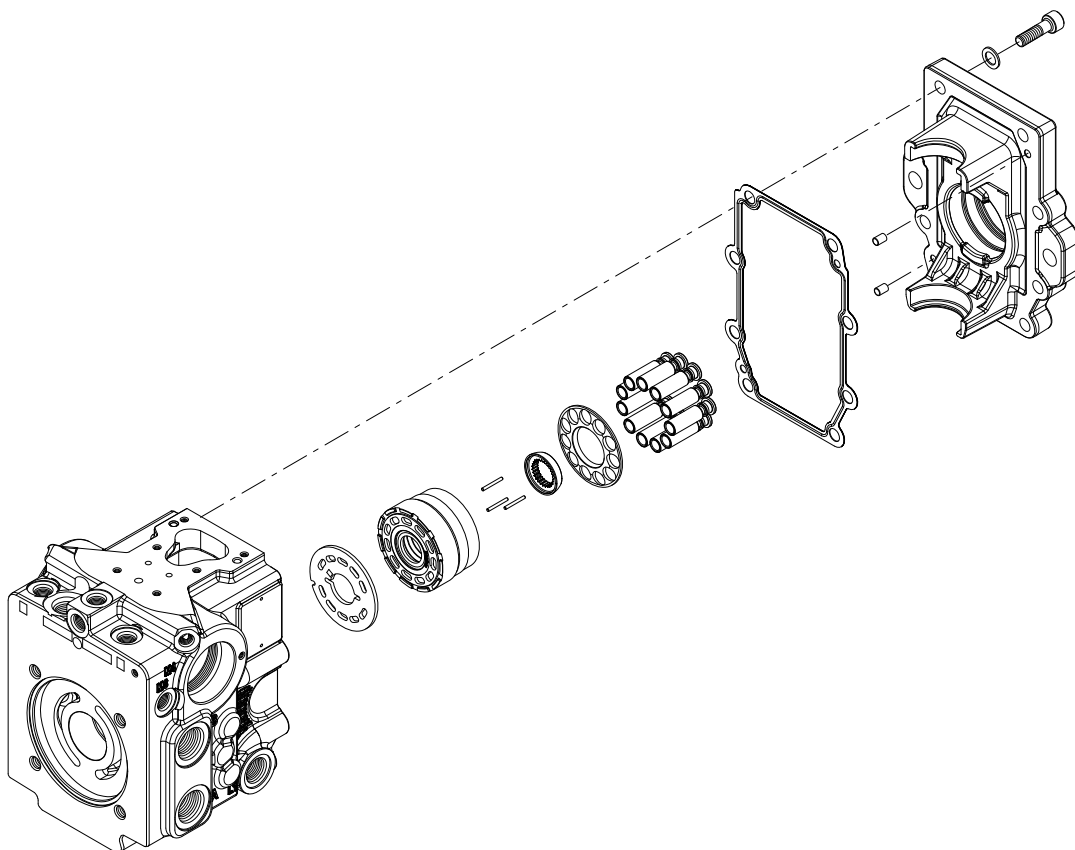


Axial Piston Closed Circuit Pump

MP1 28 and 32cc



Revision history

Table of revisions

Date	Changed	Rev
April 2025	Added RCD into special hardware	0909
January 2025	Updated QD75 part number	0908
December 2024	Housing assembly part number update (A1, A3, C1, C3)	0907
August 2024	Updated Porting type section and MDC information, SB-2024-007	0906
January 2024	Added orifice option E8	0905
July 2023	Replaced cylinder block kit part numbers	0904
February 2023	Additional Orifice Option D9 and E4	0903
January 2023	Additional Aux-Pad Cover Option to E16-ENN	0902
June 2022	Updated part numbers	0901
February 2022	Replaced plug assembly part numbers for automotive controls; added new controls	0801
December 2020	Updated CPRV part numbers	0708
September 2020	Added orifice option D6	0707
May 2020	Updated CCO part numbers	0706
March 2020	Corrected porting type options and changed document number from AX00000307	0705
January 2020	Replaced control gasket part numbers	0603
August 2019	Added various new options	0602
April 2019	Added various new options	0601
May 2018	Updated MDC control handle	0501
March 2018	Corrected journal bearing part numbers	0402
February 2018	Added new control and special hardware options	0401
October 2017	Updated to Engineering Tomorrow design	0302

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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 MP1 28 and 32cc variable displacement pumps.

The parts listed include all parts which may be used when performing either "Minor Repairs", "Major Repairs" or "Conversions" on the MP1 28 and 32cc.

Nameplate

Each unit will have a nameplate affixed to the housing. The nameplate of the MP1 28 and 32cc 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/material number

The Danfoss model number (also known as material 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.

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.

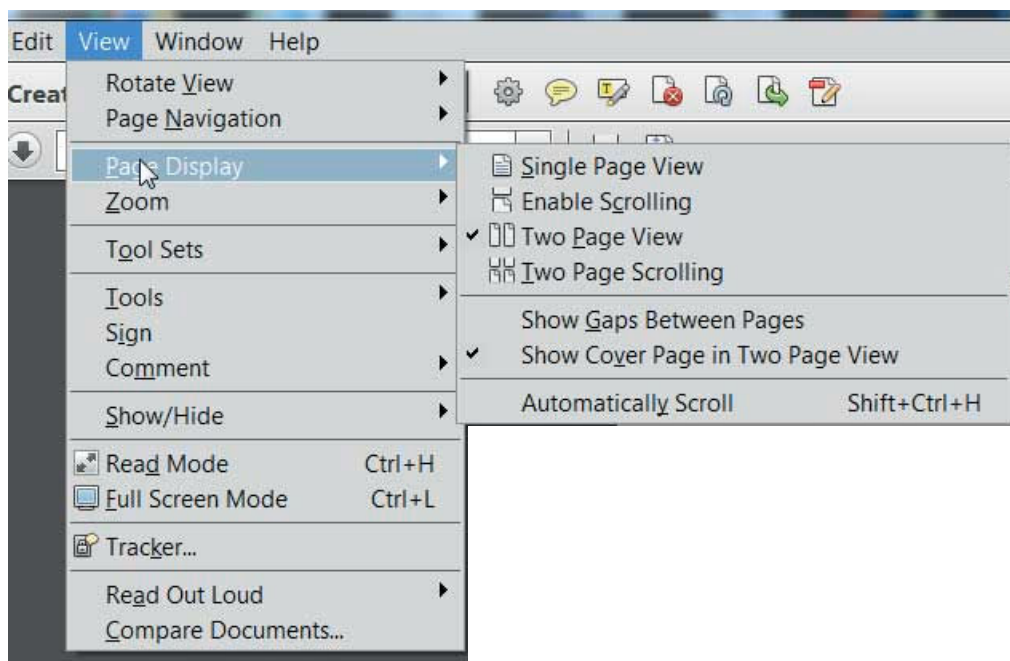
As an example, the part number (example: 314583 (9008000-0118)) will be used. The first number is sold in Germany. The number in parentheses is sold in the United States. Customers would order 9008000-0118 if ordering the part in the United States.

General information

Adobe Acrobat 2-page viewing

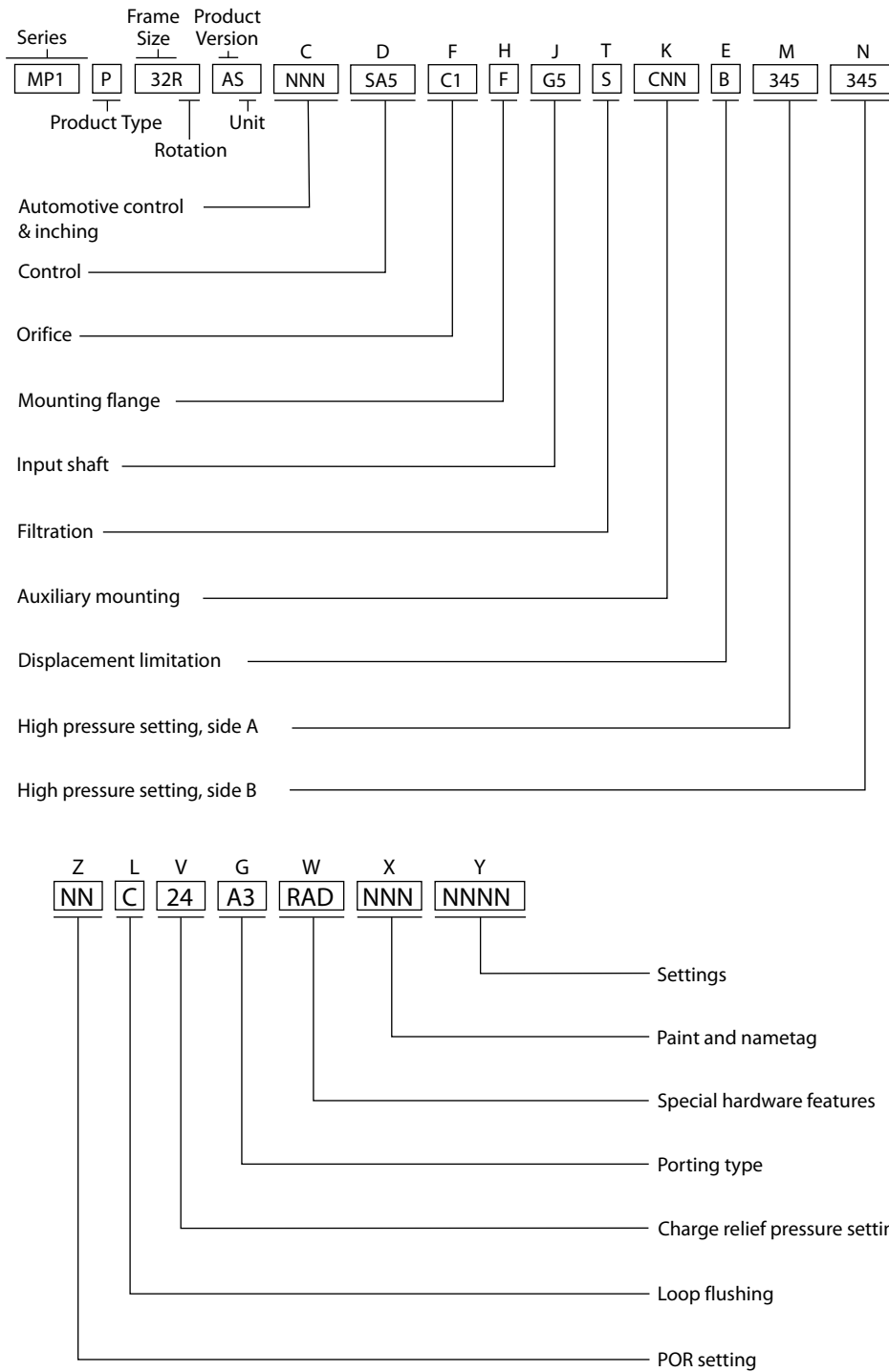
While viewing manual in Adobe Acrobat, the following settings need to be applied to ensure proper page display.

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



General information

Order code



P108 944E

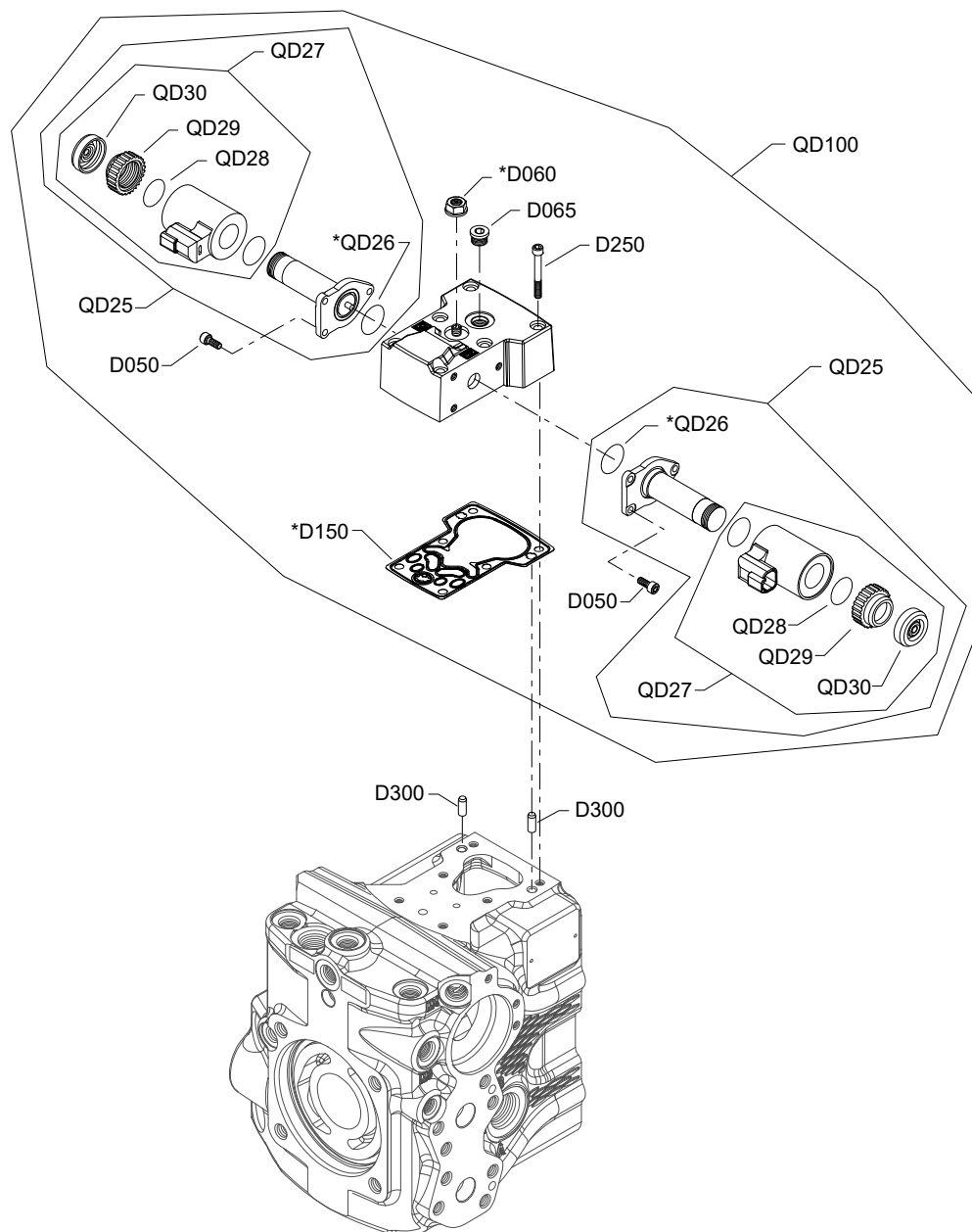
General information

Notes

Controls

MP1 control MA4, MA5

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612291 (9003508-0008)	Seal nut, M8	1
D065	16-32		5000572	Plug assembly, M12	1
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2
QD30	16-32		11027883	Cap	2

Order code: MA4

QD25	16-32		140750	Proportional solenoid, 12v	2
QD27	16-32		11004698	Coil kit, 12v, DEUTSCH connector	2
QD29	16-32		11004749	Coil nut	2
QD100	16-32		11170081	EDC kit, 12V, high gain spool, manual override, metric	1

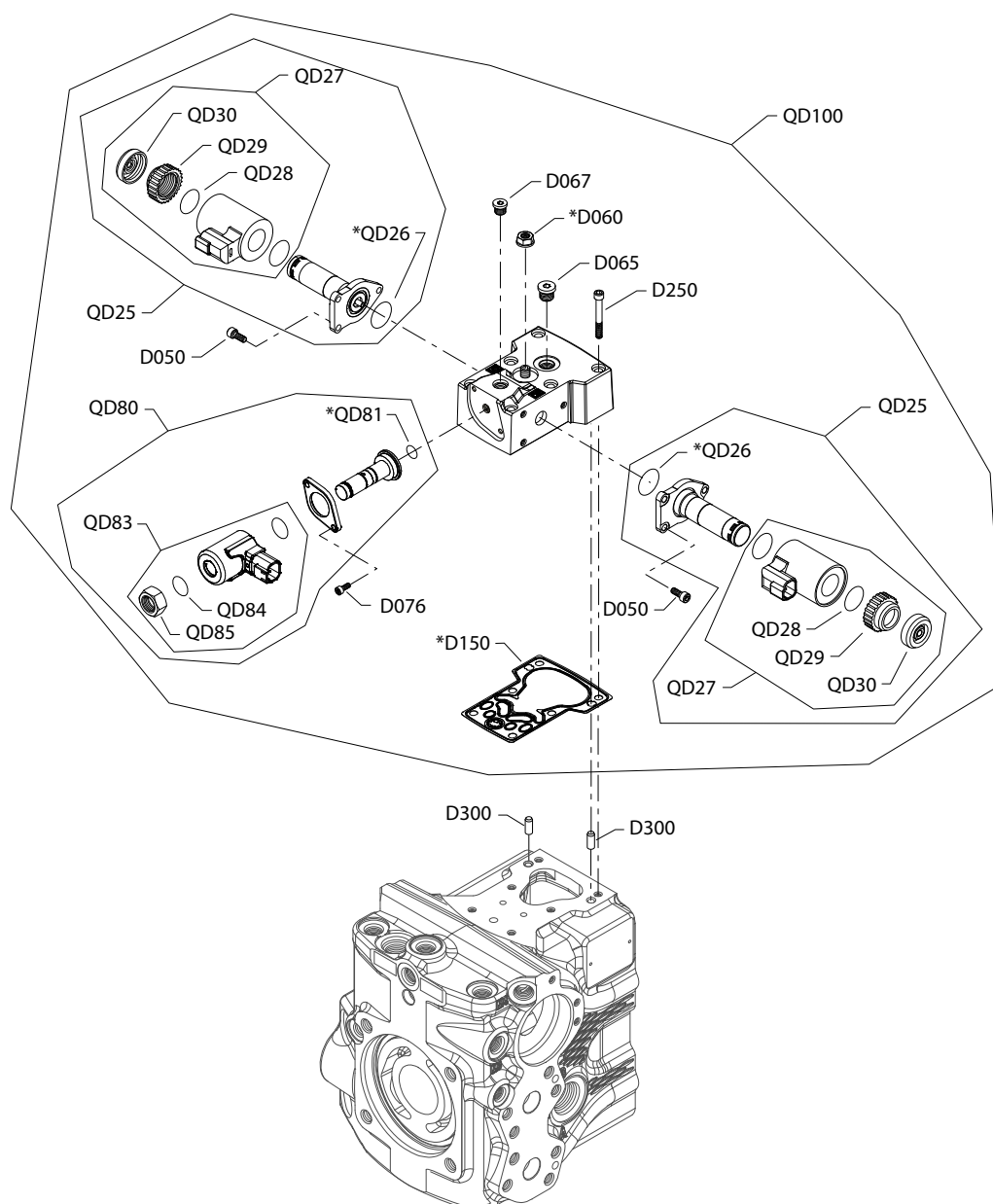
Order code: MA5

QD25	16-32		140751	Proportional solenoid, 24v	2
QD27	16-32		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	16-32		11004750	Coil nut	2
QD100	16-32		11170082	EDC kit, 24V, high gain spool, manual override, metric	1

Controls

MP1 control MG8, MH1

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612292 (9003508-0008)	Seal nut, M8	1
D065	16-32		5000572	Plug assembly, M12	1
D067	16-32		5000572	Plug assembly, M12	1
D076	16-32		067694	Screw, M4 x 10	2
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2
QD30	16-32		11027883	Cap	2
QD81	16-32		11152257	O-ring	1
QD85	16-32		11140394	Coil nut	1

Order code: MG8

QD25	16-32		140750	Proportional solenoid, 12v	2
QD27	16-32		11004698	Coil kit, 12v, DEUTSCH	2
QD29	16-32		11004749	Coil nut	2
QD80	16-32		11231200	Solenoid valve, 12v	1
QD83	16-32		11232757	Coil kit, 12v	1
QD84	16-32		11232752	O-ring	1
QD100	16-32		11170083	EDC kit, 12V, manual override, CCO, metric	1

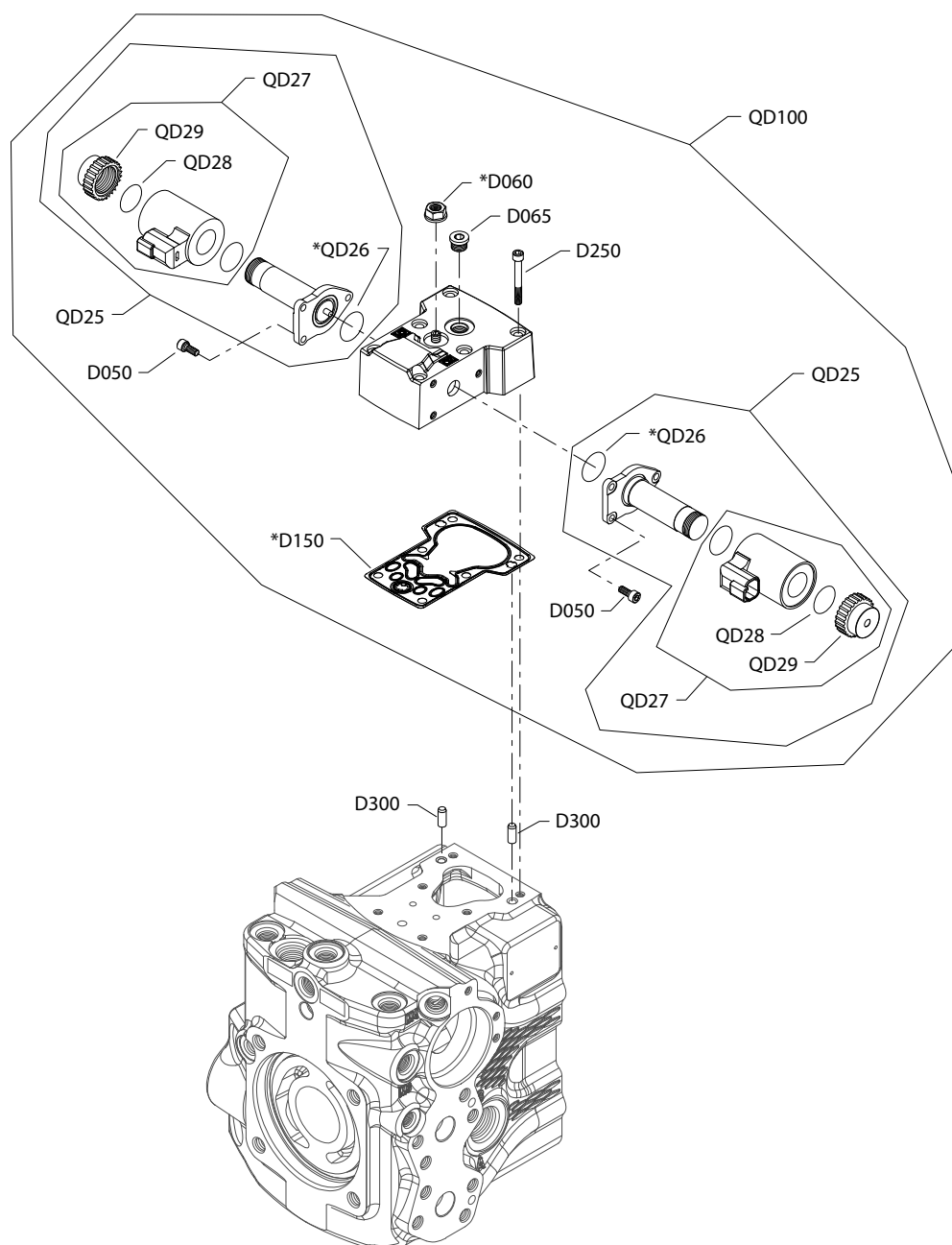
Order code: MH1

QD25	16-32		140751	Proportional solenoid, 24v	1
QD27	16-32		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	16-32		11004750	Coil nut	2
QD80	16-32		11231201	Solenoid valve, 24v	1
QD83	16-32		11232697	Coil kit, 24v	1
QD84	16-32		11232752	O-ring	1
QD100	16-32		11170085	EDC kit, 24V, manual override, CCO, metric	1

Controls

MP1 control SA2, SA3

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612291 (9003508-0008)	Seal nut, M8	1
D065	16-32		140642	Plug assembly, SAE	1
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2

Order code: SA2

QD25	16-32		11012457	Proportional solenoid, 12v	2
QD27	16-32		11028018	Coil kit, 12v, DEUTSCH connector	2
QD29	16-32		11027046	Coil nut	2
QD100	16-32		11019680	EDC kit, 12V	1

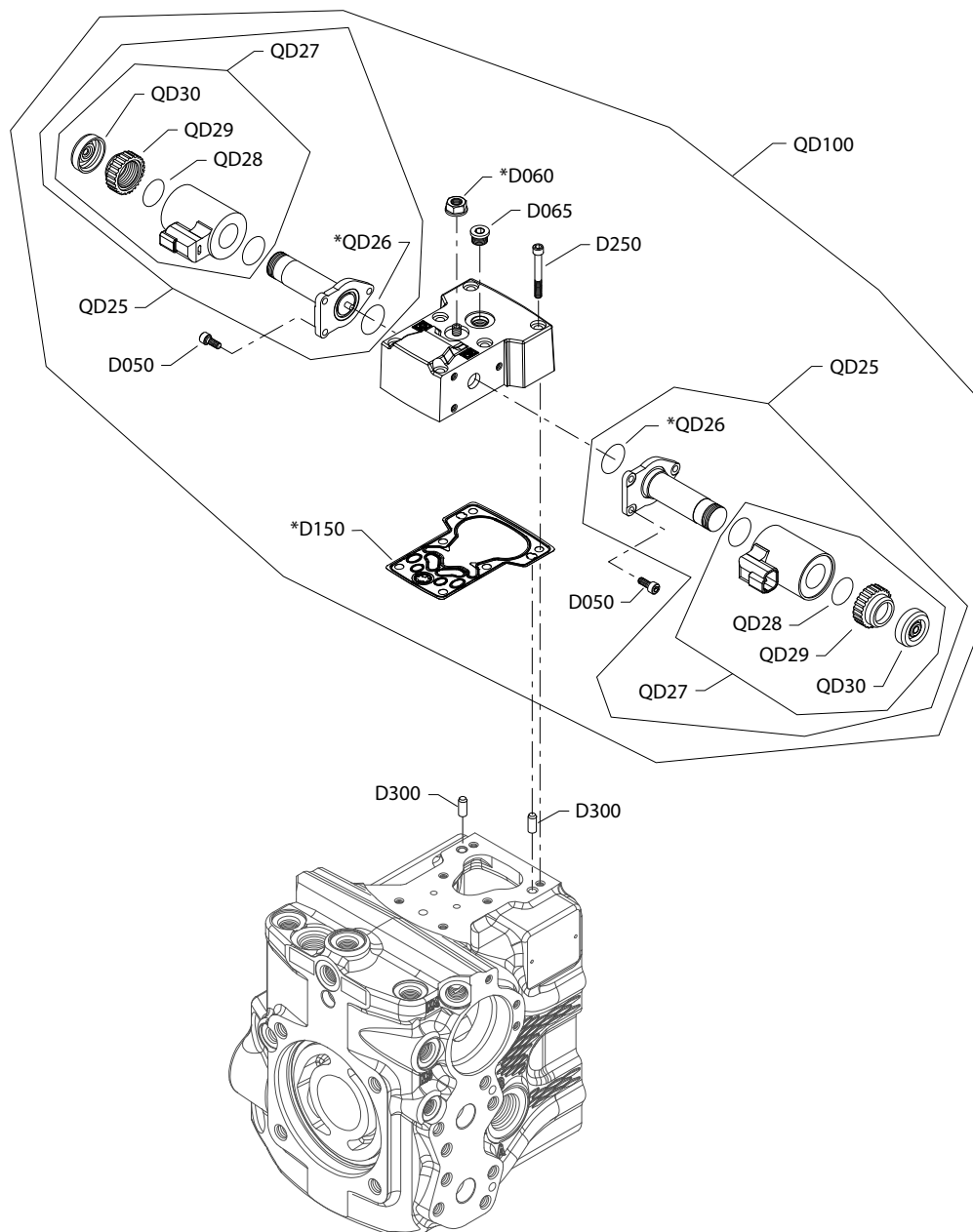
Order code: SA3

QD25	16-32		11012459	Proportional solenoid, 24v	2
QD27	16-32		11028019	Coil kit, 24v, DEUTSCH connector	2
QD29	16-32		11028024	Coil nut	2
QD100	16-32		11019681	EDC kit, 24V	1

Controls

MP1 control SA4, SA5

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612291 (9003508-0008)	Seal nut, M8	1
D065	16-32		140642	Plug assembly, SAE	1
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2
QD30	16-32		11027883	Cap	2

Order code: SA4

QD25	16-32		140750	Proportional solenoid, 12v	2
QD27	16-32		11004698	Coil kit, 12v, DEUTSCH connector	2
QD29	16-32		11004749	Coil nut	2
QD100	16-32		11019732	EDC kit, 12V, high gain spool, manual override	1

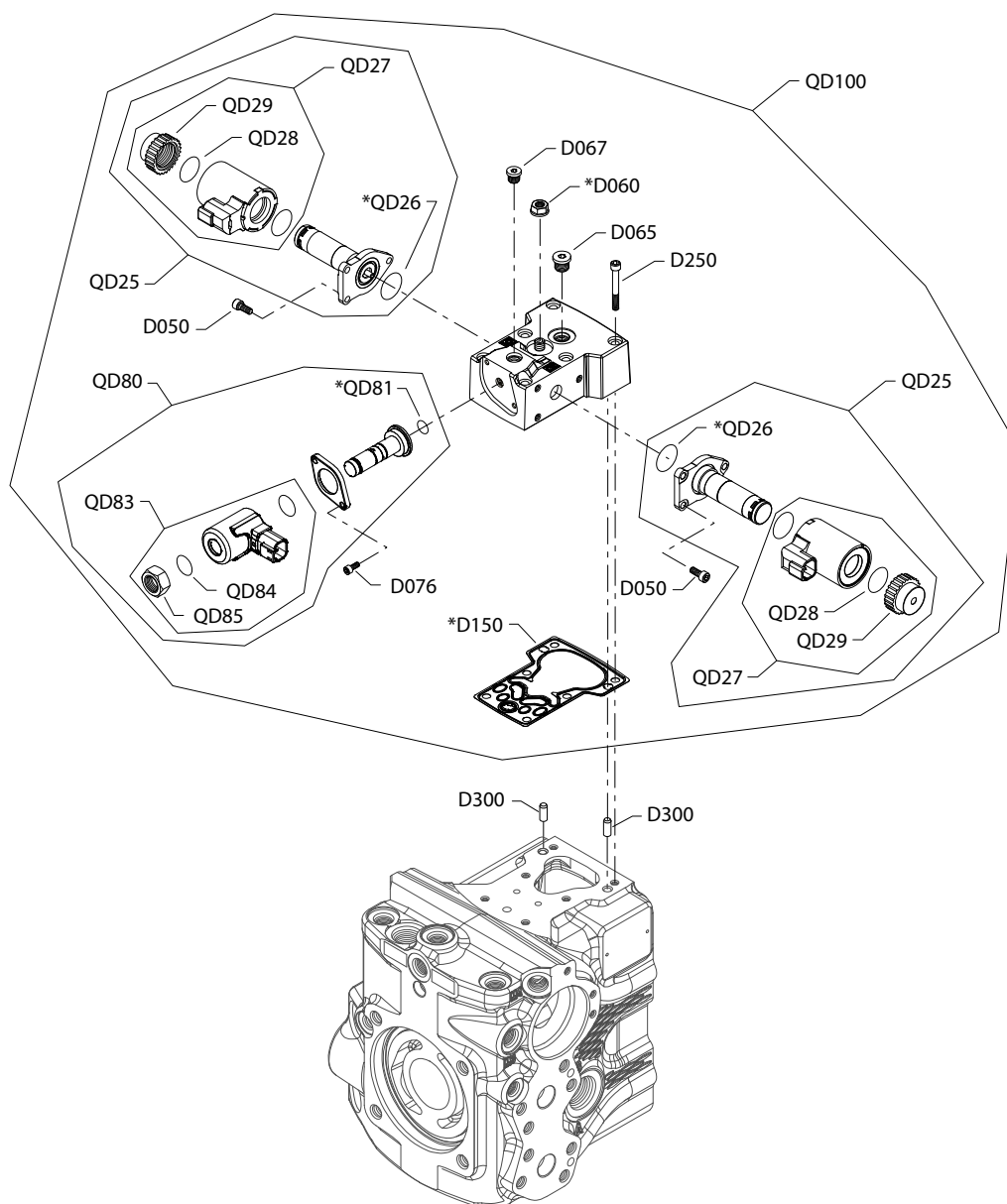
Order code: SA5

QD25	16-32		140751	Proportional solenoid, 24v	2
QD27	16-32		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	16-32		11004750	Coil nut	2
QD100	16-32		11019733	EDC kit, 24V, high gain spool, manual override	1

Controls

MP1 control SE7, SE8

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612291 (9003508-0008)	Seal nut, M8	1
D065	16-32		140642	Plug assembly, SAE	1
D067	16-32		140642	Plug assembly	1
D076	16-32		067694	Screw, M4 x 10	2
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2
QD81	16-32		11152257	O-ring	1
QD84	16-32		11232752	O-ring	1
QD85	16-32		11140394	Coil nut	1

Order code: SE7

QD25	16-32		11012457	Proportional solenoid, 12v	2
QD27	16-32		11028018	Coil kit, 12v, DEUTSCH connector	2
QD29	16-32		11027046	Coil nut	2
QD80	16-32		11231200	Solenoid valve, 12v	1
QD83	16-32		11232757	Coil kit, 12v	1
QD100	16-32		11147471	EDC kit, 12V, CCO	1

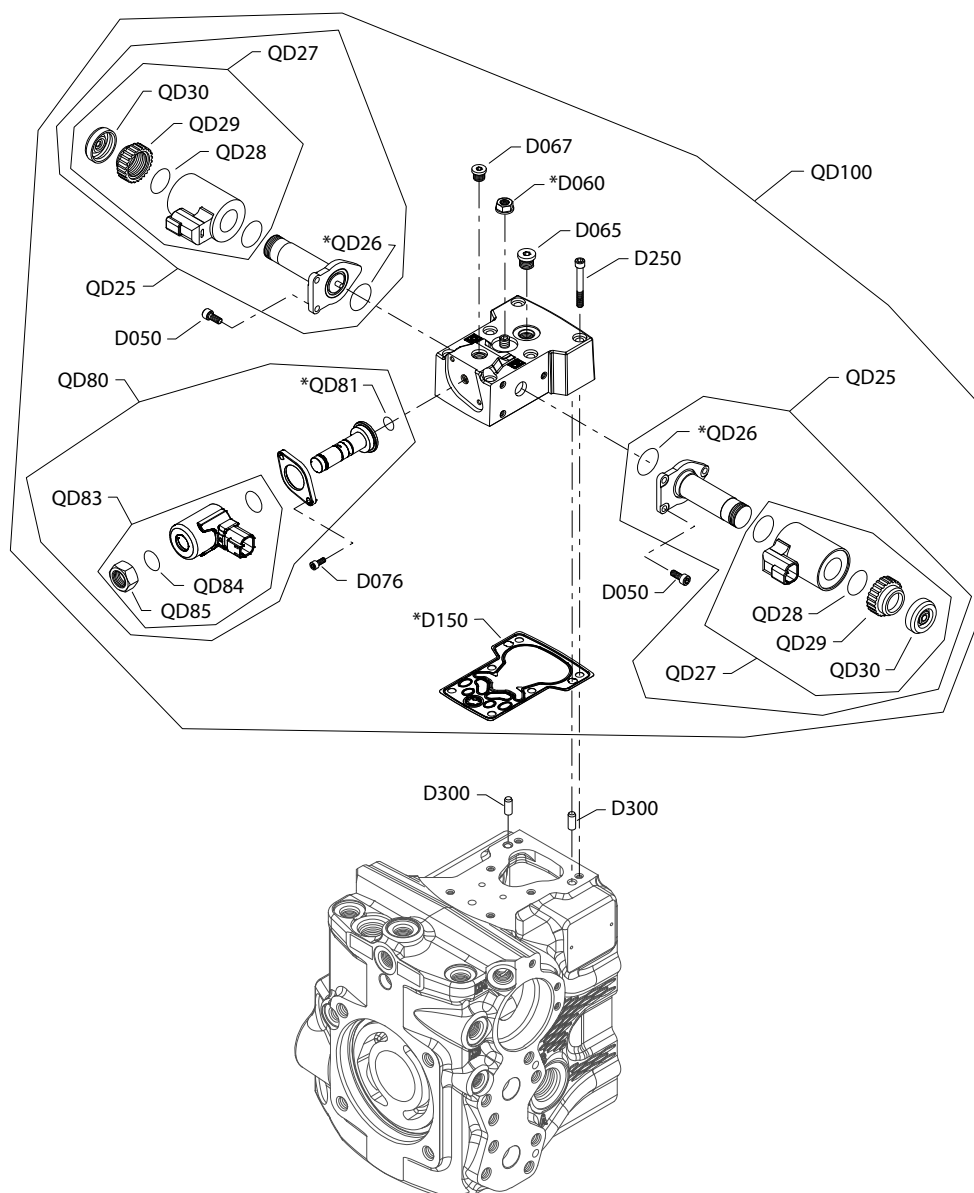
Order code: SE8

QD25	16-32		11012459	Proportional solenoid, 24v	2
QD27	16-32		11028019	Coil kit, 24v, DEUTSCH connector	2
QD29	16-32		11028024	Coil nut	2
QD80	16-32		11231201	Solenoid valve, 24v	1
QD83	16-32		11232697	Coil kit, 24v	1
QD100	16-32		11147472	EDC kit, 24V, CCO	1

Controls

MP1 control SG8, SH1

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612291 (9003508-0008)	Seal nut, M8	1
D065	16-32		140642	Plug assembly, SAE	1
D067	16-32		140642	Plug assembly	1
D076	16-32		067694	Screw, M4 x 10	2
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2
QD81	16-32		11152257	O-ring	1
QD85	16-32		11140394	Coil nut	1

Order code: SG8

QD25	16-32		140750	Proportional solenoid, 12v	2
QD27	16-32		11004698	Coil kit, 12v, DEUTSCH connector	2
QD29	16-32		11004749	Coil nut	2
QD30	16-32		11027883	Cap	2
QD80	16-32		11231200	Solenoid valve, 12v	1
QD83	16-32		11232757	Coil kit, 12v	1
QD84	16-32		11232752	O-ring	1
QD100	16-32		11155365	EDC kit, 12V, manual override, CCO	1

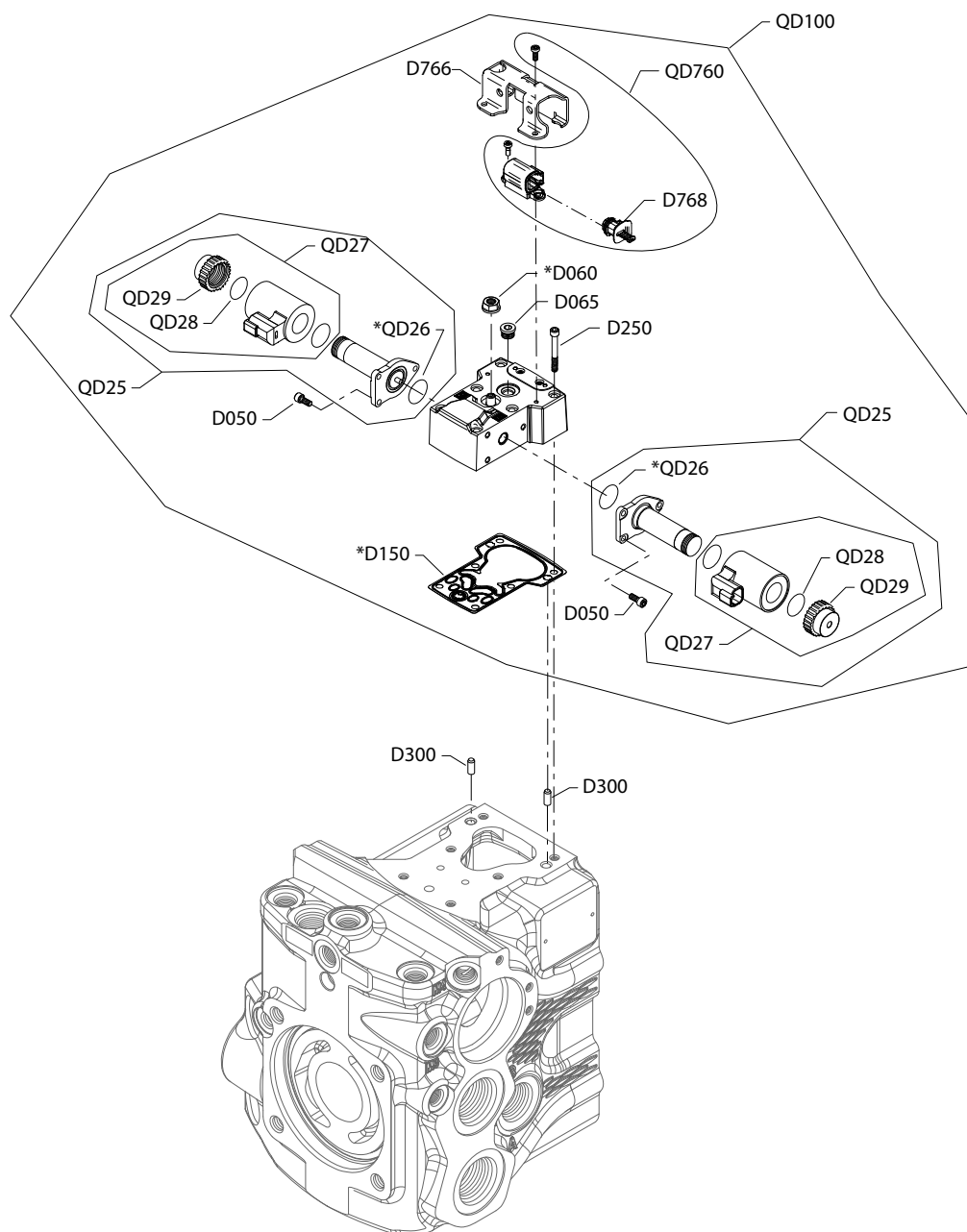
Order code: SH1

QD25	16-32		140751	Proportional solenoid, 24v	2
QD27	16-32		11004700	Coil kit, 24v, DEUTSCH connector	2
QD29	16-32		11004750	Coil nut	2
QD30	16-32		11027883	Cap	2
QD80	16-32		11231201	Solenoid valve, 24v	1
QD83	16-32		11232697	Coil kit, 24v	1
QD84	16-32		11232752	O-ring	1
QD100	16-32		11170084	EDC kit, 24V, manual override, CCO	1

Controls

MP1 control SH2

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

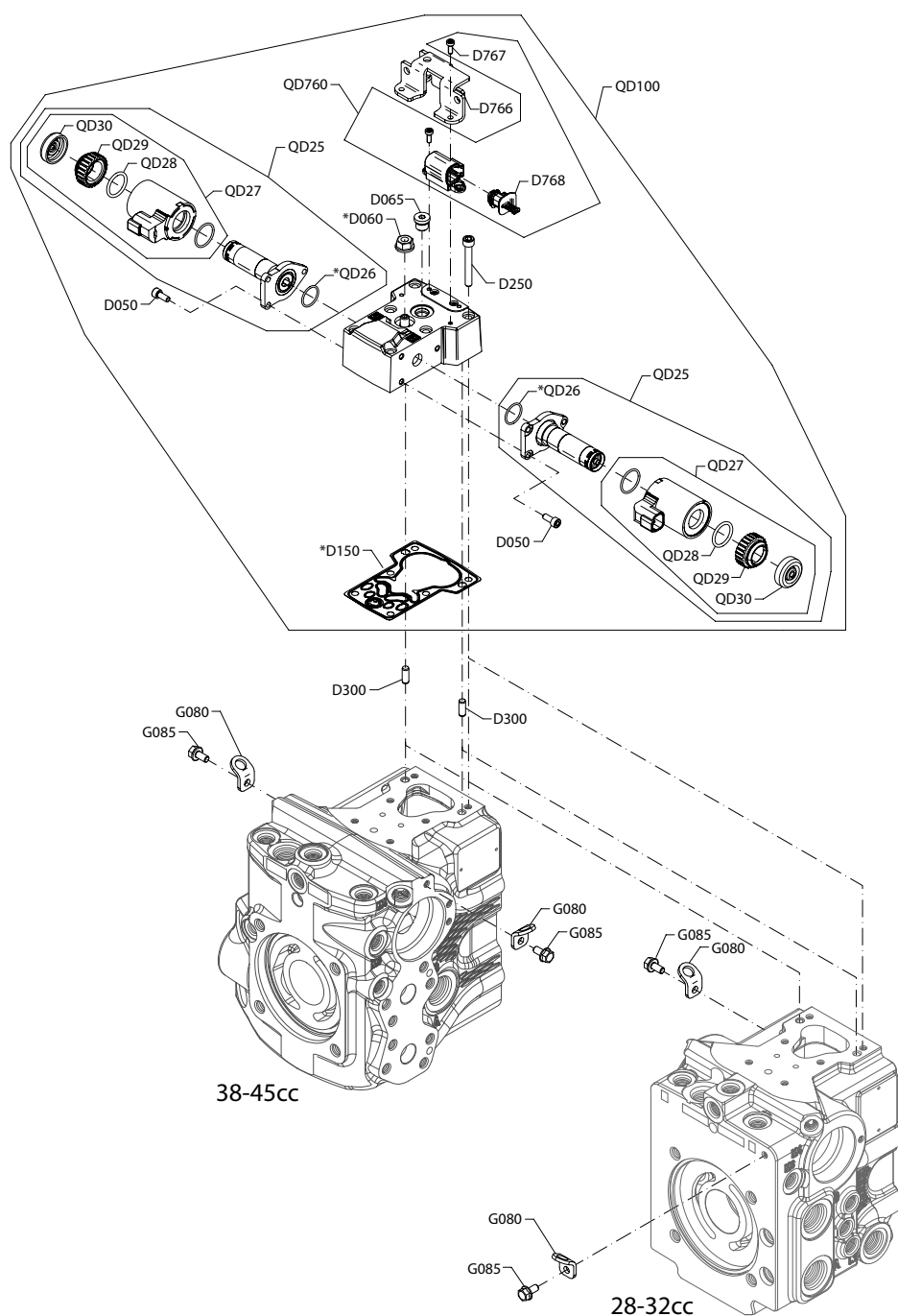
Order code: SH2

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	18-25		716860	Screw, M5 x 12	6
D060	18-25		612291	Seal nut, M8	1
D065	18-25		327007	Plug assembly	1
D150	18-25		11227209	Control gasket	1
D250	18-25		505038	Screw, M6 x 45	6
D300	18-25		310979	Dowel pin	2
D766	18-25		11187406	Protection cover	1
D768	18-25		11184617	Paint cover	1
QD100	18-25		11196619	EDC kit, 12V, ASNSR	1
QD25	18-25		11012457	Proportional solenoid, 12v	2
QD26	18-25		11001952	O-ring	2
QD27	18-25		11028018	Coil kit, 12v, DEUTSCH connector	2
QD28	18-25		063172	O-ring	2
QD29	18-25		11027046	Coil nut	2
QD760	18-25		11290138	EDC angle sensor kit	1

Controls

MP1 control SH7

Parts configuration



* Included in overhaul seal kit Q210

Generic housings used to show part locations only.

Controls

Order code: SH7

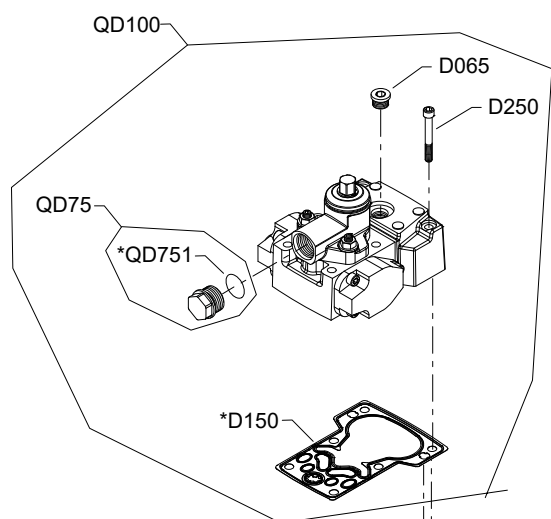
Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	17-46		716860	Screw	6
D060	17-47		612291	Hex nut seal	1
D065	17-48		327007	Plug assembly	1
D150	20-03		11227209	Control gasket	1
D250	20-03		505038	Screw	6
D300	20-03		310979	Parallel pin	2
D766	17-50		11187406	Angle sensor cover	1
D767	18-37		11167709	Screw	2
D768	17-45		11184617	Cover	1
G080	20-03		4800754	Lifting bracket	2
G085	20-03		508438	Screw	2
QD100	20-09		11179292	EDC SVC kit, 24V manual override angle sensor	1
QD25	20-09		140751	Proportional solenoid	2
QD26	20-03		11001952	O-ring	2
QD27	20-09		11004700	Coil SVC kit, 24V	2
QD28	20-03		063172	O-ring	2
QD29	20-03		11004750	Nut screw	2
QD30	20-09		11027883	Cap	2
QD760	21-50		11201819	EDC angle sensor SVC kit	1

Controls

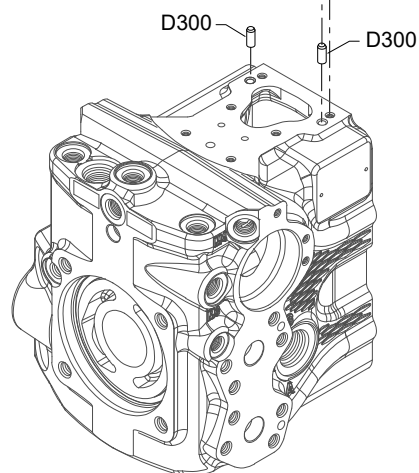
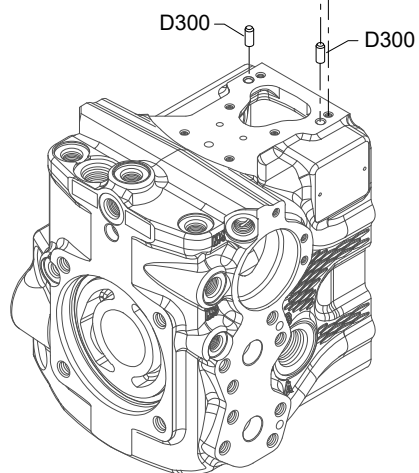
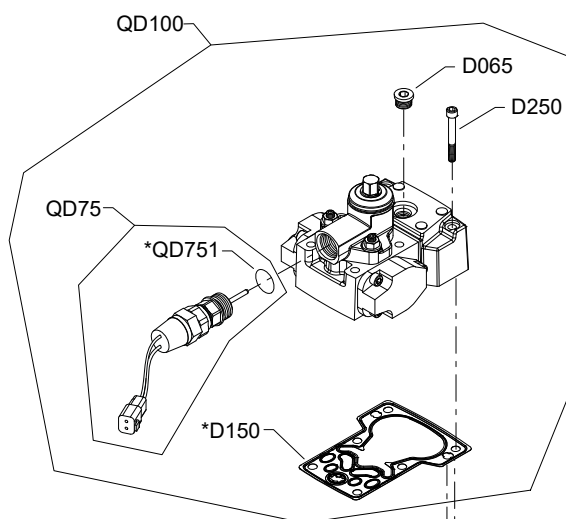
MP1 control MM1, MM2

Parts configuration

(MM1)



(MM2)



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D065	16-32		5000572	Plug assembly, M12	1
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD751	16-32		001131 (9004201-5000)	O-ring	1

Order code: MM1

QD75	16-32		11119332	Spring seat assembly	1
QD100	16-32		11170088	MDC kit	1

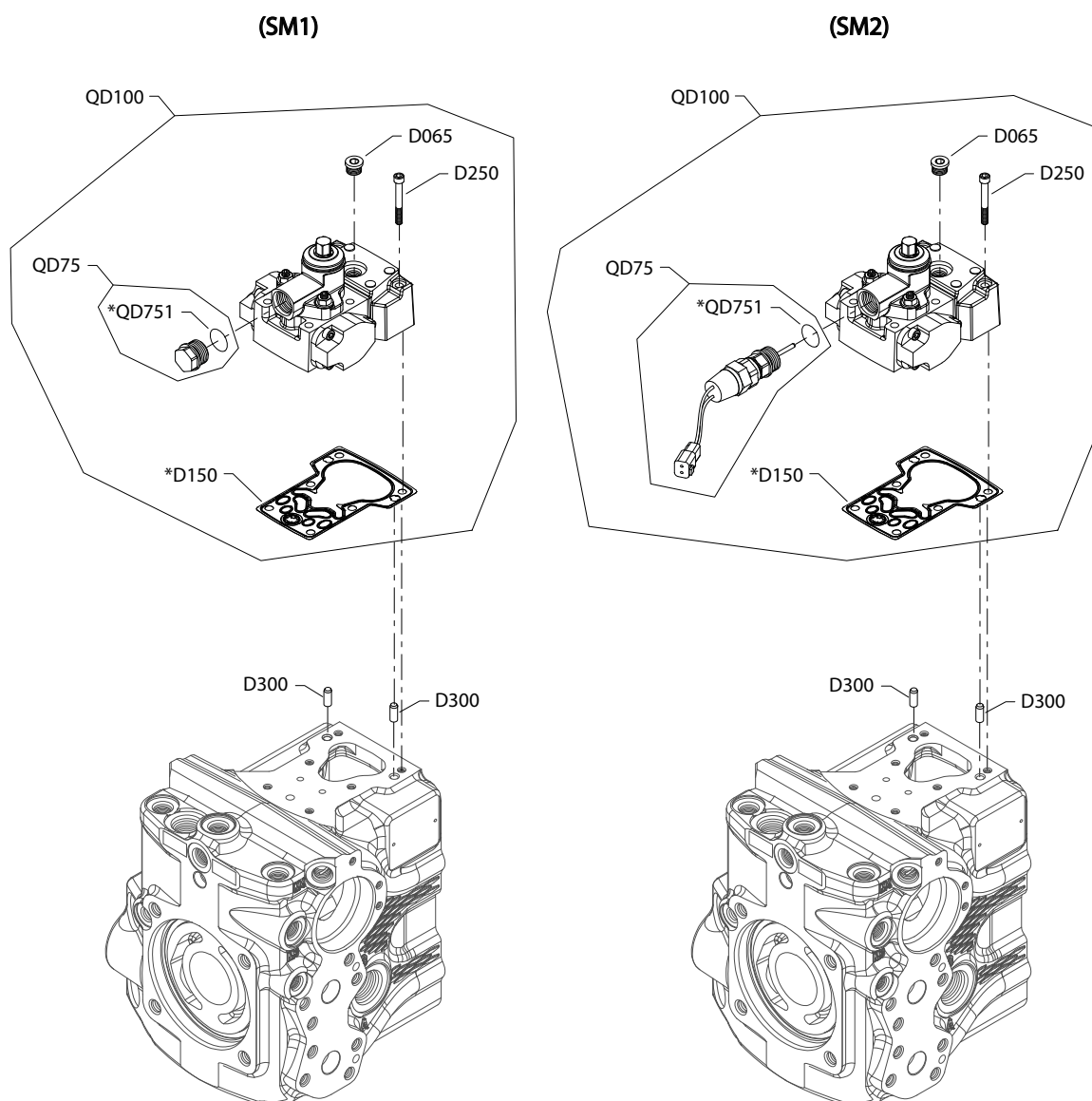
Order code: MM2

QD75	16-32		11328169	Spring seat/neutral start switch assembly	1
QD100	16-32		11170089	MDC kit with neutral start switch, metric	1

Controls

MP1 control SM1, SM2

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612291 (9003508-0008)	Seal nut, M8	1
D065	16-32		140642	Plug assembly, SAE	1
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD751	16-32		001131 (9004201-5000)	O-ring	1

Order code: SM1

QD75	16-32		11119332	Spring seat assembly	1
QD100	16-32		11141225	MDC kit	1

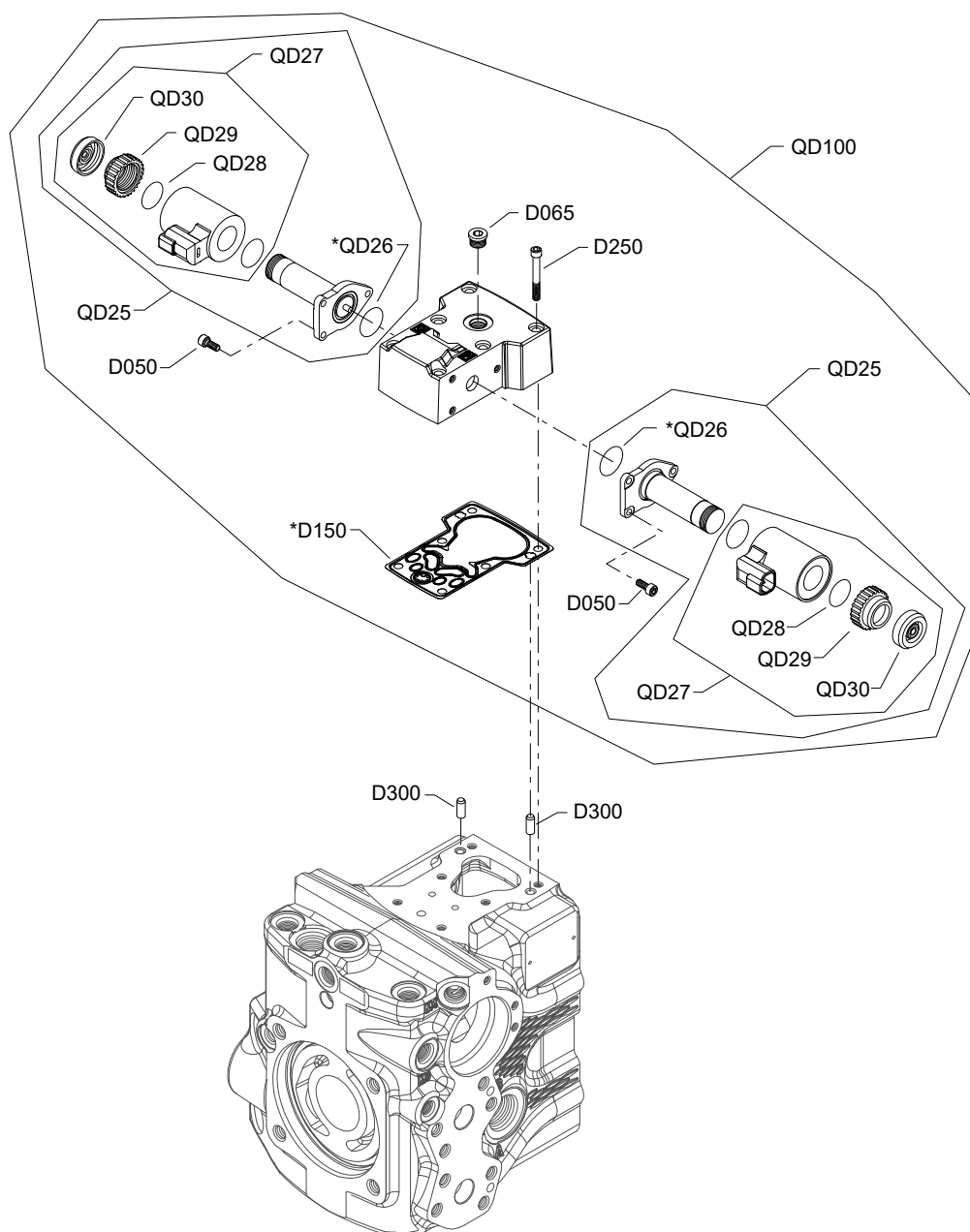
Order code: SM2

QD75	16-32		11328169	Spring seat/neutral start switch assembly	1
QD100	16-32		11141236	MDC kit with neutral start switch	1

Controls

MP1 control MA9, MB1

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-32		716860	Screw, M5 x 12	6
D065	16-32		5000572	Plug assembly, M12	1
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2
QD30	16-32		11027883	Cap	2

Order code: MA9

QD25	16-32		141301	Proportional solenoid, 12v	2
QD27	16-32		11005222	Coil kit, 12v, Deutsch connector	2
QD29	16-32		11004749	Coil nut	2
QD100	16-32		11170086	FNR kit, 12V, manual override, metric	1

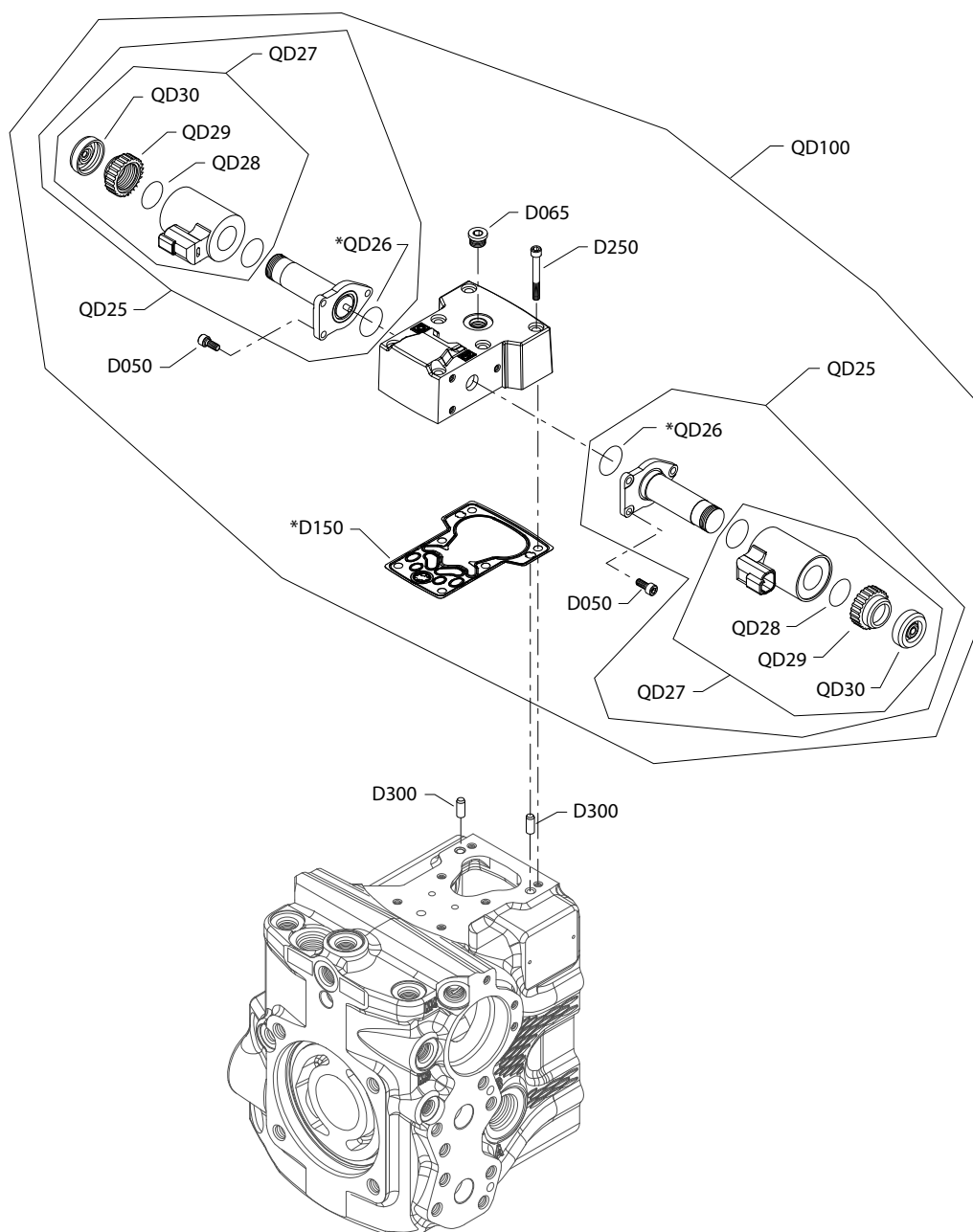
Order code: MB1

QD25	16-32		141313	Proportional solenoid, 24v	2
QD27	16-32		11005223	Coil kit, 24v, DEUTSCH connector	2
QD29	16-32		11004750	Coil nut	2
QD100	16-32		11170087	FNR kit, 24V, manual override, metric	1

Controls

MP1 control SA9, SB1

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612291 (9003508-0008)	Seal nut, M8	6
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612291 (9003508-0008)	Seal nut, M8	1
D050	16-32		716860	Screw, M5 x 12	6
D060	16-32		612291 (9003508-0008)	Seal nut, M8	1
D065	16-32		140642	Plug assembly, SAE	1
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2
D150	16-32		11227209	Control gasket	1
D250	16-32		505038	Screw, M6 x 45	6
D300	16-32		310979	Dowel pin	2
QD26	16-32		11001952	O-ring	2
QD28	16-32		063172	O-ring	2
QD30	16-32		11027883	Cap	2

Order code: SA9

QD25	16-32		141301	Proportional solenoid, 12v	2
QD27	16-32		11005222	Coil kit, 12v, DEUTSCH connector	2
QD29	16-32		11004749	Coil nut	2
QD100	16-32		11025905	FNR kit, 12V, manual override, metric	1

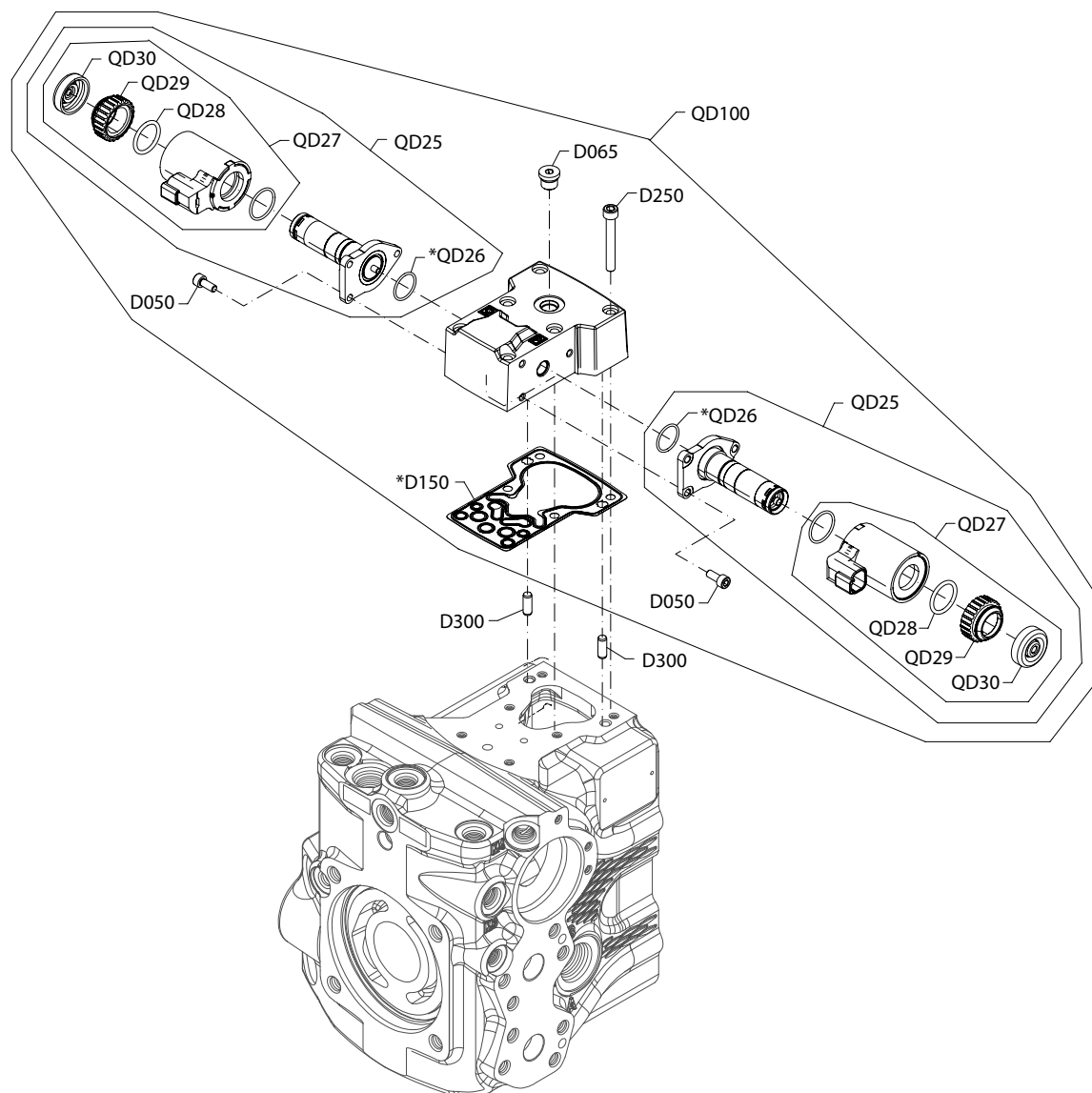
Order code: SB1

QD25	16-32		141313	Proportional solenoid, 24v	2
QD27	16-32		11005223	Coil kit, 24v, DEUTSCH connector	2
QD29	16-32		11004750	Coil nut	2
QD100	16-32		11025906	FNR kit, 24V, manual override, metric	1

Controls

MP1 control MN1, MN2, SN1, SN2

Parts configuration



Generic housing used to show part location only.

* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	17-42		716860	Screw M5 x 12	6
D150	17-42		11227209	Control gasket	1
D250	17-42		505038	Screw M6 x 45	6
D300	17-42		310979	Dowel Pin	2
QD26	17-42		11001952	O-ring	2
QD28	17-42		63172	O-ring	2
QD29	17-42		11004749	Screw nut	2
QD30	17-42		11027883	Cap	2

Order code: MN1

D065	17-42		5000572	Plug assembly, M12	1
QD25	17-42		140750	Proportional solenoid, 12v	2
QD27	17-42		11004698	Coil kit, 12v DEUTSCH connector	2
QD100	17-42		11192300	NFPE control kit, 12v	1

Order code: MN2

D065	17-42		5000572	Plug assembly, M12	1
QD25	17-42		140751	Proportional solenoid, 24v	2
QD27	17-42		11004700	Coil kit, 24v DEUTSCH connector	2
QD100	17-42		11192301	NFPE control kit, 24v	1

Order code: SN1

D065	17-42		327007	Plug assembly	1
QD25	17-42		140750	Proportional solenoid, 12v	2
QD27	17-42		11004698	Coil kit, 12v DEUTSCH connector	2
QD100	17-42		11147921	NFPE control kit, 12v	1

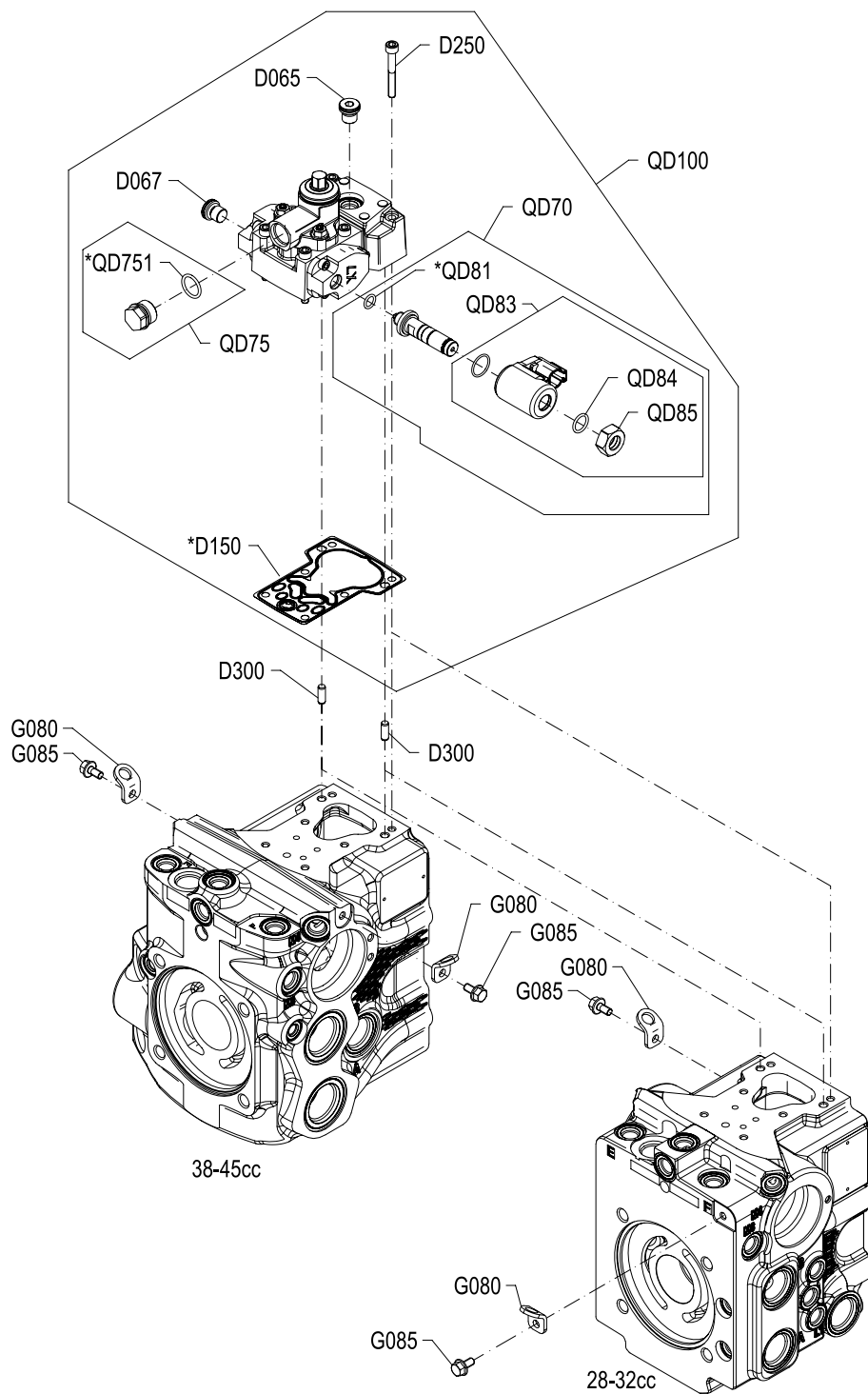
Order code: SN2

D065	17-42		327007	Plug assembly	1
QD25	17-42		140751	Proportional solenoid, 24v	2
QD27	17-42		11004700	Coil kit, 24v DEUTSCH connector	2
QD100	17-42		11147925	NFPE control kit, 24v	1

Controls

MP1 control MM3, MM4, SM3, SM4

Parts configuration



* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D150	18-27		11227209	Control gasket	1
D250	18-27		505038	Screw, M6 x 45	6
D300	18-27		310979	Dowel pin	2
G080	19-26		4800754	Bracket	2
G085	19-26		508438	Screw	2
QD75	18-27		11119332	Spring seat assembly	1
QD751	18-27		001131	O-ring	1
QD81	18-27		11152257	O-ring	1
QD84	24-01		11232752	O-ring (SB-2024-007 on page 110)	1
QD85	18-27		11140394	Coil nut	1

Order code: MM3

D065	18-27		5000572	Plug assembly, M12	1
D067	18-25		5000572	Plug assembly	1
QD100	18-27		11218895	MDC kit, 12V, CCO	1
QD70	18-27		11231212	Solenoid, 12V, DT04-2P (SB-2024-007 on page 110)	1
QD83	24-01		11253939	Coil kit, 12V, DEUTSCH (SB-2024-007 on page 110)connector, CCO	1

Order code: MM4

D065	18-27		5000572	Plug assembly, M12	1
D067	18-25		5000572	Plug assembly	1
QD100	18-25		11218896	MDC kit, 24V, CCO	1
QD70	18-25		11231213	Solenoid, 24V, DT04-2P (SB-2024-007 on page 110)	1
QD83	24-01		11253938	Coil kit, 24V, DEUTSCH (SB-2024-007 on page 110) connector, CCO	1

Order code: SM3

D065	18-25		327007	Plug assembly	1
D067	18-25		9005110-4400	Plug assembly	1
QD100	18-25		11218976	MDC kit, 12V, CCO	1
QD70	18-25		11231212	Solenoid, 12V, DT04-2P (SB-2024-007 on page 110)	1
QD83	24-01		11253939	Coil kit, 12V, DEUTSCH (SB-2024-007 on page 110) connector, CCO	1

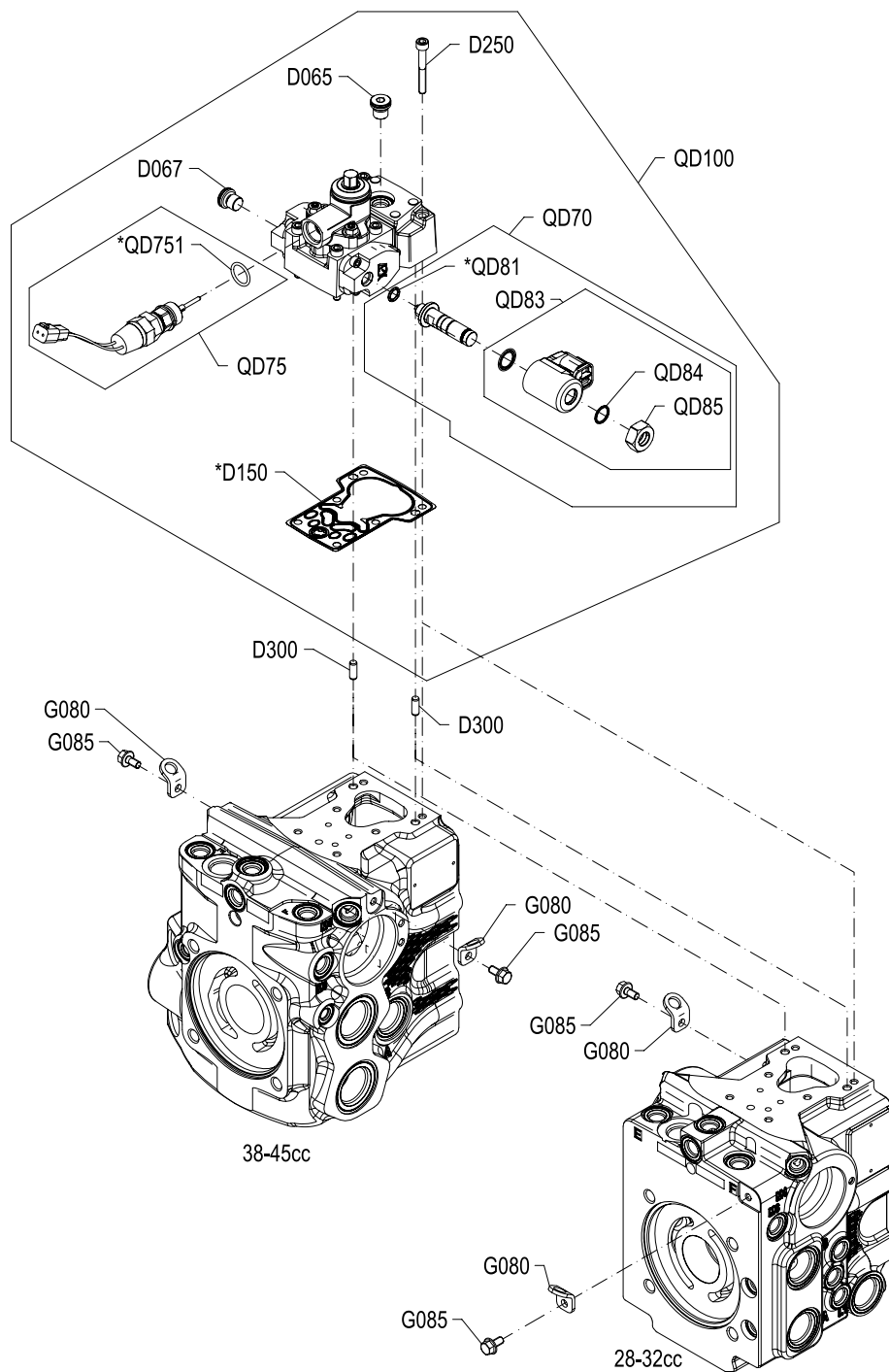
Order code: SM4

D065	18-25		327007	Plug assembly	1
D067	18-25		9005110-4400	Plug assembly	1
QD100	18-25		11218977	MDC kit, 24V, CCO	1
QD70	18-25		11231213	Solenoid, 24V, DT04-2P (SB-2024-007 on page 110)	1
QD83	24-01		11253938	Coil kit, 24V, DEUTSCH (SB-2024-007 on page 110) connector, CCO	1

Controls

MP1 control MM5, MM6, SM5, SM6

Parts configuration



* Included in overhaul seal kit Q210

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D150	18-25		11227209	Control gasket	1
D250	18-25		505038	Screw, M6 x 45	6
D300	18-25		310979	Dowel pin	2
G080	19-26		4800754	Bracket	2
G085	19-26		508438	Screw	2
QD75	18-25		11328169	Spring seat/neutral start switch (NSS) assembly	1
QD751	18-27		001131	O-ring	1
QD81	18-25		11152257	O-ring	1
QD84	24-01		11232752	O-ring (SB-2024-007 on page 110)	1
QD85	18-25		11140394	Coil nut	1

Order code: MM5

D065	18-25		5000572	Plug assembly, M12	1
D067	18-25		5000572	Plug assembly	1
QD100	18-25		11218897	MDC kit, 12V, CCO + NSS	1
QD70	18-25		11231212	Solenoid, 12V, DT04-2P (SB-2024-007 on page 110)	1
QD83	24-01		11253939	Coil kit, 12V, DEUTSCH (SB-2024-007 on page 110)connector, CCO	1

Order code: MM6

D065	18-25		5000572	Plug assembly, M12	1
D067	18-25		5000572	Plug assembly	1
QD100	18-25		11218898	MDC kit, 24V, CCO + NSS	1
QD70	18-25		11231213	Solenoid, 24V, DT04-2P (SB-2024-007 on page 110)	1
QD83	24-01		11253938	Coil kit, 24V, DEUTSCH (SB-2024-007 on page 110) connector, CCO	1

Order code: SM5

D065	18-25		327007	Plug assembly	1
D067	18-25		9005110-4400	Plug assembly	1
QD100	18-25		11218978	MDC kit, 12V, CCO + NSS	1
QD70	18-25		11231212	Solenoid, 12V, DT04-2P (SB-2024-007 on page 110)	1
QD83	24-01		11253939	Coil kit, 12V, DEUTSCH (SB-2024-007 on page 110) connector, CCO	1

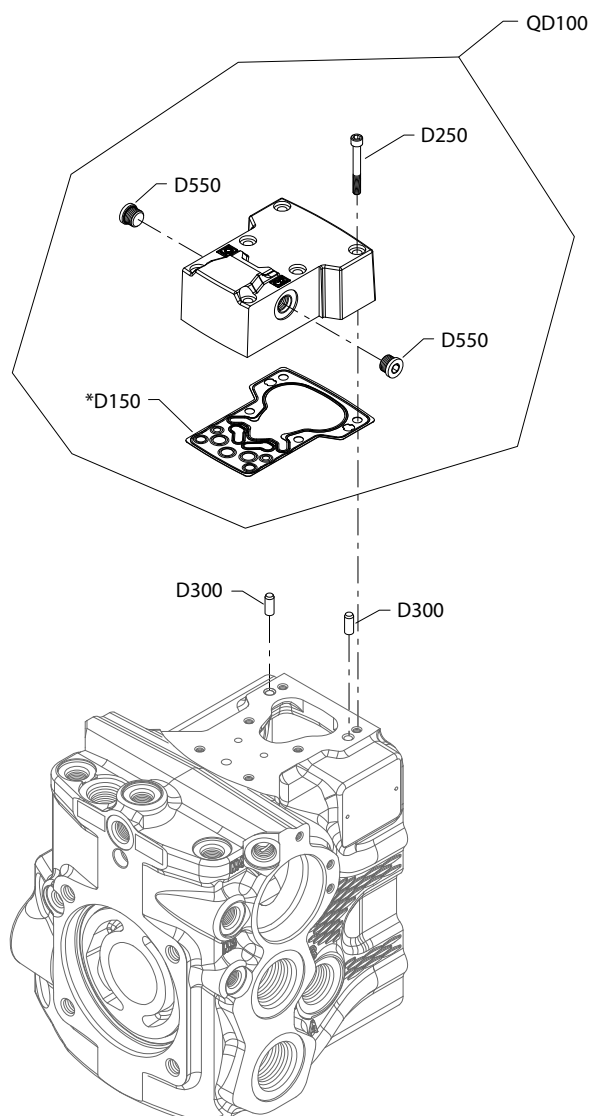
Order code SM6

D065	18-25		327007	Plug assembly	1
D067	18-25		9005110-4400	Plug assembly	1
QD100	18-25		11218979	MDC kit, 24V, CCO + NSS	1
QD70	18-25		11231213	Solenoid, 24V, DT04-2P (SB-2024-007 on page 110)	1
QD83	24-01		11253938	Coil kit, 24V, DEUTSCH (SB-2024-007 on page 110) connector, CCO	1

Controls

MP1 control MNN, SNN

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D150	18-25		11227209	Control gasket	1
D250	18-25		505038	Screw, M6 x 45	6
D300	18-25		310979	Dowel pin	2

Order code: MNN

D550	18-25		5000438	Plug assembly	2
QD100	18-25		11216838	Control cover kit	1

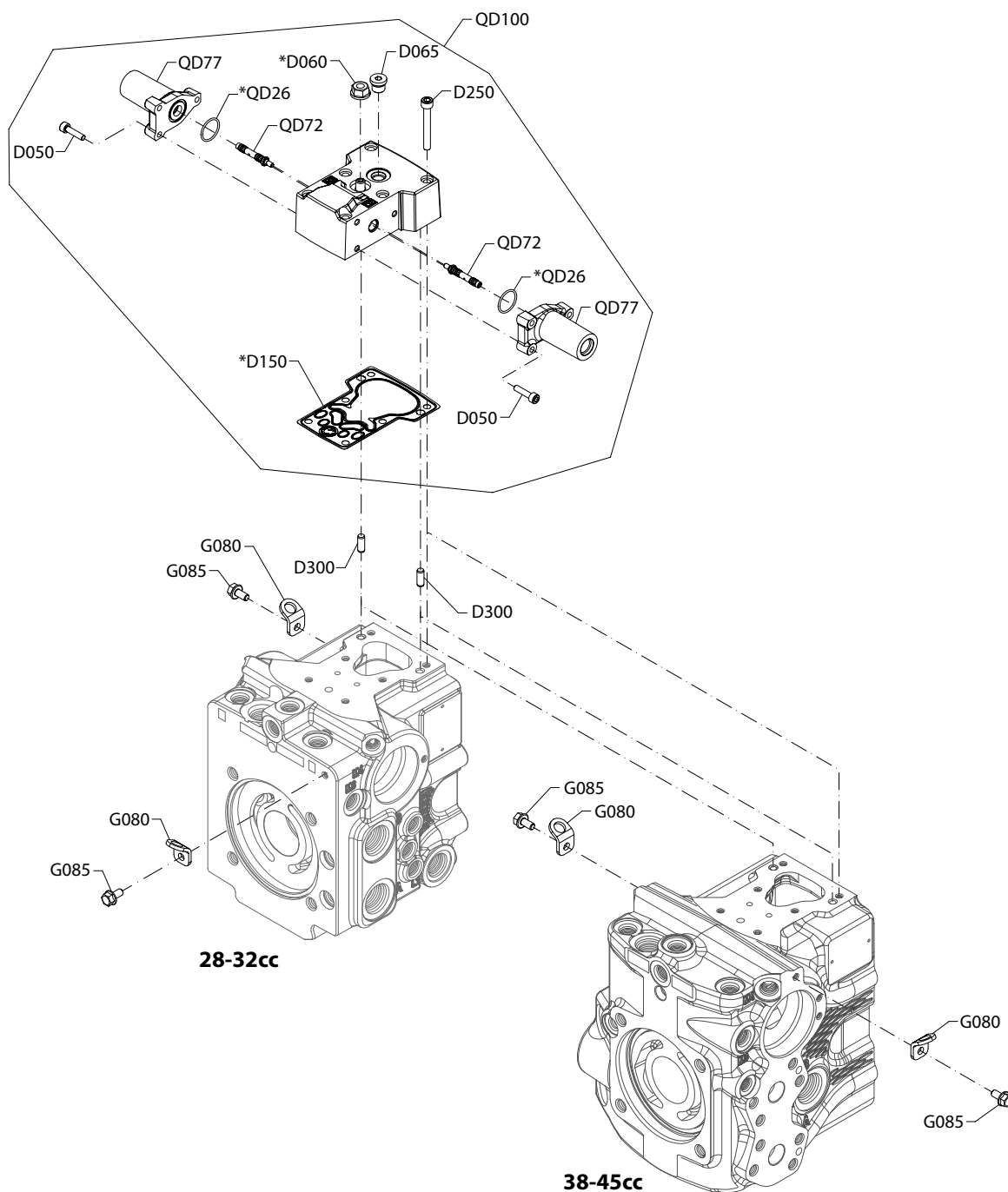
Order code: SNN

D550	18-25		9005110-5600	Plug assembly	2
QD100	18-25		11121984	Control cover kit	1

Controls

MP1 Control MT1, MT2

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	21-48		9007315-0505	Screw, M5 x 20	6
D060	21-48		612291 (9003508-0008)	Seal nut, M8	1
D065	21-48		5000572	Plug assembly, M12	1
D150	21-48		11227209	Control gasket	1
D250	21-48		505038	Screw, M6 x 45	6
D300	21-48		310979	Dowel pin	2
G080	21-48		4800754	Lifting bracket	2
G085	21-48		508438	Hex screw, M6 x 12	2
QD26	21-48		11124515	O-ring	2

Order code: MT1

QD72	21-48		11175560	Actuator spool	2
QD77	21-48		11174520	Actuator housing	2
QD100	21-48		11189184	HDC kit	1

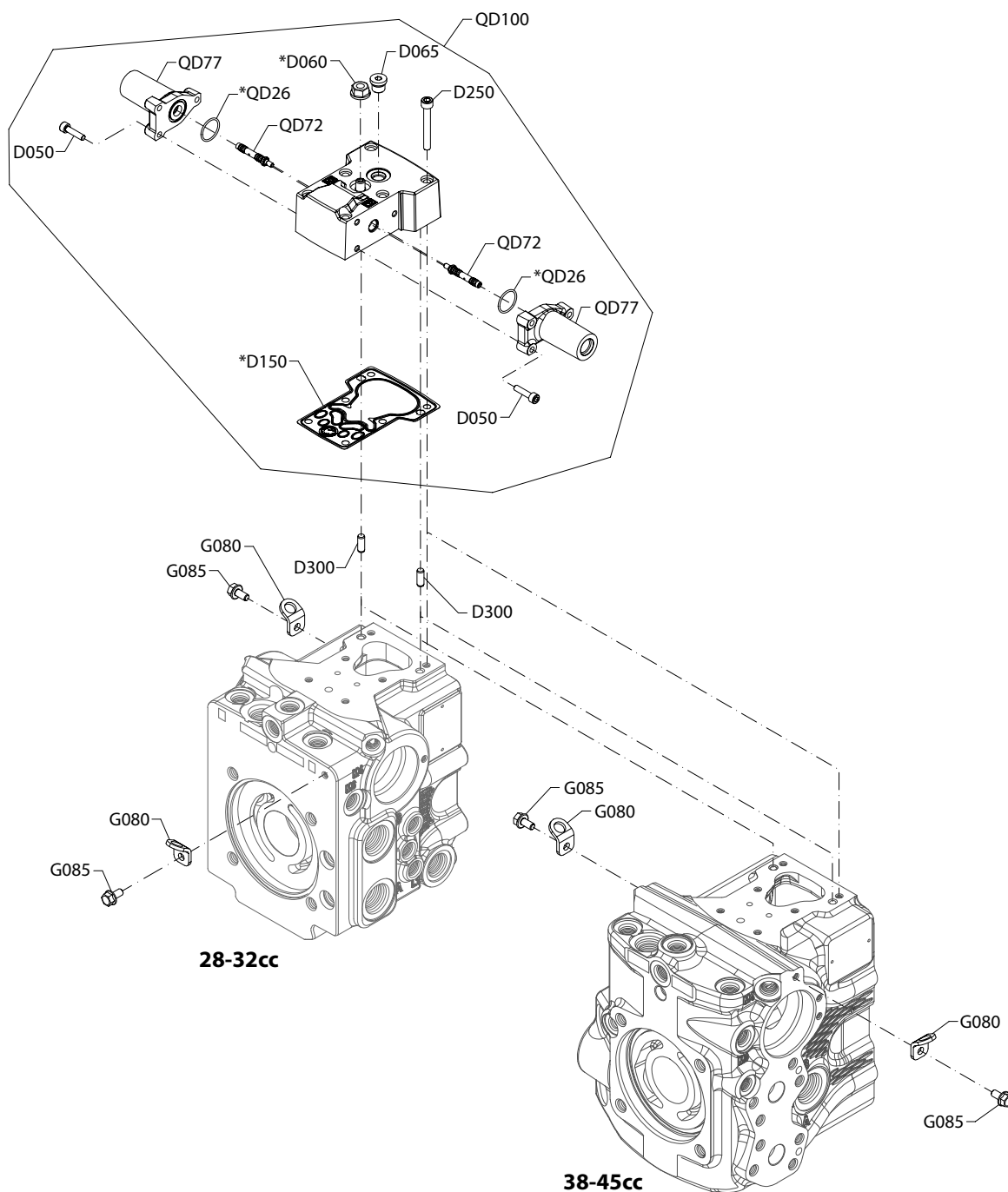
Order code: MT2

QD72	21-48		11175522	Actuator spool	2
QD77	21-48		11174518	Actuator housing	2
QD100	21-48		11189186	HDC kit	1

Controls

MP1 Control ST1, ST2

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Controls

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	21-48		9007315-0505	Screw, M5 x 20	6
D060	21-48		612291 (9003508-0008)	Seal nut, M8	1
D065	21-48		140642	Plug assembly	1
D150	21-48		11227209	Control gasket	1
D250	21-48		505038	Screw, M6 x 45	6
D300	21-48		310979	Dowel pin	2
G080	21-48		4800754	Lifting bracket	2
G085	21-48		508438	Hex screw, M6 x 12	2
QD26	21-48		11124515	O-ring	2

Order code: ST1

QD72	21-48		11175560	Actuator spool	2
QD77	21-48		11174519	Actuator housing	2
QD100	21-48		11189183	HDC kit	1

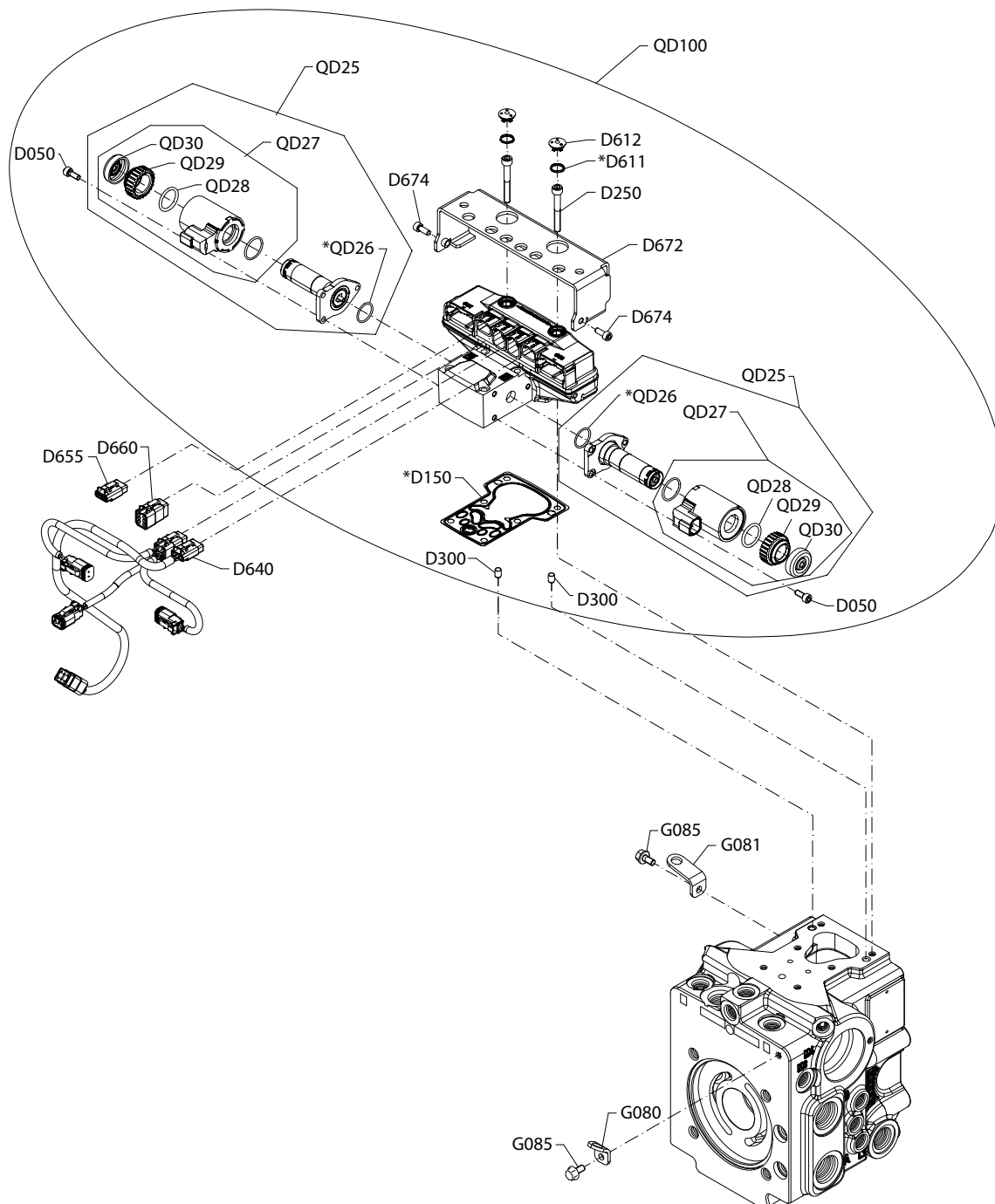
Order code: ST2

QD72	21-48		11175622	Actuator spool	2
QD77	21-48		11174517	Actuator housing	2
QD100	21-48		11189185	HDC kit	1

Controls

MP1 control AJ1

Parts configuration



* Included in overhaul seal kit Q210

Controls

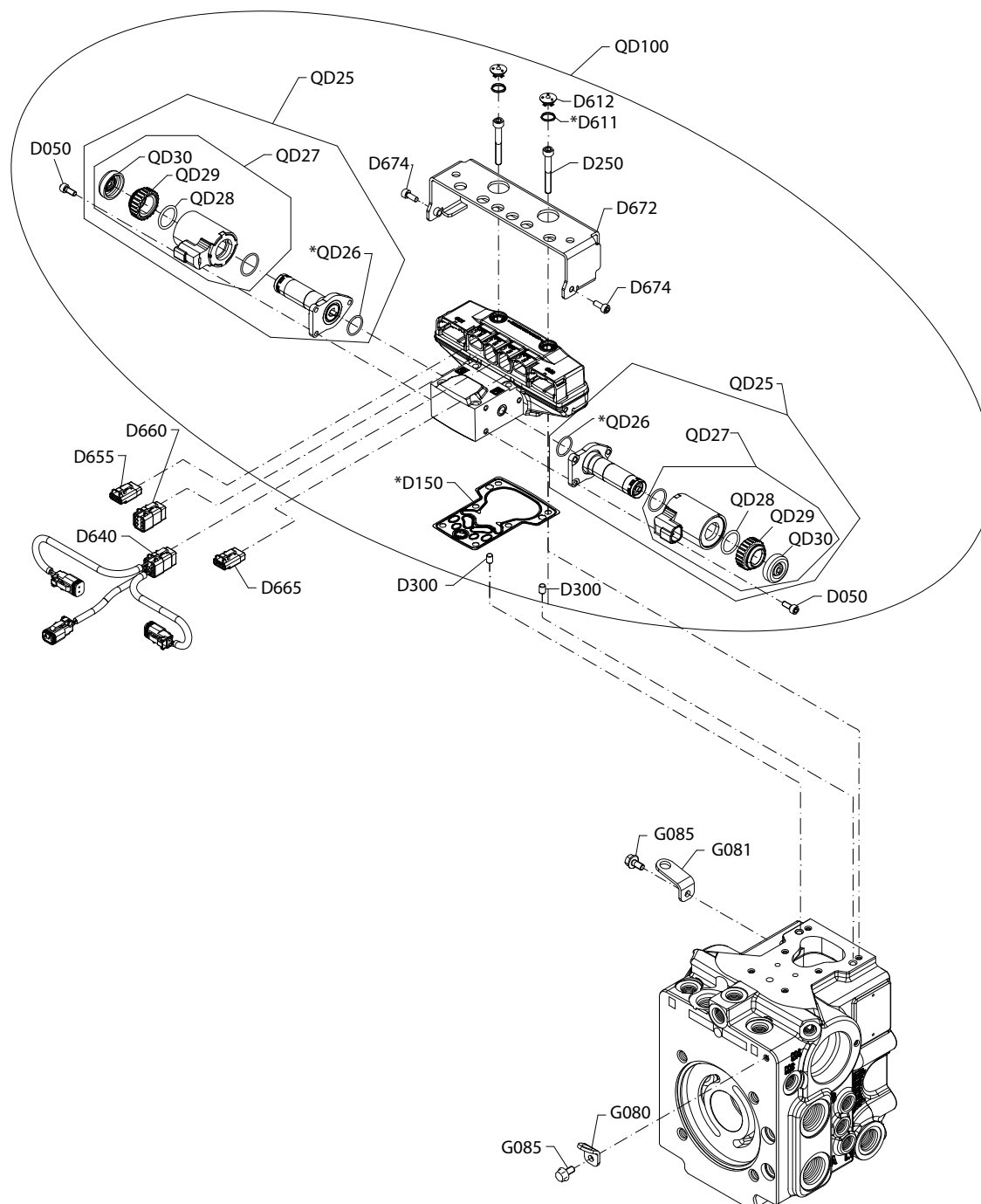
Order code: AJ1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	19-07		716860	Screw, M5x12	6
D150	19-07		11227209	Control gasket	1
D250	19-07		505038	Screw, M6x45	6
D300	19-07		11036469	Dowel pin	2
D610	19-07	21-12	11000467	Plug assembly (SB-2021-014 on page 108)	2
D611	21-13		11225703	O-ring	2
D612	21-13		11223708	Plug	2
D640	19-07		11023348	AC wiring harness	1
D655	19-07		11084827	Connector DTM 06-3S	1
D660	19-07		11084822	Connector DTM06-6S	1
D672	19-07		11151875	Protection	1
D674	19-07		716860	Screw, M5x12	2
G080	19-07		4800754	Lifting bracket	1
G081	19-07		11227284	Lifting bracket long	1
G085	19-07		508438	Screw, M6x12	2
QD25	19-07		140750	Proportional solenoid, 12V	2
QD26	19-07		11001952	O-ring	2
QD27	19-07		11004698	Coil kit, 12V, DEUTSCH connector	2
QD28	19-07		063172	O-ring	2
QD29	19-07		11004749	Coil nut	2
QD30	19-07		11027883	Cap	2
QD100	19-07		11232792	Automotive control kit, 12V	1

Controls

MP1 control AU1

Parts configuration



* Included in overhaul seal kit Q210

Controls

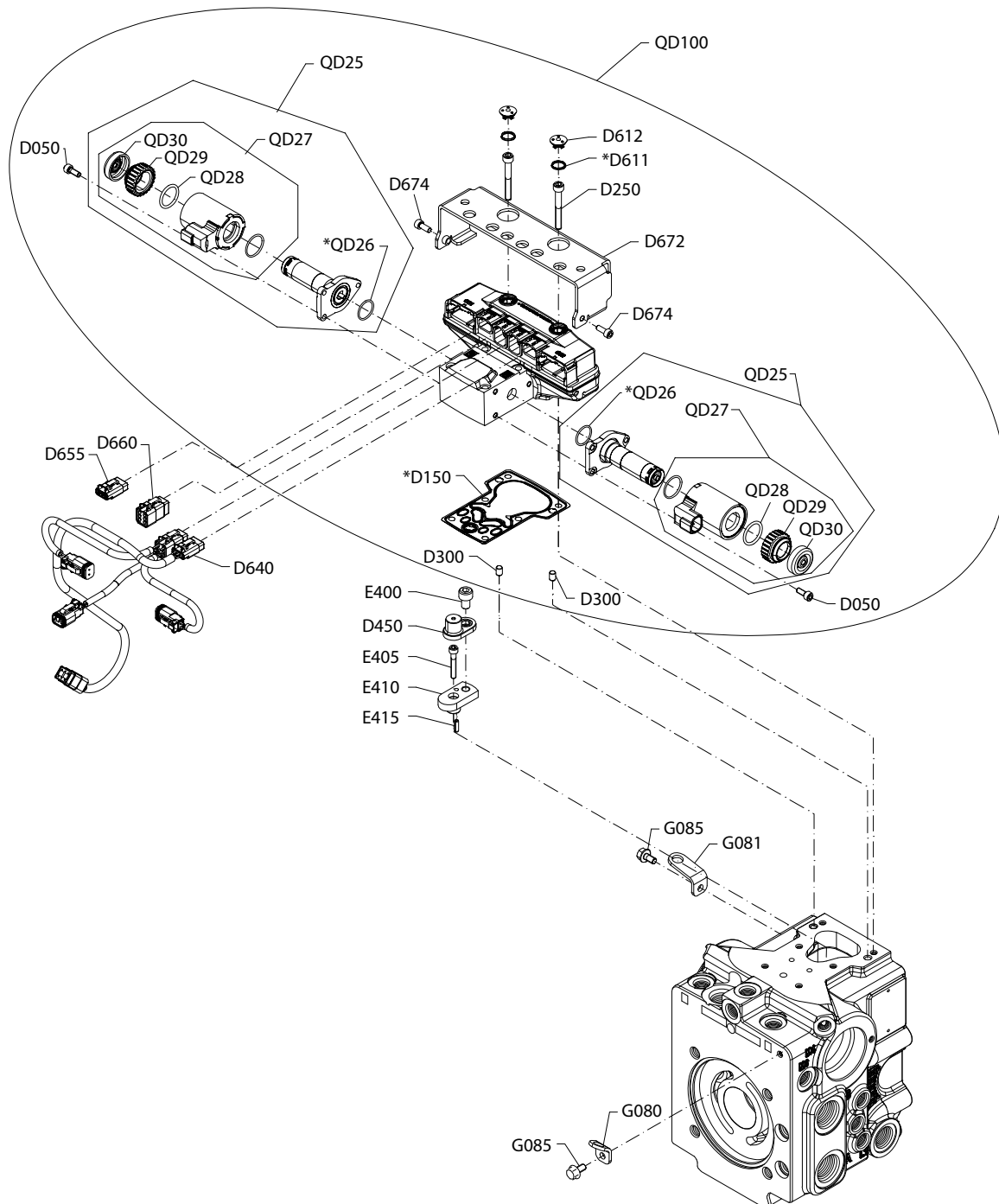
Order code: AU1

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	19-07		716860	Screw, M5x12	6
D150	19-07		11227209	Control gasket	1
D250	19-07		505038	Screw, M6x45	6
D300	19-07		11036469	Dowel pin	2
D610	19-07	21-12	11000467	Plug assembly (SB-2021-014 on page 108)	2
D611	21-13		11225703	O-ring	2
D612	21-13		11223708	Plug	2
D640	19-07		11197432	AC wiring harness	1
D655	19-07		11084827	Connector DTM 06-3S	1
D660	19-07		11084822	Connector DTM06-6S	1
D665	19-07		11084827	Connector DTM 06-3S	1
D672	19-07		11151875	Protection	1
D674	19-07		716860	Screw, M5x12	2
G080	19-07		4800754	Lifting bracket	1
G081	19-07		11227284	Lifting bracket long	1
G085	19-07		508438	Screw, M6x12	2
QD25	19-07		140750	Proportional solenoid, 12V	2
QD26	19-07		11001952	O-ring	2
QD27	19-07		11004698	Coil kit, 12V, DEUTSCH connector	2
QD28	19-07		063172	O-ring	2
QD29	19-07		11004749	Coil nut	2
QD30	19-07		11027883	Cap	2
QD100	19-07		11232792	Automotive control kit, 12V	1

Controls

MP1 control AJ3

Parts configuration



* Included in overhaul seal kit Q210

Controls

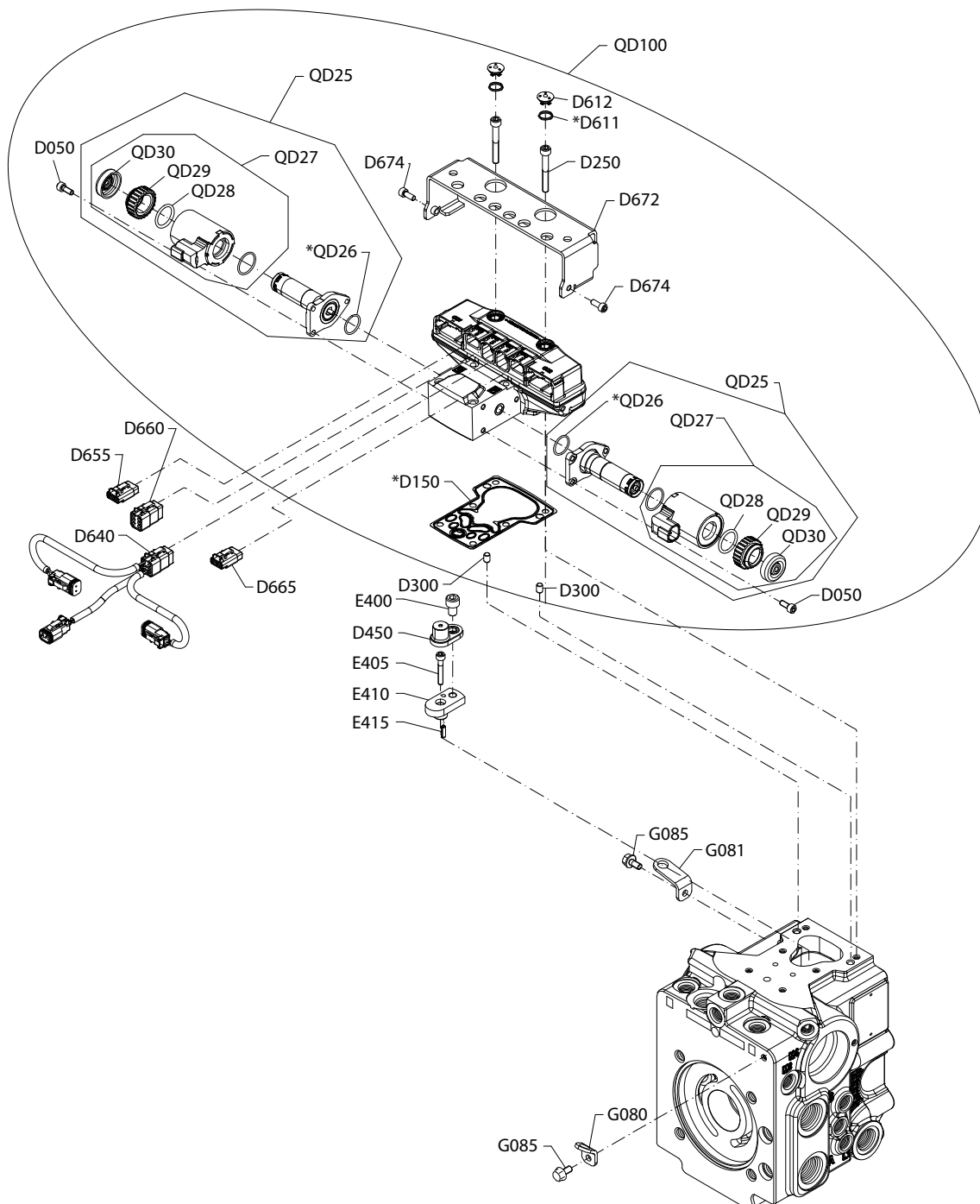
Order code: AJ3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	19-07		716860	Screw, M5x12	6
D150	19-07		11227209	Control gasket	1
D250	19-07		505038	Screw, M6x45	6
D300	19-07		11036469	Dowel pin	2
D450	19-07		11003097	Magnet carrier	1
D610	19-07	21-12	11000467	Plug assembly (SB-2021-014 on page 108)	2
D611	21-13		11225703	O-ring	2
D612	12-13		11223708	Plug	2
D640	19-07		11023348	AC wiring harness	1
D655	19-07		11084827	Connector DTM 06-3S	1
D660	19-07		11084822	Connector DTM 06-6S	1
D672	19-07		11151875	Protection	1
D674	19-07		716860	Screw, M5x12	2
E400	19-07		11212891	Screw, M8x1.25	1
E405	19-07		141135	Screw, M5x30	1
E410	19-07		11212844	Magnet carrier spacer	1
E415	19-07		9004700-1508	Pin	1
G080	19-07		4800754	Lifting bracket	1
G081	19-07		11227284	Lifting bracket long	1
G085	19-07		508438	Screw, M6x12	2
QD25	19-07		140750	Proportional solenoid, 12V	2
QD26	19-07		11001952	O-ring	2
QD27	19-07		11004698	Coil kit, 12V, DEUTSCH connector	2
QD28	19-07		063172	O-ring	2
QD29	19-07		11004749	Coil nut	2
QD30	19-07		11027883	Cap	2
QD100	19-07		11232794	Automotive control kit, 12V	1

Controls

MP1 control AU3

Parts configuration



* Included in overhaul seal kit Q210

Controls

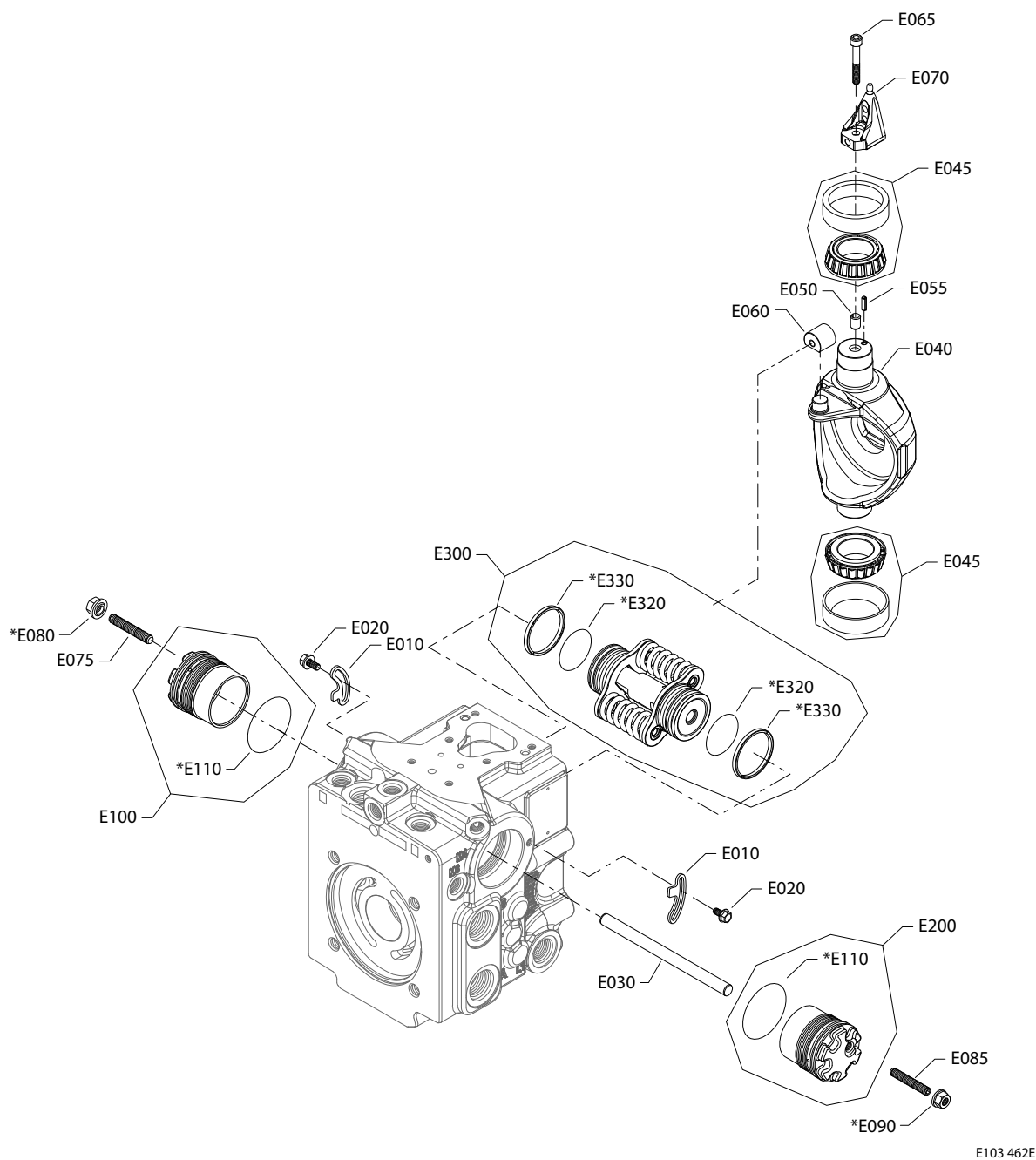
Order code: AJ3

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D050	19-07		716860	Screw, M5x12	6
D150	19-07		11227209	Control gasket	1
D250	19-07		505038	Screw, M6x45	6
D300	19-07		11036469	Dowel pin	2
D450	19-07		11003097	Magnet carrier	1
D610	19-07	21-12	11000467	Plug assembly (SB-2021-014 on page 108)	2
D611	21-13		11225703	O-ring	2
D612	21-13		11223708	Plug	2
D640	19-07		11197432	AC wiring harness	1
D655	19-07		11084827	Connector DTM 06-3S	1
D660	19-07		11084822	Connector DTM 06-6S	1
D665	19-07		11084827	Connector DTM 06-3S	2
D672	19-07		11151875	Protection	1
D674	19-07		716860	Screw, M5x12	2
E400	19-07		11212891	Screw, M8x1.25	1
E405	19-07		141135	Screw, M5x30	1
E410	19-07		11212844	Magnet carrier spacer	1
E415	19-07		9004700-1508	Pin	1
G080	19-07		4800754	Lifting bracket	1
G081	19-07		11227284	Lifting bracket long	1
G085	19-07		508438	Screw, M6x12	2
QD25	19-07		140750	Proportional solenoid, 12V	2
QD26	19-07		11001952	O-ring	2
QD27	19-07		11004698	Coil kit, 12V, DEUTSCH connector	2
QD28	19-07		063172	O-ring	2
QD29	19-07		11004749	Coil nut	2
QD30	19-07		11027883	Cap	2
QD100	19-07		11232794	Automotive control kit, 12V	1

Displacement limitation

MP1 28/32 displacement limitation B

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Displacement limitation

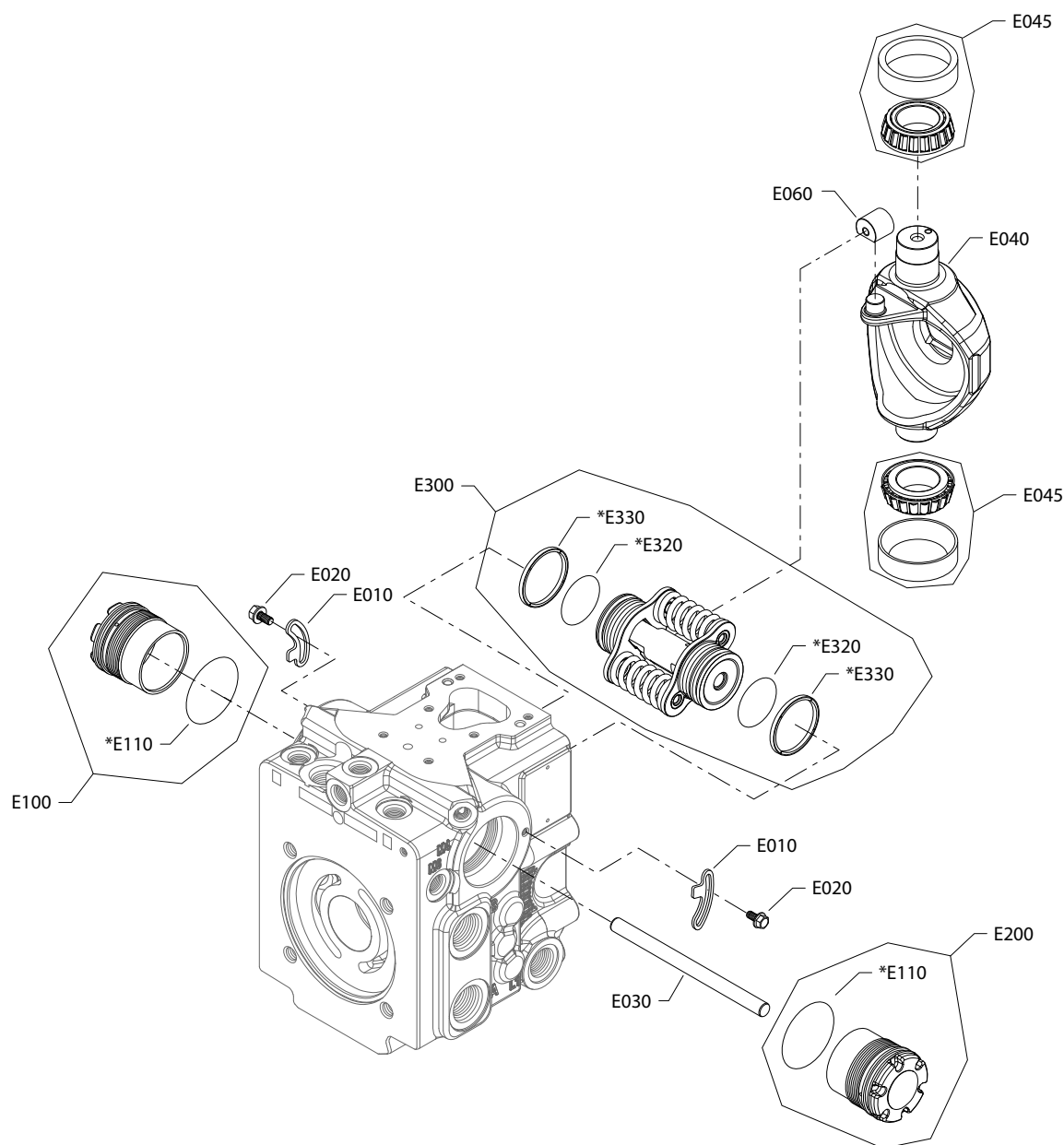
Order code: B

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E010	16-32		11152763	Locking plate	2
E020	16-32		508438	Screw, M6 x 12	2
E030	16-32		11154499	Servo piston guide rod	1
E040	16-32		11166190	Swashplate	1
E045	16-32		11154501	Roller bearing	2
E050	16-32		11160523	Bushing	1
E055	16-32		9004700-1508	Slotted pin	1
E060	16-32		11152843	Slider block	1
E065	16-32		508994	Screw, M6 x 35	1
E070	16-32		11149295	Swashplate feedback link	1
E075	16-32		528711	Set screw, M8 x 35	1
E080	16-32		505412 (9003509-0008)	Seal nut, M8	1
E085	16-32		528711	Set screw, M8 x 35	1
E090	16-32		505412 (9003509-0008)	Seal nut, M8	1
E100	16-32		11173676	Servo cylinder assembly	1
E110	16-32		9004104-1350	O-ring	2
E200	16-32		11173676	Servo cylinder assembly	1
E300	16-32		11170118	Servo piston assembly	1
E320	16-32		KA1A218	O-ring	2
E330	16-32		11154492	Piston ring	2

Displacement limitation

MP1 28/32 displacement limitation C

Parts configuration



E103 463E

* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Displacement limitation

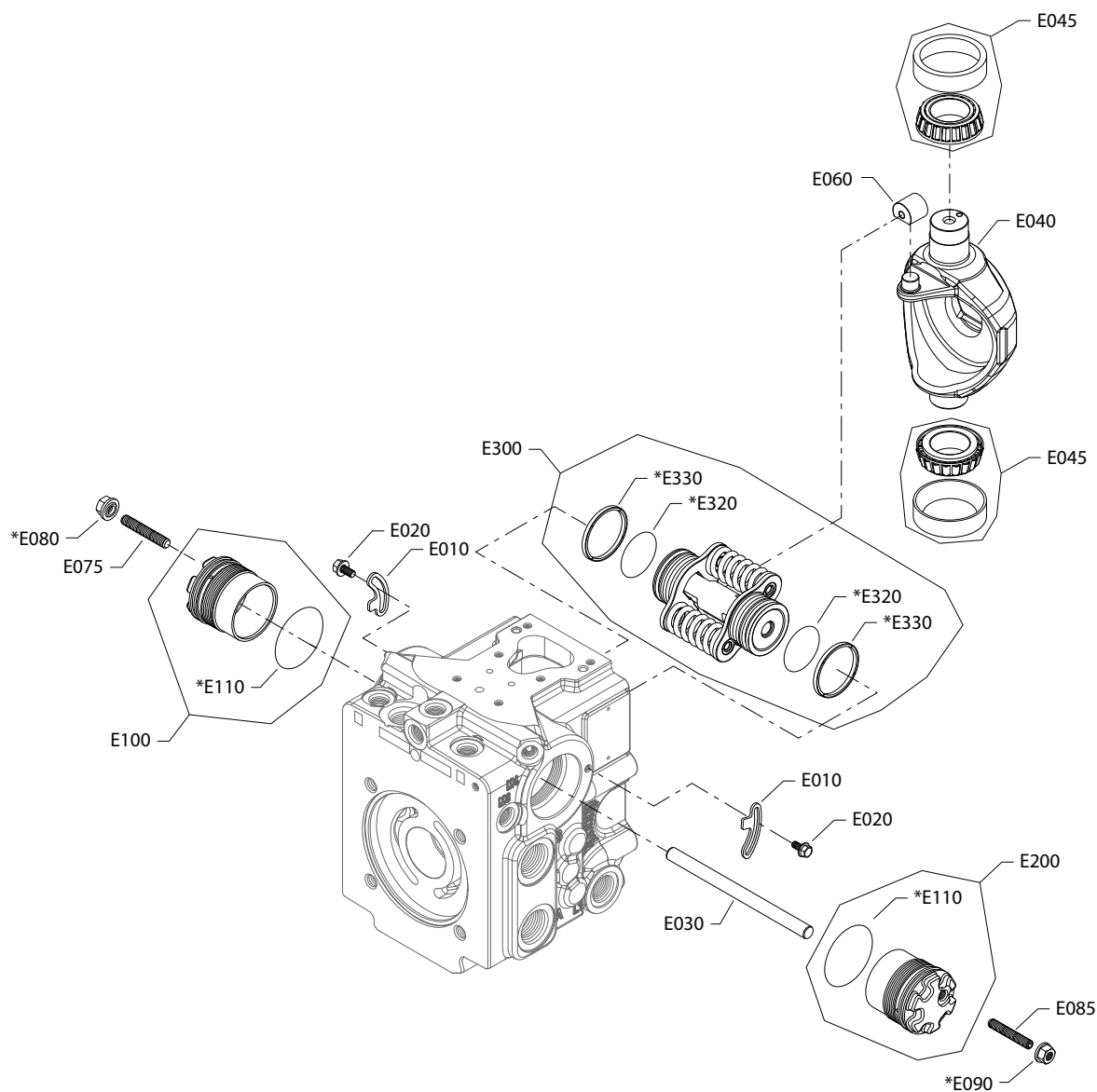
Order code: C

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E010	16-32		11152763	Locking plate	2
E020	16-32		508438	Screw, M6 x 12	2
E030	16-32		11154499	Servo piston guide rod	1
E040	16-32		11225575	Swashplate	1
E045	16-32		11154501	Roller bearing	2
E060	16-32		11152843	Slider block	1
E100	16-32		11170117	Servo cylinder assembly	1
E110	16-32		9004104-1350	O-ring	2
E200	16-32		11170117	Servo cylinder assembly	1
E300	16-32		11173674	Servo piston assembly	1
E320	16-32		KA1A218	O-ring	2
E330	16-32		11154492	Piston ring	2

Displacement limitation

MP1 28/32 displacement limitation D

Parts configuration



E103 464E

* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Displacement limitation

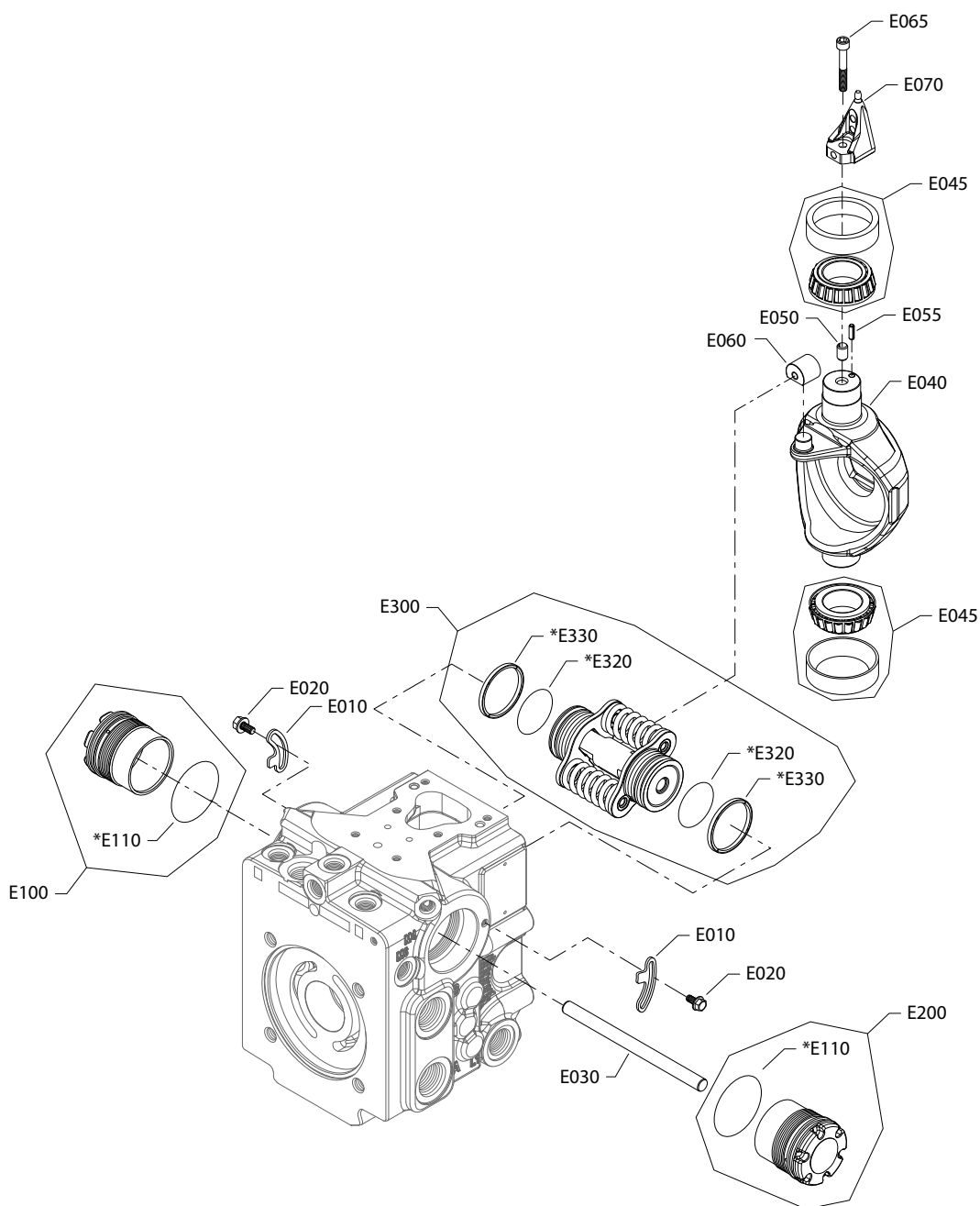
Order code: D

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E010	16-32		11152763	Locking plate	2
E020	16-32		508438	Screw, M6 x 12	2
E030	16-32		11154499	Servo piston guide rod	1
E040	16-32		11225575	Swashplate	1
E045	16-32		11154501	Roller bearing	2
E060	16-32		11152843	Slider block	1
E075	16-32		528711	Set screw, M8 x 35	1
E080	16-32		505412 (9003509-0008)	Seal nut, M8	1
E085	16-32		528711	Set screw, M8 x 35	1
E090	16-32		505412 (9003509-0008)	Seal nut, M8	1
E100	16-32		11173676	Servo cylinder assembly	1
E110	16-32		9004104-1350	O-ring	2
E200	16-32		11173676	Servo cylinder assembly	1
E300	16-32		11173674	Servo piston assembly	1
E320	16-32		KA1A218	O-ring	2
E330	16-32		11154492	Piston ring	2

Displacement limitation

MP1 28/32 displacement limitation N

Parts configuration



E103 465E

* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Displacement limitation

Order code: N

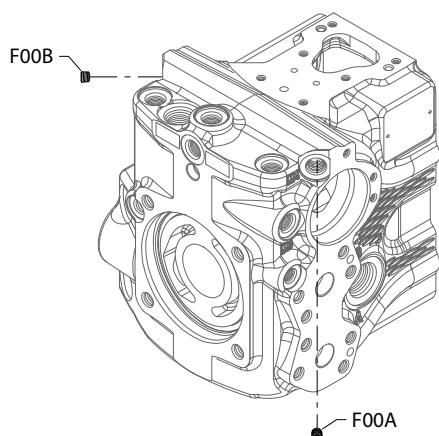
Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E010	16-32		11152763	Locking plate	2
E020	16-32		508438	Screw, M6 x 12	2
E030	16-32		11154499	Servo piston guide rod	1
E040	16-32		11166190	Swashplate	1
E045	16-32		11154501	Roller bearing	2
E050	16-32		11160523	Bushing	1
E055	16-32		9004700-1508	Slotted pin	1
E060	16-32		11152843	Slider block	1
E065	16-32		508994	Screw, M6 x 35	1
E070	16-32		11149295	Swashplate feedback link	1
E100	16-32		11170117	Servo cylinder assembly	1
E110	16-32		9004104-1350	O-ring	2
E200	16-32		11170117	Servo cylinder assembly	1
E300	16-32		11170118	Servo piston assembly	1
E320	16-32		KA1A218	O-ring	2
E330	16-32		11154492	Piston ring	2

Orifice

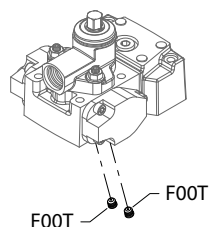
MP1 orifice C1-E8

Parts configuration

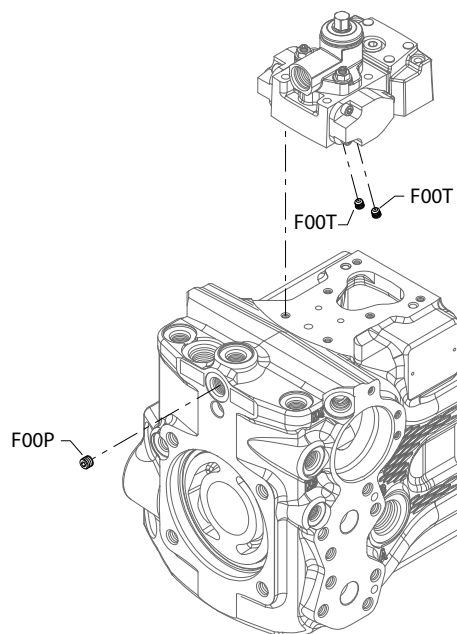
(C1, C2, C4)



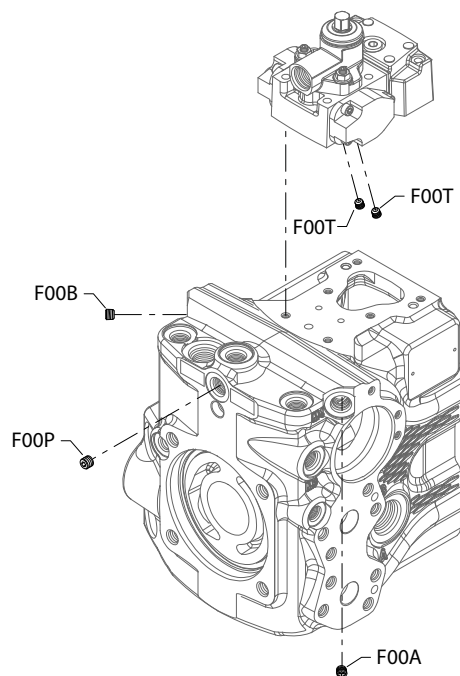
(C6, C7)



(C8, C9, D1, D2, D3, D6)



(D4, D5, E2, E3, E8)



Generic housings and controls used to show part location only.

Orifice

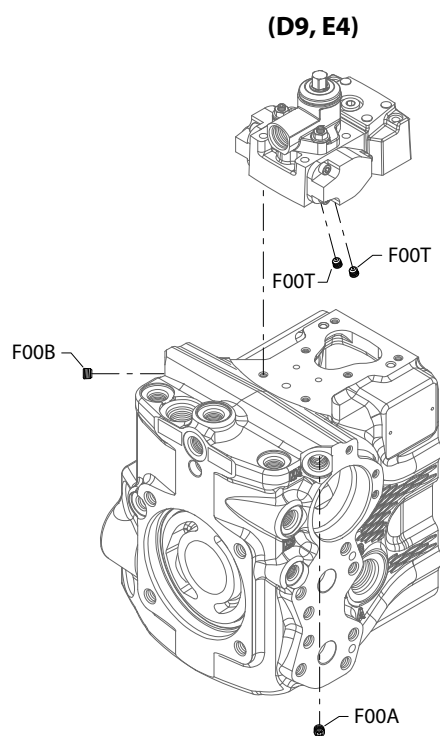
Order code: orifice C1-E8 parts

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C1	F00A	16-32		11182692	Orifice, 0.8 mm	1
	F00B	16-32		11182692	Orifice, 0.8 mm	1
C2	F00A	16-32		11167433	Orifice, 1.3 mm	1
	F00B	16-32		11167433	Orifice, 1.3 mm	1
C3	None					
C4	F00A	16-32		11167421	Orifice, 1.0 mm	1
	F00B	16-32		11167421	Orifice, 1.0 mm	1
C6	F00T	16-32		11151734	Orifice, 1.0 mm, M6	2
C7	F00T	16-32		140754	Orifice, 1.3 mm, M6	2
C8	F00P	16-32		11177220	Orifice, 0.8 mm, 1/8-27	1
	F00T	16-32		11151733	Orifice, 0.6 mm, M6	2
C9	F00P	16-32		11160290	Orifice, 0.8 mm, 1/8-27	1
	F00T	16-32		11151733	Orifice, 0.6 mm, M6	2
D1	F00P	16-32		11160290	Orifice, 1.0 mm, 1/8-27	1
	F00T	16-32		140611	Orifice, 0.8 mm, M6	2
D2	F00P	16-32		11160291	Orifice, 1.3 mm, 1/8-27	1
	F00T	16-32		140611	Orifice, 0.8 mm, M6	2
D3	F00P	16-32		11160291	Orifice, 1.3 mm, 1/8-27	1
	F00T	16-32		11151734	Orifice, 1.0 mm, M6	2
D4	F00A	16-32		11167433	Orifice, 1.3 mm	1
	F00B	16-32		11167433	Orifice, 1.3 mm	1
	F00P	16-32		11160291	Orifice, 1.3 mm, 1/8-27	1
	F00T	16-32		11151734	Orifice, 1.0 mm, M6	2
D5	F00A	16-32		11182692	Orifice, 0.8 mm	1
	F00B	16-32		11182692	Orifice, 0.8 mm	1
	F00P	16-32		11176799	Orifice, 0.6 mm, 1/8-27	1
	F00T	16-32		11151733	Orifice, 0.6 mm, M6	2
D6	F00P	20-31		11176799	Orifice, 0.6 mm, 1/8-27	1
	F00T	20-31		11151733	Orifice, 0.6 mm, M6	2
E2	F00A	17-47		11182692	Orifice, 0.8 mm	1
	F00B	17-47		11182692	Orifice, 0.8 mm	1
	F00P	17-47		11160290	Orifice, 1.0 mm, 1/8-27	1
	F00T	17-47		140611	Orifice, 0.8 mm, M6	2
E3	F00A	21-03		11182692	Orifice, 0.8 mm	1
	F00B	21-03		11192692	Orifice, 0.8 mm	1
	F00P	21-03		11177220	Orifice, 0.8 mm, 1/8-27	1
	F00T	21-03		140611	Orifice, 0.8 mm, M6	2
E8	F00A	24-07		11182692	Orifice, 0.8 mm	1
	F00B	24-07		11182692	Orifice, 0.8 mm	1
	F00P	24-07		11176799	Orifice, 0.6 mm, 1/8-27	1
	F00T	24-07		140611	Orifice, 0.8 mm, M6	2

Orifice

MP1 orifice D9, E4

Parts configuration



Generic housings and controls used to show part location only.

Orifice

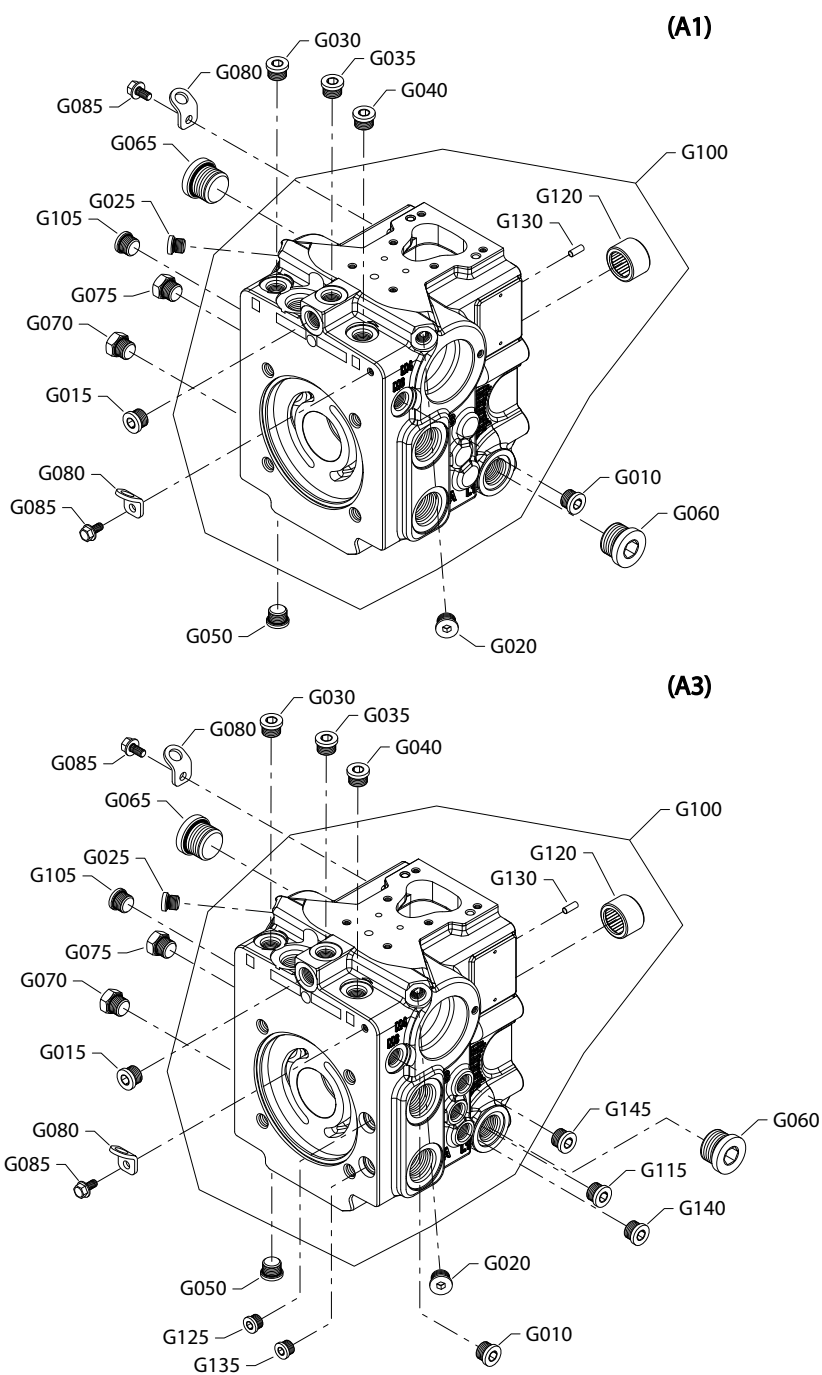
Order code: orifice D9, E4 parts

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D9	F00A	23-03		11182692	Orifice, 0.8 mm	1
	F00B	23-03		11182692	Orifice, 0.8 mm	1
	F00T	23-03		11151734	Orifice, 1.0 mm, M6	2
E4	F00A	20-32		11182692	Orifice, 0.8 mm	1
	F00B	20-32		11182692	Orifice, 0.8 mm	1
	F00T	20-32		11151733	Orifice, 0.6 mm, M6	2

Porting type

MP1 porting type A1, A3

Parts configuration



E103 460E

Porting type

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G010	16-32		140644 (9005110-5600)	Plug assembly	1
G015	16-32		140644 (9005110-5600)	Plug assembly	1
G020	16-32		327007 (9005110-4400)	Plug assembly	1
G025	16-32		327007 (9005110-4400)	Plug assembly	1
G030	16-32		140644 (9005110-5600)	Plug assembly	1
G035	16-32		140644 (9005110-5600)	Plug assembly	1
G040	16-32		140644 (9005110-5600)	Plug assembly	1
G050	16-32		140644 (9005110-5600)	Plug assembly	1
G060	16-32		664524 (9005110-9000)	Plug assembly	1
G065	16-32		664524 (9005110-9000)	Plug assembly	1
G070	16-32		140644 (9005110-5600)	Plug assembly	1
G075	16-32		140644 (9005110-5600)	Plug assembly	1
G080	16-32		4800754	Lifting bracket	2
G085	16-32		508438	Screw, M6 x 12	2
G105	16-32		140644 (9005110-5600)	Plug assembly	1
G120	16-32		11060624	Needle bearing	1
G130	16-32		9004800-1908	Pin	1

Order code: A1

G100	19-09		11229332	Housing assembly	1
G100	16-32	19-09	11173902	Housing assembly	1

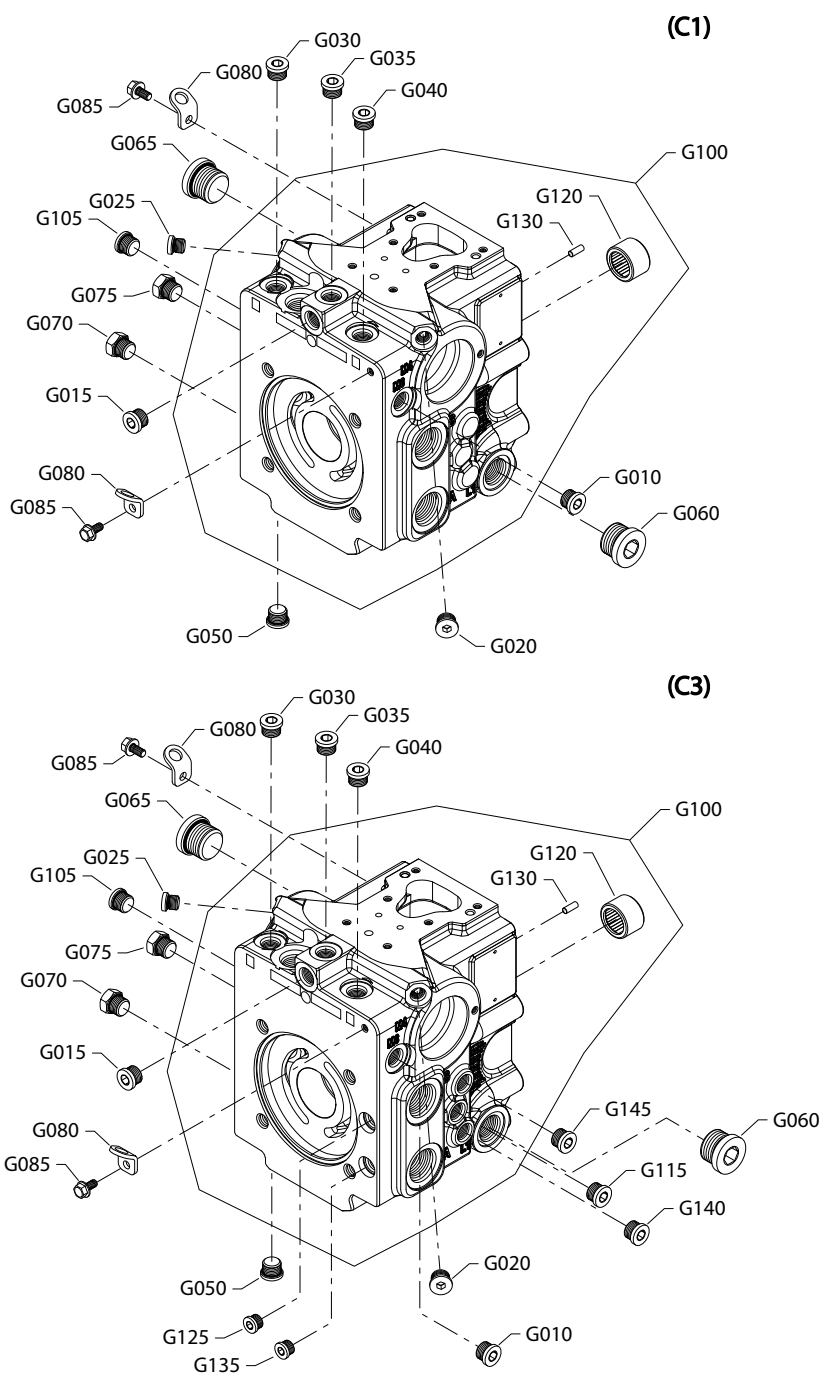
Order code: A3

G100	19-09		11229333	Housing assembly, loop flush	1
G100	16-32	19-09	11170120	Housing assembly, loop flush	1
G115	16-32		140644 (9005110-5600)	Plug assembly	1
G125	24-35		11333943	Plug assembly	1
G125	16-32	24-35	327007 (9005110-4400)	Plug assembly	1
G135	24-35		11333943	Plug assembly	1
G135	16-32	24-35	327007 (9005110-4400)	Plug assembly	1
G140	16-32		140644 (9005110-5600)	Plug assembly	1
G145	16-32		140644 (9005110-5600)	Plug assembly	1

Porting type

MP1 porting type C1, C3

Parts configuration



E103 460E.B

Porting type

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G010	16-32		5000438	Plug assembly, M14	1
G015	16-32		5000438	Plug assembly, M14	1
G020	16-32		5000572	Plug assembly, M12	1
G025	16-32		5000572	Plug assembly, M12	1
G030	16-32		5000438	Plug assembly, M14	1
G035	16-32		5000438	Plug assembly, M14	1
G040	16-32		5000438	Plug assembly, M14	1
G050	16-32		5000438	Plug assembly, M14	1
G050	16-32		11134927	Plug assembly, M27	1
G065	16-32		11134927	Plug assembly, M27	1
G070	16-32		5000591	Plug assembly, M14	1
G075	16-32		5000591	Plug assembly, M14	1
G080	16-32		4800754	Lifting bracket	2
G085	16-32		508438	Screw, M6 x 12	2
G105	16-32		5000438	Plug assembly, M14	1
G120	16-32		11060624	Needle bearing	1
G130	16-32		9004800-1908	Pin	1

Order code: C1

G100	19-26		11229334	Housing assembly, metric	1
G100	16-32	19-26	11173905	Housing assembly, metric	1

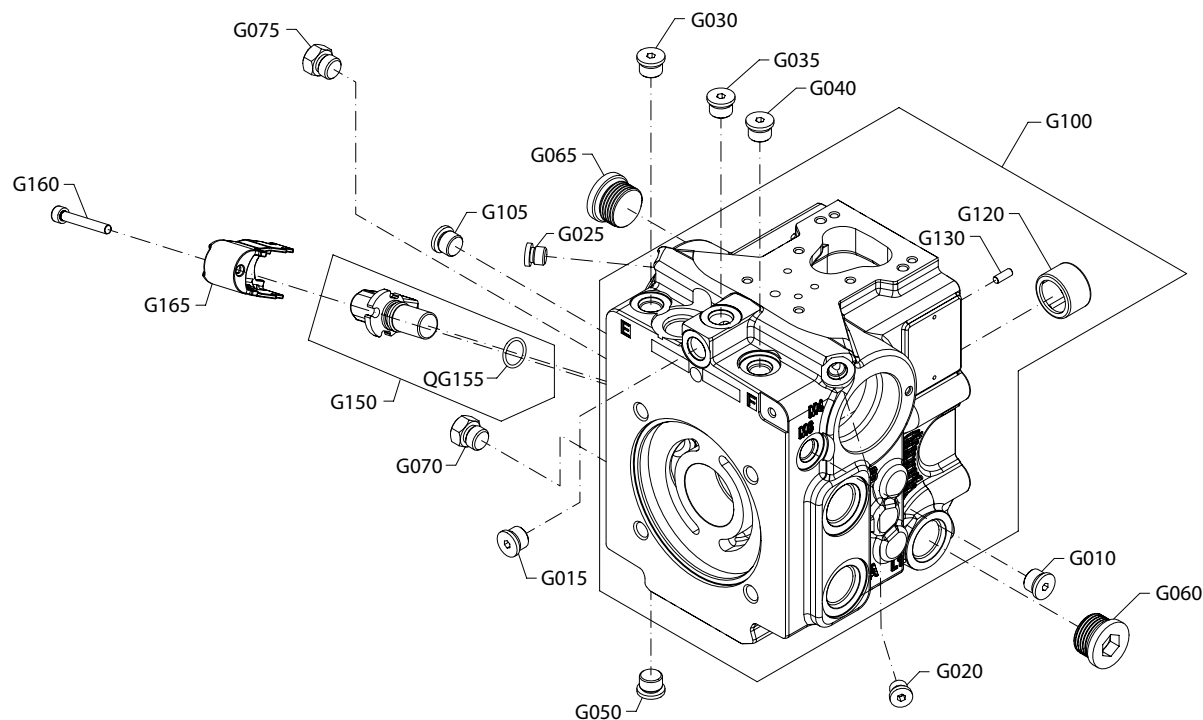
Order code: C3

G100	19-14		11229335	Housing assembly, loop flush, metric	1
G100	16-32	19-14	11173906	Housing assembly, loop flush, metric	1
G115	16-32		5000438	Plug assembly, M14	1
G125	16-32		5000572	Plug assembly, M12	1
G135	16-32		5000572	Plug assembly, M12	1
G140	16-32		5000438	Plug assembly, M14	1
G145	16-32		5000438	Plug assembly, M14	1

Porting type

MP1 28/32 porting type A4, C4

Parts configuration



Option A4 is for SAE configurations and C4 is for metric configurations. Please order accordingly.

Porting type

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G120	19-04		11060624	Needle bearing	1
G130	19-04		9004800-1908	Straight pin	1
G150	19-04		149055	Speed and temperature sensor	1
G160	19-04		11158928	Screw	1
G165	19-04		11187156	Speed sensor protective cover	1
QG155	19-04		11013397	O-ring	1

Order code: A4

G010	19-04		9005110-5600	Plug assembly	1
G015	19-04		9005110-5600	Plug assembly	1
G020	19-04		9005110-4400	Plug assembly	1
G025	19-04		9005110-4400	Plug assembly	1
G030	19-04		9005110-5600	Plug assembly	1
G035	19-04		9005110-5600	Plug assembly	1
G040	19-04		9005110-5600	Plug assembly	1
G050	19-04		9005110-5600	Plug assembly	1
G060	19-04		9005110-9000	Plug assembly	1
G065	19-04		9005110-9000	Plug assembly	1
G070	19-04		9005110-5600	Hex plug assembly	1
G075	19-04		9005110-5600	Hex plug assembly	1
G100	19-04		11223793	Housing/end cap assembly	1
G105	19-04		9005110-5600	Plug assembly	1

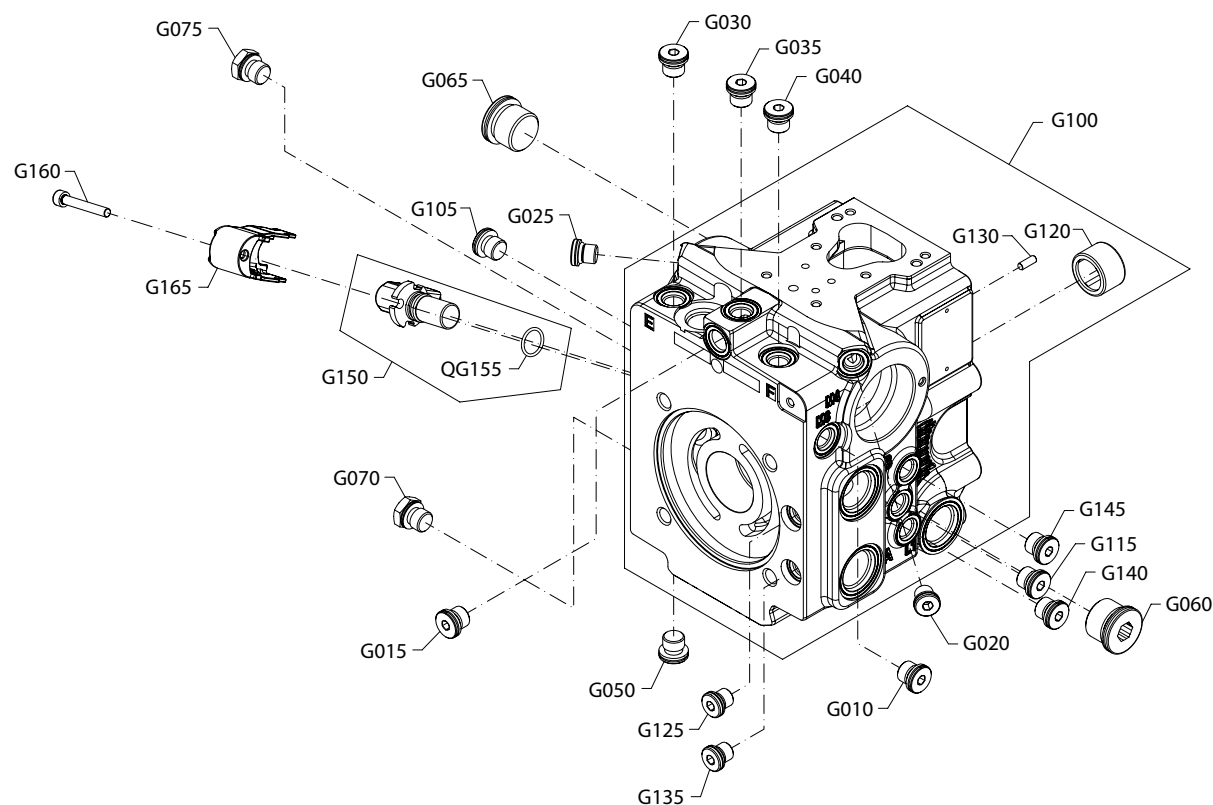
Order code: C4

G010	19-04		5000438	Plug assembly	1
G015	19-04		5000438	Plug assembly	1
G020	19-04		5000572	Plug assembly	1
G025	19-04		5000572	Plug assembly	1
G030	19-04		5000438	Plug assembly	1
G035	19-04		5000438	Plug assembly	1
G040	19-04		5000438	Plug assembly	1
G050	19-04		5000438	Plug assembly	1
G060	19-04		11134927	Steel plug	1
G065	19-04		11134927	Steel plug	1
G070	19-04		5000591	Hex plug assembly	1
G075	19-04		5000591	Hex plug assembly	1
G100	19-04		11223799	Housing/end cap assembly	1
G105	19-04		500438	Plug assembly	1

Porting type

MP1 28/32 porting type A5, C5

Parts configuration



Option A5 is for SAE configurations and C5 is for metric configurations. Please order accordingly.

Porting type

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G120	19-04		11060624	Needle bearing	1
G130	19-04		9004800-1908	Straight pin	1
G150	19-04		149055	Speed and temperature sensor	1
G160	19-04		11158928	Screw	1
G165	19-04		11187156	Speed sensor protective cover	1
QG155	19-04		11013397	O-ring	1

Order code: A5

G010	19-04		9005110-5600	Plug assembly	1
G015	19-04		9005110-5600	Plug assembly	1
G020	19-04		9005110-4400	Plug assembly	1
G025	19-04		9005110-4400	Plug assembly	1
G030	19-04		9005110-5600	Plug assembly	1
G035	19-04		9005110-5600	Plug assembly	1
G040	19-04		9005110-5600	Plug assembly	1
G050	19-04		9005110-5600	Plug assembly	1
G060	19-04		9005110-9000	Plug assembly	1
G065	19-04		9005110-9000	Plug assembly	1
G070	19-04		9005110-5600	Hex plug assembly	1
G075	19-04		9005110-5600	Hex plug assembly	1
G100	19-04		11223796	Housing/end cap assembly	1
G105	19-05		9005110-5600	Plug assembly	1
G115	19-05		9005110-5600	Plug assembly	1
G125	24-35		11333943	Plug assembly	1
G135	24-35		11333943	Plug assembly	1
G140	19-05		9005110-5600	Plug assembly	1
G145	19-05		9005110-5600	Plug assembly	1

Order code: C5

G010	19-04		5008438	Plug assembly, M14	1
G015	19-04		5000438	Plug assembly, M14	1
G020	19-04		5000572	Plug assembly, M12	1
G025	19-04		5000572	Plug assembly, M12	1
G030	19-04		5000438	Plug assembly, M14	1
G035	19-04		5000438	Plug assembly, M14	1
G040	19-04		5000438	Plug assembly, M14	1
G050	19-04		5000438	Plug assembly, M14	1
G060	19-04		11134927	Steel plug, M27	1
G065	19-04		11134927	Steel plug, M27	1
G070	19-04		5000591	Hex plug assembly, M14	1
G075	19-04		5000591	Hex plug assembly, M14	1
G100	19-04		11223802	Housing/end cap assembly	1
G105	19-04		5000438	Plug assembly, M14	1

Porting type

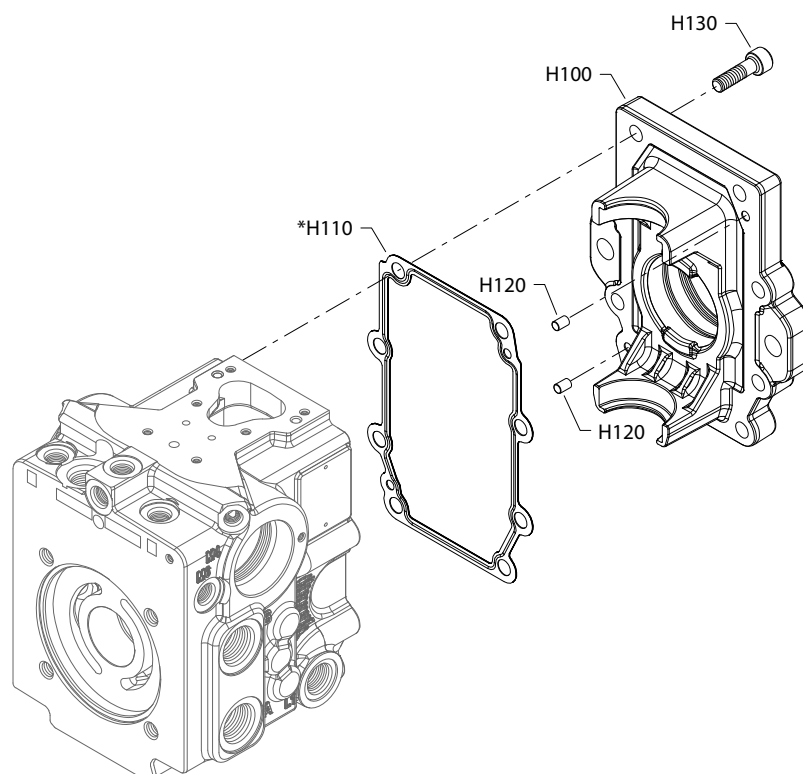
Order code: C5 (continued)

G115	19-05		9005110-5600	Plug assembly, M14	1
G125	24-35		11333943	Plug assembly, M14	1
G135	24-35		11333943	Plug assembly, M12	1
G140	19-05		9005110-5600	Plug assembly, M12	1
G145	19-05		9005110-5600	Plug assembly, M14	1

Mounting flange

MP1 28/32 mounting flange F

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Mounting flange

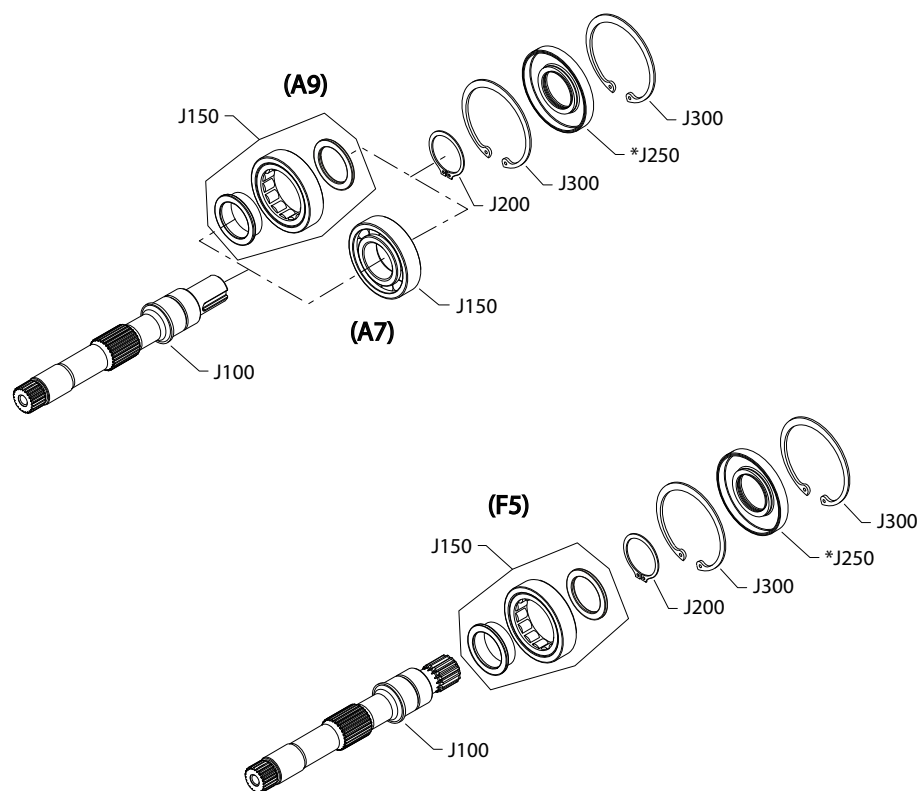
Order code: F

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
H100	16-32		11152569	Front cover	1
H110	16-32		11154506	Front cover seal gasket	1
H120	16-32		9004800-2506	Pin	2
H130	16-32		11181754	Screw, M10 x 35, special	8

Shaft

MP1 28/32 shaft A7, A9, F5

Parts configuration



* Included in overhaul seal kit Q210

Shaft

Order code: A7

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
J100	16-32		11161878	Shaft, straight key	1
J150	16-32		11165488	Ball bearing	1
J200	16-32		5000098	Retaining ring	1
J250	16-32		11165487	Lip seal	1
J300	16-32		FBE062	Retaining ring	2

Order code: A9

J100	16-32		11161878	Shaft, straight key	1
J150	16-32		11116439	Roller bearing	1
J200	16-32		5000098	Retaining ring	1
J250	16-32		11165487	Lip seal	1
J300	16-32		FBE062	Retaining ring	2

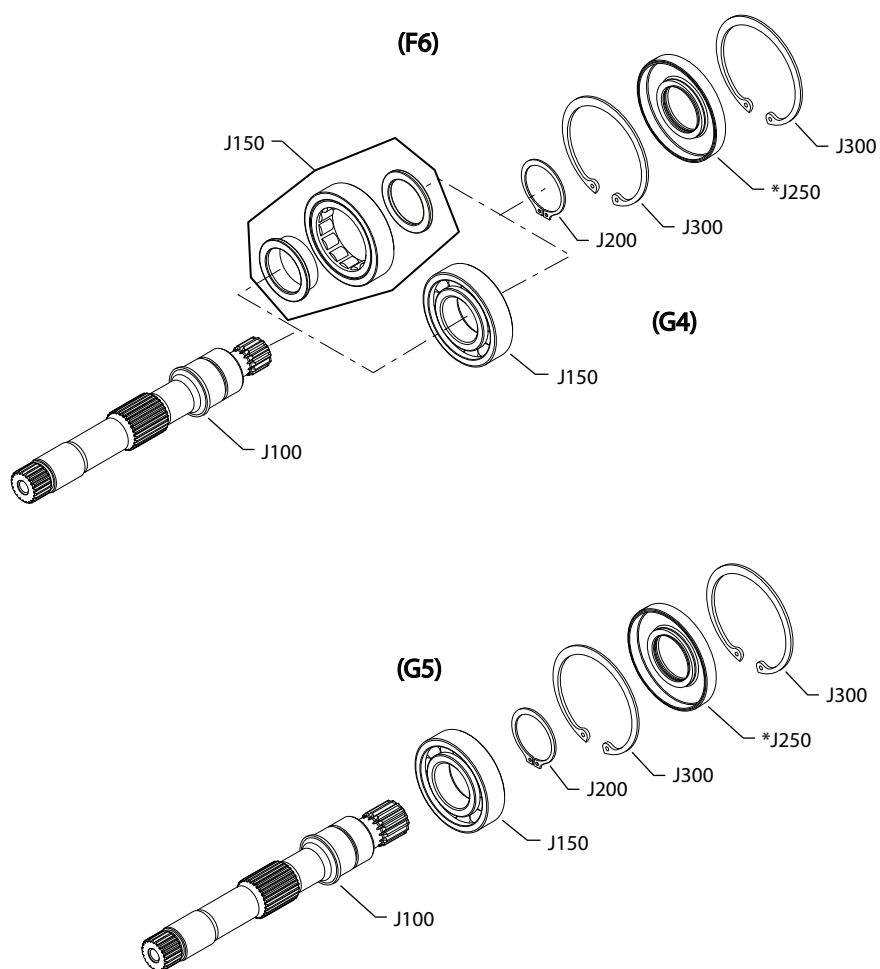
Order code: F5

J100	16-32		11152017	Shaft, 15 tooth	1
J150	16-32		11116439	Roller bearing	1
J200	16-32		5000098	Retaining ring	1
J250	16-32		11165487	Lip seal	1
J300	16-32		FBE062	Retaining ring	2

Shaft

MP1 28/32 shaft F6, G4, G5

Parts configuration



* Included in overhaul seal kit Q210

Shaft

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
J200	16-32		5000098	Retaining ring	1
J250	16-32		11165487	Lip seal	1
J300	16-32		FBE062	Retaining ring	2

Order code: F6

J100	16-32		11152016	Shaft, 13 tooth	1
J150	16-32		11116439	Roller bearing	1

Order code: G4

J100	16-32		11152016	Shaft, 13 tooth	1
J150	16-32		11165488	Ball bearing	1

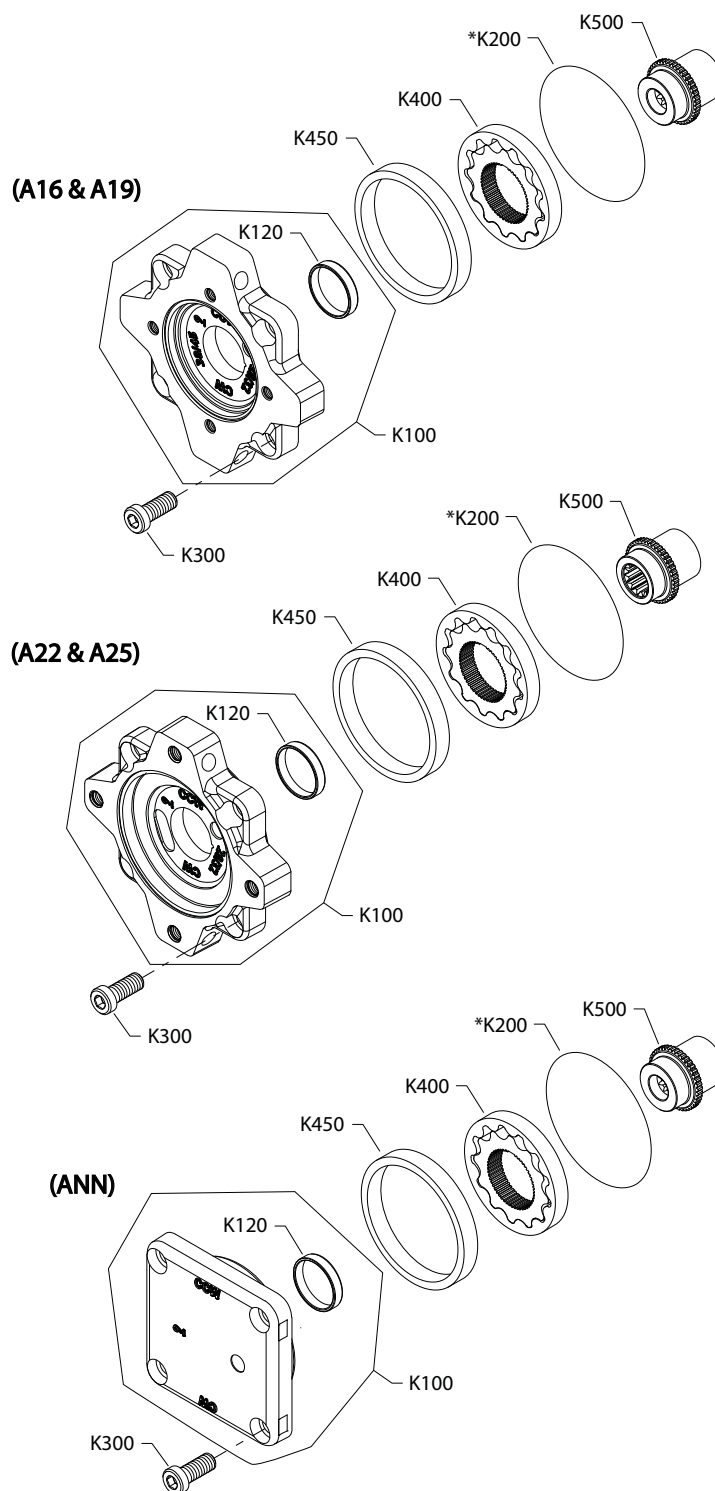
Order code: G5

J100	16-32		11152017	Shaft, 15 tooth	1
J150	16-32		11165488	Ball bearing	1

Auxiliary mounting

MP1 aux mounting A16-ANN

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K120	16-32		11189476	Journal bearing	1
K200	16-32		KA1B244	O-ring	1
K300	16-32		11000819	Screw, M12 x 25	4
K400	16-32		11155777	Gerotor assembly, 9cc	1
K450	16-32		11171571	Gerotor ring, 9cc	1

Order code: A16

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Order code: A19

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163483	Coupling, 11 tooth	1

Order code: A22

K100	16-32		11174055	Adaptor assembly, B pad, 9cc	1
K500	16-32		11163484	Coupling, 13 tooth	1

Order code: A25

No parts					
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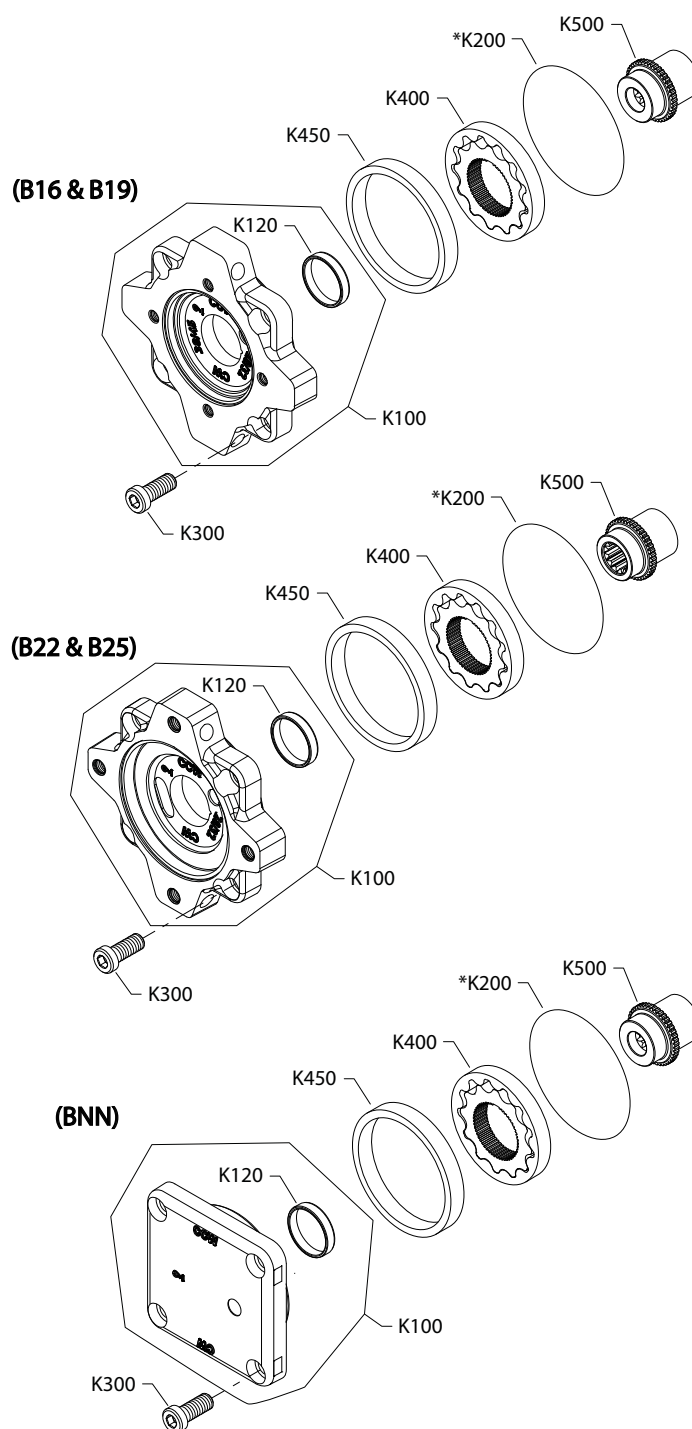
Order code: ANN

K100	16-32		11166271	Charge pump cover assembly, 9cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Auxiliary mounting

MP1 aux mounting B16-BNN

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K120	16-32		11189476	Journal bearing	1
K200	16-32		KA1B244	O-ring	1
K300	16-32		11000819	Screw, M12 x 25	4
K400	16-32		11155777	Gerotor assembly, 9cc	1
K450	16-32		11171571	Gerotor ring, 9cc	1

Order code: B16

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Order code: B19

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163483	Coupling, 11 tooth	1

Order code: B22

K100	16-32		11174055	Adaptor assembly, B pad, 9cc	1
K500	16-32		11163484	Coupling, 13 tooth	1

Order code: B25

No parts					
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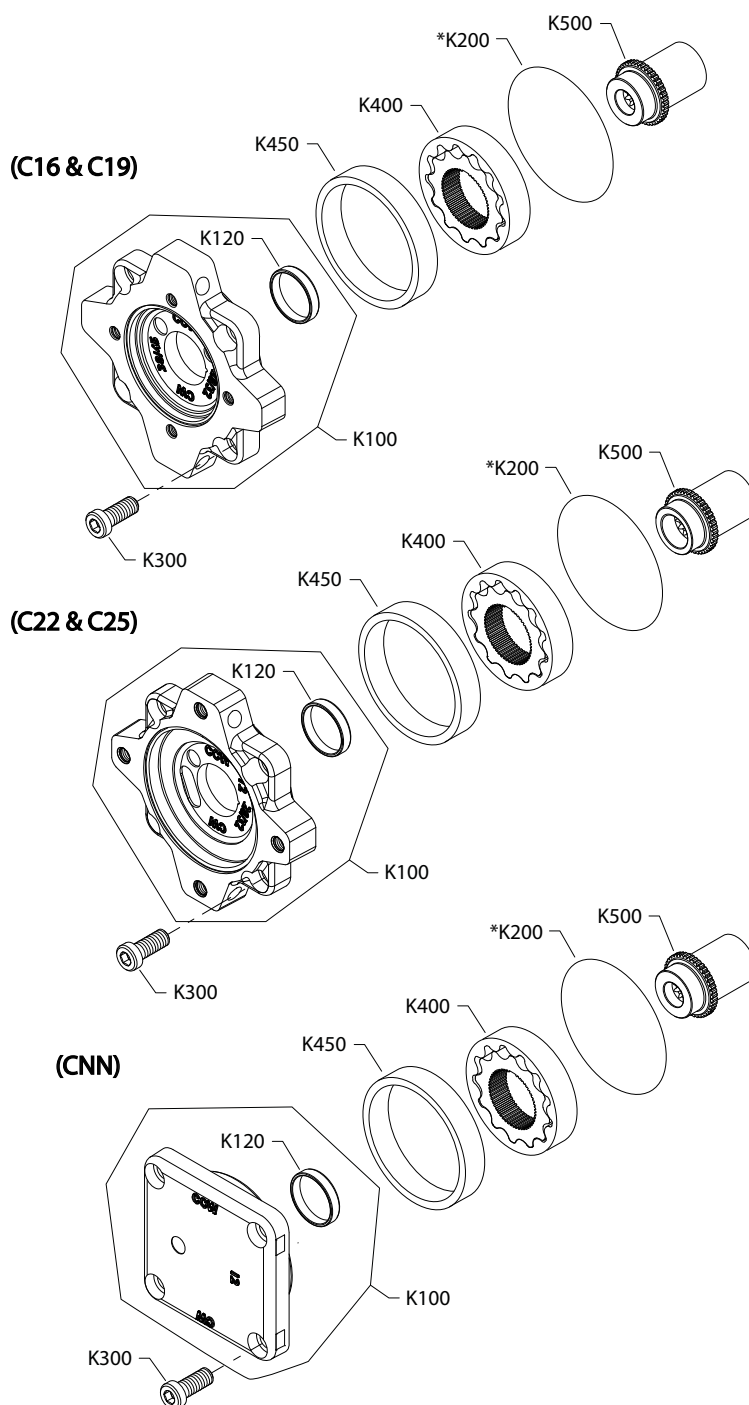
Order code: BNN

K100	16-32		11166271	Charge pump cover assembly, 9cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Auxiliary mounting

MP1 aux mounting C16-CNN

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K120	16-32		11189476	Journal bearing	1
K200	16-32		KA1B244	O-ring	1
K300	16-32		11000819	Screw, M12 x 25	4
K400	16-32		11077232	Gerotor assembly, 12cc	1
K450	16-32		141595	Gerotor ring, 12cc	1

Order code: C16

K100	16-32		11166272	Adaptor assembly, A pad, 12cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Order code: C19

K100	16-32		11166272	Adaptor assembly, A pad, 12cc	1
K500	16-32		11163483	Coupling, 11 tooth	1

Order code: C22

K100	16-32		11174068	Adaptor assembly, B pad, 12cc	1
K500	16-32		11163484	Coupling, 13 tooth	1

Order code: C25

No parts					
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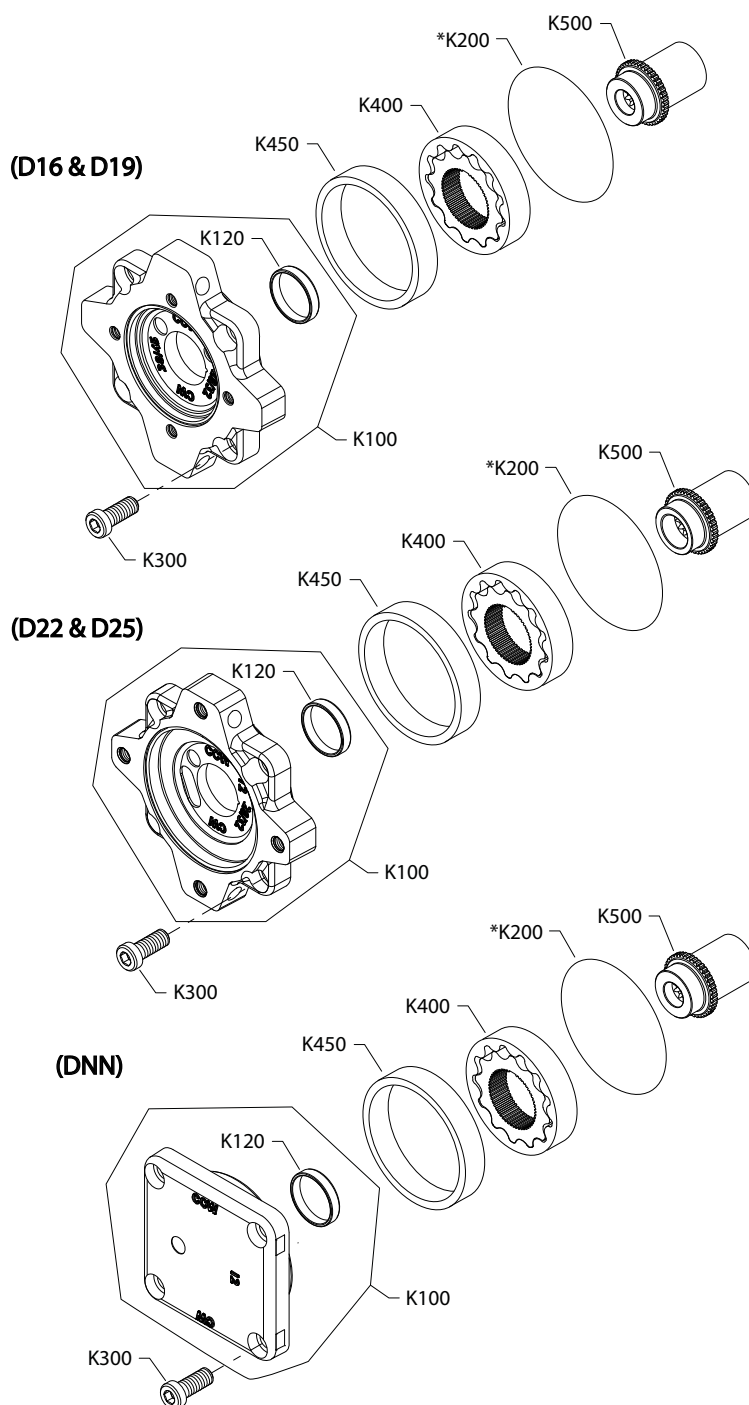
Order code: CNN

K100	16-32		11166274	Charge pump cover assembly, 12cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Auxiliary mounting

MP1 aux mounting D16-DNN

Parts configuration



* Included in overhaul seal kit Q210

Auxiliary mounting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K120	16-32		11189476	Journal bearing	1
K200	16-32		KA1B244	O-ring	1
K300	16-32		11000819	Screw, M12 x 25	4
K400	16-32		11077232	Gerotor assembly, 12cc	1
K450	16-32		141595	Gerotor ring, 12cc	1

Order code: D16

K100	16-32		11166272	Adaptor assembly, A pad, 12cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Order code: D19

K100	16-32		11166272	Adaptor assembly, A pad, 12cc	1
K500	16-32		11163483	Coupling, 11 tooth	1

Order code: D22

K100	16-32		11174068	Adaptor assembly, B pad, 12cc	1
K500	16-32		11163484	Coupling, 13 tooth	1

Order code: D25

No parts					
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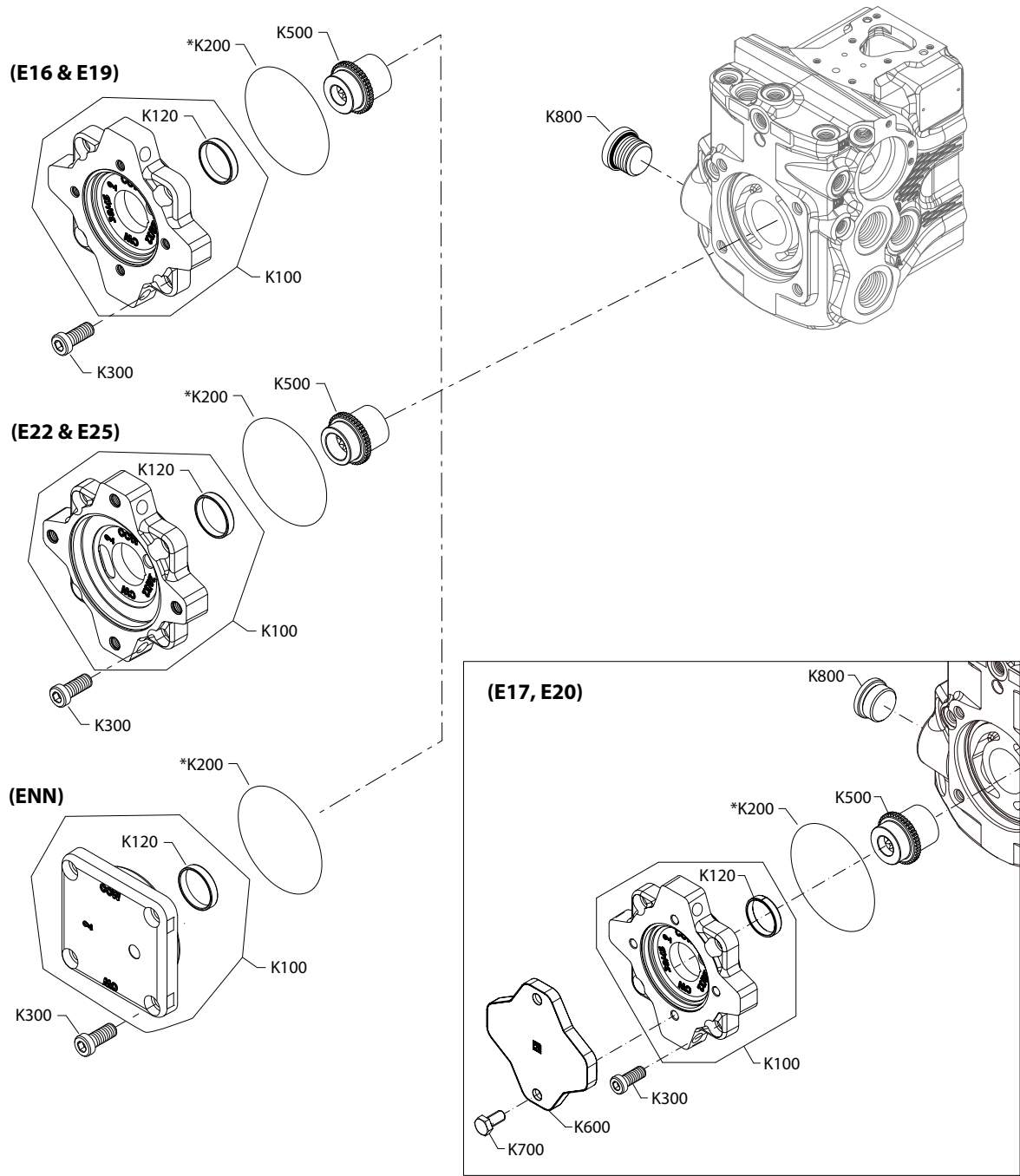
Order code: DNN

K100	16-32		11166274	Charge pump cover assembly, 12cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Auxiliary mounting

MP1 aux mounting E16-ENN

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Auxiliary mounting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K120	16-32		11189476	Journal bearing	1
K200	16-32		KA1B244	O-ring	1
K300	16-32		11000819	Screw, M12 x 25	4
K800	16-32		664524 (9005110-9000)	Plug assembly	1

Order code: E16

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Order code: E17

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163482	Coupling, 9 tooth	1
K600	22-44		11165482	Cover-running adapter, H1P045-280 82-2	1
K700	22-44		370247	Screw, M10 x 20	2

Order code: E19

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163483	Coupling, 11 tooth	1

Order code: E20

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163483	Coupling, 11 tooth	1
K600	23-10		11165482	Cover-running adapter, H1P045-280 82-2	1
K700	23-10		370247	Screw, M10 x 20	2

Order code: E22

K100	16-32		11174055	Adaptor assembly, B pad, 9cc	1
K500	16-32		11163484	Coupling, 13 tooth	1

Order code: E25

No parts					
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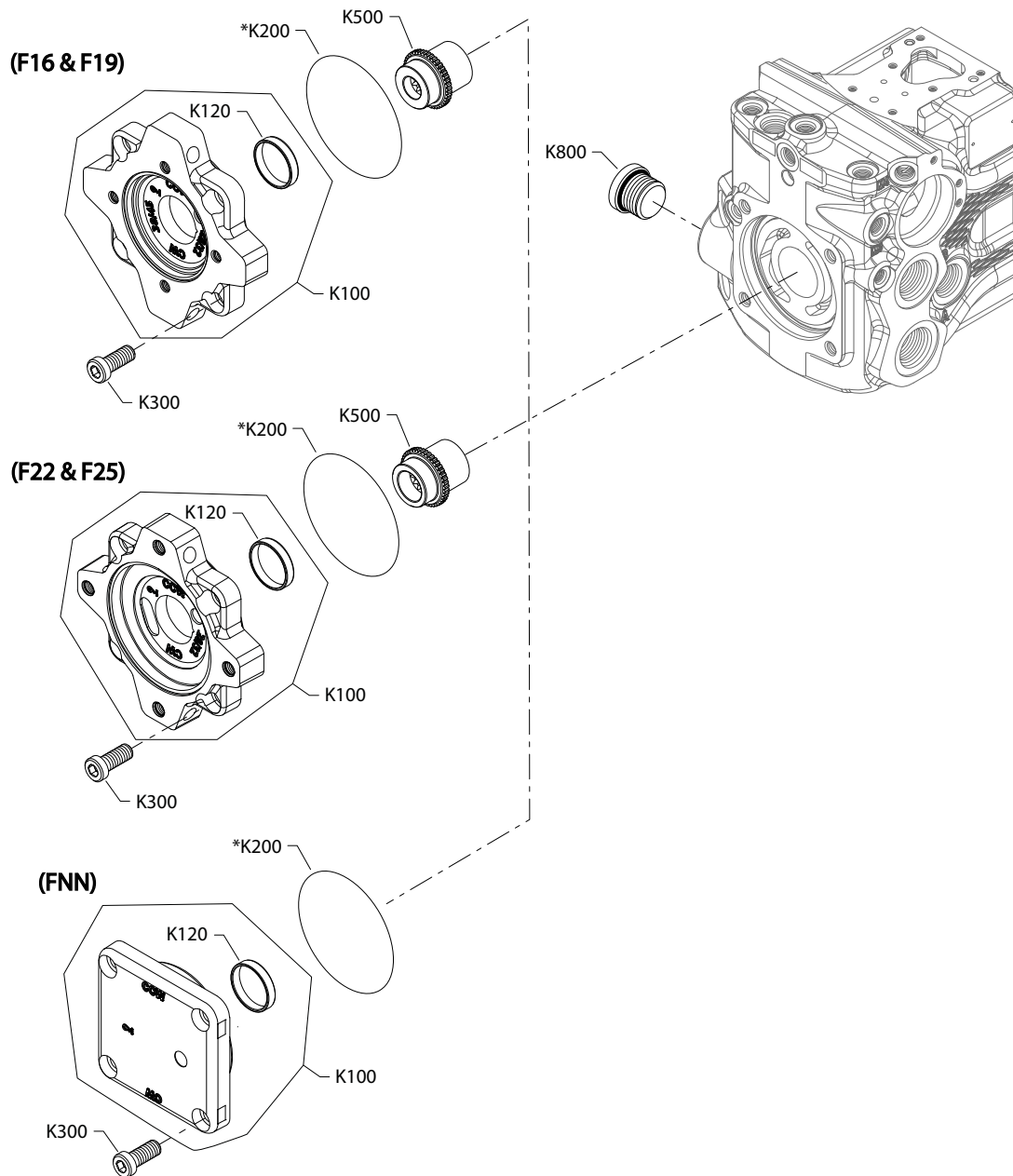
Order code: ENN

K100	16-32		11166271	Charge pump cover assembly, 9cc	1
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Auxiliary mounting

MP1 aux mounting F16-FNN

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Auxiliary mounting

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
K120	16-32		11189476	Journal bearing	1
K200	16-32		KA1B244	O-ring	1
K300	16-32		11000819	Screw, M12 x 25	4
K800	16-32		11134927	Plug assembly, M27	1

Order code: F16

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163482	Coupling, 9 tooth	1

Order code: F19

K100	16-32		11166265	Adaptor assembly, A pad, 9cc	1
K500	16-32		11163483	Coupling, 11 tooth	1

Order code: F22

K100	16-32		11174055	Adaptor assembly, B pad, 9cc	1
K500	16-32		11163484	Coupling, 13 tooth	1

Order code: F25

No parts					
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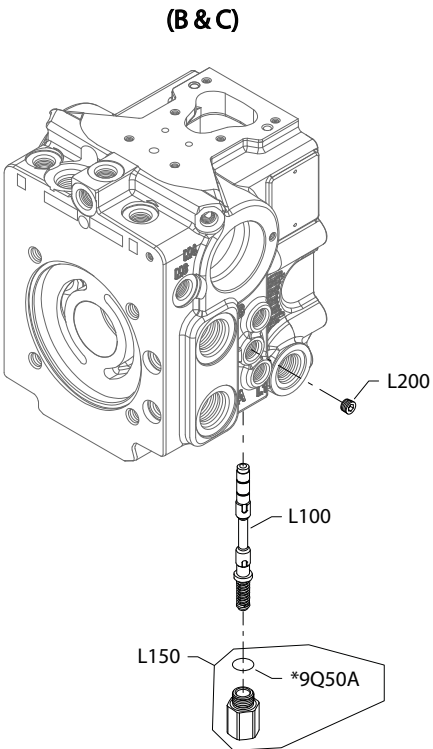
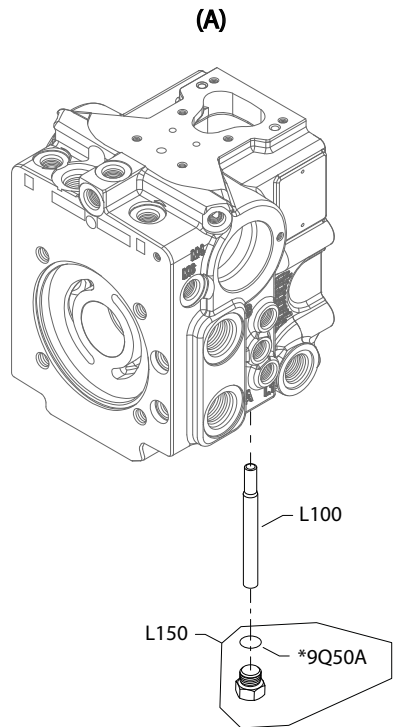
Order code: FNN

K100	16-32		11166271	Charge pump cover assembly, 9cc	1
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Loop flushing

MP1 loop flushing

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Loop flushing

Order code: A

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
L100	16-32		1735242	Loop flushing spool, defeated	1
L150	16-32		9005100-5600	Plug assembly	1
9Q50A	16-32		085043 (9004201-3700)	O-ring	1

Order code: B

L100	16-32		11060694	Loop flushing spool assembly	1
L150	16-32		4800279	Plug assembly	1
L200	16-32		11182693	Orifice, 1.6mm	1
9Q50A	16-32		085043 (9004201-3700)	O-ring	1

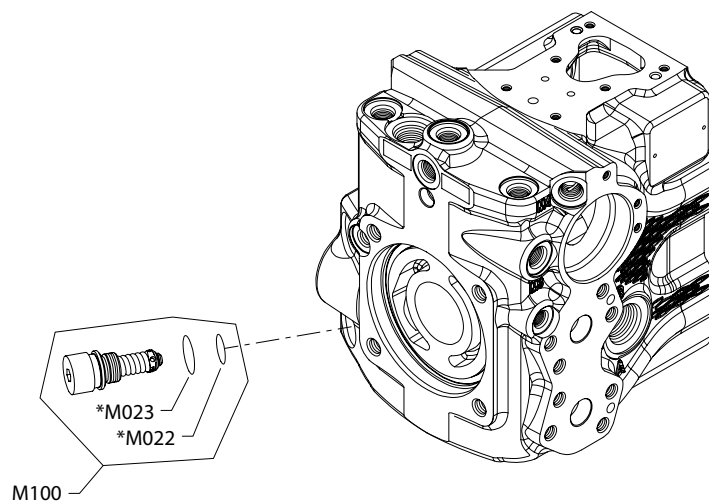
Order code: C

L100	16-32		11060694	Loop flushing spool assembly	1
L150	16-32		4800279	Plug assembly	1
L200	16-32		11182694	Orifice, 1.9mm	1
9Q50A	16-32		085043 (9004201-3700)	O-ring	1

System protection

MP1 system protections port A (140-385)

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

System protection

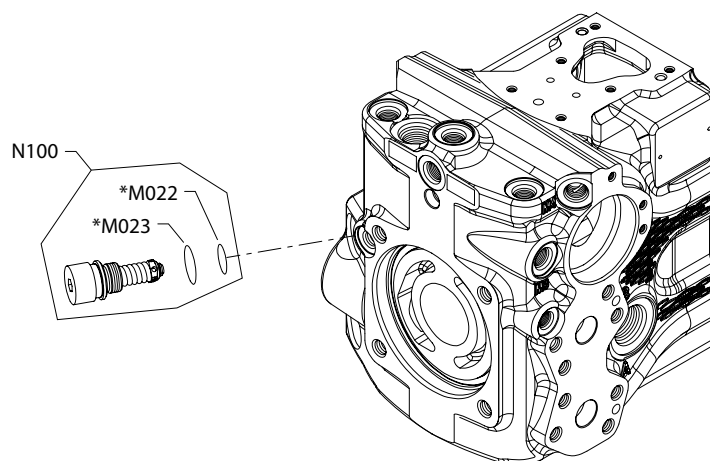
Order code: 140-385 parts

Order code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	M022	16-32		001131 (9004201-5000)	O-ring	1
	M023	16-32		9004100-2110	O-ring	1
140	M100	16-32		11224521	SCR valve assembly, 140 bar [2030 psi]	1
175	M100	16-32		11224532	SCR valve assembly, 175 bar [2538 psi]	1
190	M100	16-32		11224533	SCR valve assembly, 190 bar [2755 psi]	1
210	M100	16-32		11224534	SCR valve assembly, 210 bar [3045 psi]	1
230	M100	16-32		11224535	SCR valve assembly, 230 bar [3335 psi]	1
250	M100	16-32		11224536	SCR valve assembly, 250 bar [3625 psi]	1
260	M100	16-32		11224537	SCR valve assembly, 260 bar [3770 psi]	1
280	M100	16-32		11224538	SCR valve assembly, 280 bar [4060 psi]	1
300	M100	16-32		11224539	SCR valve assembly, 300 bar [4350 psi]	1
325	M100	16-32		11224540	SCR valve assembly, 325 bar [4712 psi]	1
345	M100	16-32		11224541	SCR valve assembly, 345 bar [5000 psi]	1
360	M100	16-32		11224542	SCR valve assembly, 360 bar [5220 psi]	1
385	M100	16-32		11224543	SCR valve assembly, 385 bar [5580 psi]	1

System protection

MP1 system protections port B (140-385)

Parts configuration



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

System protection

Order code: 140-385 parts

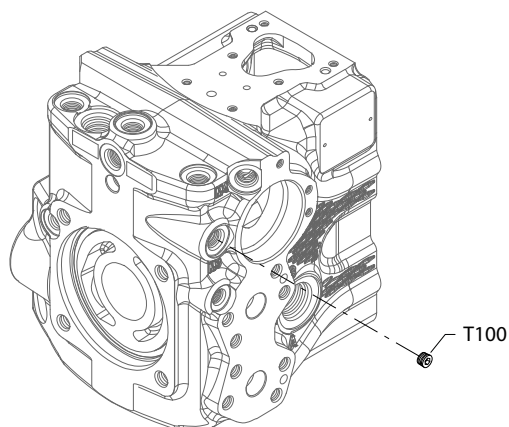
Order code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	M022	16-32		001131 (9004201-5000)	O-ring	1
	M023	16-32		9004100-2110	O-ring	1
140	N100	16-32		11224521	SCR valve assembly, 140 bar [2030 psi]	1
175	N100	16-32		11224532	SCR valve assembly, 175 bar [2538 psi]	1
190	N100	16-32		11224533	SCR valve assembly, 190 bar [2755 psi]	1
210	N100	16-32		11224534	SCR valve assembly, 210 bar [3045 psi]	1
230	N100	16-32		11224535	SCR valve assembly, 230 bar [3335 psi]	1
250	N100	16-32		11224536	SCR valve assembly, 250 bar [3625 psi]	1
260	N100	16-32		11224537	SCR valve assembly, 260 bar [3770 psi]	1
280	N100	16-32		11224538	SCR valve assembly, 280 bar [4060 psi]	1
300	N100	16-32		11224539	SCR valve assembly, 300 bar [4350 psi]	1
325	N100	16-32		11224540	SCR valve assembly, 325 bar [4712 psi]	1
345	N100	16-32		11224541	SCR valve assembly, 345 bar [5000 psi]	1
360	N100	16-32		11224542	SCR valve assembly, 360 bar [5220 psi]	1
385	N100	16-32		11224543	SCR valve assembly, 385 bar [5580 psi]	1

Filtration and charge pressure relief

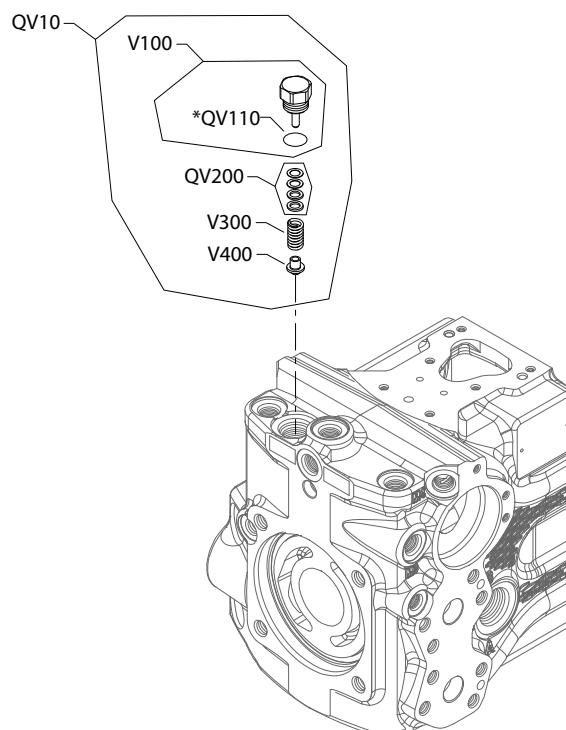
MP1 filtration and charge pressure relief

Parts configuration

(E & R)



(10-28)



* Included in overhaul seal kit Q210

Generic housing used to show part location only.

Filtration and charge pressure relief

Order code: E and R

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
T100	16-32		11151778	Pipe plug w/sealant	1

Order code: 10-12

QV10	16-32		11266646	Charge relief valve kit, 10-12 bar	1
QV110	16-32		001149 (9004201-6200)	O-ring	1
QV200	16-32		4510027	Shim kit	1
V100	16-32		4800308	Plug assembly	1
V300	16-32		4800714	Spring	1
V400	16-32		1200359	Poppet	1
V400	16-32		11259146	Poppet	1

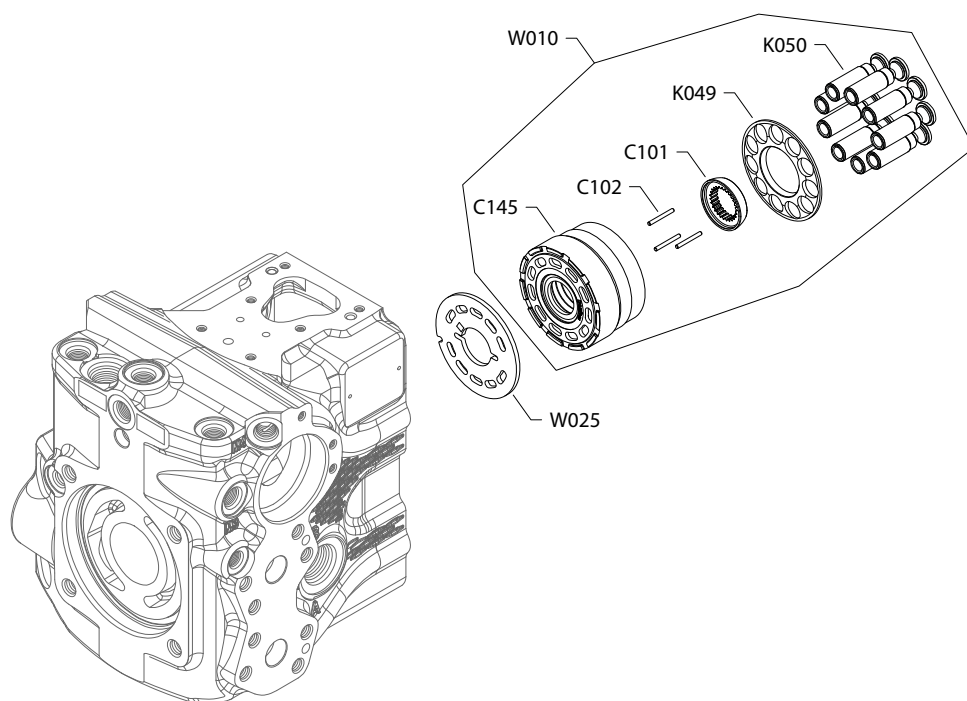
Order code: 14-28

QV10	16-32		11266333	Charge relief valve kit, 14-28 bar	1
QV110	16-32		001149 (9004201-6200)	O-ring	1
QV200	16-32		4510027	Shim kit	1
V100	16-32		4800308	Plug assembly	1
V300	16-32		4800176	Spring	1
V400	16-32		1200359	Poppet	1
V400	16-32		11259146	Poppet	1

Special hardware

MP1 28/32 special hardware LAC-LBD

Parts configuration



E103 455E

Generic housing and control used to show part location only.

Special hardware

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C101	16-32		11151154	Slipper retainer guide	1
C102	16-32		11152764	Slipper hold down pin	3
K049	16-32		11151155	Slipper retainer	1

Order code: LAC

C145	16-32		11223883	Cylinder block assembly, 28cc	1
K050	16-32		11166936	Piston assembly, 28cc	9
W010	16-32		11231515	Cylinder block kit, 28cc	1
W025	16-32		11152373	Valve plate, CCW	1

Order code: LAD

C145	16-32		11223889	Cylinder block assembly, 32cc	1
K050	16-32		11166934	Piston assembly, 32cc	9
W010	16-32		11231514	Cylinder block kit, 32cc	1
W025	16-32		11152373	Valve plate, CCW	1

Order code: LBC

C145	17-37		11223883	Cylinder block assembly, 28cc	1
K050	17-37		11166936	Piston assembly, 28cc	9
W010	17-37		11231515	Cylinder block kit, 28cc	1
W025	17-37		11195936	Valve plate, CCW	1

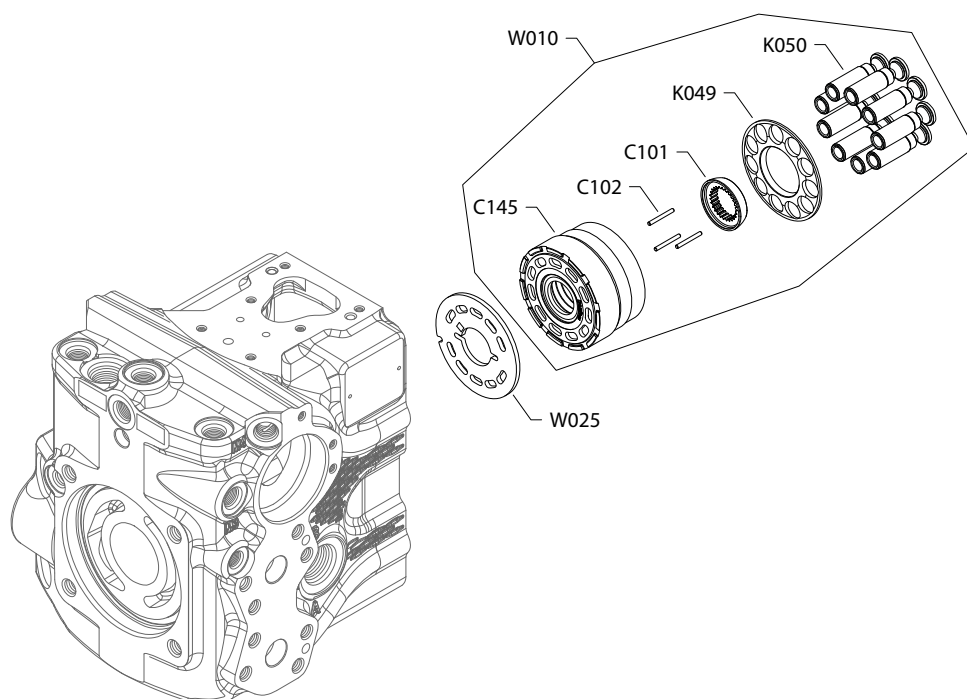
Order code: LBD

C145	17-37		11223889	Cylinder block assembly, 32cc	1
K050	17-37		11166934	Piston assembly, 32cc	9
W010	17-37		11231514	Cylinder block kit, 32cc	1
W025	17-37		11195936	Valve plate, CCW	1

Special hardware

MP1 special hardware RAC-RCD

Parts configuration



E103 455E

Generic housing used to show part location only

Special hardware

Common parts

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C101	16-32		11151154	Slipper retainer guide	1
C102	16-32		11152764	Slipper hold down pin	3
K049	16-32		11151155	Slipper retainer	1

Order code: RAC

C145	16-32		11223883	Cylinder block assembly, 28cc	1
K050	16-32		11166936	Piston assembly, 28cc	9
W010	16-32		11231515	Cylinder block kit, 28cc	1
W025	16-32		11152372	Valve plate, CW	1

Order code: RAD

C145	16-32		11223889	Cylinder block assembly, 32cc	1
K050	16-32		11166934	Piston assembly, 32cc	9
W010	16-32		11231514	Cylinder block kit, 32cc	1
W025	16-32		11152372	Valve plate, CW	1

Order code: RBC

C145	17-37		11223883	Cylinder block assembly, 28cc	1
K050	17-37		11166936	Piston assembly, 28cc	9
W010	17-37		11231515	Cylinder block kit, 28cc	1
W025	17-37		11195100	Valve plate, CW	1

Order code: RBD

C145	17-37		11223889	Cylinder block assembly, 32cc	1
K050	17-37		11166934	Piston assembly, 32cc	9
W010	17-37		11231514	Cylinder block kit, 32cc	1
W025	17-37		11195100	Valve plate, CW	1

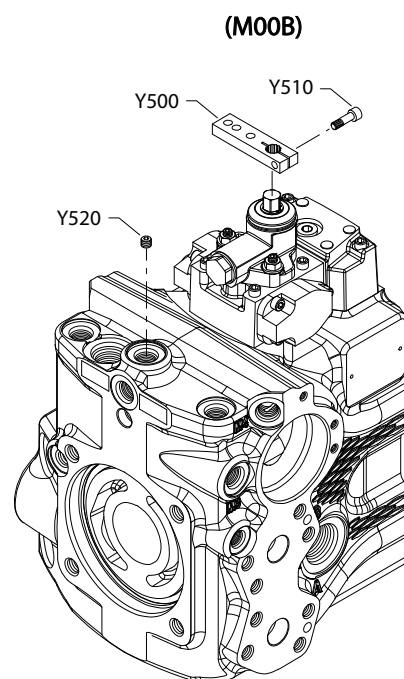
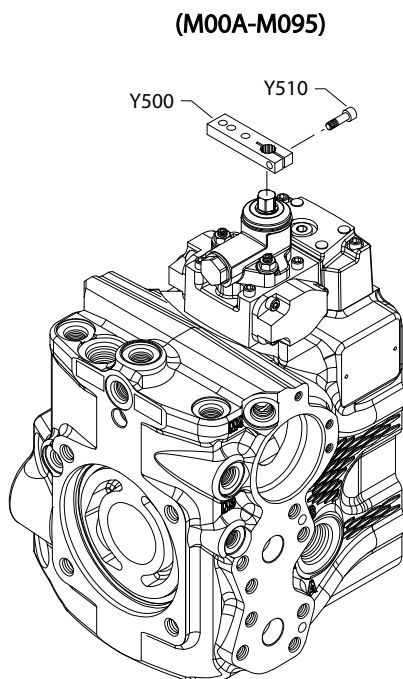
Order code: RCD

C145	16-32		11223889	Cylinder block assembly, 32cc	1
K050	16-32		11166934	Piston assembly, 32cc	9
W010	16-32		11231514	Cylinder block kit, 32cc	1
W025	16-32		11345522	Valve plate, CW, special (low noise)	1

Settings

MP1 settings M00A-M095

Parts configuration



Generic housing and control used to show part location only.

Settings

Settings parts list

Order code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
M00A	Y500	16-32		11185938	Control handle (SB-2018-024 on page 108)	1
	Y510	16-32		11173701	Screw, M6 x 20	1
M00B	Y500	16-32		11185938	Control handle (SB-2018-024 on page 108)	1
	Y510	16-32		11173701	Screw, M6 x 20	1
	Y520	16-32		11151778	Pipe plug	1
M080	Y500	16-32		11185938	Control handle (SB-2018-024 on page 108)	1
	Y510	16-32		11173701	Screw, M6 x 20	1
M085	Y500	16-32		11185938	Control handle (SB-2018-024 on page 108)	1
	Y510	16-32		11173701	Screw, M6 x 20	1
M090	Y500	16-32		11185938	Control handle (SB-2018-024 on page 108)	1
	Y510	16-32		11173701	Screw, M6 x 20	1
M095	Y500	16-32		11185938	Control handle (SB-2018-024 on page 108)	1
	Y510	16-32		11173701	Screw, M6 x 20	1

Overhaul seal kit

MP1 28/32cc seal kit

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
Q210	16-32		11173507	Overhaul seal kit	1
9Q50A	16-32		085043 (9004201-3700)	O-ring	1
D060	16-32		612291 (9003508-0008)	Seal nut, M8	1
D150	16-32		11227209	Control gasket	1
D610	19-07	21-12	11000467	Plug assembly (SB-2021-014 on page 108)	2
D611	21-13		11066774	O-ring	2
D612	21-13		11003126	Plug	2
E080	16-32		505412 (9003509-0008)	Seal nut, M8	1
E090	16-32		505412 (9003509-0008)	Seal nut, M8	1
E110	16-32		9004104-1350	O-ring	2
E320	16-32		KA1A218	O-ring	2
E330	16-32		11154492	Piston seal ring	2
H110	16-32		11154506	Front cover seal gasket	1
J250	16-32		11165487	Lip seal	1
K200	16-32		9004100-2400	O-ring	1
M022	16-32		001131 (9004201-5000)	O-ring	2
M023	16-32		9004100-2110	O-ring	2
QD26	16-32		11001952	O-ring	2
QD751	16-32		001131 (9004201-5000)	O-ring	1
QD81	16-32		11152257	O-ring	1
QV110	16-32		001149 (9004201-6200)	O-ring	1

Service bulletin

SB-2018-024

Products affected

MP1 controls

Subject

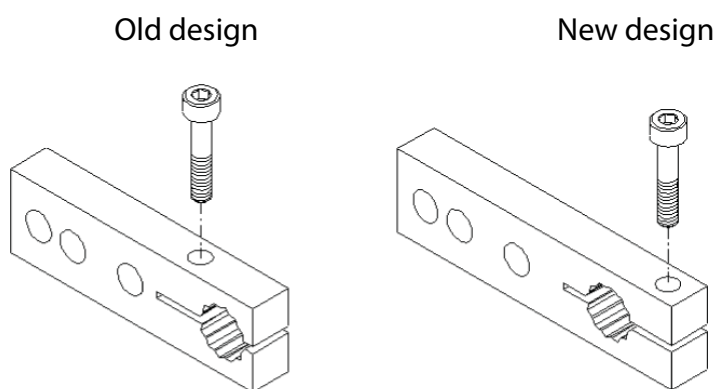
Manual displacement control design change

Description

Danfoss has changed the control handle design on all manual displacement controls used on 28/32cc and 38/45cc MP1 pumps as a product improvement.

The tension screw location has been moved to the outer edge of the part to increase the clamping capacity onto the shaft.

The new part is interchangeable with the old part, but the old part is not interchangeable with the new part due to the clamp load of the part to the shaft.



Models affected

MP1 28/32cc and 38/45cc pumps

Serial numbers affected

This change became effective at February 28, 2018 (A-18-09-xxxxx)

Part numbers affected

Description	Old part number	New part number
Handle	11113513	11185938

Parts disposition

Non-interchangeable (because of clamp load)

SB-2021-014

Products affected

H1 and MP1 pumps

Service bulletin

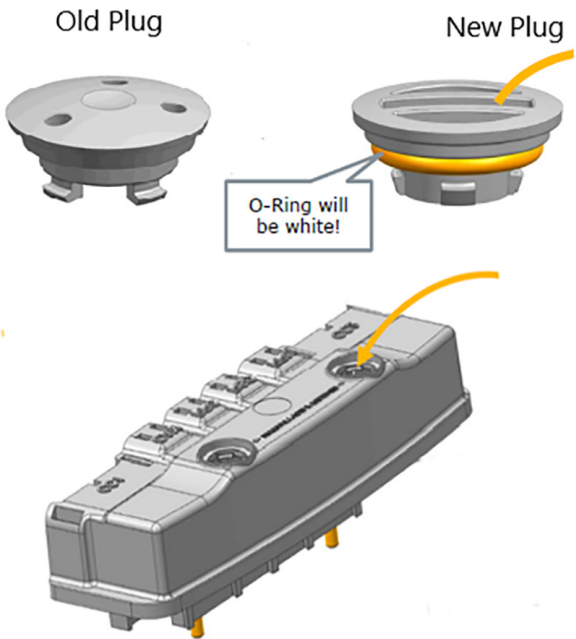
Subject

Automotive control plug design change

Description

Danfoss Power Solutions has made a design change to the Automotive Control (AC) plug on H1 and MP1 products. The new O-ring has an improved seal around the plug to the housing. This affects all automotive control service kits (AC).

The new and old plugs are not interchangeable. Overhaul seal kits will contain both the old and new plugs. Automotive Control (AC) service kit part numbers have been changed because the plug is non-interchangeable. The older service kits have been obsoleted.



Models affected

H1, MP1 Automotive Control (AC)

Serial numbers affected

- This change became effective at N-21-13-xxxxx 01 April 2021
- This change became effective at S-21-17-xxxxx 28 May 2021
- This change became effective at A-21-18-xxxxx 03 May 2021

Part numbers affected

Description	Old Part Number	New Part Number
PLUG-HOUSING-CONTROLLER-AC H1P ASSY	11000467	11226992
SVC KIT-AC1, GEN1 12V GENERIC D3F	11065118	11232544
SVC KIT-AC2, GEN1 12V GENERIC D5F	11065119	11232766
SVC KIT-AC1, GEN1 24V GENERIC D4F	11065120	11232765
SVC KIT-AC2, GEN1 24V GENERIC D6F	11065121	11232767

Service bulletin

Description	Old Part Number	New Part Number
SVC KIT-AC1, GEN3 12V GENERIC D3F	11147941	11232768
SVC KIT-AC2, GEN3 12V GENERIC D5F	11147940	11232770
SVC KIT-AC1, GEN3 24V GENERIC D4F	11147943	11232769
SVC KIT-AC2, GEN3 24V GENERIC D6F	11147942	11232771
SVC KIT-AC1, GEN3 FLASH 12V GENERIC F1E	11180761	11232792
SVC KIT-AC1, GEN3 FLASH 24V GENERIC F1E	11180762	11232793
SVC KIT-AC2, GEN3 FLASH 12V GENERIC F2J	11180763	11232794
SVC KIT-AC2, GEN3 FLASH 24V GENERIC F2J	11180765	11232795
SVC KIT-AC1, GEN1 HG 12V GENERIC D3F	11082509	11234305
SVC KIT-AC2, GEN1 HG 12V GENERIC D5F	11082522	11234306
SVC KIT-AC1, GEN1 HG 24V GENERIC D4F	11082524	11234307
SVC KIT-AC2, GEN1 HG 24V GENERIC D6F	11052526	11234308
SVC KIT-AC1, H1P078 GEN1 12V CUST D33	11134620	11234311
SVC KIT-AC1, GEN1 12V CUST D57	11155464	11234317
SVC KIT-AC1, H1P078 GEN1 12V CUST D20	11160841	11234319
SVC KIT-AC1, GEN1 24V CUST D61	11193660	11234326
SVC KIT-AC2, GEN1 24V GENERIC D5J	11195129	11234327
SVC KIT-AC2, GEN1 24V CUST C90 C93	11195374	11234328
SVC KIT-AC1, GEN1 12V CUST D90	11193446	11234416
SVC KIT-AC1, GEN3 12V CUST D90	11198212	11234417
SVC KIT-AC1, GEN3 12V CUST D93	11201433	11234418
SVC KIT-AC1, GEN1 12V CUST D12	11201908	11234419
SVC KIT-AC, H1P 12V CUST (D92)	11235075	11235075
SVC KIT-AC1, GEN3 FLASH 12V FA1	11239052	11281634

Parts disposition

Non-interchangeable

SB-2024-007

Products affected

H1 manual controls

Subject

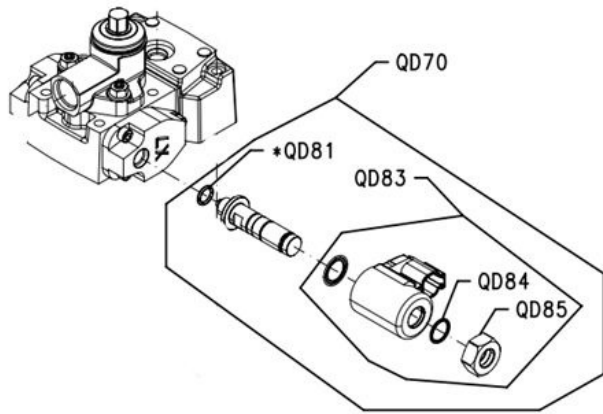
CCO thread

Description

Danfoss has increased the overall length of the coil and nut by 2mm on the CCO valve assembly. This effect all manual control valves on H1P, H1T and MP1 pumps. Can substitute new solenoid kit for old solenoid kit: CANNOT substitute old service kit for new service kit.

The internal parts are not interchangeable from new to old, or old to new. The old solenoid assembly and their internal parts are obsolete and no longer available as service parts.

Service bulletin



Models affected

H1 manual controls

Serial numbers affected

This change became effective at February 02, 2024

Part numbers affected

Description	Old part number	New part number	Item #
SOLENOID, ON/OFF THREAD 12V DT04-2P	11129916	11231212	QD70
SOLENOID, ON/OFF THREAD 24V DT04-2P	11129917	11231213	QD70
O-RING, HMS151 9.00x1.80 N NBR70	11152257	No Change	QD81
NUT-HEX, SW22	11140394	No Change	QD85
Internal parts non- interchangeable			QDxx *
SVC KIT-COIL, 12V DT CONN CCO	11136347	11253939	QD83 *
SVC KIT-COIL, 24V DT CONN CCO	11136348	11253938	QD83 *
O-RING, ISO3601-1 13.00x2.00 N-FKM70	11140393	11232752	QD84 *
O-RING, ISO3601-1 17.00x1.50 N-VMQ70	11149504	11232753	QD86 *

Parts disposition

Non-interchangeable (internal parts)

Interchangeable (complete assembly)

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