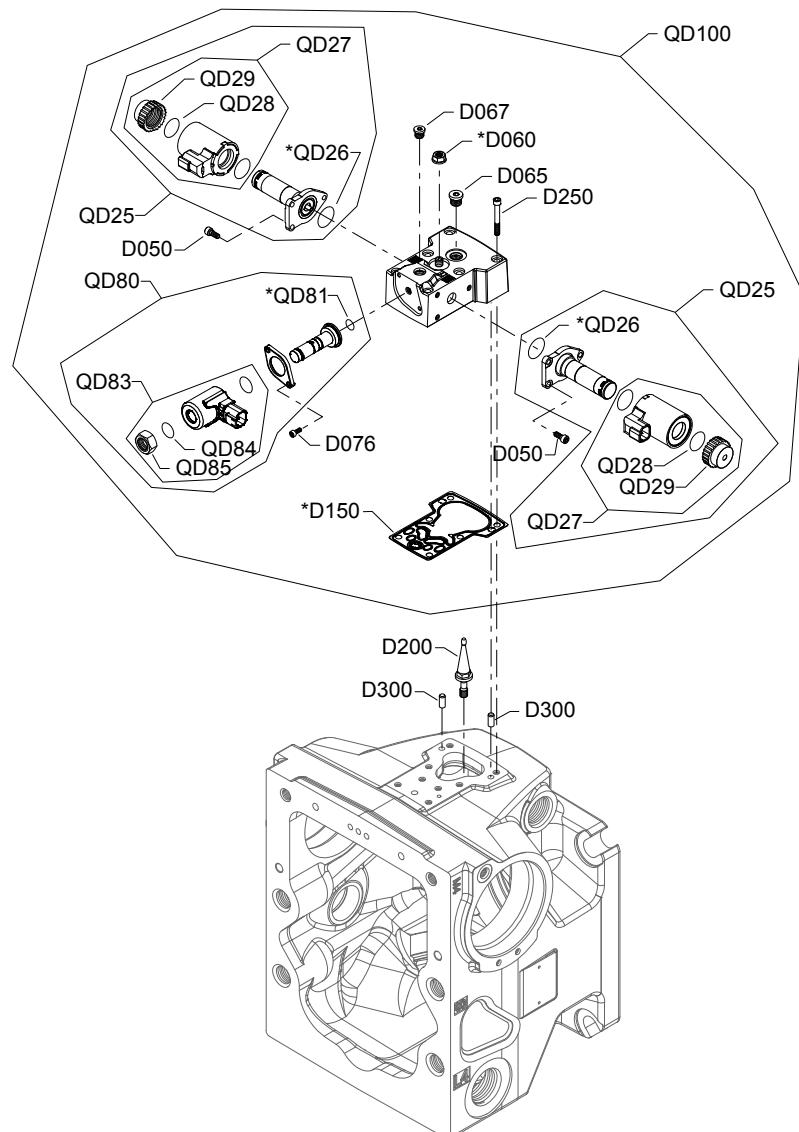
Order code: D1

QD25	12-02		140750	Proportional solenoid, 12v	2
QD27	12-02		11004698	Coil kit, 12v, DEUTSCH connector	2
QD29	12-02		11004749	Coil nut	2
QD100	12-02		11065119	Automotive control kit, 12v, manual 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 209)	1
D200	14-25		11202172	Swash plate feedback link (SB-2018-025 on page 213)	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

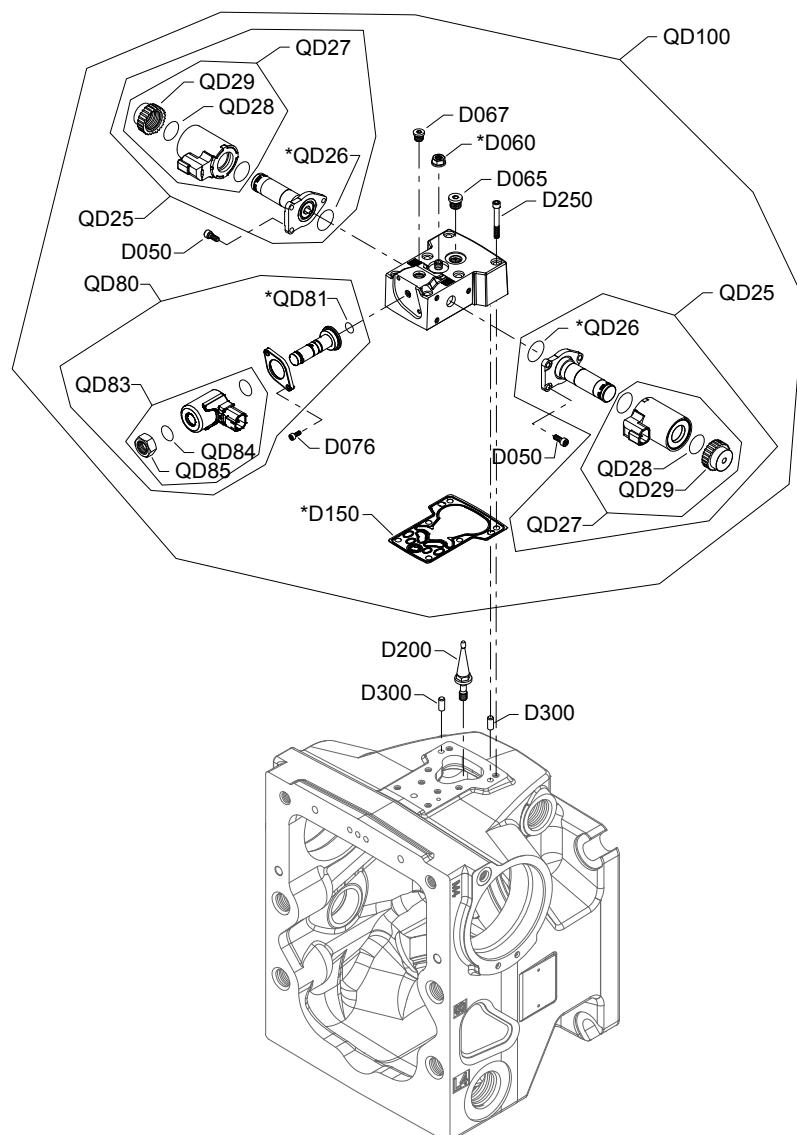
Order code: E7

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

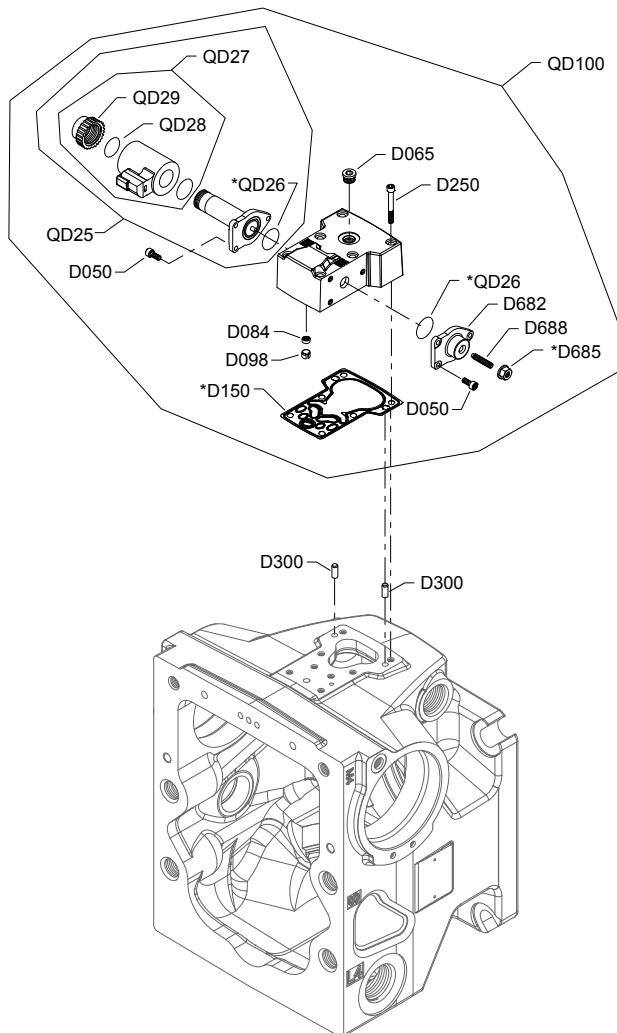
Order code: E8

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 209)	1
D200	14-25		11202172	Swashplate feedback link (SB-2018-025 on page 213)	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 209)	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

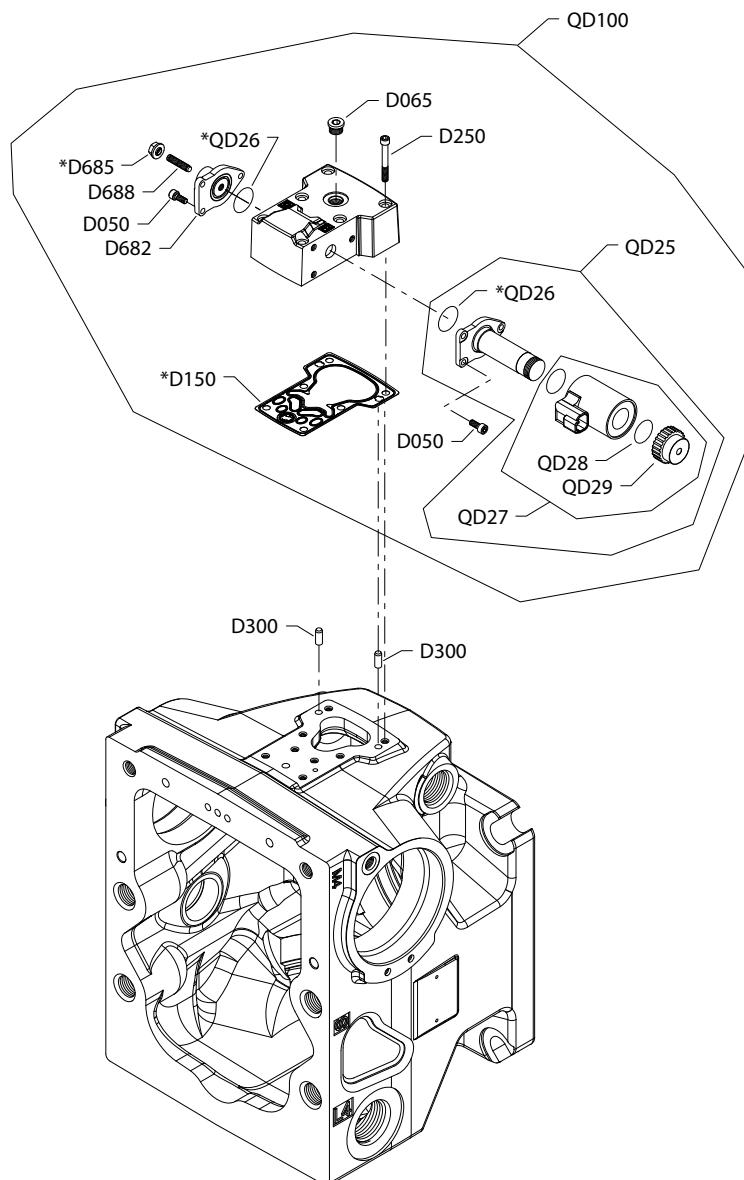
Order code: F2

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

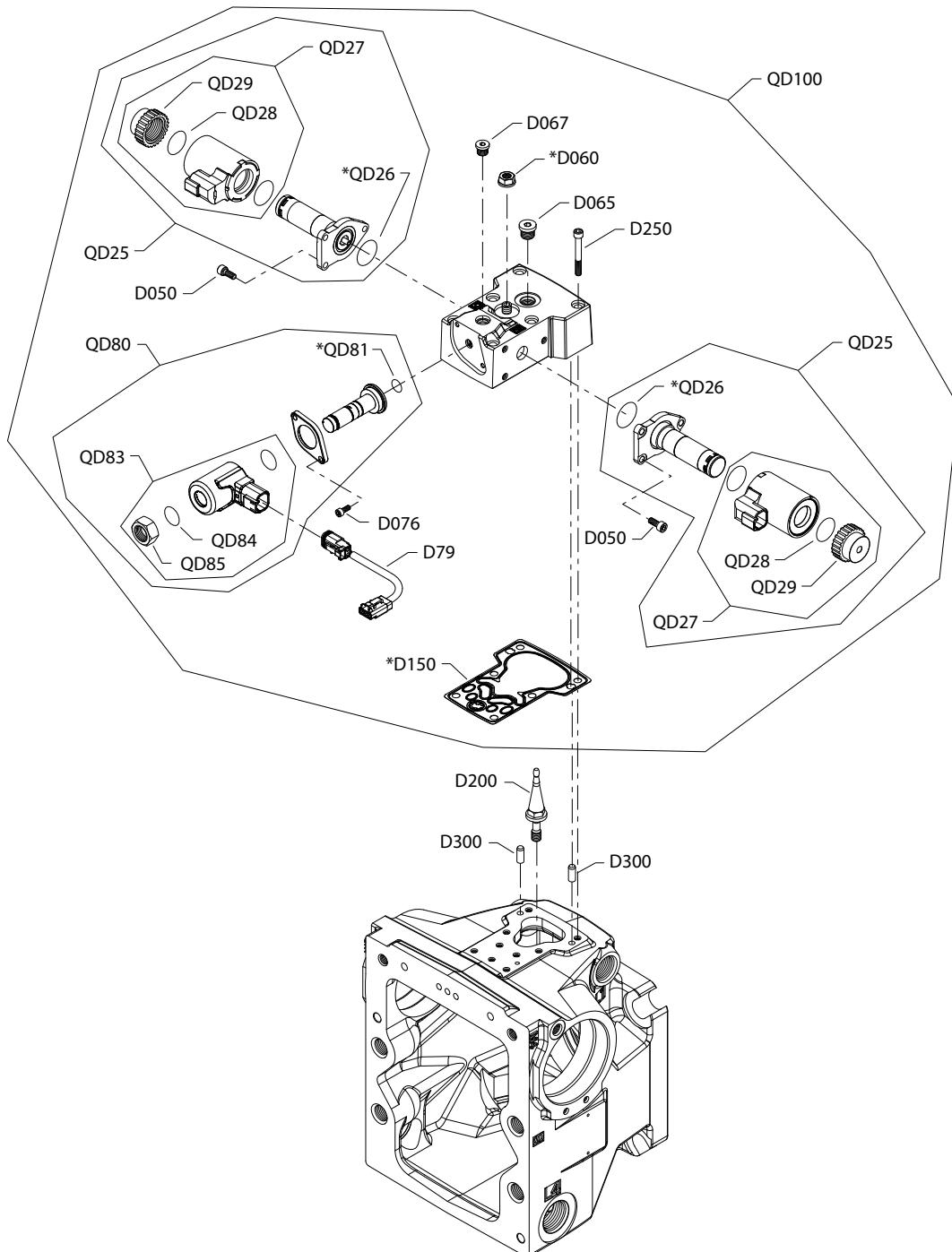
Order code: F4

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	07-25		716860	Screw, M5 x 12	6
D065	07-25		327007	Plug assembly	1
D150	07-25		11173377	Control gasket (SB-2016-033 on page 209)	1
D250	07-25		505038	Screw, M6 x 45	6
D300	07-25		310979	Dowel pin	2
D682	07-25		11079441	Flange	1
D685	07-25		612291 (9003508-0008)	Seal nut, M8	1
D688	07-25		11079453	Adjusting screw	1
QD25	07-25		11012459	Proportional solenoid, 24v	1
QD26	07-25		11001952	O-ring	2
QD27	07-25		11028019	Coil kit, 24v, DEUTSCH connector	1
QD28	07-25		063172	O-ring	1
QD29	07-25		11028024	Coil nut	1
QD100	07-25		11174982	FDC kit, 24v, DEUTSCH connector	1

Controls

H1P control G7

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

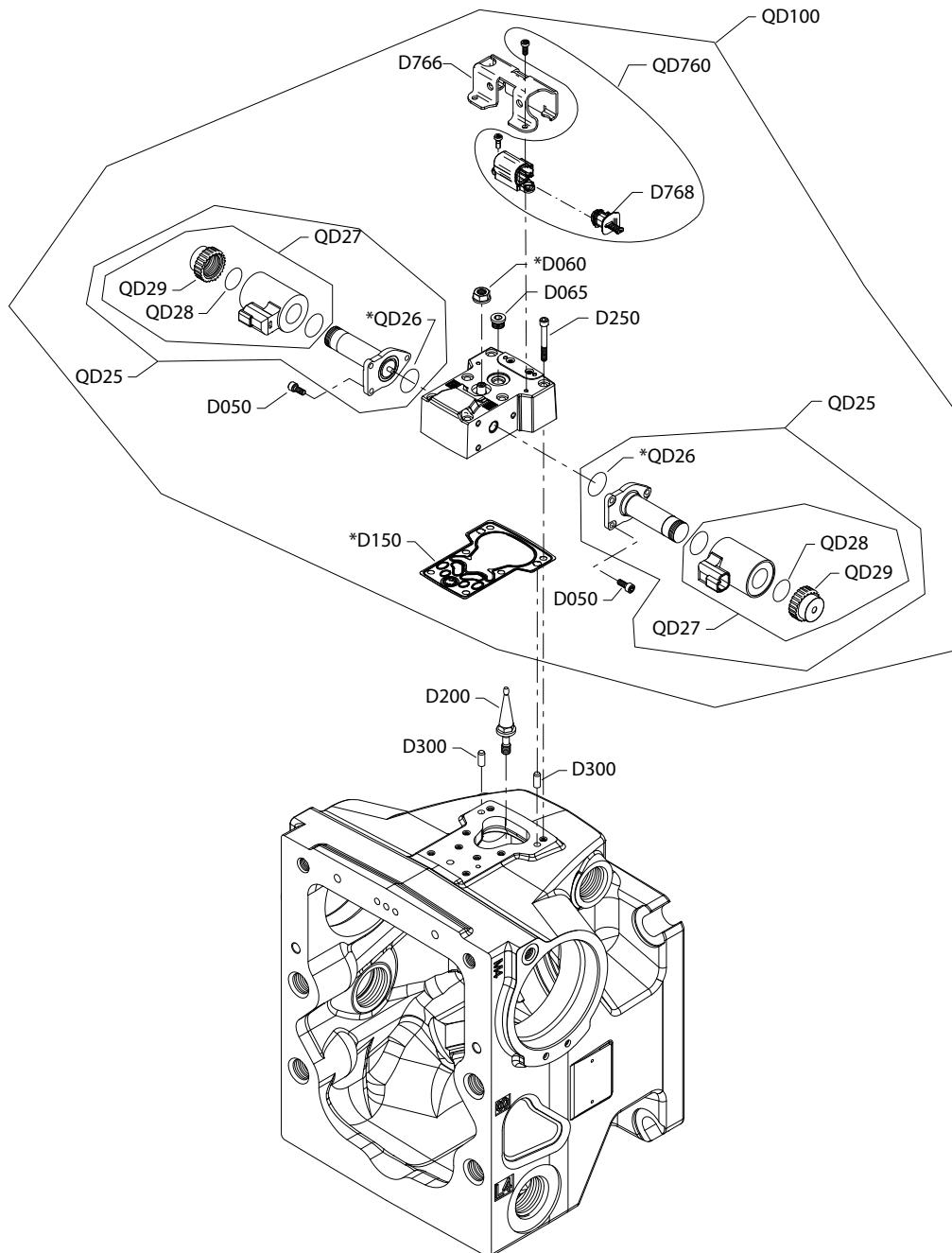
Order code: G7

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D79	14-31		11153287	Cable adapter	1
D050	14-31		716860	Screw, M5 x 12	6
D060	14-31		612291 (9003508-0008)	Seal nut, M8	1
D065	14-31		327007 (9005110-4400)	Plug assembly	1
D067	14-31		327007 (9005110-4400)	Plug assembly	1
D076	14-31		067694	Screw, M4 x 10	2
D150	14-31		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	14-31		11202172	Swashplate feedback link (SB-2018-025 on page 213)	1
D250	14-31		505038	Screw, M6 x 45	6
D300	14-31		310979	Dowel pin	2
QD25	14-31		11012457	Proportional solenoid, 12v	2
QD26	14-31		11001952	O-ring	2
QD27	14-31		11028018	Coil kit, 12v, DEUTSCH connector	2
QD28	14-31		063172	O-ring	2
QD29	14-31		11027046	Coil nut	2
QD80	14-31		11129914	Solenoid vale, on/off, 12v	1
QD81	14-31		11152257	O-ring	1
QD83	14-31		11147301	Coil kit, 12v	1
QD84	14-31		11140393	O-ring	1
QD85	14-31		11140394	Coil nut	1
QD100	14-31		11156149	EDC kit, 12v, CCO	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

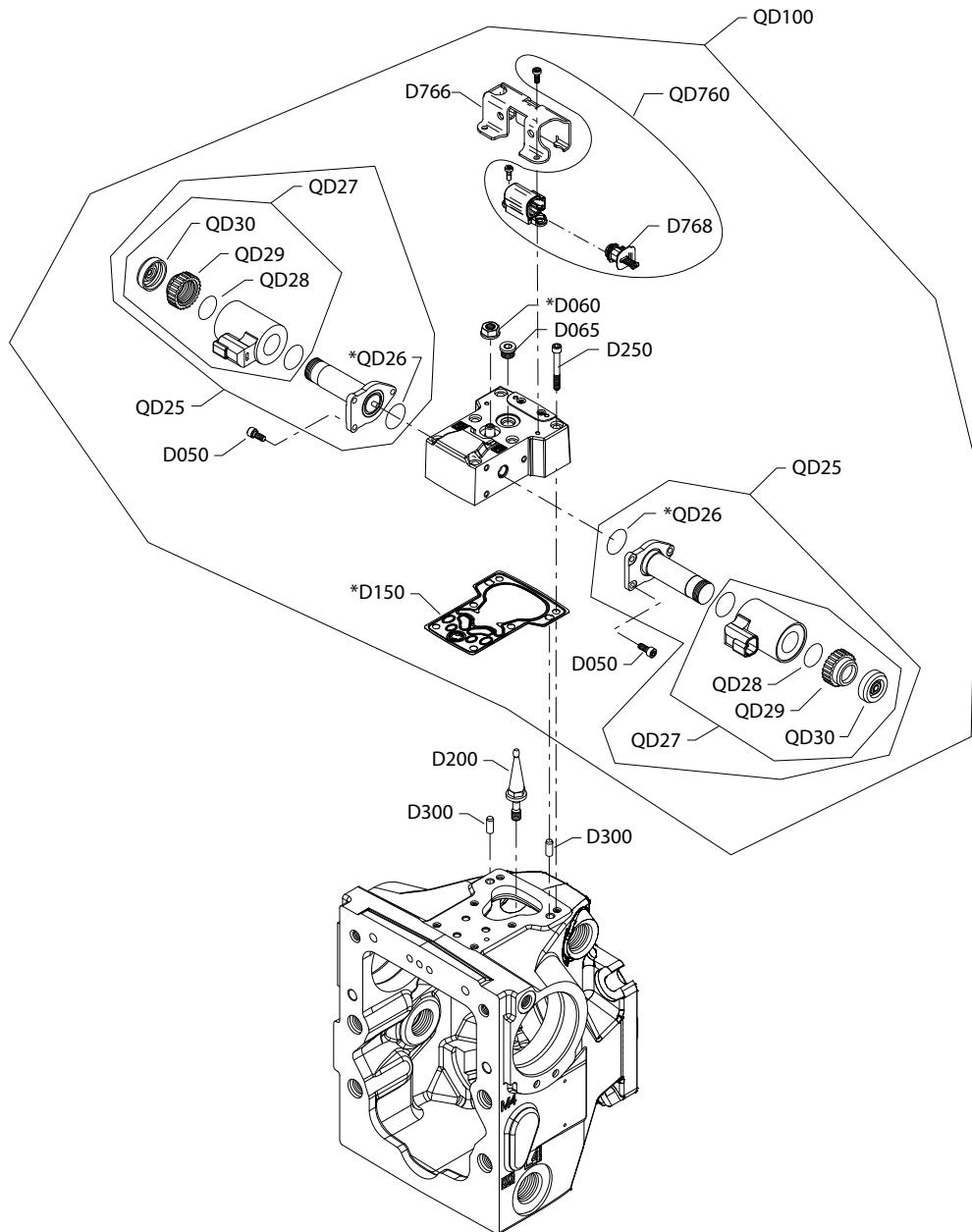
Order code: H3

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

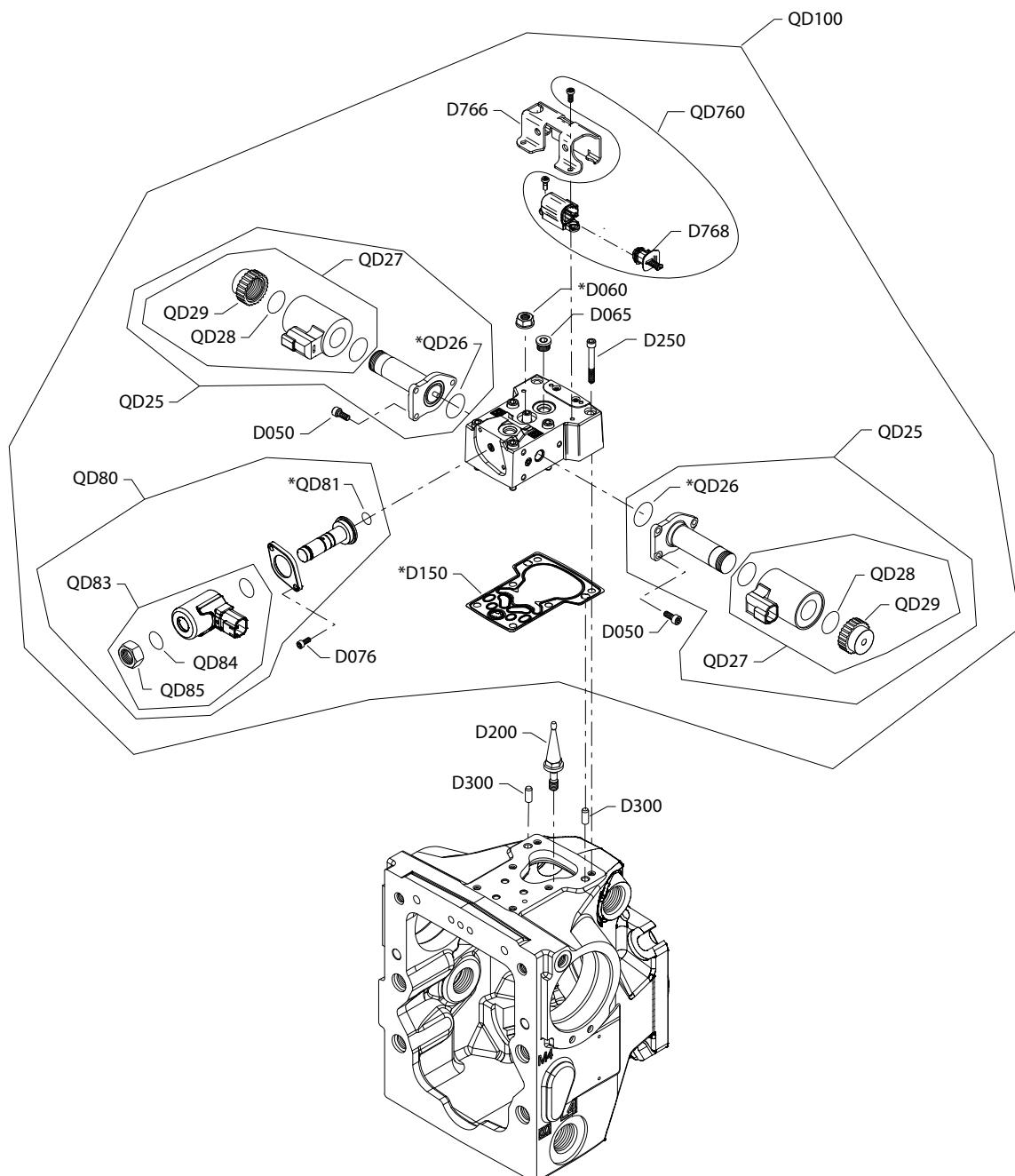
Order code: H7

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

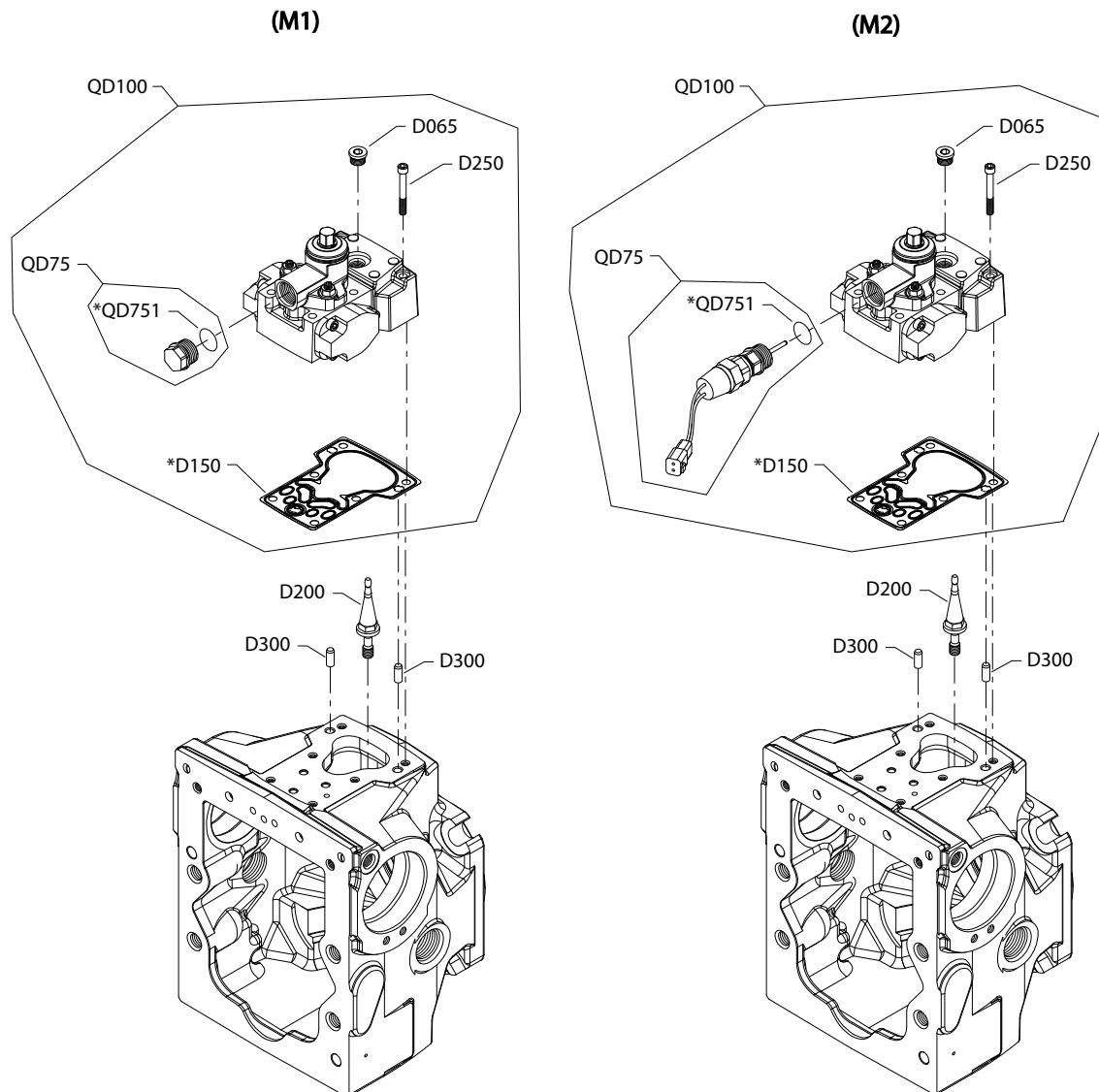
Order code: H9

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

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

Order code: M1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D065	14-15		327007	Plug assembly	1
D150	14-15		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	14-15		11202172	Swashplate feedback link (SB-2018-025 on page 213)	1
D250	14-15		505038	Screw, M6 x 45	6
D300	14-15		310979	Dowel pin	2
QD75	14-15		11119332	Spring seat assembly	1
QD100	14-15		11141225	MDC kit	1
QD751	14-15		001131	O-ring	1

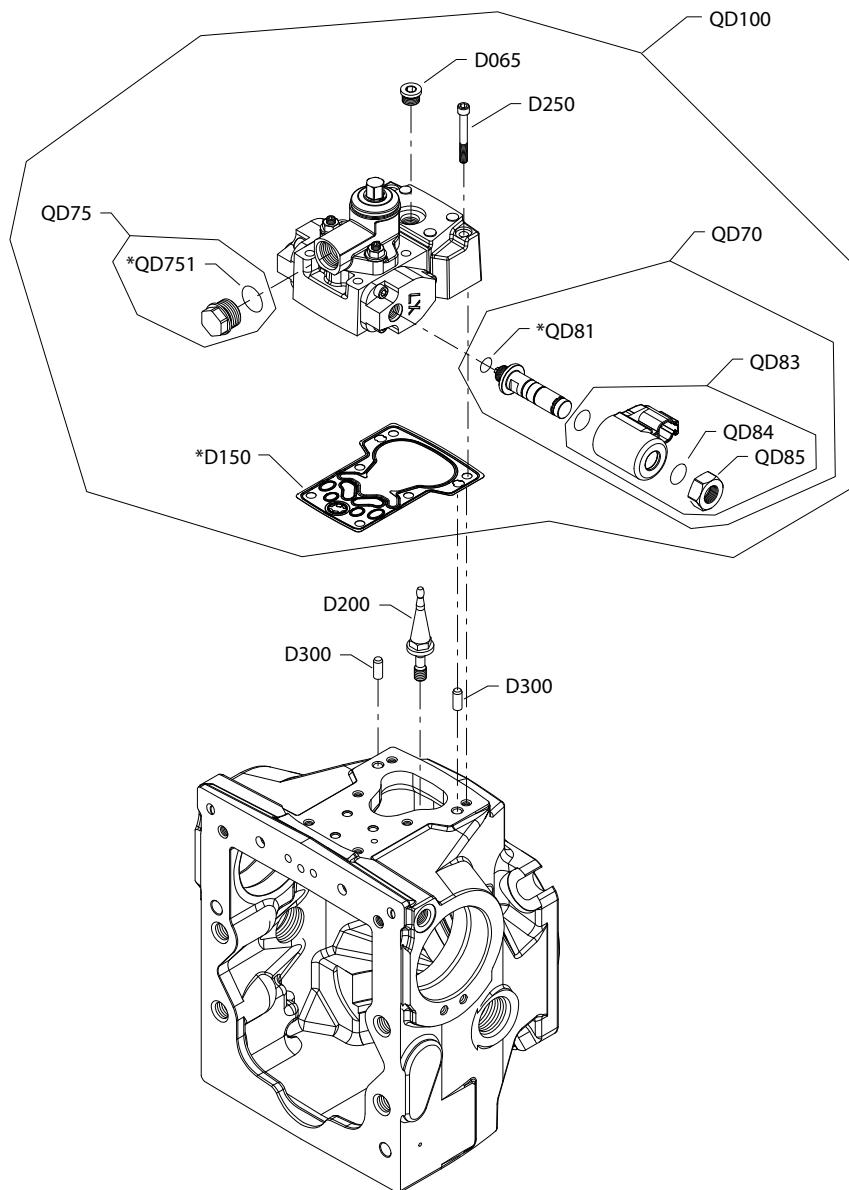
Order code: M2

D065	14-15		327007	Plug assembly	1
D150	14-15		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	14-15		11202172	Swashplate feedback link (SB-2018-025 on page 213)	1
D250	14-15		505038	Screw, M6 x 45	6
D300	14-15		310979	Dowel pin	2
QD75	14-15		11126847	Spring seat/neutral start switch assembly	1
QD100	14-15		11141236	MDC kit	1
QD751	14-15		001131	O-ring	1

Controls

H1P control M3, M4

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

Order code: M3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D065	14-15		327007	Plug assembly	1
D150	14-15		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	14-15		11202172	Swashplate feedback link ()	1
D250	14-15		505038	Screw, M6 x 45	6
D300	14-15		310979	Dowel pin	2
QD70	14-15		11129916	Solenoid valve, 12v	1
QD75	14-15		11119332	Spring seat assembly	1
QD81	14-15		11152257	O-ring	1
QD83	14-15		11136347	Coil kit, 12v	1
QD84	14-15		11140393	O-ring	1
QD85	14-15		11140394	Coil nut	1
QD100	14-15		11141237	MDC kit, 12v	1
QD751	14-15		001131	O-ring	1

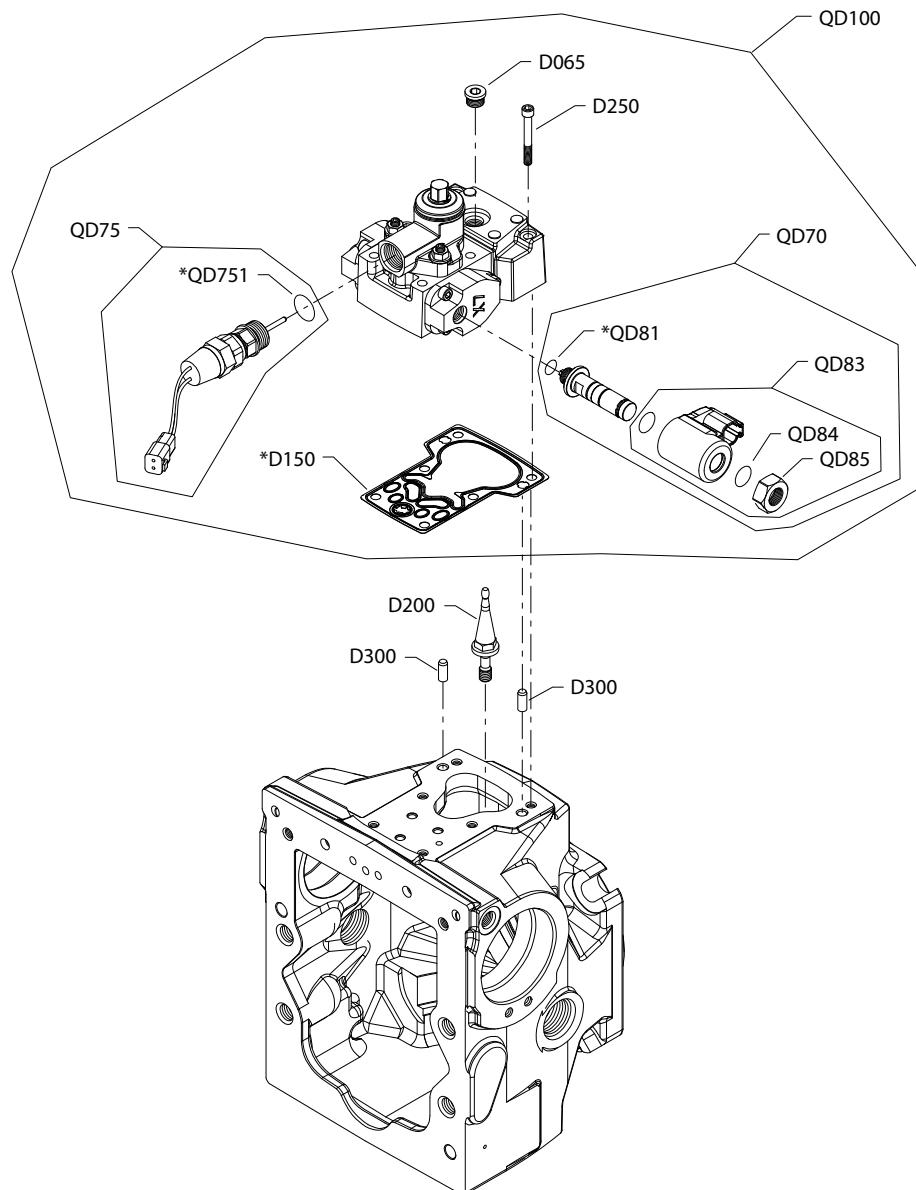
Order code: M4

D065	14-15		327007	Plug assembly	1
D150	14-15		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	14-15		11202172	Swashplate feedback link ()	1
D250	14-15		505038	Screw, M6 x 45	6
D300	14-15		310979	Dowel pin	2
QD70	14-15		11129917	Solenoid valve, 24v	1
QD75	14-15		11119332	Spring seat assembly	1
QD81	14-15		11152257	O-ring	1
QD83	14-15		11136348	Coil kit, 24v	1
QD84	14-15		11140393	O-ring	1
QD85	14-15		11140394	Coil nut	1
QD100	14-15		11141238	MDC kit, 24v	1
QD751	14-15		001131	O-ring	1

Controls

H1P control M5, M6

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

Order code: M5

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D065	14-15		327007	Plug assembly	1
D150	14-15		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	14-15		11202172	Swashplate feedback link ()	1
D250	14-15		505038	Screw, M6 x 45	6
D300	14-15		310979	Dowel pin	2
QD70	14-15		11129916	Solenoid valve, 12v	1
QD75	14-15		11126847	Spring seat/neutral start switch assembly	1
QD81	14-15		11152257	O-ring	1
QD83	14-15		11136347	Coil kit, 12v	1
QD84	14-15		11140393	O-ring	1
QD85	14-15		11140394	Coil nut	1
QD100	14-15		11141239	MDC kit, 12v	1
QD751	14-15		001131	O-ring	1

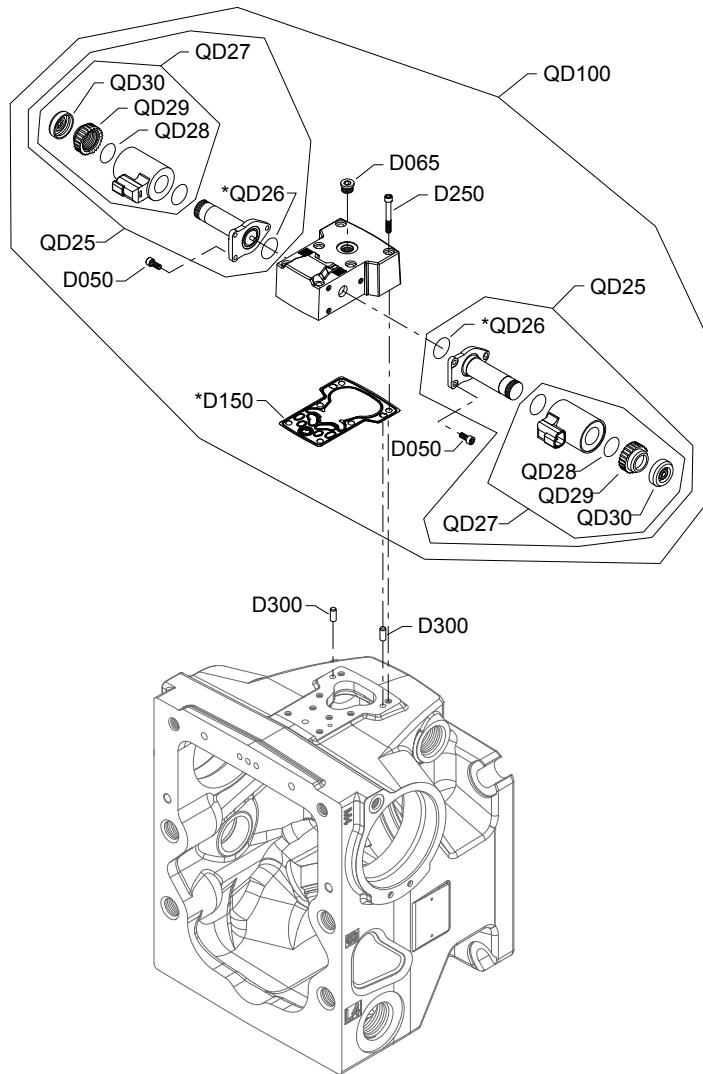
Order code: M6

D065	14-15		327007	Plug assembly	1
D150	14-15		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	14-15		11202172	Swashplate feedback link ()	1
D250	14-15		505038	Screw, M6 x 45	6
D300	14-15		310979	Dowel pin	2
QD70	14-15		11129917	Solenoid valve, 24v	1
QD75	14-15		11126847	Spring seat/neutral start switch assembly	1
QD81	14-15		11152257	O-ring	1
QD83	14-15		11136348	Coil kit, 24v	1
QD84	14-15		11140393	O-ring	1
QD85	14-15		11140394	Coil nut	1
QD100	14-15		11141240	MDC kit, 24v	1
QD751	14-15		001131	O-ring	1

Controls

H1P control N1, N2

N1 and N2 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Parts Manual
H1P 147 and 165cc

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

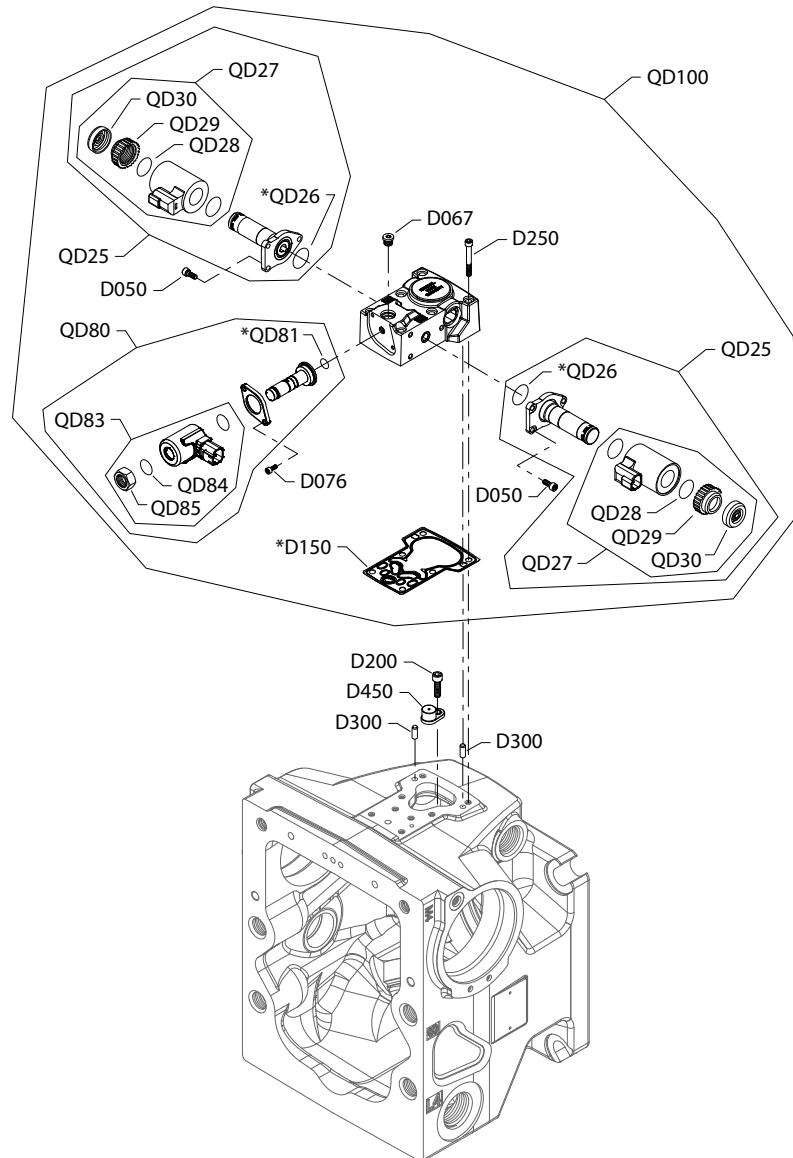
Order code: N2

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

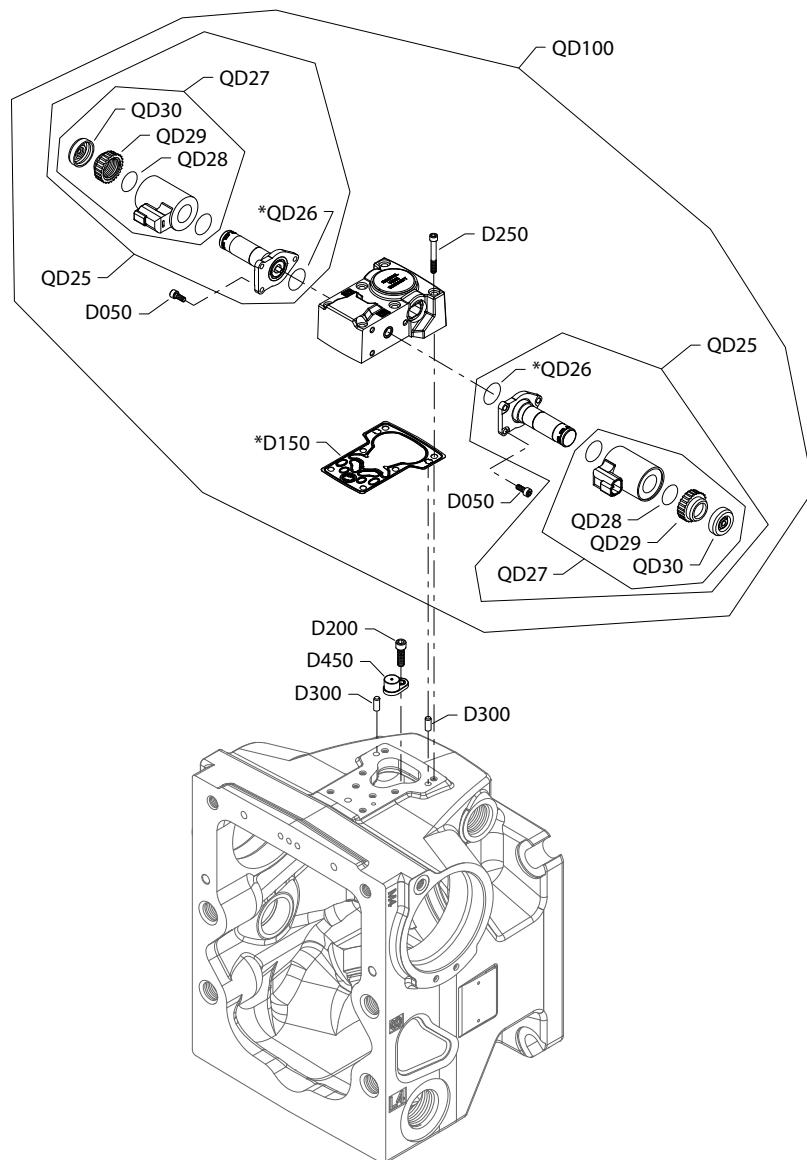
Order code: N4

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

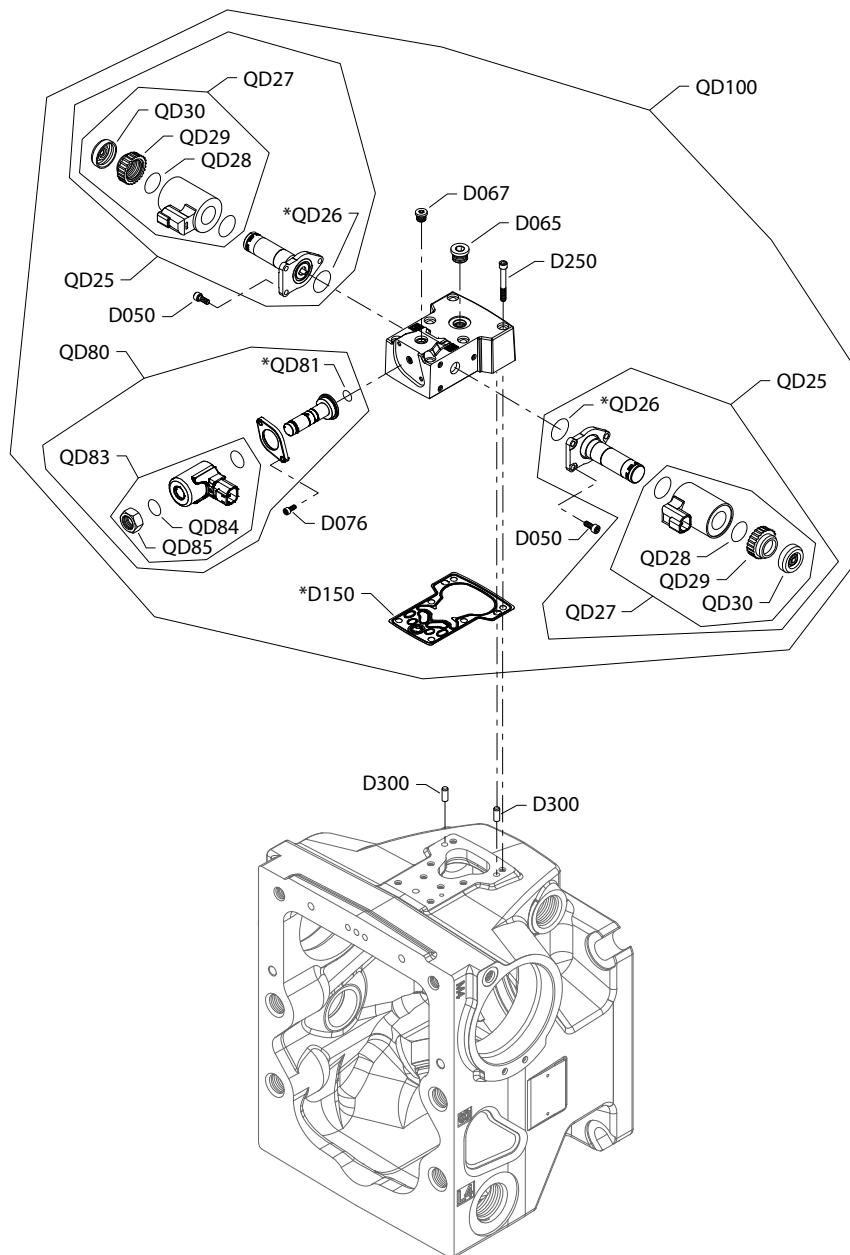
Order code: N6

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

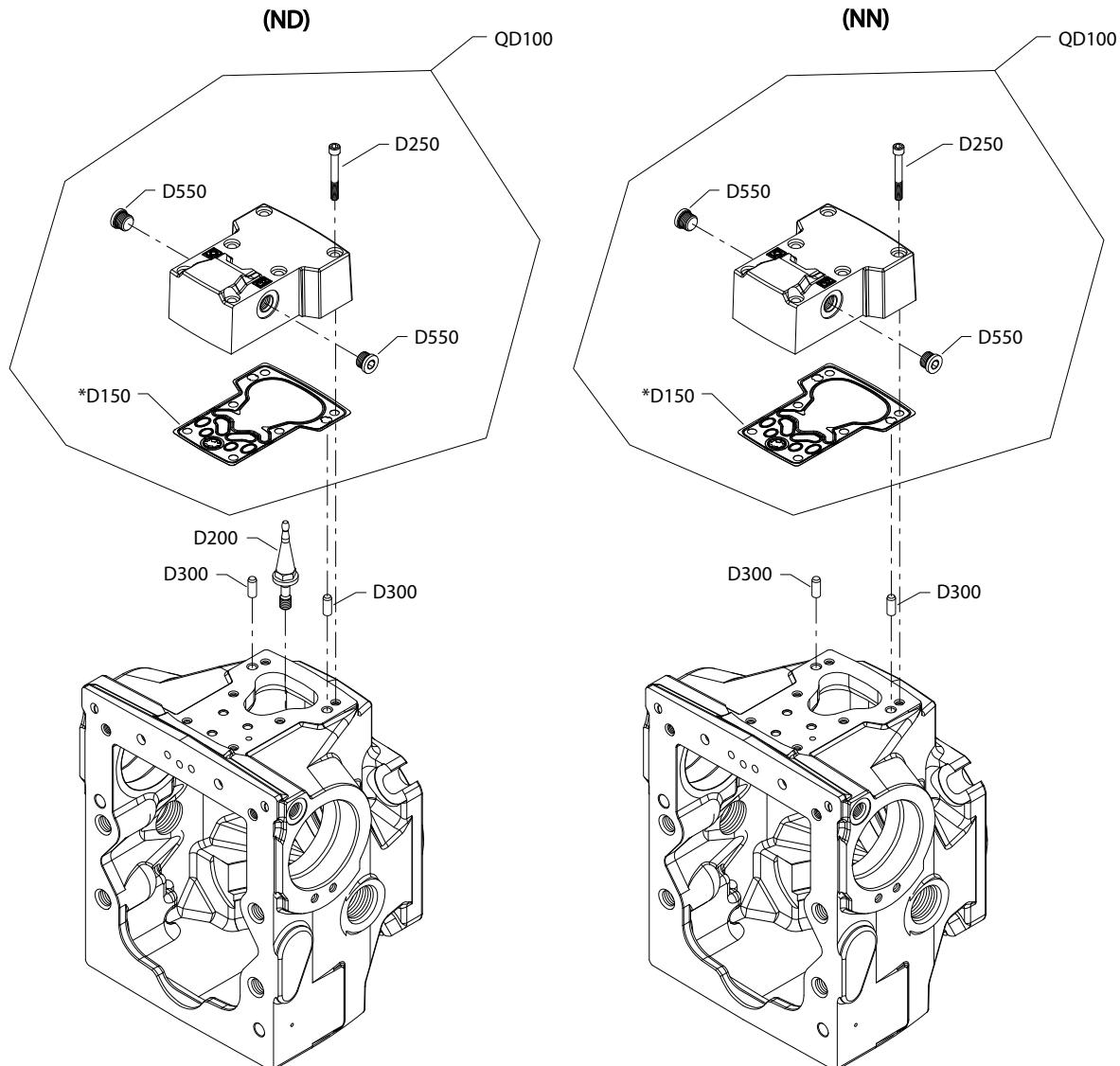
Order code: N8

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

Parts 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	15-11		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	15-11		11202172	Swashplate feedback link ()	1
D250	15-11		505038	Screw, M6 x 45	6
D300	15-11		310979	Dowel pin	2
D550	15-11		140644	Plug assembly	2
QD100	15-11		11121984	Control cover kit	1

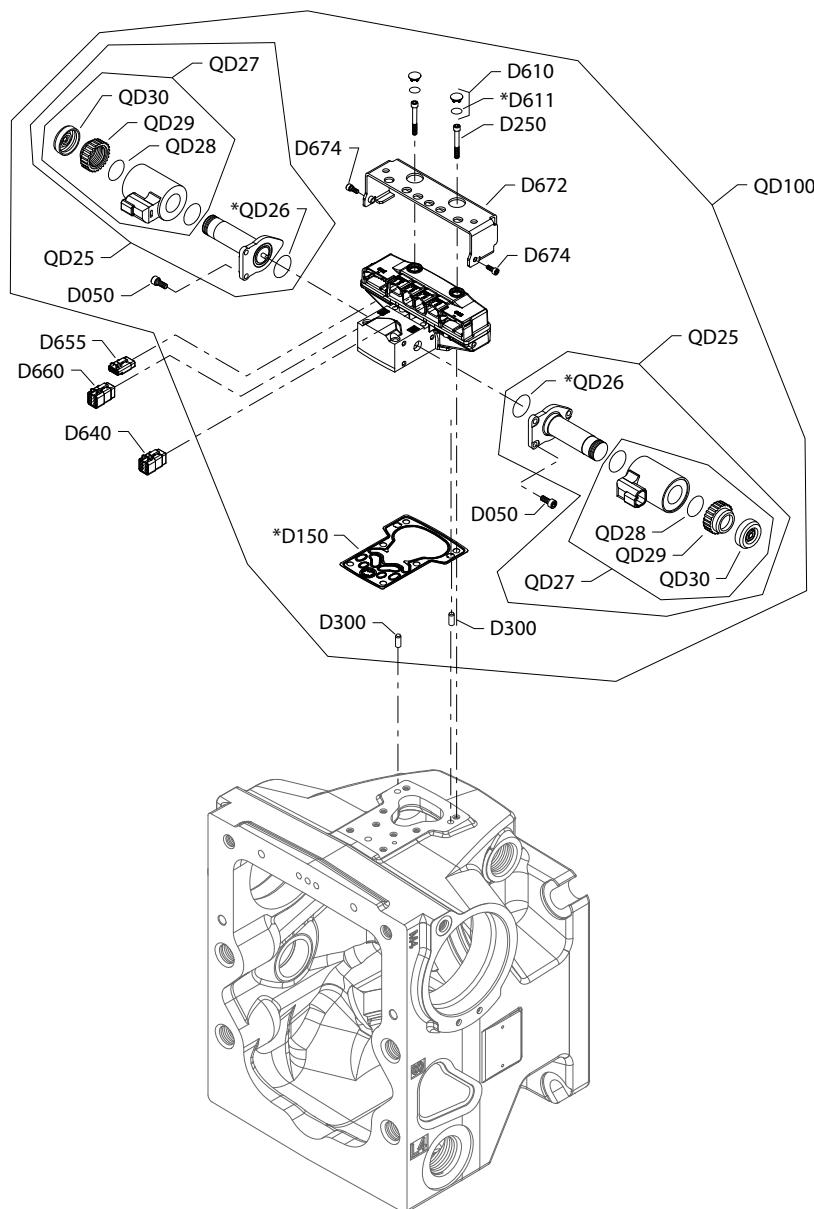
Order code: NN

D150	13-38		11173377	Control gasket (SB-2016-033 on page 209)	1
D250	13-38		505038	Screw, M6 x 45	6
D300	13-38		310979	Dowel pin	2
D550	13-38		140644	Plug assembly	2
QD100	13-38		11121984	Control cover kit	1

Controls

H1P control P5

P5 configuration



Generic housing shown

* Included in overhaul kit Q210

Controls

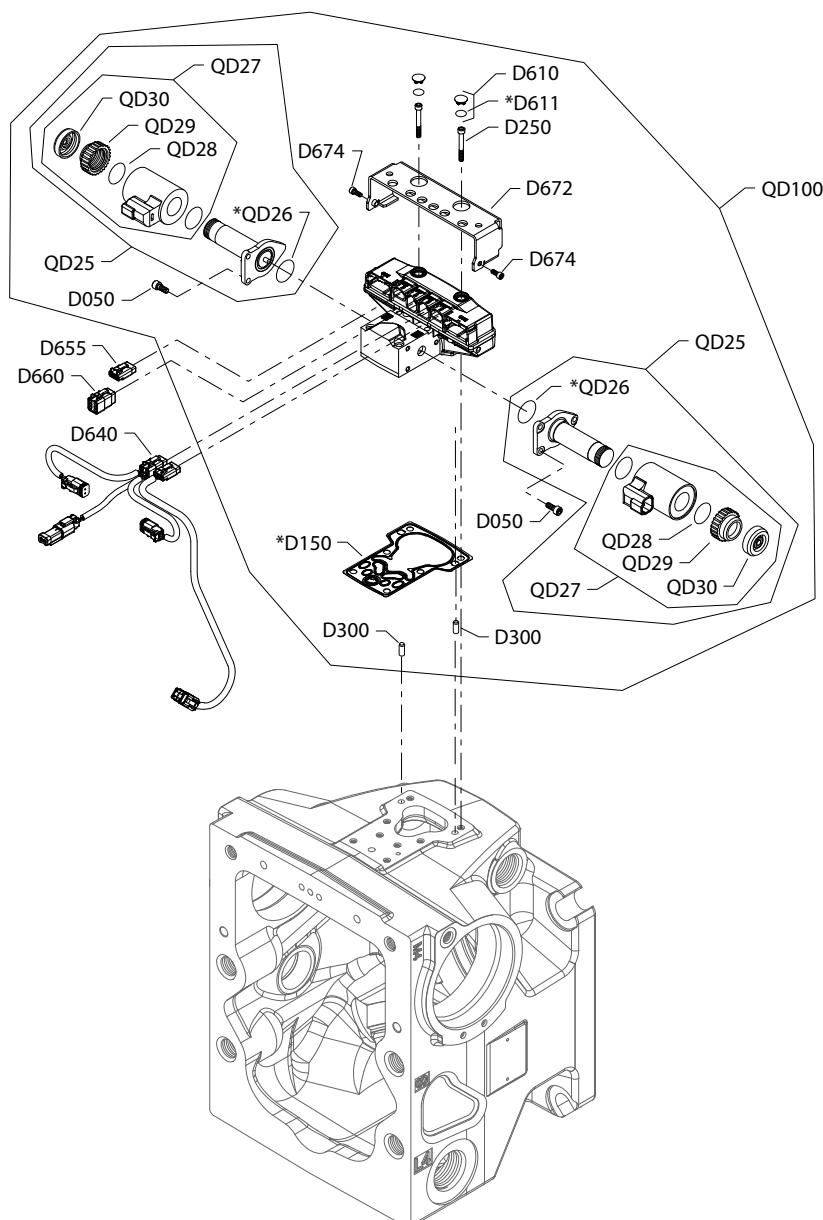
Order code: P5

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	17-15		716860	Screw, M5 x 12	6
D150	17-15		11173377	Control gasket	1
D250	17-15		505038	Screw, M6 x 45	6
D300	17-15		11036469	Dowel pin	2
D610	17-15		11000467	Plug assembly	2
D611	17-15		11066774	O-ring	2
D640	17-15		11084822	Blank, connector DTM 06-6S	1
D655	17-15		11084827	Blank, connector DTM 06-3S	1
D660	17-15		11084822	Blank, connector DTM 06-6S	1
D672	17-15		11151875	Protection	1
D674	17-15		716860	Screw, M5 x 12	2
QD25	17-15		140750	Proportional solenoid, 12 volt	2
QD26	17-15		11001952	O-ring	2
QD27	17-15		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	17-15		063172	O-ring	2
QD29	17-15		11004749	Coil nut	2
QD30	17-15		11027883	Cap	2
QD100	17-15		11147941	Automotive control kit, 12v, manual override	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

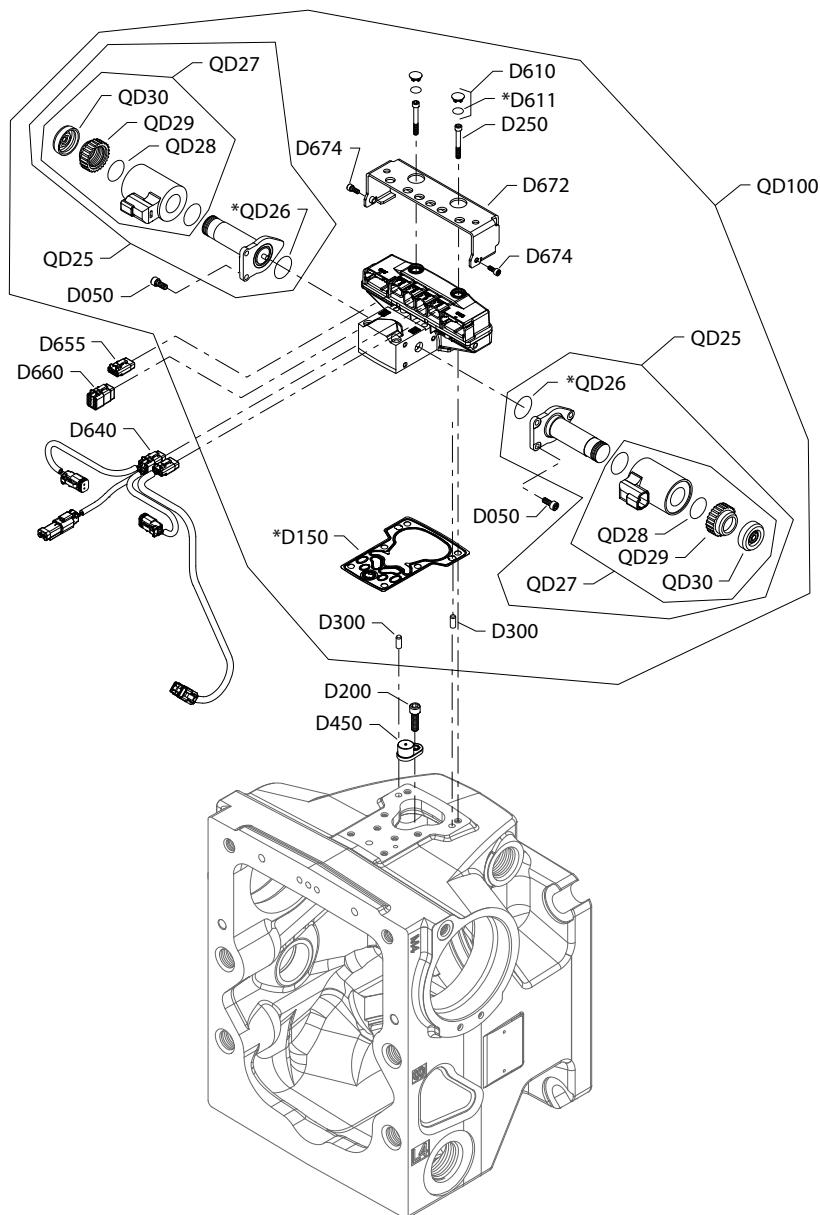
Order code: P7

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

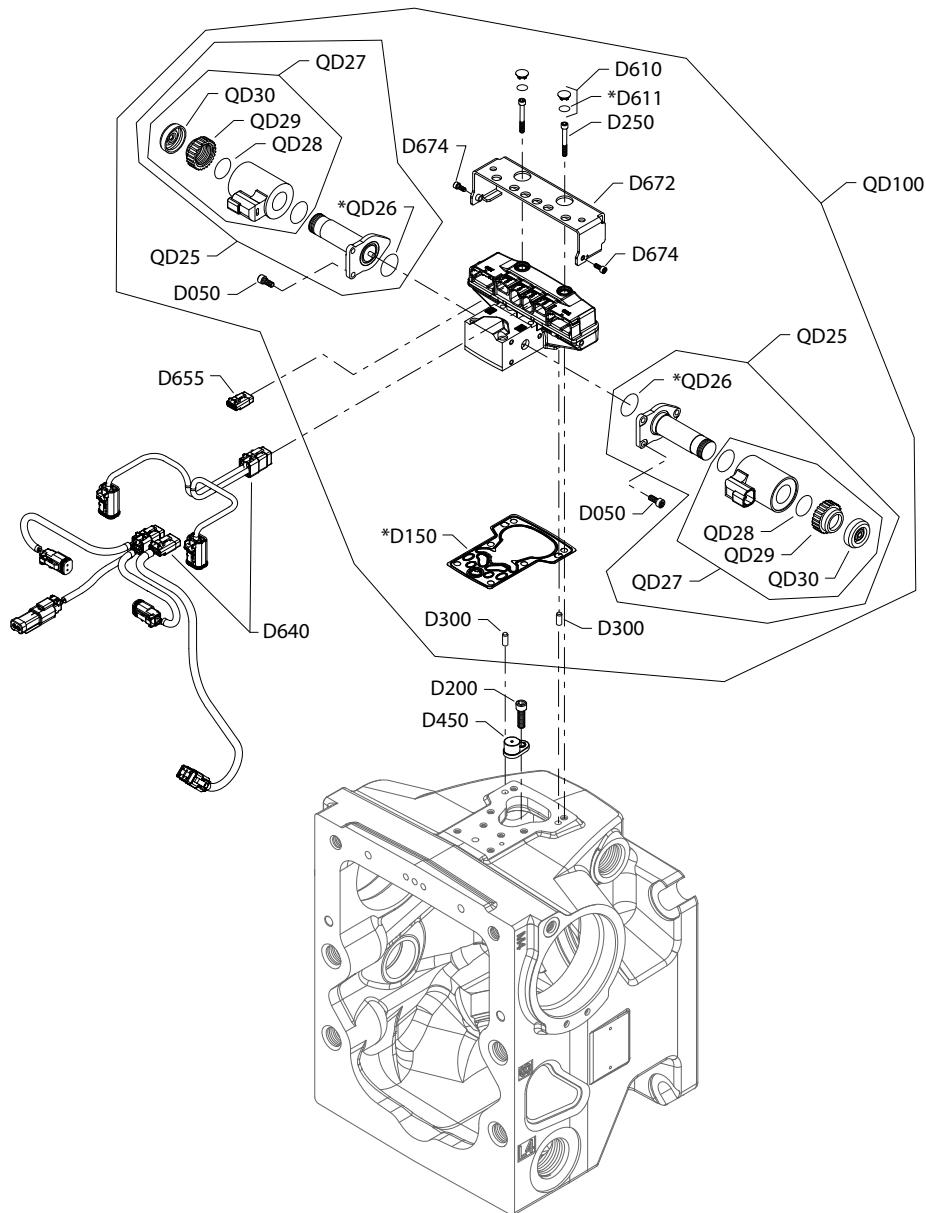
Order code: P9

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 R1, R2

R1 and R2 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		11105876	AC wiring harness	1
D655	16-30		11084827	Blank, connector DTM 06-3S	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: R1

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

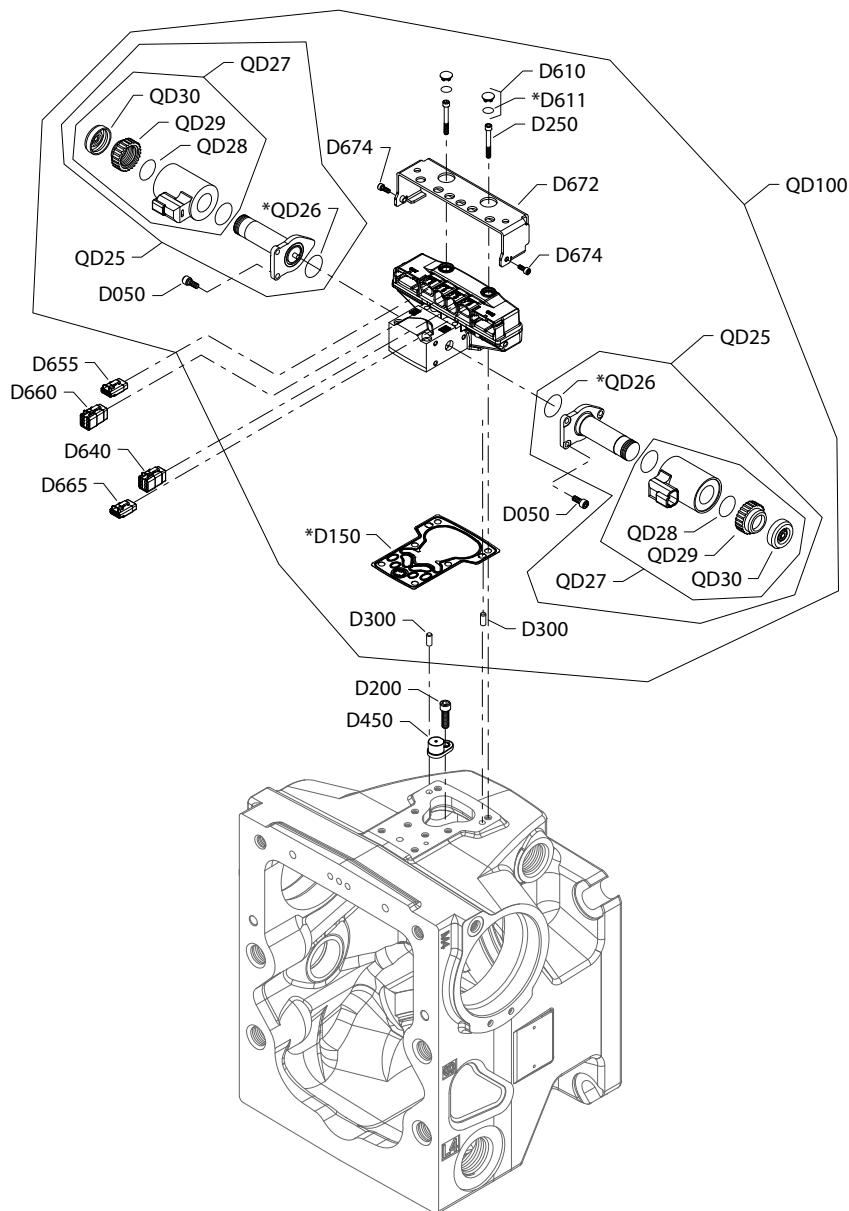
Order code: R2

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 R3

R3 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

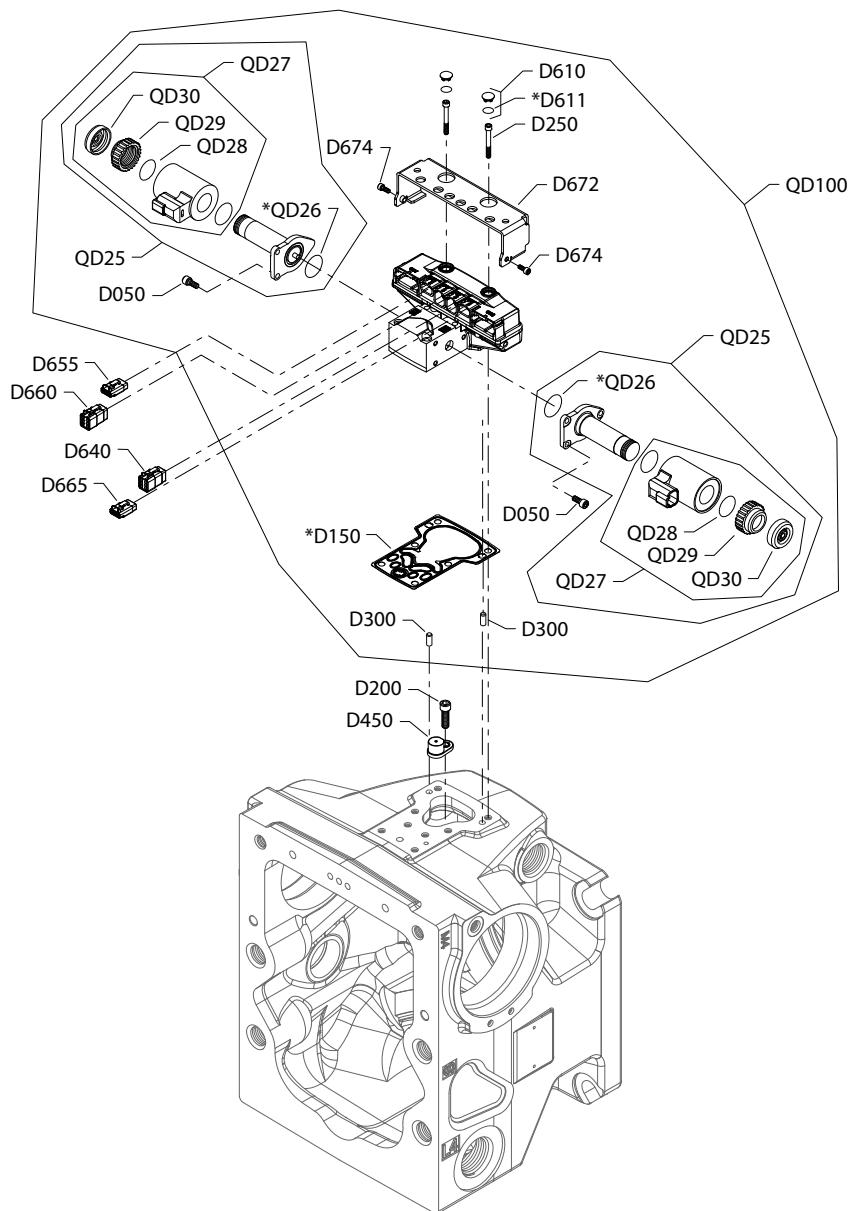
Order code: R3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-17		716860	Screw, M5 x 12	6
D150	16-17		11173377	Control gasket	1
D200	16-17		141472	Screw, special	1
D250	16-17		505038	Screw, M6 x 45	6
D300	16-17		11036469	Dowel pin	2
D450	16-17		11003097	Magnetic carrier	1
D610	16-17		11000467	Plug assembly	2
D611	16-17		11066774	O-ring	2
D640	16-17		11084822	Blank, connector DTM 06-6S	1
D655	16-17		11084827	Blank, connector DTM 06-3S	1
D660	16-17		11084822	Blank, connector DTM 06-6S	1
D665	16-17		11084827	Blank, connector DTM 06-3S	1
D672	16-17		11151875	Protection	1
D674	16-17		716860	Screw, M5 x 12	2
QD25	16-17		140751	Proportional solenoid, 24 volt	2
QD26	16-17		11001952	O-ring	2
QD27	16-17		11004700	Coil kit, 24v, DEUTSCH connector	2
QD28	16-17		063172	O-ring	2
QD29	16-17		11004750	Coil nut	2
QD30	16-17		11027883	Cap	2
QD100	16-17		11147943	Automotive control kit, 24v, manual override	1

Controls

H1P control R4

R4 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

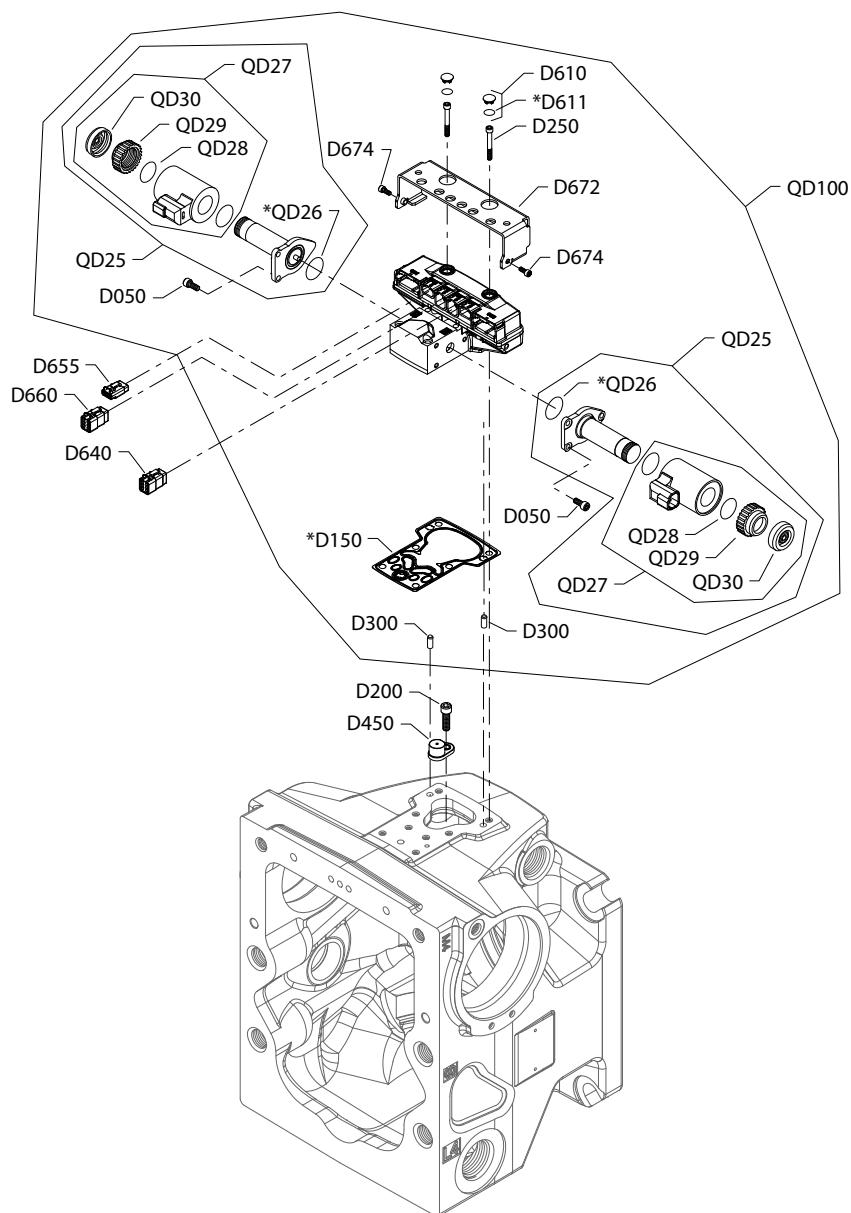
Order code: R4

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	17-15		716860	Screw, M5 x 12	6
D150	17-15		11173377	Control gasket	1
D200	17-15		141472	Screw, special	1
D250	17-15		505038	Screw, M6 x 45	6
D300	17-15		11036469	Dowel pin	2
D450	17-15		11003097	Magnetic carrier	1
D610	17-15		11000467	Plug assembly	2
D611	17-15		11066774	O-ring	2
D640	17-15		11084822	Blank, connector DTM 06-6S	1
D655	17-15		11084827	Blank, connector DTM 06-3S	1
D660	17-15		11084822	Blank, connector DTM 06-6S	1
D665	17-15		11084827	Blank, connector DTM 06-3S	1
D672	17-15		11151875	Protection	1
D674	17-15		716860	Screw, M5 x 12	2
QD25	17-15		140750	Proportional solenoid, 12 volt	2
QD26	17-15		11001952	O-ring	2
QD27	17-15		11004698	Coil kit, 12v, DEUTSCH connector	2
QD28	17-15		063172	O-ring	2
QD29	17-15		11004749	Coil nut	2
QD30	17-15		11027883	Cap	2
QD100	17-15		11147940	Automotive control kit, 12v, manual override	1

Controls

H1P control R5

R5 configuration



Generic housing shown

* Included in overhaul seal kit Q210

Controls

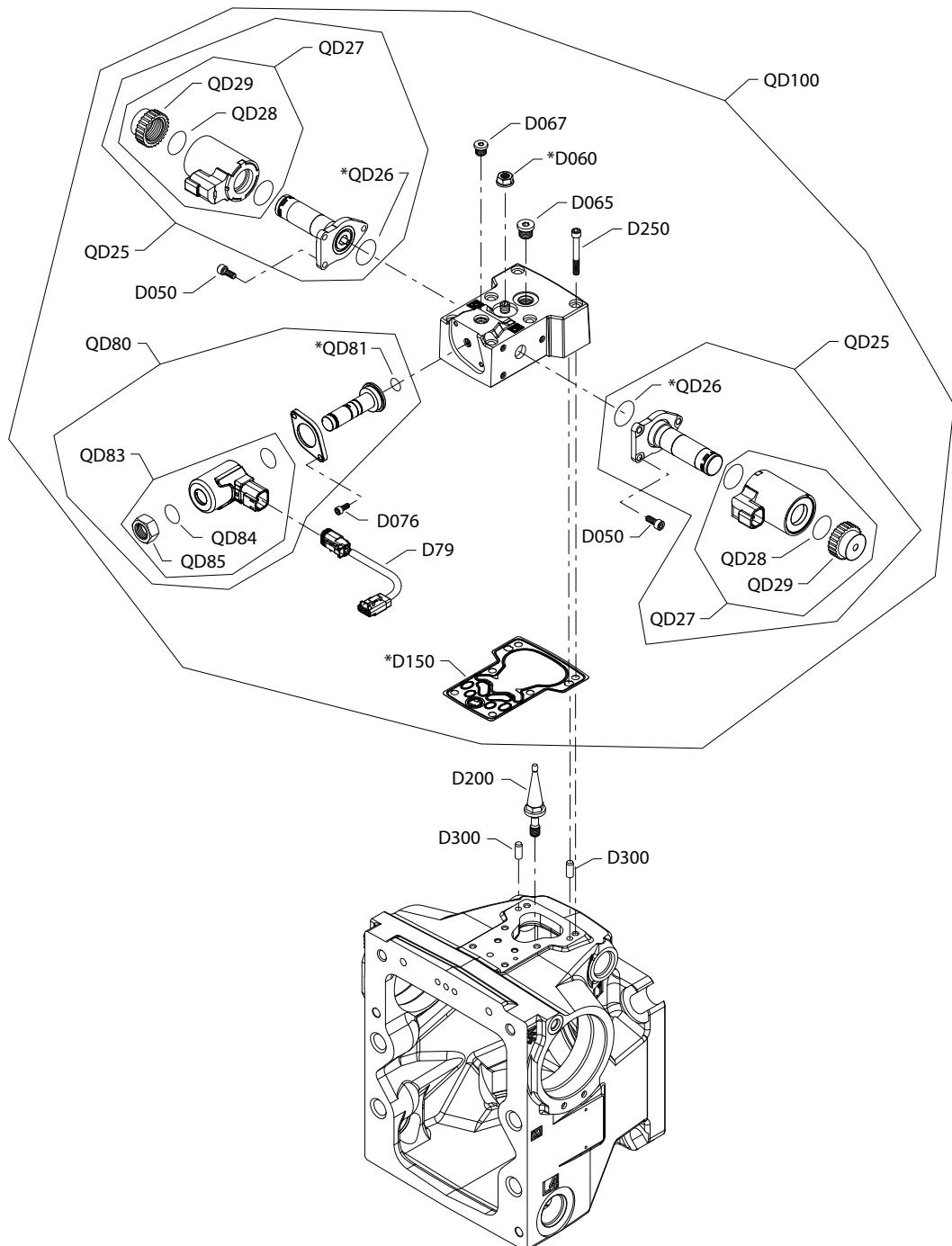
Order code: R5

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	17-15		716860	Screw, M5 x 12	6
D150	17-15		11173377	Control gasket	1
D200	17-15		141472	Screw, special	1
D250	17-15		505038	Screw, M6 x 45	6
D300	17-15		11036469	Dowel pin	2
D450	17-15		11003097	Magnetic carrier	1
D610	17-15		11000467	Plug assembly	2
D611	17-15		11066774	O-ring	2
D640	17-15		11084822	Blank, connector DTM 06-6S	1
D655	17-15		11084827	Blank, connector DTM 06-3S	1
D660	17-15		11084822	Blank, connector DTM 06-6S	1
D672	17-15		11151875	Protection	1
D674	17-15		716860	Screw, M5 x 12	2
QD25	17-15		140751	Proportional solenoid, 24 volt	2
QD26	17-15		11001952	O-ring	2
QD27	17-15		11004700	Coil kit, 24v, DEUTSCH connector	2
QD28	17-15		063172	O-ring	2
QD29	17-15		11004750	Coil nut	2
QD30	17-15		11027883	Cap	2
QD100	17-15		11147942	Automotive control kit, 24v, manual override	1

Controls

H1P control S6

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

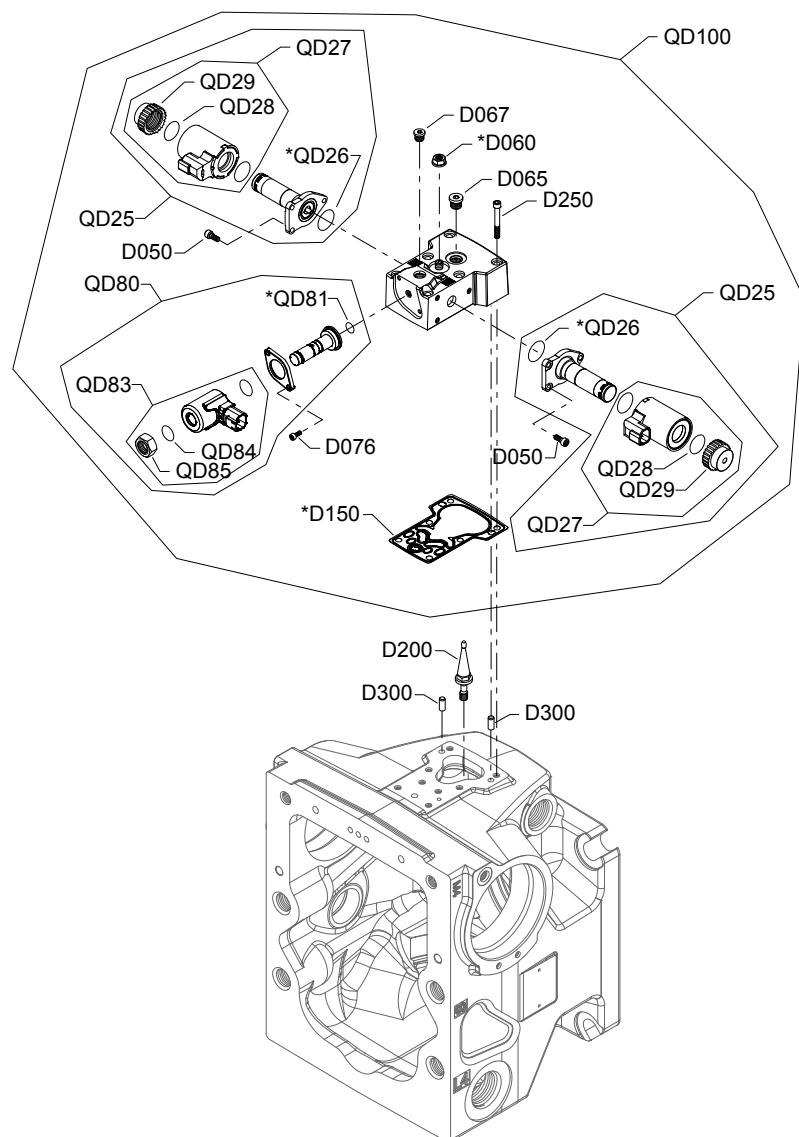
Order code: S6

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D79	14-25		11150437	Cable adapter	1
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		11040532	Plug assembly	1
D076	14-25		067694	Screw, M4 x 10	2
D150	14-25		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	14-25		11202172	Swashplate feedback link (SB-2018-025 on page 213)	1
D250	14-25		505038	Screw, M6 x 45	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 vale, on/off, 12v	1
QD81	14-25		11152257	O-ring	1
QD83	14-25		11147301	Coil kit, 12v	1
QD84	14-25		11140393	O-ring	1
QD85	14-25		11140394	Coil nut	1
QD100	14-25		11152574	EDC kit, 12v, CORF	1

Controls

H1P control S7

Parts configuration



Generic housing shown.

* Included in overhaul seal kit Q210

Controls

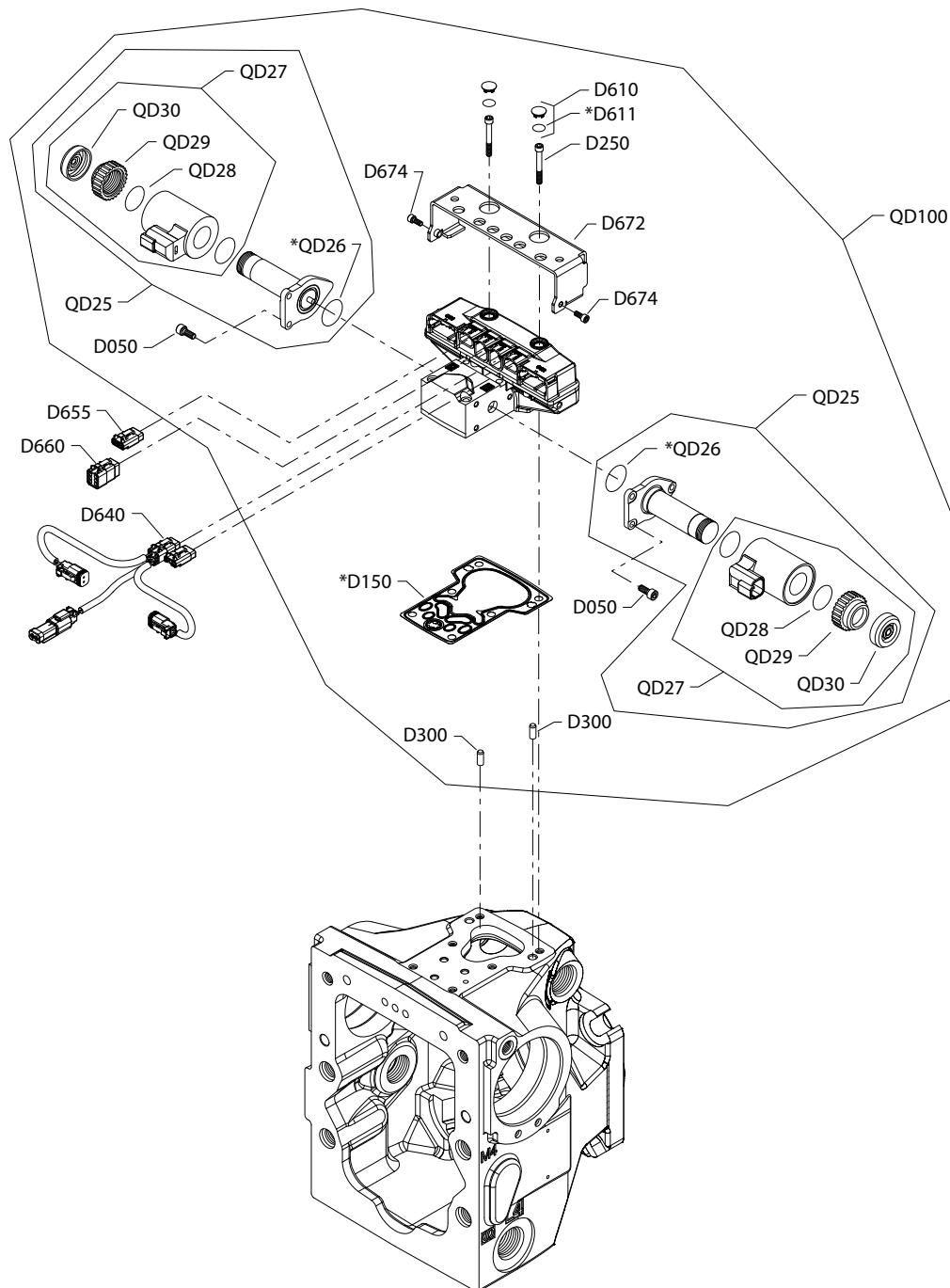
Order code: S7

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	14-31		716860	Screw, M5 x 12	6
D060	14-31		612291 (9003508-0008)	Seal nut, M8	1
D065	14-31		327007	Plug assembly	1
D067	14-31		11040532	Plug assembly	1
D076	14-25		067694	Screw, M4 x 10	2
D150	14-31		11173377	Control gasket (SB-2016-033 on page 209)	1
D200	14-31		11202172	Swashplate feedback link (SB-2018-025 on page 213)	1
D250	14-31		505038	Screw, M6 x 45	6
D300	14-31		310979	Dowel pin	2
QD25	14-31		11012457	Proportional solenoid, 12v	2
QD26	14-31		11001952	O-ring	2
QD27	14-31		11028018	Coil kit, 12v, DEUTSCH connector	2
QD28	14-31		063172	O-ring	2
QD29	14-31		11027046	Coil nut	2
QD80	14-31		11129914	Solenoid vale, on/off, 12v	1
QD81	14-31		11152257	O-ring	1
QD83	14-31		11147301	Coil kit, 12v	1
QD84	14-31		11140393	O-ring	1
QD85	14-31		11140394	Coil nut	1
QD100	14-31		11152574	EDC kit, 12v, CORF	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

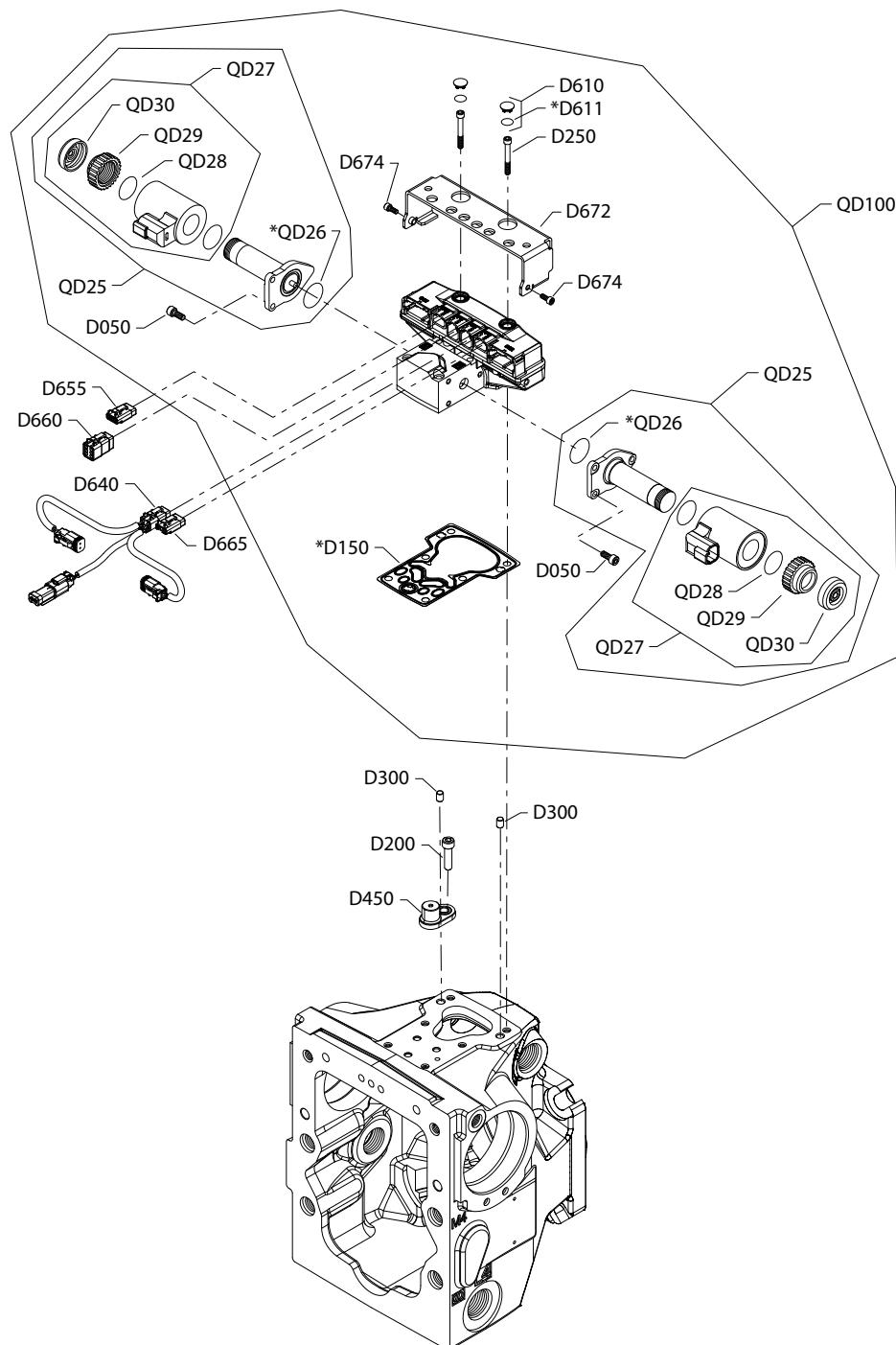
Order code: T7

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

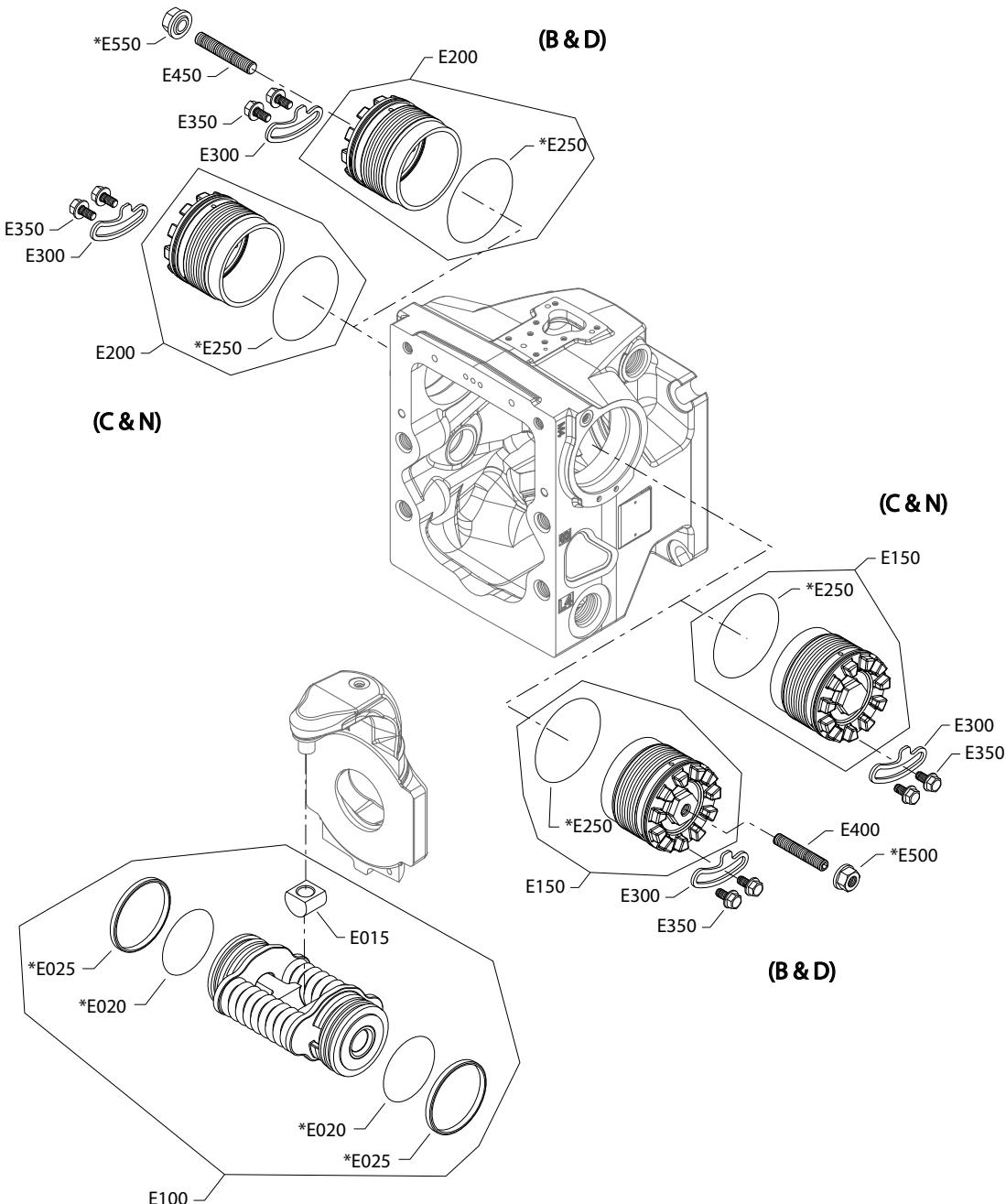
Order code: T9

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 147/165cc displacement limitation

Parts configuration



* Included in overhaul seal kit Q210

Displacement limitation

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E015	05-18		11141991	Slider block	1
E020	05-18		11075559	O-ring	2
E025	05-18		11075558	Piston ring	2
E250	05-18		9004104-1520	O-ring	2
E300	10-29		11033382	Locking plate (SB-2009-046 on page 192)	2
E300	05-18	10-28	140513	Locking plate	2
E350	05-18		508438	Screw, M6 x 12	4

Order code: B

E100	05-18		11005250	Servo piston assembly ()	1
E150	05-18		11162485	Servo cylinder assembly (SB-2009-046 on page 192)	1
E200	05-18		11162485	Servo cylinder assembly (SB-2009-046 on page 192)	1
E400	05-18		11000798	Set screw	1
E450	05-18		11000798	Set screw	1
E500	05-18		649822	Seal nut, M14	1
E550	05-18		649822	Seal nut, M14	1

Order code: C

E100	05-18		11005249	Servo piston assembly w/nested springs ()	1
E150	05-18		11089775	Servo cylinder assembly (SB-2009-046 on page 192)	1
E200	05-18		11089775	Servo cylinder assembly (SB-2009-046 on page 192)	1

Order code: D

E100	05-18		11005249	Servo piston assembly w/nested springs ()	1
E150	05-18		11162485	Servo cylinder assembly (SB-2009-046 on page 192)	1
E200	05-18		11162485	Servo cylinder assembly (SB-2009-046 on page 192)	1
E400	05-18		11000798	Set screw	1
E450	05-18		11000798	Set screw	1
E500	05-18		649822	Seal nut, M14	1
E550	05-18		649822	Seal nut, M14	1

Order code: N

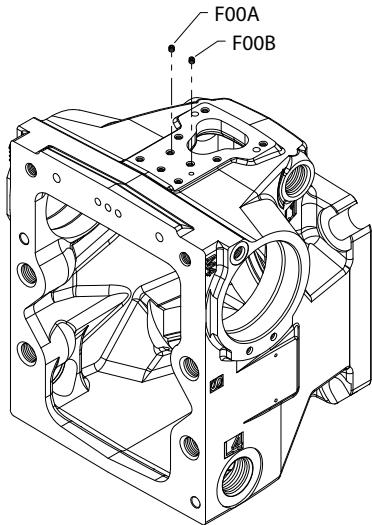
E100	05-18		11005250	Servo piston assembly ()	1
E150	05-18		11089775	Servo cylinder assembly (SB-2009-046 on page 192)	1
E200	05-18		11089775	Servo cylinder assembly (SB-2009-046 on page 192)	1

Orifice

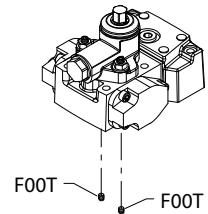
H1P orifice C-D

Parts configuration

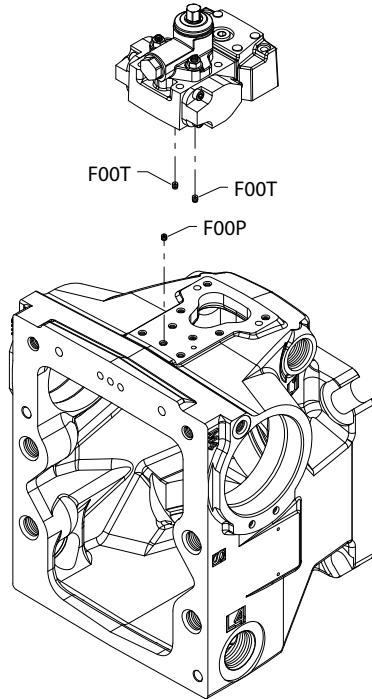
(C1, C2, C4, C5, D7, D8)



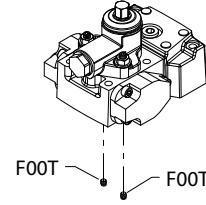
(C6, C7)



(D1, D2, D3, D6)

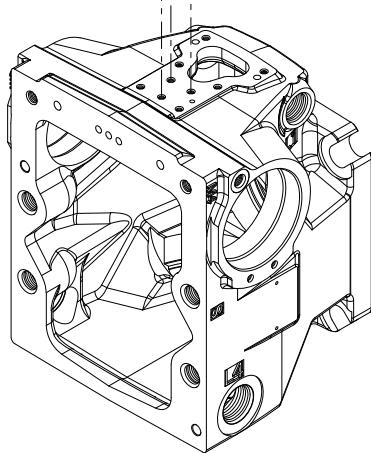


(D4)



FOOT
FOOT

FOOT
FOOT



Generic controls and housings shown.

Parts Manual
H1P 147 and 165cc

Orifice

Order code: C1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
F00A	05-18		140611	Orifice, 0.8, M6 x 0.75 mm	1
F00B	05-18		140611	Orifice, 0.8, M6 x 0.75 mm	1

Order code: C2

F00A	05-18		140754	Orifice, 1.3, M6 x 0.75 mm	1
F00B	05-18		140754	Orifice, 1.3, M6 x 0.75 mm	1

Order code: C3

No parts

Order code: C4

F00A	14-01		140757	Orifice, 1.8, M6 x 0.75 mm	1
F00B	14-01		140757	Orifice, 1.8, M6 x 0.75 mm	1

Order code: C5

F00A	18-01		140759	Orifice, 2.5, M6 x 0.75mm	1
F00B	18-01		140759	Orifice, 2.5, M6 x 0.75mm	1

Order code: C6

FOOT	14-01		11151734	Orifice, 1.0, M6 x 0.75 mm	2
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Order code: C7

FOOT	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	2
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Order code: D1

F00P	14-01		11151734	Orifice, 1.0 M6 x 0.75 mm	1
FOOT	14-01		140611	Orifice, 0.8 M6 x 0.75 mm	2

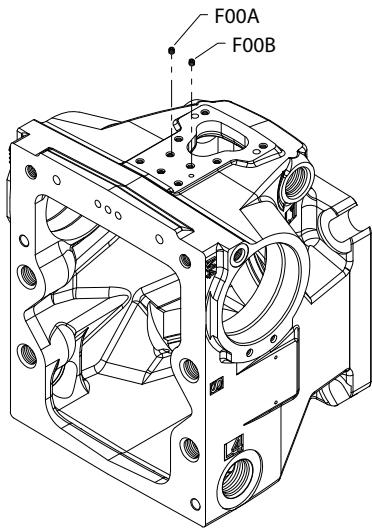
Order code: D2

F00P	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
FOOT	14-01		140611	Orifice, 0.8 M6 x 0.75 mm	2

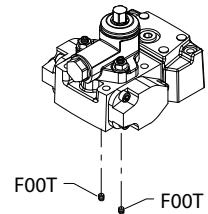
Orifice

Parts configuration

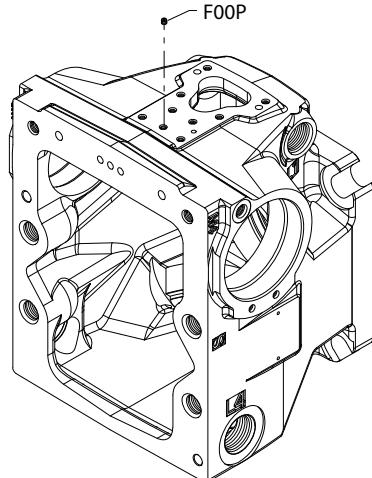
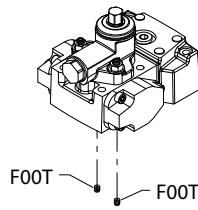
(C1, C2, C4, C5, D7, D8)



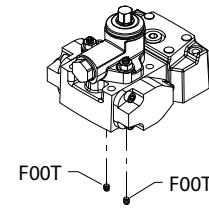
(C6, C7)



(D1, D2, D3, D6)

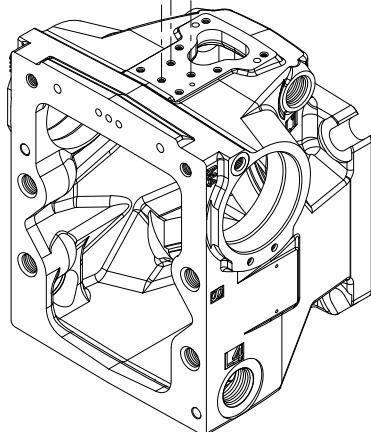


(D4)



FOOT
FOOT

FOOA
FOOB



Generic controls and housings shown.

Parts Manual
H1P 147 and 165cc

Orifice

Order code: D3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
F00P	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
FOOT	14-01		11151734	Orifice, 1.0 M6 x 0.75 mm	2

Order code: D4

F00A	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
F00B	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
F00P	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
FOOT	14-01		11151734	Orifice, 1.0 M6 x 0.75 mm	2

Order code: D6

F00P	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
FOOT	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	2

Order code: D8

F00A	17-07		11189557	Orifice, 2.3, M6 x 0.75mm	1
F00B	17-07		11189557	Orifice, 2.3, M6 x 0.75mm	1

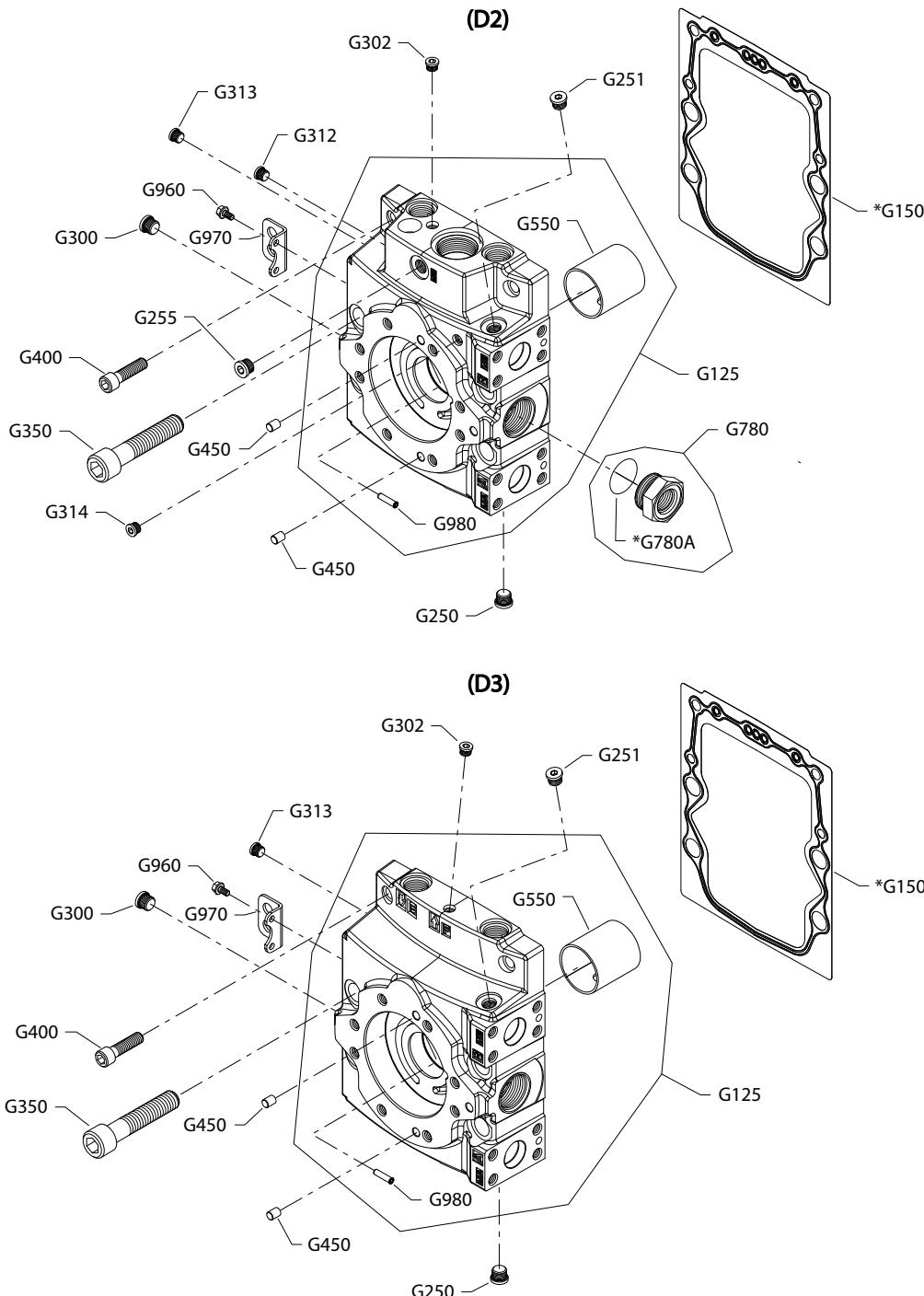
Order code: E1

F00A	17-09		11151734	Orifice, 1.0, M6 x 0.75	1
F00B	17-09		11151734	Orifice, 1.0, M6 x 0.75	1

End cap

H1P 147/165cc end cap D2, D3

Parts configuration



* Included in overhaul seal kit Q210

End cap

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G150	05-18		140518	End cap gasket	1
G250	05-18		140644	Plug assembly	1
G251	05-18		140644	Plug assembly	1
G300	05-18		140644	Plug assembly	1
G302	05-18		11040532	Plug assembly	1
G313	05-18		11040532	Plug assembly	1
G350	05-18		140314	Screw, M20 x 100	4
G400	05-18		503499	Screw, M12 x 45	2
G450	05-18		9004800-3708	Dowel pin	2
G550	05-18		11070150	Journal bearing	1
G960	05-18		508438	Screw, M6 x 12	2
G970	05-18		4460311	Lifting bracket	1
G980	05-18		11000229	Lubrication orifice	1

Order code: D2

G125	10-39		11050309	End cap assembly, CW, ISL (SB-2011-002 on page 196)	1
G255	05-18		140644	Plug assembly	1
G312	05-18		11040532	Plug assembly	1
G314	05-18		11040532	Plug assembly	1
G780	05-18		521318	Reducer plug assembly	1
G780A	05-18		093823 (9004201-9200)	O-ring	1

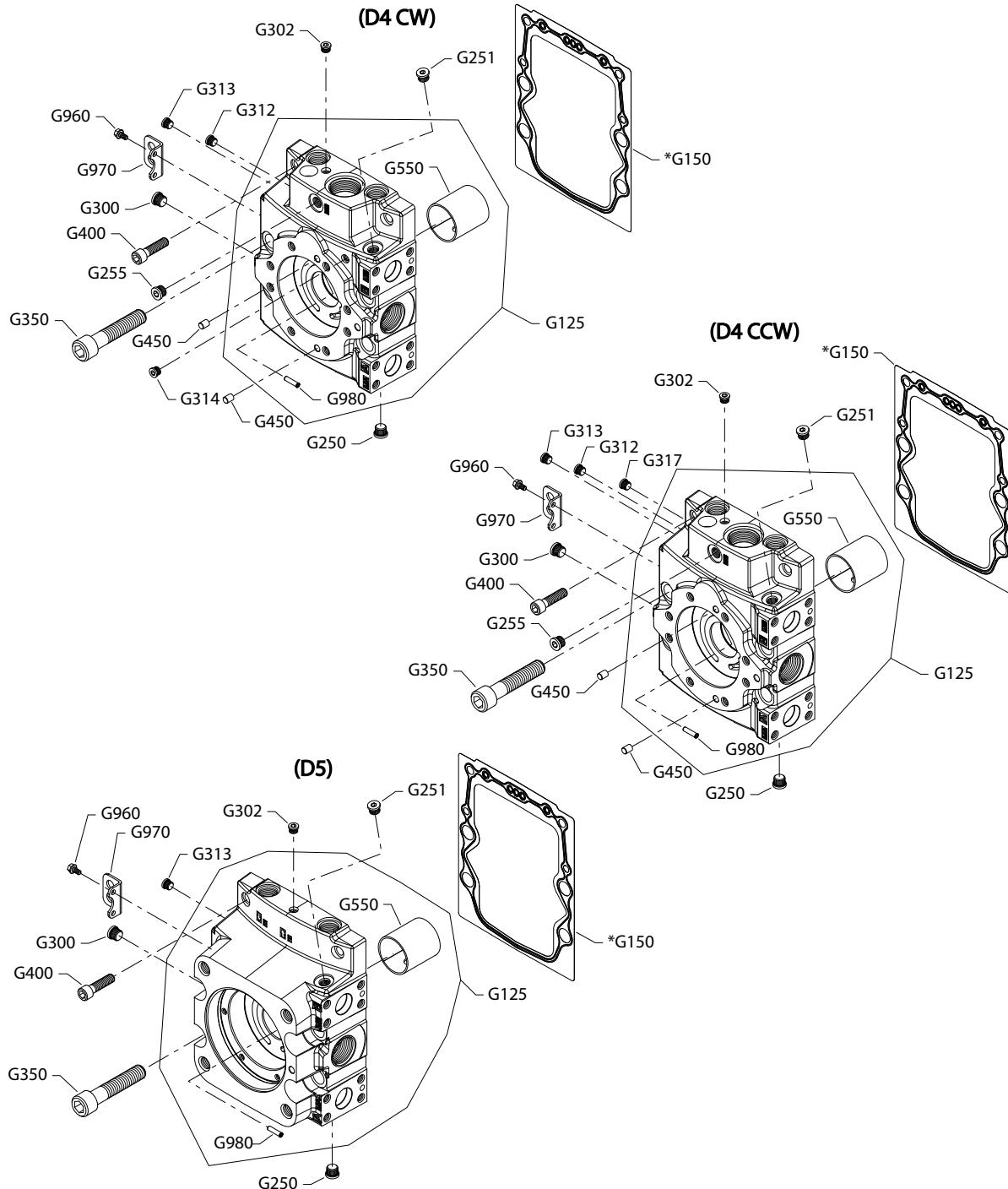
Order code: D3

G125	10-39		11050310	End cap assembly, CW (SB-2011-002 on page 196)	1
G125	10-39		11050350	End cap assembly, CCW (SB-2011-002 on page 196)	1

End cap

H1P 147/165cc end cap D4, D5

Parts configuration



* Included in overhaul seal kit Q210

End cap

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G150	05-18		140518	End cap gasket	1
G250	05-18		140644	Plug assembly	1
G251	05-18		140644	Plug assembly	1
G300	05-18		140644	Plug assembly	1
G302	05-18		11040532	Plug assembly	1
G313	05-18		11040532	Plug assembly	1
G350	05-18		140314	Screw, M20 x 100	4
G400	05-18		503499	Screw, M12 x 45	2
G550	05-18		11070150	Journal bearing	1
G960	05-18		508438	Screw, M6 x 12	2
G970	05-18		4460311	Lifting bracket	1
G980	05-18		11000229	Lubrication orifice	1

Order code: D4 (CW)

G125	10-39		11050342	End cap assembly, CW, ISL (SB-2011-002 on page 196)	1
G255	05-18		140644	Plug assembly	1
G312	05-18		11040532	Plug assembly	1
G314	05-18		11040532	Plug assembly	1
G450	05-18		9004800-3708	Dowel pin	2

Order code: D4 (CWW)

G125	10-39		11050351	End cap assembly, CCW, ISL (SB-2011-002 on page 196)	1
G255	05-18		140644	Plug assembly	1
G312	05-18		11040532	Plug assembly	1
G317	05-18		11040532	Plug assembly	1
G450	05-18		9004800-3708	Dowel pin	2

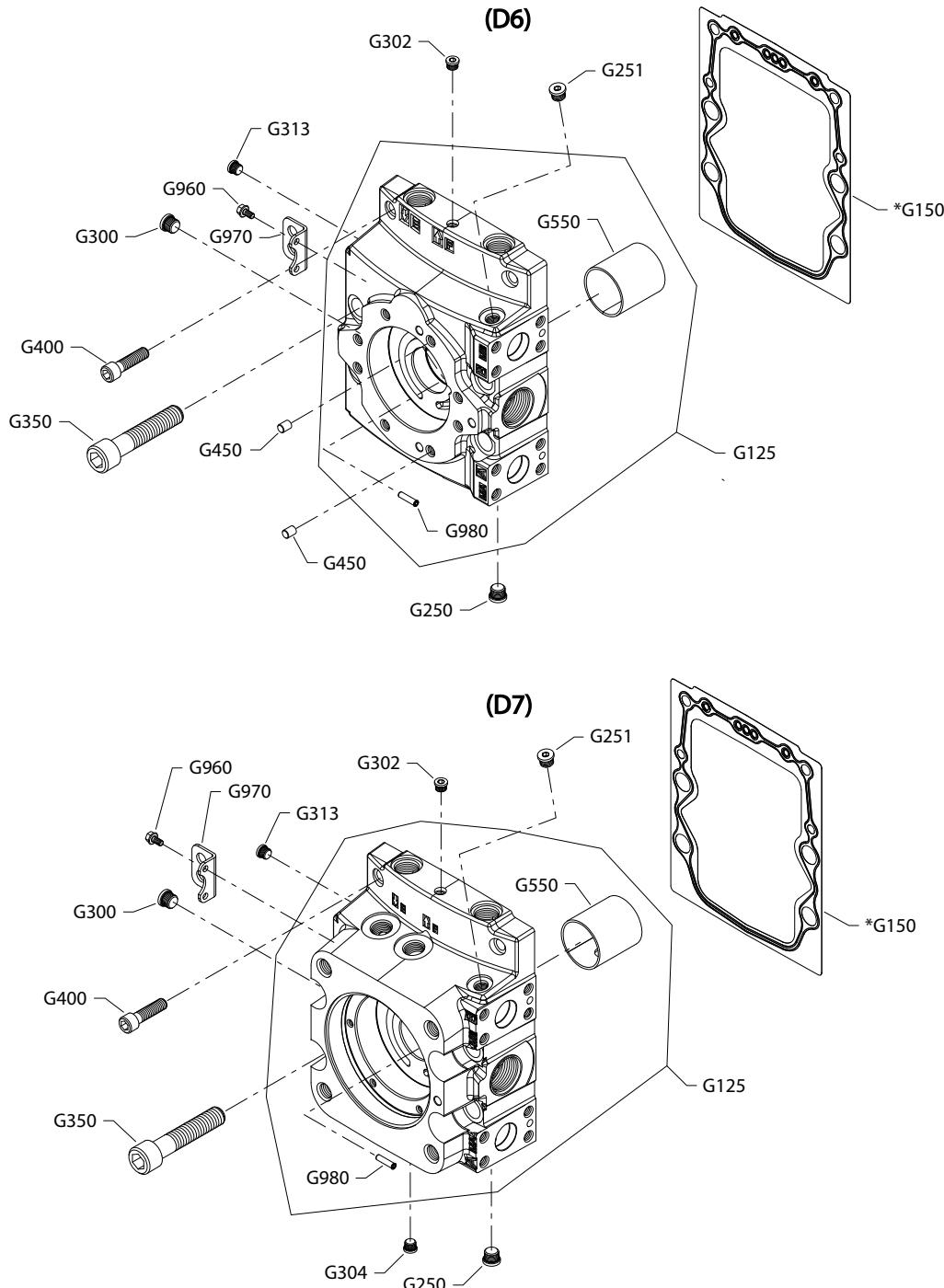
Order code: D5

G125	10-39		11050343	End cap assembly, CW (SB-2011-002 on page 196)	1
G125	10-39		11050352	End cap assembly, CCW (SB-2011-002 on page 196)	1

End cap

H1P 147/165cc end cap D6, D7

Parts configuration



* Included in overhaul seal kit Q210

End cap

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G150	05-18		140518	End cap gasket	1
G250	05-18		140644	Plug assembly	1
G251	05-18		140644	Plug assembly	1
G300	05-18		140644	Plug assembly	1
G302	05-18		11040532	Plug assembly	1
G313	05-18		11040532	Plug assembly	1
G350	05-18		140314	Screw, M20 x 100	4
G400	05-18		503499	Screw, M12 x 45	2
G550	05-18		11070150	Journal bearing	1
G960	05-18		508438	Screw, M6 x 12	2
G970	05-18		4460311	Lifting bracket	1
G980	05-18		11000229	Lubrication orifice	1

Order code: D6

G125	10-39		11050344	End cap assembly, CW (SB-2011-002 on page 196)	1
G125	10-39		11050353	End cap assembly, CCW (SB-2011-002 on page 196)	1
G450	05-18		9004800-3708	Dowel pin	2

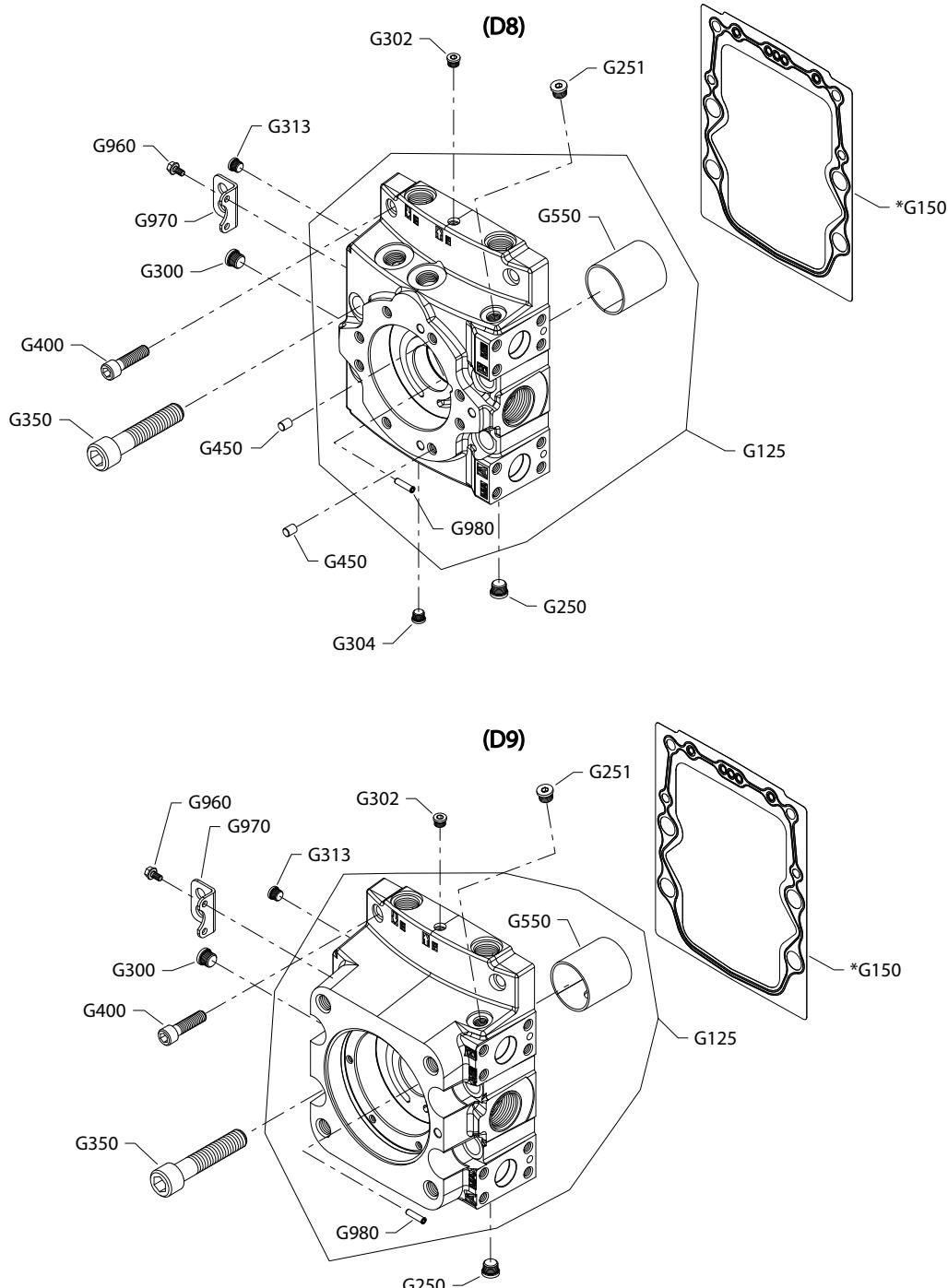
Order code: D7

G125	10-39		11050346	End cap assembly, CW (SB-2011-002 on page 196)	1
G125	10-39		11050354	End cap assembly, CCW (SB-2011-002 on page 196)	1
G304	05-18		11040532	Plug assembly	1

End cap

H1P 147/165cc end cap D8, D9

Parts configuration



* Included in overhaul seal kit Q210

End cap

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G150	05-18		140518	End cap gasket	1
G250	05-18		140644	Plug assembly	1
G251	05-18		140644	Plug assembly	1
G300	05-18		140644	Plug assembly	1
G302	05-18		11040532	Plug assembly	1
G313	05-18		11040532	Plug assembly	1
G350	05-18		140314	Screw, M20 x 100	4
G400	05-18		503499	Screw, M12 x 45	2
G550	05-18		11070150	Journal bearing	1
G960	05-18		508438	Screw, M6 x 12	2
G970	05-18		4460311	Lifting bracket	1
G980	05-18		11000229	Lubrication orifice	1

Order code: D8

G125	10-39		11050347	End cap assembly, CW (SB-2011-002 on page 196)	1
G125	10-39		11050355	End cap assembly, CCW (SB-2011-002 on page 196)	1
G304	05-18		11040532	Plug assembly	1
G450	05-18		9004800-3708	Dowel pin	2

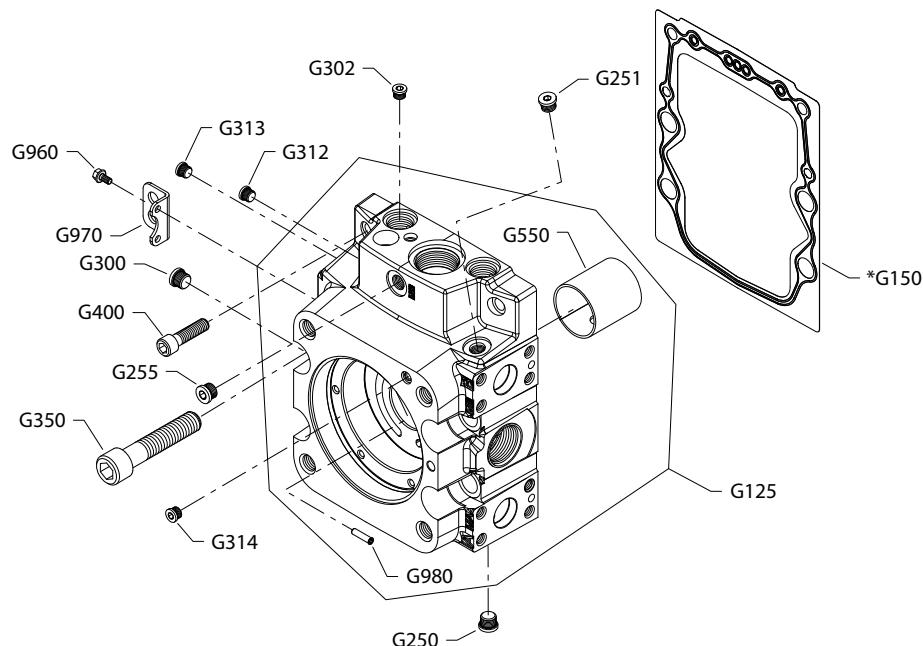
Order code: D9

G125	10-39		11050348	End cap assembly, CW (SB-2011-002 on page 196)	1
G125	10-39		11050356	End cap assembly, CCW (SB-2011-002 on page 196)	1

End cap

H1P 147/165cc end cap E3

Parts configuration



* Included in overhaul seal kit Q210

End cap

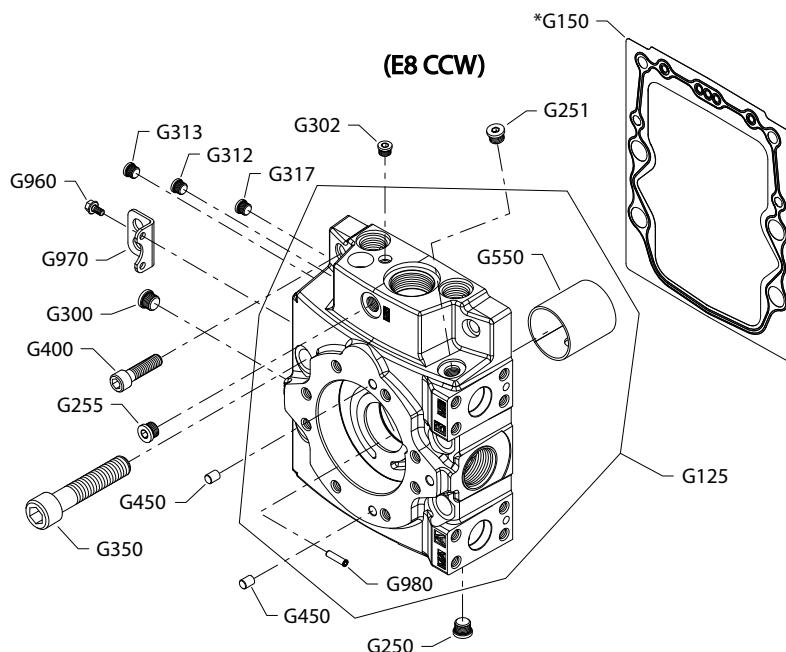
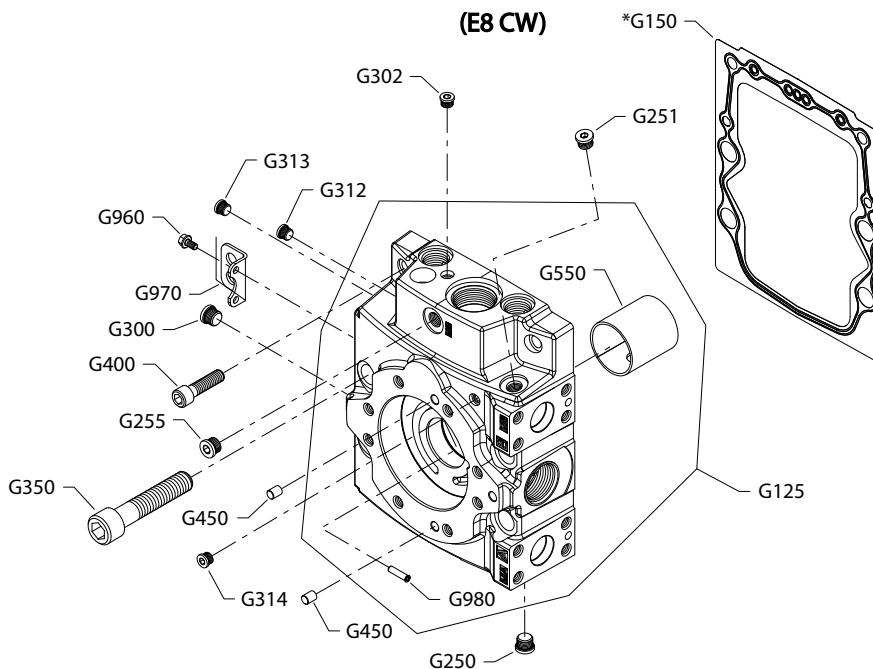
Order code: E3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G125	12-42		11017678	End cap assembly, CW, ISL	1
G150	12-42		140518	End cap gasket	1
G250	12-42		140644	Plug assembly	1
G251	12-42		140644	Plug assembly	1
G255	12-42		140644	Plug assembly	1
G300	12-42		140644	Plug assembly	1
G302	12-42		11040532	Plug assembly	1
G312	12-42		11040532	Plug assembly	1
G313	12-42		11040532	Plug assembly	1
G314	12-42		11040532	Plug assembly	1
G350	12-42		140314	Screw, M20 x 100	4
G400	12-42		503499	Screw, M12 x 45	2
G550	12-42		11070150	Journal bearing	1
G960	12-42		508438	Screw, M6 x 12	2
G970	12-42		4460311	Lifting bracket	1
G980	12-42		11000229	Lubrication orifice	1

End cap

H1P 147/165cc end cap E8

Parts configuration



* Included in overhaul seal kit Q210

End cap

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G150	05-18		140518	End cap gasket	1
G250	05-18		140644	Plug assembly	1
G251	05-18		140644	Plug assembly	1
G255	05-18		140644	Plug assembly	1
G300	05-18		140644	Plug assembly	1
G302	05-18		11040532	Plug assembly	1
G312	05-18		11040532	Plug assembly	1
G313	05-18		11040532	Plug assembly	1
G350	05-18		140314	Screw, M20 x 100	4
G400	05-18		503499	Screw, M12 x 45	2
G450	05-18		9004800-3708	Dowel pin	2
G550	05-18		11070150	Journal bearing	1
G960	05-18		508438	Screw, M6 x 12	2
G970	05-18		4460311	Lifting bracket	1
G980	05-18		11000229	Lubrication orifice	1

Order code: E8 (CW)

G125	10-39		11050349	End cap assembly, CW, ISL (SB-2011-002 on page 196)	1
G314	05-18		11040532	Plug assembly	1

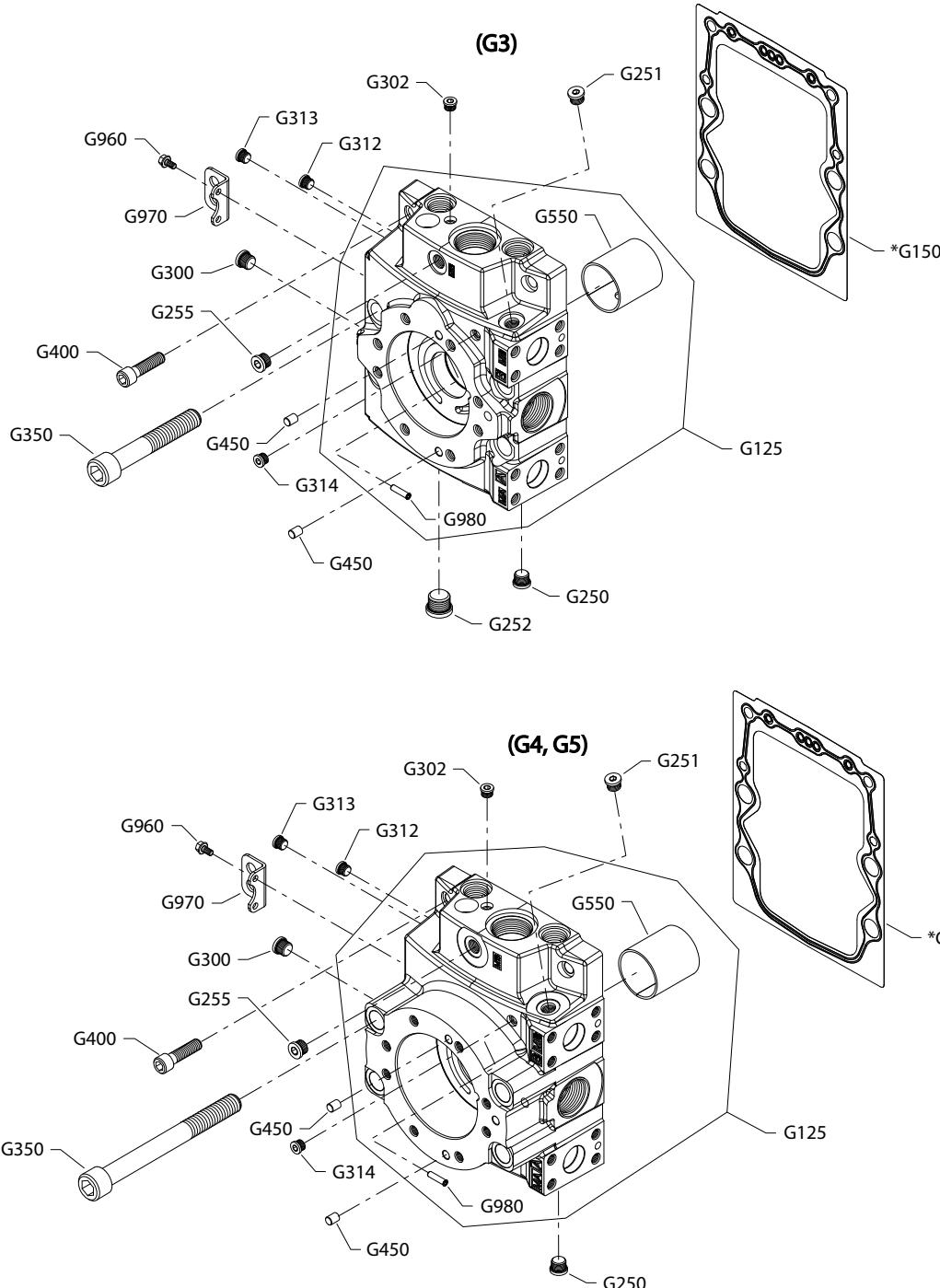
Order code: E8 (CCW)

G125	10-39		11050357	End cap assembly, CCW, ISL (SB-2011-002 on page 196)	1
G317	05-18		11040532	Plug assembly	1

End cap

H1P 147/165cc end cap G3-G5

Parts configuration



Option G5 is available in SAE and metric configurations. Please order accordingly.

* Included in overhaul seal kit Q210

End cap

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G150	08-04		140518	End cap gasket	1
G250	08-04		140644	Plug assembly	1
G251	08-04		140644	Plug assembly	1
G255	08-04		140644	Plug assembly	1
G300	08-04		140644	Plug assembly	1
G302	08-04		11040532	Plug assembly	1
G312	08-04		11040532	Plug assembly	1
G313	08-04		11040532	Plug assembly	1
G314	08-04		11040532	Plug assembly	1
G400	08-04		503499	Screw, M12 x 45	2
G450	08-04		9004800-3708	Pin	2
G960	08-04		508438	Screw, M6 x 12	2
G970	08-04		4460311	Lifting bracket	1
G980	08-04		11000229	Lubrication orifice	1

Order code: G3

G125	08-04		11089753	End cap assembly, CW, ISL	1
G252	08-04		315325 (9005110-8700)	Plug assembly	1
G350	08-04		140314	Screw, M20 x 100	4
G550	08-04		11070150	Journal bearing	1

Order code: G4

G125	11-45		11093337	End cap assembly, CW, ISL	1
G350	11-45		11104091	Screw, M20 x 160	4
G550	11-45		11061889	Journal bearing	1

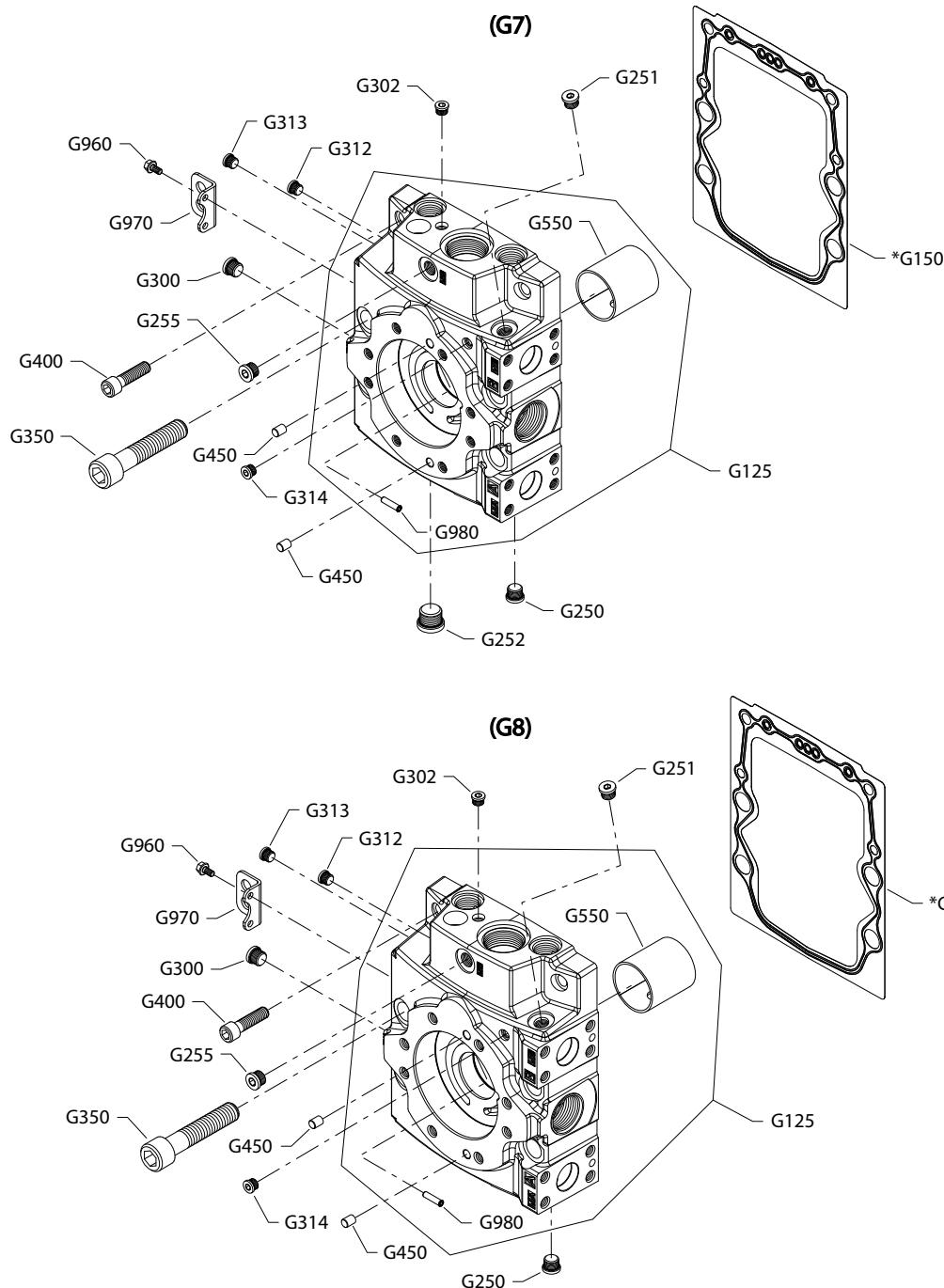
Order code: G5

G125	11-45		11106206	End cap assembly, CW, ISL	1
G125	11-45		11176898	End cap assembly, CW, ISL (metric)	1
G250	11-45		11178808	Plug assembly, M14 (metric)	1
G251	11-45		11178808	Plug assembly, M14 (metric)	1
G255	11-45		11178808	Plug assembly, M14 (metric)	1
G300	11-45		11178808	Plug assembly, M14 (metric)	1
G350	11-45		11104091	Screw, M20 x 160	4
G550	11-45		11061889	Journal bearing	1

End cap

H1P 147/165cc end cap G7, G8

Parts configuration



Option G8 is available in SAE and metric configurations. Please order accordingly.

* Included in overhaul seal kit Q210

End cap

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G150	12-40		140518	End cap gasket	1
G250	12-40		140644	Plug assembly	1
G251	12-40		140644	Plug assembly	1
G255	12-40		140644	Plug assembly	1
G300	12-40		140644	Plug assembly	1
G302	12-40		11040532	Plug assembly	1
G312	12-40		11040532	Plug assembly	1
G313	12-40		11040532	Plug assembly	1
G314	12-40		11040532	Plug assembly	1
G350	12-40		140314	Screw, M20 x 100	4
G400	12-40		503499	Screw, M12 x 45	2
G450	12-40		9004800-3708	Dowel pin	2
G550	12-40		11070150	Journal bearing	1
G960	12-40		508438	Screw, M6 x 12	2
G970	12-40		4460311	Lifting bracket	1
G980	12-40		11000229	Lubrication orifice	1

Order code: G7

G125	12-40		11117000	End cap assembly, CW, ISL	1
G252	12-40		315325 (9005110-8700)	Plug assembly	1

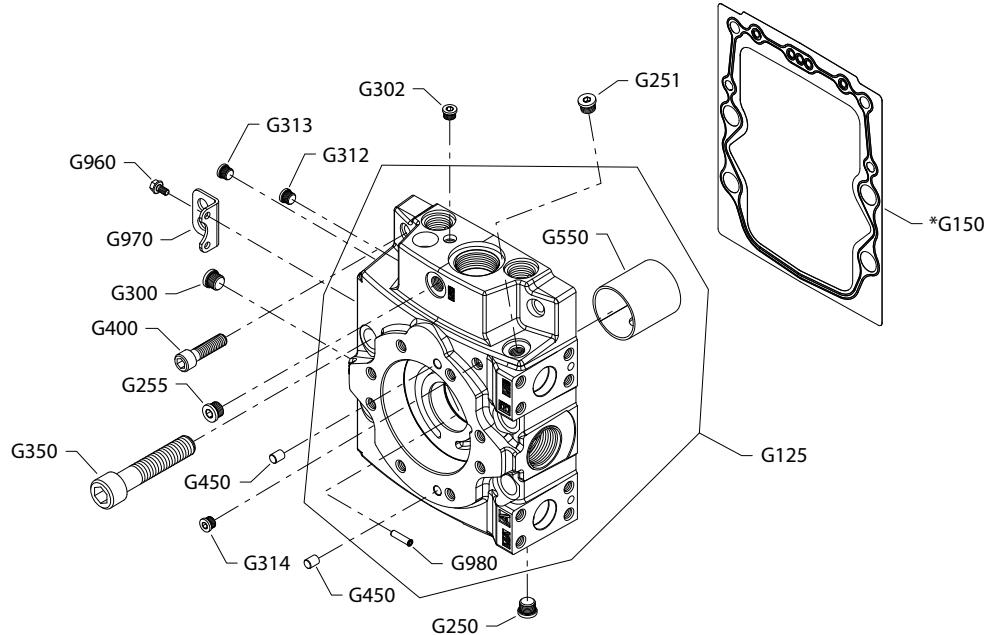
Order code: G8

G125	14-50		11160968	End cap assembly, CW, ISL	1
G125	14-50		11172780	End cap assembly, CW, ISL (metric)	1
G250	14-50		11178808	Plug assembly, M14 (metric)	1
G251	14-50		11178808	Plug assembly, M14 (metric)	1
G255	14-50		11178808	Plug assembly, M14 (metric)	1
G300	14-50		11178808	Plug assembly, M14 (metric)	1

End cap

H1P 147/165cc end cap J8, J9

Parts configuration



Option J9 is only available in metric configurations.

* Included in overhaul seal kit Q210

End cap

Order code: J8

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G125	10-39		11181477	End cap assembly, CW, ISL	1
G150	05-18		140518	End cap gasket	1
G250	05-18		140644	Plug assembly	1
G251	05-18		140644	Plug assembly	1
G255	05-18		140644	Plug assembly	1
G300	05-18		140644	Plug assembly	1
G302	05-18		11040532	Plug assembly	1
G312	05-18		11040532	Plug assembly	1
G313	05-18		11040532	Plug assembly	1
G314	05-18		11040532	Plug assembly	1
G350	05-18		140314	Screw, M20 x 100	4
G400	05-18		503499	Screw, M12 x 45	2
G450	05-18		9004800-3708	Dowel pin	2
G550	05-18		11070150	Journal bearing	1
G960	05-18		508438	Screw, M6 x 12	2
G970	05-18		4460311	Lifting bracket	1
G980	05-18		11000229	Lubrication orifice	1

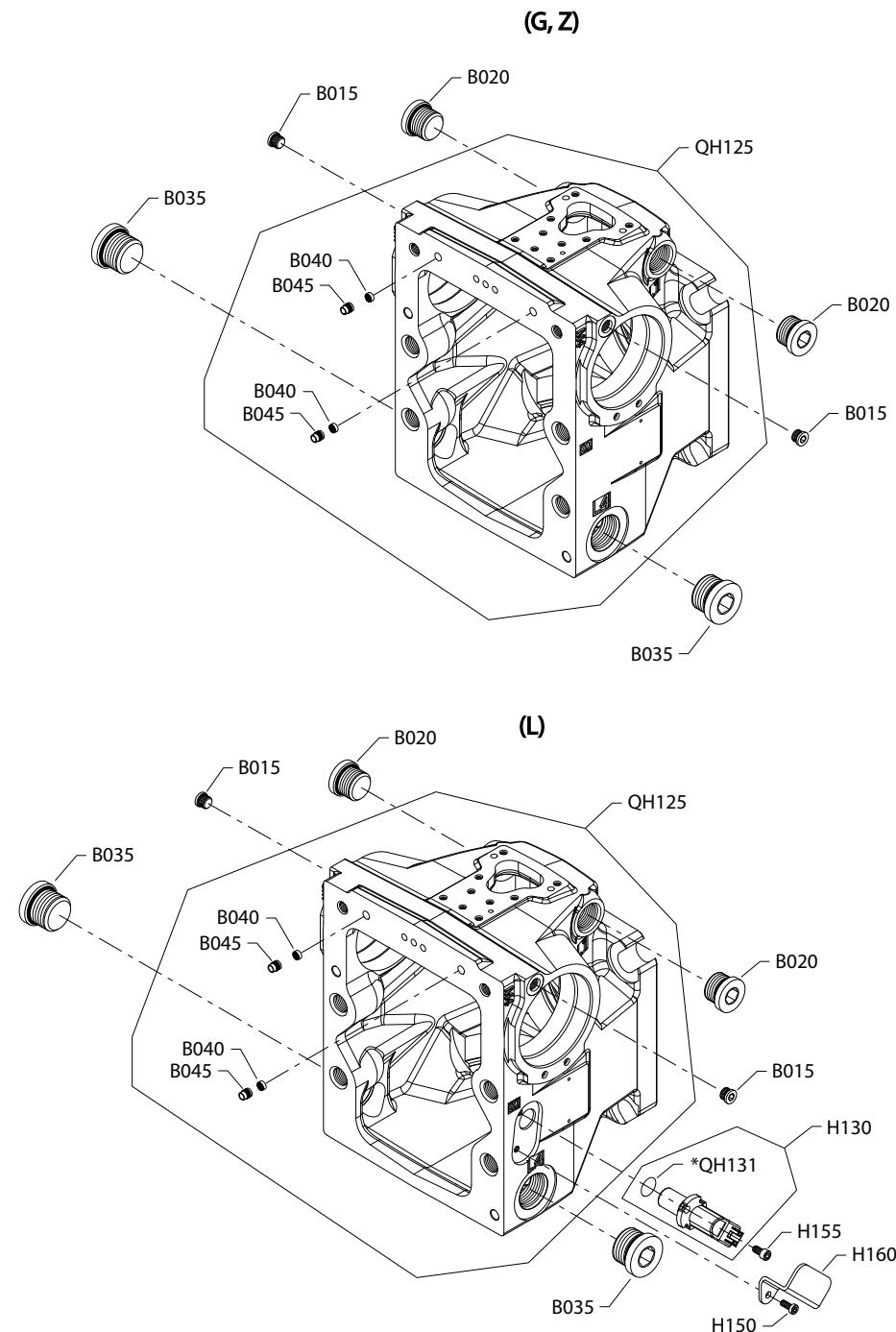
Order code: J9 (metric configuration only)

G125	10-39		11187239	End cap assembly, CW, ISL (metric)	1
G150	05-18		140518	End cap gasket	1
G250	05-18		11178808	Plug assembly, M14	1
G251	05-18		11178808	Plug assembly, M14	1
G255	05-18		11178808	Plug assembly, M14	1
G300	05-18		11178808	Plug assembly, M14	1
G302	05-18		11040532	Plug assembly	1
G312	05-18		11040532	Plug assembly	1
G313	05-18		11040532	Plug assembly	1
G314	05-18		11040532	Plug assembly	1
G350	05-18		140314	Screw, M20 x 100	4
G400	05-18		503499	Screw, M12 x 45	2
G450	05-18		9004800-3708	Dowel pin	2
G550	05-18		11070150	Journal bearing	1
G960	05-18		508438	Screw, M6 x 12	2
G970	05-18		4460311	Lifting bracket	1
G980	05-18		11000229	Lubrication orifice	1

Housing

H1P 147/165cc housing

Parts configuration



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

* Included in overhaul seal kit Q210

Housing

Order code: G

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B015	05-18		140642	Plug assembly (SAE)	2
B015	16-09		5000572	Plug assembly, M12 (metric)	2
B020	05-18		664524 (9005110-9000)	Plug assembly	2
B020	16-09		11178807	Plug assembly, M27 (metric)	2
B035	05-18		320002 (9005110-9200)	Plug assembly	2
B035	16-09		11164204	Plug assembly, M33 (metric)	2
B040	07-01		140967	Screen, 8 mm, 125 micron (SAE) (SB-2009-068 on page 194)	2
B040	16-09		140967	Screen, 8 mm, 125 micron (metric)	2
B045	09-25		11062684	Screen retainer (SB-2009-068 on page 194)	2
QH125	07-01		11005674	Housing assembly H1, 6-screw control (SB-2009-068 on page 194)	1
QH125	16-09		11172778	Housing assembly, (metric)	1
QH125	05-18	06-52	11019987 (A2 control option)	Housing replacement kit (SB-2006-030 on page 183)	1
QH125	05-18	06-52	11019988 (A3 control option)	Housing replacement kit (SB-2006-030 on page 183)	1
QH125	05-18	06-52	11019989 (A4 control option)	Housing replacement kit (SB-2006-030 on page 183)	1
QH125	05-18	06-52	11019990 (A5 control option)	Housing replacement kit (SB-2006-030 on page 183)	1
QH125	05-18	06-52	11019991 (A6 control option)	Housing replacement kit (SB-2006-030 on page 183)	1

Order code: L

B015	05-18		140642	Plug assembly	2
B020	05-18		664524 (9005110-9000)	Plug assembly	2
B035	05-18		320002 (9005110-9200)	Plug assembly	2
B040	10-14		140967	Screen, 8 mm, 125 micron	2
B045	10-14		11062684	Screen retainer	2
H130	10-14		149055	Speed sensor	1
H150	10-14		508438	Screw, M6 x 12 10.9	1
H155	10-14		376749	Screw, M6 x 12 8.8 (SB-2012-027 on page 202)	1
H160	10-14		11186383	Speed sensor protector	1
QH125	10-14		11082252	Housing assembly	1
QH131	10-14		11013397	O-ring	1

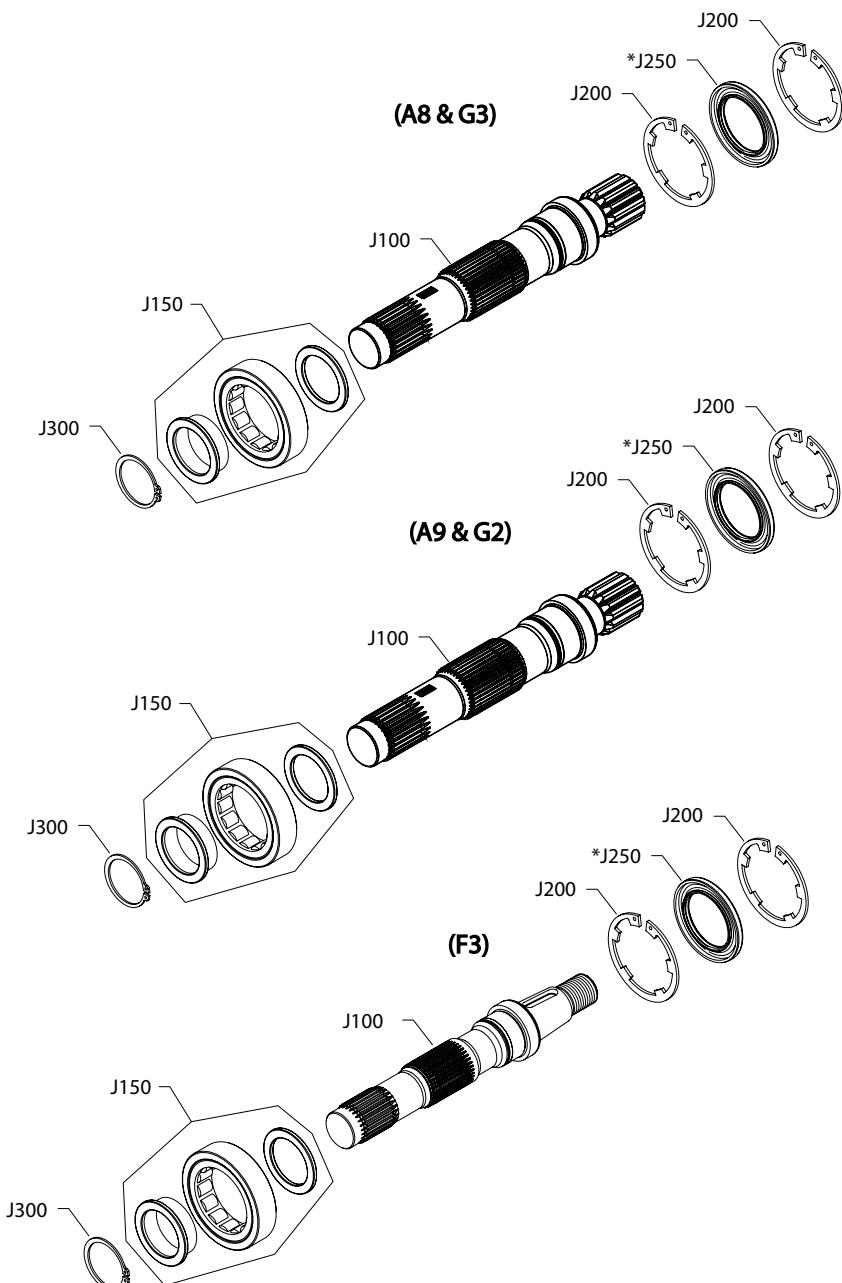
Order code: Z

B015	05-18		140642	Plug assembly	2
B020	05-18		664524 (9005110-9000)	Plug assembly	2
B035	05-18		320002 (9005110-9200)	Plug assembly	2
B040	07-25		140967	Screen, 8 mm, 125 micron	2
B045	09-25		11062684	Screen retainer (SB-2009-068 on page 194)	2
QH125	07-25		11005677	Housing assembly	1

Shaft

H1P 147/165cc shaft

Parts configuration



* Included in overhaul seal kit Q210

Parts Manual
H1P 147 and 165cc

Shaft

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
J150	15-06		11056379	Roller bearing	1
J200	15-06		140063	Retaining ring	2
J300	15-06		140094	Retaining ring	1

Order code: A8

J100	17-36		11179442	Shaft, 13 tooth spline, 8/16 pitch (SB-2018-007 on page 211)	1
J250	15-06		11066133	Lip seal	1

Order code: A9

J100	17-36		11179433	Shaft, 27 tooth spline, 16/32 pitch (SB-2018-007 on page 211)	1
J250	15-06		11066133	Lip seal	1

Order code: F3

J100	17-36		11179444	Shaft, tapered (SB-2018-007 on page 211)	1
J100	07-29	10-07	11022051	Shaft, tapered (SB-2011-023 on page 199)	1
J250	07-29		11024711	Lip seal (SB-2008-014 on page 189)	1

Order code: G2

J100	17-36		11179443	Shaft, 27 tooth spline, 16/32 pitch (SB-2018-007 on page 211)	1
J100	05-18	10-07	140254	Shaft, 27 tooth spline, 16/32 pitch (SB-2011-023 on page 199)	1
J250	05-18		11024711	Lip seal (SB-2008-014 on page 189)	1

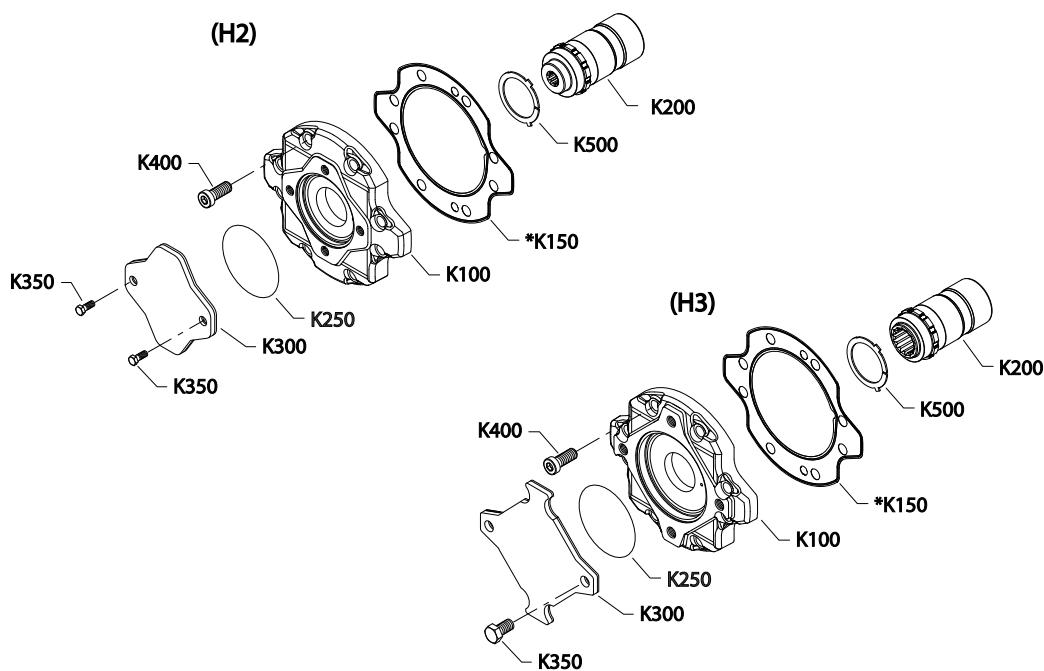
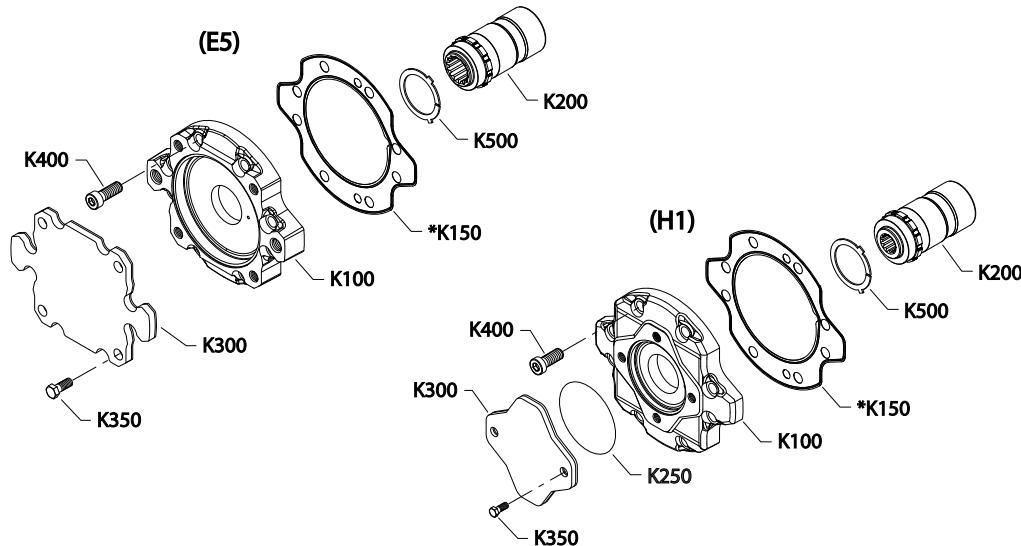
Order code: G3

J100	17-36		11179442	Shaft, 13 tooth spline, 8/16 pitch (SB-2018-007 on page 211)	1
J100	05-18	10-07	140412	Shaft, 13 tooth spline, 8/16 pitch (SB-2011-023 on page 199)	1
J250	05-18		11024711	Lip seal (SB-2008-014 on page 189)	1

Auxiliary mounting

H1P 147/165cc aux mounting E5-H3

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

Order code: E5

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K100	13-38		11138744	Adapter flange, SAE C (SB-2018-036 on page 214)	1
K150	13-38		11002236	Adapter seal	1
K200	13-38		11045667	Charge pump shaft, 13 tooth, 8/16 pitch	1
K300	13-38		11023748	Flange cover	1
K350	13-38		509528	Screw, M12 x 20	4
K400	13-38		140700	Screw, M12 x 30 (SB-2018-036 on page 214)	8
K500	13-38		11001182	Thrust washer	1

Order code: H1

K100	10-39		11002191	Adapter flange, SAE A	1\
K100	06-41	10-38	11086818	Adapter flange replacement kit (SB-2011-002 on page 196)	1
K150	10-39		11002236	Adapter seal (SB-2011-002 on page 196)	1
K150	06-41	10-38	140703	Adapter seal	1
K200	10-08		11064258	Charge pump shaft, 11 tooth, 16/32 pitch, (SB-2011-023 on page 199)	1
K250	06-41	08-11	9004104-1520	O-ring (SB-2008-038 on page 190)	1
K300	06-41		11017125	Flange cover (SB-2008-038 on page 190)	1
K350	06-41		370247	Screw, M10 x 20	2
K400	06-41		140700	Screw, M12 x 30	8
K500	10-39		11001182	Thrust washer (SB-2011-002 on page 196)	1

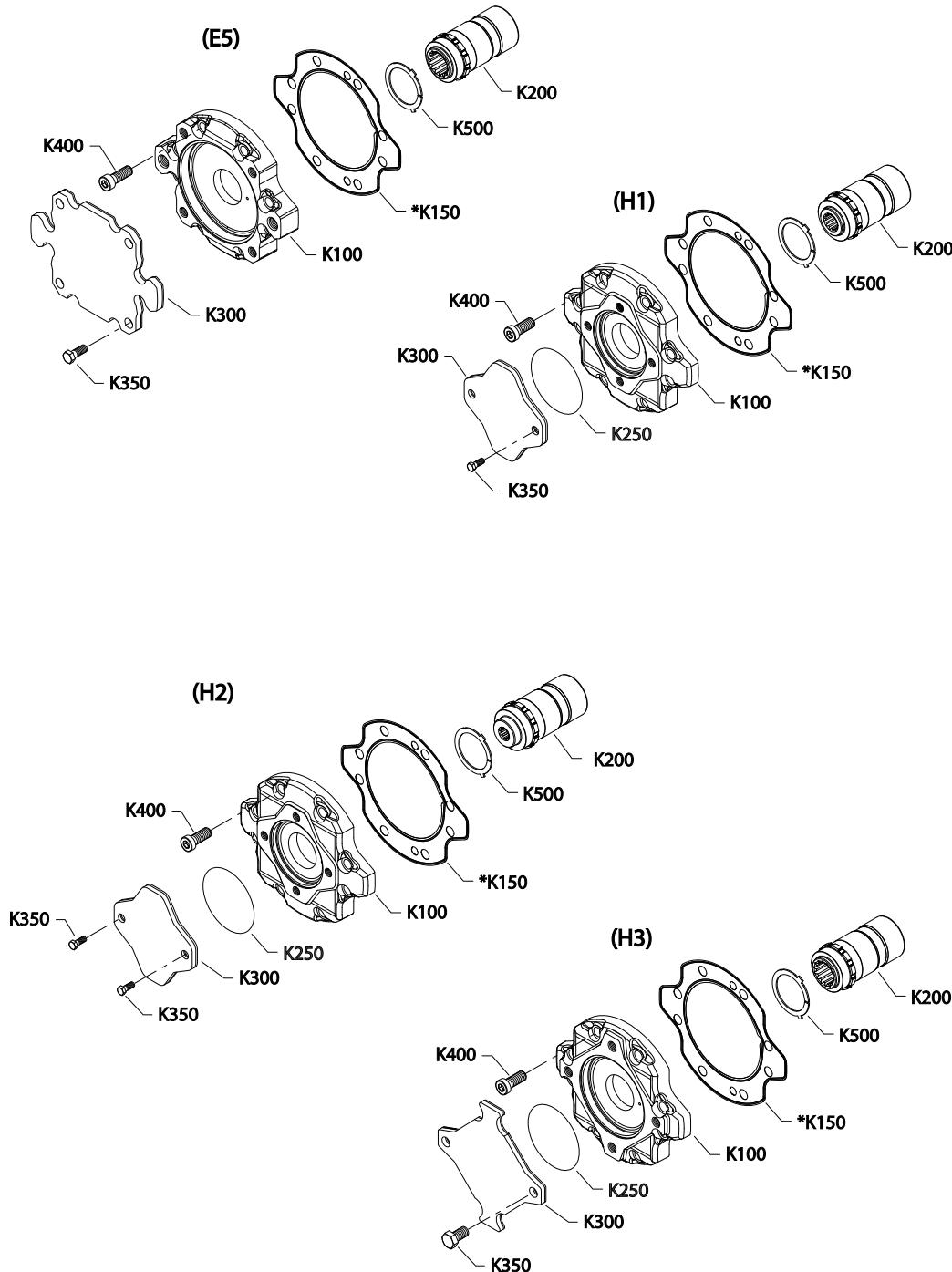
Order code: H2

K100	10-39		11002191	Adapter flange, SAE A	1
K100	05-18	10-38	11086818	Adapter flange replacement kit (SB-2011-002 on page 196)	1
K150	10-39		11002236	Adapter seal (SB-2011-002 on page 196)	1
K150	05-18	10-38	140703	Adapter seal	1
K200	10-08		11064260	Charge pump shaft, 9 tooth, 16/32 pitch (SB-2011-023 on page 199)	1
K250	05-18	08-11	9004104-1520	O-ring (SB-2008-038 on page 190)	1
K300	05-18		11017125	Flange cover (SB-2008-038 on page 190)	1
K350	05-18		370247	Screw, M10 x 20	2
K400	05-18		140700	Screw, M12 x 30	8
K500	10-39		11001182	Thrust washer (SB-2011-002 on page 196)	1

Parts continue to the next 2 pages.

Auxiliary mounting

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

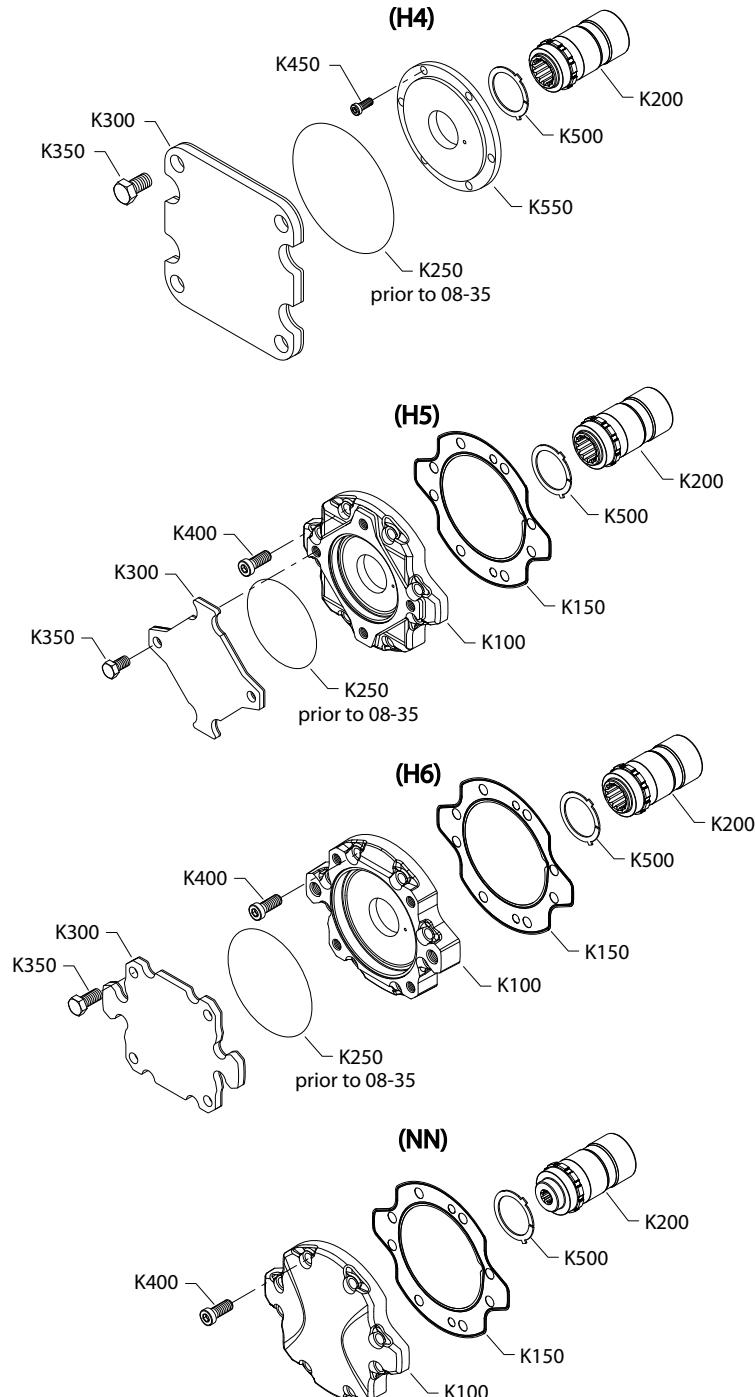
Order code: H3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K100	10-39		11002192	Adapter flange, SAE B	1
K100	05-18	10-38	11086817	Adapter flange replacement kit (SB-2011-002 on page 196)	1
K150	10-39		11002236	Adapter seal (SB-2011-002 on page 196)	1
K150	05-18	10-38	140703	Adapter seal	1
K200	10-08		11064272	Charge pump shaft, 13 tooth, 16/32 pitch	1
K200	05-18	10-07	140975	Charge pump shaft, 13 tooth (SB-2011-023 on page 199)	1
K250	05-18	08-35	327627 (9004104-1540)	O-ring (SB-2008-038)	1
K300	05-18		11023747	Flange cover (SB-2008-038 on page 190)	1
K350	05-18		509528	Screw, M12 x 20	2
K400	05-18		140700	Screw, M12 x 30	8
K500	10-39		11001182	Thrust washer (SB-2011-002 on page 196)	1

Auxiliary mounting

H1P 147/165cc aux mounting H4-NN

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

Order code: H4

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K200	10-08		11045667	Charge pump shaft, 13 tooth, 8/16 pitch	1
K200	05-18	10-07	140966	Charge pump shaft, 13 tooth (SB-2011-023 on page 199)	1
K250	05-18	08-35	726927	O-ring (SB-2008-038 on page 190)	1
K300	05-18		11023751	Flange cover (SB-2008-038 on page 190)	1
K350	05-18		11024165	Screw, M20 x 30	4
K450	05-18		11001141	Screw, M8 x 20	6
K500	10-39		11001182	Thrust washer (SB-2011-002 on page 196)	1
K550	10-39		11158373	Charge pump cover	1
K550	06-41	10-38	11086882	Charge pump cover replacement kit	1

Order code: H5

K100	10-39		11002192	Adapter flange, SAE B	1
K100	06-41	10-38	11086817	Adapter flange replacement kit (SB-2011-002 on page 196)	1
K150	10-39		11002236	Adapter seal (SB-2011-002 on page 196)	1
K150	05-18	10-38	140703	Adapter seal	1
K200	10-08		11064275	Charge pump shaft, 15 tooth, 16/32 pitch	1
K200	05-18	10-07	11000658	Charge pump shaft, 15 tooth (SB-2011-023 on page 199)	1
K250	05-18	08-35	327627 (9004104-1540)	O-ring (SB-2008-038 on page 190)	1
K300	05-18		11023747	Flange cover (SB-2008-038 on page 190)	1
K350	05-18		509528	Screw, M12 x 20	2
K400	05-18		140700	Screw, M12 x 30	8
K500	10-39		11001182	Thrust washer (SB-2011-002 on page 196)	1

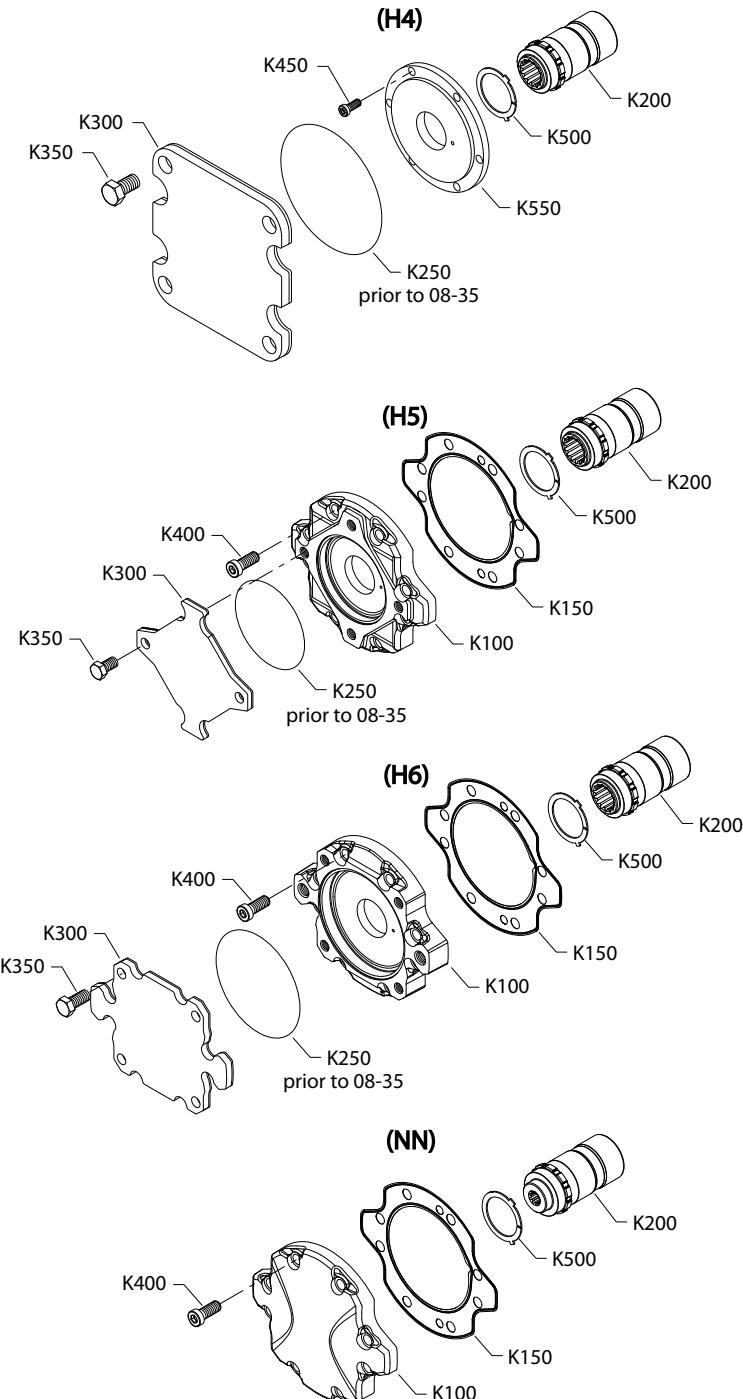
Order code: H6

K100	10-39		11138744	Adapter flange, SAE C (SB-2018-036 on page 214)	1
K100	06-41	10-38	11086816	Adapter flange replacement kit (SB-2011-002 on page 196)	1
K150	10-39		11002236	Adapter seal (SB-2011-002 on page 196)	1
K150	05-18	10-38	140703	Adapter seal	1
K200	10-08		11064276	Charge pump shaft, 14 tooth, 12/24 pitch	1
K200	05-18	10-07	140965	Charge pump shaft, 14 tooth (SB-2011-023 on page 199)	1
K250	05-18	08-35	056739 (9004104-1580)	O-ring (SB-2008-038 on page 190)	1
K300	05-18		11023748	Flange cover (SB-2008-038 on page 190)	1
K350	05-18		509528	Screw, M12 x 20	2
K400	05-18		140700	Screw, M12 x 30 (SB-2018-036 on page 214)	8
K500	10-39		11001182	Thrust washer (SB-2011-002 on page 196)	1

Parts continue to the next 2 pages.

Auxiliary mounting

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

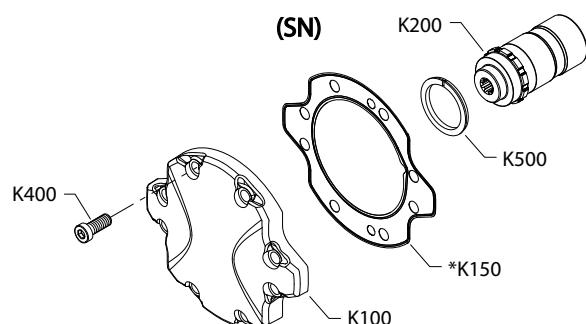
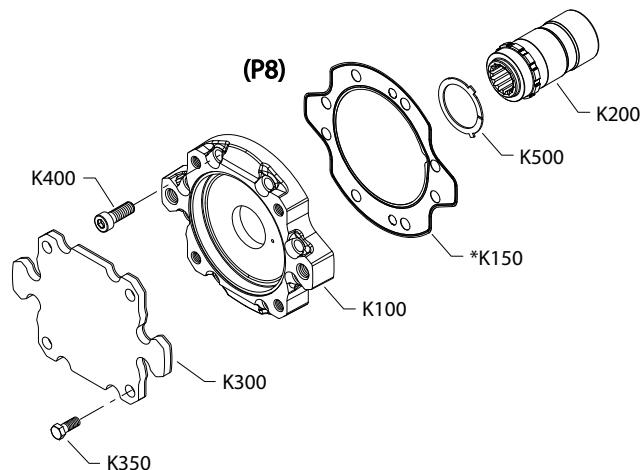
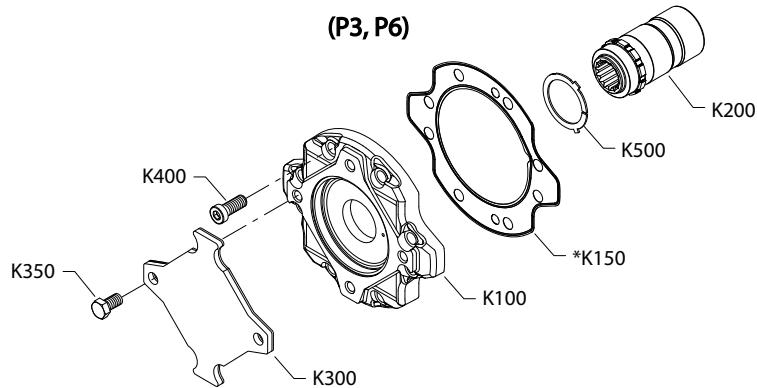
Order code: NN

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K100	10-39		11002194	Adapter flange, no pad	1
K100	06-41	10-38	11086819	Adapter flange replacement kit (SB-2011-002 on page 196)	1
K150	10-39		11002236	Adapter seal (SB-2011-002 on page 196)	1
K150	05-18	10-38	140703	Adapter seal	1
K200	10-08		11064260	Charge pump shaft, (SB-2011-023 on page 199)	1
K400	05-18		140700	Screw, M12 x 30	8
K500	10-39		11001182	Thrust washer (SB-2011-002 on page 196)	1

Auxiliary mounting

H1P 147/165cc aux mounting P3-SN

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

Order code: P3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K100	14-43		11002192	Adapter flange assembly, SAE B	1
K150	14-43		11002236	Adapter seal	1
K200	14-43		11092010	Charge pump shaft, 13 tooth, 16/32 pitch	1
K300	14-43		11023747	Cover	1
K350	14-43		509528	Screw, M12 x 20	2
K400	14-43		140700	Screw, M12 x 30	8
K500	14-43		11001182	Thrust washer	1

Order code: P6

K100	14-43		11002192	Adapter flange assembly, SAE B	1
K150	14-43		11002236	Adapter seal	1
K200	14-43		11152424	Charge pump shaft, 14 tooth, 12/24 pitch	1
K300	14-43		11023747	Cover	1
K350	14-43		509528	Screw, M12 x 20	2
K400	14-43		140700	Screw, M12 x 30	8
K500	14-43		11001182	Thrust washer	1

Order code: P8

K100	15-41		11138744	Adapter flange, SAE C (SB-2018-036 on page 214)	1
K150	15-41		11002236	Adapter seal	1
K200	15-41		11152424	Charge pump shaft, 14 tooth, 12/24 pitch	1
K300	15-41		11023748	Flange cover	1
K350	15-41		509528	Screw, M12 x 20	4
K400	15-41		140700	Screw, M12 x 30 (SB-2018-036 on page 214)	8
K500	15-41		11001182	Thrust washer	1

Order code: SN

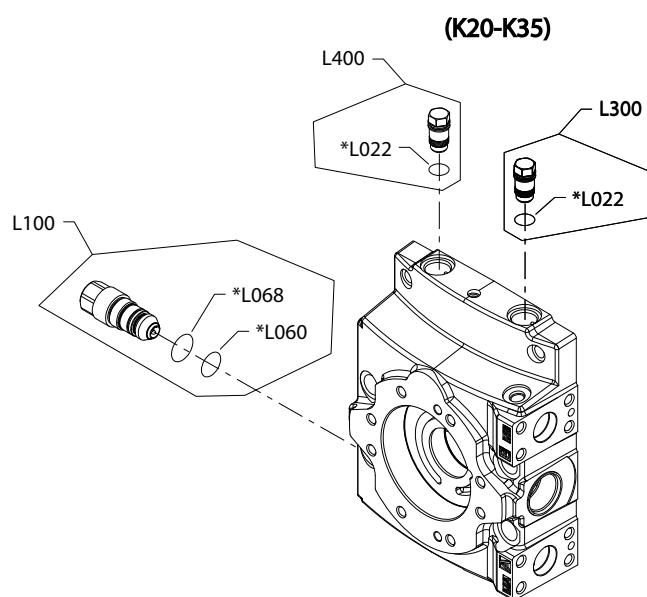
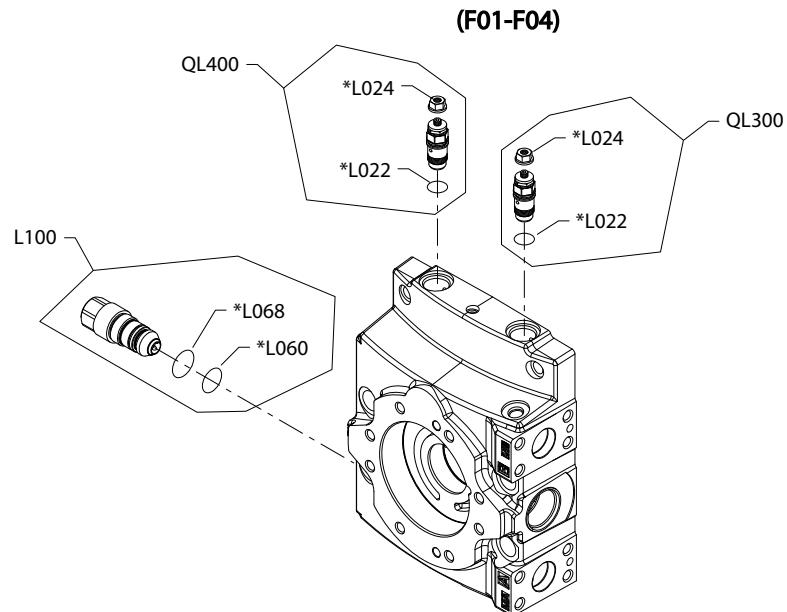
K100	12-49		11002194	Adapter flange assembly, no pad	1
K150	12-49		11002236	Adapter seal	1
K200	12-49		11064260	Charge pump shaft	1
K400	12-49		140700	Screw, M12 x 30	8
K500	12-49		11113698	Thrust washer, 40cc	1

High pressure setting

Port A

H1P HPS (port A) F01-K33

Parts configuration



* 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	05-18		504207	O-ring	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: F01

L024	13-14		336826	Seal nut	1
L100	13-14		11049147	High pressure relief valve, 250 bar	1
QL300	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: F02

L024	13-14		336826	Seal nut	1
L100	13-14		11049149	High pressure relief valve, 300 bar	1
QL300	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: F03

L024	13-14		336826	Seal nut	1
L100	13-14		11049151	High pressure relief valve, 350 bar	1
QL300	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: F04

L024	13-14		336826	Seal nut	1
L100	13-14		11049153	High pressure relief valve, 400 bar	1
QL300	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: J44

L100	14-02		11116160	High pressure relief valve, 440 bar	1
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Order code: J45

L100	14-02		11049155	High pressure relief valve, 450 bar	1
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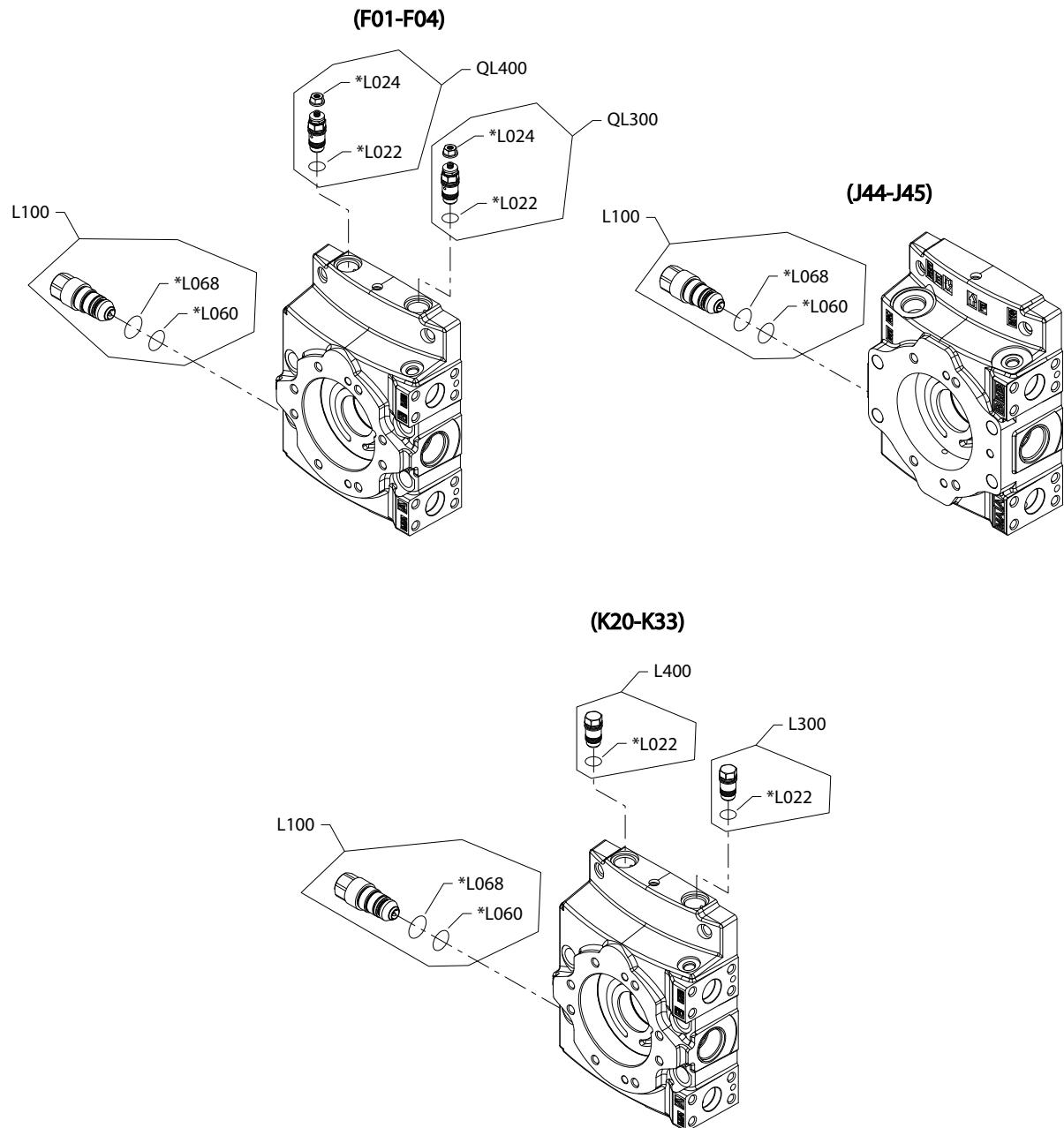
Order code: K20

L100	05-18		11049144	High pressure relief valve, 200 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Parts continue to the next 2 pages.

High pressure setting

Parts configuration



* 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	08-10		504207	O-ring	1
L060	08-10		365023	O-ring	1
L068	08-10		11052201	O-ring	1

Order code: K23

L100	05-18		11049146	High pressure relief valve, 230 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Order code: K25

L100	05-18		11049147	High pressure relief valve, 250 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Order code: K28

L100	05-18		11049148	High pressure relief valve, 280 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Order code: K30

L100	05-18		11049149	High pressure relief valve, 300 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

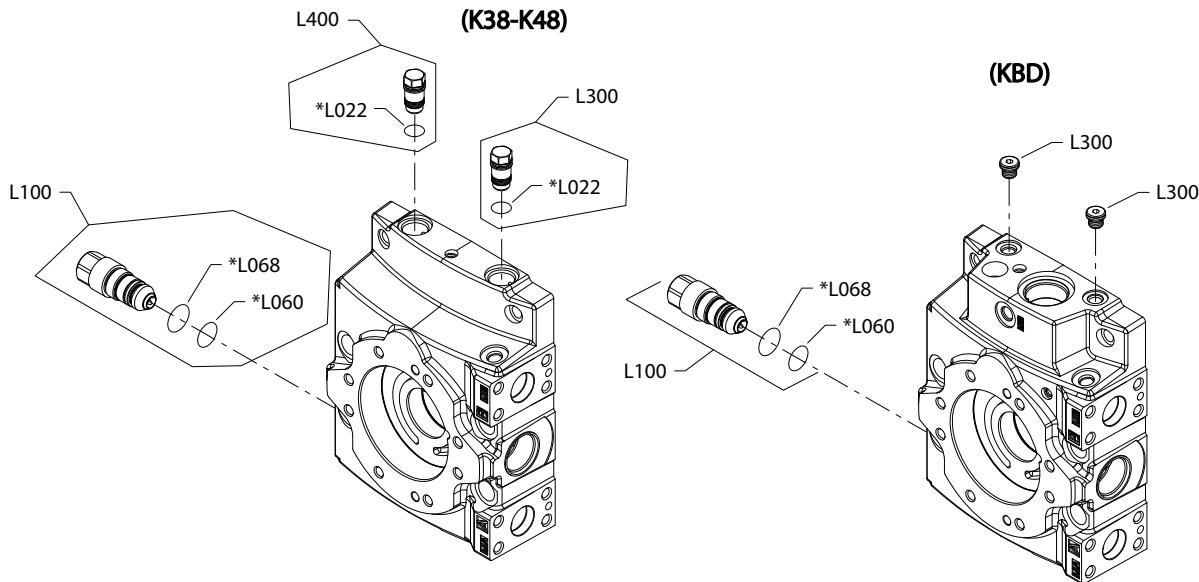
Order code: K33

L100	05-18		11049150	High pressure relief valve, 330 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

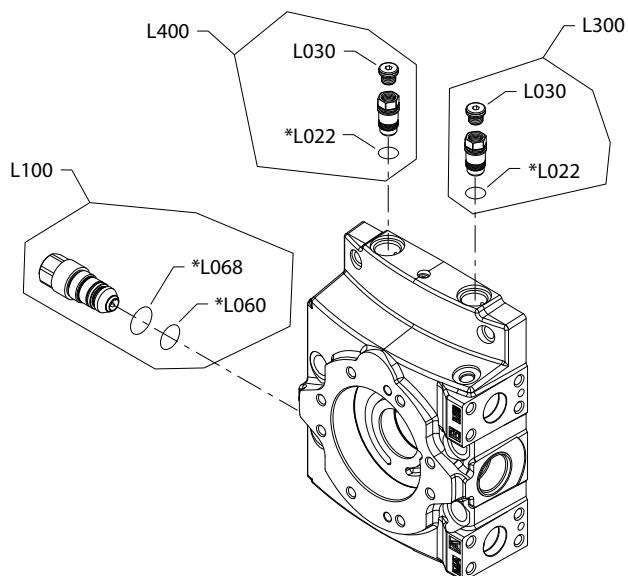
High pressure setting

H1P 147/165cc HPS (port A) K38-KWY

Parts configuration



(KDC-KWY)



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
L022	05-18		504207	O-ring	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: K38

L100	05-18		11049152	High pressure relief valve, 380 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Order code: K40

L100	05-18		11049153	High pressure relief valve, 400 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Order code: K42

L100	05-18		11049154	High pressure relief valve, 420 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Order code: K45

L100	05-18		11049155	High pressure relief valve, 450 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Order code: K46

L100	05-18		11106573	High pressure relief valve, 460 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Order code: K48

L100	05-18		11049156	High pressure relief valve, 480 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

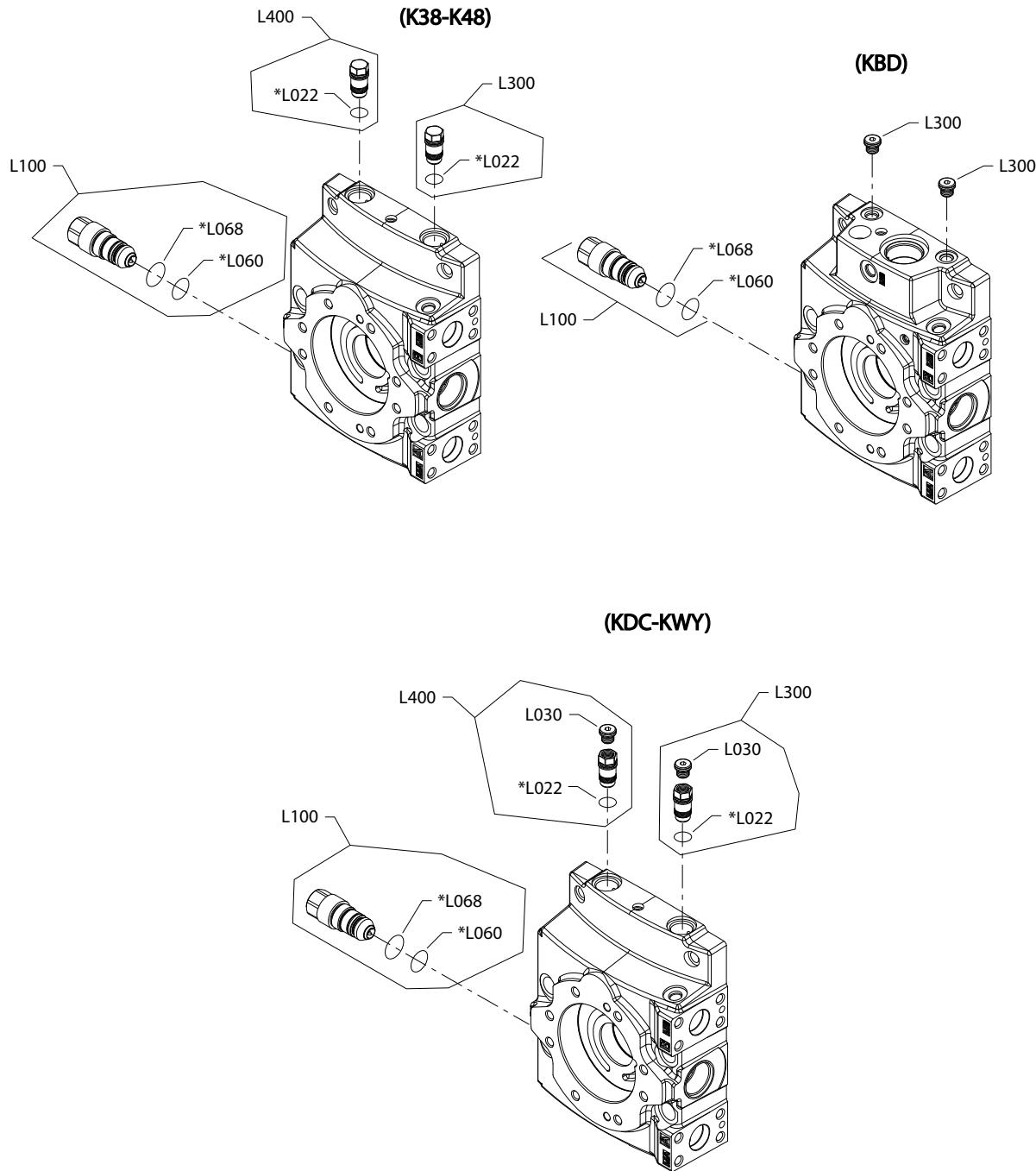
Order code: KBD

L100	05-18		11049154	High pressure relief valve, 420 bar	1
L300	05-18		513443	Plug assembly, CCW rotation pump	1
L400	05-18		513443	Plug assembly, CW rotation pump	1

Parts continue to the next 2 pages.

High pressure setting

Parts configuration



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
L022	05-18		504207	O-ring	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: KDC

L030	05-18		513443	Plug assembly	1
L100	05-18		11069762	High pressure relief valve, 430 bar	1
L300	05-18		11035112	Pressure sensor adapter, CCW rotation pump	1
L400	05-18		11035112	Pressure sensor adapter, CW rotation pump	1

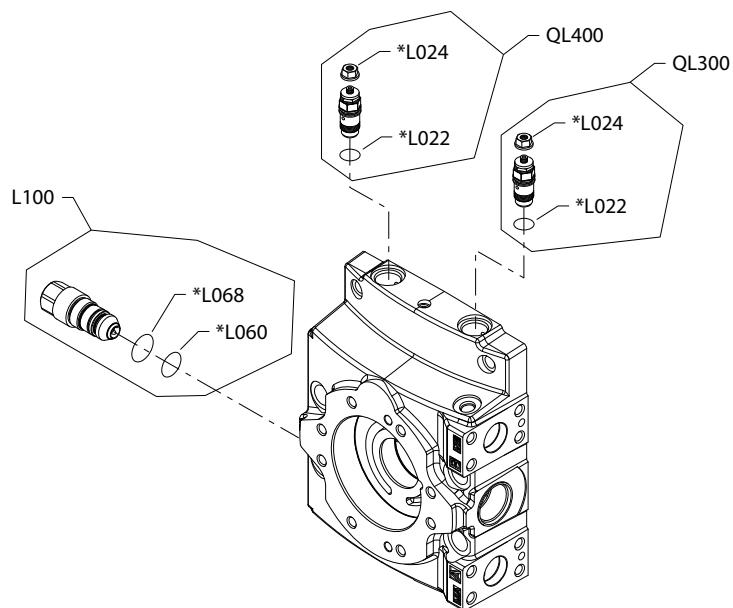
Order code: KWY

L030	05-18		513443	Plug assembly	1
L100	05-18		11049155	High pressure relief valve, 450 bar	1
L300	05-18		11035112	Pressure sensor adapter, CCW rotation pump	1
L400	05-18		11035112	Pressure sensor adapter, CW rotation pump	1

High pressure setting

H1P HPS (port A) L23-L43

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	05-18		504207	O-ring	1
L024	05-18		336826	Seal nut	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: L15

L100	05-18		11049144	High pressure relief valve, 200 bar	1
QL300	05-18		11119002	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11119002	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L20

L100	05-18		11049147	High pressure relief valve, 250 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L23

L100	05-18		11049148	High pressure relief valve, 280 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L25

L100	05-18		11049149	High pressure relief valve, 300 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L28

L100	05-18		11049150	High pressure relief valve, 330 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L30

L100	05-18		11049151	High pressure relief valve, 350 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

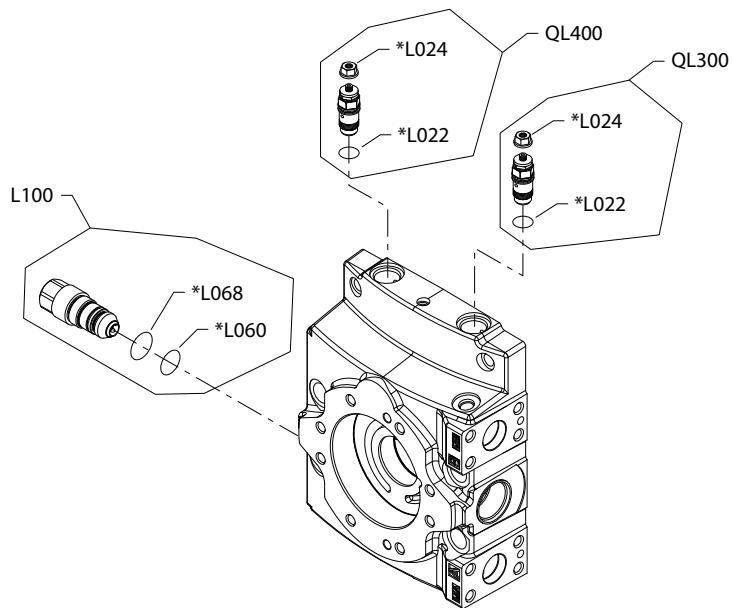
Order code: L33

L100	05-18		11049152	High pressure relief valve, 380 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

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	08-10		504207	O-ring	1
L024	08-10		336826	Seal nut	1
L060	08-10		365023	O-ring	1
L068	08-10		11052201	O-ring	1

Order code: L35

L100	08-10		11049153	High pressure relief valve, 400 bar	1
QL300	08-10		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	08-10		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L37

L100	18-12		11049153	High pressure relief valve, 400 bar	1
QL300	18-12		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	18-12		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L38

L100	05-18		11049154	High pressure relief valve, 420 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L40

L100	05-18		11049155	High pressure relief valve, 450 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

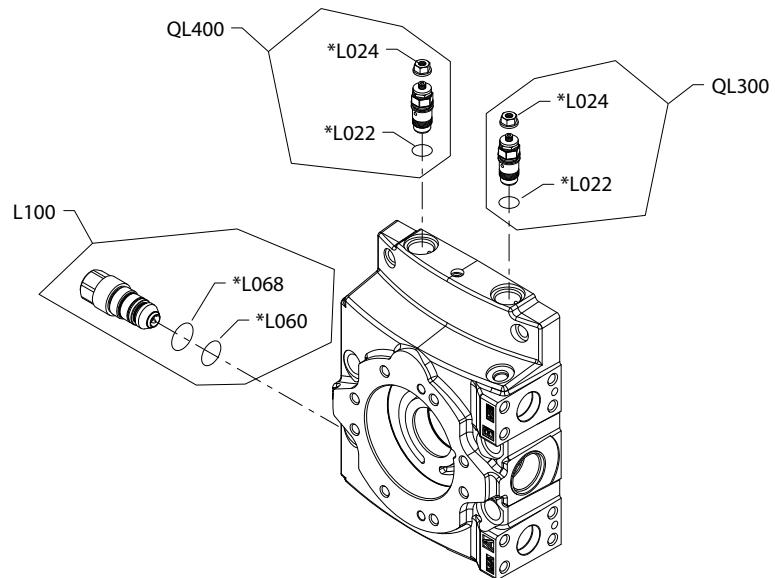
Order code: L41

L100	05-18		11049155	High pressure relief valve, 450 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

High pressure setting

H1P 147/165cc HPS (port A) L42-LEG

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	05-18		504207	O-ring	1
L024	05-18		336826	Seal nut	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: L42

L100	05-18		11049155	High pressure relief valve, 450 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L43, L44, L45

L100	05-18		11049156	High pressure relief valve, 480 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L46, L47, L48

L100	05-18		11049157	High pressure relief valve, 510 bar	1
QL300	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1
QL400	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1

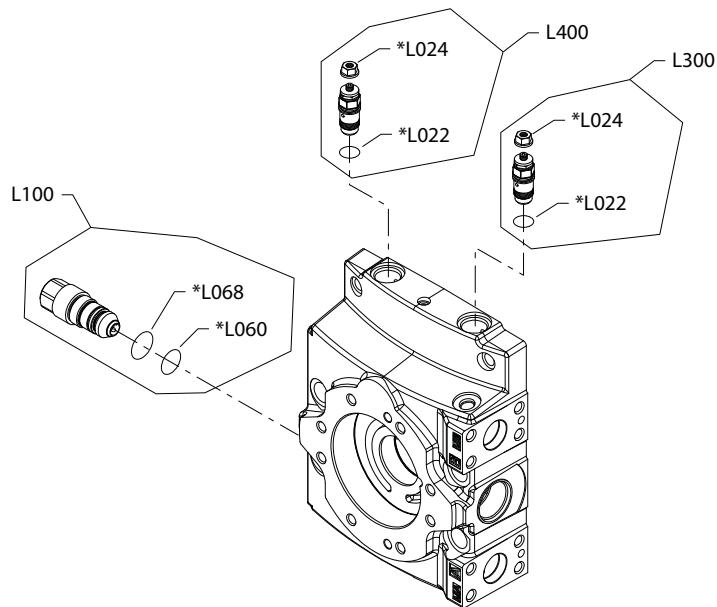
Order code: LEG

L100	05-18		11049156	High pressure relief valve, 480 bar	1
QL400	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1

High pressure setting

H1P HPS S42-S45

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	05-18		504207	O-ring	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: S42

L030	12-04		140644	Plug assembly	1
L200	12-04		11049154	High pressure relief valve, 420 bar	1
L300	12-02		11085422	Pressure sensor adapter, CW rotation pump	1
L400	12-04		11085422	Pressure sensor adapter, CCW rotation pump	1

Order code: S44

L030	12-02		140644	Plug assembly	1
L200	12-02		11116160	High pressure relief valve, 440 bar	1
L300	12-02		11085422	Pressure sensor adapter, CW rotation pump	1
L400	12-02		11085422	Pressure sensor adapter, CCW rotation pump	1

Order code: S45

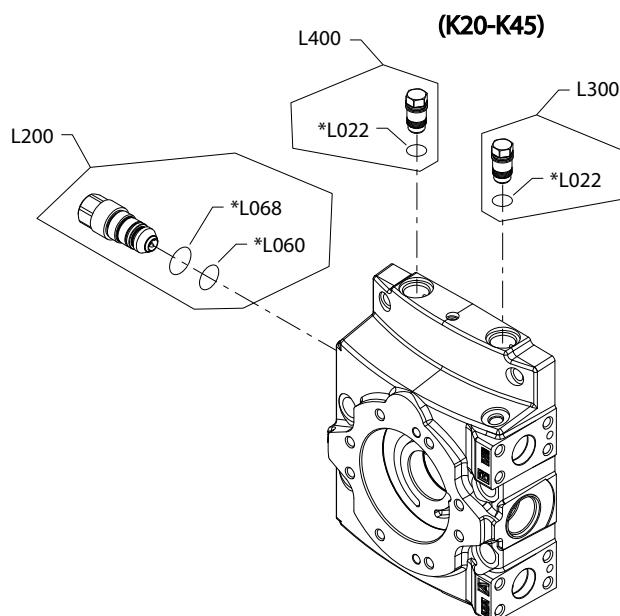
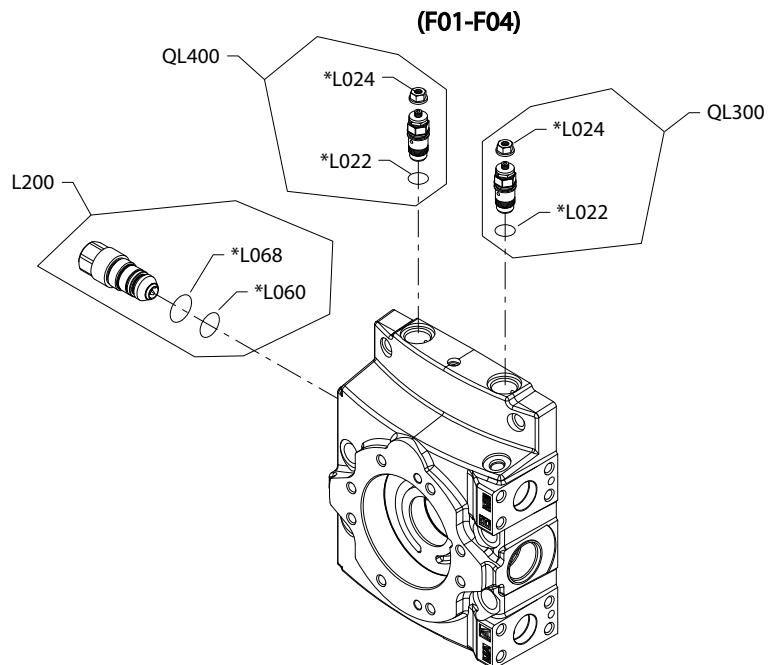
L030	12-22		140644	Plug assembly	1
L200	12-22		11049155	High pressure relief valve, 450 bar	1
L300	12-22		11085422	Pressure sensor adapter, CW rotation pump	1
L400	12-22		11085422	Pressure sensor adapter, CCW rotation pump	1

High pressure setting

Port B

H1P HPS (port B) F01-K28

Parts configuration



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	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: F01

L022	13-14		504207	O-ring	1
L024	13-14		336826	Seal nut	1
L200	13-14		11049147	High pressure relief valve, 250 bar	1
QL300	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: F02

L022	13-14		504207	O-ring	1
L024	13-14		336826	Seal nut	1
L200	13-14		11049149	High pressure relief valve, 300 bar	1
QL300	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: F03

L022	13-14		504207	O-ring	1
L024	13-14		336826	Seal nut	1
L200	13-14		11049151	High pressure relief valve, 350 bar	1
QL300	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

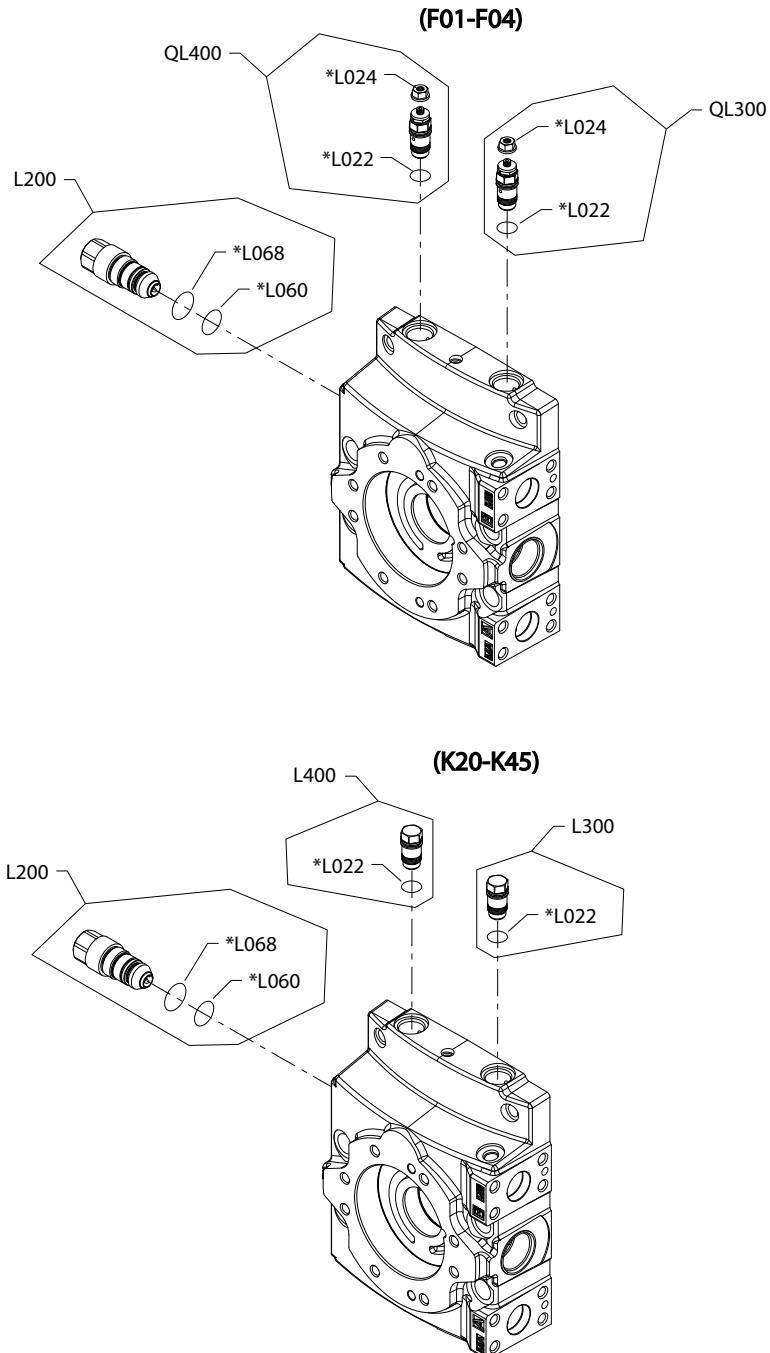
Order code: F04

L022	13-14		504207	O-ring	1
L024	13-14		336826	Seal nut	1
L200	13-14		11049153	High pressure relief valve, 400 bar	1
QL300	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

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

High pressure setting

Parts configuration



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	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: K20

L022	05-18		504207	O-ring	1
L200	05-18		11049144	High pressure relief valve, 200 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Order code: K23

L022	05-18		504207	O-ring	1
L200	05-18		11049146	High pressure relief valve, 230 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Order code: K25

L022	05-18		504207	O-ring	1
L200	05-18		11049147	High pressure relief valve, 250 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

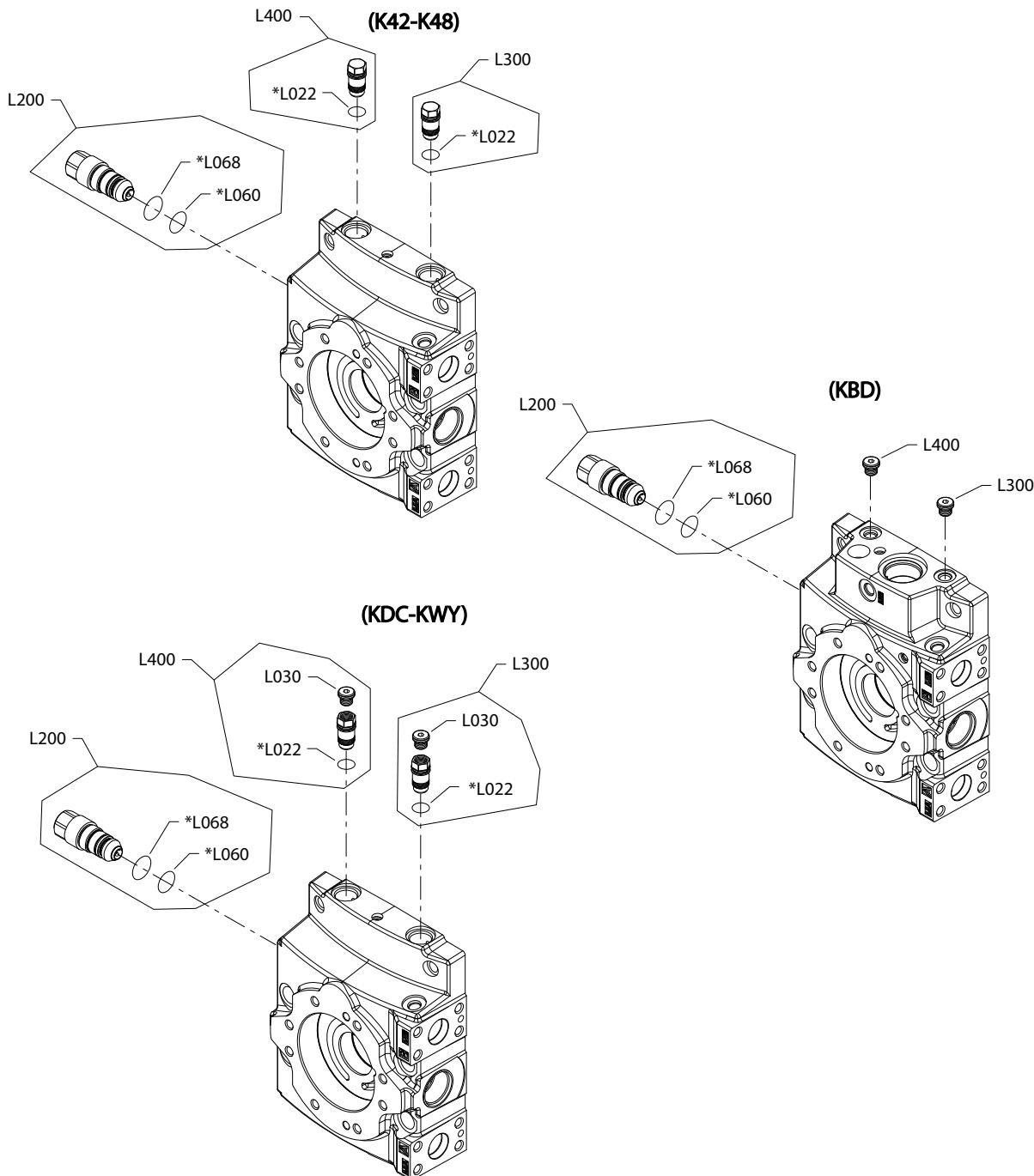
Order code: K28

L022	05-18		504207	O-ring	1
L200	05-18		11049148	High pressure relief valve, 280 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

High pressure setting

H1P HPS (port B) K30-KWY

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	05-18		504207	O-ring	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: K30

L200	05-18		11049149	High pressure relief valve, 300 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Order code: K33

L200	05-18		11049150	High pressure relief valve, 330 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Order code: K35

L200	05-18		11049151	High pressure relief valve, 350 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Order code: K38

L200	05-18		11049152	High pressure relief valve, 380 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Order code: K40

L200	05-18		11049153	High pressure relief valve, 400 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Order code: K42

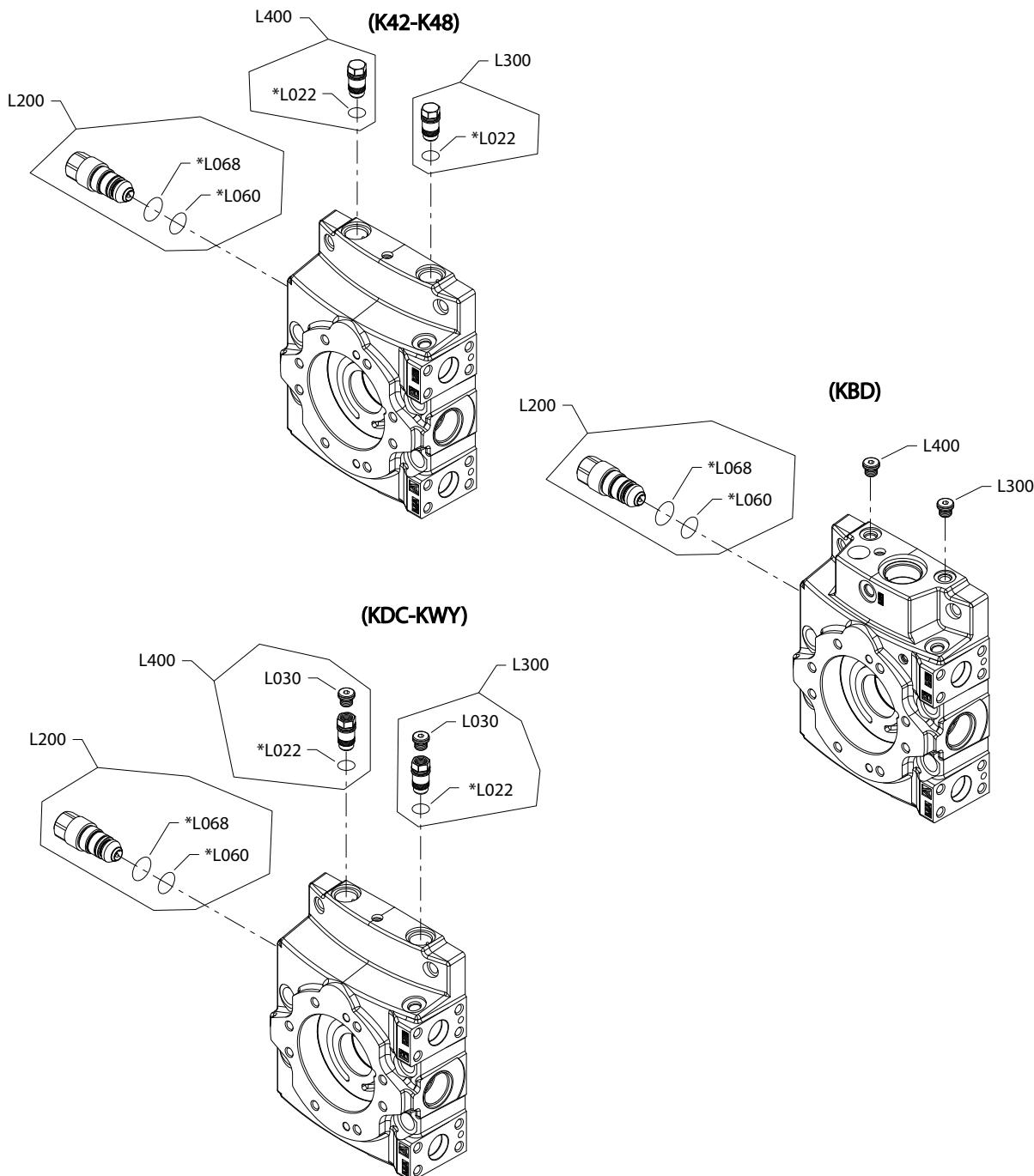
L200	05-18		11049154	High pressure relief valve, 420 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Parts continue to the next 2 pages.

High pressure setting

Parts configuration

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	05-18		504207	O-ring	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: K45

L200	05-18		11049155	High pressure relief valve, 450 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Order code: K46

L200	05-18		11106573	High pressure relief valve, 460 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1

Order code: K48

L022	05-18		504207	O-ring	1
L200	05-18		11049156	High pressure relief valve, 480 bar	1
L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

Order code: KDB

L200	05-18		11049154	High pressure relief valve, 420 bar	1
L300	05-18		513443	Plug assembly, CCW rotation pump	1
L400	05-18		513443	Plug assembly, CW rotation pump	1

Order code: KDC

L030	05-18		513443	Plug assembly	1
L200	05-18		11069762	High pressure relief valve, 430 bar	1
L300	05-18		11035112	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11035112	Pressure limiter plug assembly, CCW rotation pump	1

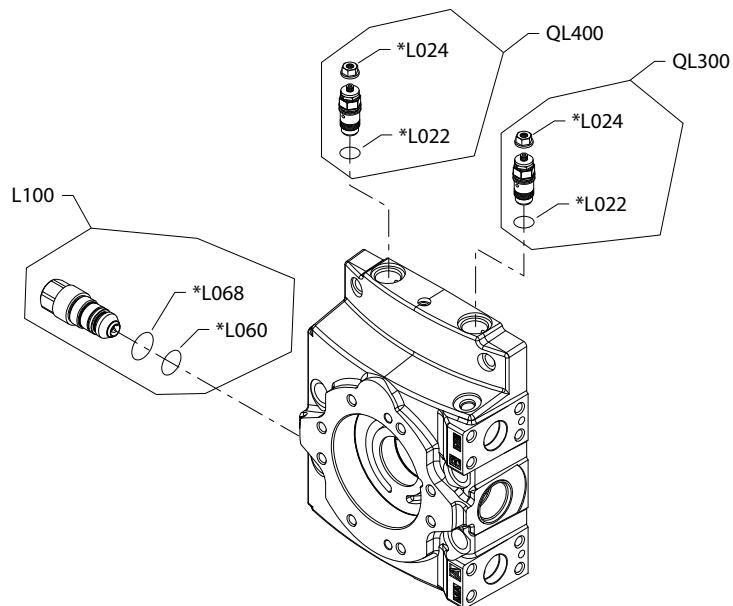
Order code: KWY

L030	05-18		513443	Plug assembly	1
L200	05-18		11049155	High pressure relief valve, 450 bar	1
L300	05-18		11035112	Pressure limiter plug assembly, CW rotation pump	1
L400	05-18		11035112	Pressure limiter plug assembly, CCW rotation pump	1

High pressure setting

H1P HPS (port B) L15-L41

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	05-18		504207	O-ring	1
L024	05-18		336826	Seal nut	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: L15

L200	05-18		11049144	High pressure relief valve, 200 bar	1
QL300	05-18		11119002	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11119002	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: L20

L200	05-18		11049147	High pressure relief valve, 250 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: L23

L200	05-18		11049148	High pressure relief valve, 280 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: L25

L200	05-18		11049149	High pressure relief valve, 300 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: L28

L200	05-18		11049150	High pressure relief valve, 330 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

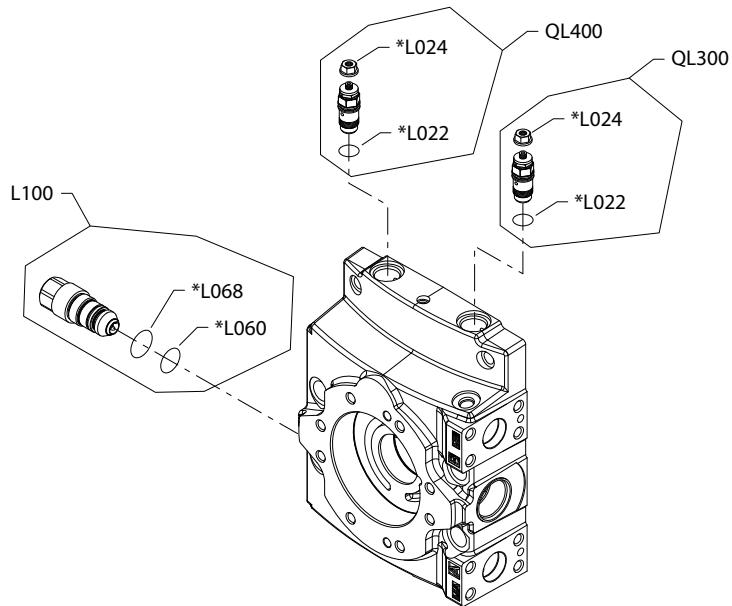
Order code: L30

L200	05-18		11049151	High pressure relief valve, 350 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

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	05-18		504207	O-ring	1
L024	05-18		336826	Seal nut	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: L33

L200	05-18		11049152	High pressure relief valve, 380 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: L35

L200	05-18		11049153	High pressure relief valve, 400 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: L37

L100	18-12		11049153	High pressure relief valve, 400 bar	1
QL300	18-12		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
QL400	18-12		11004709	Pressure limiter kit, adjustable, CW rotation pump	1

Order code: L38

L200	05-18		11049154	High pressure relief valve, 420 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: L40

L200	05-18		11049155	High pressure relief valve, 450 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

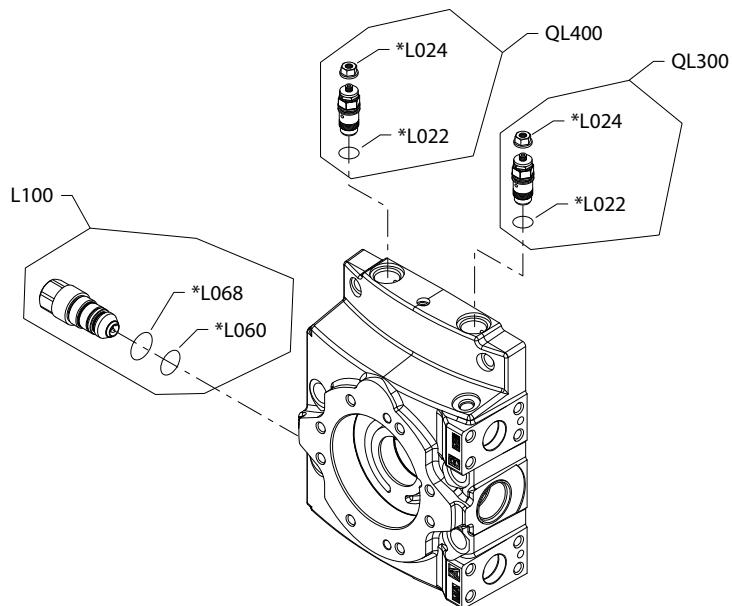
Order code: L41

L200	05-18		11049155	High pressure relief valve, 450 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

High pressure setting

H1P HPS (port B) L42-LED

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	05-18		504207	O-ring	1
L024	05-18		336826	Seal nut	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: L42

L200	05-18		11049155	High pressure relief valve, 450 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: L43

L200	05-18		11049156	High pressure relief valve, 480 bar	1
QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1

Order code: L44

L200	05-18		11049156	High pressure relief valve, 480 bar	1
QL300	05-18		11004709	Pressure limiter, adjustable,CW rotation pump	1
QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1

Order code: L45

L200	05-18		11049156	High pressure relief valve, 480 bar	1
QL300	05-18		11004709	Pressure limiter, adjustable,CW rotation pump	1
QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1

Order code: L46

L200	05-18		11049157	High pressure relief valve, 510 bar	1
QL300	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1

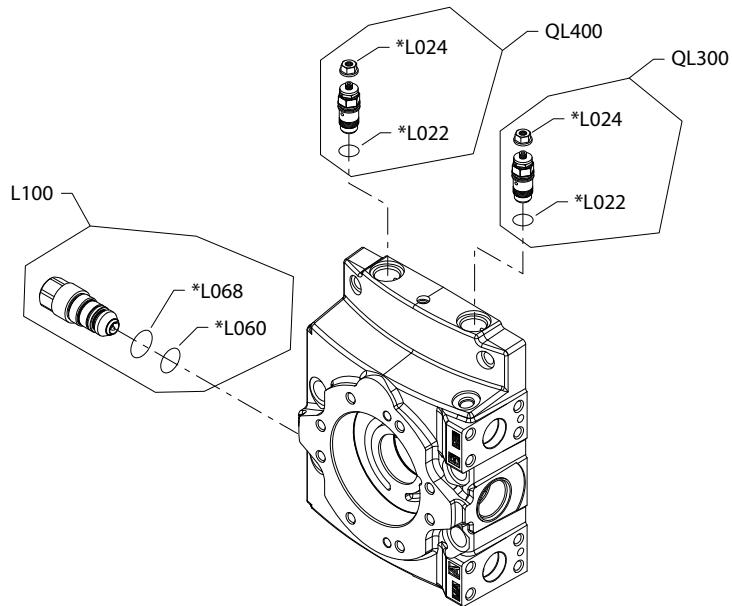
Order code: L47

L200	05-18		11049157	High pressure relief valve, 510 bar	1
QL300	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1

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	05-18		504207	O-ring	1
L024	05-18		336826	Seal nut	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: L48

L200	05-18		11049157	High pressure relief valve, 510 bar	1
QL300	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1

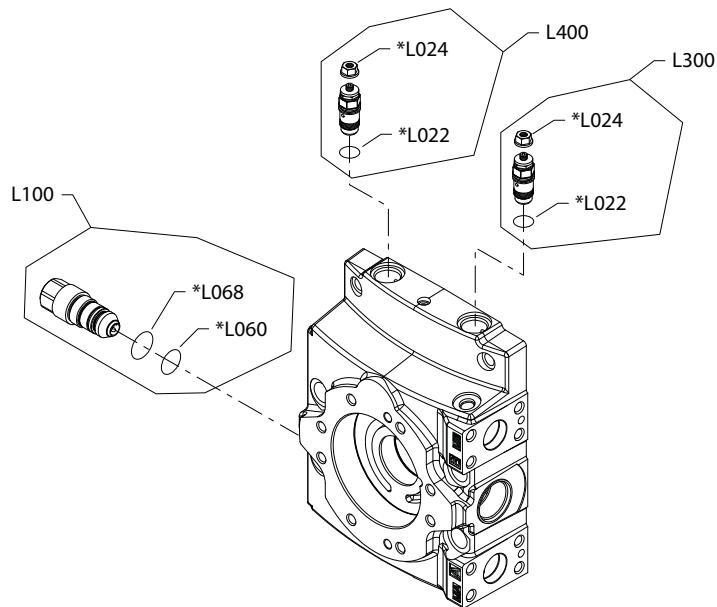
Order code: LEG

L200	05-18		11049156	High pressure relief valve, 480 bar	1
QL300	05-18		11004709	Pressure limiter, adjustable,CW rotation pump	1
QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1

High pressure setting

H1P HPS S42-S45

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	05-18		504207	O-ring	1
L060	05-18		365023	O-ring	1
L068	05-18		11052201	O-ring	1

Order code: S42

L030	12-04		140644	Plug assembly	1
L200	12-04		11049154	High pressure relief valve, 420 bar	1
L300	12-02		11085422	Pressure sensor adapter, CW rotation pump	1
L400	12-04		11085422	Pressure sensor adapter, CCW rotation pump	1

Order code: S44

L030	12-02		140644	Plug assembly	1
L200	12-02		11116160	High pressure relief valve, 440 bar	1
L300	12-02		11085422	Pressure sensor adapter, CW rotation pump	1
L400	12-02		11085422	Pressure sensor adapter, CCW rotation pump	1

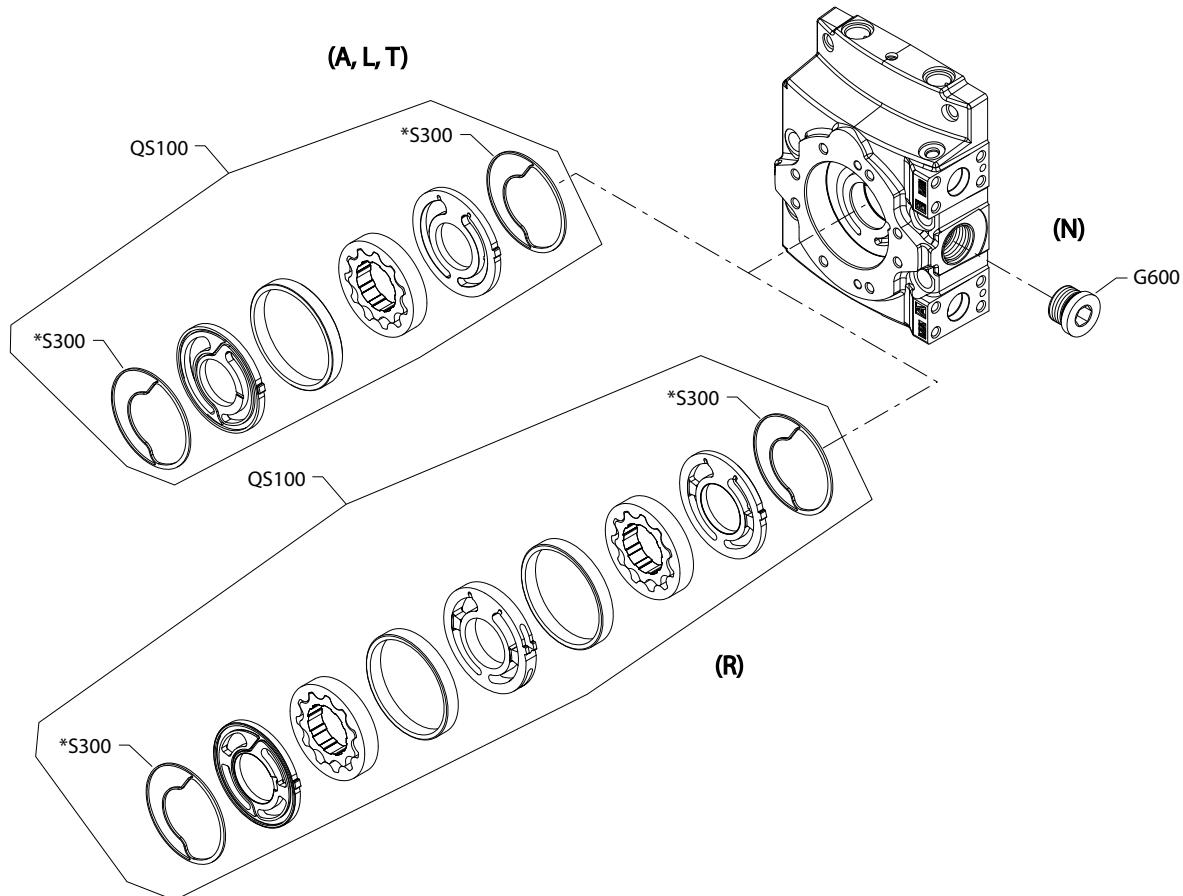
Order code: S45

L030	12-22		140644	Plug assembly	1
L200	12-22		11049155	High pressure relief valve, 450 bar	1
L300	12-22		11085422	Pressure sensor adapter, CW rotation pump	1
L400	12-22		11085422	Pressure sensor adapter, CCW rotation pump	1

Charge pump

H1P charge pump

Parts configuration



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

* Included in overhaul seal kit Q210

Parts Manual
H1P 147 and 165cc

Charge pump

Order code: A

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
QS100	10-08		11075695	Charge pump kit, 26cc (SB-2011-022 on page 197)	1
QS100	05-18	10-07	11004702	Charge pump kit, 26cc	1
S300	08-10		11126778	Seal ring (SB-2013-019 on page 206)	2

Order code: L

QS100	10-08		11069135	Charge pump kit, 34cc (SB-2011-022 on page 197)	1
QS100	05-18	10-07	11004704	Charge pump kit, 34cc	1
S300	08-10		11126778	Seal ring (SB-2013-019 on page 206)	2

Order code: N

G600	10-15		676734 (9005110-9500)	Plug assembly	1
G600	16-09		11164205	Plug assembly, M42 (metric)	1

Order code: R

QS100	11-45		11070194	Charge pump kit, 52 cc	1
S300	11-45		11126778	Seal ring (SB-2013-019 on page 206)	2

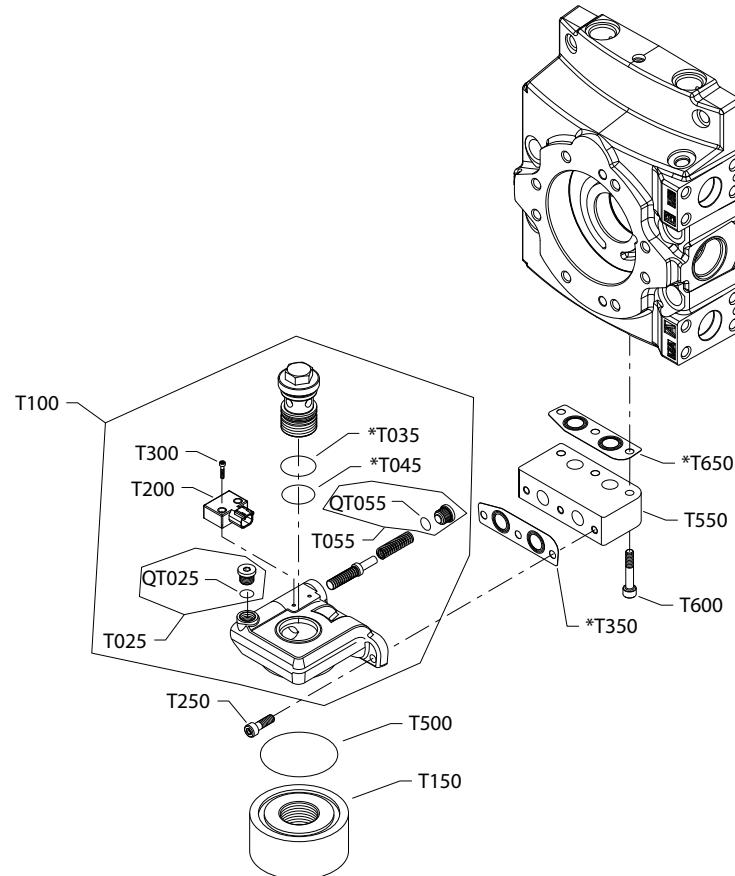
Order code: T

QS100	09-47		11124502	Charge pump kit, 40 cc	1
S300	09-47		11126778	Seal ring (SB-2013-019 on page 206)	2

Filtration

H1P filtration C

Parts configuration



Generic end cap shown

* Included in overhaul seal kit Q210

Filtration

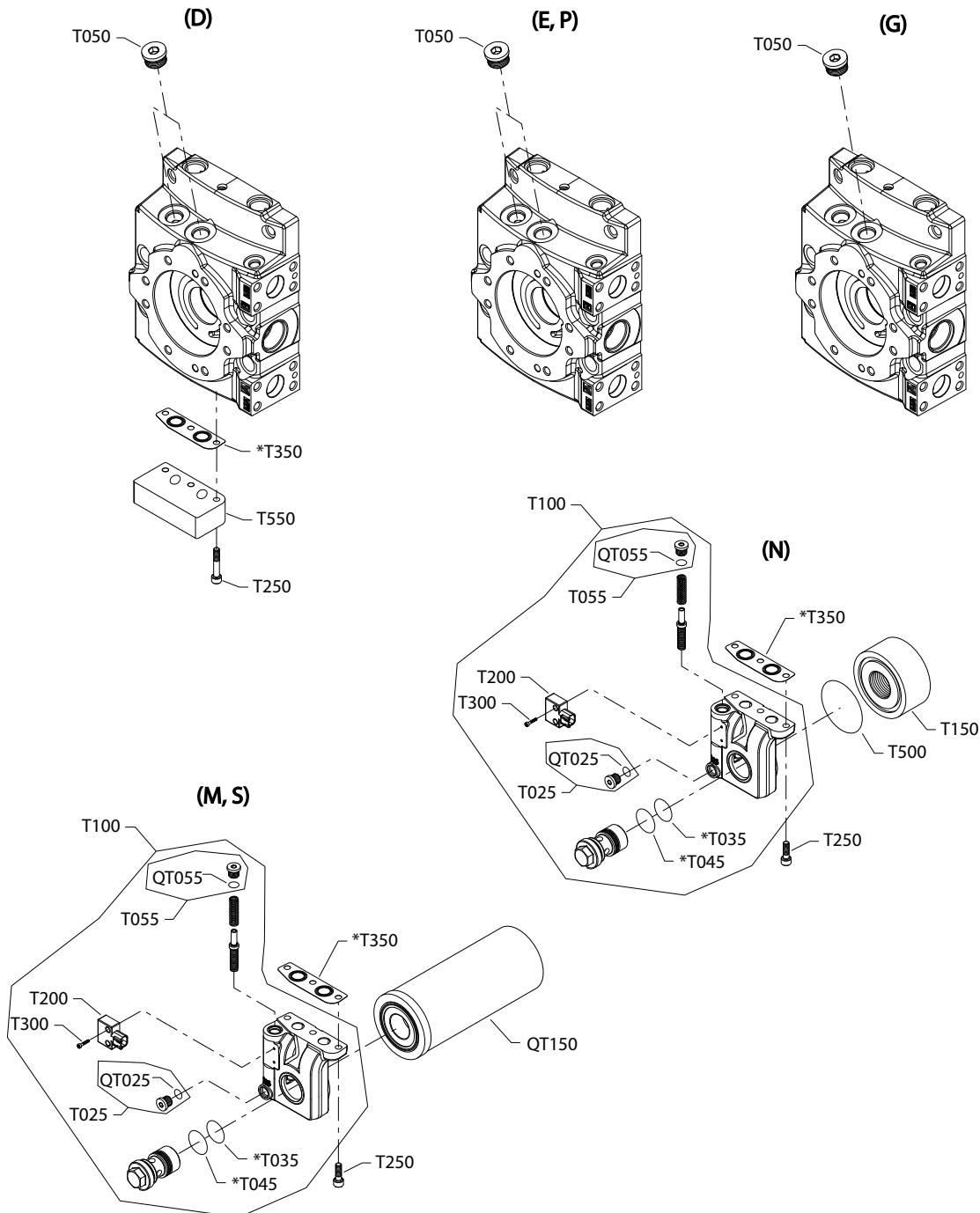
Order code: C

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
T025	07-25		141269	Plug assembly	1
T035	07-25		761148 (9004100-0260)	O-ring	1
T045	07-25		314500 (9004100-1250)	O-ring	1
T055	07-25		141269	Plug assembly	1
T100	07-25		140736	Pressure filter adapter assembly	1
T150	07-25		11008261	Cover	1
T200	07-25		11031852	Filtration sensor (SB-2007-052 on page 187)	1
T250	07-25		11128665	Screw, M8 x 25	3
T300	07-25		140560	Screw, M3 x 16	2
T350	07-25		140737	Filter adapter gasket	1
T500	07-25		000943 (9004100-2300)	O-ring	1
T550	07-25		11008273	Adapter plate	1
T600	07-25		376624	Screw, M8 x 45	3
T650	07-25		140737	Gasket	1

Filtration

H1P filtration D-S

Parts configuration



Generic end caps shown

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

* Included in overhaul seal kit Q210

Parts Manual
H1P 147 and 165cc

Filtration

Order code: D

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
T050	09-43		664524 (9005110-9000)	Plug assembly	2
T050	09-43		11178807	Plug assembly, M27 (metric)	1
T250	09-43		092106	Screw	3
T350	09-43		140737	Filter adapter gasket	1
T550	09-43		11074118	Adapter plate	1
T550	09-43		11172774	Adapter plate (metric)	1

Order code: E

T050	09-43		664524 (9005110-9000)	Plug assembly	2
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Order code: G

T050	09-43		664524 (9005110-9000)	Plug assembly	1
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Order code: L

No parts

Order code: M

QT150	05-18		11004919	Filter assembly	1
T025	05-18		141269	Plug assembly	1
T035	05-18		761148 (9004100-0260)	O-ring	1
T045	05-18		314500 (9004100-1250)	O-ring	1
T055	05-18		141269	Plug assembly	1
T100	05-18		140736	Pressure filter adapter assembly	1
T200	05-18		11031852	Filtration sensor (SB-2007-052 on page 187)	1
T250	05-18		11128665	Screw	3
T300	05-18		140560	Screw	2
T350	05-18		140737	Filter adapter gasket	1

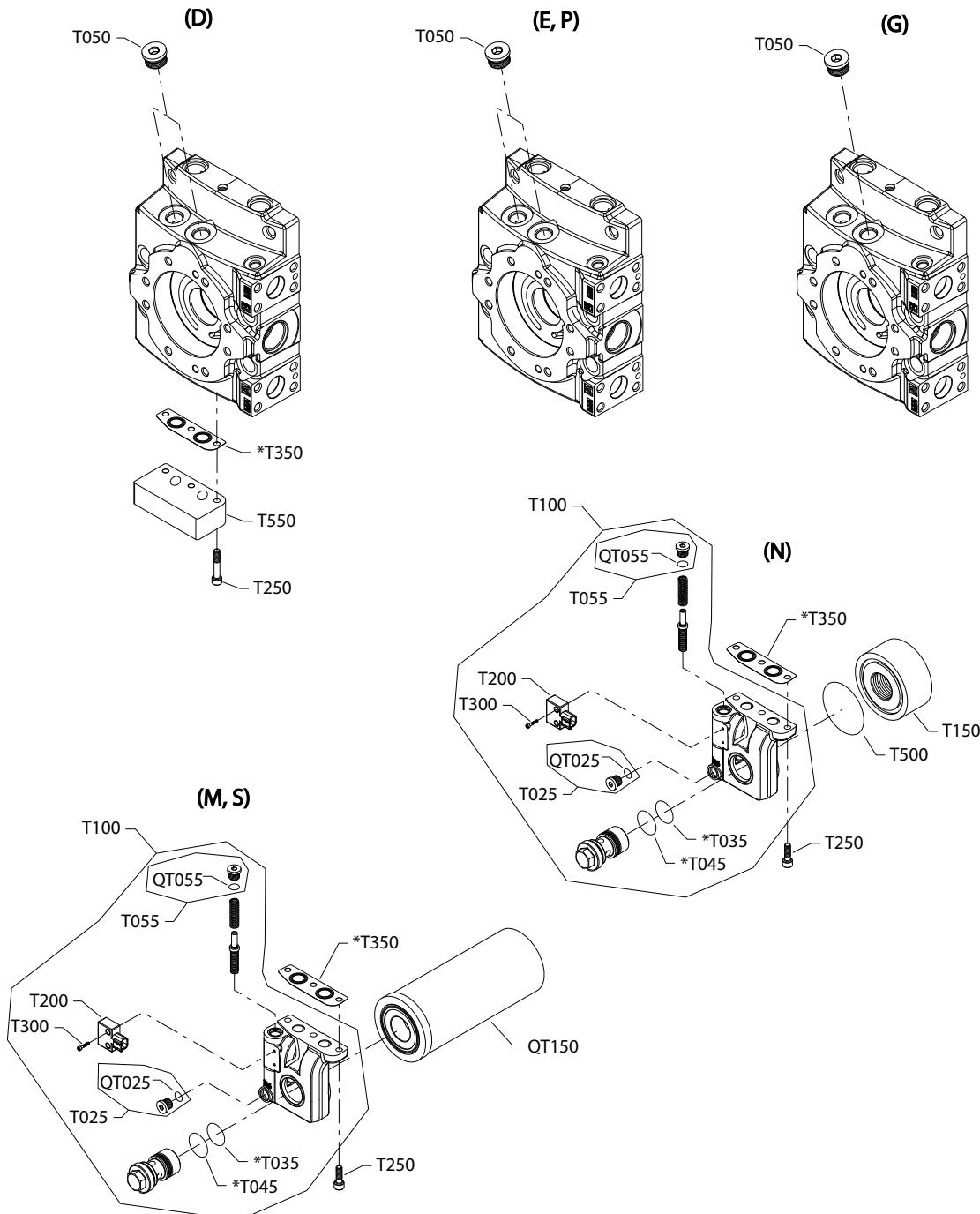
Order code: N

T025	08-47		141269	Plug assembly	1
T035	08-47		761148 (9004100-0260)	O-ring	1
T045	08-47		314500 (9004100-1250)	O-ring	1
T055	08-47		141269	Plug assembly	1
T100	08-47		140736	Pressure filter adapter assembly	1
T150	08-47		11008261	Cover	1
T200	08-47		11031852	Filtration sensor (SB-2007-052 on page 187)	1
T250	08-47		11128665	Screw	3
T300	08-47		140560	Screw	2
T350	08-47		140737	Filter adapter gasket	1
T500	08-47		000943 (9004100-2300)	O-ring	1

Parts continue to the next 2 pages

Filtration

Parts configuration



Generic end caps shown

* Included in overhaul seal kit Q210

Filtration

Order code: P

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
T050	08-10		664524 (9005110-9000)	Plug assembly	2

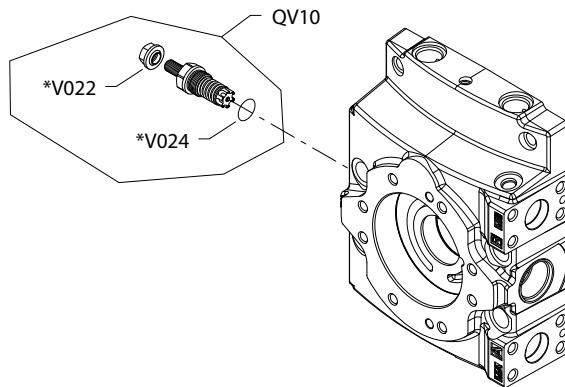
Order code: S

QT150	05-18		11004919	Filter assembly	1
T025	05-18		141269	Plug assembly	1
T035	05-18		761148 (9004100-0260)	O-ring	1
T045	05-18		314500 (9004100-1250)	O-ring	1
T055	05-18		141269	Plug assembly	1
T100	05-18		11000746	Pressure filter adapter assembly	1
T200	05-18		11031853	Filtration sensor (SB-2007-052 on page 187)	1
T250	05-18		11128665	Screw	3
T300	05-18		140560	Screw	2
T350	05-18		140737	Filter adapter gasket	1

Charge pressure relief and ISL settings

H1P 147/165cc charge pressure relief 18-34

Parts configuration



Generic end cap shown.

* Included in overhaul seal kit Q210

Charge pressure relief and ISL settings

Order code: 18-22

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
QV10	05-18		11137578	Charge relief valve kit	1
V022	05-18		066159	Seal nut	1
V024	05-18		001149 (9004201-6200)	O-ring	1

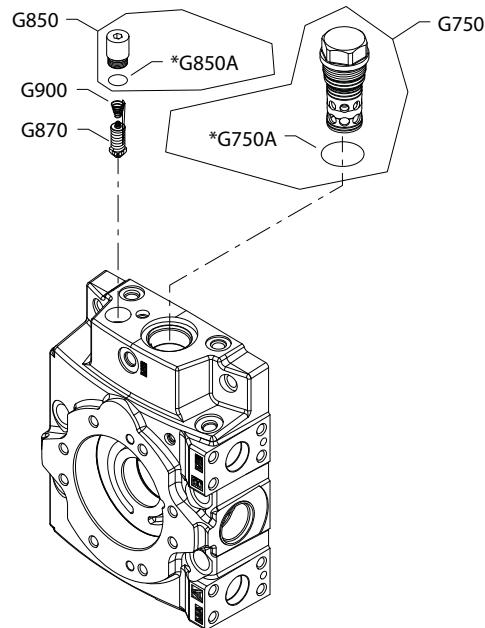
Order code: 24-34

QV10	05-18		11137579	Charge relief valve kit	1
V022	05-18		066159	Seal nut	1
V024	05-18		001149 (9004201-6200)	O-ring	1

Charge pressure relief and ISL settings

H1P 147/165cc ISL setting G14-G34

Parts configuration



Generic end cap shown.

* Included in overhaul seal kit Q210

Charge pressure relief and ISL settings

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E063	05-18		001131 (9004201-5000)	O-ring	1
G750	05-18		11137759	ISL valve assembly, 5.5mm orifice	1
G750A	05-18		140866	O-ring	1
G850	05-18		11126727	Plug assembly	1
G900	05-18		4800780	Spring	1

Order code: G14

G870	05-18		3103375-0140	SCR valve assembly, 140 bar [2030 psi]	1
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Order code: G18

G870	05-18		3103375-0175	SCR valve assembly, 175 bar [2538 psi]	1
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Order code: G21

G870	05-18		3103375-0210	SCR valve assembly, 210 bar [3045 psi]	1
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Order code: G23

G870	05-18		3103375-0230	SCR valve assembly, 230 bar [3335 psi]	1
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Order code: G25

G870	05-18		3103375-0250	SCR valve assembly, 250 bar [3625 psi]	1
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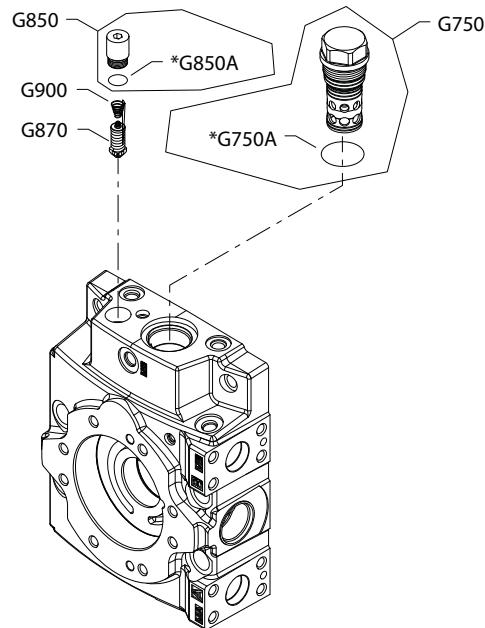
Order code: G34

G870	05-18		3103375-0345	SCR valve assembly, 345 bar [5000 psi]	1
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Charge pressure relief and ISL settings

H1P 147/165cc ISL setting GAA-GAU

Parts configuration



Generic end cap shown.

* Included in overhaul seal kit Q210

Charge pressure relief and ISL settings

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E063	05-18		001131 (9004201-5000)	O-ring	1
G750A	05-18		140866	O-ring	1
G850	05-18		11126727	Plug assembly	1
G900	05-18		4800780	Spring	1

Order code: GAA

G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
G870	05-18		3103375-0140	SCR valve assembly, 140 bar [2030 psi]	1

Order code: GAB

G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
G870	05-18		3103375-0175	SCR valve assembly, 175 bar [2538 psi]	1

Order code: GAC

G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
G870	05-18		3103375-0210	SCR valve assembly, 210 bar [3045 psi]	1

Order code: GAD

G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
G870	05-18		3103375-0230	SCR valve assembly, 230 bar [3335 psi]	1

Order code: GAE

G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
G870	05-18		3103375-0250	SCR valve assembly, 250 bar [3625 psi]	1

Order code: GAS

G750	15-16		11145639	ISL valve assembly, 4.4mm orifice	1
G870	15-16		11165436	SCR valve assembly, 110 bar [1595 psi]	1

Order code: GAT

G750	16-09		11155320	ISL valve assembly, 5.5mm orifice	1
G870	16-09		11165436	SCR valve assembly, 110 bar [1595 psi]	1

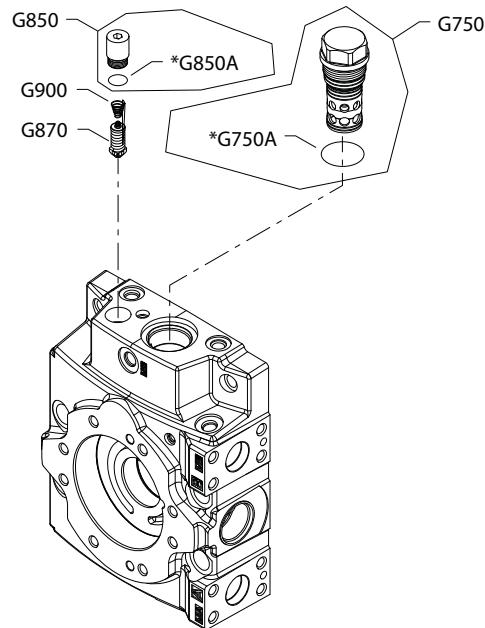
Order code: GAU

G750	16-50		11137581	ISL valve assembly, 4.4mm orifice	1
G870	16-50		11165436	SCR valve assembly, 110 bar [1595 psi]	1

Charge pressure relief and ISL settings

H1P 147/165cc ISL setting MAA-YAJ

Parts configuration



Generic end cap shown.

* Included in overhaul seal kit Q210

Charge pressure relief and ISL settings

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E063	05-18		001131 (9004201-5000)	O-ring	1
G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
G750A	05-18		140866	O-ring	1
G850	05-18		11126727	Plug assembly	1
G900	05-18		4800780	Spring	1

Order code: MAA

G870	05-18		3103375-0140	SCR valve assembly, 140 bar [2030 psi]	1
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Order code: MAB

G870	05-18		3103375-0175	SCR valve assembly, 175 bar [2538 psi]	1
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Order code: YAJ

G870	05-18		3103375-0140	SCR valve assembly, 140 bar [2030 psi]	1
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Overhaul seal kit

H1P 147/165cc seal kit

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
Q210	05-18		11178089	Overhaul seal kit, H1P147-165	1
D060	05-18		612291 (9003508-0008)	Seal nut	1
D150	07-01		11173377	Control gasket, H1, 6-screw	1
D150	05-18	06-52	140722	Control gasket, H1, 5-screw (SB-2006-030)	1
D611	05-18		11066774	O-ring	2
E020	05-18		11075559	O-ring	2
E025	05-18		11075558	Piston ring	2
E250	05-18		9004104-1520	O-ring	2
E500	05-18		649822	Seal nut	1
E550	05-18		649822	Seal nut	1
G150	05-18		140518	End cap gasket	1
G750A	05-18		140866	O-ring	1
G780A	05-18		093823 (9004201-9200)	O-ring	1
E063	05-18		001131 (9004201-5000)	O-ring	1
J250	07-29		11024711	Lip seal (SB-2008-014)	1
K150	10-39		11002236	Adapter seal (SB-2011-002)	1
K150	05-18	10-38	140703	Adapter seal	1
K250	05-18	08-11	327627 (9004104-1540)	O-ring	1
K250	05-18	08-11	9004104-1520	O-ring	1
K250	05-18	08-11	726927	O-ring	1
K250	05-18	08-11	056739 (9004104-1580)	O-ring	1
L022	05-18		504207	O-ring	2
L024	05-18		336826	Seal nut, M10 x 1	2
L060	05-18		365023	O-ring	2
L068	05-18		11052201	O-ring	2
QD26	05-18		11001952	O-ring	2
QD81	05-18		11059551	O-ring	1
QD751	14-01		001131 (9004201-5000)	O-ring	1
QH131	10-14		11013397	O-ring	1
S300	05-18		11126778	Seal ring	2
T035	05-18		761148 (9004100-0260)	O-ring	1
T045	05-18		314500 (9004100-1250)	O-ring	1
T350	05-18		140737	Filter adapter gasket	1
T650	05-18		140737	Filter adapter gasket	1
V022	05-18		612291 (9003508-0008)	Seal nut, M8 x 1, fine thread	1
V024	05-18		001149 (9004201-6200)	O-ring	1

Service bulletin

SB-2006-030

Products affected

Subject

Control, servo piston and housing

Description

As a product improvement, Danfoss made changes to the H1 147 and 165cc pumps. The following parts are affected by this change; control, servo piston, and pump housing.

Control: The old control had five mounting screws and the control pilot supply screen was between the pump housing and the end cap. The new control uses six mounting screws and has the supply screen integrated into the control. The new and old controls are not interchangeable. The old control will be available for a period of time.

Pump housing: The old pump housing was designed to accept the original five screw control. The old pump housing was also machined to have the control pilot supply screen in it. The new pump housing was designed to accept the new six mounting screw control. The supply screen has been moved to the control. Also, the new pump housing was changed slightly to accept the new servo piston assembly. The new and old pump housings are not interchangeable. The old pump housing is no longer available for service.

Servo piston assembly: The servo piston assembly has new spring seats. The new servo piston assembly can be used in the new and old housings. The old servo piston assembly can only be used in the old housings. The old servo piston assembly is obsolete and no longer available for service.

Service kit: A service kit has been created to service the older models requiring a new housing. This kit includes; the new control and screws, new pump housing, new servo piston assembly, and a pump overhaul seal kit.

Models affected

All H1 147 and 165cc pumps

Serial numbers

This change became effective at serial number N-07-01-xxxxx.

Part numbers affected

Description	Old part number	New part number	Servo piston type
Housing (Class)	11005477	11019991	Nested spring assembly
Housing (standard)	11005069	According to control	Standard assembly
EDC 12V (A2) Kit	11004693	11019987	Standard assembly
EDC 24V (A3) Kit	11004695	11019988	Standard assembly
EDC 12V Mor (A4) Kit	11004697	11019989	Standard assembly
EDC 24V Mor (A5) Kit	11004699	11019990	Standard assembly
EDC 12V Corf (A6) Kit	11004701	11019991	Nested spring assembly

Description	Old part number	New part number
Servo piston assembly (standard)	140500	11005250
Servo piston assembly (nested springs)	11000580	11005249

Service bulletin

Parts disposition

Interchangeable

Service bulletin

SB-2007-033

Products affected

H1 pumps

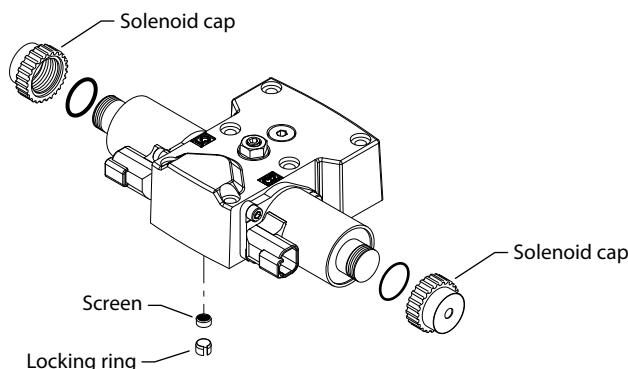
Subject

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-2006-40

Products affected

H1 pumps

Subject

Filtration pressure sensor

Description

As a product improvement, Danfoss has changed the filtration pressure sensor.

The new filtration pressure sensor is completely interchangeable with the old sensor. The old sensor will be obsoleted when all inventory has been exhausted.

Models affected

All H1 pumps with "M" or "S" filtration option.

Serial numbers

This change became effective at serial number N-07-43-xxxxx.

Part numbers affected

Sensor option	Old part number	New part number
M	140355	11031852
S	11000357	11031853

Parts disposition

Interchangeable, use parts in stock

SB-2007-052

Products affected

H1 pumps

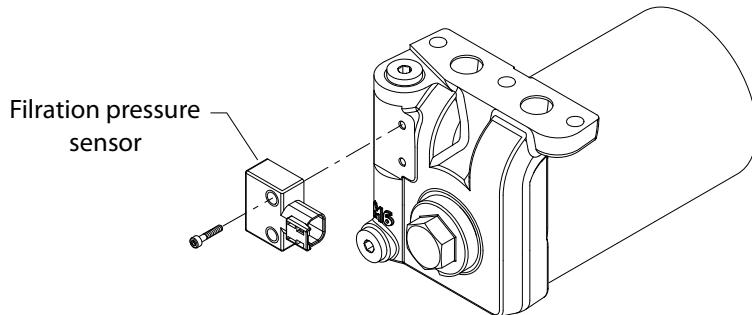
Subject

Filtration pressure sensor

Description

As a product improvement, Danfoss has changed the filtration pressure sensor. The new filtration pressure sensor is completely interchangeable with the old sensor. The old sensor will be obsoleted.

Service bulletin



Models affected

All H1 pumps with an "M" or "S" filtration option

Serial numbers affected

This change became effective at serial number N-07-43-xxxx

Part numbers affected

Description	Old part number	New part number
Filtration sensor position	140355	11031852
Filtration sensor position	11000357	11031853

Parts disposition

Interchangeable, use parts in stock

Service bulletin

SB-2008-014

Products affected

H1 147 and 165cc pumps

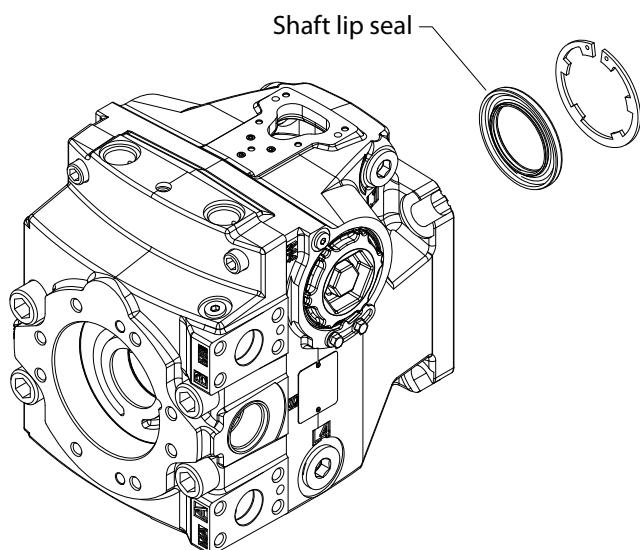
Subject

Shaft lip seal

Description

Danfoss has changed the design of the shaft lip seal used on the H1 147 and 165cc pumps. The new design is a more robust seal.

The new seal is completely interchangeable with the old seal.



Models affected

All H1 147 and 165cc pumps

Serial numbers

This change became effective at serial number N-08-09-xxxx.

Part numbers affected

Description	Old part number	New part number
Lip seal	140093	11024711

Parts disposition

Interchangeable

Service bulletin

SB-2008-038

Products affected

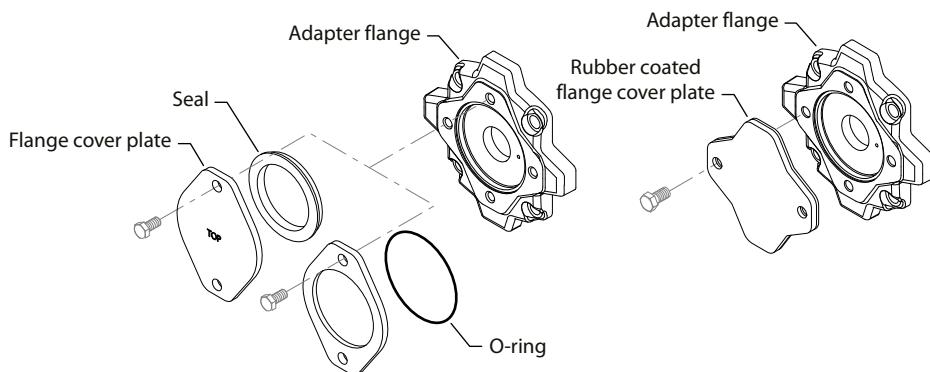
H1 pumps

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-2009-046

Products affected

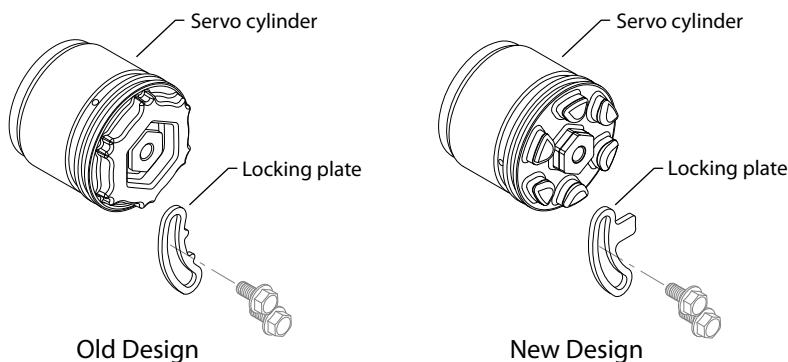
H1 78, 115/130 and 147/165cc pumps

Subject

Servo cylinder and locking plate design change

Description

As a product improvement, Danfoss has changed the servo cylinder and locking plate. 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, if both parts are replaced together.



Models affected

All H1 78, 115/130 and 147/165cc pumps

Serial numbers

This change became effective at serial number

- N-10-29-xxxxx (21 July 2010)
- N-10-35-xxxxx (30 August 2010)
- N-10-28-xxxxx. (15 July 2010)

Part numbers affected

Description	Frame size	Old part number	New part number
Servo cylinder, no-adjust	78 cc	140853	11089749
Servo cylinder, adjustable	78 cc	140852	11089779
Locking plate	78 cc	140513	11033382
Servo cylinder, no-adjust	115 - 130 cc	141224	11089773
Servo cylinder, adjustable	115 - 130 cc	141225	11089772
Locking plate	115 - 130 cc	140513	11033382
Servo cylinder, no-adjust	147 - 165 cc	140493	11089775
Servo cylinder, adjustable	147 - 165 cc	140309	11089774
Locking plate	147 - 165 cc	140513	11033382

Service bulletin

Parts disposition

Interchangeable only if both parts are replaced together

Service bulletin

SB-2009-068

Products affected

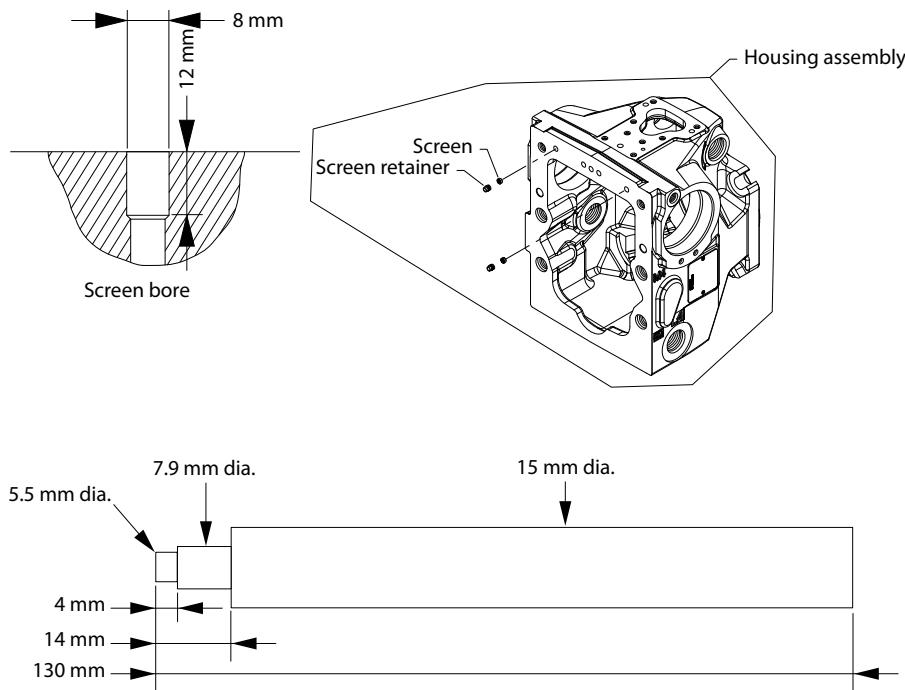
H1 78, 115/130 and 147/165 cc pumps

Subject

Change to the design of servo screen retention in pump housing

Description

Danfoss has made a change to the way the servo passage screens are retained in the pump housing of H1- 78 cc, 115/130 cc and 147/165 cc pumps. The screens in the past were retained only by friction fit. The screens are now pressed into the bores to the step. The retainers are then pressed in the bore against the screens with a maximum force of 3000 Newtons. The retainers must be against the screens so no movement of the screens occurs. A tool for installation of the retainer can be made with the dimensions shown below. The bores in the housing for the screens have been cut deeper to allow for the length of the retainers. The housings sold for service parts have changed to a housing assembly, with the screens and retainers installed. The old housings can be reworked to allow for the use of the new retainers by boring the 8mm bores for the screen and retainer 12mm deep from the gasket surface to the step that the screen sets on. The screen part number remains the same.



Models affected

All H1 78, 115/130 and 147/165cc pump

Serial numbers

This change became effective at serial number

- H1P147/165 (G): N09-25-XXX59
- H1P147/165 (Z): N09-26-XXX36
- H1P115/130 (G): N09-24-X4341

Service bulletin

- H1P115/130 (L): N10-04-X3743
- H1P078 (H): N09-25-00081
- H1P078 (K): N09-29-03540

Part numbers affected

Frame size	Old housing part number	Housing assembly
147/165 cc (G)	11005012	11005677
147/165 cc w/1 1/16 drain ports (Z)	11004991	11005674
115/130 cc (G)	11002342	11005070
115/130 cc w/speed sensing (L)	11030117	11030118
78 cc (H)	140904	11005071
78 cc w/speed sensing (K)	11024418	11011752

Parts disposition

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

Service bulletin

SB-2011-002

Products affected

H1 115-165cc pumps

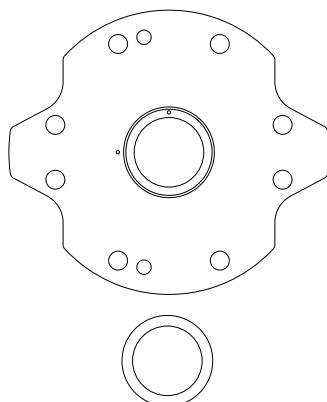
Subject

Adapter and thrust plate

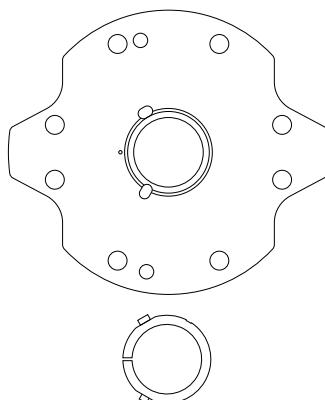
Description

As a product improvement Danfoss has changed the adapter plate and thrust plate design. In case you have to replace either the adapter or the thrust plate you need to order the appropriate Repair Service Kit as per the attached cross reference list because the old adapter and thrust plate design will no longer be provided. The thrust plate is not interchangeable to the adapter.

Old design



New design



Models affected

H1 115-165cc pumps

Serial numbers affected

This change became effective at:

- SAE -NN N-10-44-xxxxx (Nov 2010)
- SAE -A N-11-05-xxxxx (Feb 2011)
- SAE -B N-11-14-xxxxx (April 2011)
- SAE -B-B N-10-44-xxxxx (Nov 2010)
- SAE -C N-10-48-xxxxx (Dec 2010)
- SAE -D N-10-46-xxxxx (Nov 2010)
- SAE -SN N-11-22-xxxxx (June 2011)

Part numbers affected

Description	Old number	new number	Service kit (adapter and thrust washer)
Thrust washer	140973	11001182	-
Adapter seal	140703	11002236	-
Adapter SAE (NN)	140969	11087614	11086819
Adapter SAE A (H1)	140694	11087615	11086818

Service bulletin

Description	Old number	new number	Service kit (adapter and thrust washer)
Adapter SAE A (H2)	140694	11087615	11086818
Adapter SAE B (H3)	140696	11087617	11086817
Adapter SAE D (H4)	141012	11023751	11086882
Adapter SAE B (H5)	140696	11087617	11086817
Adapter SAE C (H6)	140698	11087618	11086816
Adapter SAE C (SN)	11081188	11086770	-

Mounting kit

Description	Old number	new number
Mounting Kit (NN)	11079317	11083499
Mounting Kit (H1)	11079318	11083494
Mounting Kit (H2)	11079319	11083495
Mounting Kit (H3)	11079320	11083496
Mounting Kit (H4)	11069133	11083497
Mounting Kit (H5)	11079321	11083493
Mounting Kit (H6)	11079322	11083498
Mounting Kit (SN)	11071702	11088769

Parts disposition

Non-interchangeable, use parts in stock

SB-2011-022

Products affected

H1 115/130cc pumps

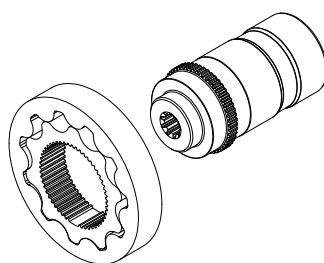
Subject

Gerotor and charge pump shaft design change

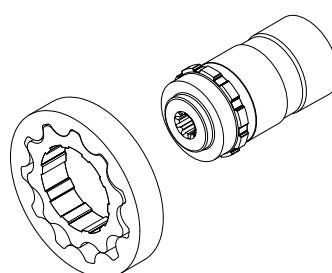
Description

As a product improvement and part commonality between models Danfoss is changing the charge pump shaft and gerotor set design. The inner and outer spline of the charge pump shaft and consequently the inner spline of the inner gerotor wheel are affected by this change.

Old Design



New Design



Service bulletin

Models affected

H1 115/130cc pumps

Serial numbers

This change became effective at N-10-36-xxxxx (6 September 2010)

Part numbers affected

Code	Description	Old part number	New part number
H1	Charge pump shaft, 11T, 16/32	11002333	11064258
H2	Charge pump shaft, 9T, 16/32	11002231	11064260
H3	Charge pump shaft, 13T, 16/32	11002232	11064272
H4	Charge pump shaft, 13T, 8/16	11002234	11045667
H5	Charge pump shaft, 15T, 16/32	11002235	11064275
H6	Charge pump shaft, 14T, 12/24	11002233	11064276
NN	Charge pump shaft, 9T, 16/32	11002231	11064260
S1	Charge pump shaft, 14T, 12/24	11002233	11064276
A	Charge pump kit, 26 cc	11004702	11075695
L	Charge pump kit, 34 cc	11004704	11069135

Parts disposition

Interchangeable only if both parts are replaced together

Use parts in stock; old and new design cannot be mixed

Service bulletin

SB-2011-023

Products affected

H1 147 and 165cc pumps

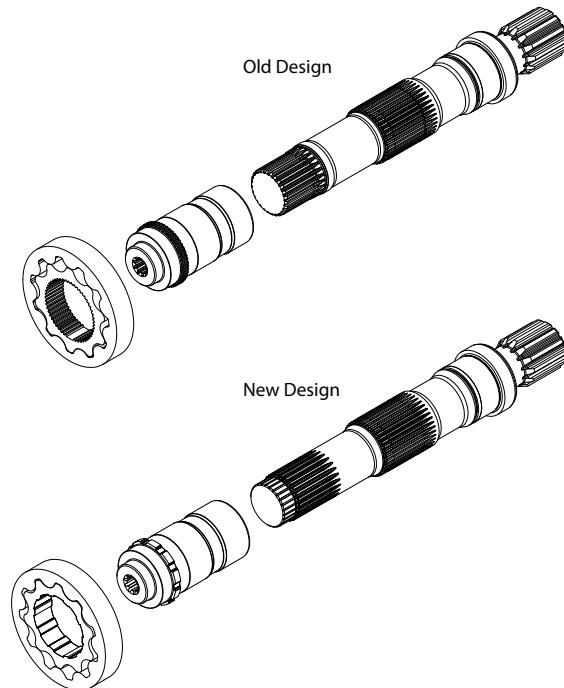
Subject

Gerotor, charge pump shaft and pump shaft design change

Description

As a product improvement and part commonality between models, Danfoss is changing the pump shaft, charge pump shaft and gerotor set design. The inner and outer spline of the charge pump shaft, inner gerotor spline and the charge pump spline on the pump shaft are affected by this change.

The parts are not interchangeable, and the old parts will remain available for a period of time.



Models affected

All H1 147 and 165cc pumps

Serial numbers

This change became effective at serial number: N-10-08-xxxxx. (23 February 2010)

Part numbers affected

Description	Old part number	New part number
Charge kit 26 cc	11004702	11075695
Charge kit 34 cc	11004704	11069135
Charge pump shaft, H1P147-165 9t 16/32	140972	11064260
Charge pump shaft, H1P147-165 13t 16/32	140975	11064272

Service bulletin

Description	Old part number	New part number
Charge pump shaft, H1P147-165 14t 12/24	140965	11064276
Charge pump shaft, H1P147-165 13t 8/16	140966	11045667
Charge pump shaft, H1P147-165 15t 16/32	11000658	11064275
Charge pump shaft, H1P147-165 11t 16/32	140704	11064258
Shaft H1P147-165 27t 16/32 special	140254	11047745
Shaft H1P147-165 13t 8/16	140412	11049118
Shaft H1P147-165 taper 44-3 keyway	11022051	11049119

Parts disposition

Non-interchangeable, use parts in stock

Service bulletin

SB-2012-003

Products affected

H1 147 and 165cc pumps

Subject

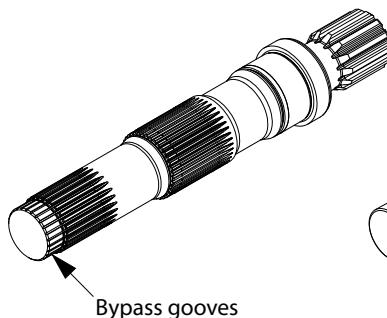
Shaft change

Description

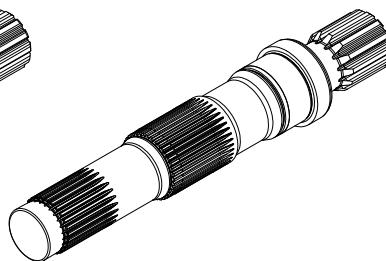
Danfoss has removed the bypass on the end of the shaft. The old shaft allowed unfiltered oil from the pump case into charge pump and the high pressure loop. The bypass feature is now in the end cap. This change is not interchangeable with end caps that have external remote filtration built prior to N10-39-xxxxx (26 September 2010). The old design shafts are obsolete and no longer available.

The new design shafts are also not interchangeable with all pumps built prior to 10-08-xxxxx (23 February 2010). Refer to service bulletin SB-2011-023.

Old Design



New Design



Bypass grooves

Models affected

H1 147 and 165cc pumps

Serial numbers

See below

Part numbers affected

Description	Old part number	New part number	Start date
Shaft, 27t (G2)	11047745	11123699	N12-43-xxxxx (22 October 2012)
Shaft, 13t (G3)	11049118	11119638	N12-36-xxxxx (3 September 2012)
Shaft, tapered (F3)	11049119	11119640	N12-37-xxxxx (7 September 2012)

Parts disposition

Non-interchangeable, use parts in stock

Service bulletin

SB-2012-027

Products affected

H1 pumps

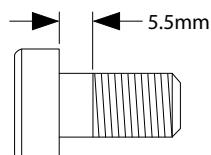
Subject

Speed sensor screw change

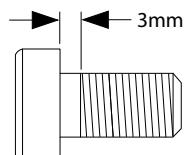
Description

Danfoss has changed the screw that retains the speed sensor for H1-pumps. The current screw, due to the design, may not fully tighten down sensor due to the shank (shoulder) length. The new design will be threaded to the head of the bolt.

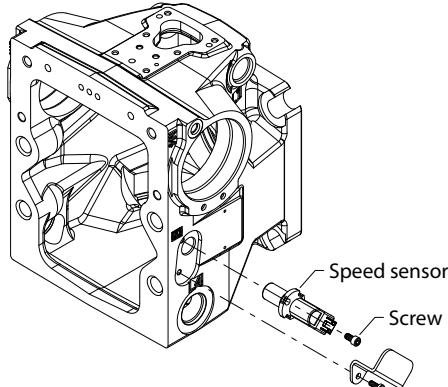
This part is not interchangeable due to shoulder length.



9007375-0036



376749



Models affected

H1 pumps with speed sensors

Serial numbers

This change took effect at serial number A-12-38-xxxxx (17-September-2012) for 45 thru 68cc pumps.

This change took effect at serial number N-12-43-xxxxx (19-October-2012) for 78 thru 165cc pumps.

Part numbers affected

Description	Old part number	New part number
Screw	9007375-0036	376749

Parts disposition

Interchangeable, scrap old parts

Service bulletin

SB-2012-035

Products affected

H1 147 and 165cc pumps

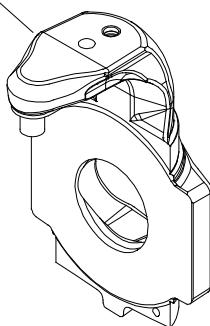
Subject

Swashplate design change

Description

Danfoss has made a design change to the swashplate of H1 147/165cc pumps. The new swashplate is completely interchangeable with the old part. A new part number has been issued for tracking purposes. The old part number is obsolete and no longer available for service.

Swashplate



Models affected

H1 147 and 165cc pumps

Serial numbers

This change became effective at serial number: N 13-11-xxxxx (12 March 2013)

Part numbers affected

Description	Old part number	New part number
Swashplate H1P 147/165cc	9007375-0036	376749

Parts disposition

Non-interchangeable, use parts in stock

Service bulletin

SB-2013-003

Products affected

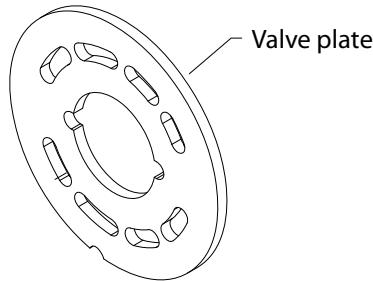
H1 pumps

Subject

Valve plate change

Description

As part of continuing product improvement efforts, Danfoss is implementing a design change to the valve plates. The new valve plates are interchangeable with old valve plate. The new design reduces cavitation wear to the valve plate. The old valve plate will become obsolete.



Models affected

H1 69 through 165cc pumps

Serial numbers

See below

Part numbers affected

Description	Old part number	New part number	Effective date
069/078 R CP17-1.5	11075607	11125564	N-13-05-xxxxx (31 Jan 2013)
069/078 R CP17+2.5	11076863	11125563	N-13-05-xxxxx (31 Jan 2013)
069/078 L CP17+2.5	11076865	11125551	N-13-05-xxxxx (31 Jan 2013)
069/078 L CP17-1.5	11076866	11125562	N-13-05-xxxxx (31 Jan 2013)
089/100 R CP17-1.5	11077025	11125566	N-13-05-xxxxx (31 Jan 2013)
089/100 R CP17+2.5	11077027	11125567	N-12-50-xxxxx (12 Dec 2012)
089/100 L CP17-1.5	11077026	11125568	N-13-05-xxxxx (31 Jan 2013)
089/100 L CP17+2.5	11077028	11125565	N-12-49-xxxxx (5 Dec 2012)
115/130 R CP17+2.5	11077029	11125572	N-13-05-xxxxx (25 Jan 2013)
115/130 R CP17-1.5	11077031	11123707	N-13-05-xxxxx (31 Jan 2013)

Service bulletin

Description	Old part number	New part number	Effective date
115/130 L CP17+2.5	11077030	11125569	N-13-05-xxxxx (31 Jan 2013)
115/130 L CP17-1.5	11077062	11125571	N-13-03-xxxxx (16 Jan 2013)
147/165 R CP17-1.5	11077063	11123708	N-13-05-xxxxx (31 Jan 2013)
147/165 R CP17+2.5	11077065	11125576	N-13-05-xxxxx (31 Jan 2013)
147/165 R (larger dia.)	11093335	11126989	N-13-05-xxxxx (31 Jan 2013)
147/165 L CP17-1.5	11077064	11125575	N-13-03-xxxxx (14 Jan 2013)
147/165 L CP17+2.5	11077066	11125574	N-13-05-xxxxx (31 Jan 2013)

Parts disposition

- Interchangeable
- Use parts in stock

Service bulletin

SB-2013-019

Products affected

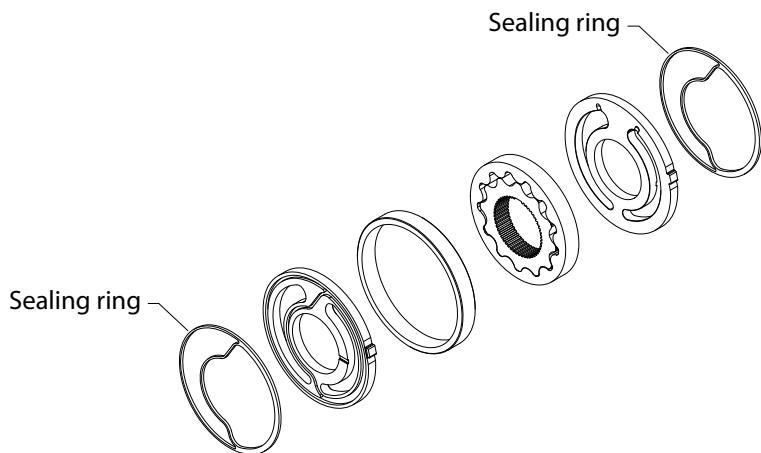
H1 pumps

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-2015-035

Products affected

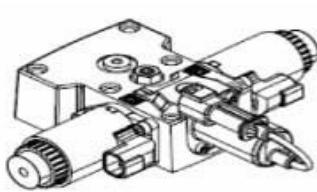
H1 pumps

Subject

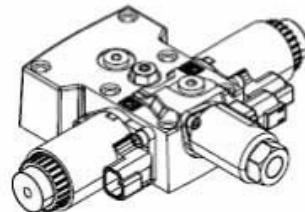
Control override valve service kit change

Description

Service kits for Control Override Valves (CCO/COR) on H1 pumps have been reconfigured to include a new control option. There has been a connector change to the coil. The new connector is a DEUTSCH key-lock pin style (W2SC). The old solenoid has a wire lead with a standard DEUTSCH connector (W2P).



Old style control (W2P connector)



New style control (W2SC connector)

Each new service kit comes with an adapter cable which has a W2P and a W2SC on each end.



Adapter Cable

New service kit numbers have been issued for the new control option. The old service kits are no longer available. Reference PUB HY2014-175.

EDC, 12v DEUTSCH connector, COR Before Change: H1-P-100-L-A-**A6**-C2-N-D8-H-F1-H5-L-42-L-42-D-P-24-PN-NNN-NNN

After Change: H1-P-100-L-A-**S6**-C2-N-D8-H-F1-H5-L-42-L-42-D-P-24-PN-NNN-NNN

EDC, 24v DEUTSCH connector, CCO Before Change: H1-P-100-R-A-**C1**-C2-N-D6-H-G9-H2-L-38-L-38-M-L-24-PN-NNN-NNN

After Change: H1-P-100-R-A-**E8**-C2-N-D6-H-G9-H2-L-38-L-38-M-L-24-PN-NNN-NNN

Models affected

H1 pumps

Service bulletin

Serial numbers

No serial numbers affected. The new option began with the new part number.

Part numbers affected

Description	Old control option	Old number	New control option	New number
SVC KIT-EDC, H1P 12V DT04 FAST CORF	A6	11019736	S6	11152574
SVC KIT-EDC, H1P 12V DT04 CCO	C5	11086382	E7	11147471
SVC KIT-EDC, H1P 12V DT04 CCO KEY-C	D4	11131492	E7	11147471
SVC KIT-EDC, H1P 24V DT04 CCO	C6	11086383	E8	11147472
SVC KIT-EDC, H1P 24V DT04 FAST CORF	C1	11037176	E8	11147472
SVC KIT-EDC, H1P 095 12V CCO			E5	11147422
SVC KIT-EDC, H1P 095 24V CCO			E6	11147423
CABLE-ADAPTER (W2SC/ W2SC)				11153287
CABLE-ADAPTER (W2SC/ W2P)				11150437

Control options S6, E7 and E8 contain parts for the new style connector. The attached cable adaptor W2P / W2SC supplied in the service kit is necessary to replace the old control.

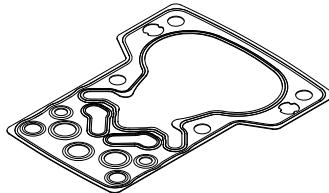
Parts disposition

Non-interchangeable

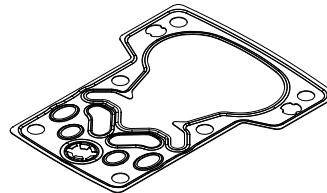
Service bulletin

SB-2016-033

Products affected	H1 pumps and tandems, MP1 and M46 control kits
Subject	Control Gasket
Description	<p>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.</p> <p>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.</p>



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
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Service bulletin

SB-2016-040

Products affected

H1 pumps

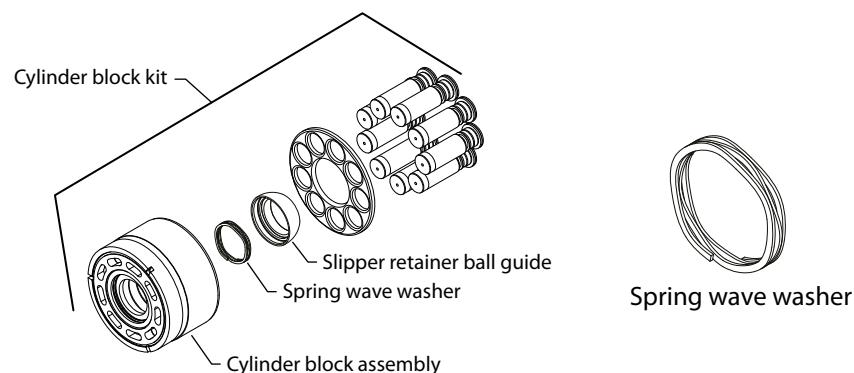
Subject

Cylinder block wave spring

Description

Danfoss has made a supplier change to the wave spring washer. The part number has also been changed for tracking purposes.

Parts are completely interchangeable. Old parts will become obsolete and no longer available as a service part.



Spring wave washer

Models affected

H1 69/78, 89/100, 115/130, 147/165cc pumps

Serial numbers

This change became effective for 69/78cc pumps on N-16-37-xxxxx (12 Sept 2016)

This change became effective for 89/100cc pumps on N-16-37-xxxxx (12 Sept 2016)

This change became effective for 115/130cc pumps on N-16-47-xxxxx (18 Nov 2016)

This change became effective for 147/165cc pumps on N-16-44-xxxxx (04 Nov 2016)

Part numbers affected

Description	Old part number	New part number
Spring wave washer, H1P069/078	11063564	11176611
Spring wave washer, H1P089/100	11037923	11175203
Spring wave washer, H1P115/130	11063561	11175204
Spring wave washer, H1P147/165	11063559	11180936

Parts disposition

Interchangeable

Service bulletin

SB-2018-007

Products affected

H1 147/165cc pumps

Subject

Shaft and cylinder block kit change

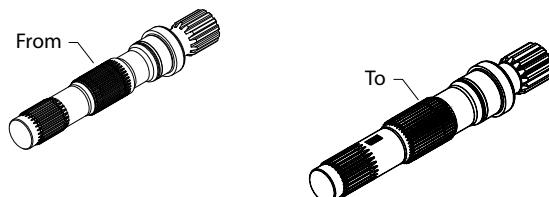
Description

Danfoss has made design changes to the main shaft and the slipper retainer ball guide in the H1 147/165cc pumps cylinder block kit. The internal block splines on the shaft are now machined longer and the slipper retainer ball guide is now splined.

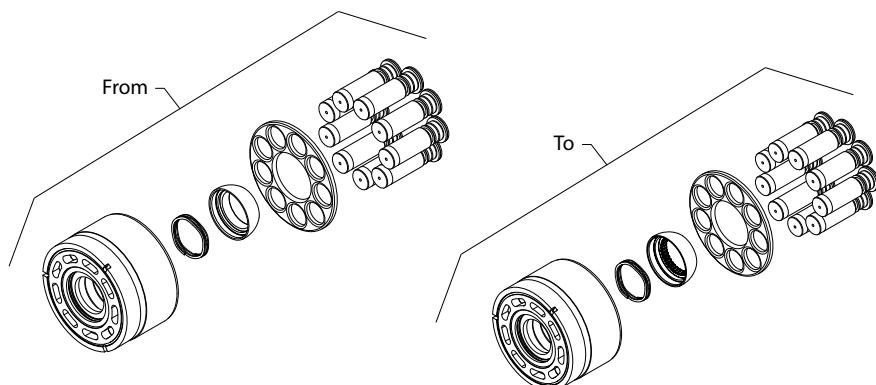
The new shaft may be substituted for the old shaft, but the old shaft cannot be substituted for the new shaft. The old shaft will be obsoleted.

The slipper retainer ball guide design is changed from non-splined to splined due to the new shaft spline design change. The new splined ball guide can be used only with the new shaft design and it is not interchangeable. The old slipper retainer ball guide will be obsoleted.

Shaft Change:



Cylinder Block Kit Change:



Models affected

H1 147/165cc pumps

Service bulletin

Serial numbers

Shaft change became effective at August 30, 2017 (N1736xxxx)

Cylinder block kit change became effective at November 15, 2017 (N1747xxxx)

Part numbers affected

Description	Old Part Number	New Part Number
Shaft, H1P147-165 13T 8/16	11119638	11179442
Shaft, H1P147-165 TAPER 39.231MM	11119640	11179444
Shaft, H1P147-165 27T 16/32	11123699	11179443
Kit-Cylinder-Block H1P147	140478/P	11190005
Kit-Cylinder-Block H1P165	140284/P	11190006
Kit-Cylinder-Block, H1P147 Speed Sensor	11082253	11191007
Kit-Cylinder-Block, H1P165 Speed Sensor	11082255	11191008
Guide-Slipper Retainer, H1P147-165	11121505	11148927

Parts disposition

- Shaft is interchangeable new to old
- Cylinder block kit is non-interchangeable
- Slipper retainer ball guide is non-interchangeable

Service bulletin

SB-2018-025

Products affected

H1 pumps

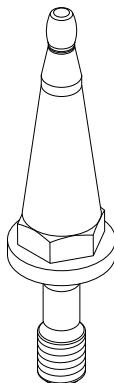
Subject

Swashplate feedback link

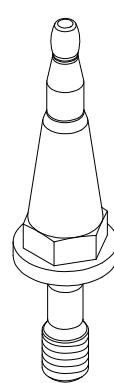
Description

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 obsoleted.



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

Service bulletin

SB-2018-036

Products affected

H1 115/130, 147/165, 210/250cc pumps

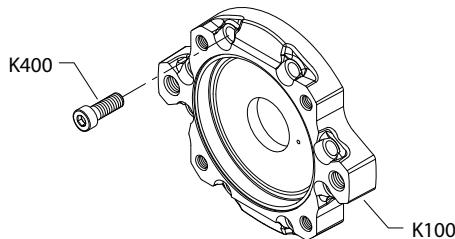
Subject

Adapter SAE-C flange and screws change

Description

Changes have been made to the adapter screws and the SAE-C adapter on H1 115/250cc pumps to reduce assembly variation. The screw length on the SAE-C adapter changed from 35mm to 30mm. The thickness of the adapter has been changed to improve thread engagement. The old adapter is 18.7mm and the new adapter is 15.7mm for the mounting bolt thickness.

The old versions of the screws and adapters are not interchangeable with the new versions. If an old screw (35mm) is used with a new adapter, screws will bottom out and cause a leak. If the new screw (30mm) is used with an old adapter, screws could strip before the proper torque is achieved.



Models affected

H1 115/130, 147/165, 210/250cc pumps

Serial numbers affected

This change became effective at serial number 15 July 2018 (N-19-29-xxxxx)

This change became effective at serial number 21 Dec 2018 (A-18-51-xxxxx)

Part numbers affected

Description	Old Part Number	New Part Number
Screw (K400)	11071462	140700
ADAPTER, H1P115-250 127-2-4	11002193	11138744

Parts disposition

Non-interchangeable

Products we offer:

- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Hydrostatic motors
- Hydrostatic pumps
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
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- PLUS+1® software
- PLUS+1® software services, support and training
- Position controls and sensors
- PVG proportional valves
- Steering components and systems
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