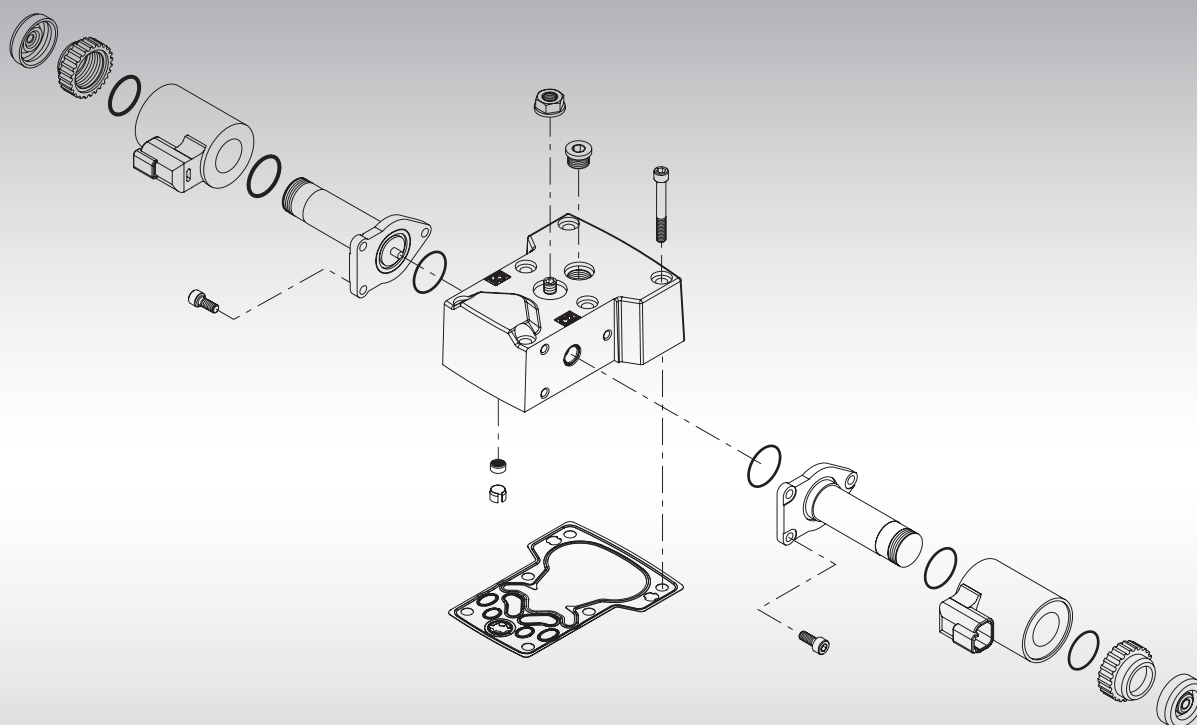




Parts Manual

H1P 60 & 68cc Variable Displacement Pump





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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 H1 60 and 68cc variable displacement pumps.

The parts listed include all parts which may be used when performing either "Minor Repairs", "Major Repairs" or "Conversions" on the H1 60 and 68cc pump.

Nameplate

Each unit will have a nameplate affixed to the housing. The nameplate will include the following information.

Model Code

The Sauer-Danfoss model code completely defines the specific unit and must be used when ordering parts to service this product.

Model Number

The Sauer-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 Sauer-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). "A" indicates the unit was originally assembled in Ames, Iowa.

The first number (2 digits) indicates the year of manufacture. ("10" would indicate the unit was manufactured in 2010)

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	87-02	89-16	8000151	End cap gasket (SB-1995-006)	1

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

Service bulletins

A Service Bulletin Number (SB-____-____) may follow the "Part Name" of the part you desire. You must read that Service Bulletin prior to ordering that part. The information contained in these Service Bulletins, as of the print date of this bulletin, are included at the end of this manual. Service Bulletins contain more detailed information such as interchangeability, what additional parts are involved, etc. It is suggested that you add additional Service Bulletins to this manual as you receive them.

Procedure to identify a part

General

The modular design of H1 units results in a simplified service parts list and part number identification procedure.

The same item numbers are used for same part names on all units within a product type. (Example: The lip seal - Item J250 has the same item number on all pumps.)

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

Example of a Part Identification

The nameplate on an H1 pump has an Order Code of H1P60 L A A4 C2 N D8 H G1 NN L 43 L 43 F 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 (see page 7), the input shaft option for this pump is identified by the code "G1". (H1P60 L A A4 C2 N D8 H G1 NN L 43 L 43 F P 24 NN NNN NNN)

2) Referring to the Service Parts List, find the shaft group. Next find the order code that relates to this unit, which is "G1". The shaft is found to be item J100 and part number 11038238.

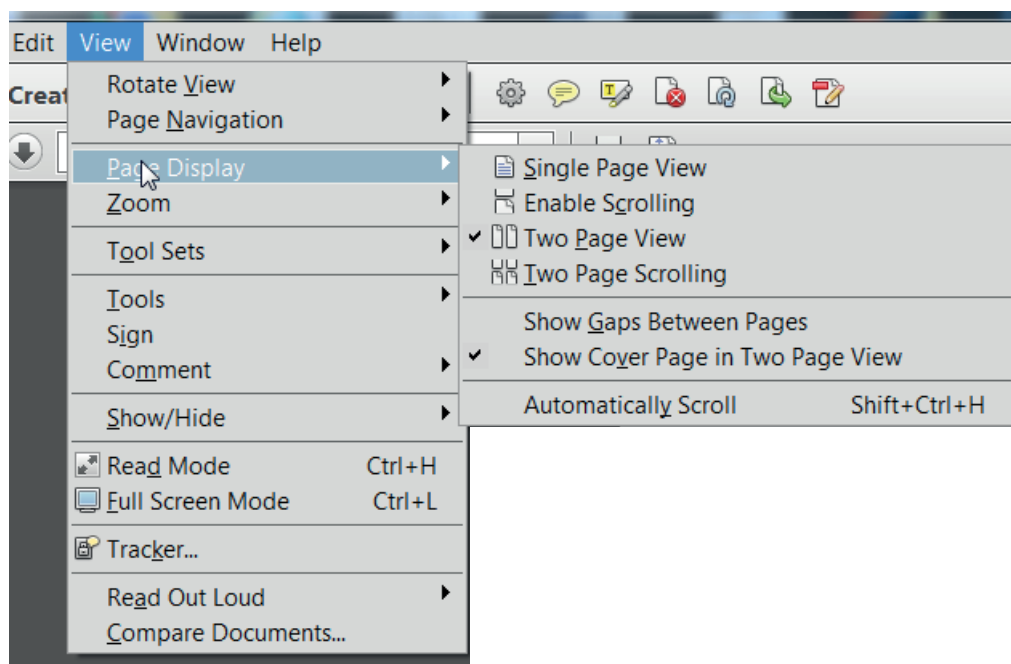


Adobe Acrobat 2-page viewing

Adobe Acrobat 2-page viewing

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

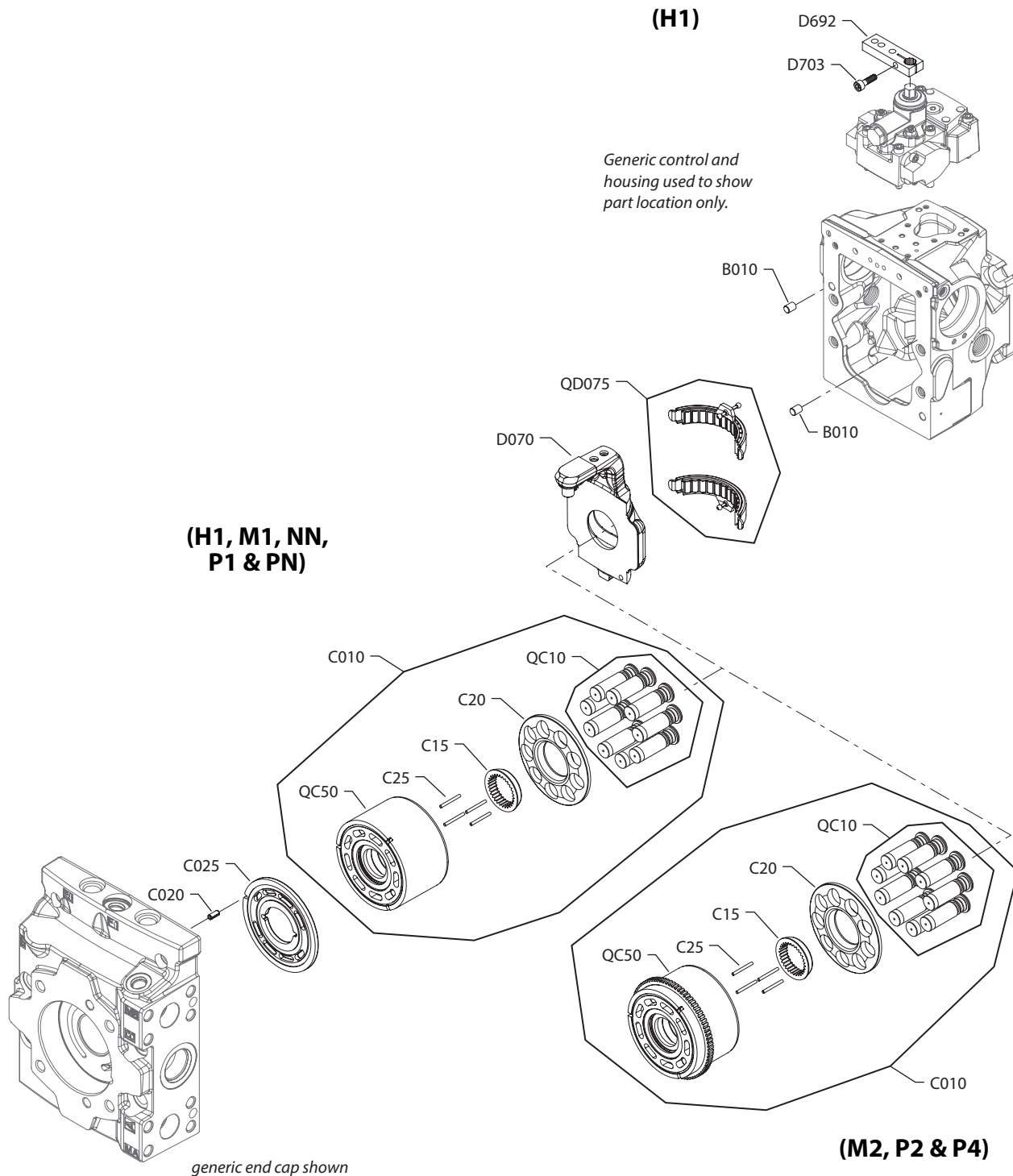
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Order code

Series	Product Type	Frame Size	Product Version	Port Configuration	Rotation	Control	Orifice	Displacement limitation	End cap	Mounting flange	Input shaft	Auxiliary mounting	High pressure setting, port A	High pressure setting, port B	Charge pump	Filtration	Charge relief pressure setting	Special hardware features	Paint and nametag	Settings							
H1	P	060	L	A	A	A4	C2	N	D8	H	G1	NN	M	L43	N	L43	S	F	T	V	24	PN	W	X	NNN	Y	NNN

Variable displacement pump



Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

Common parts

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	B010	10-48		5000757	Dowel pin	2
	C020	10-48		9004700-1907	Valve plate pin	1
	C025	10-48		11082840	Valve plate, CCW	1
	C025	10-48		11081201	Valve plate, CW	1
	C15	10-48		11033139	Slipper retainer guide	1
	C20	10-48		11033140	Slipper retainer	1
	C25	10-48		11040075	Slipper hold down pin	4
	D070	10-48		11121000	Swashplate	1
	QC10	10-48		11087709	Slipper/piston kit, 60 cc	1
	QC10	10-48		11087710	Slipper/piston kit, 68 cc	1
	QD075	10-48		11086555	Swashplate bearing kit	1

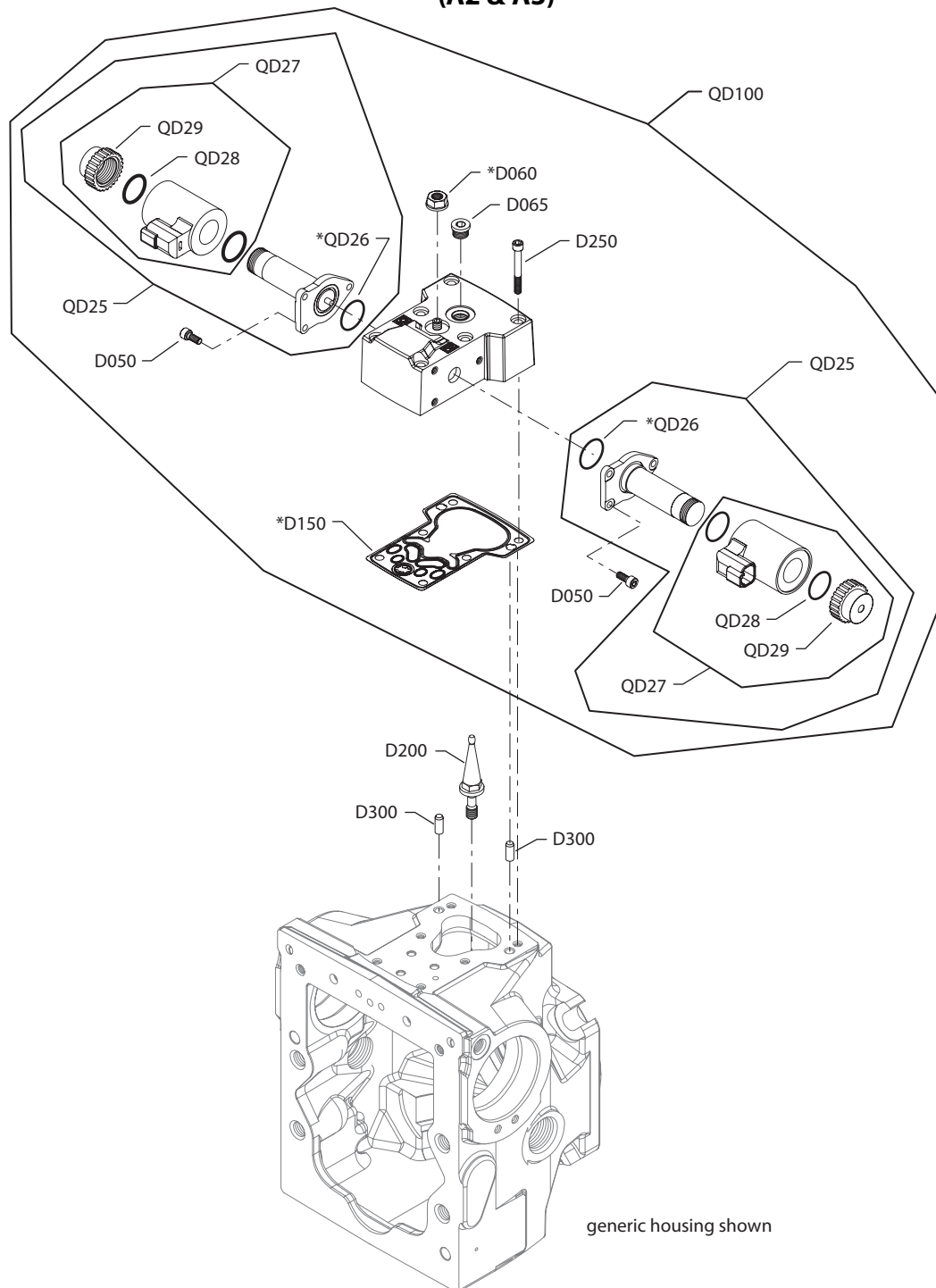
Special hardware

H1	C010	14-33		11050563	Cylinder block kit, 60 cc	1
	C010	14-33		11033143	Cylinder block kit, 68 cc	1
	D692	14-33		11113513	Control handle	1
	D703	14-33		041160 (9007314-0605)	Screw, M6 x 20	1
	QC50	14-33		11050267	Cylinder block assembly, 60 cc	1
	QC50	14-33		11033144	Cylinder block assembly, 68 cc	1
M1	Replaced with P1					
M2	Replaced with P2					
NN	Replaced with PN					
P1	C010	10-48		11050563	Cylinder block kit, 60 cc	1
	C010	10-48		11033143	Cylinder block kit, 68 cc	1
	QC50	10-48		11050267	Cylinder block assembly, 60 cc	1
	QC50	10-48		11033144	Cylinder block assembly, 68 cc	1
P2	C010	10-48		11050248	Cylinder block kit, 60 cc, with speed ring	1
	C010	10-48		11050247	Cylinder block kit, 68 cc, with speed ring	1
	QC50	10-48		11106174	Cylinder block assembly, 60 cc, with speed ring	1
	QC50	10-48		11106175	Cylinder block assembly, 68 cc, with speed ring	1
P4	C010	13-18		11050248	Cylinder block kit, 60 cc, speed ring	1
	C010	13-18		11050247	Cylinder block kit, 68 cc, speed ring	1
	QC50	13-18		11106174	Cylinder block assembly, 60 cc, with speed ring	1
	QC50	13-18		11106175	Cylinder block assembly, 68 cc, with speed ring	1
PN	C010	10-48		11050563	Cylinder block kit, 60 cc	1
	C010	10-48		11033143	Cylinder block kit, 68 cc	1
	QC50	10-48		11050267	Cylinder block assembly, 60 cc	1
	QC50	10-48		11033144	Cylinder block assembly, 68 cc	1



Variable displacement pump

(A2 & A3)



E100 912E

* = included in overhaul seal kit Q210

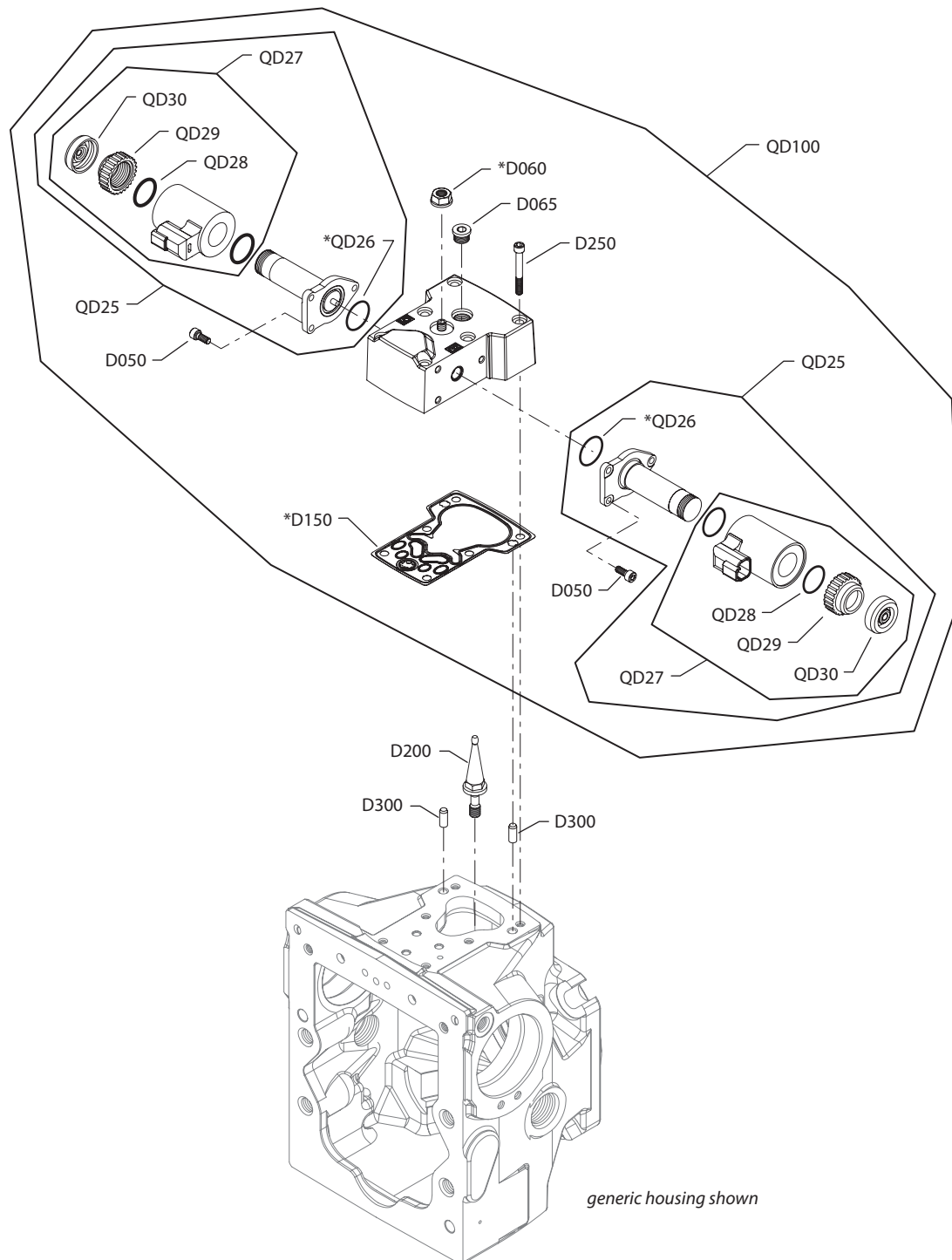
Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A2	D050	10-48		716860	Screw, M5 x 12	6
	D060	10-48		612291 (9003508-0008)	Seal nut, M8	1
	D065	10-48		140642	Plug assembly	1
	D150	10-48		11173377	Control gasket (SB-2016-033)	1
	D200	10-48		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	10-48		505038	Screw, M6 x 45	6
	D300	10-48		310979	Dowel pin	2
	QD25	10-48		11012457	Proportional solenoid, 12V	2
	QD26	10-48		11001952	O-ring	2
	QD27	10-48		11028018	Coil kit, 12V, Deutsch connector	2
	QD28	10-48		063172	O-ring	2
	QD29	10-48		11027046	Coil nut	2
	QD100	10-48		11019680	EDC kit, 12V, Deutsch connector, fast	1
A3	D050	10-48		716860	Screw, M5 x 12	6
	D060	10-48		612291 (9003508-0008)	Seal nut, M8	1
	D065	10-48		140642	Plug assembly	1
	D150	10-48		11173377	Control gasket (SB-2016-033)	1
	D200	10-48		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	10-48		505038	Screw, M6 x 45	6
	D300	10-48		310979	Dowel pin	2
	QD25	10-48		11012459	Coil kit, 24V, Deutsch connector	2
	QD26	10-48		11001952	O-ring	2
	QD27	10-48		11028019	Coil kit, 24V, Deutsch connector	2
	QD28	10-48		063172	O-ring	2
	QD29	10-48		11027046	Coil nut	2
	QD100	10-48		11019681	EDC kit, 24V, Deutsch connector, fast	1



Variable displacement pump

(A4 & A5)



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* = included in overhaul seal kit Q210

Parts Manual

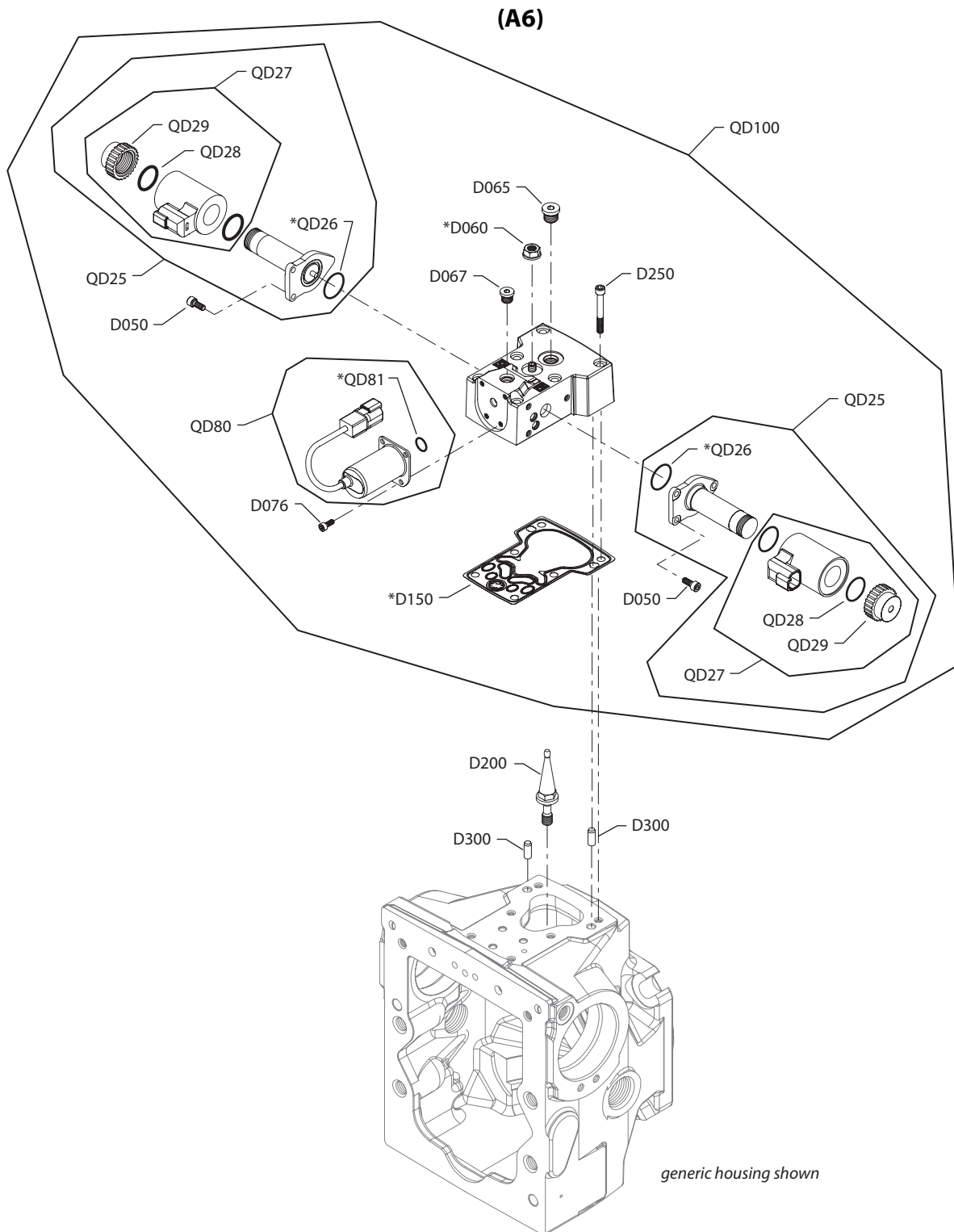
H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A4	D050	10-48		716860	Screw, M5 x 12	6
	D060	10-48		612291 (9003508-0008)	Seal nut, M8	1
	D065	10-48		140642	Plug	1
	D150	10-48		11173377	Control gasket (SB-2016-033)	1
	D200	10-48		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	10-48		505038	Screw, M6 x 45	6
	D300	10-48		310979	Dowel pin	2
	QD25	05-18		140750	Proportional solenoid, 12v	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	10-48		11019732	EDC kit, 12V, high gain spool, manual override	1
A5	D050	10-48		716860	Screw, M5 x 12	6
	D060	10-48		612291 (9003508-0008)	Seal nut, M8	1
	D065	10-48		140642	Plug	1
	D150	10-48		11173377	Control gasket (SB-2016-033)	1
	D200	10-48		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	10-48		505038	Screw, M6 x 45	6
	D300	10-48		310979	Dowel pin	2
	QD25	05-18		140751	Proportional solenoid, 24v	2
	QD26	05-18		11001952	O-ring	2
	QD27	05-18		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	05-18		063172	O-ring	2
	QD29	05-18		11004749	Coil nut	2
	QD30	05-18		11027883	Cap	2
	QD100	10-48		11019733	EDC kit, 24V, high gain spool, manual override	1

Variable displacement pump



E101 787E

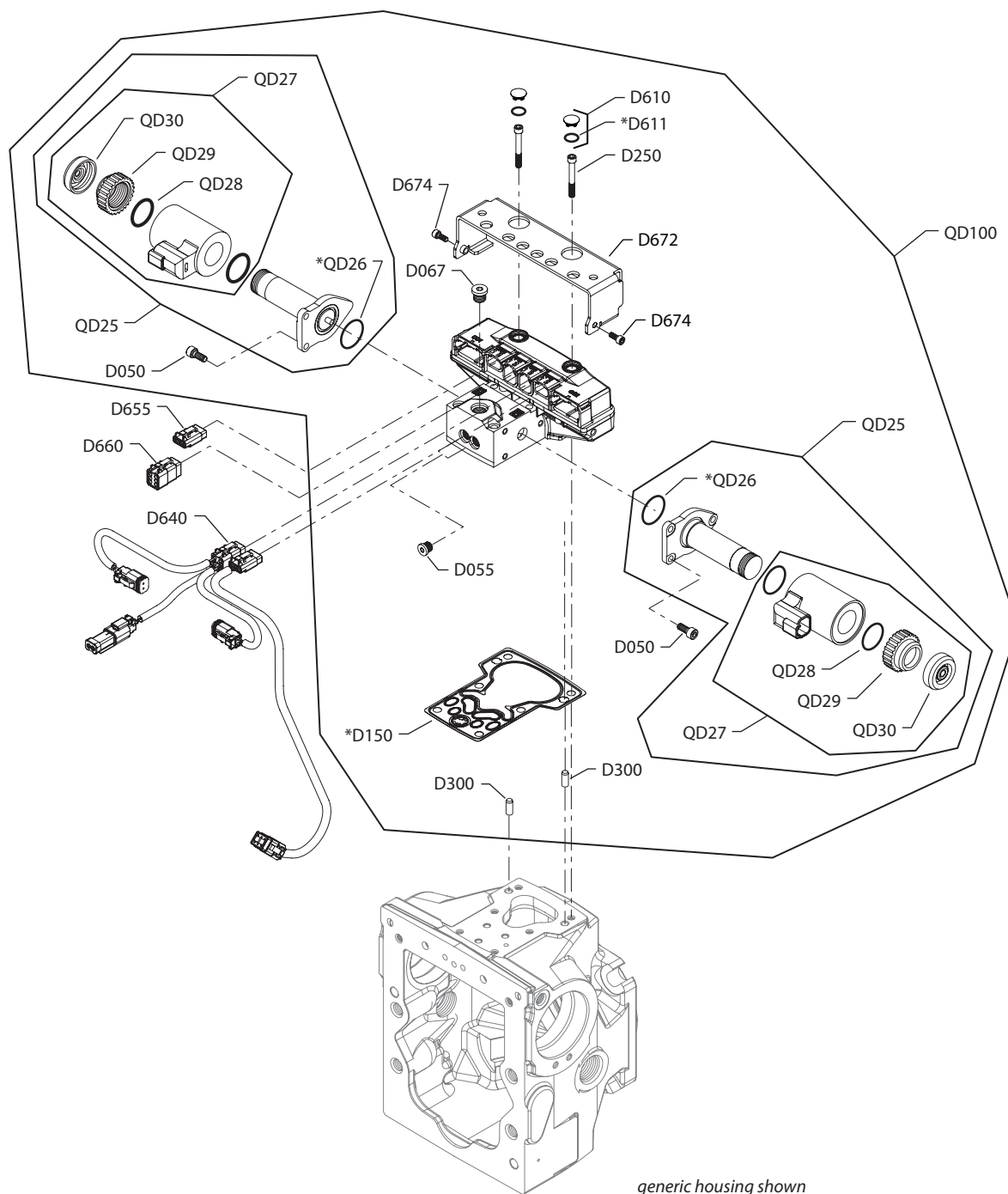
* = included in overhaul seal kit Q210

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A6	D050	10-48	12-49	716860	Screw, M5 x 12	6
	D060	10-48	12-49	612291 (9003508-0008)	Seal nut, M8	1
	D065	10-48	12-49	140642	Plug assembly	1
	D067	10-48	12-49	11040532	Plug assembly	1
	D076	10-48	12-49	346957	Screw, M4 x 8	4
	D150	10-48	12-49	11173377	Control gasket (SB-2016-033)	1
	D200	10-48	12-49	11148827	Swashplate feedback link (SB-2016-028)	1
	D250	10-48	12-49	505038	Screw, M6 x 45	6
	D300	10-48	12-49	310979	Dowel pin	2
	QD25	10-48	12-49	11012457	Proportional solenoid, 12V	2
	QD26	10-48	12-49	11001952	O-ring	2
	QD27	10-48	12-49	11028018	Coil kit, 12V, Deutsch connector	2
	QD28	10-48	12-49	063172	O-ring	2
	QD29	10-48	12-49	11027046	Coil nut	2
	QD080	10-48	12-49	11015978	Solenoid- on/off, 12 volt	1
	QD081	10-48	12-49	11059551	O-ring	1
	QD100	10-48	12-49	11019736	EDC kit, 12V, high gain spool, control override	1

Variable displacement pump

(A7)



E101 763E

* = included in overhaul seal kit Q210

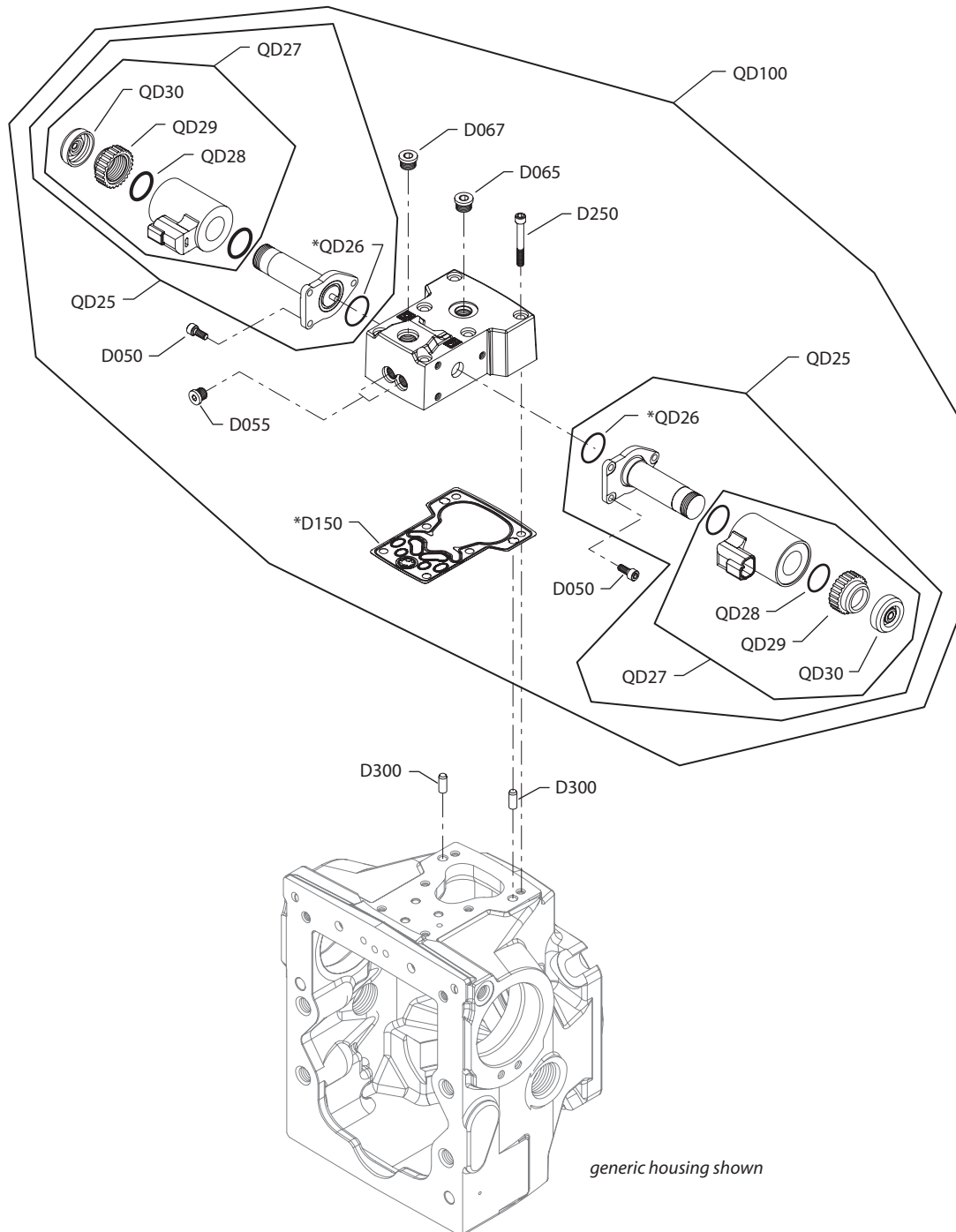
Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A7	D050	10-14		716860	Screw, M5 x 12	6
	D055	10-14		11040532	Plug assembly	2
	D067	10-14		140642	Plug assembly	1
	D150	10-14		11173377	Control gasket (SB-2016-033)	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	Blank, connector DTM 06-3S	1
	D660	10-14		11084822	Blank, 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



Variable displacement pump

(A8)



E101 764E

* = included in overhaul seal kit Q210

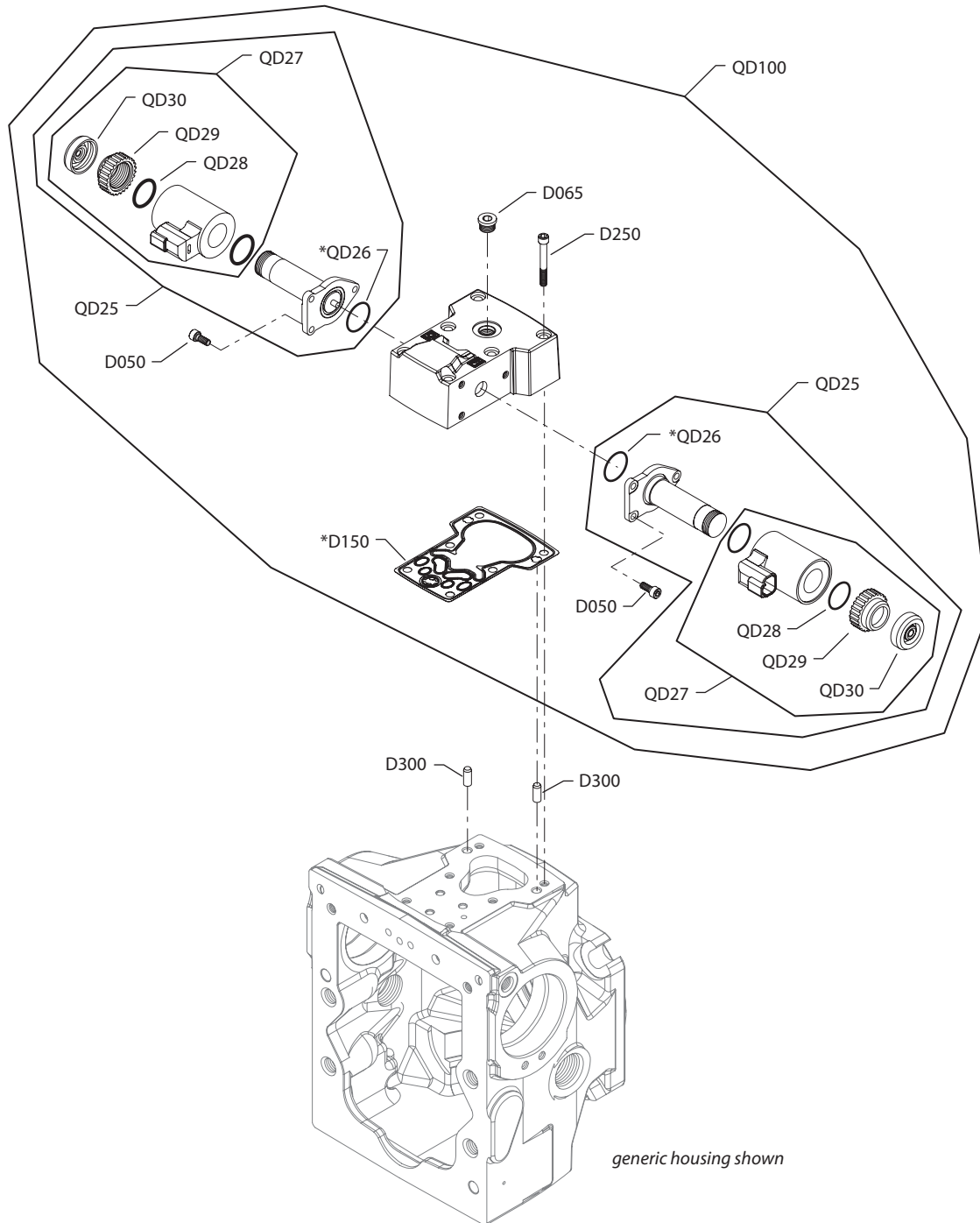
Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A8	D050	10-48		716860	Screw, M5 x 12	6
	D055	10-48		11040532	Plug assembly	2
	D065	10-48		140642	Plug	1
	D067	10-48		140642	Plug	1
	D150	10-48		11173377	Control gasket (SB-2016-033)	1
	D250	10-48		505038	Screw, M6 x 45	6
	D300	10-48		310979	Dowel pin	2
	QD25	10-48		140750	Proportional solenoid, 12v, Deutsch connector	2
	QD26	10-48		11001952	O-ring	2
	QD27	10-48		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	10-48		063172	O-ring	2
	QD29	10-48		11004749	Coil nut	2
	QD30	10-48		11027883	Cap	2
	QD100	10-48		11015803	NFPE control kit, 12V, manual override, Deutsch conn.	1



Variable displacement pump

(A9 & B1)



E101 735E

* = included in overhaul seal kit Q210

Parts Manual H1P 60 & 68cc Variable Displacement Pump

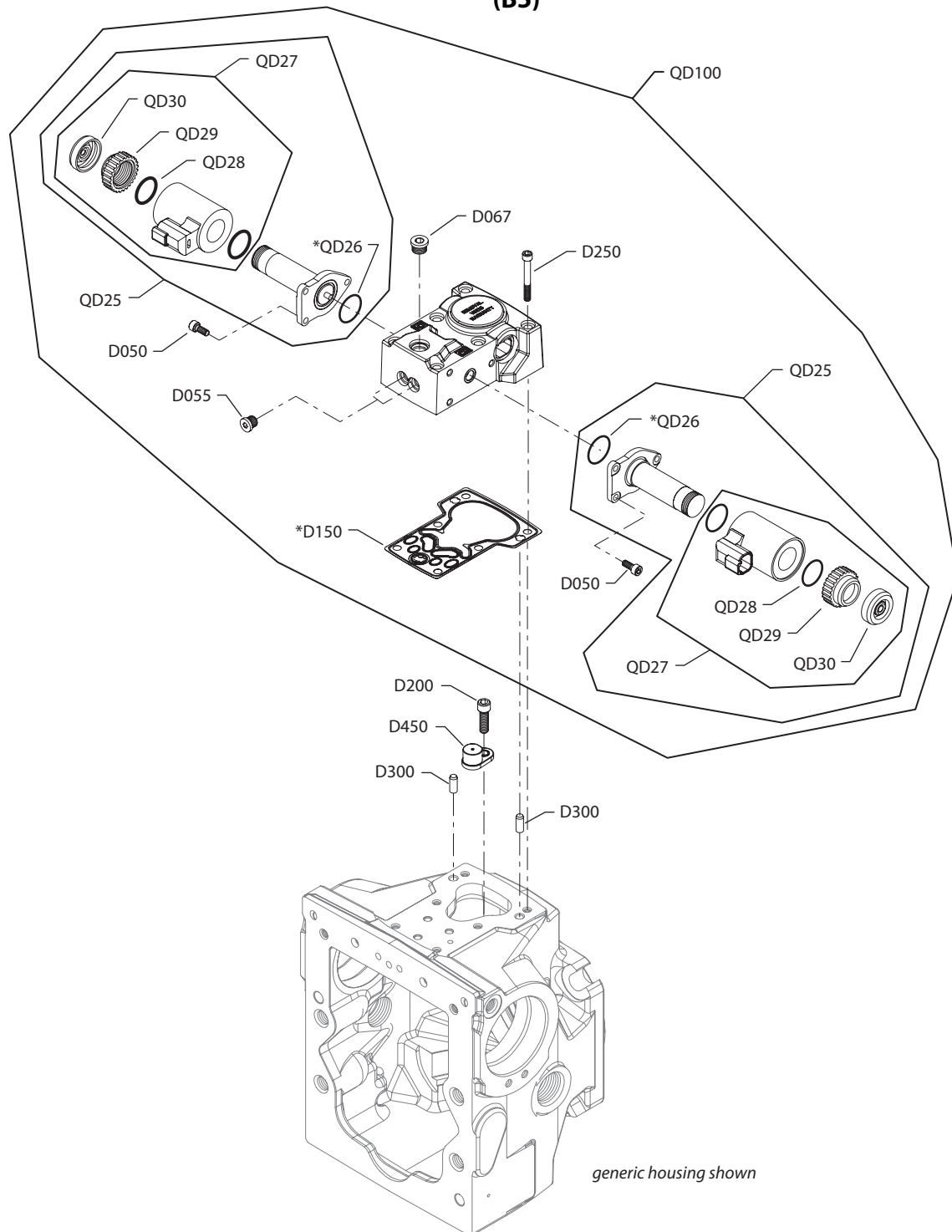
Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A9	D050	10-48		716860	Screw, M5 x 12	6
	D065	10-48		140642	Plug assembly	1
	D150	10-48		11173377	Control gasket (SB-2016-033)	1
	D250	10-48		505038	Screw, M6 x 45	6
	D300	10-48		310979	Dowel pin	2
	QD25	10-48		141301	Proportional solenoid, 12v, Deutsch connector	2
	QD26	10-48		11001952	O-ring	2
	QD27	10-48		11005222	Coil kit, 12v, Deutsch connector	2
	QD28	10-48		063172	O-ring	2
	QD29	10-48		11004749	Coil nut	2
	QD30	10-48		11027883	Cap	2
	QD100	10-48		11025905	FNR control kit, 12v, manual override, Deutsch conn.	1
B1	D050	10-48		716860	Screw, M5 x 12	6
	D065	10-48		140642	Plug assembly	1
	D150	10-48		11173377	Control gasket (SB-2016-033)	1
	D250	10-48		505038	Screw, M6 x 45	6
	D300	10-48		310979	Dowel pin	2
	QD25	10-48		141313	Proportional solenoid, 24v, Deutsch connector	2
	QD26	10-48		11001952	O-ring	2
	QD27	10-48		11005223	Coil kit, 24v, Deutsch connector	2
	QD28	10-48		063172	O-ring	2
	QD29	10-48		11004749	Coil nut	2
	QD30	10-48		11027883	Cap	2
	QD100	10-48		11025906	FNR control kit, 24v, manual override, Deutsch conn.	1

Variable displacement pump

(B5)



E101 971E

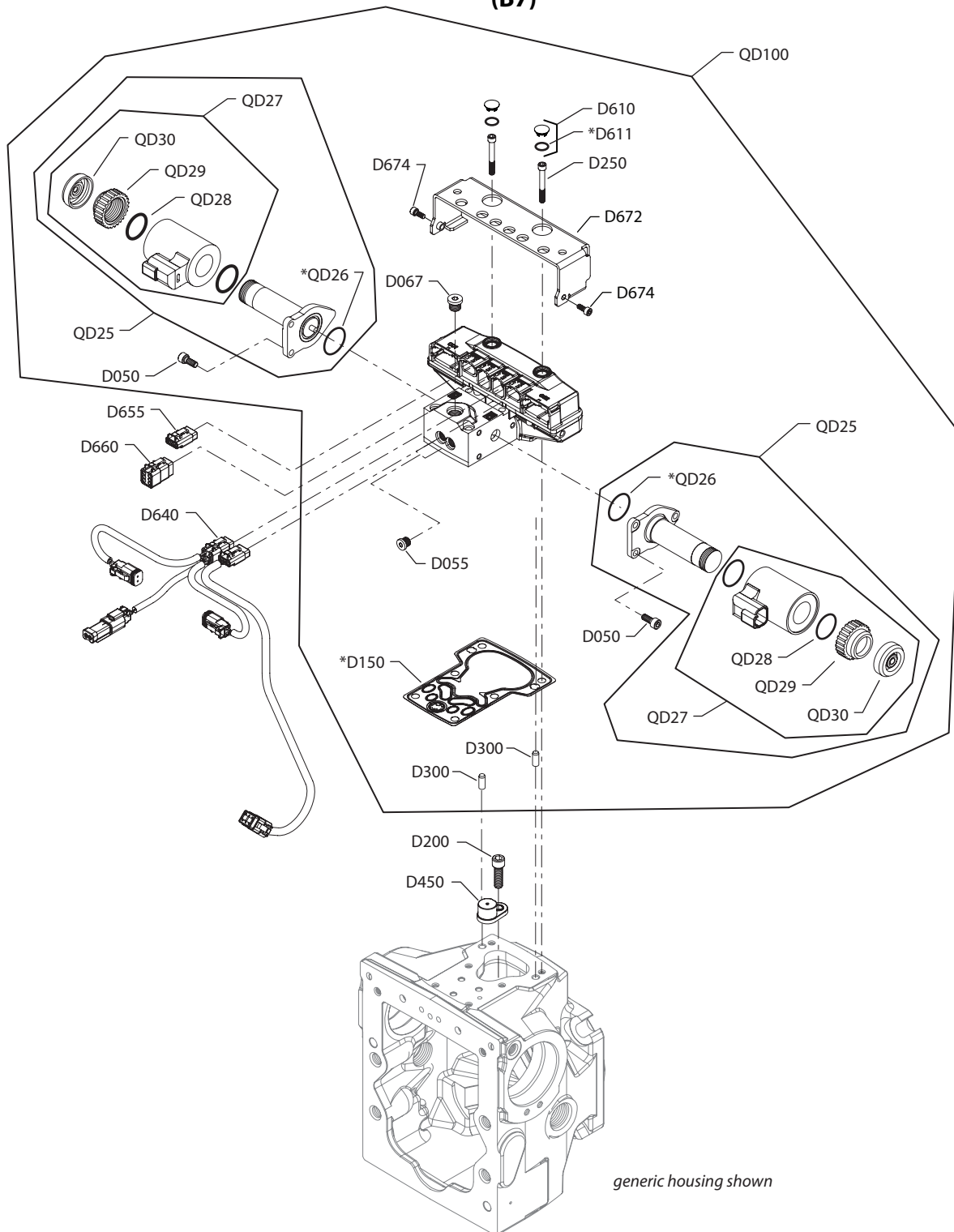
* = included in overhaul seal kit Q210

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B5	D050	10-14		716860	Screw, M5 x 12	6
	D055	10-14		11040532	Plug assembly	2
	D067	10-14		140642	Plug assembly	1
	D150	10-14		11173377	Control gasket (SB-2016-033)	1
	D200	10-14		141472	Screw, special	1
	D250	10-14		505038	Screw, M6 x 45	6
	D300	10-14		310979	Dowel pin	2
	D450	10-14		11003097	Magnet carrier	1
	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		11050138	NFPE control kit, 12V, manual override	1

Variable displacement pump

(B7)



E101 972E

* = included in overhaul seal kit Q210

Parts Manual

H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B7	D050	10-04		716860	Screw, M5 x 12	6
	D055	10-04		11040532	Plug assembly	2
	D067	10-04		140642	Plug assembly	1
	D150	10-14		11173377	Control gasket (SB-2016-033)	1
	D200	10-04		141472	Screw, special	1
	D250	10-04		505038	Screw, M6 x 45	6
	D300	10-04		11036469	Dowel pin	2
	D450	10-04		11003097	Magnet carrier	1
	D610	10-04		11000467	Plug assembly	2
	D611	10-04		11066774	O-ring	2
	D640	10-04		11023348	AC wiring harness	1
	D655	10-04		11084827	Blank, connector DTM 06-3S	1
	D660	10-04		11084822	Blank, connector DTM 06-6S	1
	D672	10-04		11151875	Protection	1
	D674	10-04		716860	Screw, M5 x 12	2
	QD25	10-04		140750	Proportional solenoid, 12 volt	2
	QD26	10-04		11001952	O-ring	2
	QD27	10-04		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	10-04		063172	O-ring	2
	QD29	10-04		11004749	Coil nut	2
	QD30	10-04		11027883	Cap	2
	QD100	10-04		11065119	Automotive control kit, 12v, manual override	1

(B8)

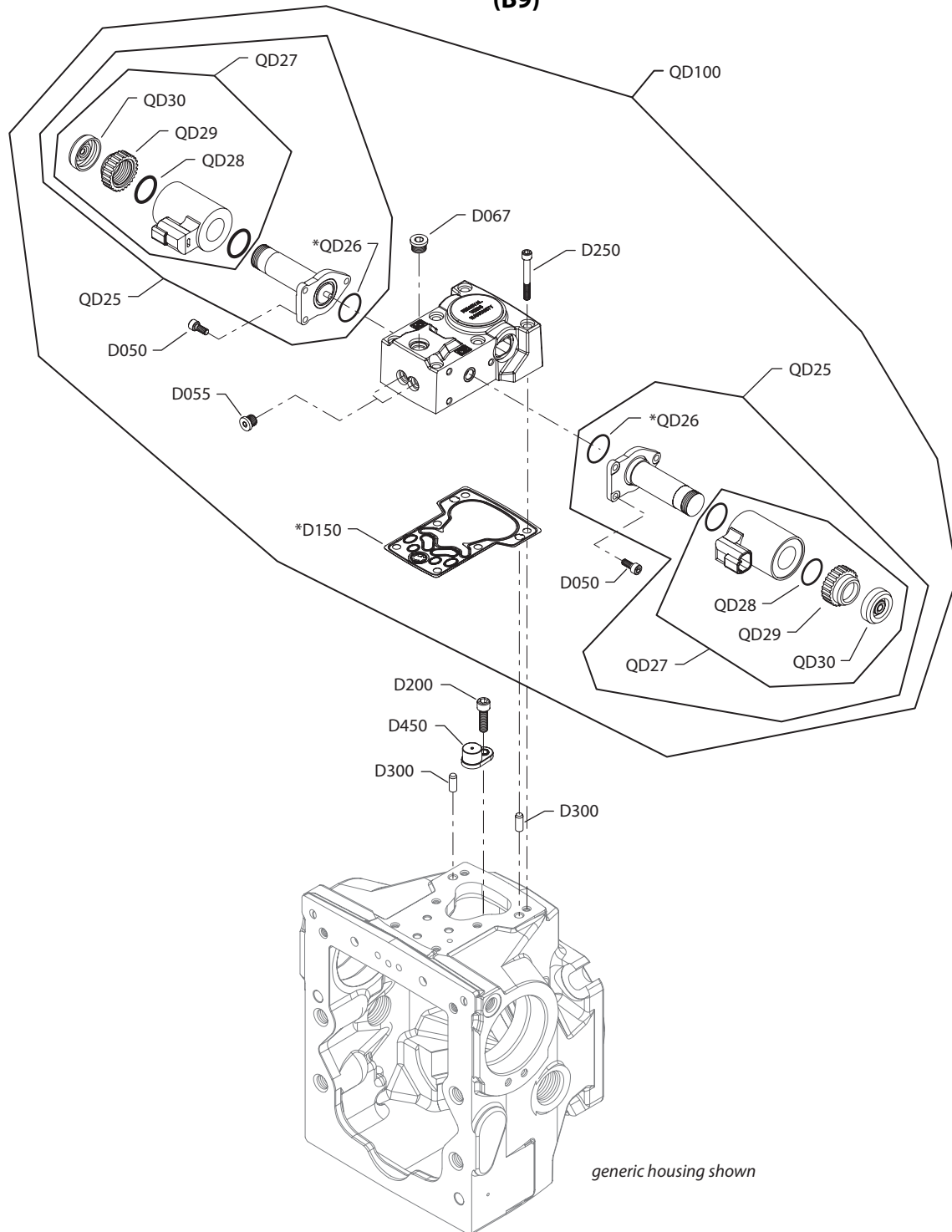


Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B8	D050	10-48		716860	Screw, M5 x 12	6
	D055	10-48		11040532	Plug assembly	2
	D065	10-48		140642	Plug assembly	1
	D067	10-48		140642	Plug assembly	1
	D150	10-14		11173377	Control gasket (SB-2016-033)	1
	D250	10-48		505038	Screw, M6 x 45	6
	D300	10-48		310979	Dowel pin	2
	QD25	10-48		140751	Proportional solenoid, 24v, Deutsch connector	2
	QD26	10-48		11001952	O-ring	2
	QD27	10-48		1104700	Coil kit, 24v, Deutsch connector	2
	QD28	10-48		063172	O-ring	2
	QD29	10-48		11004749	Coil nut	2
	QD30	10-48		11027883	Cap	2
	QD100	10-48		11025904	NFPE control kit, 24v, manual override, Deutsch conn.	1

Variable displacement pump

(B9)



E101 971E

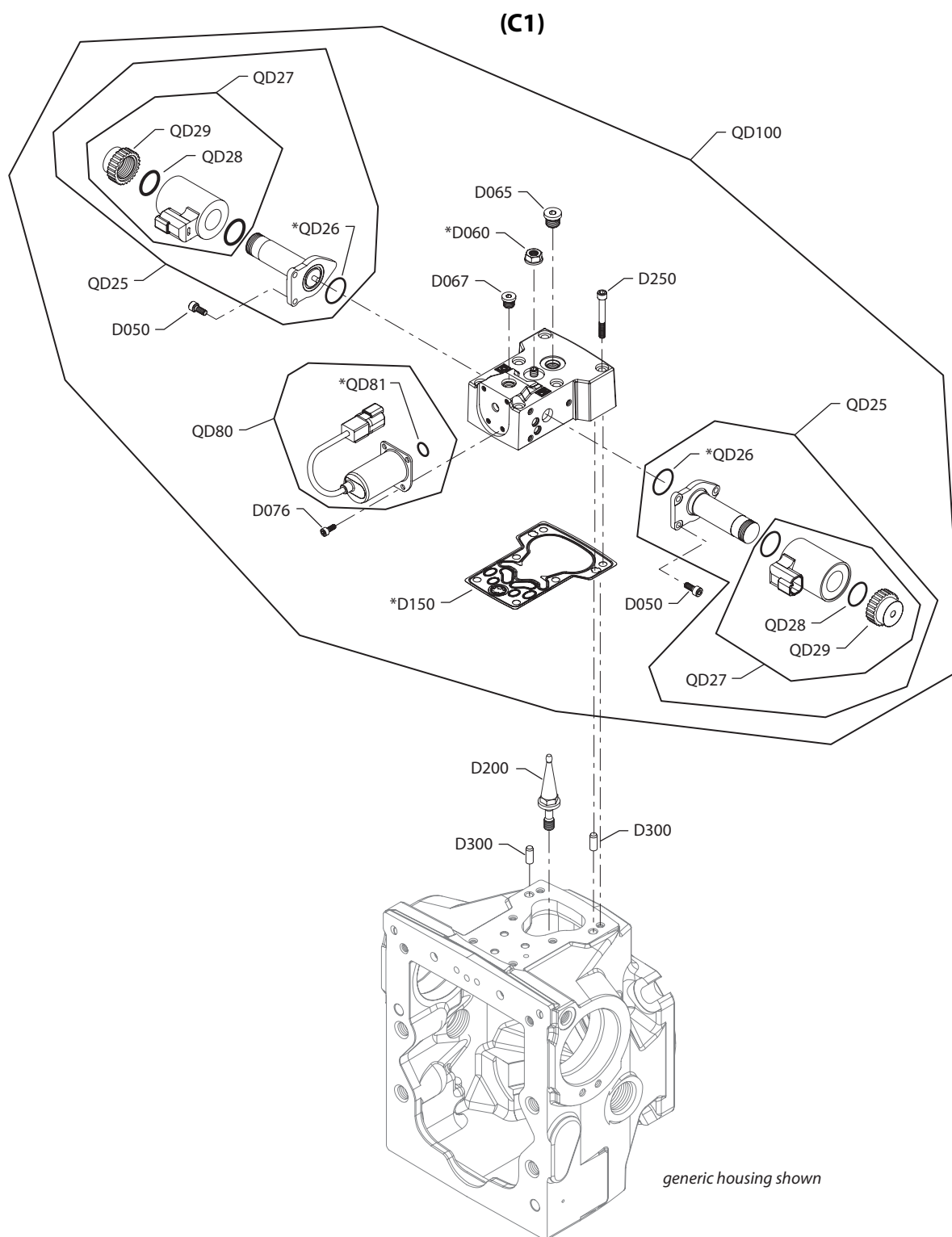
* = included in overhaul seal kit Q210

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B9	D050	10-48		716860	Screw, M5 x 12	6
	D055	10-48		11040532	Plug assembly	2
	D067	10-48		140642	Plug assembly	1
	D150	10-48		11173377	Control gasket (SB-2016-033)	1
	D200	10-48		141472	Screw, special	1
	D250	10-48		505038	Screw, M6 x 45	6
	D300	10-48		310979	Dowel pin	2
	D450	10-48		11003097	Magnet carrier	1
	QD25	10-48		140751	Proportional solenoid, 24v, Deutsch connector	2
	QD26	10-48		11001952	O-ring	2
	QD27	10-48		1104700	Coil kit, 24v, Deutsch connector	2
	QD28	10-48		063172	O-ring	2
	QD29	10-48		11004749	Coil nut	2
	QD30	10-48		11027883	Cap	2
	QD100	10-48		11050137	NFPE control kit,, 24V, manual override	1



Variable displacement pump



E101 787E

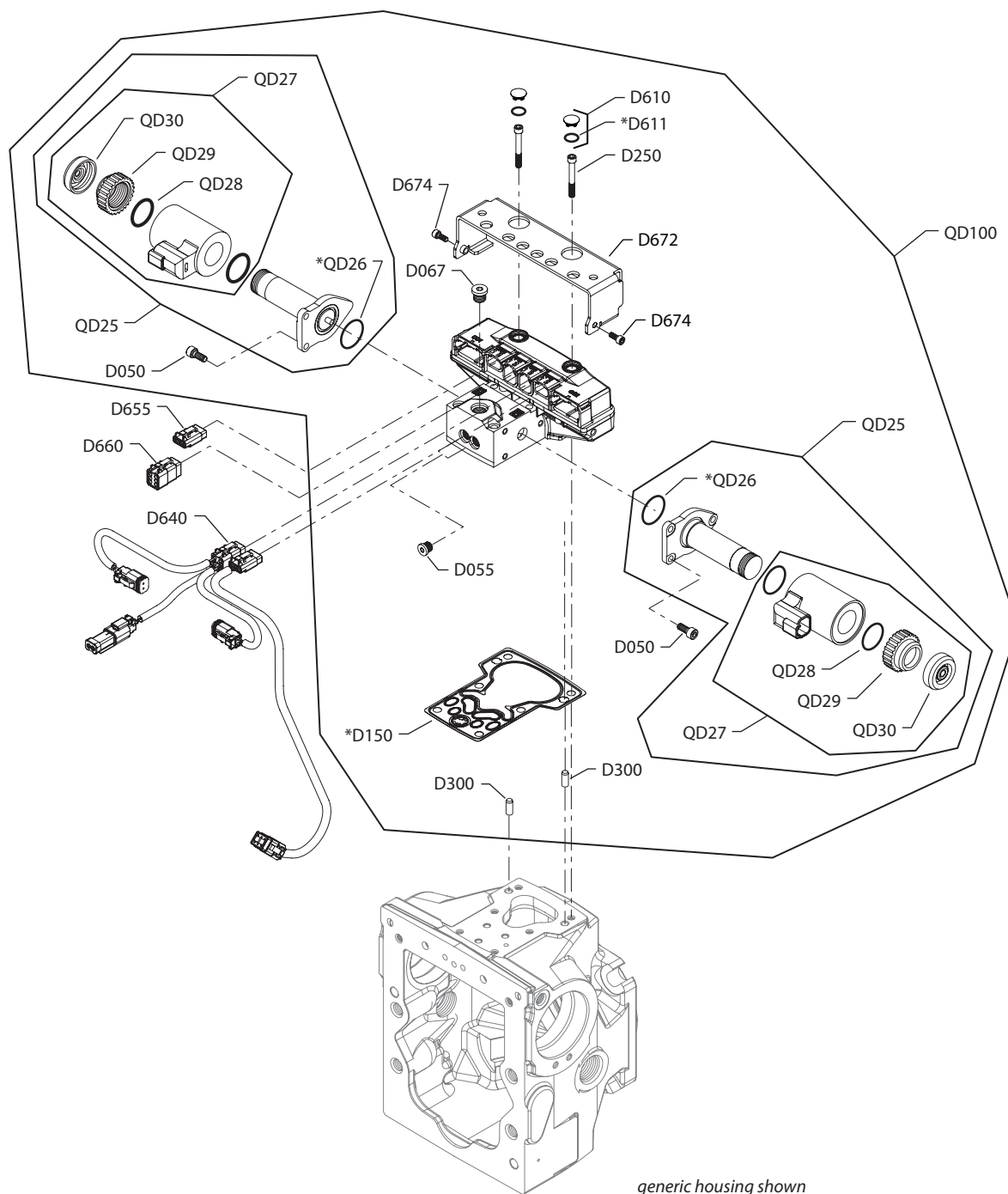
* = included in overhaul seal kit Q210

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C1	D050	10-48	12-49	716860	Screw, M5 x 12	6
	D060	10-48	12-49	612291 (9003508-0008)	Seal nut	1
	D065	10-48	12-49	140642	Plug assembly	1
	D067	10-48	12-49	11040532	Plug assembly	1
	D076	10-48	12-49	346957	Screw, M4 x 8	4
	D150	10-48	12-49	11173377	Control gasket (SB-2016-033)	1
	D200	10-48	12-49	11148827	Swashplate feedback link (SB-2016-028)	1
	D250	10-48	12-49	505038	Screw, M6 x 45	6
	D300	10-48	12-49	310979	Dowel pin	2
	QD25	10-48	12-49	11012459	Proportional solenoid, 24V, Deutsch connector	2
	QD26	10-48	12-49	11001952	O-ring	2
	QD27	10-48	12-49	11028019	Coil kit, 24V, Deutsch connector	2
	QD28	10-48	12-49	063172	O-ring	2
	QD29	10-48	12-49	11028024	Coil nut	2
	QD80	10-48	12-49	11015979	Solenoid, 24V	1
	QD81	10-48	12-49	11059551	O-ring	1
	QD100	10-48	12-49	11037176	EDC kit, 24V, high gain spool, control override	1

Variable displacement pump

(C2)



E101 763E

* = included in overhaul seal kit Q210

Parts Manual

H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

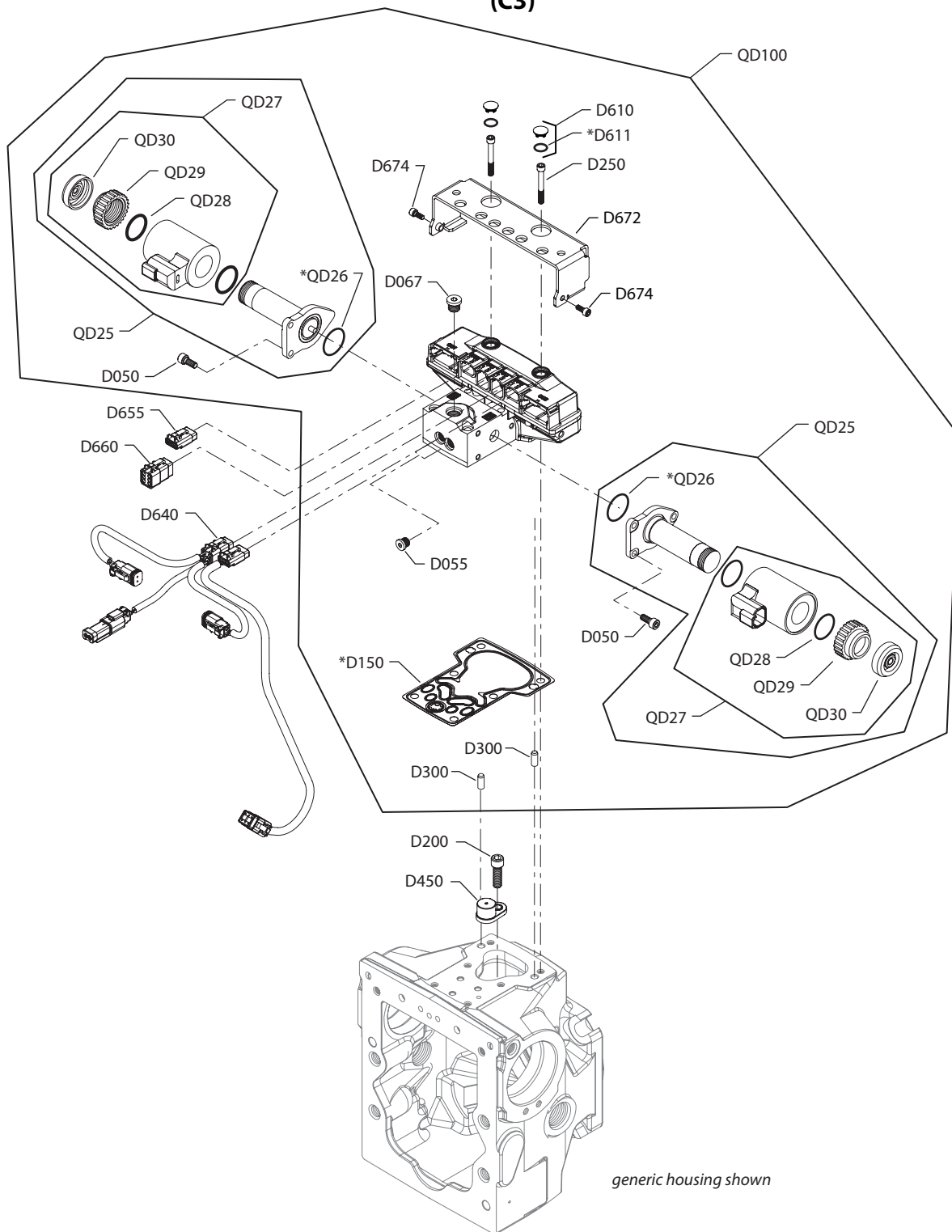
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C2	D050	10-04		716860	Screw, M5 x 12	6
	D055	10-04		11040532	Plug assembly	2
	D067	10-04		140642	Plug assembly	1
	D150	10-04		11173377	Control gasket (SB-2016-033)	1
	D250	10-04		505038	Screw, M6 x 45	6
	D300	10-04		11036469	Dowel pin	2
	D610	10-04		11000467	Plug assembly	2
	D611	10-04		11066774	O-ring	2
	D640	10-04		11023348	AC wiring harness	1
	D655	10-04		11084827	Blank, connector DTM 06-3S	1
	D660	10-04		11084822	Blank, connector DTM 06-6S	1
	D672	10-04		11151875	Protection	1
	D674	10-04		716860	Screw, M5 x 12	2
	QD25	10-04		140751	Proportional solenoid, 24 volt	2
	QD26	10-04		11001952	O-ring	2
	QD27	10-04		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	10-04		063172	O-ring	2
	QD29	10-04		11004749	Coil nut	2
	QD30	10-04		11027883	Cap	2
	QD100	10-04		11065120	Automotive control kit, 24v, manual override	1



Variable displacement pump

(C3)



generic housing shown

E101 972E

* = included in overhaul seal kit Q210

Parts Manual

H1P 60 & 68cc Variable Displacement Pump

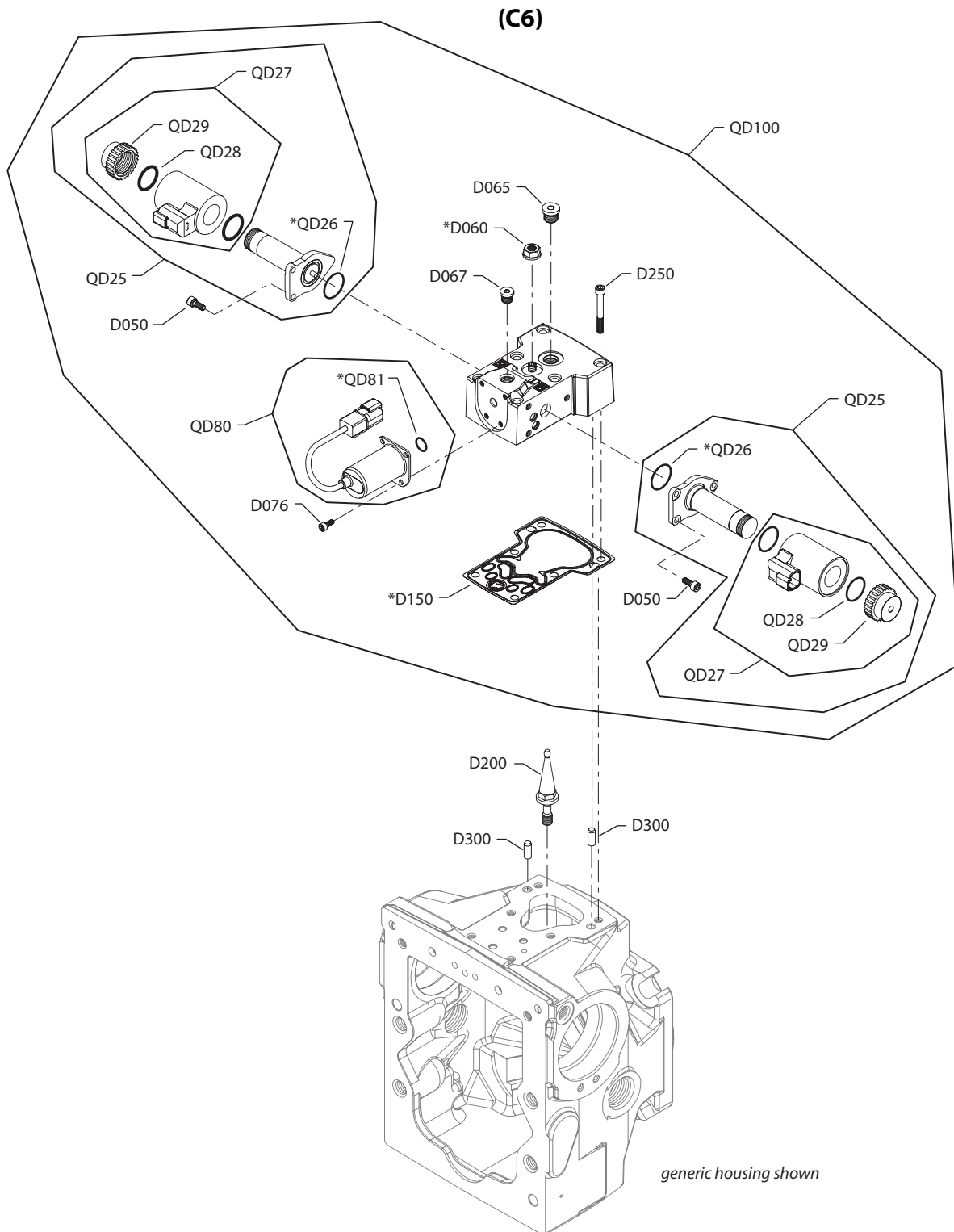
Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C3	D050	10-04		716860	Screw, M5 x 12	6
	D055	10-04		11040532	Plug assembly	2
	D067	10-04		140642	Plug assembly	1
	D150	10-04		11173377	Control gasket (SB-2016-033)	1
	D200	10-04		141472	Screw, special	1
	D250	10-04		505038	Screw, M6 x 45	6
	D300	10-04		11036469	Dowel pin	2
	D450	10-04		11003097	Magnet carrier	1
	D610	10-04		11000467	Plug assembly	2
	D611	10-04		11066774	O-ring	2
	D640	10-04		11023348	AC wiring harness	1
	D655	10-04		11084827	Blank, connector DTM 06-3S	1
	D660	10-04		11084822	Blank, connector DTM 06-6S	1
	D672	10-04		11151875	Protection	1
	D674	10-04		716860	Screw, M5 x 12	2
	QD25	10-04		140751	Proportional solenoid, 24 volt	2
	QD26	10-04		11001952	O-ring	2
	QD27	10-04		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	10-04		063172	O-ring	2
	QD29	10-04		11004749	Coil nut	2
	QD30	10-04		11027883	Cap	2
	QD100	10-04		11065121	Automotive control kit, 24v, manual override	1



Variable displacement pump

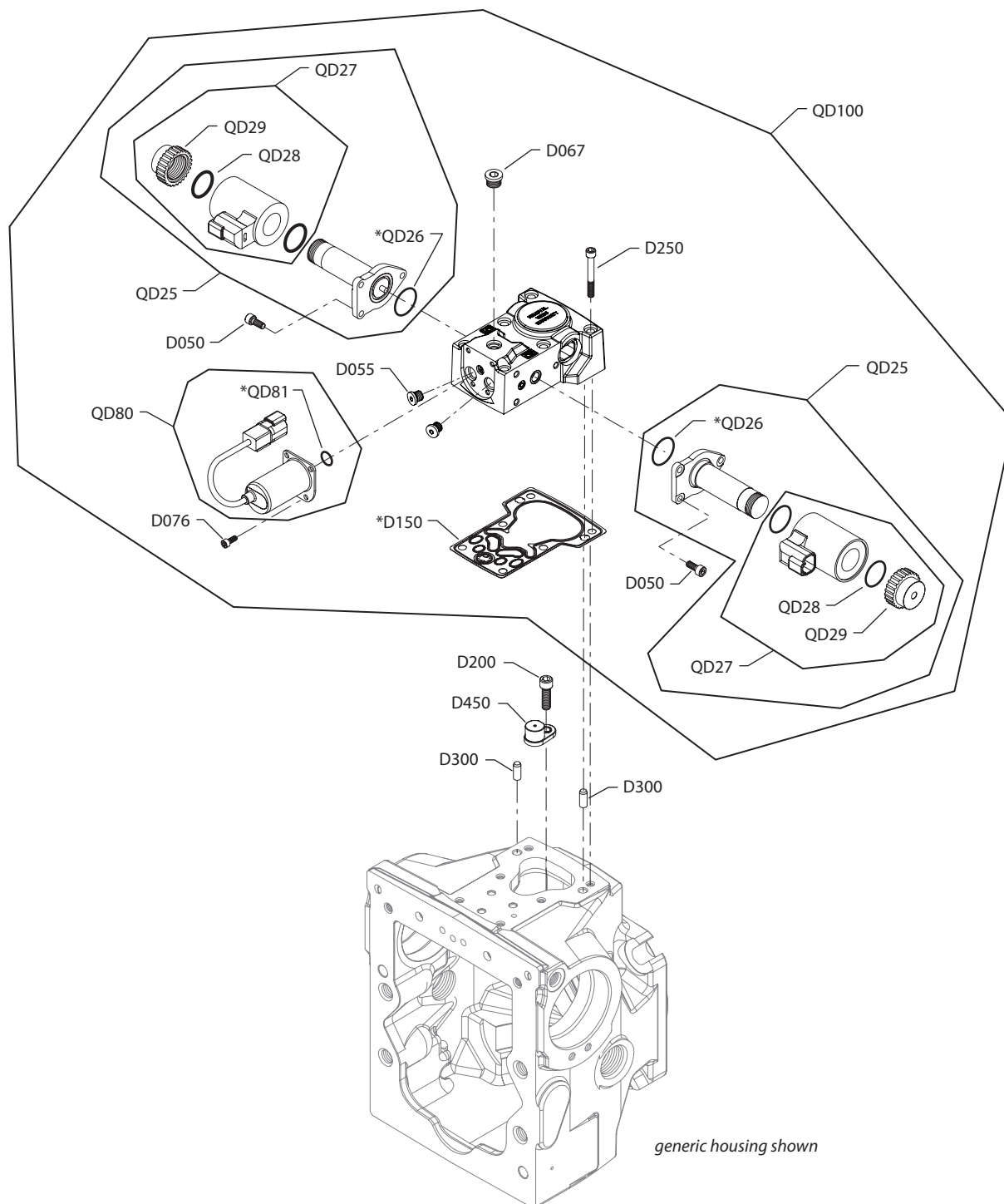


Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C6	D050	10-27		716860	Screw, M5 x 12	6
	D060	10-27		612291 (9003508-0008)	Seal nut, M8	1
	D065	10-27		140642	Plug assembly	1
	D067	10-27		11040532	Plug assembly	1
	D076	10-27		346957	Screw, M4 x 8	4
	D150	10-27		11173377	Control gasket (SB-2016-033)	1
	D200	10-27		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	10-27		505038	Screw, M6 x 45	6
	D300	10-27		310979	Dowel pin	2
	QD25	10-27		11012459	Proportional solenoid, 24v	2
	QD26	10-27		11001952	O-ring	2
	QD27	10-27		11028019	Coil kit, 24v, Deutsch connector	2
	QD28	10-27		063172	O-ring	2
	QD29	10-27		11027046	Coil nut	2
	QD80	10-27		11015979	Solenoid valve, 24v	1
	QD81	10-27		11059551	O-ring	1
	QD100	10-27		11086383	EDC kit, 24v, Deutsch connector	1

Variable displacement pump

(C7 & C8)



generic housing shown

E101 973E

* = included in overhaul seal kit Q210

Parts Manual

H1P 60 & 68cc Variable Displacement Pump

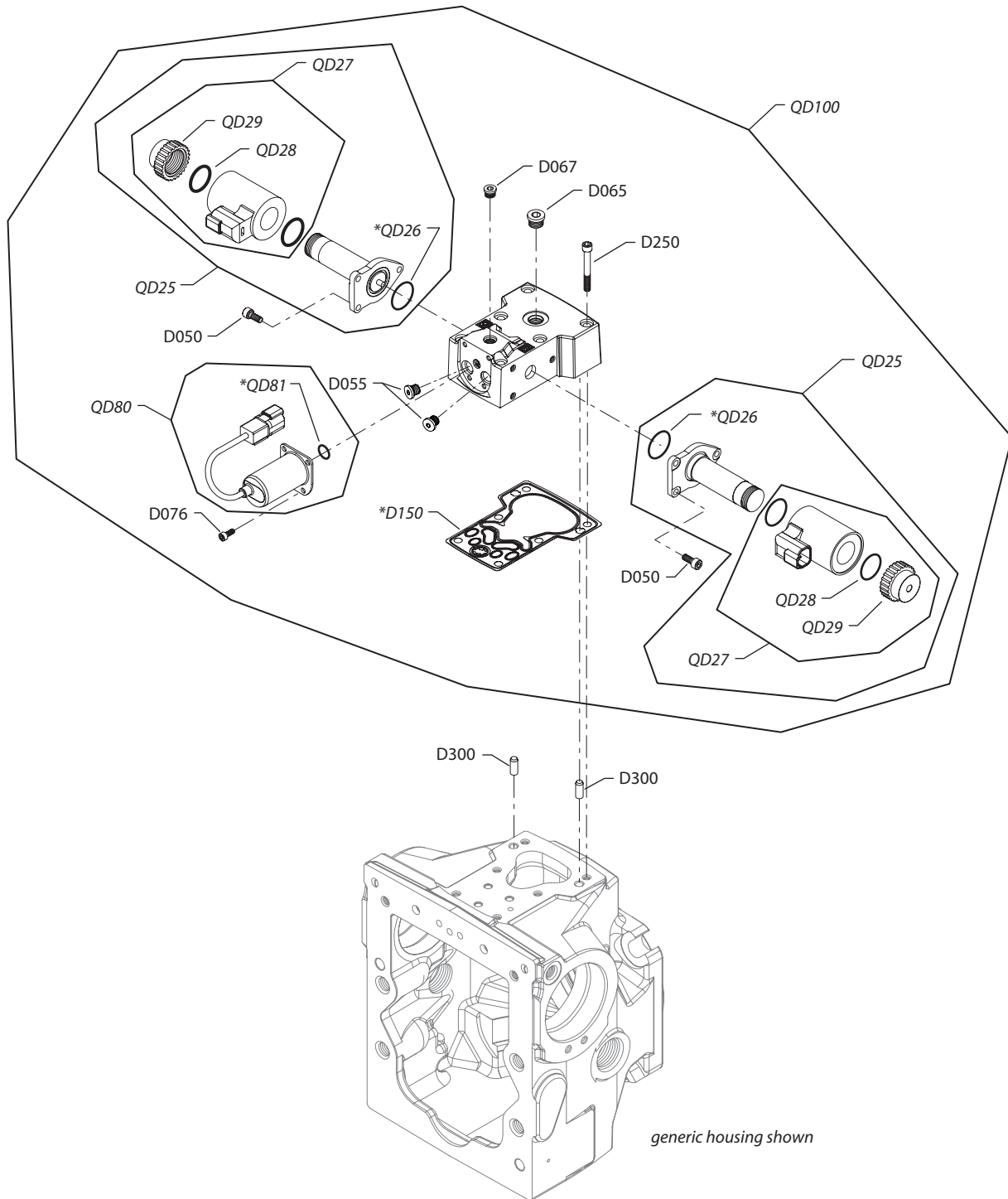
Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C7	D050	10-37		716860	Screw, M5 x 12	6
	D055	10-37		11040532	Plug assembly	2
	D067	10-37		11040532	Plug assembly	1
	D076	10-37		346957	Screw, M4 x 8	4
	D150	10-37		11173377	Control gasket (SB-2016-033)	1
	D200	10-37		141472	Screw, special	1
	D250	10-37		505038	Screw, M6 x 45	6
	D300	10-37		310979	Dowel pin	2
	D450	10-37		11003097	Magnet carrier	1
	QD25	10-37		11012457	Proportional solenoid, 12V	2
	QD26	10-37		11001952	O-ring	2
	QD27	10-37		11028018	Coil kit, 12V, Deutsch connector	2
	QD28	10-37		063172	O-ring	2
	QD29	10-37		11027046	Coil nut	2
	QD80	10-37		11015978	Solenoid, 12V	1
	QD81	10-37		11059551	O-ring	1
	QD100	10-37		11088423	NFPE kit, 12V, high gain spool, control override	1
C8	D050	10-37	16-42	716860	Screw, M5 x 12	6
	D055	10-37	16-42	11040532	Plug assembly	2
	D067	10-37	16-42	11040532	Plug assembly	1
	D076	10-37	16-42	346957	Screw, M4 x 8	4
	D150	10-37	16-42	11173377	Control gasket (SB-2016-033)	1
	D200	10-37	16-42	141472	Screw, special	1
	D250	10-37	16-42	505038	Screw, M6 x 45	6
	D300	10-37	16-42	310979	Dowel pin	2
	D450	10-37	16-42	11003097	Magnet carrier	1
	QD25	10-37	16-42	11012459	Proportional solenoid, 24V	2
	QD26	10-37	16-42	11001952	O-ring	2
	QD27	10-37	16-42	11028019	Coil kit, 24V, Deutsch connector	2
	QD28	10-37	16-42	063172	O-ring	2
	QD29	10-37	16-42	11027046	Coil nut	2
	QD80	10-37	16-42	11015979	Solenoid, 24V	1
	QD81	10-37	16-42	11059551	O-ring	1
	QD100	10-37	16-42	11088570	NFPE kit, 24V, high gain spool, control override	1

Variable displacement pump

(D5 & D8)



E103 388E

* = included in overhaul seal kit Q210

Parts Manual H1P 60 & 68cc Variable Displacement Pump

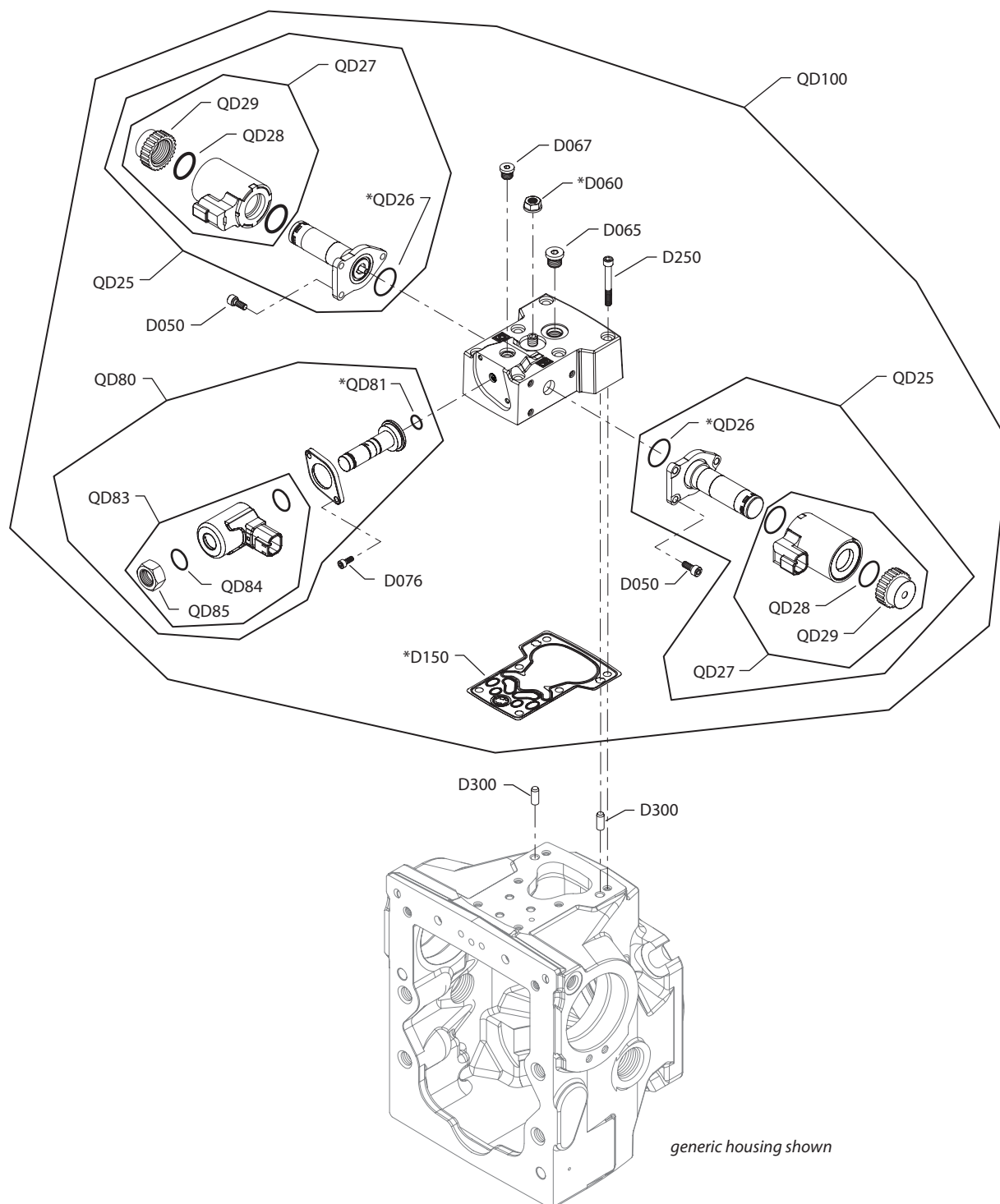
Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D5	D050	13-32	14-40	716860	Screw, M5 x 12	6
	D055	13-32	14-40	11040532	Plug assembly	2
	D065	13-32	14-40	140642	Plug assembly	1
	D067	13-32	14-40	11040532	Plug assembly	1
	D076	13-32	14-40	346957	Screw, M4 x 8	4
	D150	13-32	14-40	11173377	Control gasket (SB-2016-033)	1
	D250	13-32	14-40	505038	Screw, M6 x 45	6
	D300	13-32	14-40	310979	Dowel pin	2
	QD25	13-32	14-40	11012457	Proportional solenoid, 12 volt	2
	QD26	13-32	14-40	11001952	O-ring	2
	QD27	13-32	14-40	11028018	Coil kit, 12V, Deutsch connector	2
	QD28	13-32	14-40	063172	O-ring	2
	QD29	13-32	14-40	11027046	Coil nut	2
	QD80	13-32	14-40	11015978	Solenoid valve, 12v	1
	QD81	13-32	14-40	11059551	O-ring	1
	QD100	13-32	14-40	11133841	NFPE control kit, 12V, CCO	1
D8	D050	13-32		716860	Screw, M5 x 12	6
	D055	13-32		11040532	Plug assembly	2
	D065	13-32		140642	Plug assembly	1
	D067	13-32		11040532	Plug assembly	1
	D076	13-32		346957	Screw, M4 x 8	4
	D150	13-32		11173377	Control gasket (SB-2016-033)	1
	D250	13-32		505038	Screw, M6 x 45	6
	D300	13-32		310979	Dowel pin	2
	QD25	13-32		11012459	Proportional solenoid, 24 volt	2
	QD26	13-32		11001952	O-ring	2
	QD27	13-32		11028019	Coil kit, 24V, Deutsch connector	2
	QD28	13-32		063172	O-ring	2
	QD29	13-32		11027046	Coil nut	2
	QD80	13-32		11015979	Solenoid valve, 24v	1
	QD81	13-32		11059551	O-ring	1
	QD100	13-32		11133842	NFPE control kit, 24V, CCO	1

Variable displacement pump

(E2)



E103 384E

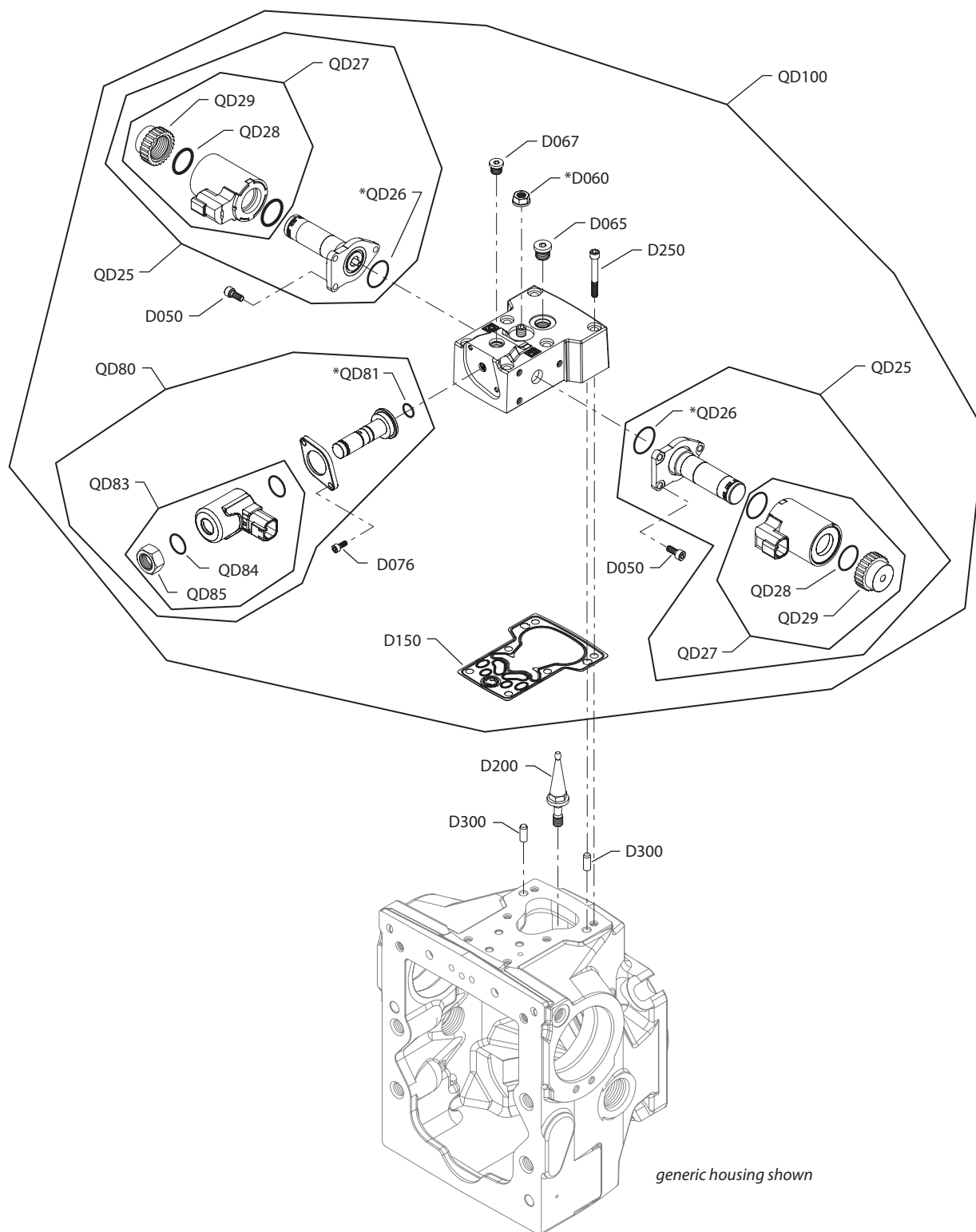
* = included in overhaul seal kit Q210

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E2	D050	13-45		716860	Screw M5 x 12	6
	D065	13-45		140642	Plug assembly	2
	D067	13-45		140642	Plug assembly	1
	D076	13-45		067694	Screw, M4 x 10	2
	D150	13-45		11173377	Control gasket (SB-2016-033)	1
	D250	13-45		505038	Screw, M6 x45	6
	D300	13-45		310979	Dowel pin	2
	QD25	13-45		11012457	Proportional solenoid, 12V	2
	QD26	13-45		11001952	O-ring	2
	QD27	13-45		11028018	Coil kit, 12V, Deutsch connector	2
	QD28	13-45		063172	O-ring	2
	QD29	13-45		11027046	Coil nut	2
	QD80	13-45		11129914	Solenoid, 12V, Deutsch connector	1
	QD81	13-45		11152257	O-ring	1
	QD83	13-45		11147301	Coil kit, 12V, Deutsch connector	1
	QD84	13-45		11140393	O-ring	1
	QD85	13-45		11140394	Nut	1
	QD100	13-45		11145115	NFPE kit, 12V, high gain spool, control override	1

Variable displacement pump

(E5 & E6)



E103 356E

* = included in overhaul seal kit Q210

Parts Manual H1P 60 & 68cc Variable Displacement Pump

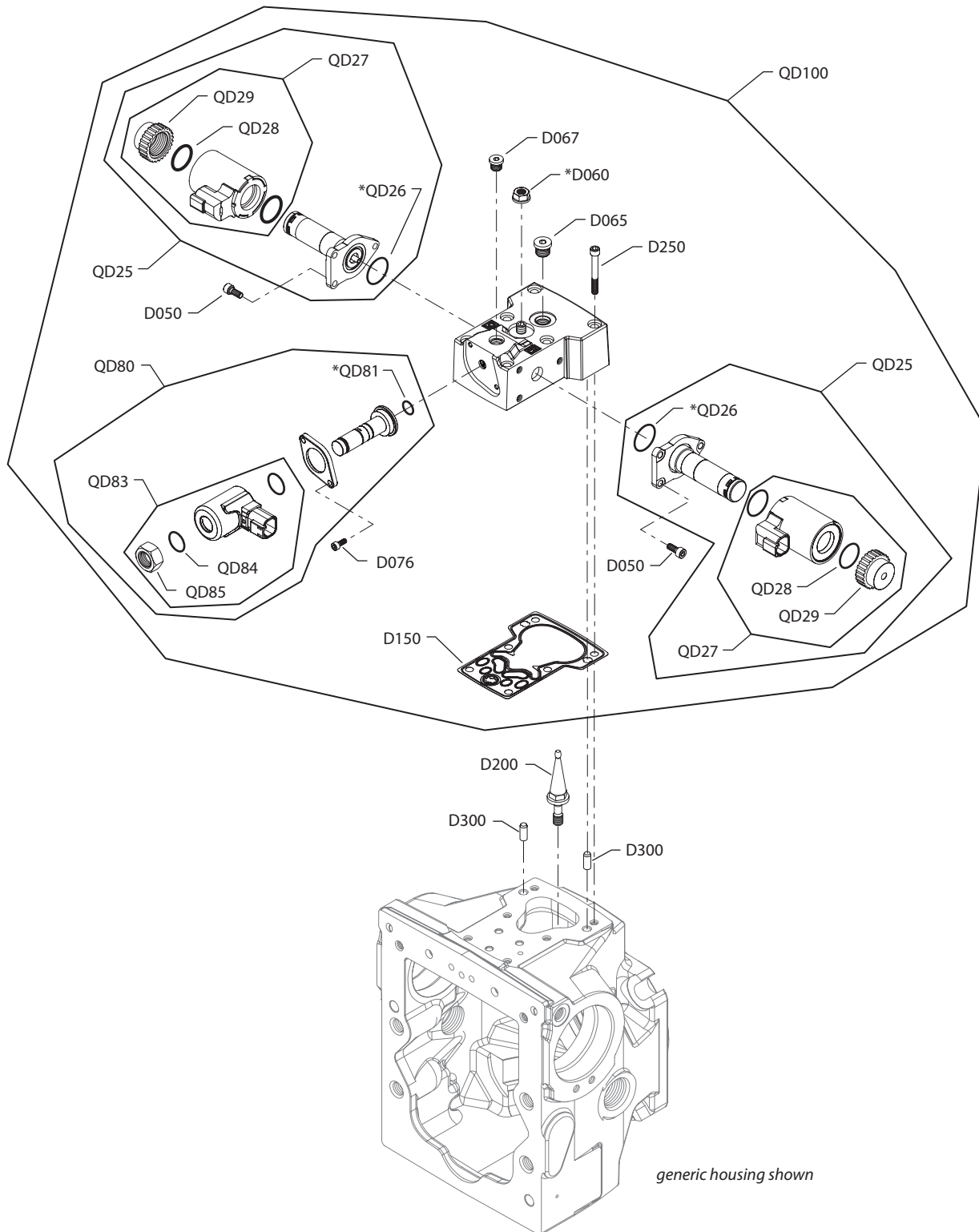
Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E5	D050	14-25		716860	Screw M5 x 12	6
	D060	14-25		612291	Seal nut	1
	D065	14-25		140642	Plug assembly	2
	D067	14-25		140642	Plug assembly	1
	D076	14-25		067694	Screw, M4 x 10	2
	D150	14-25		11173377	Control gasket (SB-2016-033)	1
	D200	14-25		11148827	Swashplate feedback link (SB-2016-028)	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, 12V, Deutsch connector	1
	QD81	14-25		11152257	O-ring	1
	QD83	14-25		11147301	Coil kit, 12V, Deutsch connector	1
	QD84	14-25		11140393	O-ring	1
	QD85	14-25		11140394	Nut	1
	QD100	14-25		11147422	EDC kit, 12V, control override	1
E6	D050	14-25		716860	Screw M5 x 12	6
	D060	14-25		612291	Seal nut	1
	D065	14-25		140642	Plug assembly	2
	D067	14-25		140642	Plug assembly	1
	D076	14-25		067694	Screw, M4 x 10	2
	D150	14-25		11173377	Control gasket (SB-2016-033)	1
	D200	14-25		11148827	Swashplate feedback link (SB-2016-028)	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, 24V, Deutsch connector	1
	QD81	14-25		11152257	O-ring	1
	QD83	14-25		11147332	Coil kit, 24V, Deutsch connector	1
	QD84	14-25		11140393	O-ring	1
	QD85	14-25		11140394	Nut	1
	QD100	14-25		11147423	EDC kit, 24V, control override	1

Variable displacement pump

(E7 & E8)



E103 356E

* = included in overhaul seal kit Q210

Parts Manual

H1P 60 & 68cc Variable Displacement Pump

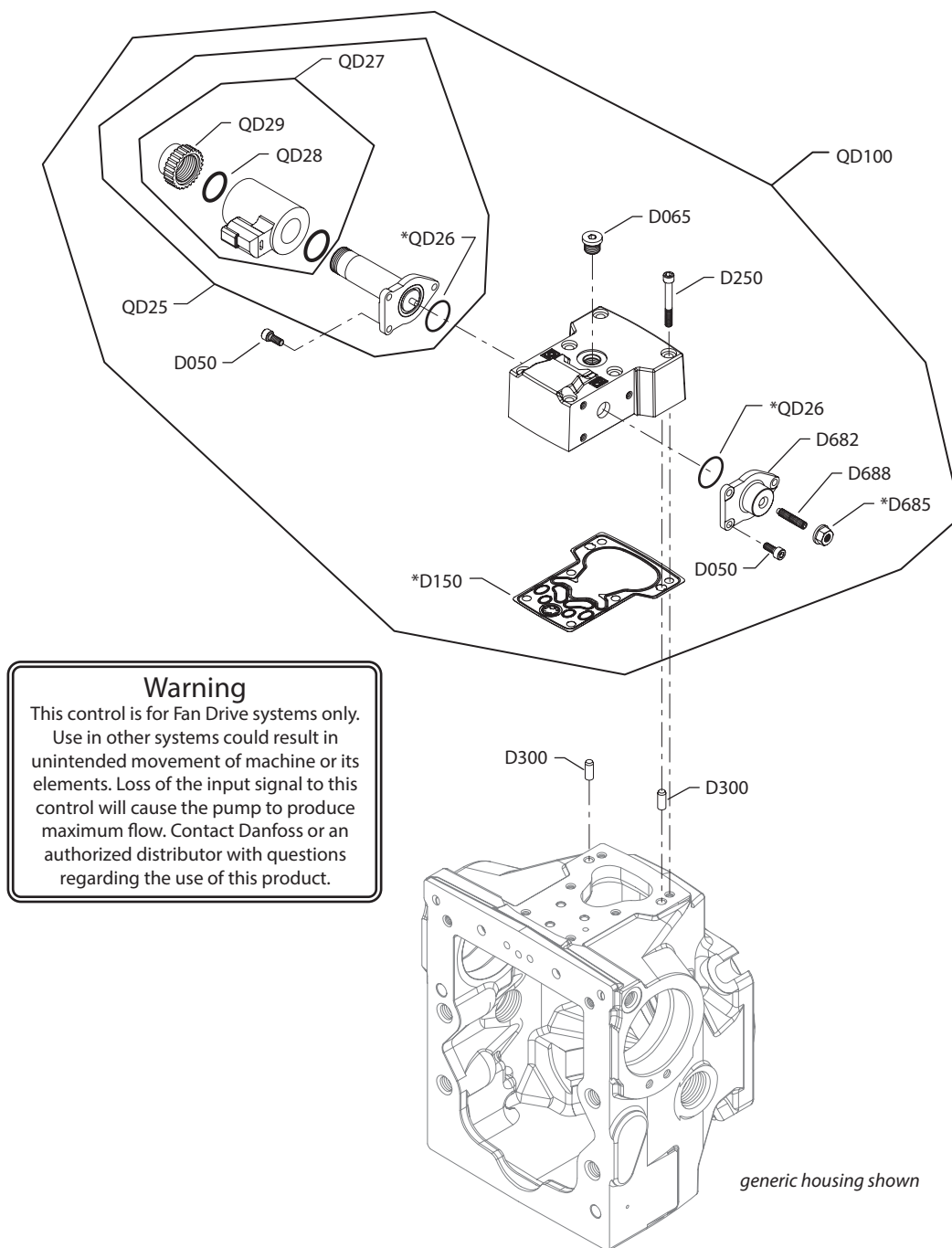
Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E7	D050	14-25		716860	Screw, M5 x 12	6
	D060	14-25		612291 (9003508-0008)	Seal nut, M8	1
	D065	14-25		140642	Plug assembly	1
	D067	14-25		140642	Plug assembly	1
	D076	14-25		067694	Screw, M4 x 10	2
	D150	14-25		11173377	Control gasket (SB-2016-033)	1
	D200	14-25		11148827	Swashplate feedback link (SB-2016-028)	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		11147471	EDC kit, 12v, CCO	1
E8	D050	14-25		716860	Screw, M5 x 12	6
	D060	14-25		612291 (9003508-0008)	Seal nut, M8	1
	D065	14-25		140642	Plug assembly	1
	D067	14-25		140642	Plug assembly	1
	D076	14-25		067694	Screw, M4 x 10	2
	D150	14-25		11173377	Control gasket (SB-2016-033)	1
	D200	14-25		11148827	Swashplate feedback link (SB-2016-028)	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

Variable displacement pump

(F1 & F2)



E101 902E

* = included in overhaul seal kit Q210

Parts Manual

H1P 60 & 68cc Variable Displacement Pump

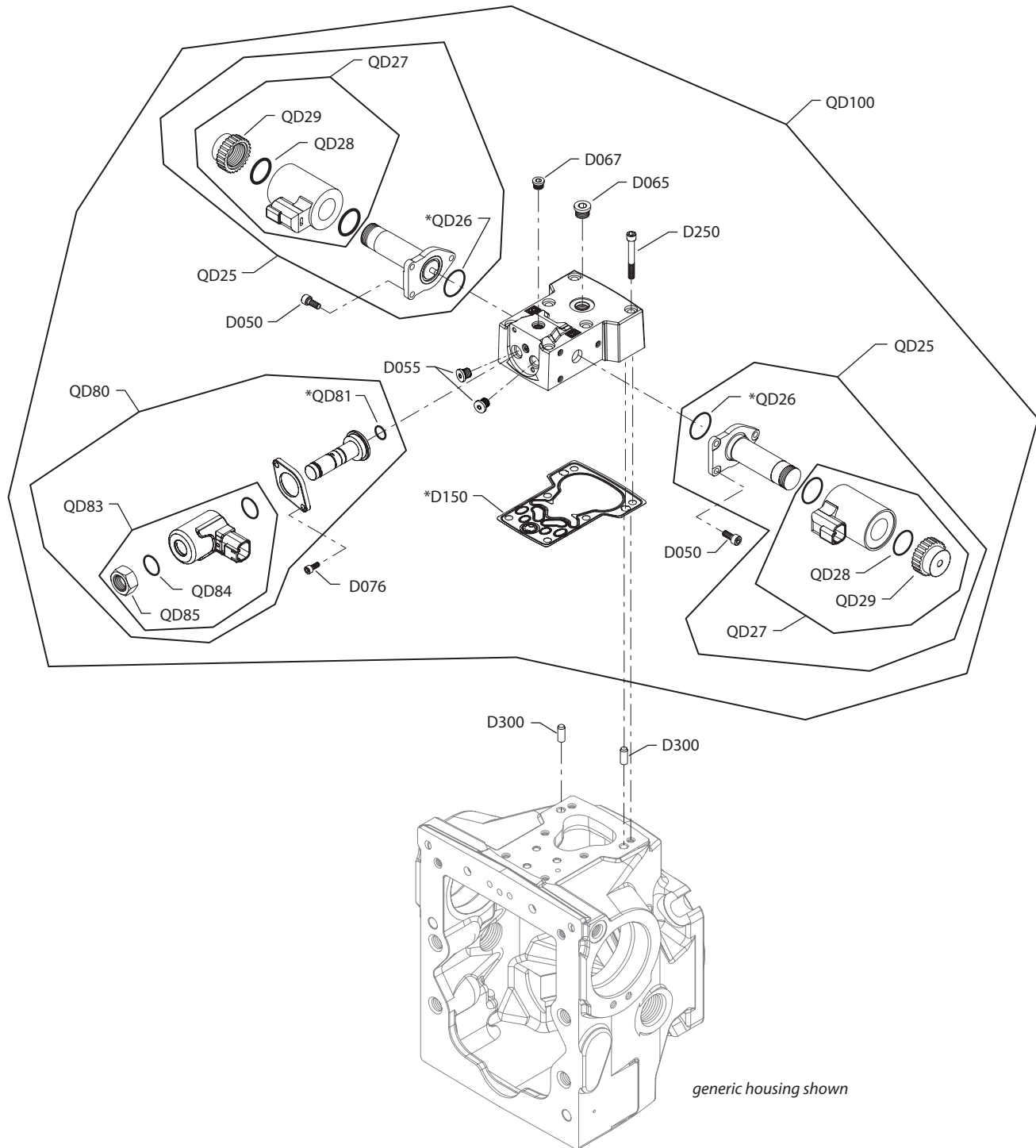
Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
F1	D050	12-33		716860	Screw, M5 x 12	6
	D065	12-33		140642	Plug assembly	1
	D150	12-33		11173377	Control gasket (SB-2016-033)	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
	QD25	12-33		11012457	Proportional solenoid, 12v	1
	QD26	12-33		11001952	O-ring	2
	QD27	12-33		11028018	Coil kit, 12v, Deutsch connector	1
	QD28	12-33		063172	O-ring	1
	QD29	12-33		11027046	Coil nut	1
	QD100	12-33		11081306	FDC kit, 12v, Deutsch connector	1
F2	D050	12-33		716860	Screw, M5 x 12	6
	D065	12-33		140642	Plug assembly	1
	D150	12-33		11173377	Control gasket (SB-2016-033)	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
	QD25	12-33		11012459	Proportional solenoid, 24v	1
	QD26	12-33		11001952	O-ring	2
	QD27	12-33		11028019	Coil kit, 24v, Deutsch connector	1
	QD28	12-33		063172	O-ring	1
	QD29	12-33		11028024	Coil nut	1
	QD100	12-33		11081307	FDC kit, 24v, Deutsch connector	1

Variable displacement pump

(G6)



E103 389E

* = included in overhaul seal kit Q210

Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

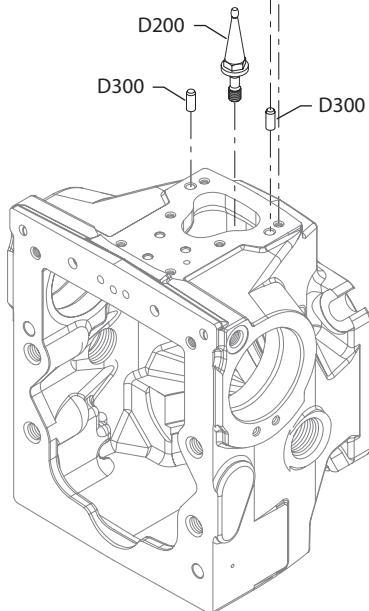
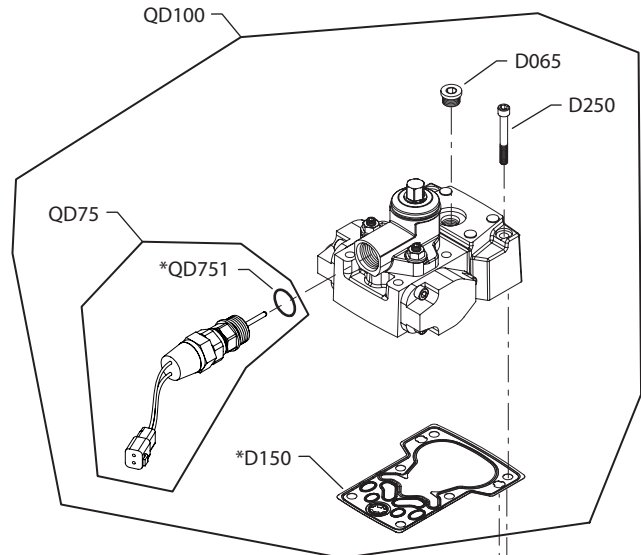
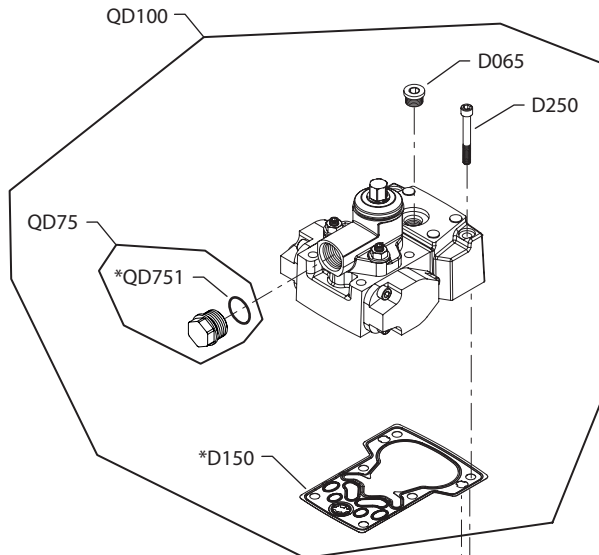
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G6	D050	14-31		716860	Screw, M5 x 12	6
	D055	14-31		11040532	Plug assembly	2
	D065	14-31		140642	Plug assembly	1
	D067	14-31		11040532	Plug assembly	1
	D076	14-31		067694	Screw, M4 x 8	4
	D150	14-31		11173377	Control gasket (SB-2016-033)	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 valve, 12v	1
	QD81	14-31		11152257	O-ring	1
	QD83	10-47		11147301	Coil kit, 12v	1
	QD84	10-47		11140393	O-ring	1
	QD85	14-31		11140394	Coil nut	1
	QD100	14-31		11154961	NFPE kit, 12v CCO	1

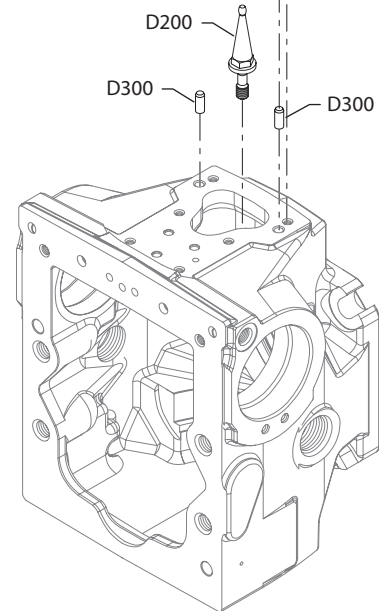
Variable displacement pump

(M1)

(M2)



generic housing shown



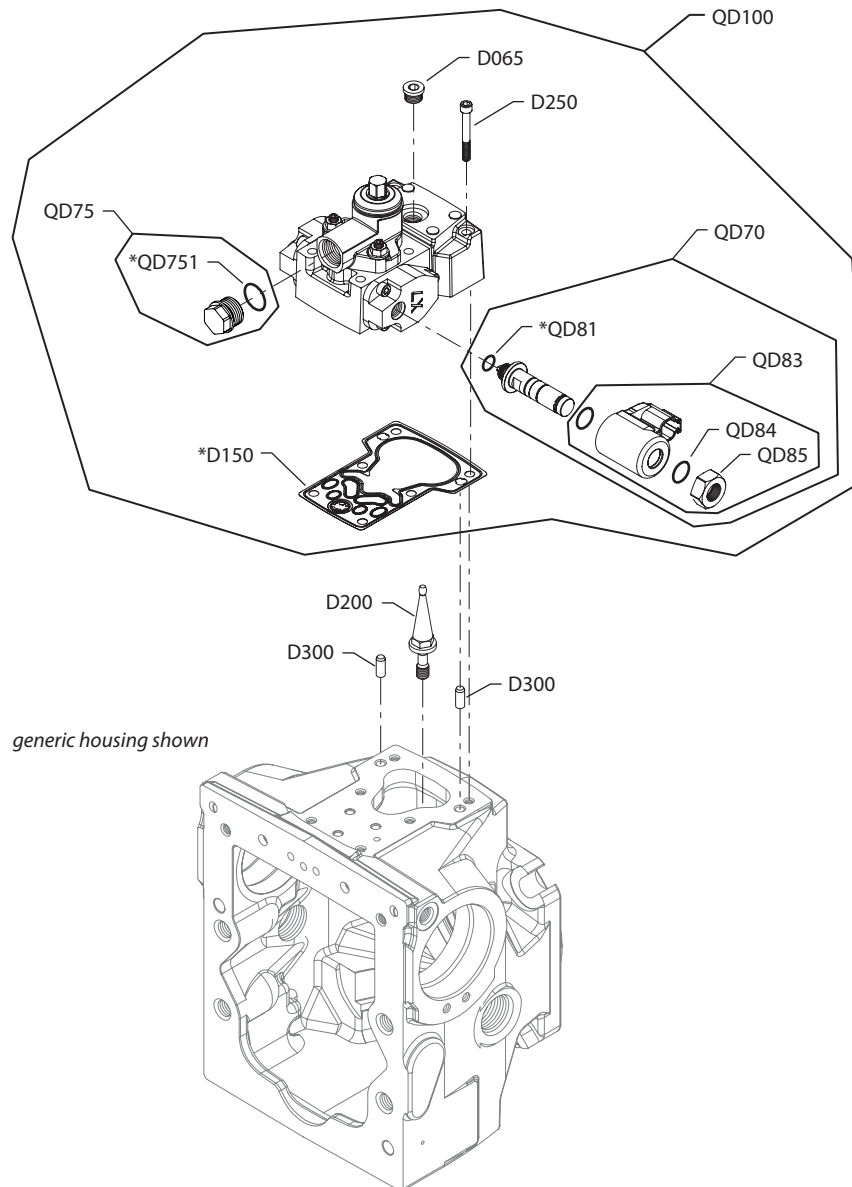
Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
M1	D065	14-01		140642	Plug assembly	1
	D150	14-01		11173377	Control gasket (SB-2016-033)	1
	D200	14-01		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	14-01		505038	Screw, M6 x 45	6
	D300	14-01		310979	Dowel pin	2
	QD75	14-01		11119332	Spring seat assembly	1
	QD100	14-01		11141225	MDC kit	1
	QD751	14-01		001131 (9004201-5000)	O-ring	1
M2	D065	14-01		140642	Plug assembly	1
	D150	14-01		11173377	Control gasket (SB-2016-033)	1
	D200	14-01		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	14-01		505038	Screw, M6 x 45	6
	D300	14-01		310979	Dowel pin	2
	QD75	14-01		11126847	Spring seat/neutral start switch assembly	1
	QD100	14-01		11141236	MDC kit	1
	QD751	14-01		001131 (9004201-5000)	O-ring	1



Variable displacement pump

(M3 & M4)



E103 358E

* = included in overhaul seal kit Q210

Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

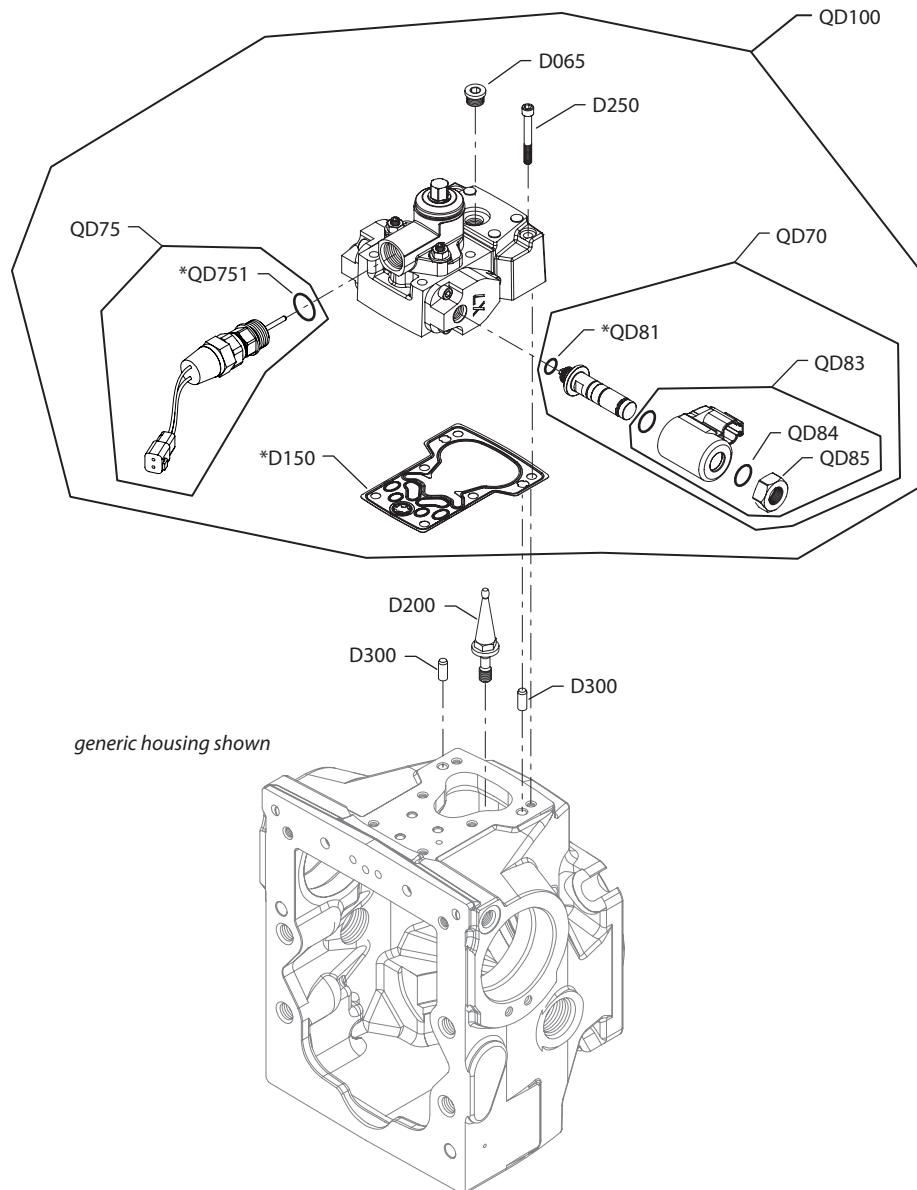
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
M3	D065	14-01		140642	Plug assembly	1
	D150	14-01		11173377	Control gasket (SB-2016-033)	1
	D200	14-01		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	14-01		505038	Screw, M6 x 45	6
	D300	14-01		310979	Dowel pin	2
	QD70	14-01		11129916	Solenoid valve, 12v	1
	QD75	14-01		11119332	Spring seat assembly	1
	QD81	14-01		11152257	O-ring	1
	QD83	14-01		11136347	Coil kit, 12v	1
	QD84	14-01		11140393	O-ring	1
	QD85	14-01		11140394	Coil nut	1
	QD100	14-01		11141237	MDC kit, 12v	1
	QD751	14-01		001131 (9004201-5000)	O-ring	1
M4	D065	14-01		140642	Plug assembly	1
	D150	14-01		11173377	Control gasket (SB-2016-033)	1
	D200	14-01		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	14-01		505038	Screw, M6 x 45	6
	D300	14-01		310979	Dowel pin	2
	QD70	14-01		11129917	Solenoid valve, 24v	1
	QD75	14-01		11119332	Spring seat assembly	1
	QD81	14-01		11152257	O-ring	1
	QD83	14-01		11136348	Coil kit, 24v	1
	QD84	14-01		11140393	O-ring	1
	QD85	14-01		11140394	Coil nut	1
	QD100	14-01		11141238	MDC kit, 24v	1
	QD751	14-01		001131 (9004201-5000)	O-ring	1



Variable displacement pump

(M5 & M6)



E103 359E

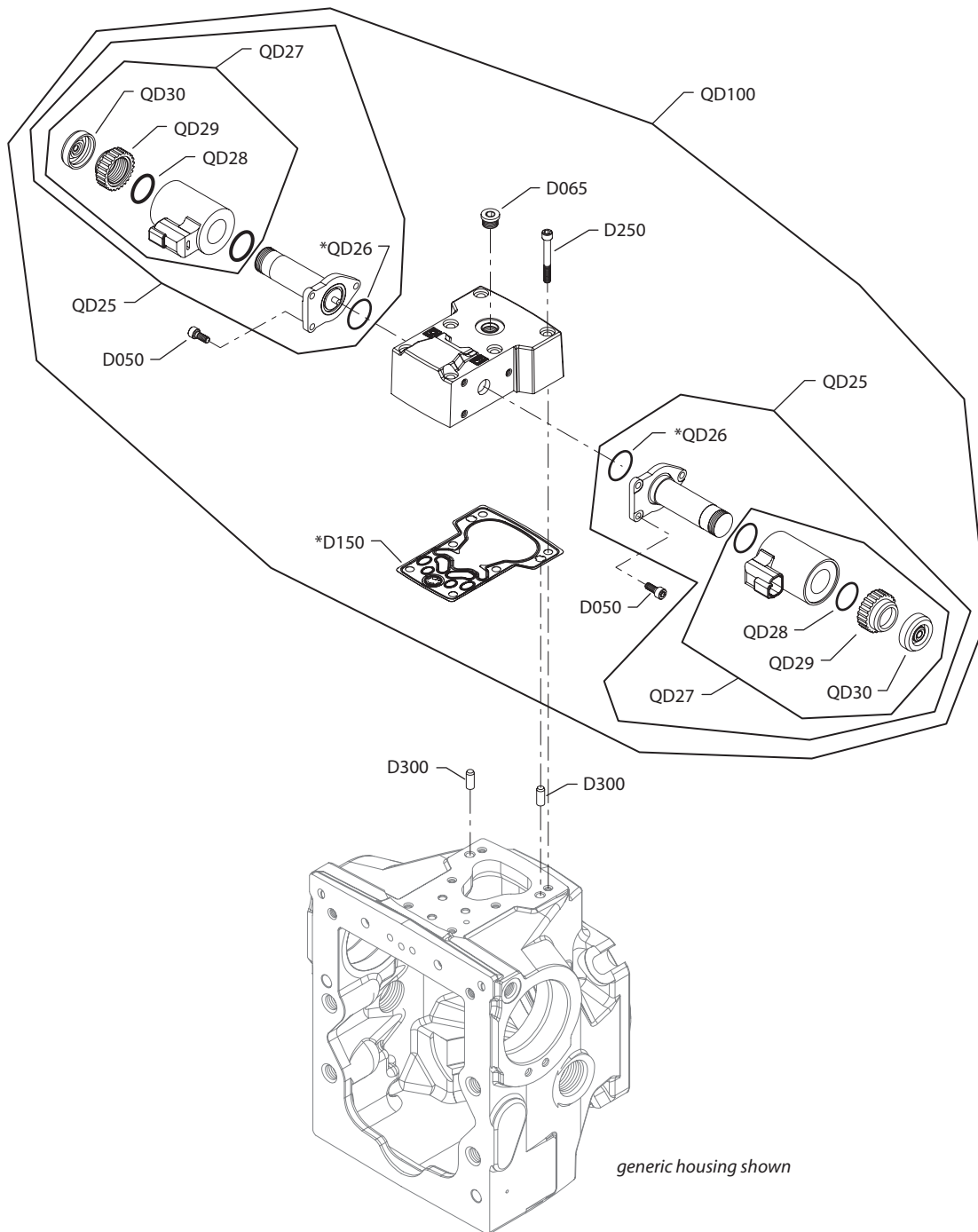
* = included in overhaul seal kit Q210

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
M5	D065	14-01		140642	Plug assembly	1
	D150	14-01		11173377	Control gasket (SB-2016-033)	1
	D200	14-01		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	14-01		505038	Screw, M6 x 45	6
	D300	14-01		310979	Dowel pin	2
	QD70	14-01		11129916	Solenoid valve, 12v	1
	QD75	14-01		11126847	Spring seat/neutral start switch assembly	1
	QD81	14-01		11152257	O-ring	1
	QD83	14-01		11136347	Coil kit, 12v	1
	QD84	14-01		11140393	O-ring	1
	QD85	14-01		11140394	Coil nut	1
	QD100	14-01		11141239	MDC kit, 12v	1
	QD751	14-01		001131 (9004201-5000)	O-ring	1
M6	D065	14-01		140642	Plug assembly	1
	D150	14-01		11173377	Control gasket (SB-2016-033)	1
	D200	14-01		11148827	Swashplate feedback link (SB-2016-028)	1
	D250	14-01		505038	Screw, M6 x 45	6
	D300	14-01		310979	Dowel pin	2
	QD70	14-01		11129917	Solenoid valve, 24v	1
	QD75	14-01		11126847	Spring seat/neutral start switch assembly	1
	QD81	14-01		11152257	O-ring	1
	QD83	14-01		11136348	Coil kit, 24v	1
	QD84	14-01		11140393	O-ring	1
	QD85	14-01		11140394	Coil nut	1
	QD100	14-01		11141240	MDC kit, 24v	1
	QD751	14-01		001131 (9004201-5000)	O-ring	1

Variable displacement pump

(N1 & N2)



E101 703E

* = included in overhaul seal kit Q210

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
N1	D050	16-21		716860	Screw, M5 x 12	6
	D065	16-21		140642	Plug assembly	1
	D150	16-21		11173377	Control gasket, H1 (SB-2016-033)	1
	D250	16-21		505038	Screw, M6 x 45	6
	D300	16-21		310979	Dowel pin	2
	QD25	16-21		141750	Proportional solenoid, 12v, Deutsch connector	2
	QD26	16-21		11001952	O-ring	2
	QD27	16-21		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	16-21		063172	O-ring	2
	QD29	16-21		11004749	Coil nut	2
	QD30	16-21		11027883	Cap	2
	QD100	16-21		11147921	NFPE control kit, 12v, manual override, Deutsch conn.	1
N2	D050	16-21		716860	Screw, M5 x 12	6
	D065	16-21		140642	Plug assembly	1
	D150	16-21		11173377	Control gasket, H1 (SB-2016-033)	1
	D250	16-21		505038	Screw, M6 x 45	6
	D300	16-21		310979	Dowel pin	2
	QD25	16-21		140751	Proportional solenoid, 24v, Deutsch connector	2
	QD26	16-21		11001952	O-ring	2
	QD27	16-21		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	16-21		063172	O-ring	2
	QD29	16-21		11004749	Coil nut	2
	QD30	16-21		11027883	Cap	2
	QD100	16-21		11147925	NFPE control kit, 24v, manual override, Deutsch conn.	1

(N3 & N4)



Parts Manual H1P 60 & 68cc Variable Displacement Pump

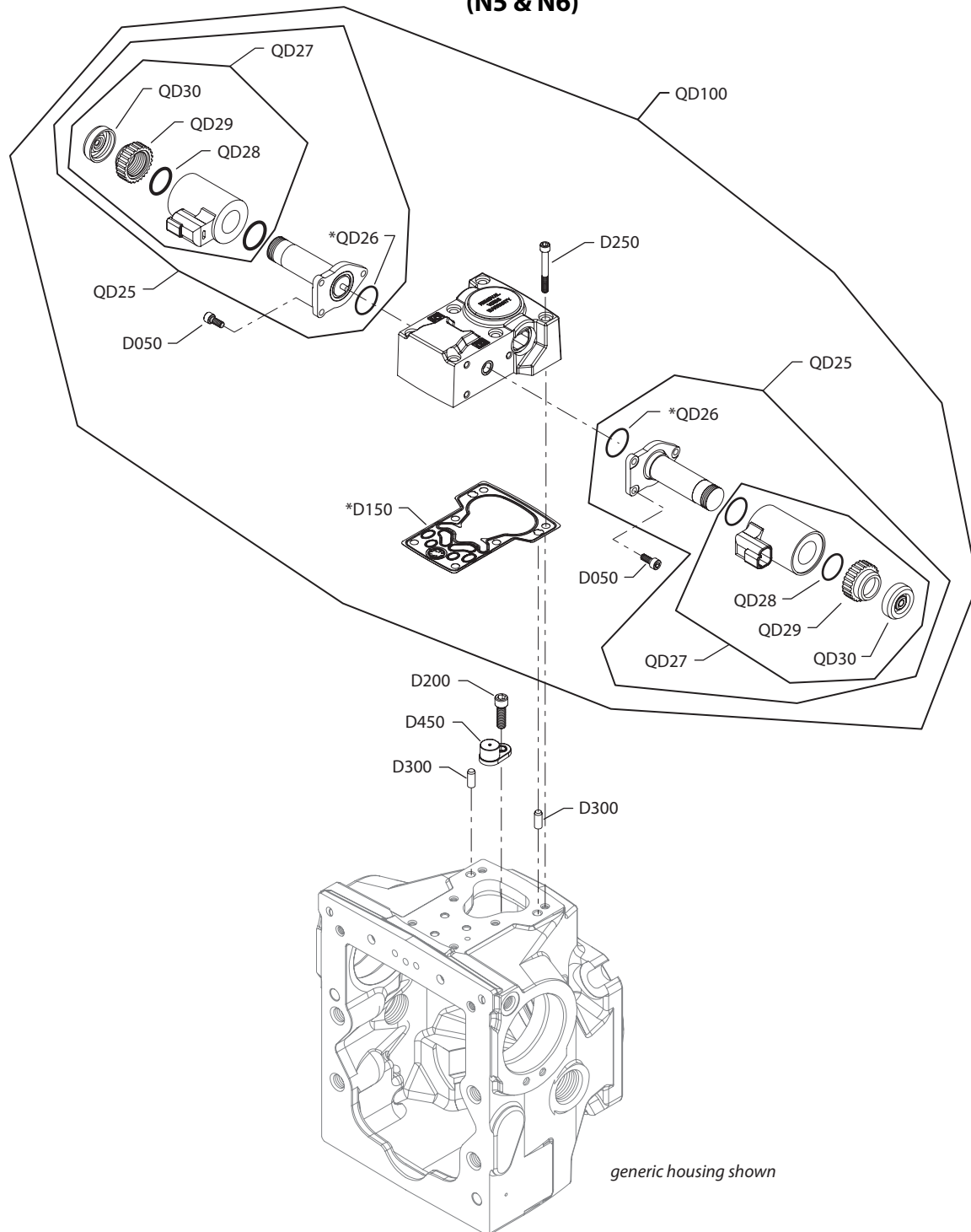
Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
N3	D050	16-21		716860	Screw, M5 x 12	6
	D067	16-21		140642	Plug assembly	1
	D076	16-21		067694	Screw, M4 x 10	2
	D150	16-21		11173377	Control gasket, H1 (SB-2016-033)	1
	D200	16-21		141472	Screw, special	1
	D250	16-21		505038	Screw, M6 x 45	6
	D300	16-21		310979	Dowel pin	2
	D450	16-21		11003097	Magnetic carrier	1
	QD25	16-21		140750	Proportional solenoid, 12v	2
	QD26	16-21		11001952	O-ring	2
	QD27	16-21		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	16-21		063172	O-ring	2
	QD29	16-21		11004749	Coil nut	2
	QD30	16-21		11027883	Cap	2
	QD80	16-21		11129914	Solenoid, 12V, Deutsch connector	1
	QD81	16-21		11152257	O-ring	1
	QD83	16-21		11147301	Coil kit, 12V, Deutsch connector	1
	QD84	16-21		11140393	O-ring	1
	QD85	16-21		11140394	Nut	1
	QD100	16-21		11147920	NFPE control kit, 12v, CCO	1
N4	D050	16-21		716860	Screw, M5 x 12	6
	D067	16-21		140642	Plug assembly	1
	D076	16-21		067694	Screw, M4 x 10	2
	D150	16-21		11173377	Control gasket, H1 (SB-2016-033)	1
	D200	16-21		141472	Screw, special	1
	D250	16-21		505038	Screw, M6 x 45	6
	D300	16-21		310979	Dowel pin	2
	D450	16-21		11003097	Magnetic carrier	1
	QD25	16-21		140751	Proportional solenoid, 24v	2
	QD26	16-21		11001952	O-ring	2
	QD27	16-21		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	16-21		063172	O-ring	2
	QD29	16-21		11004749	Coil nut	2
	QD30	16-21		11027883	Cap	2
	QD80	16-21		11129915	Solenoid, 24V, Deutsch connector	1
	QD81	16-21		11152257	O-ring	1
	QD83	16-21		11147332	Coil kit, 24V, Deutsch connector	1
	QD84	16-21		11140393	O-ring	1
	QD85	16-21		11140394	Nut	1
	QD100	16-21		11147924	NFPE control kit, 24v, CCO	1

Variable displacement pump

(N5 & N6)



E103 609E

* = included in overhaul seal kit Q210

Parts Manual H1P 60 & 68cc Variable Displacement Pump

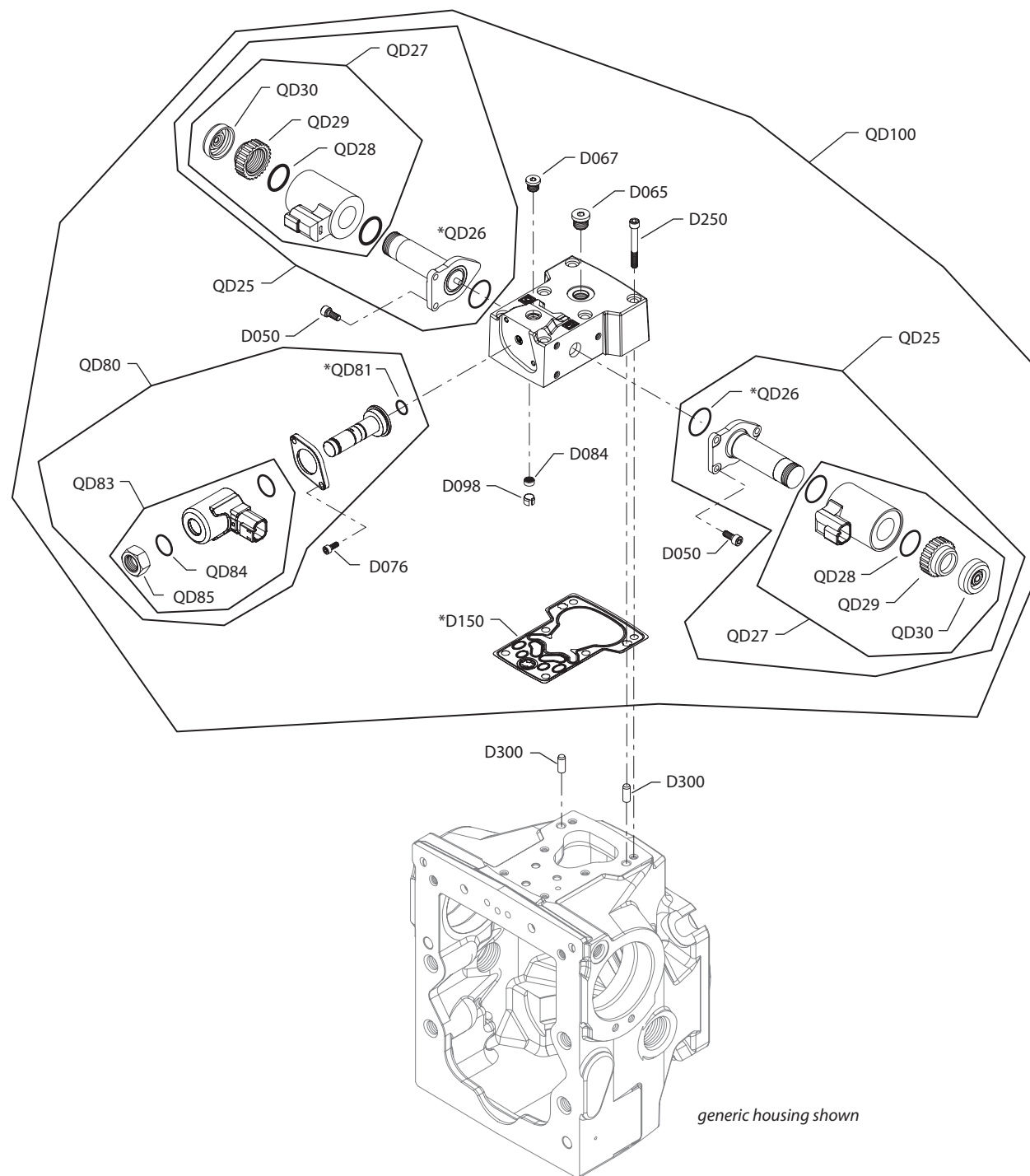
Variable displacement pump

Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
N5	D050	16-21		716860	Screw, M5 x 12	6
	D150	16-21		11173377	Control gasket, H1 (SB-2016-033)	1
	D200	16-21		141472	Screw, special	1
	D250	16-21		505038	Screw, M6 x 45	6
	D300	16-21		310979	Dowel pin	2
	D450	16-21		11003097	Magnetic carrier	1
	QD25	16-21		140750	Proportional solenoid, 12v	2
	QD26	16-21		11001952	O-ring	2
	QD27	16-21		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	16-21		063172	O-ring	2
	QD29	16-21		11004749	Coil nut	2
	QD30	16-21		11027883	Cap	2
	QD100	16-21		11147918	NFPE control kit, 12v, manual override	1
N6	D050	16-21		716860	Screw, M5 x 12	6
	D150	16-21		11173377	Control gasket, H1 (SB-2016-033)	1
	D200	16-21		141472	Screw, special	1
	D250	16-21		505038	Screw, M6 x 45	6
	D300	16-21		310979	Dowel pin	2
	D450	16-21		11003097	Magnetic carrier	1
	QD25	16-21		140751	Proportional solenoid, 24v	2
	QD26	16-21		11001952	O-ring	2
	QD27	16-21		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	16-21		063172	O-ring	2
	QD29	16-21		11004749	Coil nut	2
	QD30	16-21		11027883	Cap	2
	QD100	16-21		11147922	NFPE control kit, 24v, manual override	1

Variable displacement pump

(N7 & N8)



Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

Control

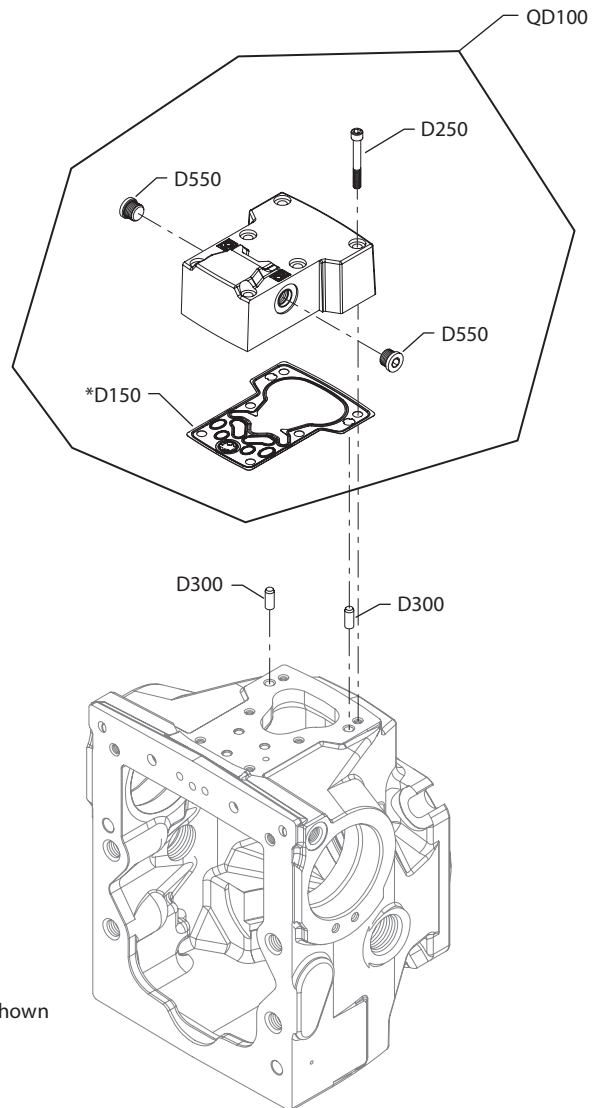
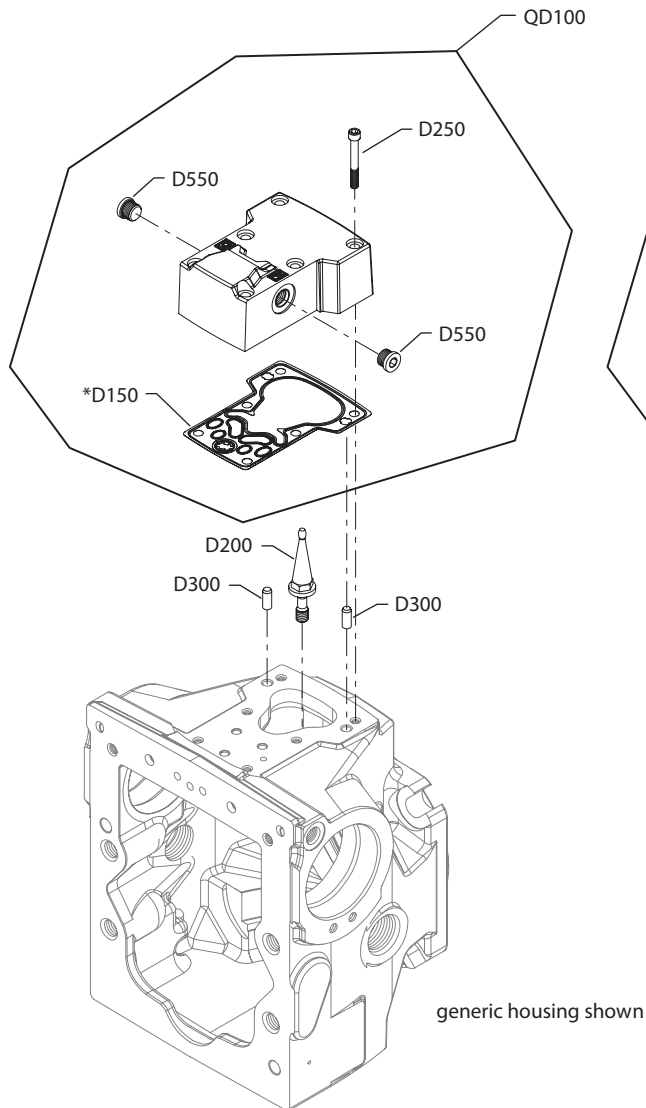
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N7	D050	16-21		716860	Screw, M5 x 12	6
	D067	16-21		140642	Plug assembly	1
	D076	16-21		067694	Screw, M4 x 10	2
	D150	16-21		11173377	Control gasket, H1 (SB-2016-033)	1
	D250	16-21		505038	Screw, M6 x 45	6
	D300	16-21		310979	Dowel pin	2
	QD25	16-21		140750	Proportional solenoid, 12v	2
	QD26	16-21		11001952	O-ring	2
	QD27	16-21		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	16-21		063172	O-ring	2
	QD29	16-21		11004749	Coil nut	2
	QD30	16-21		11027883	Cap	2
	QD80	16-21		11129914	Solenoid, 12V, Deutsch connector	1
	QD81	16-21		11152257	O-ring	1
	QD83	16-21		11147301	Coil kit, 12V, Deutsch connector	1
	QD84	16-21		11140393	O-ring	1
	QD85	16-21		11140394	Nut	1
	QD100	16-21		11147919	NFPE control kit, 12v, CCO	1
N8	D050	16-21		716860	Screw, M5 x 12	6
	D067	16-21		140642	Plug assembly	1
	D076	16-21		067694	Screw, M4 x 10	2
	D150	16-21		11173377	Control gasket, H1 (SB-2016-033)	1
	D250	16-21		505038	Screw, M6 x 45	6
	D300	16-21		310979	Dowel pin	2
	QD25	16-21		140751	Proportional solenoid, 24v	2
	QD26	16-21		11001952	O-ring	2
	QD27	16-21		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	16-21		063172	O-ring	2
	QD29	16-21		11004749	Coil nut	2
	QD30	16-21		11027883	Cap	2
	QD80	16-21		11129915	Solenoid, 24V, Deutsch connector	1
	QD81	16-21		11152257	O-ring	1
	QD83	16-21		11147332	Coil kit, 24V, Deutsch connector	1
	QD84	16-21		11140393	O-ring	1
	QD85	16-21		11140394	Nut	1
	QD100	16-21		11147923	NFPE control kit, 24v, CCO	1



Variable displacement pump

(ND)

(NN)



E103 360E

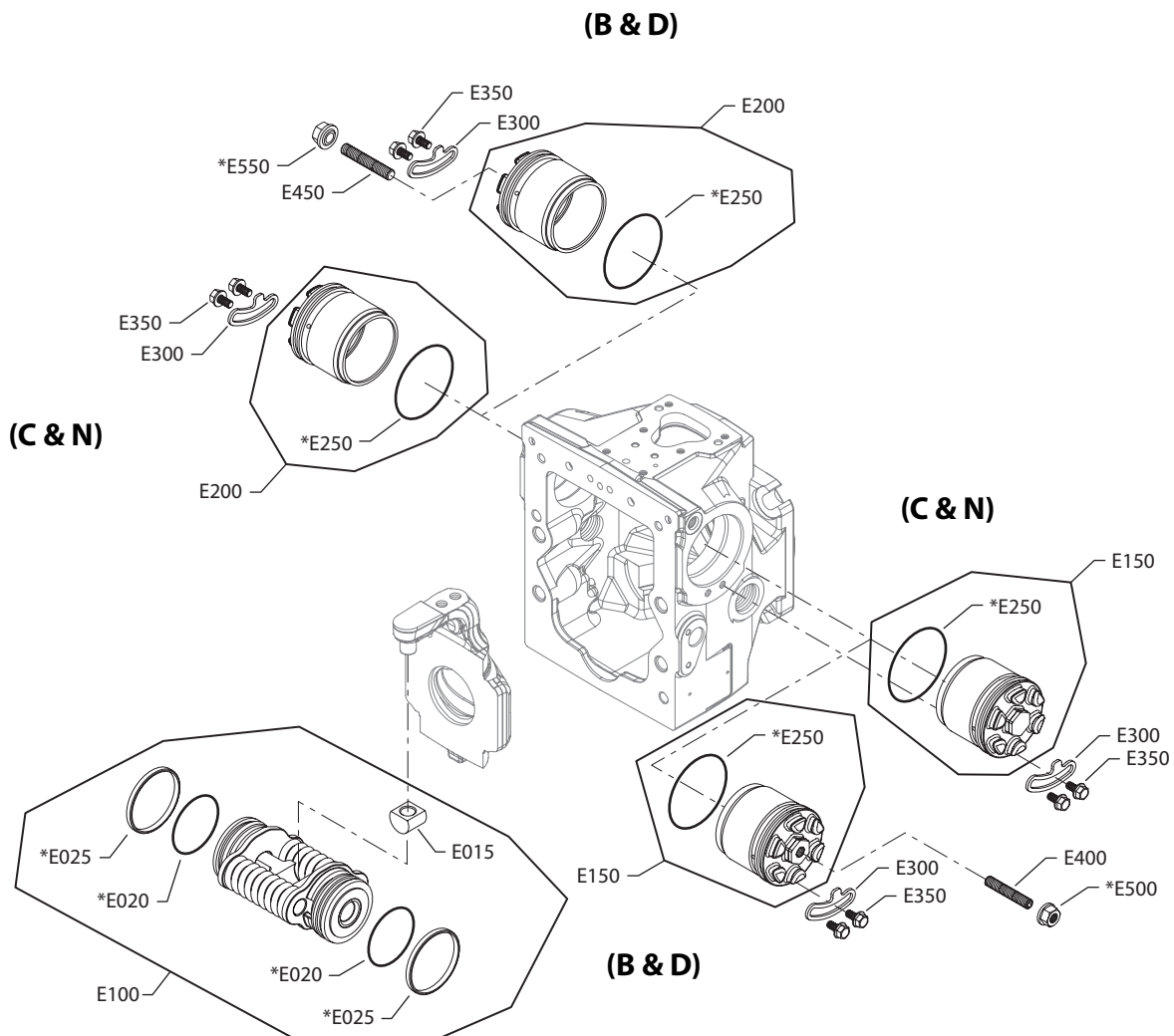
* = included in overhaul seal kit Q210


Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
ND	D150	15-11		11173377	Control gasket (SB-2016-033)	1
	D200	15-11		11148827	Swashplate feedback link (SB-2016-028)	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
NN	D150	13-38		11173377	Control gasket (SB-2016-033)	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



Variable displacement pump



Parts Manual

H1P 60 & 68cc Variable Displacement Pump

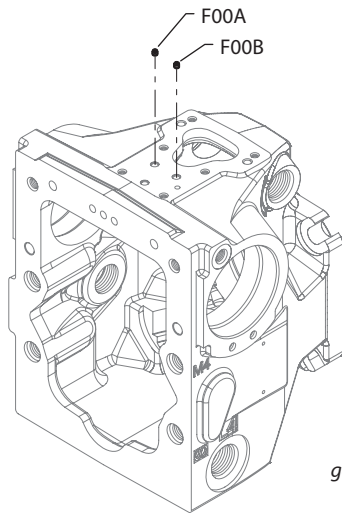
Variable displacement pump

Displacement limitation

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B	E015	10-48		11141989	Slider block	1
	E020	10-48		11045358	O-ring	2
	E025	10-48		11040065	Piston seal ring	2
	E100	10-48		11142039	Servo piston assembly	1
	E150	10-48		11081815	Servo cylinder assembly	1
	E200	10-48		11081815	Servo cylinder assembly	1
	E250	10-48		11045233	O-ring	2
	E300	10-48		11041776	Locking plate	2
	E350	10-48		508438	Screw, M6 x12	4
	E400	10-48		719401	Set screw, M8 x 50	1
	E450	10-48		719401	Set screw, M8 x 50	1
	E500	10-48		505412 (9003509-0008)	Seal nut, M8	1
	E550	10-48		505412 (9003509-0008)	Seal nut, M8	1
C	E015	10-48		11141989	Slider block	1
	E020	10-48		11045358	O-ring	2
	E025	10-48		11040065	Piston seal ring	2
	E100	10-48		11142040	Servo piston assembly w/nested spring	1
	E150	10-48		11081814	Servo cylinder assembly	1
	E200	10-48		11081814	Servo cylinder assembly	1
	E250	10-48		11045233	O-ring	2
	E300	10-48		11041776	Locking plate	2
	E350	10-48		508438	Screw, M6 x12	4
D	E015	10-48		11141989	Slider block	1
	E020	10-48		11045358	O-ring	2
	E025	10-48		11040065	Piston seal ring	2
	E100	10-48		11142040	Servo piston assembly w/nested spring	1
	E150	10-48		11081815	Servo cylinder assembly	1
	E200	10-48		11081815	Servo cylinder assembly	1
	E250	10-48		11045233	O-ring	2
	E300	10-48		11041776	Locking plate	2
	E350	10-48		508438	Screw, M6 x12	4
	E400	10-48		719401	Set screw, M8 x 50	1
	E450	10-48		719401	Set screw, M8 x 50	1
	E500	10-48		505412 (9003509-0008)	Seal nut, M8	1
	E550	10-48		505412 (9003509-0008)	Seal nut, M8	1
N	E015	10-48		11141989	Slider block	1
	E020	10-48		11045358	O-ring	2
	E025	10-48		11040065	Piston seal ring	2
	E100	10-48		11142039	Servo piston assembly	1
	E150	10-48		11081814	Servo cylinder assembly	1
	E200	10-48		11081814	Servo cylinder assembly	1
	E250	10-48		11045233	O-ring	2
	E300	10-48		11041776	Locking plate	2
	E350	10-48		508438	Screw, M6 x12	4

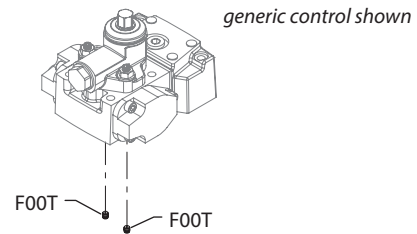
Variable displacement pump

(C1 & C2)



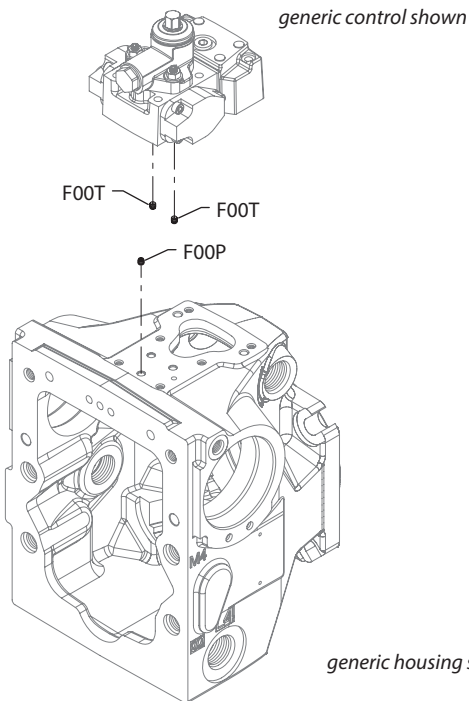
generic housing shown

(C6 & C7)



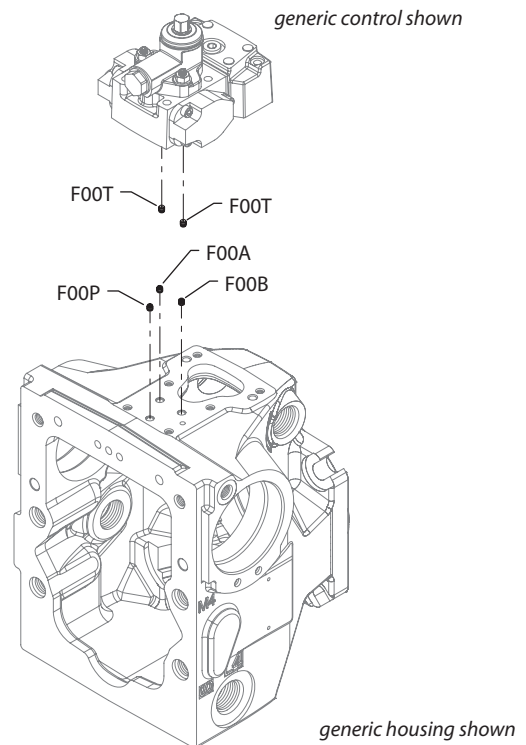
generic control shown

(C8, C9, D1, D2 & D3)



generic housing shown

(D4 & D5)



generic housing shown

Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

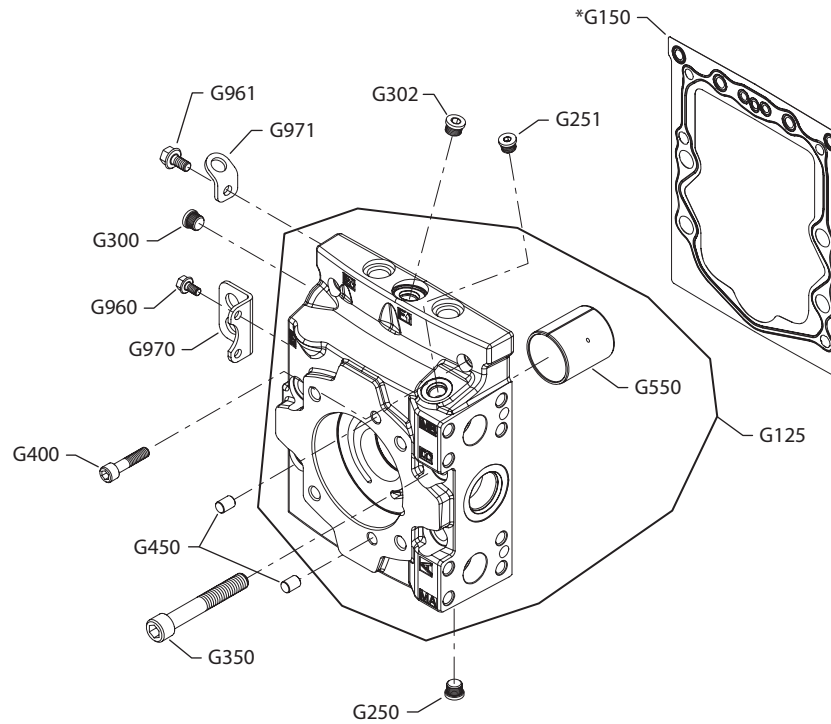
Orifice

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C1	F00A	10-48		140611	Orifice, 0.8, M6 x 0.75 mm	1
	F00B	10-48		140611	Orifice, 0.8, M6 x 0.75 mm	1
C2	F00A	10-48		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00B	10-48		140754	Orifice, 1.3, M6 x 0.75 mm	1
C3				No parts		
C6	F00T	14-44		11151734	Orifice, 1.0 M6 x 0.75 mm	2
C7	F00T	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	2
C8	F00P	14-44		140611	Orifice, 0.8 M6 x 0.75 mm	1
	F00T	14-44		11151733	Orifice, 0.6 M6 x 0.75 mm	2
C9	F00P	14-44		11151734	Orifice, 1.0 M6 x 0.75 mm	1
	F00T	14-44		11151733	Orifice, 0.6 M6 x 0.75 mm	2
D1	F00P	14-44		11151734	Orifice, 1.0 M6 x 0.75 mm	1
	F00T	14-44		140611	Orifice, 0.8 M6 x 0.75 mm	2
D2	F00P	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-44		140611	Orifice, 0.8 M6 x 0.75 mm	2
D3	F00P	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-44		11151734	Orifice, 1.0 M6 x 0.75 mm	2
D4	F00A	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00B	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00P	14-44		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-44		11151734	Orifice, 1.0 M6 x 0.75 mm	2
D5	F00A	14-44		140611	Orifice, 0.8 M6 x 0.75 mm	1
	F00B	14-44		140611	Orifice, 0.8 M6 x 0.75 mm	1
	F00P	14-44		11151733	Orifice, 0.6 M6 x 0.75 mm	1
	F00T	14-44		11151733	Orifice, 0.6 M6 x 0.75 mm	2



Variable displacement pump

(D3 & D6)



E101 780E

* = included in overhaul seal kit Q210

Parts Manual H1P 60 & 68cc Variable Displacement Pump

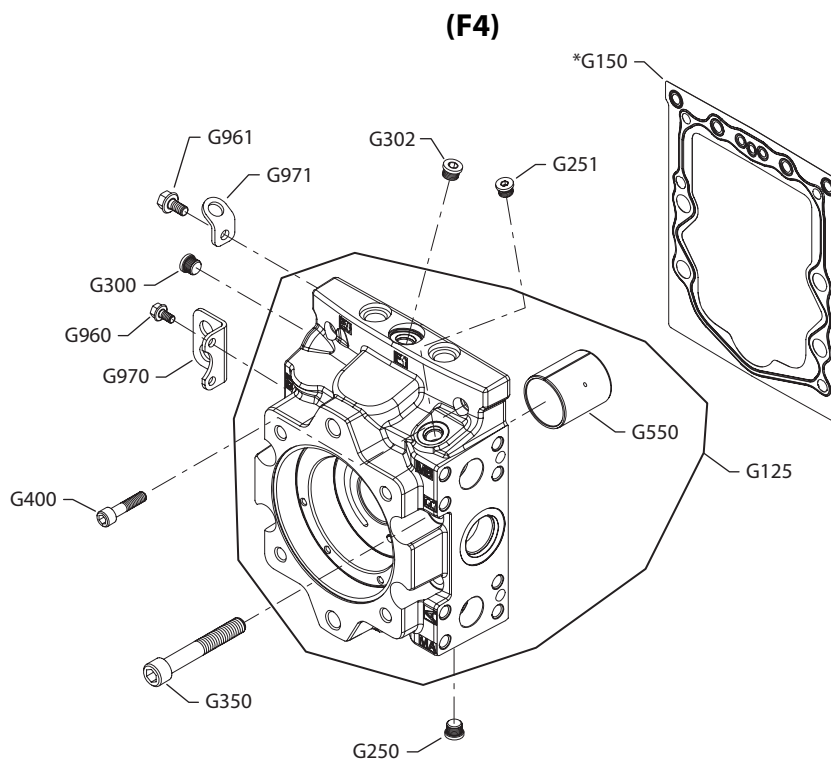
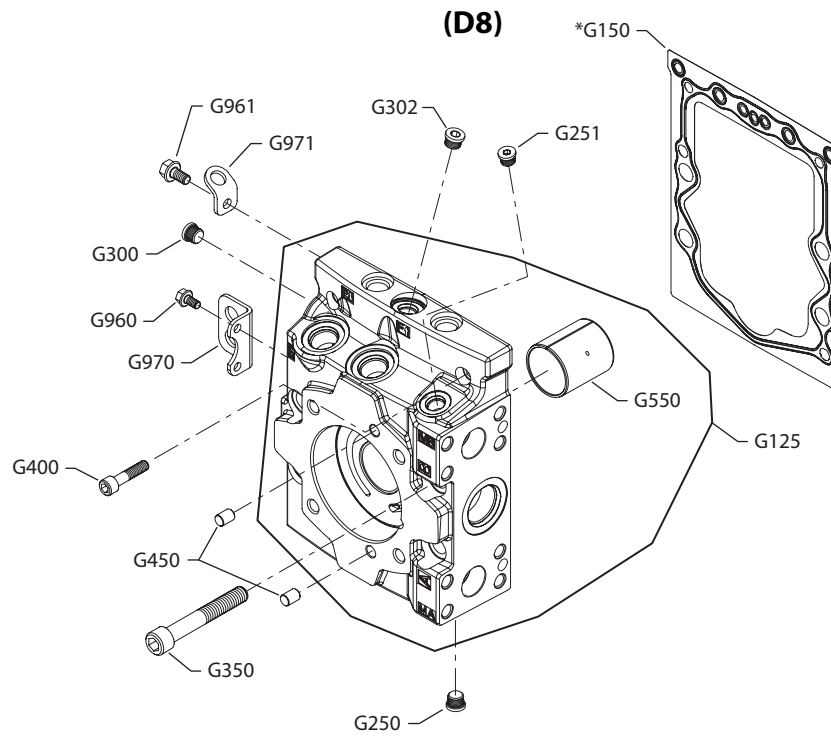
Variable displacement pump

End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D3	G125	10-48		11040057	End cap assembly, CW	1
	G125	10-48		11040056	End cap assembly, CCW	1
	G150	10-48		11040066	End cap gasket	1
	G250	10-48		140644	Plug assembly	1
	G251	10-48		140644	Plug assembly	1
	G300	10-48		140644	Plug assembly	1
	G302	10-48		140644	Plug assembly	1
	G350	10-48		11049249	Screw, M14 x 80	4
	G400	10-48		092106	Screw, M8 x 35	2
	G450	10-48		5000757	Dowel pin	2
	G550	10-48		11038841	Journal bearing	1
	G960	10-48		508438	Screw, M6 x 12	2
	G961	10-48		508438	Screw, M6 x 12	1
	G970	10-48		4460311	Lifting bracket	1
	G971	10-48		4800754	Lifting bracket	1
D6	G125	10-48		11040053	End cap assembly, CW	1
	G125	10-48		11040052	End cap assembly, CCW	1
	G150	10-48		11040066	End cap gasket	1
	G250	10-48		140644	Plug assembly	1
	G251	10-48		140644	Plug assembly	1
	G300	10-48		140644	Plug assembly	1
	G302	10-48		140644	Plug assembly	1
	G350	10-48		11049249	Screw, M14 x 80	4
	G400	10-48		092106	Screw, M8 x 35	2
	G450	10-48		5000757	Dowel pin	2
	G550	10-48		11038841	Journal bearing	1
	G960	10-48		508438	Screw, M6 x 12	2
	G961	10-48		508438	Screw, M6 x 12	1
	G970	10-48		4460311	Lifting bracket	1
	G971	10-48		4800754	Lifting bracket	1



Variable displacement pump



E101 781E

* = included in overhaul seal kit Q210

Parts Manual

H1P 60 & 68cc Variable Displacement Pump

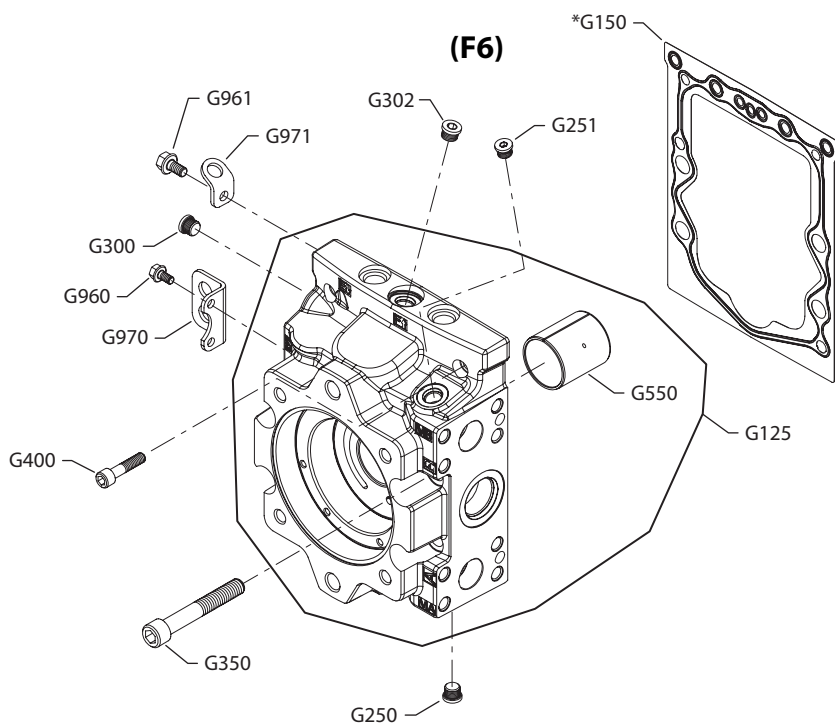
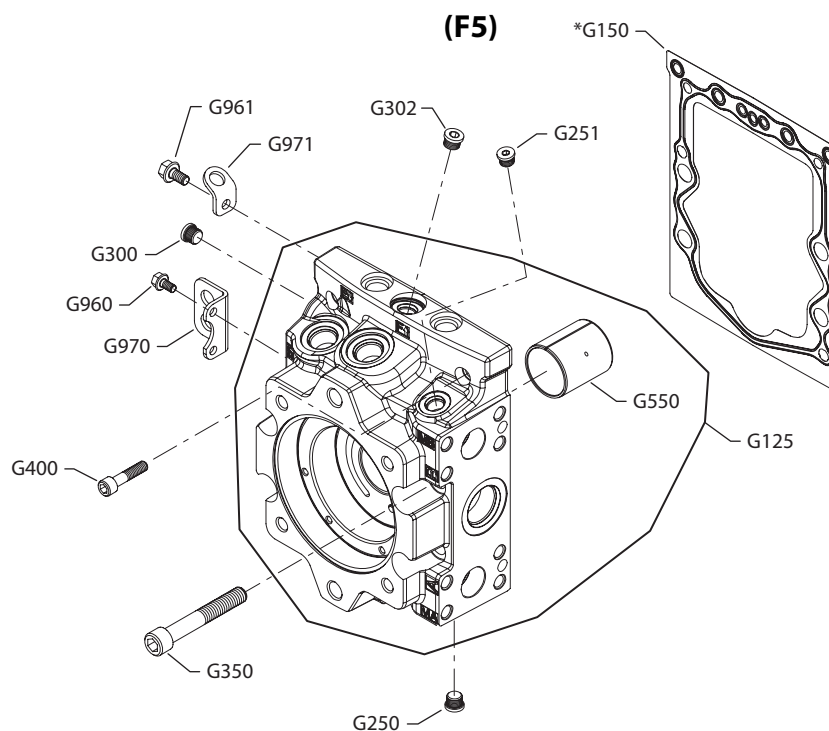
Variable displacement pump

End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D8	G125	10-48		11040055	End cap assembly, CW	1
	G125	10-48		11040054	End cap assembly, CCW	1
	G150	10-48		11040066	End cap gasket	1
	G250	10-48		140644	Plug assembly	1
	G251	10-48		140644	Plug assembly	1
	G300	10-48		140644	Plug assembly	1
	G302	10-48		140644	Plug assembly	1
	G350	10-48		11049249	Screw, M14 x 80	4
	G400	10-48		092106	Screw, M8 x 35	2
	G450	10-48		5000757	Dowel pin	2
	G550	10-48		11038841	Journal bearing	1
	G960	10-48		508438	Screw, M6 x 12	2
	G961	10-48		508438	Screw, M6 x 12	1
	G970	10-48		4460311	Lifting bracket	1
	G971	10-48		4800754	Lifting bracket	1
F4	G125	10-48		11040059	End cap assembly, CW	1
	G125	10-48		11040058	End cap assembly, CCW	1
	G150	10-48		11040066	End cap gasket	1
	G250	10-48		140644	Plug assembly	1
	G251	10-48		140644	Plug assembly	1
	G300	10-48		140644	Plug assembly	1
	G302	10-48		140644	Plug assembly	1
	G350	10-48		11049249	Screw, M14 x 80	4
	G400	10-48		092106	Screw, M8 x 35	2
	G550	10-48		11038841	Journal bearing	1
	G960	10-48		508438	Screw, M6 x 12	2
	G961	10-48		508438	Screw, M6 x 12	1
	G970	10-48		4460311	Lifting bracket	1
	G971	10-48		4800754	Lifting bracket	1



Variable displacement pump



E101 788E

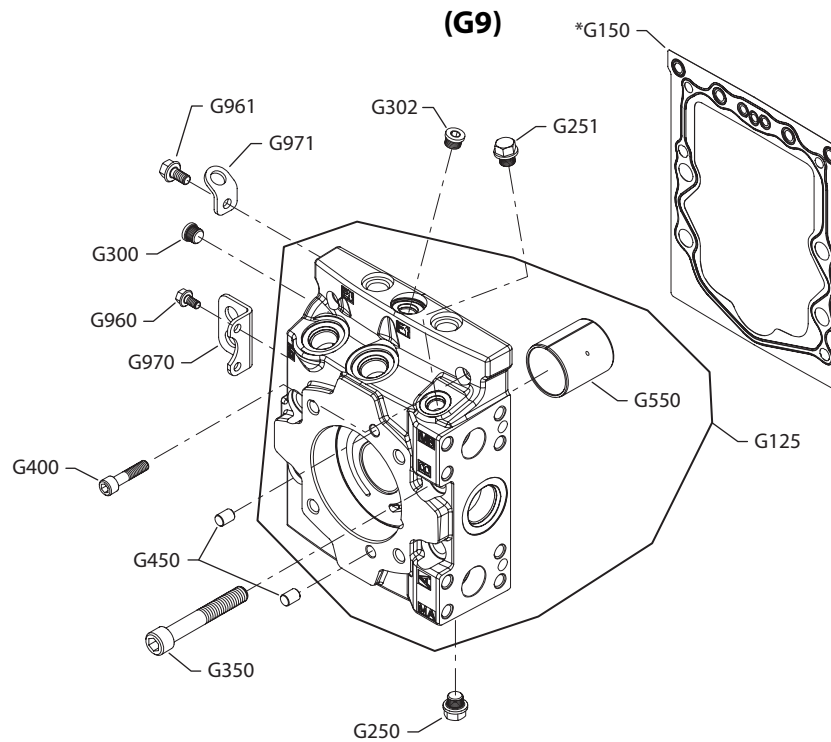
* = included in overhaul seal kit Q210

Variable displacement pump
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
F5	G125	10-48		11040061	End cap assembly, CW	1
	G125	10-48		11040060	End cap assembly, CCW	1
	G150	10-48		11040066	End cap gasket	1
	G250	10-48		140644	Plug assembly	1
	G251	10-48		140644	Plug assembly	1
	G300	10-48		140644	Plug assembly	1
	G302	10-48		140644	Plug assembly	1
	G350	10-48		11049249	Screw, M14 x 80	4
	G400	10-48		092106	Screw, M8 x 35	2
	G550	10-48		11038841	Journal bearing	1
	G960	10-48		508438	Screw, M6 x 12	2
	G961	10-48		508438	Screw, M6 x 12	1
	G970	10-48		4460311	Lifting bracket	1
	G971	10-48		4800754	Lifting bracket	1
F6	G125	10-48		11040063	End cap assembly, CW	1
	G125	10-48		11040062	End cap assembly, CCW	1
	G150	10-48		11040066	End cap gasket	1
	G250	10-48		140644	Plug assembly	1
	G251	10-48		140644	Plug assembly	1
	G300	10-48		140644	Plug assembly	1
	G302	10-48		140644	Plug assembly	1
	G350	10-48		11049249	Screw, M14 x 80	4
	G400	10-48		092106	Screw, M8 x 35	2
	G550	10-48		11038841	Journal bearing	1
	G960	10-48		508438	Screw, M6 x 12	2
	G961	10-48		508438	Screw, M6 x 12	1
	G970	10-48		4460311	Lifting bracket	1
	G971	10-48		4800754	Lifting bracket	1



Variable displacement pump



E103 556E

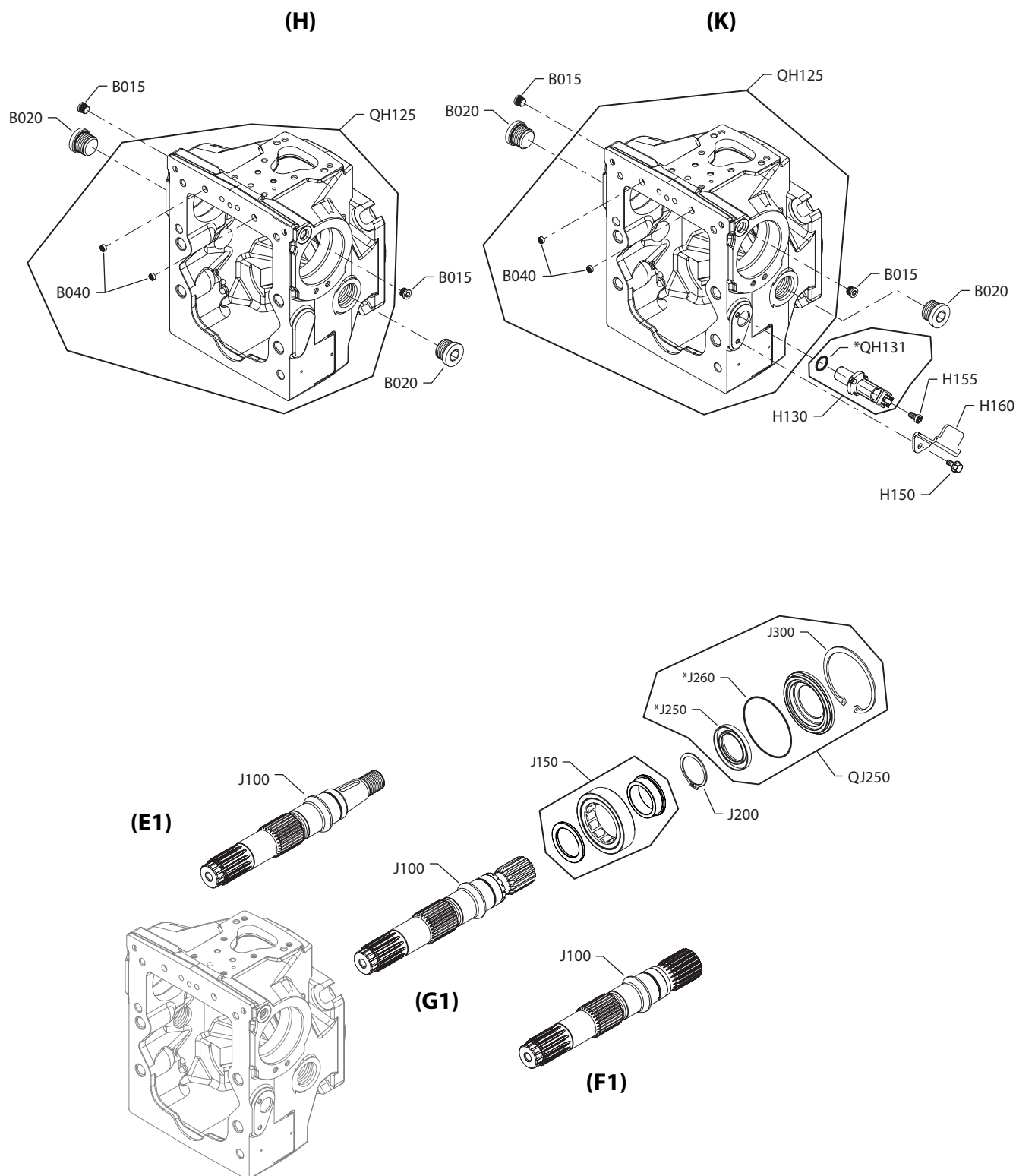
* = included in overhaul seal kit Q210


Variable displacement pump
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G9	G125	10-48		11040055	End cap assembly, CW	1
	G150	10-48		11040066	End cap gasket	1
	G250	10-48		11147119	Plug assembly, special	1
	G251	10-48		11147119	Plug assembly, special	1
	G300	10-48		140644	Plug assembly	1
	G302	10-48		140644	Plug assembly	1
	G350	10-48		11049249	Screw, M14 x 80	4
	G400	10-48		092106	Screw, M8 x 35	2
	G450	10-48		5000757	Dowel pin	2
	G550	10-48		11038841	Journal bearing	1
	G960	10-48		508438	Screw, M6 x 12	2
	G961	10-48		508438	Screw, M6 x 12	1
	G970	10-48		4460311	Lifting bracket	1
	G971	10-48		4800754	Lifting bracket	1



Variable displacement pump



Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

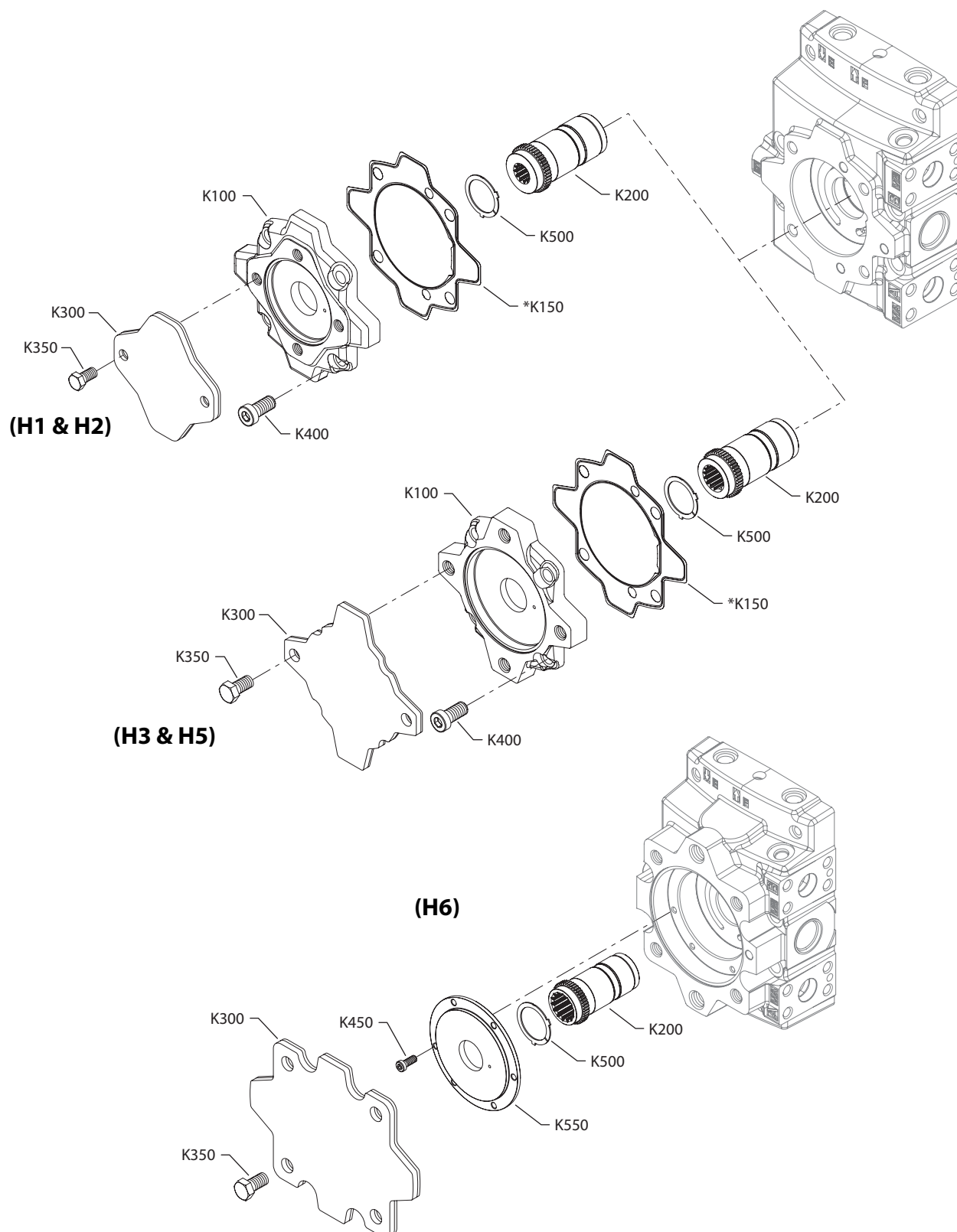
Housing

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
H	B015	10-48		327007 (9005110-4400)	Plug assembly	2
	B020	10-48		664524 (9005110-9000)	Plug assembly	2
	B040	10-48		140967	Screen, 8 mm, 125 micron	2
	QH125	10-48		11145206	Housing assembly, H1P060/068	1
K	B015	10-48		327007 (9005110-4400)	Plug assembly	2
	B020	10-48		664524 (9005110-9000)	Plug assembly	2
	B040	10-48		140967	Screen, 8 mm, 125 micron	2
	H150	10-48		508438	Screw, M6 x 12	1
	H155	10-48		376749	Screw, M6 x 12	1
	H160	10-48		11025029	Speed sensor protector	1
	H130	10-48		149055	Speed sensor assembly	1
	QH125	10-48		11145207	Housing assembly, H1P060/068	1
	QH131	10-48		11013397	O-ring	1

Shaft

E1	J100	13-05		11039239	Shaft, tapered	1
	J150	13-05		357616	Roller bearing	1
	J200	13-05		9006300-0137	Retaining ring	2
	J250	13-05		141936	Lip seal	1
	J260	13-05		9004104-2310	O-ring	1
	J300	13-05		9006200-0281	Retaining ring	1
	QJ250	13-05		11077181	Shaft seal kit	1
F1	J100	10-48		11038239	Shaft, 21 tooth spline, 16/32 pitch	1
	J150	10-48		357616	Roller bearing	1
	J200	10-48		9006300-0137	Retaining ring	2
	J250	10-48		141936	Lip seal	1
	J260	10-48		9004104-2310	O-ring	1
	J300	10-48		9006200-0281	Retaining ring	1
	QJ250	10-48		11077181	Shaft seal kit	1
G1	J100	10-48		11038238	Shaft, 14 tooth spline, 12/24 pitch	1
	J150	10-48		357616	Roller bearing	1
	J200	10-48		9006300-0137	Retaining ring	2
	J250	10-48		141936	Lip seal	1
	J260	10-48		9004104-2310	O-ring	1
	J300	10-48		9006200-0281	Retaining ring	1
	QJ250	10-48		11077181	Shaft seal kit	1

Variable displacement pump



E101 783E

* = included in overhaul seal kit Q210

Parts Manual

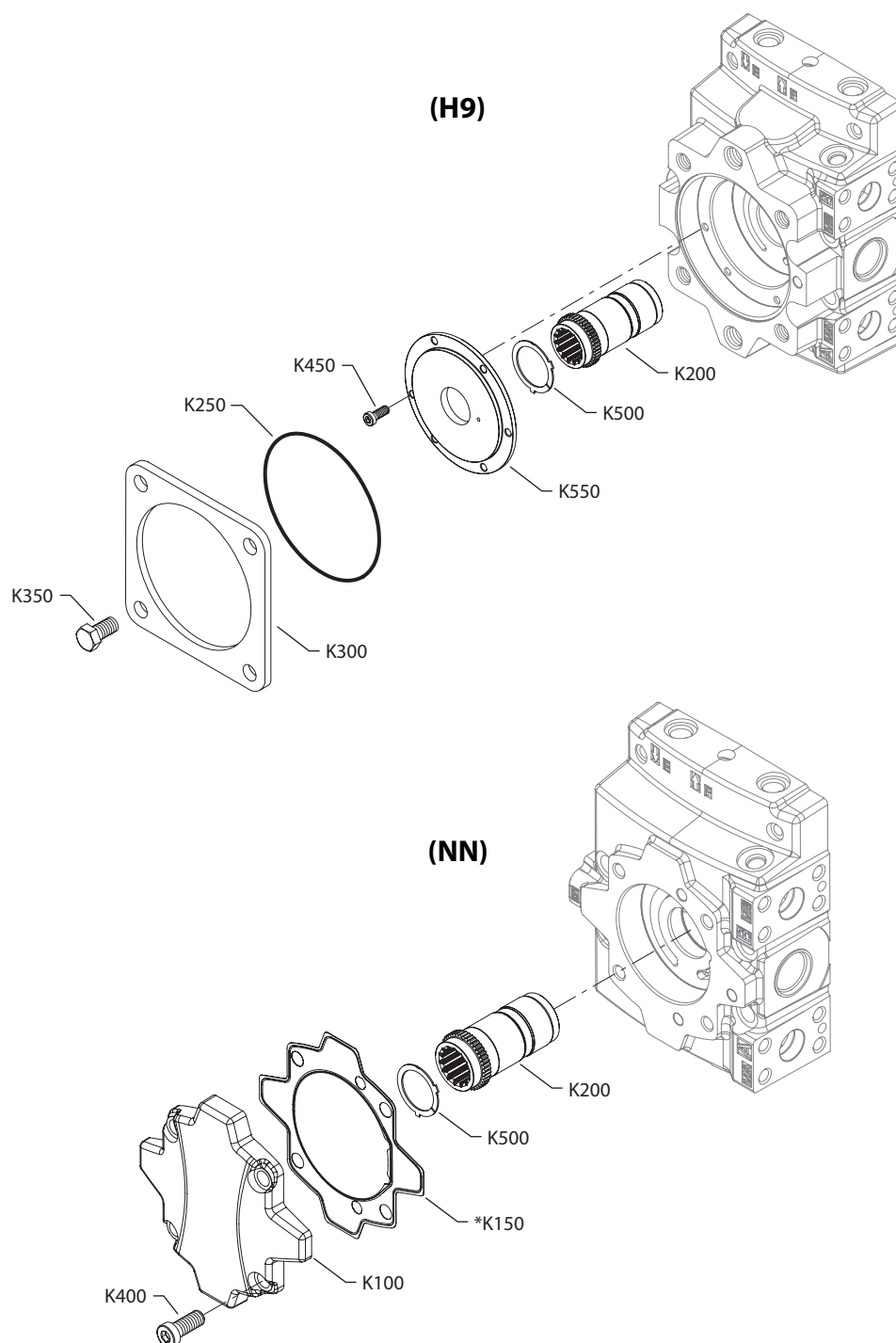
H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

Auxiliary mounting

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
H1	K100	10-48		140927	Adapter flange, SAE A	1
	K150	10-48		11029873	Adapter seal	1
	K200	10-48		11038273	Coupling, 11 tooth, 16/32 pitch	1
	K300	10-48		11017125	Flange cover	1
	K350	10-48		370247	Screw, M10 x 20	2
	K400	10-48		11000819	Screw, M12 x 25	4
	K500	10-48		141105	Thrust washer	1
H2	K100	10-48		140927	Adapter flange, SAE A	1
	K150	10-48		11029873	Adapter seal	1
	K200	10-48		11039241	Coupling, 9 tooth, 16/32 pitch	1
	K300	10-48		11017125	Flange cover	1
	K350	10-48		370247	Screw, M10 x 20	2
	K400	10-48		11000819	Screw, M12 x 25	4
	K500	10-48		141105	Thrust washer	1
H3	K100	10-48		141240	Adapter flange, SAE B	1
	K150	10-48		11029873	Adapter seal	1
	K200	10-48		11038236	Coupling, 13 tooth, 16/32 pitch	1
	K300	10-48		11023746	Flange cover	1
	K350	10-48		5000760	Screw, M12 x 20	2
	K400	10-48		11000819	Screw, M12 x 25	4
	K500	10-48		141105	Thrust washer	1
H5	K100	10-48		141240	Adapter flange, SAE B	1
	K150	10-48		11029873	Adapter seal	1
	K200	10-48		11039252	Coupling, 15 tooth, 16/32 pitch	1
	K300	10-48		11023746	Flange cover	1
	K350	10-48		5000760	Screw, M12 x 20	2
	K400	10-48		11000819	Screw, M12 x 25	4
	K500	10-48		141105	Thrust washer	1
H6	K200	10-48		11038418	Coupling, 14 tooth, 12/24 pitch	1
	K300	10-48		11023750	Flange cover	1
	K350	10-48		5000760	Screw, M12 x 20	2
	K450	10-48		376749	Screw, M6 x 12	6
	K500	10-48		141105	Thrust washer	1
	K550	10-48		11149453	Charge pump cover	1

Variable displacement pump



E103 390E

* = included in overhaul seal kit Q210

Parts Manual H1P 60 & 68cc Variable Displacement Pump

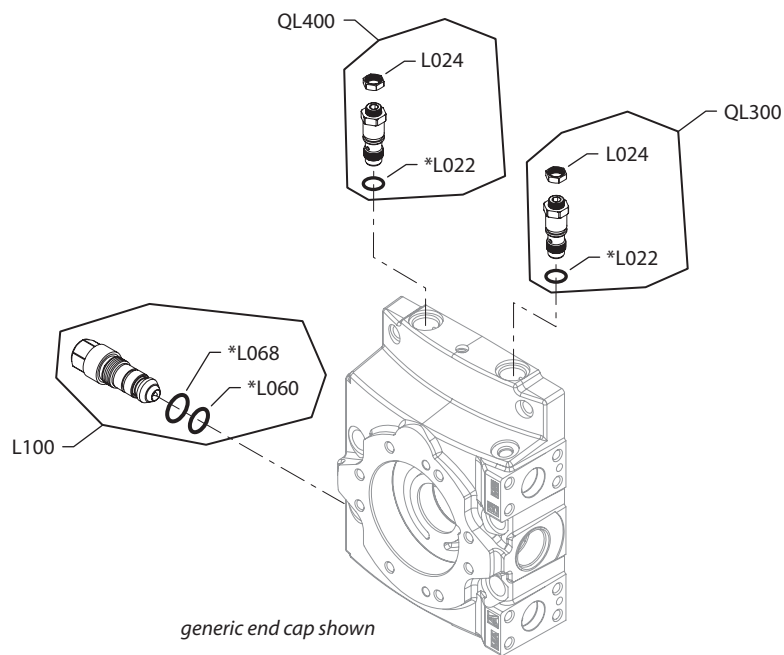
Variable displacement pump

Auxiliary mounting

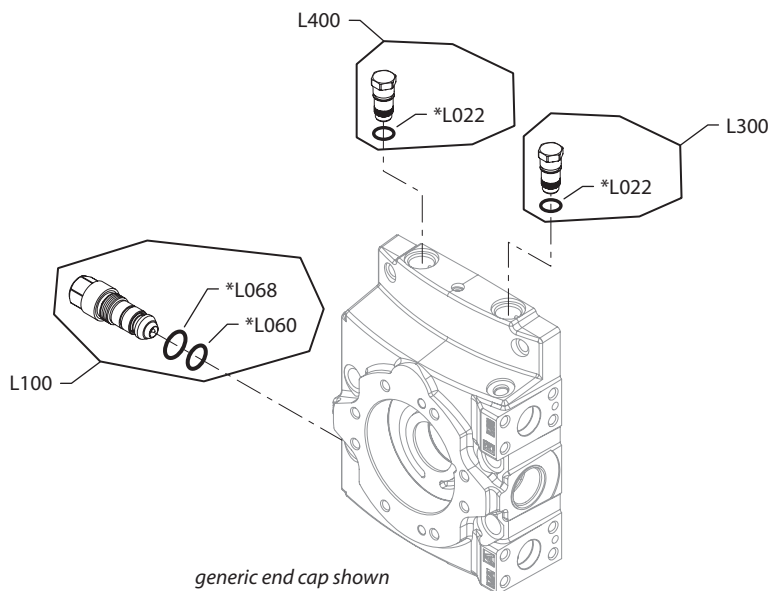
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
H9	K200	11-34		11038418	Coupling, 14 tooth, 12/24 pitch	1
	K250	11-34		056739	O-ring	1
	K300	11-34		8800406	Flange cover	1
	K350	11-34		5000760	Screw, M12 x 20	2
	K450	11-34		376749	Screw, M6 x 12	6
	K500	11-34		141105	Thrust washer	1
	K550	11-34		11149453	Charge pump cover	1
NN	K100	10-48		141249	Adapter flange, NN	1
	K150	10-48		11029873	Adapter seal	1
	K200	10-48		11038236	Coupling, 13 tooth, 16/32 pitch	1
	K400	10-48		11000819	Screw, M12 x 25	4
	K500	10-48		141105	Thrust washer	1

Variable displacement pump

(F01 - F07)



(K18 - K25)



Parts Manual H1P 60 & 68cc Variable Displacement Pump

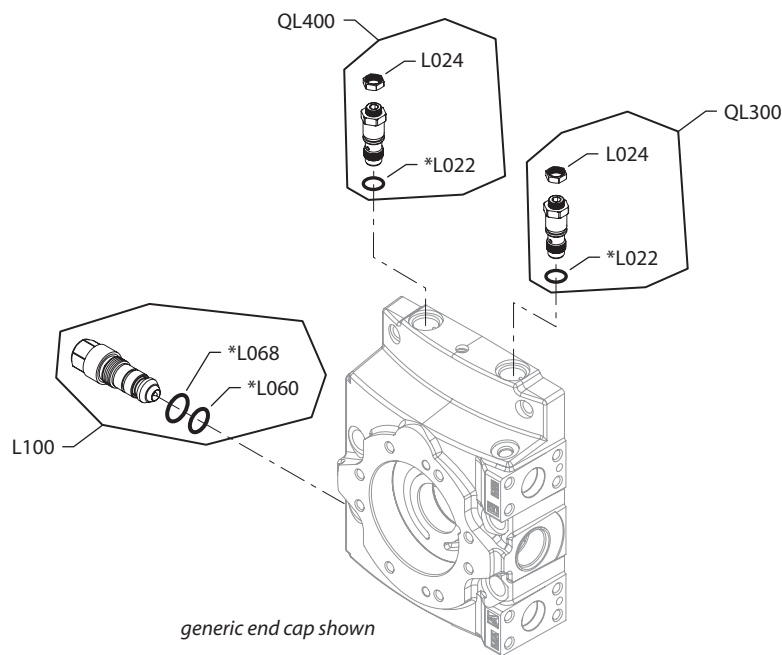
Variable displacement pump

High pressure setting, port A

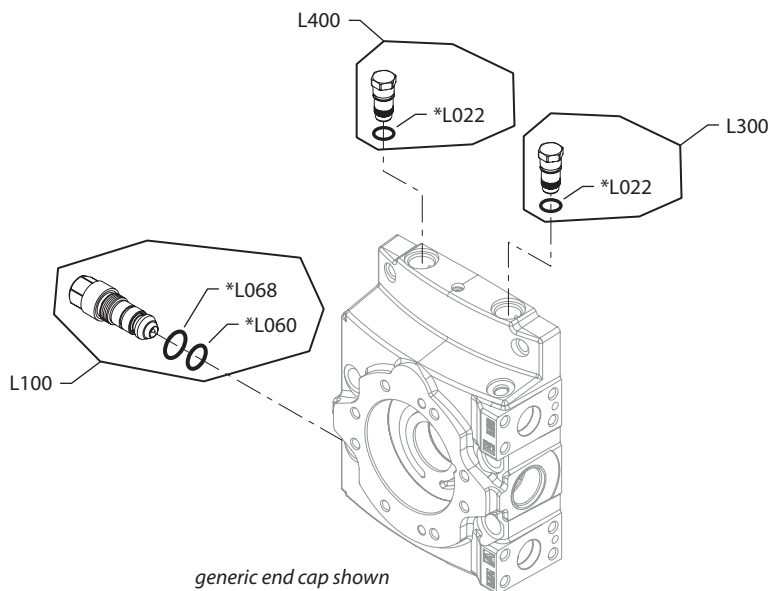
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	10-48		041152	O-ring	1
	L060	10-48		141109	O-ring	1
	L068	10-48		11052215	O-ring	1
F01	L024	13-14		11054668	Nut	1
	L100	13-14		11049123	High pressure relief valve, 250 bar	1
	QL300	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
F02	L024	13-14		11054668	Nut	1
	L100	13-14		11049125	High pressure relief valve, 300 bar	1
	QL300	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
F03	L024	13-14		11054668	Nut	1
	L100	13-14		11049127	High pressure relief valve, 350 bar	1
	QL300	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
F04	L024	13-14		11054668	Nut	1
	L100	13-14		11049129	High pressure relief valve, 400 bar	1
	QL300	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
F05	L024	13-14		11054668	Nut	1
	L100	13-14		11049125	High pressure relief valve, 300 bar	1
	QL300	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
F07	L024	15-17		11054668	Nut	1
	L100	15-17		11049125	High pressure relief valve, 300 bar	1
	QL300	15-17		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	15-17		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
K18	L100	10-48		11049120	High pressure relief valve, 180 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly, CCW rotation pump	1
	L400	10-48		11002291	Pressure limiter plug assembly, CW rotation pump	1
K20	L100	10-48		11049121	High pressure relief valve, 200 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly, CCW rotation pump	1
	L400	10-48		11002291	Pressure limiter plug assembly, CW rotation pump	1
K23	L100	10-48		11049122	High pressure relief valve, 230 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly, CCW rotation pump	1
	L400	10-48		11002291	Pressure limiter plug assembly, CW rotation pump	1
K25	L100	10-48		11049123	High pressure relief valve, 250 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly, CCW rotation pump	1
	L400	10-48		11002291	Pressure limiter plug assembly, CW rotation pump	1

Variable displacement pump

(L15-L20)



(K28 - K48)



Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

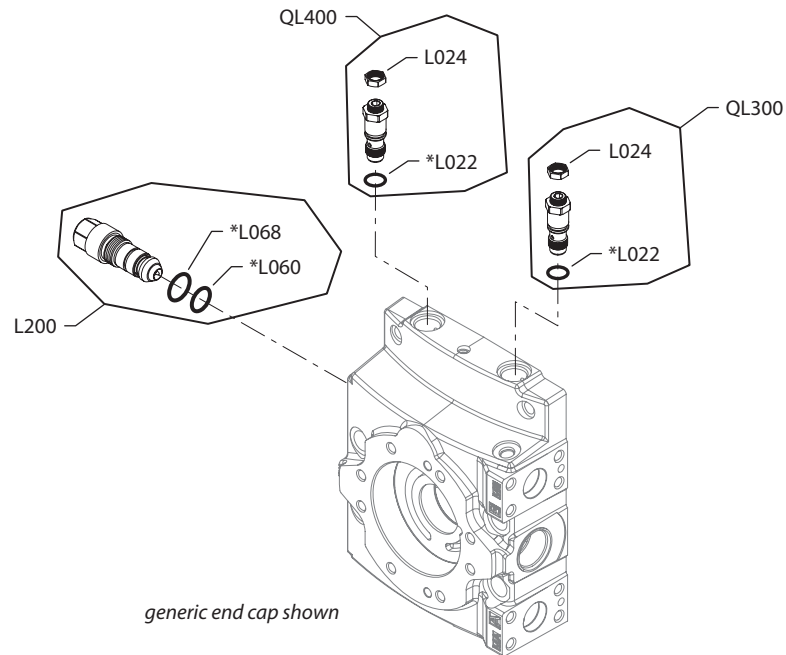
High pressure setting, port A

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	10-48		041152	O-ring	1
	L060	10-48		141109	O-ring	1
	L068	10-48		11052215	O-ring	1
K28	L100	10-48		11049124	High pressure relief valve, 280 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly, CCW rotation pump	1
	L400	10-48		11002291	Pressure limiter plug assembly, CW rotation pump	1
K30	L100	10-48		11049125	High pressure relief valve, 300 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly, CCW rotation pump	1
	L400	10-48		11002291	Pressure limiter plug assembly, CW rotation pump	1
K33	L100	10-48		11049126	High pressure relief valve, 330 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly, CCW rotation pump	1
	L400	10-48		11002291	Pressure limiter plug assembly, CW rotation pump	1
K35	L100	10-48		11049127	High pressure relief valve, 350 bar	1
	L400	10-48		11002291	Pressure limiter plug assembly	1
K38	L100	10-48		11049128	High pressure relief valve, 380 bar	1
	L400	10-48		11002291	Pressure limiter plug assembly	1
K40	L100	10-48		11049129	High pressure relief valve, 400 bar	1
	L400	10-48		11002291	Pressure limiter plug assembly	1
K42	L100	10-48		11049130	High pressure relief valve, 420 bar	1
	L400	10-48		11002291	Pressure limiter plug assembly	1
K45	L100	10-48		11049131	High pressure relief valve, 450 bar	1
	L400	10-48		11002291	Pressure limiter plug assembly	1
K48	L100	10-48		11049132	High pressure relief valve, 480 bar	1
	L400	10-48		11002291	Pressure limiter plug assembly	1
L15	L024	10-48		11054668	Nut	1
	L100	10-48		11049121	High pressure relief valve, 200 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 150 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 150 bar	1
L18	L024	10-48		11054668	Nut	1
	L100	10-48		11049123	High pressure relief valve, 250 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 180 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 180 bar	1
L20	L024	10-48		11054668	Nut	1
	L100	10-48		11049123	High pressure relief valve, 250 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 200 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 200 bar	1



Variable displacement pump

(L23 -L43)



Parts Manual H1P 60 & 68cc Variable Displacement Pump

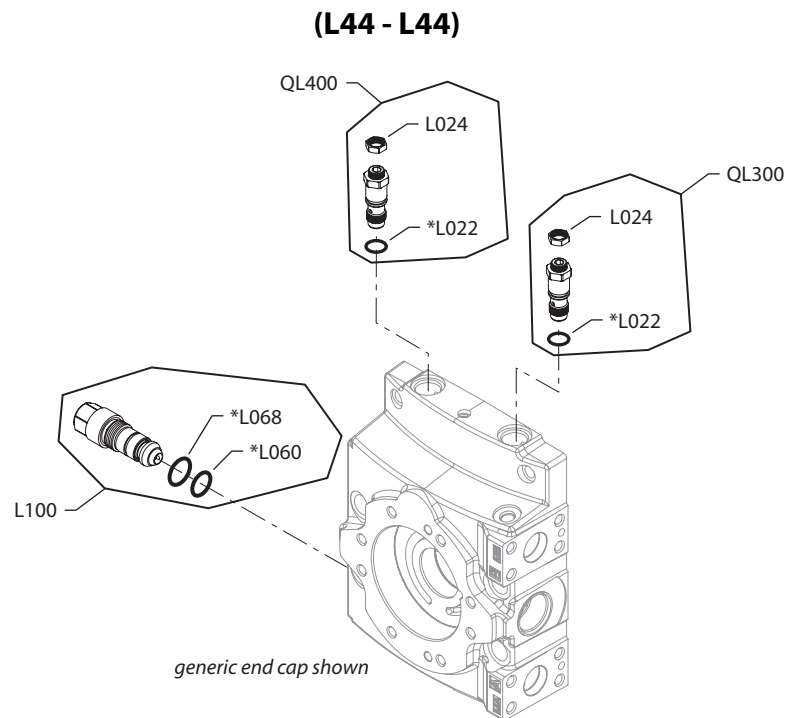
Variable displacement pump

High pressure setting, port A

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	10-48		041152	O-ring	1
	L024	10-48		11054668	Nut	1
	L060	10-48		141109	O-ring	1
	L068	10-48		11052215	O-ring	1
L23	L100	10-48		11049124	High pressure relief valve, 280 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 230 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 230 bar	1
L25	L100	10-48		11049125	High pressure relief valve, 300 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 250 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 250 bar	1
L28	L100	10-48		11049126	High pressure relief valve, 330 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 280 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 280 bar	1
L30	L100	10-48		11049127	High pressure relief valve, 350 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 300 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 300 bar	1
L33	L100	10-48		11049128	High pressure relief valve, 380 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 330 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 330 bar	1
L35	L100	10-48		11049129	High pressure relief valve, 400 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 350 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 350 bar	1
L38	L100	10-48		11049130	High pressure relief valve, 420 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 380 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 380 bar	1
L40	L100	10-48		11049131	High pressure relief valve, 450 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 400 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 400 bar	1
L41	L100	10-48		11049131	High pressure relief valve, 450 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 410 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 410 bar	1
L42	L100	10-48		11049131	High pressure relief valve, 450 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 420 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 420 bar	1
L43	L100	10-48		11049132	High pressure relief valve, 480 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 430 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 430 bar	1



Variable displacement pump



Parts Manual

H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

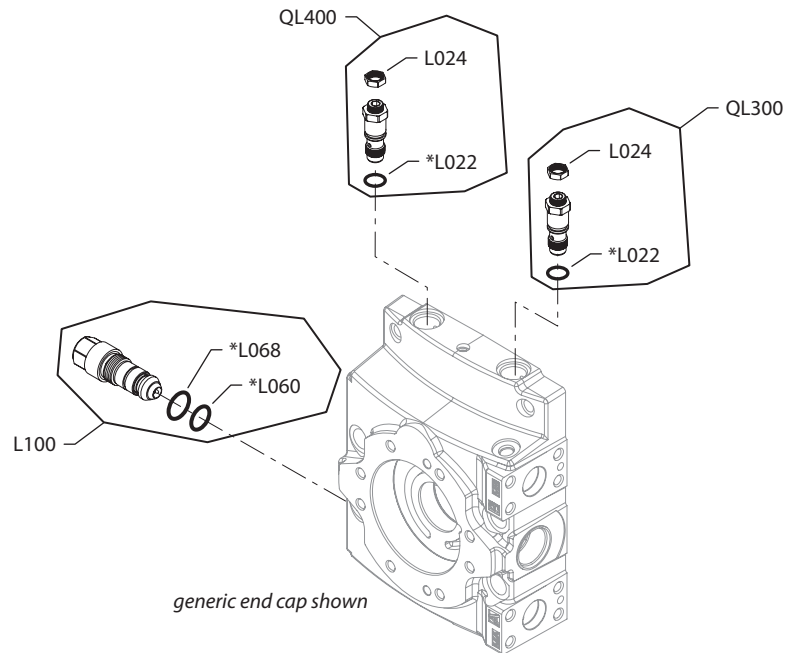
High pressure setting, port A

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	10-48		041152	O-ring	1
	L024	10-48		11054668	Nut	1
	L060	10-48		365023	O-ring	1
	L068	10-48		11052201	O-ring	1
L25	L100	10-48		11049125	High pressure relief valve, 300 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L28	L100	10-48		11049126	High pressure relief valve, 330 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L30	L100	10-48		11049127	High pressure relief valve, 350 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L33	L100	10-48		11049128	High pressure relief valve, 380 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L35	L100	10-48		11049129	High pressure relief valve, 400 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L38	L100	10-48		11049130	High pressure relief valve, 420 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L40	L100	10-48		11049131	High pressure relief valve, 450 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L41	L100	10-48		11049131	High pressure relief valve, 450 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L42	L100	10-48		11049131	High pressure relief valve, 450 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L43	L100	10-48		11049132	High pressure relief valve, 480 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
L44	L100	10-48		11049132	High pressure relief valve, 480 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CCW rotation pump	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CW rotation pump	1



Variable displacement pump

(L45 - L48)

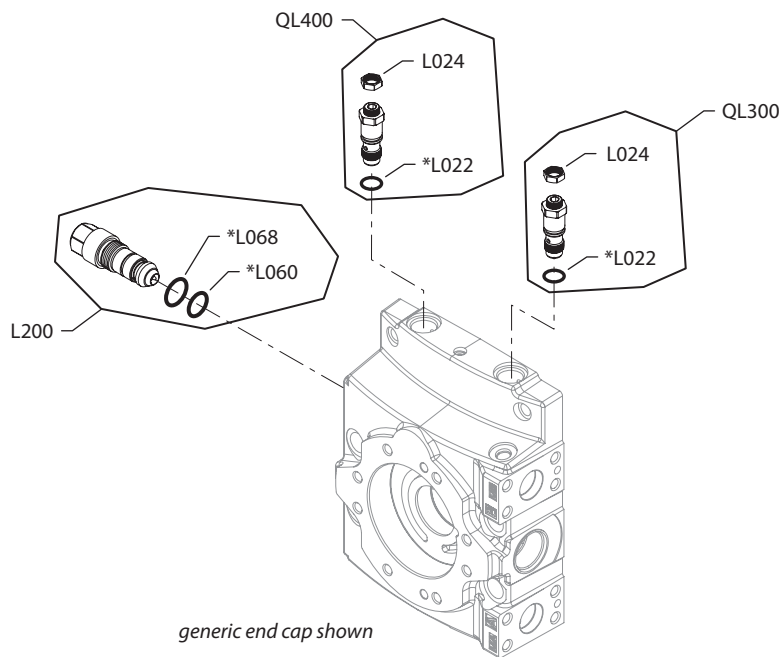


Variable displacement pump
High pressure setting, port A

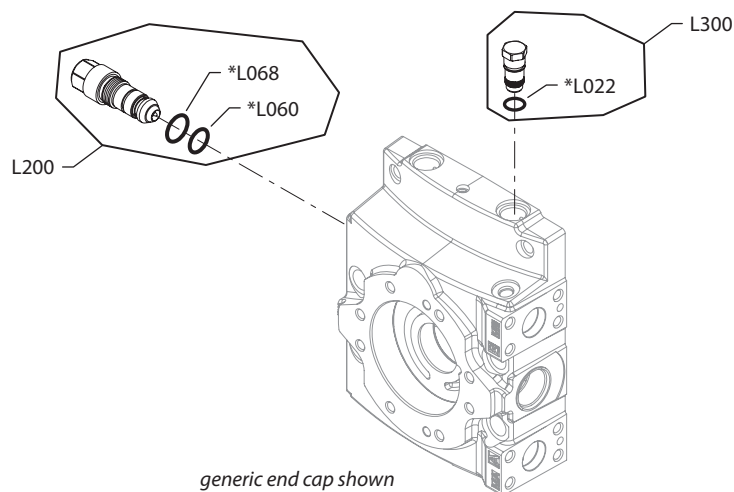
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L024	10-48		11054668	Nut	1
	L022	10-48		041152	O-ring	1
	L060	10-48		365023	O-ring	1
	L068	10-48		11052201	O-ring	1
L45	L100	10-48		11049132	High pressure relief valve, 480 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CCW, set at 450 bar	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CW, set at 450 bar	1
L46	L100	10-48		11049133	High pressure relief valve, 510 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CCW, set at 460 bar	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CW, set at 460 bar	1
L47	L100	10-48		11049133	High pressure relief valve, 510 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CCW, set at 470 bar	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CW, set at 470 bar	1
L48	L100	10-48		11049133	High pressure relief valve, 510 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CCW, set at 480 bar	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CW, set at 480 bar	1

Variable displacement pump

(F01 - F07)



(K18 - K30)



Parts Manual H1P 60 & 68cc Variable Displacement Pump

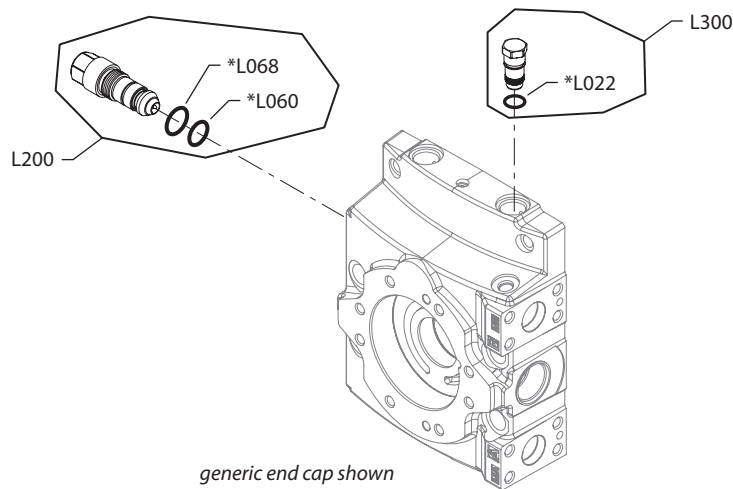
Variable displacement pump

High pressure setting, port B

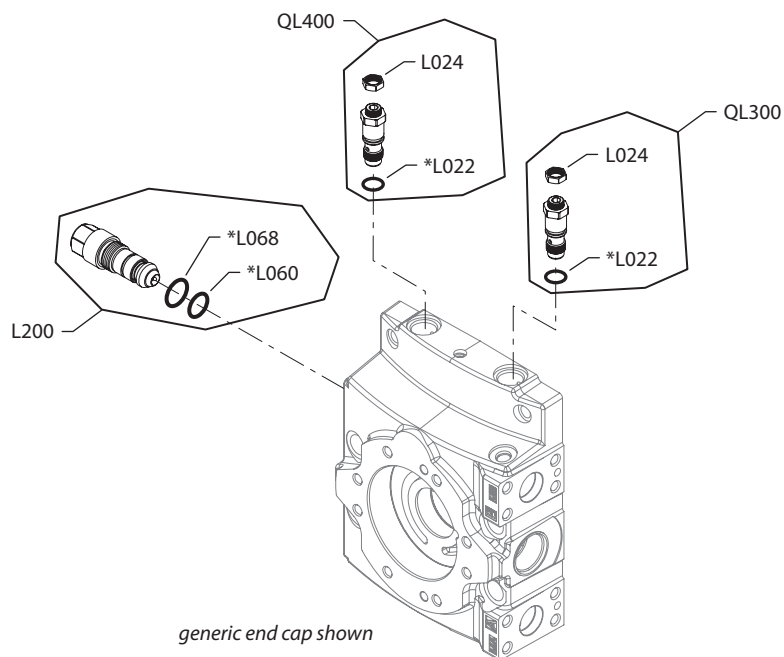
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	10-48		504207	O-ring	1
	L060	10-48		365023	O-ring	1
	L068	10-48		11052201	O-ring	1
F01	L024	13-14		11054668	Nut	1
	L200	13-14		11049123	High pressure relief valve, 250 bar	1
	QL300	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
F02	L024	13-14		11054668	Nut	1
	L200	13-14		11049125	High pressure relief valve, 300 bar	1
	QL300	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
F03	L024	13-14		11054668	Nut	1
	L200	13-14		11049127	High pressure relief valve, 350 bar	1
	QL300	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
F04	L024	13-14		11054668	Nut	1
	L200	13-14		11049129	High pressure relief valve, 400 bar	1
	QL300	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
F05	L024	13-14		11054668	Nut	1
	L200	13-14		11049125	High pressure relief valve, 300 bar	1
	QL300	13-14		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	13-14		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
F07	L024	15-17		11054668	Nut	1
	L200	15-17		11049125	High pressure relief valve, 300 bar	1
	QL300	15-17		11050482	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	15-17		11050482	Pressure limiter kit, adjustable, CW rotation pump	1
K18	L200	10-48		11049120	High pressure relief valve, 180 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K20	L200	10-48		11049121	High pressure relief valve, 200 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K23	L200	10-48		11049122	High pressure relief valve, 230 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K25	L200	10-48		11049123	High pressure relief valve, 250 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K28	L200	10-48		11049124	High pressure relief valve, 280 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K30	L200	10-48		11049125	High pressure relief valve, 300 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1

Variable displacement pump

(K33 -K48)



(L15 -L25)



Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

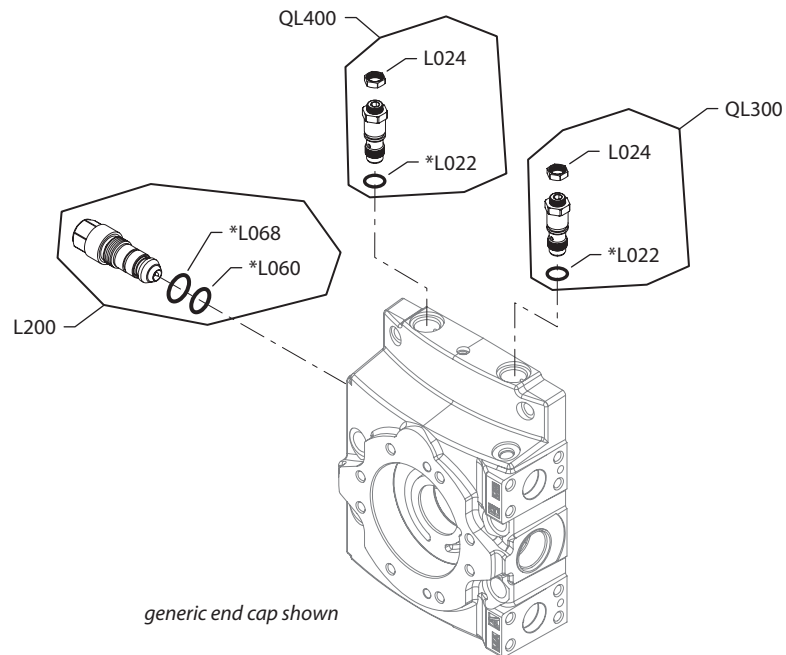
High pressure setting, port B

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	10-48		041152	O-ring	1
	L060	10-48		365023	O-ring	1
	L068	10-48		11052201	O-ring	1
K33	L200	10-48		11049126	High pressure relief valve, 330 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K35	L200	10-48		11049127	High pressure relief valve, 350 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K38	L200	10-48		11049128	High pressure relief valve, 380 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K40	L200	10-48		11049129	High pressure relief valve, 400 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K42	L200	10-48		11049130	High pressure relief valve, 420 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K45	L200	10-48		11049131	High pressure relief valve, 450 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
K48	L200	10-48		11049132	High pressure relief valve, 480 bar	1
	L300	10-48		11002291	Pressure limiter plug assembly	1
L15	L024	10-48		11054668	Nut	1
	L200	10-48		11049121	High pressure relief valve, 200 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 150 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 150 bar	1
L18	L024	10-48		11054668	Nut	1
	L200	10-48		11049123	High pressure relief valve, 250 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 180 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 180 bar	1
L20	L024	10-48		11054668	Nut	1
	L200	10-48		11049147	High pressure relief valve, 250 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 200 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 200 bar	1
L23	L024	10-48		11054668	Nut	1
	L200	10-48		11049124	High pressure relief valve, 280 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 230 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 230 bar	1
L25	L024	10-48		11054668	Nut	1
	L200	10-48		11049125	High pressure relief valve, 300 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 250 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 250 bar	1



Variable displacement pump

(L28 - L45)



Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

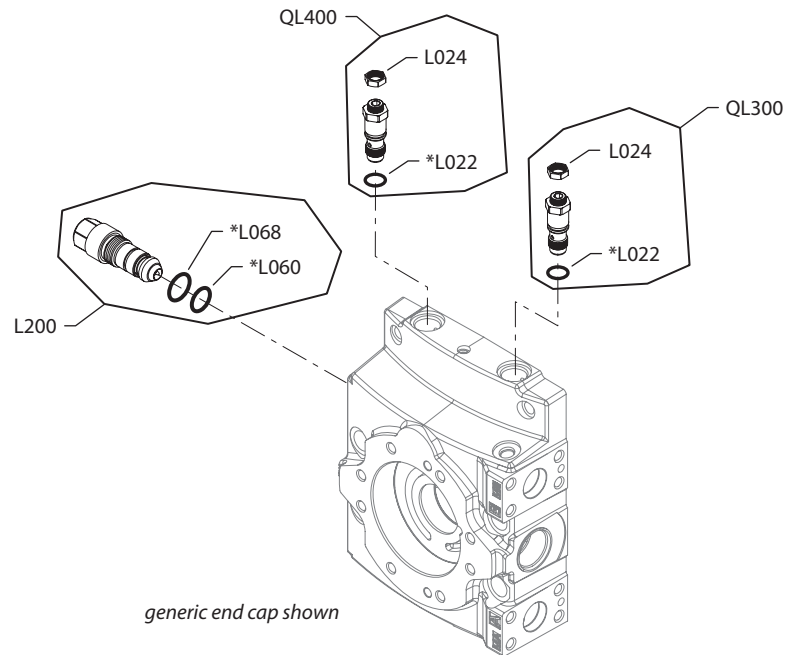
High pressure setting, port B

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	10-48		041152	O-ring	1
	L024	10-48		11054668	Nut	1
	L060	10-48		365023	O-ring	1
	L068	10-48		11052201	O-ring	1
L28	L024	10-48		11054668	Nut	1
	L200	10-48		11049150	High pressure relief valve, 330 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 280 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 280 bar	1
L30	L200	10-48		11049127	High pressure relief valve, 350 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 300 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 300 bar	1
L33	L200	10-48		11049128	High pressure relief valve, 380 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 330 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 330 bar	1
L35	L200	10-48		11049129	High pressure relief valve, 400 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 350 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 350 bar	1
L38	L200	10-48		11049130	High pressure relief valve, 420 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 380 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 380 bar	1
L40	L200	10-48		11049131	High pressure relief valve, 450 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 400 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 400 bar	1
L41	L200	10-48		11049131	High pressure relief valve, 450 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 410 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 410 bar	1
L42	L200	10-48		11049131	High pressure relief valve, 450 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 420 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 420 bar	1
L43	L200	10-48		11049132	High pressure relief valve, 480 bar	1
	QL300	10-48		11050482	Pressure limiter kit, adjustable, CW, set at 430 bar	1
	QL400	10-48		11050482	Pressure limiter kit, adjustable, CCW, set at 430 bar	1
L44	L200	10-48		11049132	High pressure relief valve, 480 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CW, set at 440 bar	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CCW, set at 440 bar	1
L45	L200	10-48		11049132	High pressure relief valve, 480 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CW, set at 450 bar	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CCW, set at 450 bar	1



Variable displacement pump

(L46 - L48)

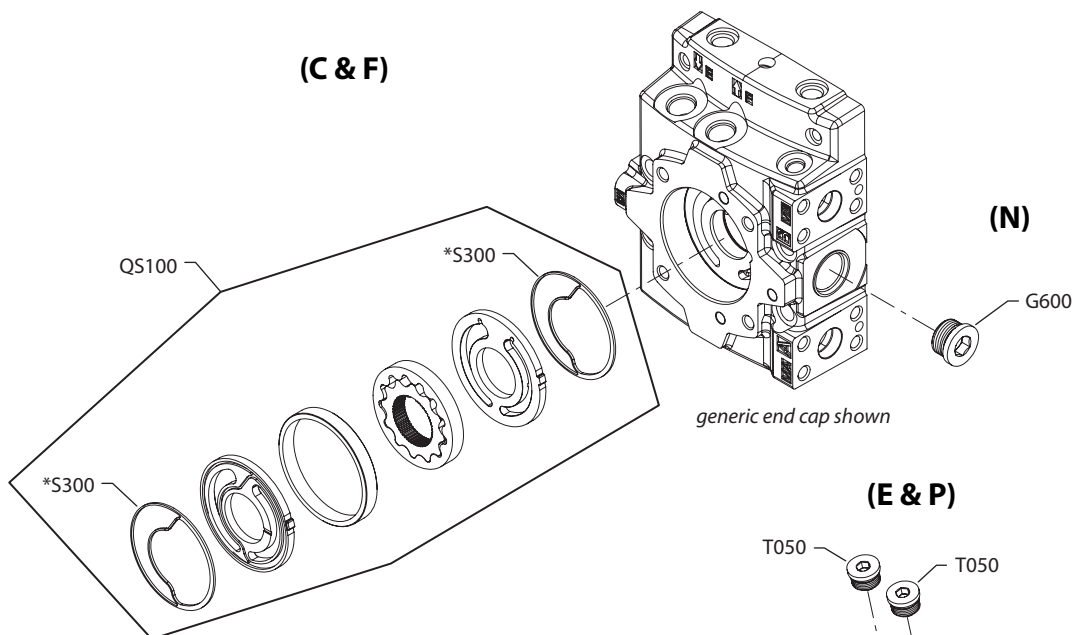


Variable displacement pump
High pressure setting, port B

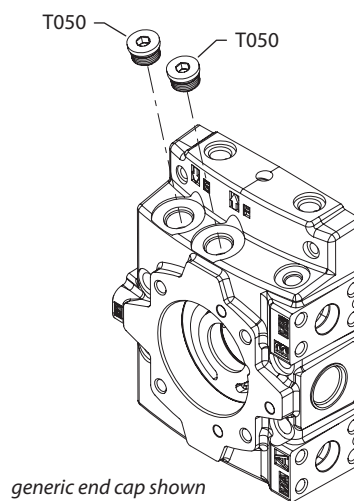
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	10-48		041152	O-ring	1
	L024	10-48		11054668	Nut	1
	L060	10-48		365023	O-ring	1
	L068	10-48		11052201	O-ring	1
L46	L200	10-48		11049133	High pressure relief valve, 510 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CW, set at 460 bar	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CCW, set at 460 bar	1
L47	L200	10-48		11049133	High pressure relief valve, 510 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CW, set at 470 bar	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CCW, set at 470 bar	1
L48	L200	10-48		11049133	High pressure relief valve, 510 bar	1
	QL300	10-48		11050482	Pressure limiter, adjustable, CW, set at 480 bar	1
	QL400	10-48		11050482	Pressure limiter, adjustable, CCW, set at 480 bar	1

Variable displacement pump

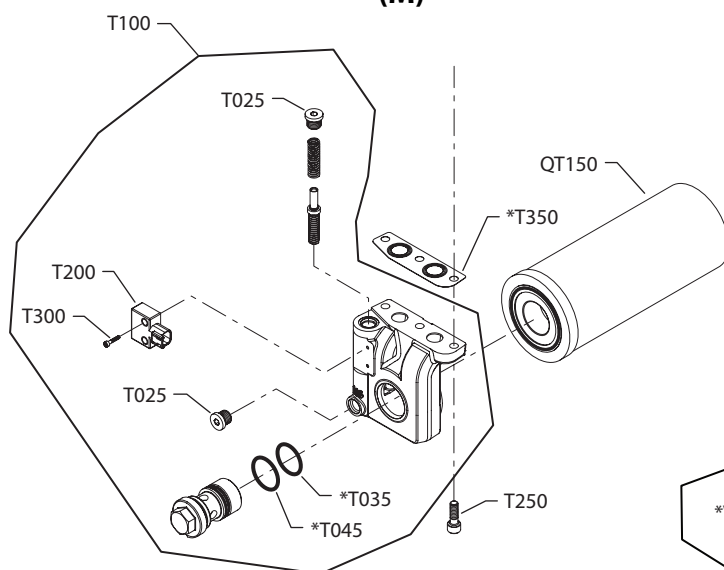
(C & F)



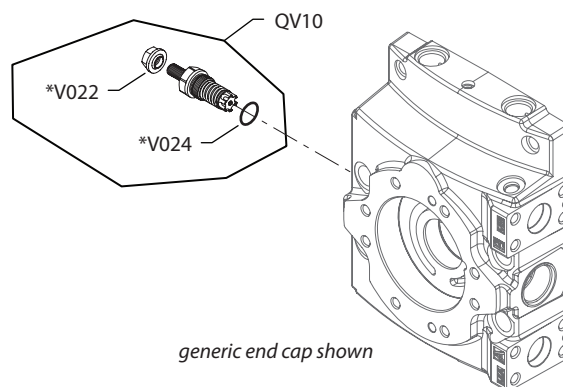
(E & P)



(M)



(18-34)



Parts Manual H1P 60 & 68cc Variable Displacement Pump

Variable displacement pump

Charge pump

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C	QS100	10-48		11086554	Charge pump kit, 17 cc	1
	S300	10-48		11126777	Seal ring (SB-2013-019)	2
F	QS100	10-48		11086553	Charge pump kit, 14 cc	1
	S300	10-48		11126777	Seal ring (SB-2013-019)	2
N	G600	10-48		320002 (9005110-9200)	Plug assembly	1

Filtration

E	T050	10-48		315325 (9005110-8700)	Plug assembly	2
L		10-48		None		
M	T025	10-48		141269	Plug assembly	2
	T035	10-48		761148 (9004100-0260)	O-ring	1
	T045	10-48		314500 (9004100-1250)	O-ring	1
	T100	10-48		140736	Pressure filter adapter assembly	1
	T200	10-48		11031852	Filtration sensor	1
	T250	10-48		11128665	Screw, M8 x 25	3
	T300	10-48		140560	Screw, M3 x 16	2
	T350	10-48		140737	Filter adapter gasket	1
	QT150	10-48		11004918	Filter assembly	1
P	T050	10-48		315325 (9005110-8700)	Plug assembly	2

Charge pressure relief

18-34	QV10	10-48		11017127	Charge relief valve kit	1
	V022	10-48		612291 (9003508-0008)	Seal nut	1
	V024	10-48		001149 (9004201-6200)	O-ring	1

Parts Manual H1P 60 & 68cc Variable Displacement Pump



Variable displacement pump

Overhaul seal kit

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	Q210	10-48		11178403	Overhaul seal kit, H1P060-068	1
	D060	10-48		612291 (9003508-0008)	Seal nut, M8	1
	D150	10-48		11173377	Control gasket, H1	1
	D611	10-14		11066774	O-ring, 10.82 x 1.78, viton	2
	E020	10-48		11045358	O-ring, 1.864 x .070, nitrile	2
	E025	10-48		11040065	Piston seal ring	2
	E250	10-48		11045233	O-ring, 2.609 x .103, viton	2
	E500	10-48		505412 (9003509-0008)	Seal nut, M8 x 1.25, coarse thread	1
	E550	10-48		505412 (9003509-0008)	Seal nut, M8 x 1.25, coarse thread	1
	G150	10-48		11040066	End cap gasket	1
	J250	10-48		141936	Lip seal	1
	J260	10-48		9004104-2310	O-ring, 2.609 x .139, viton	1
	K150	10-48		11029873	Adapter seal	1
	K250	10-48		9004104-1580	O-ring, 4.737 x .103, viton	1
	L022	10-48		041152	O-ring, 12.00 x 2.00, nitrile	2
	L060	10-48		141109	O-ring, 16.00 x 1.50, viton	2
	L068	10-48		11052215	O-ring, 19.3 x 2.4, viton	2
	QD26	10-48		11001952	O-ring, 18.00 x 1.50, viton	2
	QD81	10-48		11059551	O-ring, 9.50 x 1.78, viton	1
	QD81	10-48		11152257	O-ring, 9.0 x 1.80, nitrile	1
	QD751	10-48		001131 (9004201-5000)	O-ring, .644 x .087, nitrile	1
	QH131	10-48		11013397	O-ring, 15.60 x 1.78, viton	1
	S300	10-48		11126777	Seal ring	2
	T035	10-48		761148 (9004100-0260)	O-ring, 1.239 x .070, nitrile	1
	T045	10-48		314500 (9004100-1250)	O-ring, 1.299 x .103, nitrile	1
	T350	10-48		140737	Filter adapter gasket	1
	V022	10-48		612291 (9003508-0008)	Seal nut, M8	1
	V024	10-48		001149 (9004201-6200)	O-ring, .755 x .097, nitrile	1

Products affected

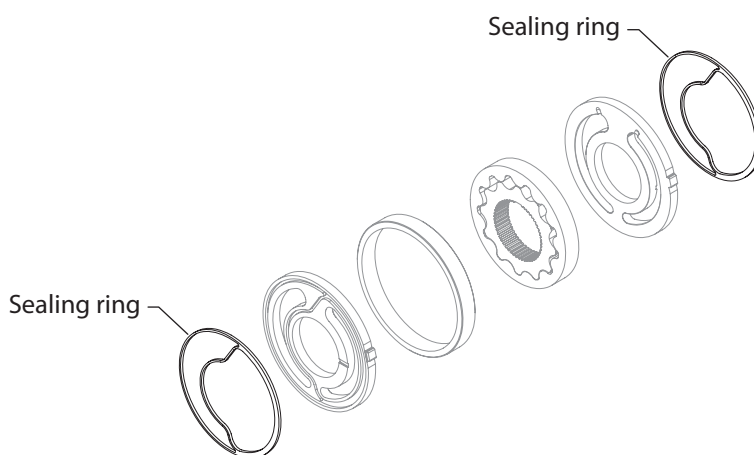
H1 pumps

Subject

Charge pump seal

Description

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



Models affected

H1 pumps

Serial numbers

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

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

Part numbers affected

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

Parts disposition

- Interchangeable
- Scrap used parts



Service Bulletin: SB-2016-028

Products affected

H1 pumps

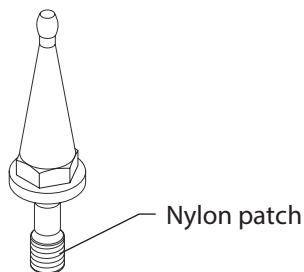
Subject

Swashplate feedback link update

Description

Danfoss Power Solutions has made a product improvement to the swashplate link on H1 pumps. A nylon coating has been added to the link threads.

The new part can be substituted for the old part, but the old part cannot be substituted for the new. The old part is obsolete.



Models affected

H1 45/53cc, 60/68cc, 69/78cc, 89/100cc, 115/130cc, 147/165cc, 210/250cc pumps.

Serial numbers

This change became effective on A-16-22-23606 (June 2, 2016)

Part numbers affected

Description	Old part number	New part number
Swashplate feedback link	140724	11148827

Parts disposition

■ Non-interchangeable - can substitute new for old

Products affected

H1 pumps and tandems, MP1 and M46 control kits

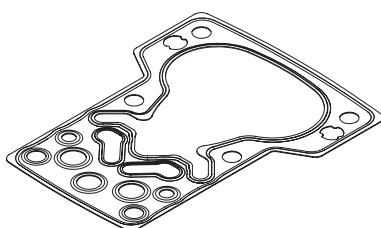
Subject

Control Gasket

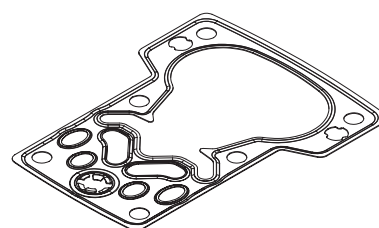
Description

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

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



Old gasket



New gasket

Models affected

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

Serial numbers

H1 Pumps - This change became effective on N-16-36-30132

H1 Tandems - This change became effective on N-16-37-30132

MP1 Control Kits - This change became effective on N-16-32-xxxxx

M46 Control Kits - This change became effective on N-16-32-xxxxx

Part numbers affected

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

Parts disposition

■ Non-interchangeable - can substitute new for old


Service Bulletin: SB-2016-034

Products affected H1 45/53cc, 60/68cc, 69/78cc, 89/100cc, 115/130cc, 147/165cc, 210/250cc pumps and tandem pumps

Subject Overhaul Seal Kit change

Description A change has been made to the overhaul seal kits for H1 45/53cc, 60/68cc, 69/78cc, 89/100cc, 115/130cc, 147/165cc and 210/250cc pumps and tandems.

The new 12mm pressure port control gasket (see SB-2016-033) has been added to the overhaul seal kit and the old control gasket has been removed. The old control gasket is not interchangeable with the new control gasket. The new seal kits can be substituted for old seal kits, but old seal kits cannot be substituted for new seal kits.

The overhaul seal kit part numbers have changed.

Models affected H1 45/53cc, 60/68cc, 69/78cc, 89/100cc, 115/130cc, 147/165cc, 210/250cc pumps and tandem pumps

Serial numbers This change became effective on N-16-41-xxxxx

Part numbers affected

Description	Old part number	New part number
Overhaul seal kit, H1P045-053	11134090	11178402
Overhaul seal kit, H1P060-068	11086556	11178403
Overhaul seal kit, H1T045-053	11134091	11178404
Overhaul seal kit, H1T060-068	11177381	11178405
Overhaul seal kit, H1T045-053, special	4510470	11178406
Overhaul seal kit, H1P045-053, special	11016546	11178407
Overhaul seal kit, H1T060-068, special	11147118	11178408
Overhaul seal kit, H1P069-078	11003521	11178086
Overhaul seal kit, H1P089-100	11008585	11178087
Overhaul seal kit, H1P115-130	11003522	11178088
Overhaul seal kit, H1P147-165	11000687	11178089
Overhaul seal kit, H1P210-250	11070641	11178090
Overhaul seal kit, TMP EDC, MDC	11145298	11179930

Parts disposition ■ Non-interchangeable - can substitute new for old

**Notes**



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