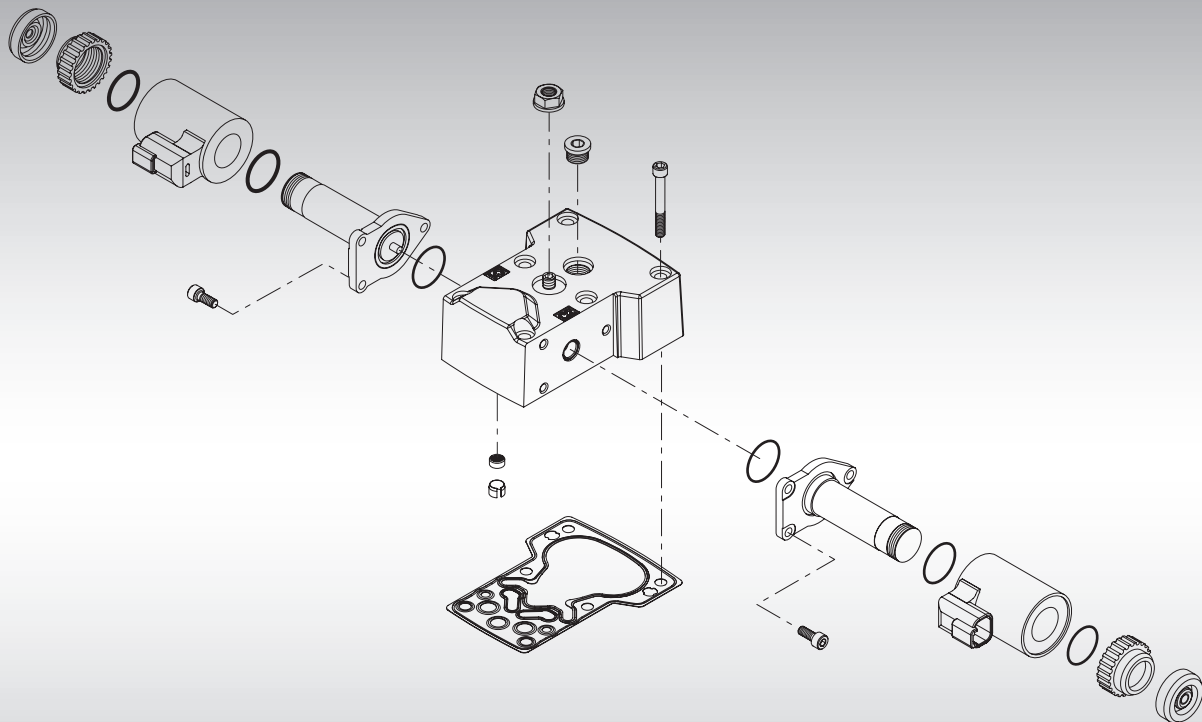




Parts Manual

H1P 147 & 165cc

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 147 and 165cc 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 147 and 165cc 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). “N” indicates the unit was originally assembled in Neumuenster, Germany.

The first number (2 digits) indicates the year of manufacture. (“05” would indicate the unit was manufactured in 2005)

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 H1P147R C A A2 C2 N D8 G G2 NN L 42 L 42 A P 24 NN NNN NNN. Use the following procedures to determine the part number of the drive shaft used on this pump.

- 1) Referring to the input shaft module in the Order Code (see page 7), the input shaft option for this pump is identified by the code "G2". (H1P147R C A A2 C2 N D8 G **G2** NN L 42 L 42 A P 24 NN NNN NNN)
- 2) Referring to the Service Parts List, find the shaft group. Next find the order code that relates to this unit, which is "G2". The shaft is found to be item J100 and part number 11123699.

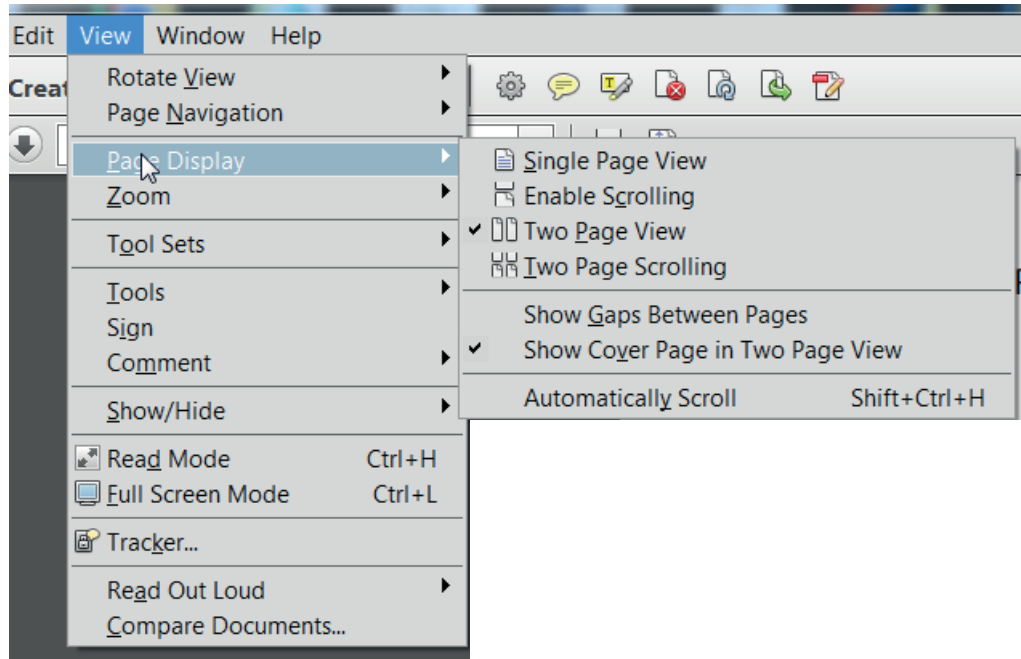


Adobe Acrobat 2-page viewing

Adobe Acrobat 2-page viewing

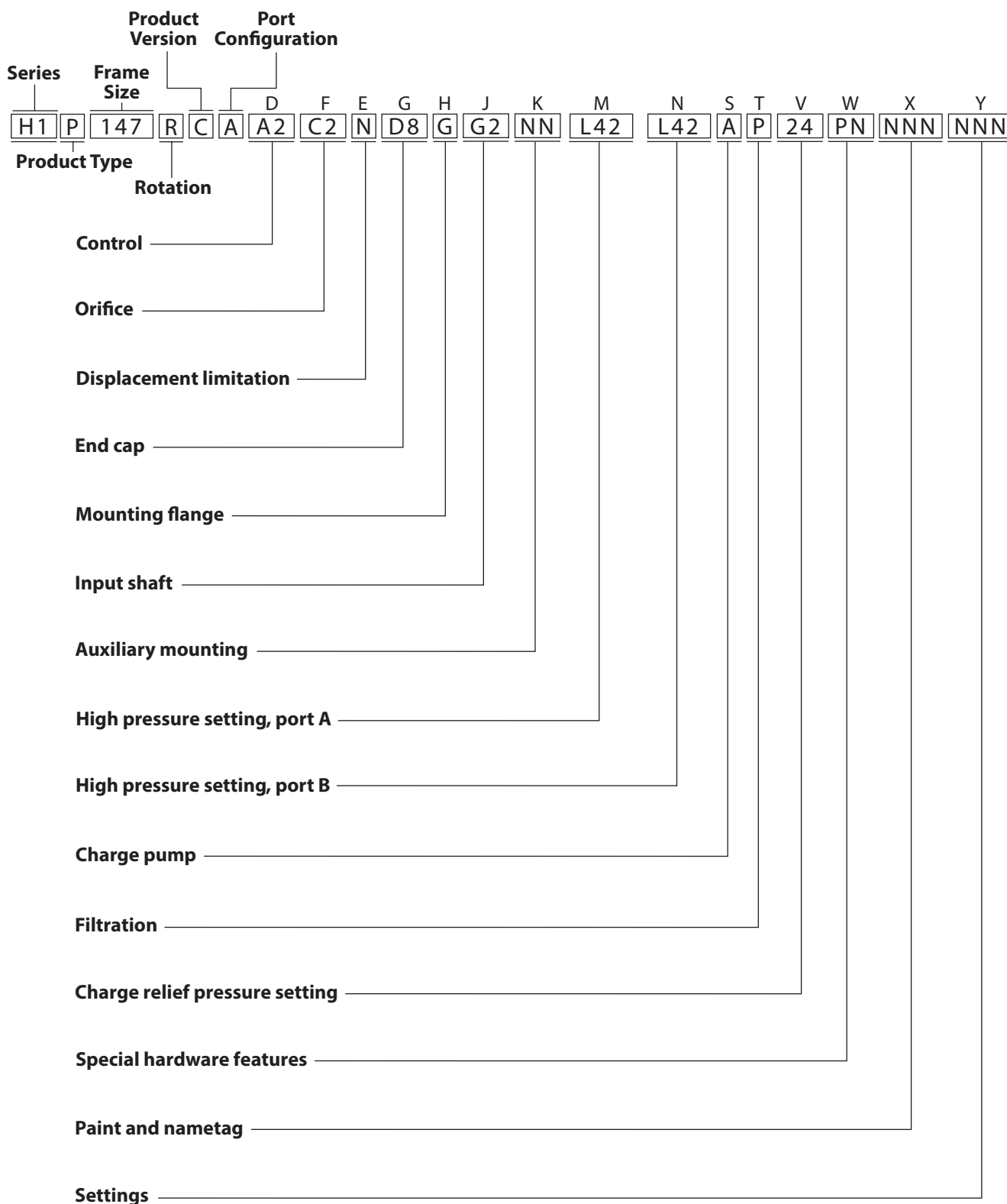
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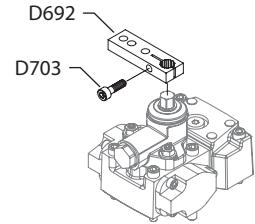
Order code



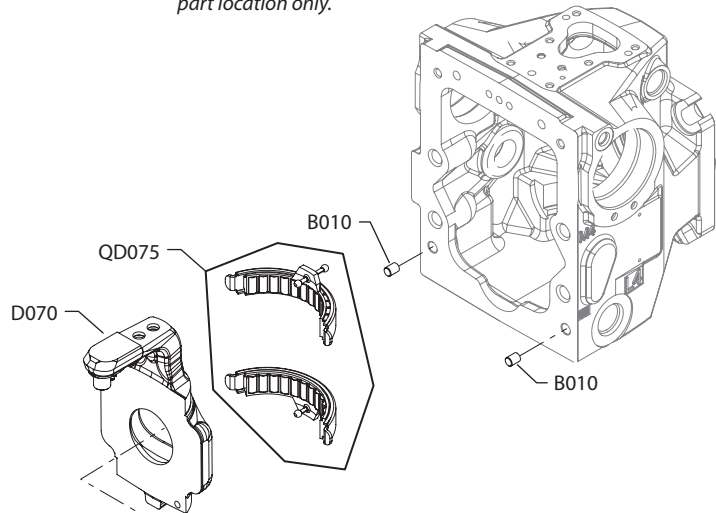


Variable displacement pump

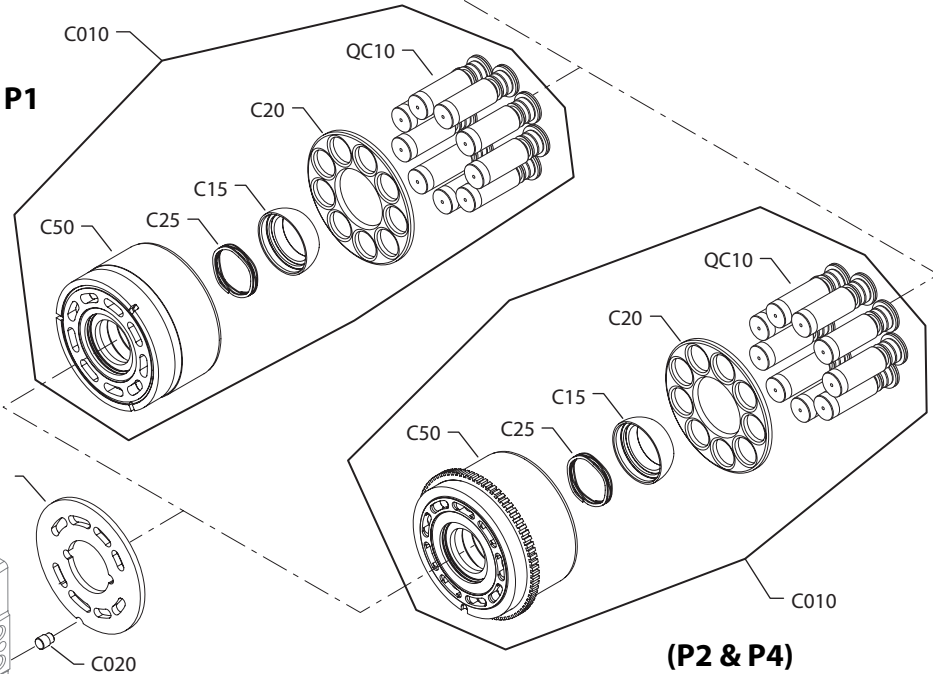
(H1)



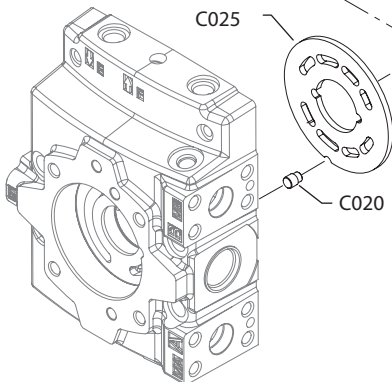
Generic control and housing used to show part location only.



(H1, NN, P1 & PN)



(P2 & P4)



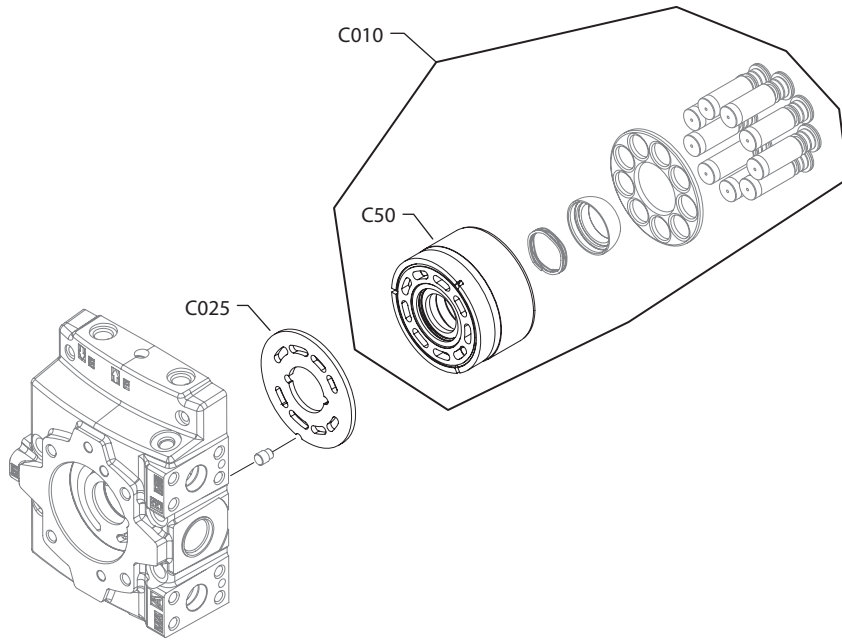

Variable displacement pump
Common parts

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
	B010	05-18		9004800-3708	Dowel pin	2
	C15	11-15		11121505	Slipper retainer ball guide (SB-2012-037)	1
	C15	05-18	11-14	11091046	Slipper retainer ball guide/spring washer replacement kit	1
	C20	05-18		140292	Slipper retainer	1
	C25	11-15		11180936	Spring washer (SB-2012-037 & SB-2016-040)	1
	C25	05-18	11-14	11091046	Slipper retainer ball guide/spring washer replacement kit	1
	C020	05-18		141128	Valve plate pin, CCW	1
	C020	05-18		141126	Valve plate pin, CW	1
	D070	05-18		11105987	Swashplate (SB-2012-035)	1
	QC10	05-18		11021922	Slipper/piston assembly kit, 147 cc	1
	QC10	05-18		11021924	Slipper/piston assembly kit, 165 cc	1
	QD075	05-18		11004705	Swashplate bearing kit	1
H1	C010	13-28		140478/P	Cylinder block kit, 147 cc	1
	C010	13-28		140284/P	Cylinder block kit, 165 cc	1
	C025	13-28		11125575	Valve plate, CCW	1
	C025	13-28		11123708	Valve plate, CW	1
	C50	13-28		11124494	Cylinder block assembly, 147 cc	1
	C50	13-28		11126004	Cylinder block assembly, 165 cc	1
	D692	13-28		11185938	Control handle	1
	D703	13-28		11173701	Screw, M6 x 20	1
NN & PN	C010	05-18		140478/P	Cylinder block kit, 147 cc	1
	C010	05-18		140284/P	Cylinder block kit, 165 cc	1
	C025	05-18		11125575	Valve plate, CCW	1
	C025	05-18		11123708	Valve plate, CW	1
	C50	11-15		11124494	Cylinder block assembly, 147 cc (SB-2012-037)	1
	C50	11-15		11126004	Cylinder block assembly, 165 cc (SB-2012-037)	1
P1	C010	10-11		140478/P	Cylinder block kit, 147 cc	1
	C010	10-11		140284/P	Cylinder block kit, 165 cc	1
	C025	10-11		11125574	Valve plate, CCW	1
	C025	10-11		11125576	Valve plate, CW	1
	C50	11-15		11124494	Cylinder block assembly, 147 cc (SB-2012-037)	1
	C50	11-15		11126004	Cylinder block assembly, 165 cc (SB-2012-037)	1
P2	C010	10-11		11082253	Cylinder block kit with speed ring, 147 cc	1
	C010	10-11		11082255	Cylinder block kit with speed ring, 165 cc	1
	C025	10-11		11125574	Valve plate, CCW	1
	C025	10-11		11125576	Valve plate, CW	1
	C50	11-15		11124495	Cylinder block assy. w/speed ring, 147 cc (SB-2012-037)	1
	C50	11-15		11124497	Cylinder block assy. w/speed ring, 165 cc (SB-2012-037)	1
P4	C010	11-28		11082253	Cylinder block kit with speed ring, 147 cc	1
	C010	11-28		11082255	Cylinder block kit with speed ring, 165 cc	1
	C025	11-28		11125575	Valve plate, CCW	1
	C025	11-28		11123708	Valve plate, CW	1
	C50	11-28		11124495	Cylinder block assy. w/speed ring, 147 cc	1
	C50	11-28		11124497	Cylinder block assy. w/speed ring, 165 cc	1



Variable displacement pump

(P5)



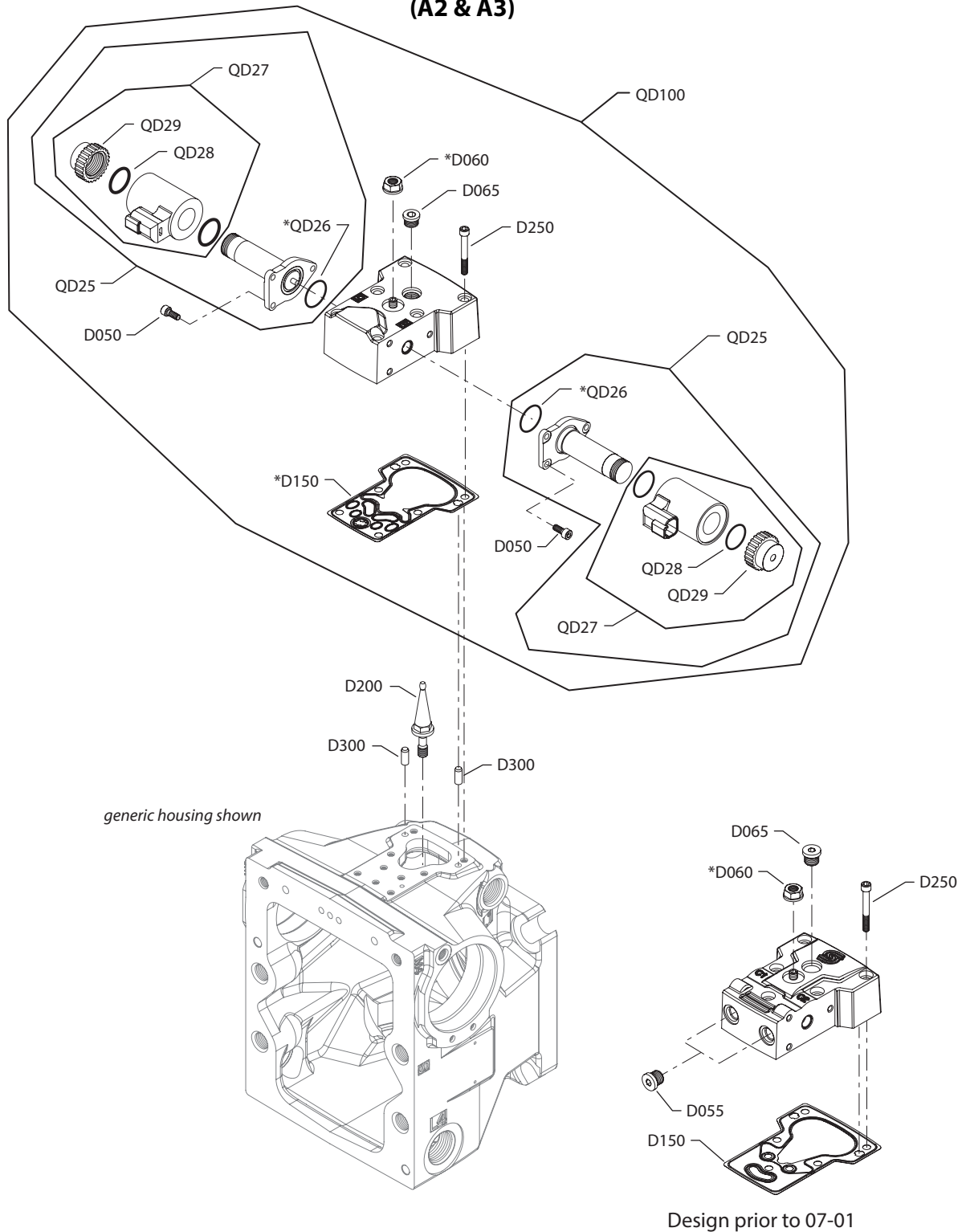
**Variable displacement pump****Special hardware**

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
P5	C010	11-45		140284/P	Cylinder block kit, 165 cc	1
	C025	11-45		11126989	Valve plate, CW	1
	C50	11-45		11126004	Cylinder block assembly, 165 cc	1



Variable displacement pump

(A2 & A3)



E100 982E

* = included in overhaul seal kit Q210



Variable displacement pump

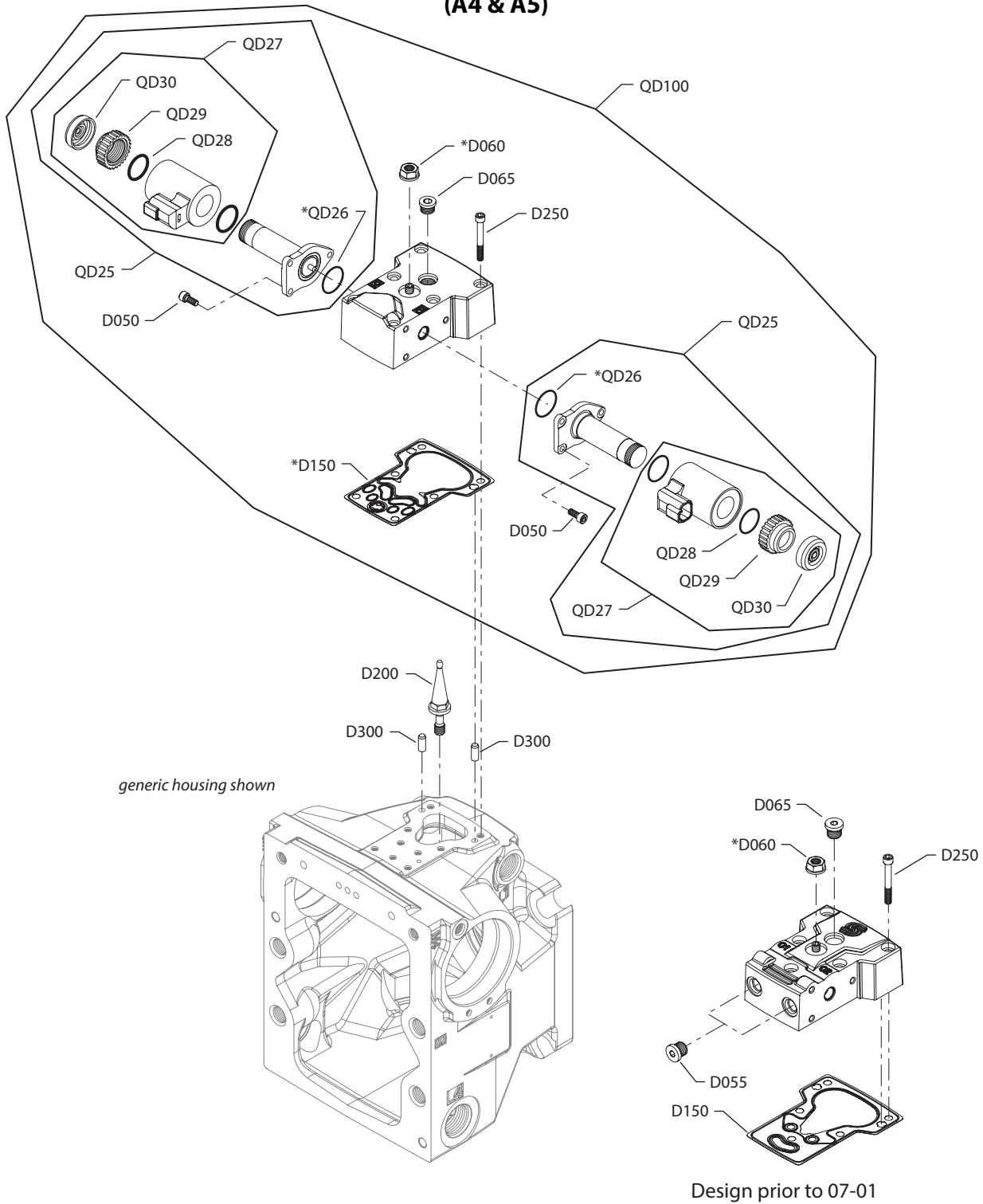
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
A2	D050	05-18		716860	Screw	6	
	D055	05-18	06-52	11040532	Plug assembly	2	
	D060	05-18		612291 (9003508-0008)	Seal nut	1	
	D065	05-18		140642	Plug assembly	1	
	D150	07-01		11173377	Control gasket, H1, 6-screw (SB-2016-033)	1	
	D150	05-18	06-52	140722	Control gasket, H1, 5-screw (SB-2006-030)	1	
	D200	05-18		11148827	Swashplate feedback link	1	
	D250	07-01		505038	Screw, M6 x 45	6	
	D250	05-18	06-52	510382	Screw, M6 x 40 (SB-2006-030)	5	
	D300	05-18		310979	Dowel pin	2	
	QD25	05-18		11012457	Proportional solenoid, 12V (SB-2007-033)	2	
	QD26	05-18		11001952	O-ring	2	
	QD27	05-18		11028018	Coil kit, 12V, Deutsch connector (SB-2007-033)	2	
	QD28	05-18		063172	O-ring	2	
	QD29	05-18		11027046	Coil nut	2	
	QD100	07-01		11019680	EDC kit, 12V, Deutsch connector, fast	1	
	QD100	05-18	06-52	11004693	EDC kit, 12V, Deutsch connector, fast (SB-2006-030)	1	
	A3	D050	05-18		716860	Screw	6
		D055	05-18	06-52	11040532	Plug assembly	2
		D060	05-18		612291 (9003508-0008)	Seal nut	1
D065		05-18		140642	Plug assembly	1	
D150		07-01		11173377	Control gasket, H1, 6-screw (SB-2016-033)	1	
D150		05-18	06-52	140722	Control gasket, H1, 5-screw (SB-2006-030)	1	
D200		05-18		11148827	Swashplate feedback link	1	
D250		07-01		505038	Screw, M6 x 45	6	
D250		05-18	06-52	510382	Screw, M6 x 40 (SB-2006-030)	5	
D300		05-18		310979	Dowel pin	2	
QD25		05-18		11012459	Coil kit, 24V, Deutsch connector (SB-2007-033)	2	
QD26		05-18		11001952	O-ring	2	
QD27		05-18		11028019	Coil kit, 24V, Deutsch connector (SB-2007-033)	2	
QD28		05-18		063172	O-ring	2	
QD29		05-18		11028024	Coil nut	2	
QD100		07-01		11019681	EDC kit, 24V, Deutsch connector, fast	1	
QD100		05-18	06-52	11004695	EDC kit, 24V, Deutsch connector, fast (SB-2006-030)	1	



Variable displacement pump

(A4 & A5)



E101 739E

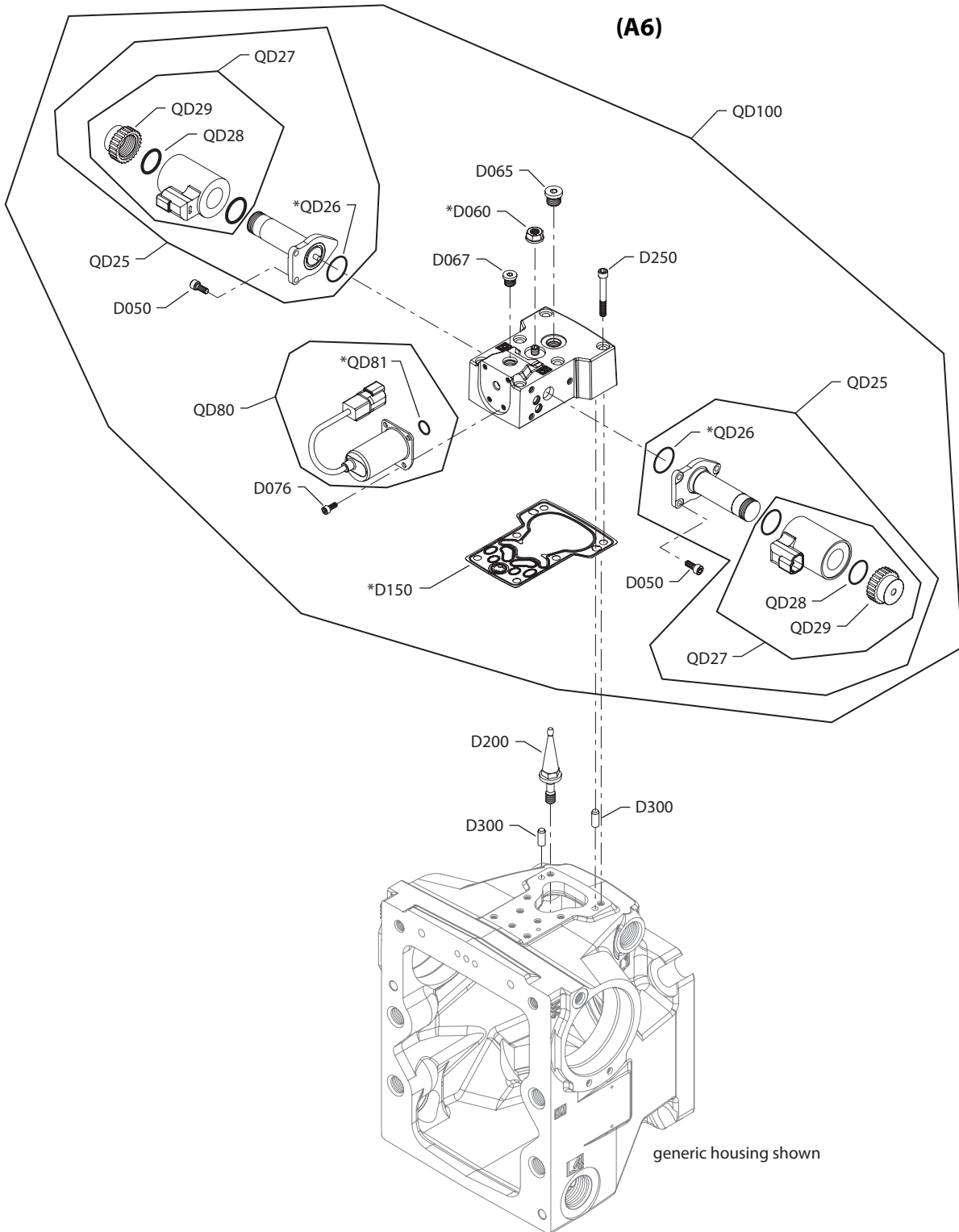
* = included in overhaul seal kit Q210


Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
A4	D050	05-18		716860	Screw	6	
	D055	05-18	06-52	11040532	Plug assembly	2	
	D060	05-18		612291 (9003508-0008)	Seal nut	1	
	D065	05-18		140642	Plug assembly	1	
	D150	07-01		11173377	Control gasket, H1, 6-screw (SB-2016-033)	1	
	D150	05-18	06-52	140722	Control gasket, H1, 5-screw (SB-2006-030)	1	
	D200	05-18		11148827	Swashplate feedback link	1	
	D250	07-01		505038	Screw, M6 x 45	6	
	D250	05-18	06-52	510382	Screw, M6 x 40 (SB-2006-030)	5	
	D300	05-18		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	07-01		11019732	EDC kit, 12V, Deutsch connector, fast, manual override	1	
	QD100	05-18	06-52	11004697	EDC kit, 12V, Deutsch connector, fast (SB-2006-030)	1	
	A5	D050	05-18		716860	Screw	6
		D055	05-18	06-52	11040532	Plug assembly	2
D060		05-18		612291 (9003508-0008)	Seal nut	1	
D065		05-18		140642	Plug assembly	1	
D150		07-01		11173377	Control gasket, H1, 6-screw (SB-2016-033)	1	
D150		05-18	06-52	140722	Control gasket, H1, 5-screw (SB-2006-030)	1	
D200		05-18		11148827	Swashplate feedback link	1	
D250		07-01		505038	Screw, M6 x 45	6	
D250		05-18	06-52	510382	Screw, M6 x 40 (SB-2006-030)	5	
D300		05-18		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		11004750	Coil nut	2	
QD30		05-18		11027883	Cap	2	
QD100		07-01		11019733	EDC kit, 24V, Deutsch connector, fast, manual override	1	
QD100		05-18	06-52	11004699	EDC kit, 24V, Deutsch connector, fast (SB-2006-030)	1	



Variable displacement pump



E100 913E

* = included in overhaul seal kit Q210

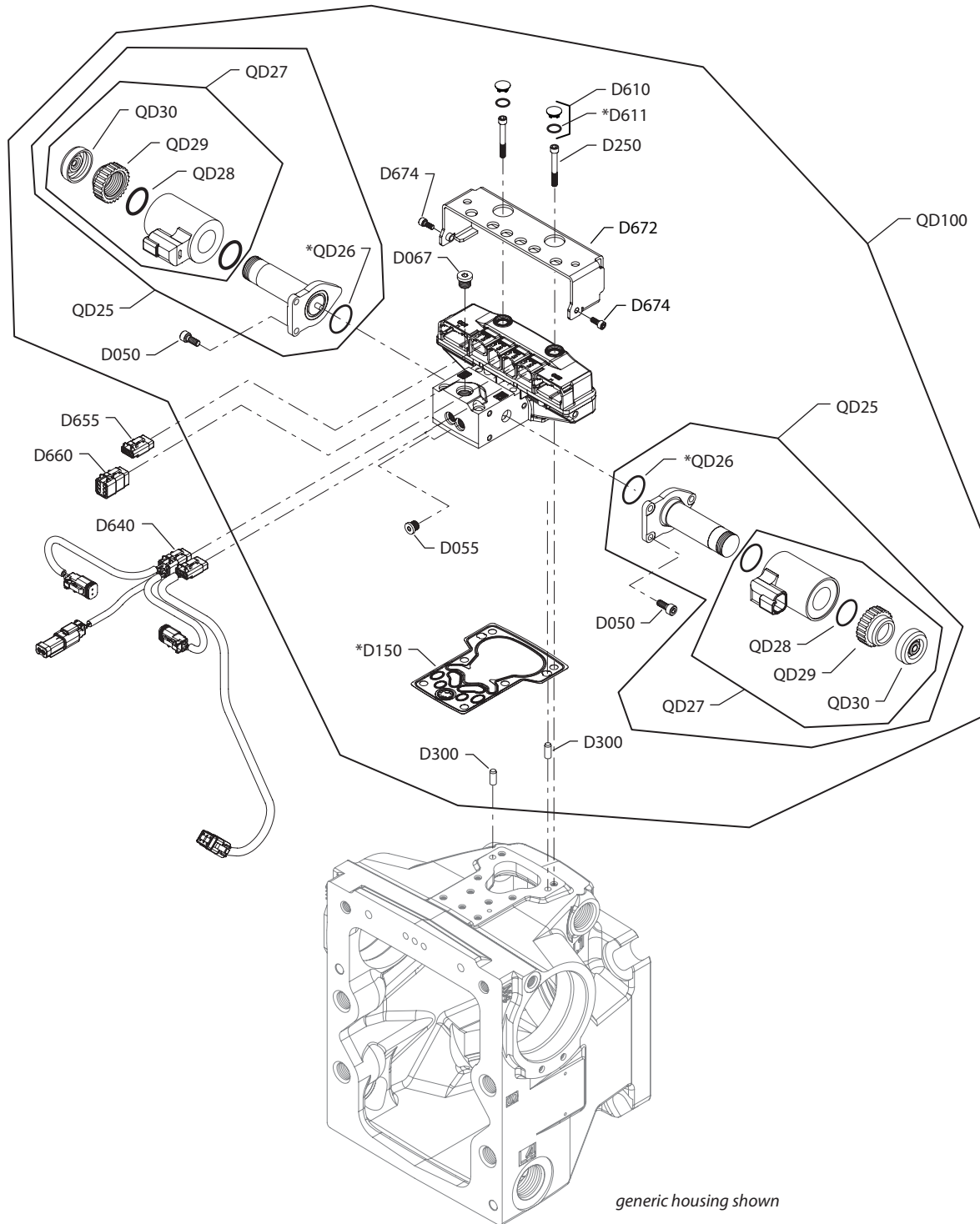

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A6	D050	05-18		716860	Screw	6
	D060	05-18		612291 (9003508-0008)	Seal nut	1
	D065	05-18		140642	Plug assembly	1
	D067	05-18		11040532	Plug assembly	1
	D076	05-18		346957	Screw	4
	D150	05-18		11173377	Control gasket, H1 (SB-2016-033)	1
	D200	05-18		11148827	Swashplate feedback link	1
	D250	07-01		505038	Screw, M6 x 45	6
	D300	05-18		310979	Dowel pin	2
	QD25	05-18		11012457	Proportional solenoid, 12V (SB-2007-033)	2
	QD26	05-18		11001952	O-ring	2
	QD27	05-18		11028018	Coil kit, 12V, Deutsch connector (SB-2007-033)	2
	QD28	05-18		063172	O-ring	2
	QD29	05-18		11027046	Coil nut	2
	QD080	05-18		11015978	Solenoid- on/off, 12 volt	1
	QD081	05-18		11059551	O-ring	1
	QD100	07-01		11019736	EDC kit, 12V, Deutsch connector	1



Variable displacement pump

(A7)



generic housing shown

E101 757E

* = included in overhaul seal kit Q210



Variable displacement pump

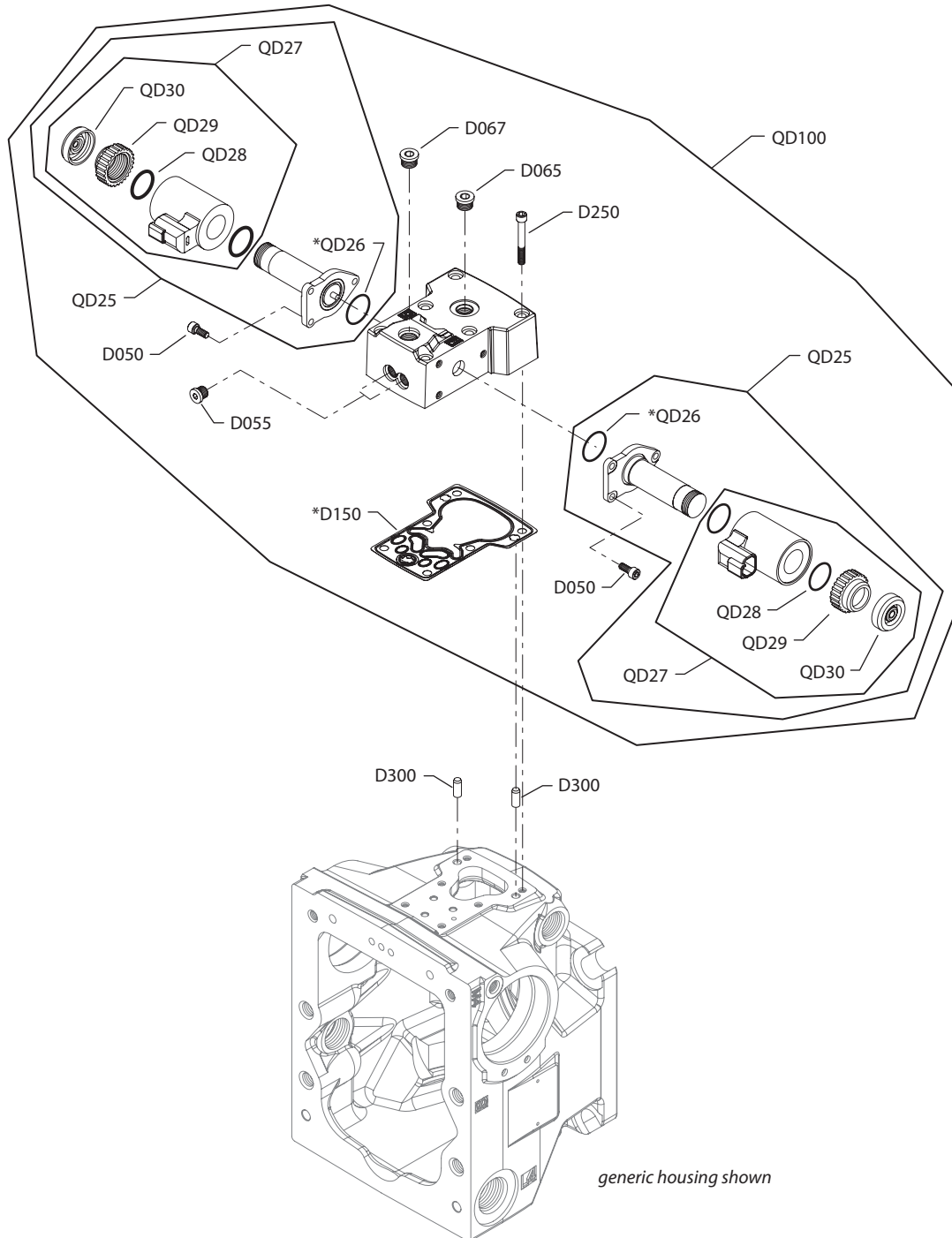
Control

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, H1 (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		11082509	Automotive control kit, 12v, manual override	1



Variable displacement pump

(A8)



E100 900E

* = included in overhaul seal kit Q210



Variable displacement pump

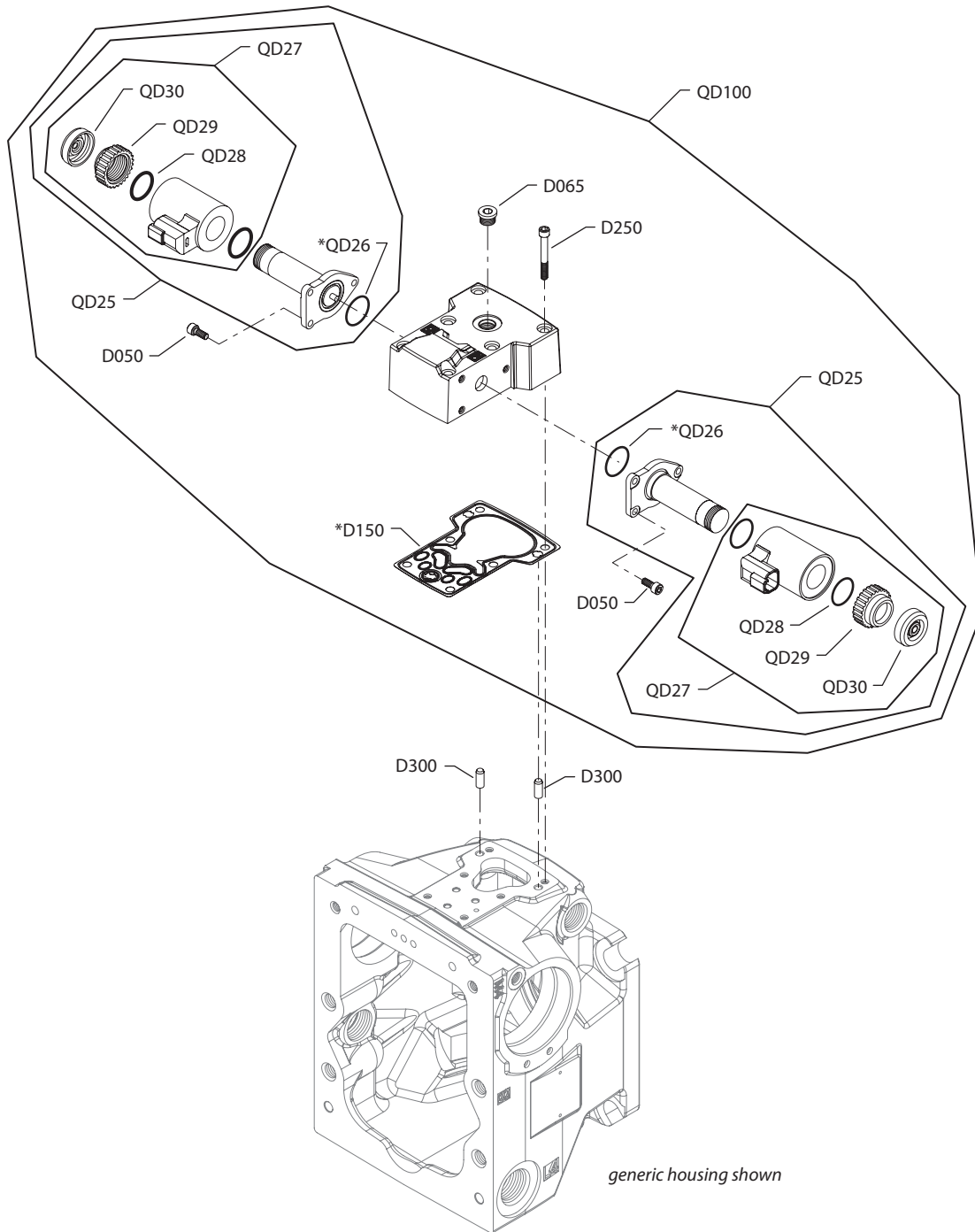
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A8	D050	10-45		716860	Screw, M5 x 12	6
	D055	10-45		11040532	Plug assembly	2
	D065	10-45		140642	Plug assembly	1
	D067	10-45		140642	Plug assembly	1
	D150	10-45		11173377	Control gasket, H1 (SB-2016-033)	1
	D250	10-45		505038	Screw, M6 x 45	6
	D300	10-45		310979	Dowel pin	2
	QD25	10-45		140750	Proportional solenoid, 12v, Deutsch connector	2
	QD26	10-45		11001952	O-ring	2
	QD27	10-45		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	10-45		063172	O-ring	2
	QD29	10-45		11004749	Coil nut	2
	QD30	10-45		11027883	Cap	2
	QD100	10-45		11068423	NFPE control kit, 12v, manual override, Deutsch conn.	1



Variable displacement pump

(A9 & B1)



E101 735E

* = included in overhaul seal kit Q210

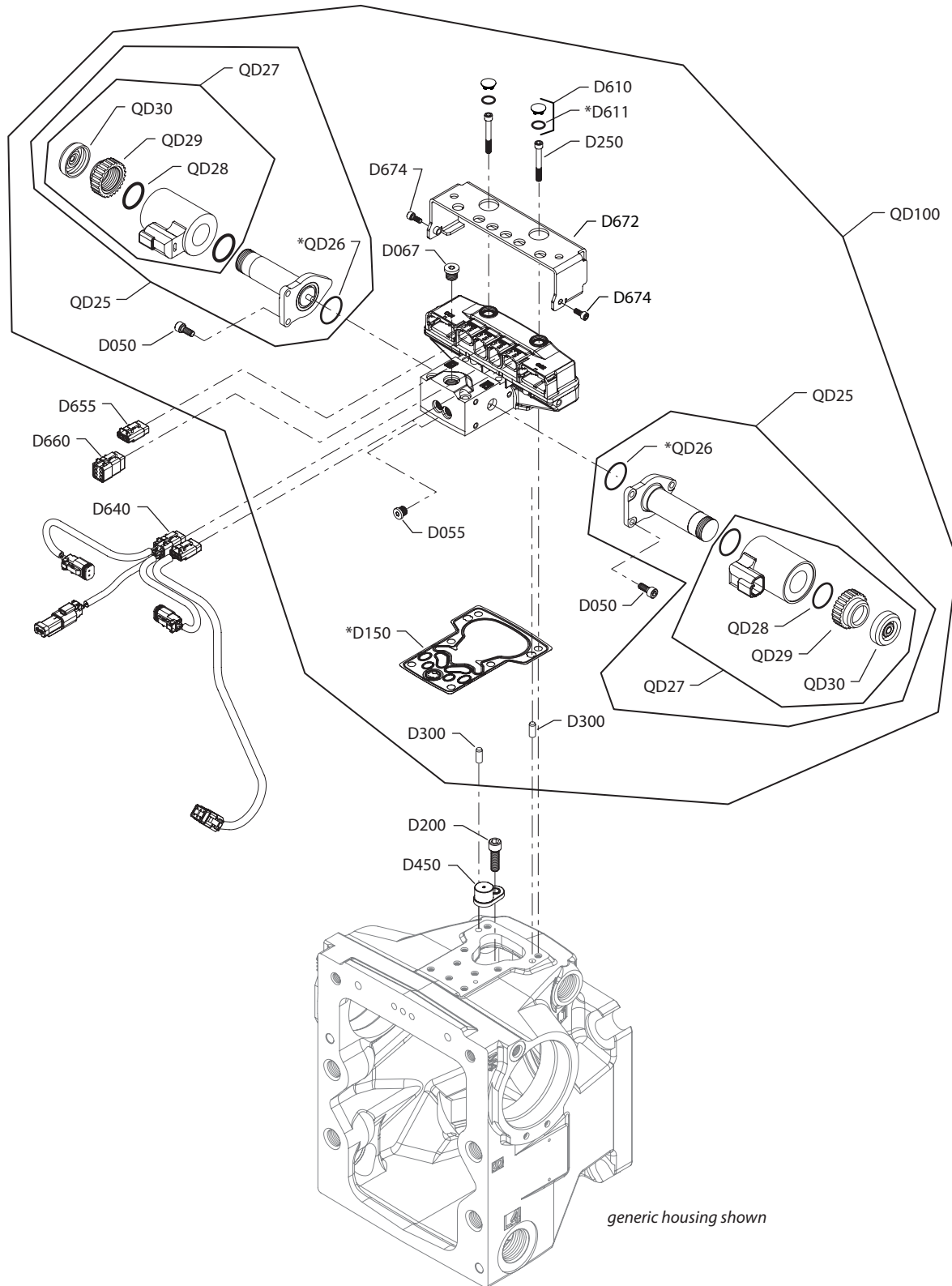

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A9	D050	12-10		716860	Screw, M5 x 12	6
	D065	12-10		140642	Plug assembly	1
	D150	12-10		11173377	Control gasket, H1 (SB-2016-033)	1
	D250	12-10		505038	Screw, M6 x 45	6
	D300	12-10		310979	Dowel pin	2
	QD25	12-10		141301	Proportional solenoid, 12v, Deutsch connector	2
	QD26	12-10		11001952	O-ring	2
	QD27	12-10		11005222	Coil kit, 12v, Deutsch connector	2
	QD28	12-10		063172	O-ring	2
	QD29	12-10		11004749	Coil nut	2
	QD30	12-10		11027883	Cap	2
	QD100	12-10		11025905	FNR control kit, 12v, manual override, Deutsch conn.	1
	B1	D050	12-10		716860	Screw, M5 x 12
D065		12-10		140642	Plug assembly	1
D150		12-10		11173377	Control gasket, H1 (SB-2016-033)	1
D250		12-10		505038	Screw, M6 x 45	6
D300		12-10		310979	Dowel pin	2
QD25		12-10		141313	Proportional solenoid, 24v, Deutsch connector	2
QD26		12-10		11001952	O-ring	2
QD27		12-10		11005223	Coil kit, 24v, Deutsch connector	2
QD28		12-10		063172	O-ring	2
QD29		12-10		11004750	Coil nut	2
QD30		12-10		11027883	Cap	2
QD100		12-10		11025906	FNR control kit, 24v, manual override, Deutsch conn.	1



Variable displacement pump

(B7)



generic housing shown

E101 758E

* = included in overhaul seal kit Q210

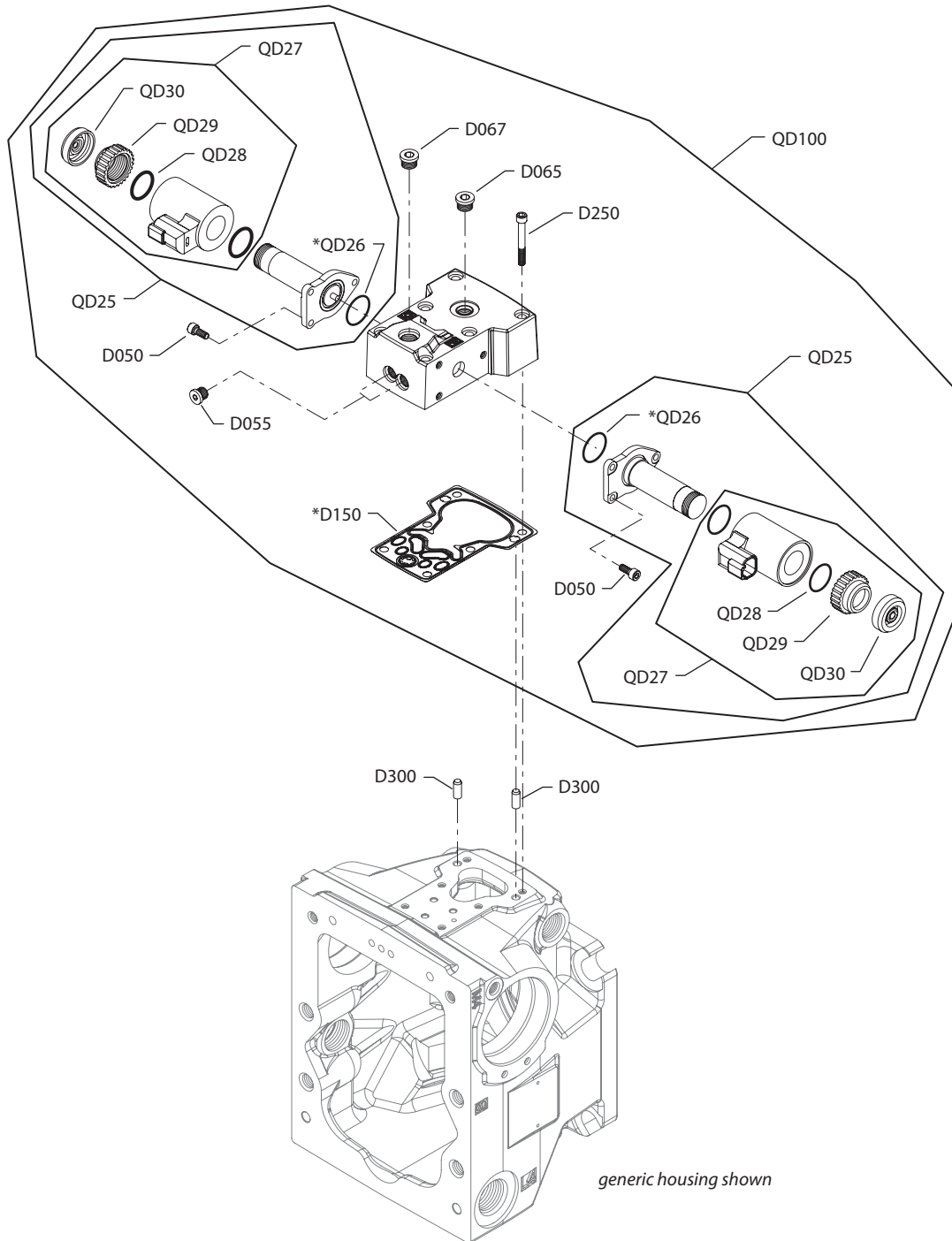

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B7	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, H1 (SB-2016-033)	1
	D200	10-14		141472	Screw, special	1
	D250	10-14		505038	Screw, M6 x 45	6
	D300	10-14		11036469	Dowel pin	2
	D450	10-14		11003097	Magnet carrier	1
	D610	10-14		11000467	Plug assembly	2
	D611	10-14		11066774	O-ring	2
	D640	10-14		11023348	AC wiring harness	1
	D655	10-14		11084827	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		11082522	Automotive control kit, 12v, manual override	1



Variable displacement pump

(B8)



E100 900E

* = included in overhaul seal kit Q210

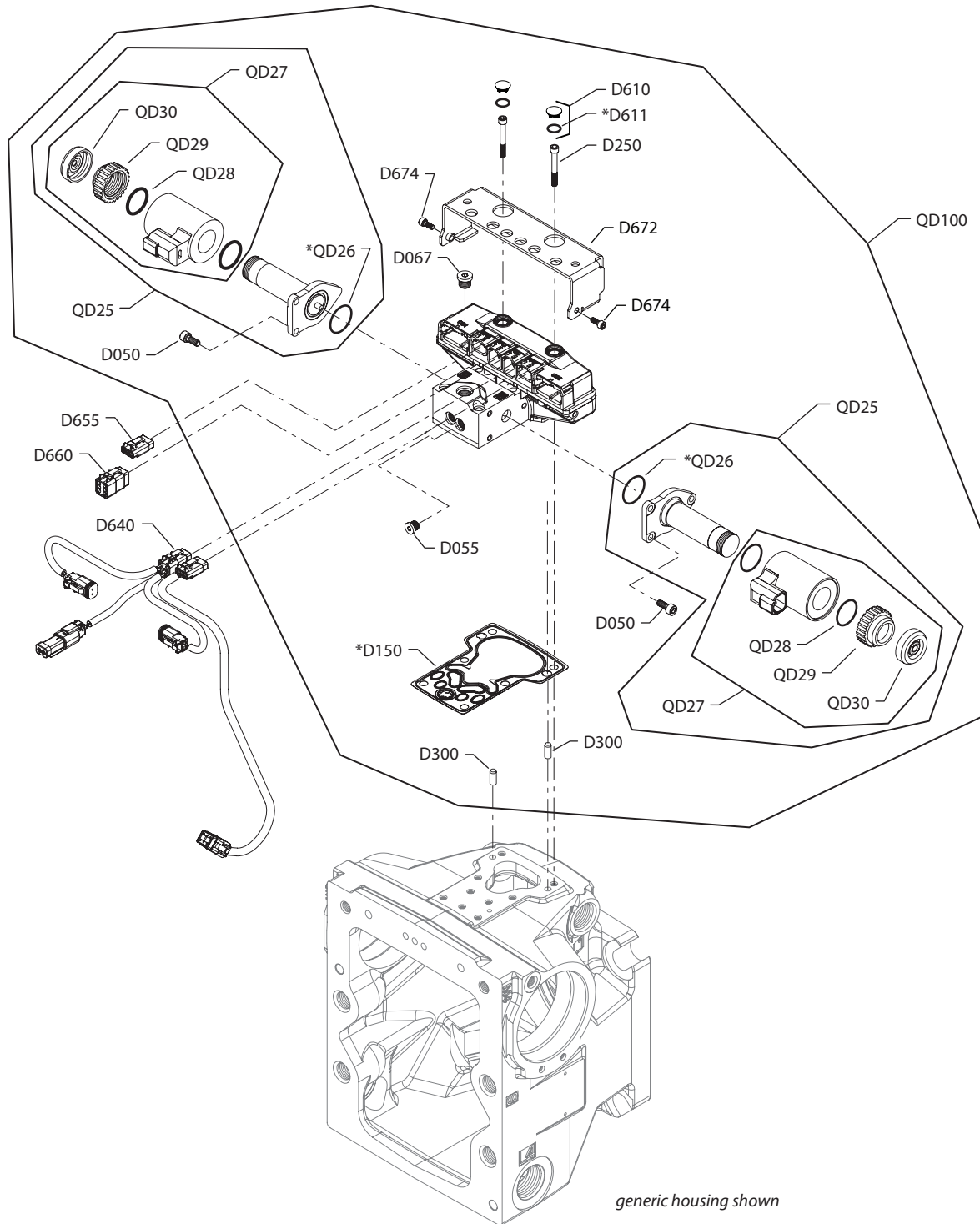

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B8	D050	10-45		716860	Screw, M5 x 12	6
	D055	10-45		11040532	Plug assembly	2
	D065	10-45		140642	Plug assembly	1
	D067	10-45		140642	Plug assembly	1
	D150	10-45		11173377	Control gasket, H1 (SB-2016-033)	1
	D250	10-45		505038	Screw, M6 x 45	6
	D300	10-45		310979	Dowel pin	2
	QD25	10-45		140751	Proportional solenoid, 24v, Deutsch connector	2
	QD26	10-45		11001952	O-ring	2
	QD27	10-45		1104700	Coil kit, 24v, Deutsch connector	2
	QD28	10-45		063172	O-ring	2
	QD29	10-45		11004750	Coil nut	2
	QD30	10-45		11027883	Cap	2
	QD100	10-45		11087014	NFPE control kit, 24v, manual override, Deutsch conn.	1



Variable displacement pump

(C2)



generic housing shown

E101 757E

* = included in overhaul seal kit Q210

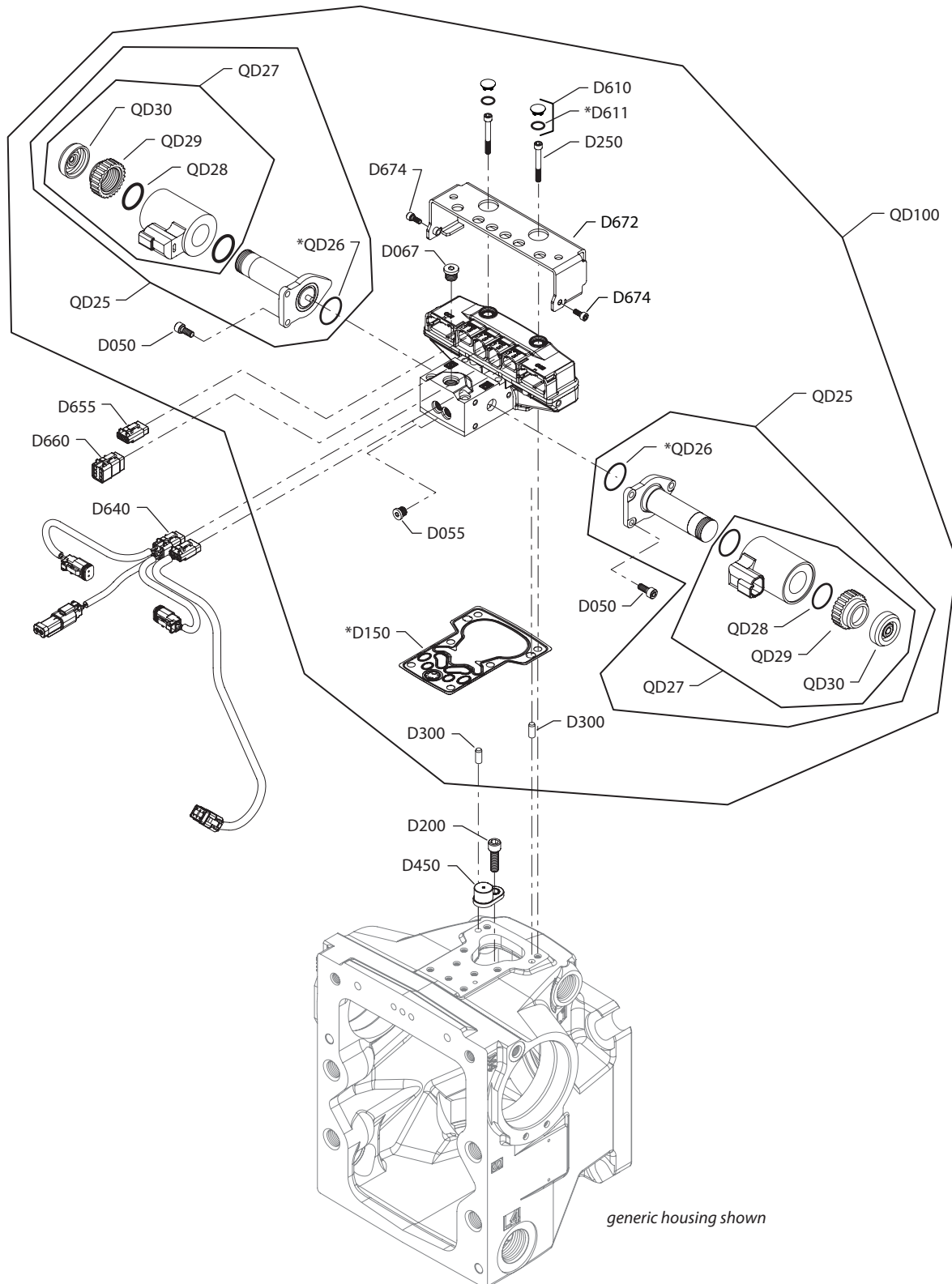

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C2	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, H1 (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		140751	Proportional solenoid, 24 volt	2
	QD26	10-14		11001952	O-ring	2
	QD27	10-14		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	10-14		063172	O-ring	2
	QD29	10-14		11004750	Coil nut	2
	QD30	10-14		11027883	Cap	2
	QD100	10-14		11082524	Automotive control kit, 24v, manual override	1



Variable displacement pump

(C3)



generic housing shown

E101 758E

* = included in overhaul seal kit Q210

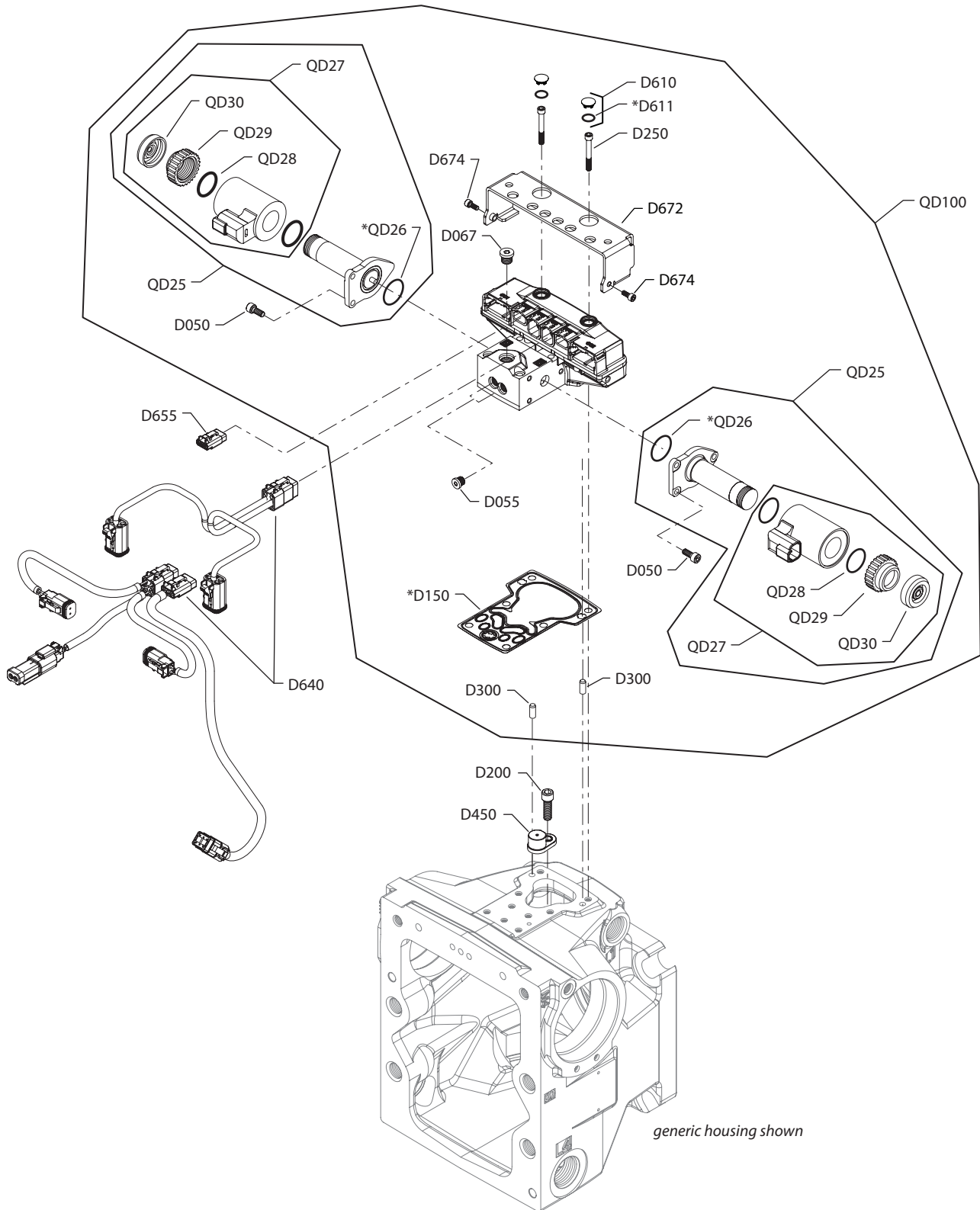

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C3	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, H1 (SB-2016-033)	1
	D200	10-14		141472	Screw, special	1
	D250	10-14		505038	Screw, M6 x 45	6
	D300	10-14		11036469	Dowel pin	2
	D450	10-14		11003097	Magnet carrier	1
	D610	10-14		11000467	Plug assembly	2
	D611	10-14		11066774	O-ring	2
	D640	10-14		11023348	AC wiring harness	1
	D655	10-14		11084827	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		140751	Proportional solenoid, 24 volt	2
	QD26	10-14		11001952	O-ring	2
	QD27	10-14		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	10-14		063172	O-ring	2
	QD29	10-14		11004750	Coil nut	2
	QD30	10-14		11027883	Cap	2
	QD100	10-14		11082526	Automotive control kit, 24v, manual override	1



Variable displacement pump

(C9 & D1)



generic housing shown

E101 913E

* = included in overhaul seal kit Q210

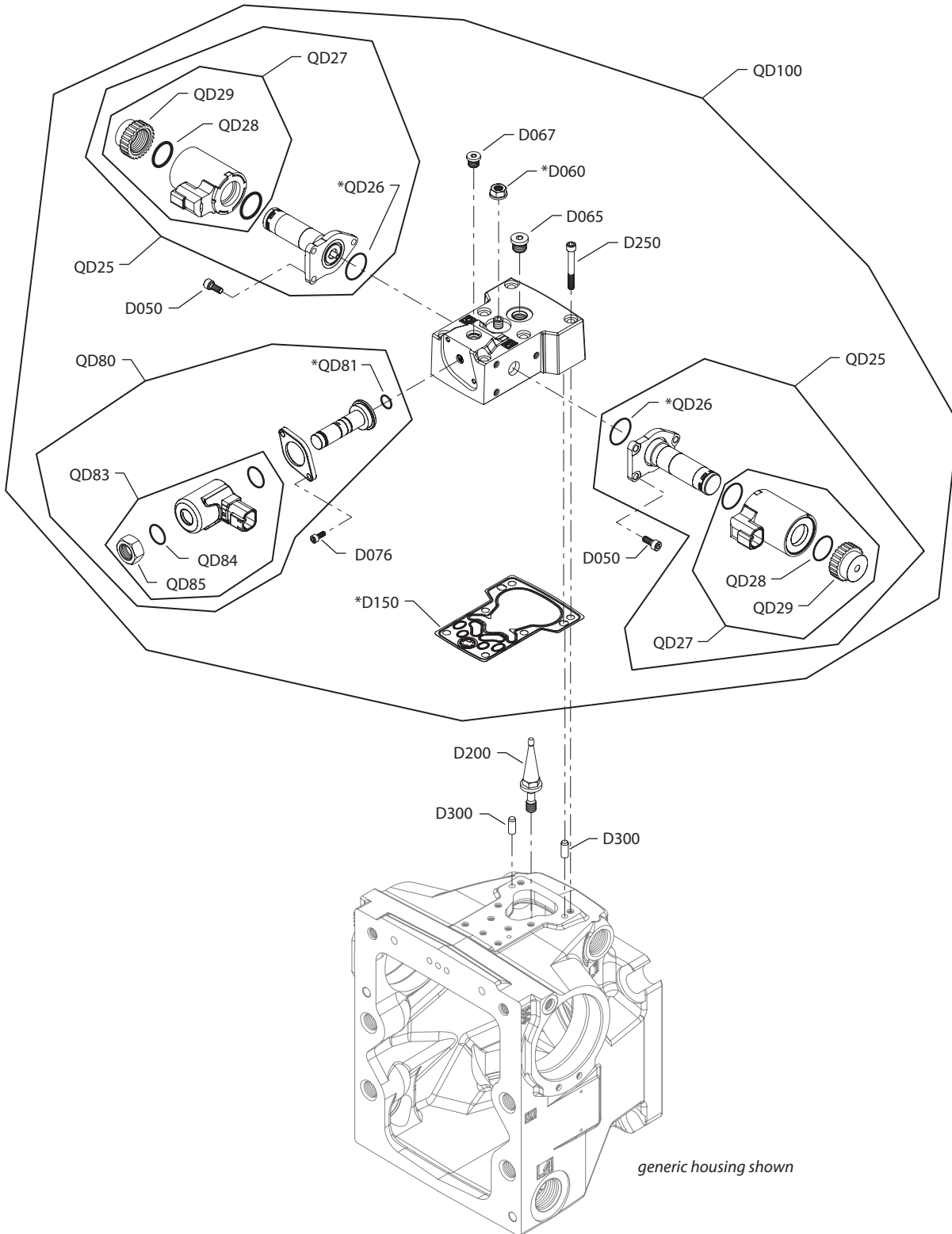

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C9	D050	12-02		716860	Screw, M5 x 12	6
	D055	12-02		11040532	Plug assembly	2
	D067	12-02		140642	Plug assembly	1
	D150	12-02		11173377	Control gasket, H1 (SB-2016-033)	1
	D200	12-02		141472	Screw, special	1
	D250	12-02		505038	Screw, M6 x 45	6
	D300	12-02		11036469	Dowel pin	2
	D450	12-02		11003097	Magnet carrier	1
	D610	12-02		11000467	Plug assembly	2
	D611	12-02		11066774	O-ring	2
	D640	12-02		11105876	AC wiring harness	1
	D655	12-02		11084827	Blank, connector DTM 06-3S	1
	D672	12-02		11151875	Protection	1
	D674	12-02		716860	Screw, M5 x 12	2
	QD25	12-02		140751	Proportional solenoid, 24v	2
	QD26	12-02		11001952	O-ring	2
	QD27	12-02		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	12-02		063172	O-ring	2
	QD29	12-02		11004750	Coil nut	2
	QD30	12-02		11027883	Cap	2
QD100	12-02		11082526	Automotive control kit, 24v, manual override	1	
D1	D050	14-01		716860	Screw, M5 x 12	6
	D055	14-01		11040532	Plug assembly	2
	D067	14-01		140642	Plug assembly	1
	D150	14-01		11173377	Control gasket, H1 (SB-2016-033)	1
	D200	14-01		141472	Screw, special	1
	D250	14-01		505038	Screw, M6 x 45	6
	D300	14-01		11036469	Dowel pin	2
	D450	14-01		11003097	Magnet carrier	1
	D610	14-01		11000467	Plug assembly	2
	D611	14-01		11066774	O-ring	2
	D640	14-01		11105876	AC wiring harness	1
	D655	14-01		11084827	Blank, connector DTM 06-3S	1
	D672	14-01		11151875	Protection	1
	D674	14-01		716860	Screw, M5 x 12	2
	QD25	14-01		140750	Proportional solenoid, 12v	2
	QD26	14-01		11001952	O-ring	2
	QD27	14-01		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	14-01		063172	O-ring	2
	QD29	14-01		11004749	Coil nut	2
	QD30	14-01		11027883	Cap	2
QD100	14-01		11082522	Automotive control kit, 12v, manual override	1	



Variable displacement pump

(E6)



E103 356E

* = included in overhaul seal kit Q210

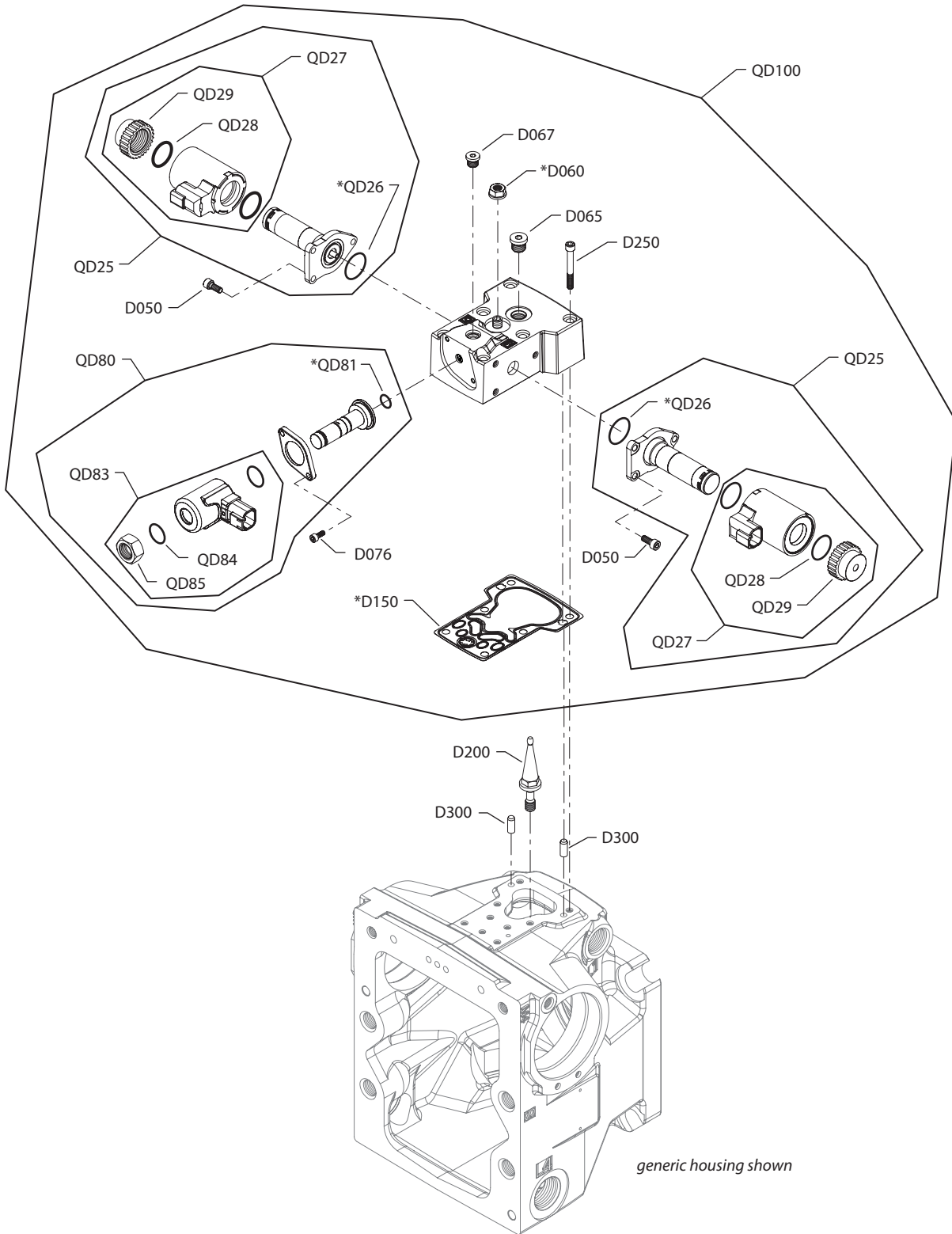

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E6	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	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		11147423	EDC kit, 24v, CCO	1



Variable displacement pump

(E7)



E103 356E

* = included in overhaul seal kit Q210



Variable displacement pump

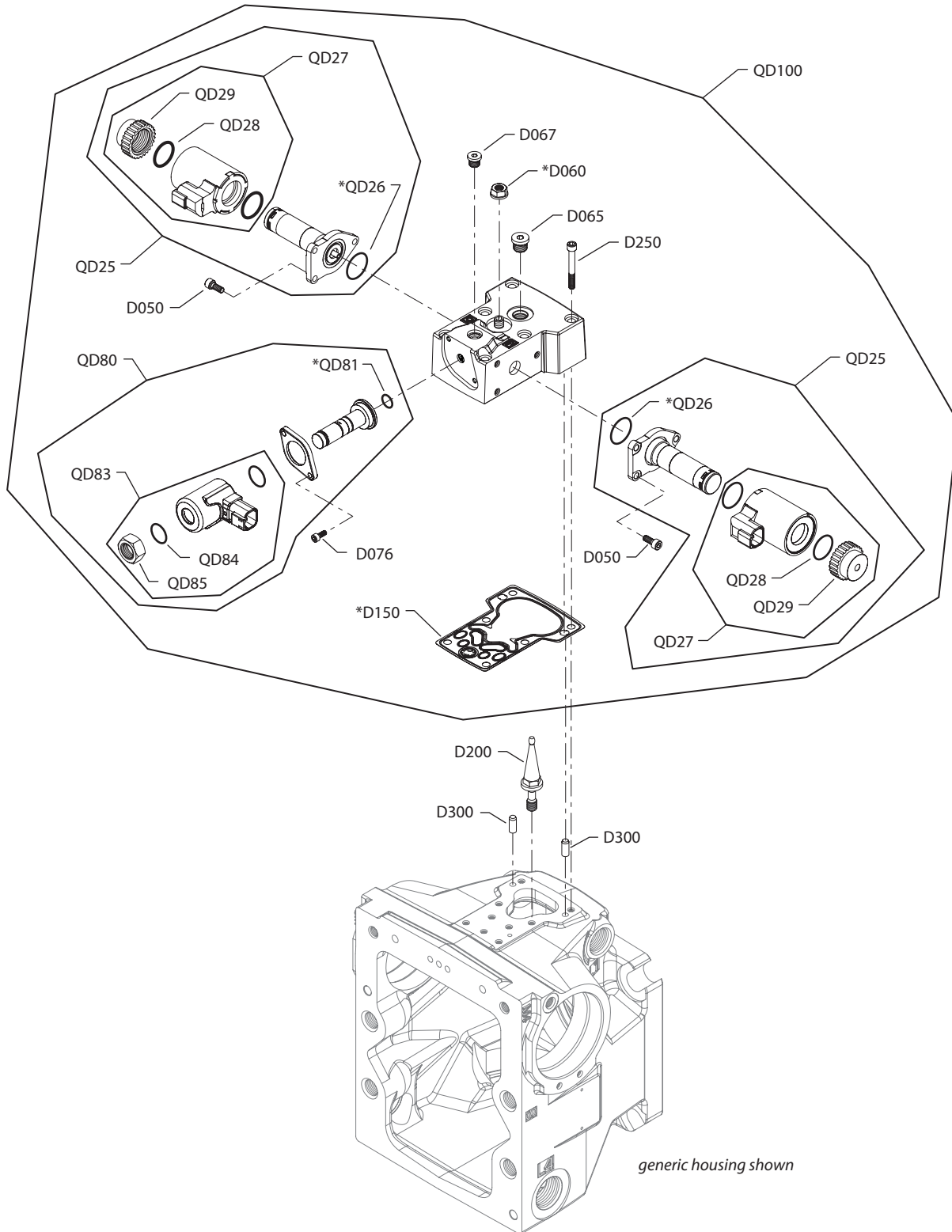
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E7	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	1
	D250	14-25		505038	Screw	6
	D300	14-25		310979	Dowel pin	2
	QD25	14-25		11012457	Proportional solenoid, 12V	2
	QD26	14-25		11001952	O-ring	2
	QD27	14-25		11028018	Coil kit, 12V, Deutsch connector	2
	QD28	14-25		063172	O-ring	2
	QD29	14-25		11027046	Coil nut	2
	QD80	14-25		11129914	Solenoid, 12V, Deutsch connector	1
	QD81	14-25		11152257	O-ring	1
	QD83	14-25		11147301	Coil kit, 12V, Deutsch connector	1
	QD84	14-25		11140393	O-ring	1
	QD85	14-25		11140394	Nut	1
	QD100	14-25		11147471	EDC kit, 12V, control override	1
E7	D050	14-25		716860	Screw, M5 x 12	6
(metric)	D060	14-25		612291	Seal nut	1
	D065	14-25		5000572	Plug assembly, M12	2
	D067	14-25		5000572	Plug assembly, M12	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	1
	D250	14-25		505038	Screw	6
	D300	14-25		310979	Dowel pin	2
	QD25	14-25		11012457	Proportional solenoid, 12V	2
	QD26	14-25		11001952	O-ring	2
	QD27	14-25		11028018	Coil kit, 12V, Deutsch connector	2
	QD28	14-25		063172	O-ring	2
	QD29	14-25		11027046	Coil nut	2
	QD80	14-25		11129914	Solenoid, 12V, Deutsch connector	1
	QD81	14-25		11152257	O-ring	1
	QD83	14-25		11147301	Coil kit, 12V, Deutsch connector	1
	QD84	14-25		11140393	O-ring	1
	QD85	14-25		11140394	Nut	1
	QD100	14-25		11164610	EDC kit, metric, 12V, control override	1



Variable displacement pump

(E8)



E103 356E

* = included in overhaul seal kit Q210

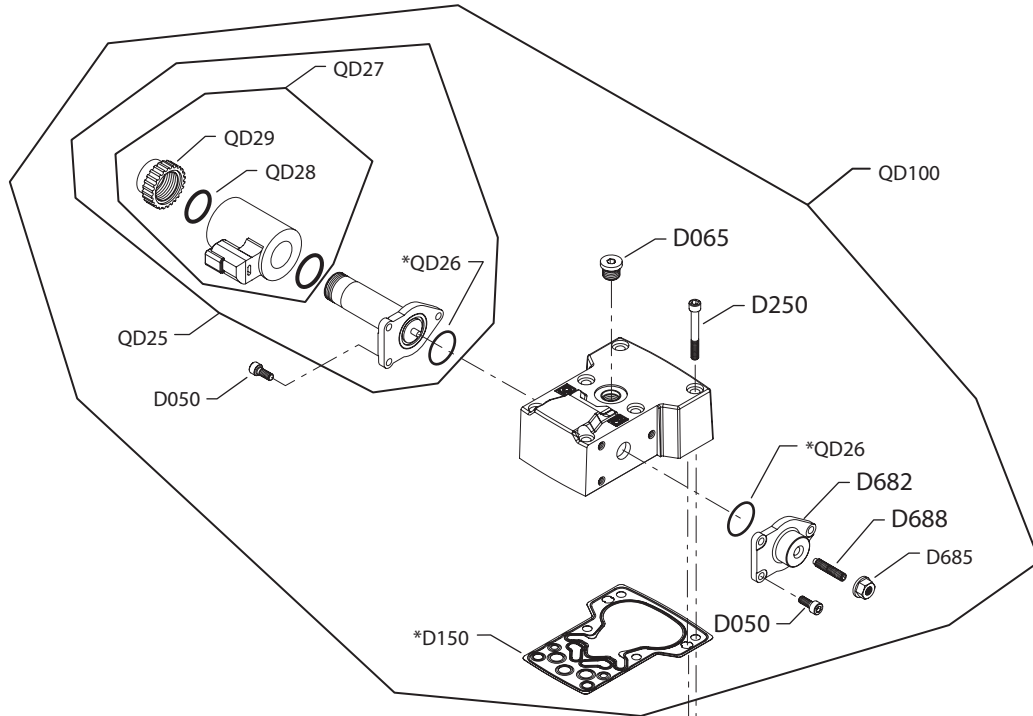

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E8	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	1
	D250	14-25		505038	Screw	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		11147472	EDC kit, 24V, control override	1

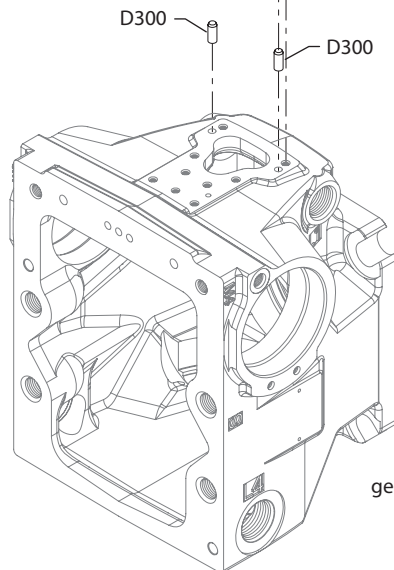


Variable displacement pump

(F1 & F2)



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



generic housing shown

E101 902E

* = included in overhaul seal kit Q210

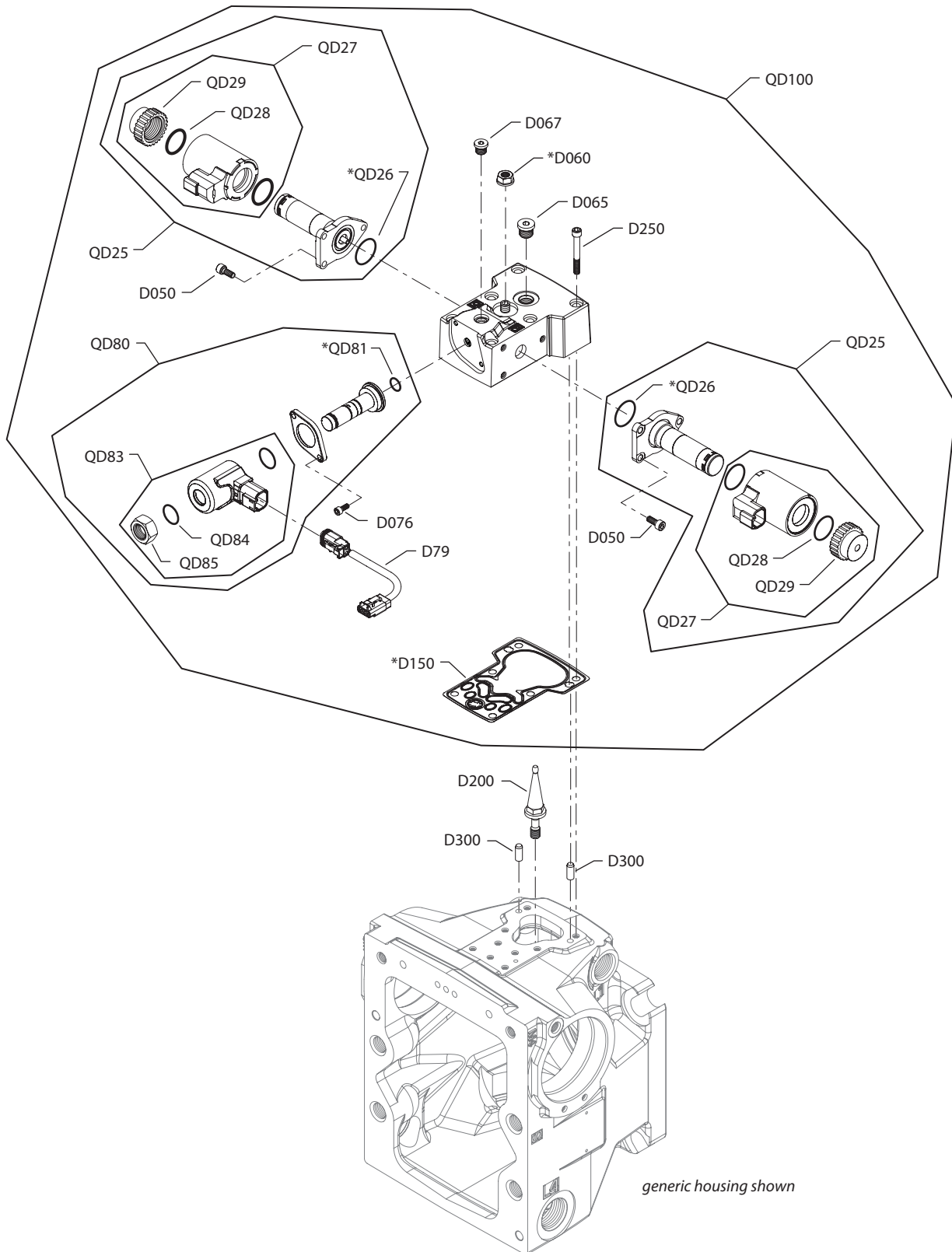

Variable displacement pump
Control

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

(G7)



generic housing shown

E103 378E

* = included in overhaul seal kit Q210



Variable displacement pump

Control

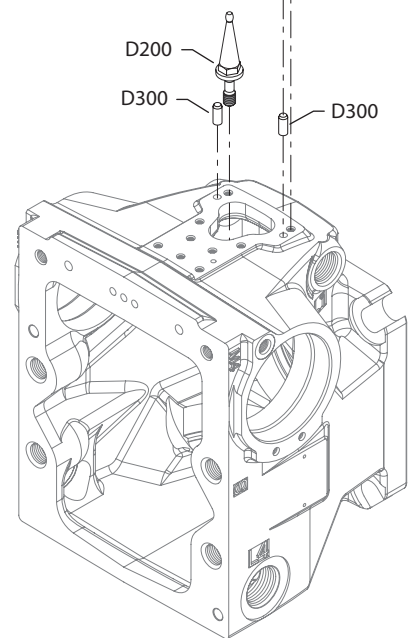
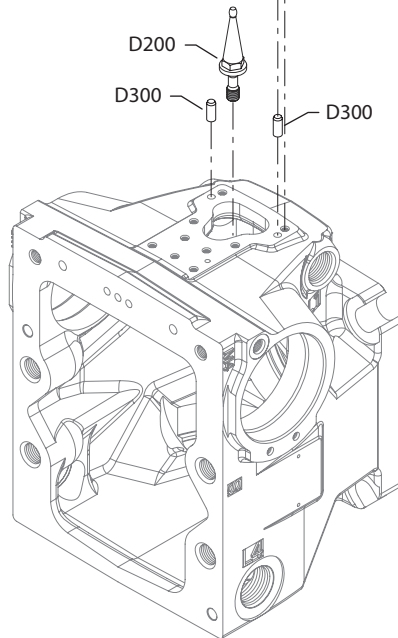
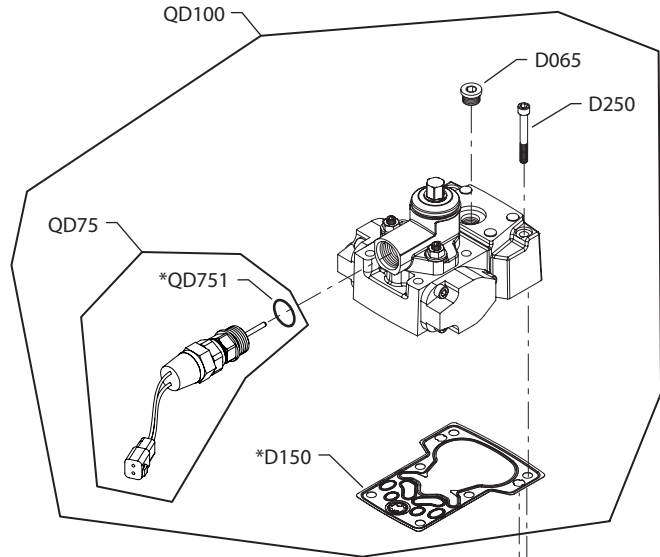
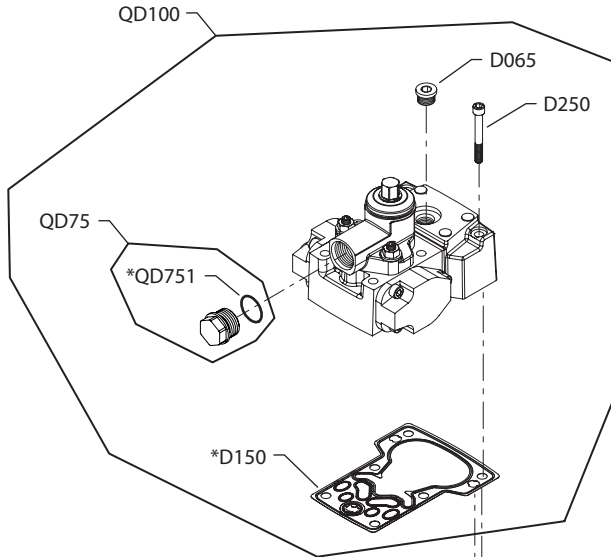
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G7	D79	14-31		11153287	Cable adapter	1
	D050	14-31		716860	Screw, M5 x 12	6
	D060	14-01		612291 (9003508-0008)	Seal nut, M8	1
	D065	14-01		140642	Plug assembly	1
	D067	14-01		140642	Plug assembly	1
	D076	14-01		067694	Screw, M4 x 10	2
	D150	14-01		11173377	Control gasket (SB-2016-033)	1
	D200	14-01		11148827	Swashplate feedback link	1
	D250	14-01		505038	Screw, M6 x 45	6
	D300	14-01		310979	Dowel pin	2
	QD25	14-01		11012457	Proportional solenoid, 12v	2
	QD26	14-01		11001952	O-ring	2
	QD27	14-01		11028018	Coil kit, 12v, Deutsch connector	2
	QD28	14-01		063172	O-ring	2
	QD29	14-01		11027046	Coil nut	2
	QD80	14-01		11129914	Solenoid vale, on/off, 12v	1
	QD81	14-01		11152257	O-ring	1
	QD83	14-01		11147301	Coil kit, 12v	1
	QD84	14-01		11140393	O-ring	1
	QD85	14-01		11140394	Coil nut	1
	QD100	14-01		11156149	EDC kit, 12v, CCO	1



Variable displacement pump

(M1)

(M2)



generic housing shown

E103 357E

* = included in overhaul seal kit Q210

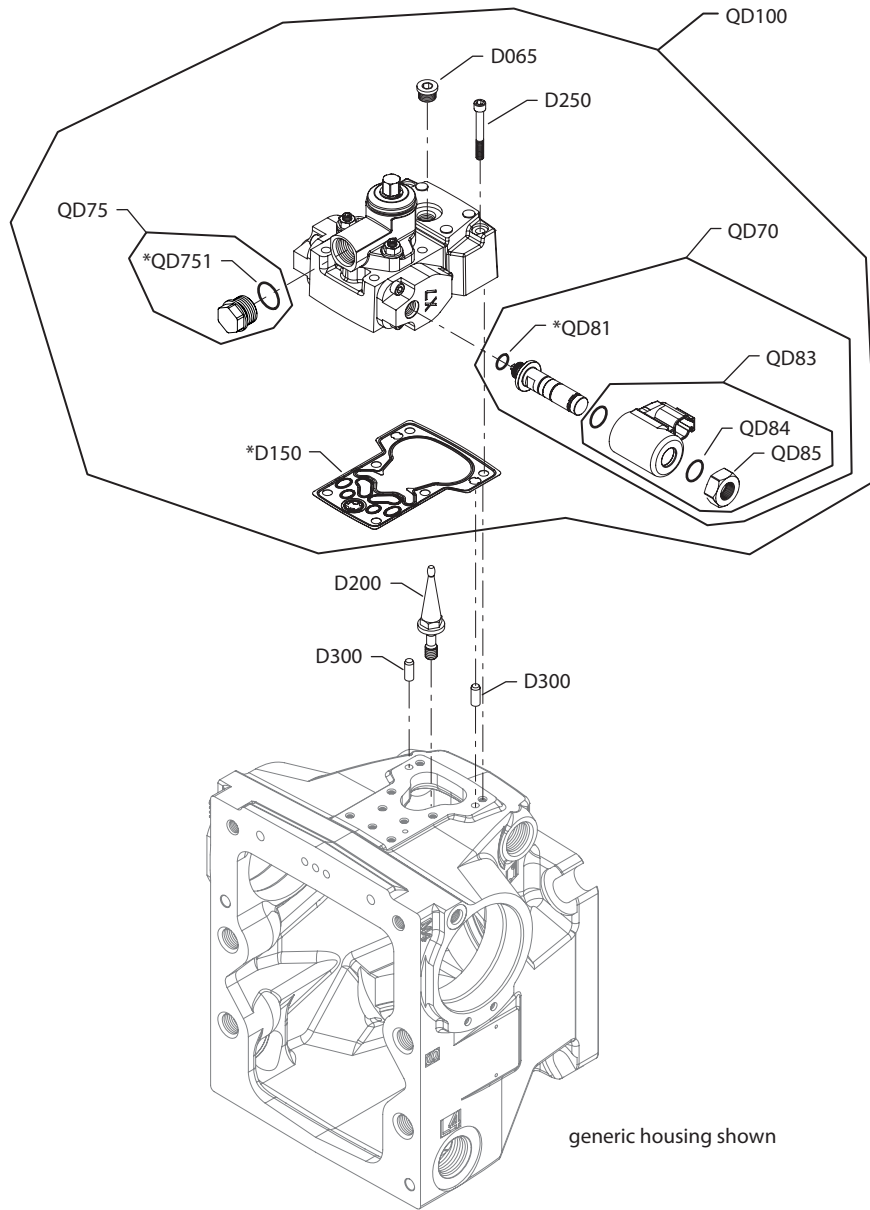

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
M1	D065	14-15		140642	Plug assembly	1
	D150	14-15		11173377	Control gasket (SB-2016-033)	1
	D200	14-15		11148827	Swashplate feedback link	1
	D250	14-15		505038	Screw, M6 x 45	6
	D300	14-15		310979	Dowel pin	2
	QD75	14-15		11119332	Spring seat assembly	1
	QD100	14-15		11141225	MDC kit	1
	QD751	14-15		001131 (9004201-5000)	O-ring	1
	M2	D065	14-15		140642	Plug assembly
D150		14-15		11173377	Control gasket (SB-2016-033)	1
D200		14-15		11148827	Swashplate feedback link	1
D250		14-15		505038	Screw, M6 x 45	6
D300		14-15		310979	Dowel pin	2
QD75		14-15		11126847	Spring seat/neutral start switch assembly	1
QD100		14-15		11141236	MDC kit	1
QD751		14-15		001131 (9004201-5000)	O-ring	1



Variable displacement pump

(M3 & M4)



E103 358E

* = included in overhaul seal kit Q210



Variable displacement pump

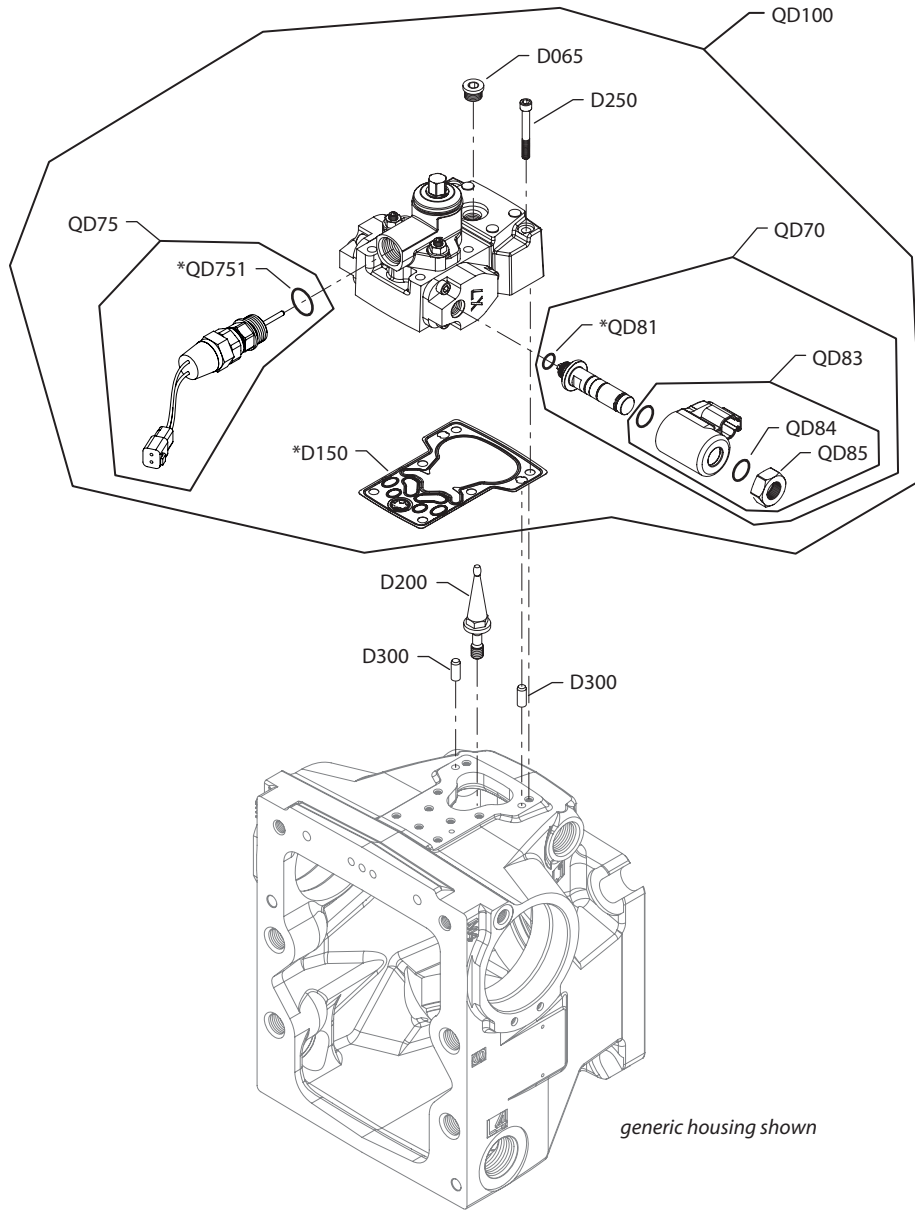
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
M3	D065	14-15		140642	Plug assembly	1
	D150	14-15		11173377	Control gasket (SB-2016-033)	1
	D200	14-15		11148827	Swashplate feedback link	1
	D250	14-15		505038	Screw, M6 x 45	6
	D300	14-15		310979	Dowel pin	2
	QD70	14-15		11129916	Solenoid valve, 12v	1
	QD75	14-15		11119332	Spring seat assembly	1
	QD81	14-15		11152257	O-ring	1
	QD83	14-15		11136347	Coil kit, 12v	1
	QD84	14-15		11140393	O-ring	1
	QD85	14-15		11140394	Coil nut	1
	QD100	14-15		11141237	MDC kit, 12v	1
	QD751	14-15		001131 (9004201-5000)	O-ring	1
	M4	D065	14-15		140642	Plug assembly
D150		14-15		11173377	Control gasket (SB-2016-033)	1
D200		14-15		11148827	Swashplate feedback link	1
D250		14-15		505038	Screw, M6 x 45	6
D300		14-15		310979	Dowel pin	2
QD70		14-15		11129917	Solenoid valve, 24v	1
QD75		14-15		11119332	Spring seat assembly	1
QD81		14-15		11152257	O-ring	1
QD83		14-15		11136348	Coil kit, 24v	1
QD84		14-15		11140393	O-ring	1
QD85		14-15		11140394	Coil nut	1
QD100		14-15		11141238	MDC kit, 24v	1
QD751		14-15		001131 (9004201-5000)	O-ring	1



Variable displacement pump

(M5 & M6)



generic housing shown

E103 359E

* = included in overhaul seal kit Q210

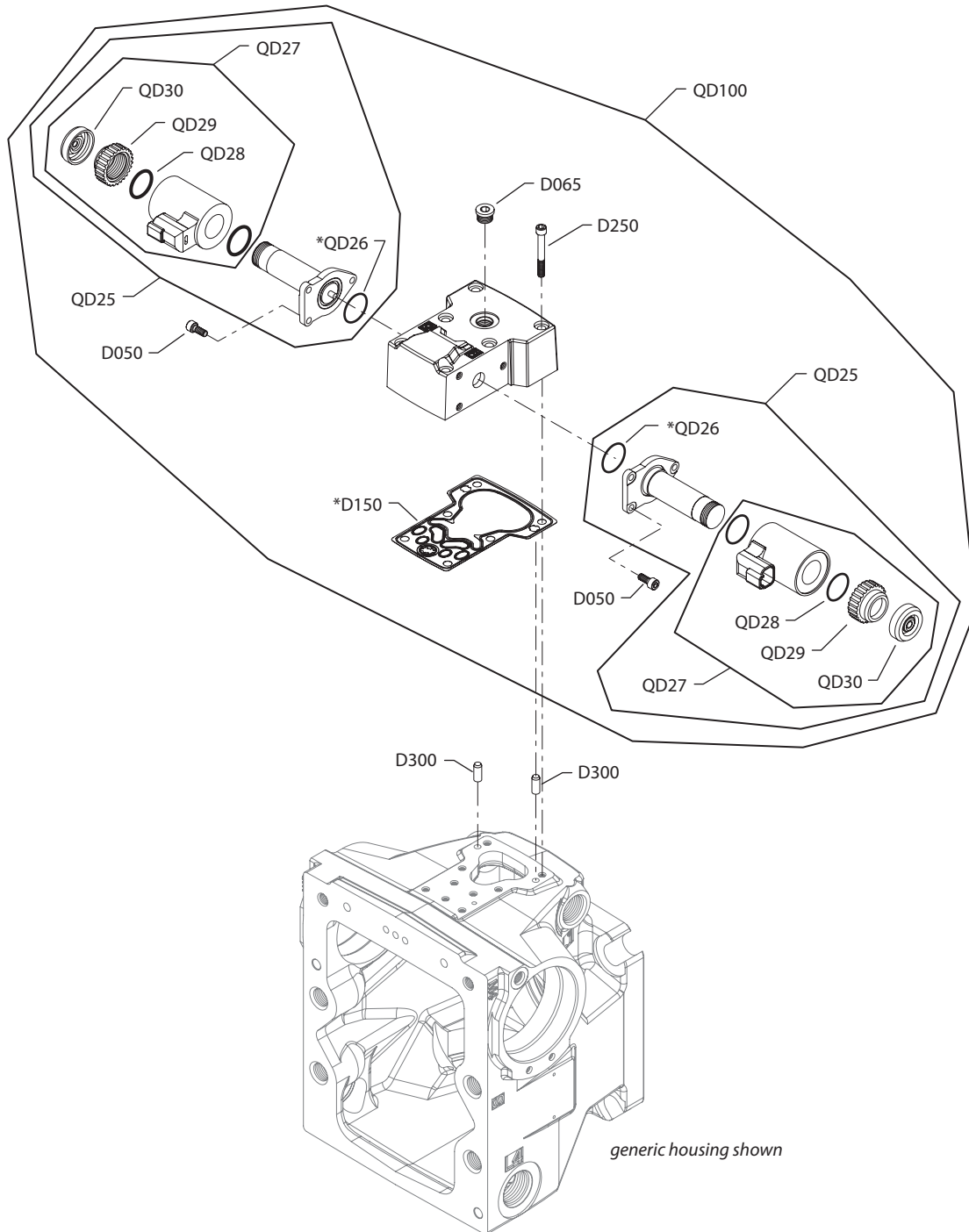

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
M5	D065	14-15		140642	Plug assembly	1
	D150	14-15		11173377	Control gasket (SB-2016-033)	1
	D200	14-15		11148827	Swashplate feedback link	1
	D250	14-15		505038	Screw, M6 x 45	6
	D300	14-15		310979	Dowel pin	2
	QD70	14-15		11129916	Solenoid valve, 12v	1
	QD75	14-15		11126847	Spring seat/neutral start switch assembly	1
	QD81	14-15		11152257	O-ring	1
	QD83	14-15		11136347	Coil kit, 12v	1
	QD84	14-15		11140393	O-ring	1
	QD85	14-15		11140394	Coil nut	1
	QD100	14-15		11141239	MDC kit, 12v	1
	QD751	14-15		001131 (9004201-5000)	O-ring	1
	M6	D065	14-15		140642	Plug assembly
D150		14-15		11173377	Control gasket (SB-2016-033)	1
D200		14-15		11148827	Swashplate feedback link	1
D250		14-15		505038	Screw, M6 x 45	6
D300		14-15		310979	Dowel pin	2
QD70		14-15		11129917	Solenoid valve, 24v	1
QD75		14-15		11126847	Spring seat/neutral start switch assembly	1
QD81		14-15		11152257	O-ring	1
QD83		14-15		11136348	Coil kit, 24v	1
QD84		14-15		11140393	O-ring	1
QD85		14-15		11140394	Coil nut	1
QD100		14-15		11141240	MDC kit, 24v	1
QD751		14-15		001131 (9004201-5000)	O-ring	1



Variable displacement pump

(N1 & N2)



generic housing shown

E101 703E

* = included in overhaul seal kit Q210

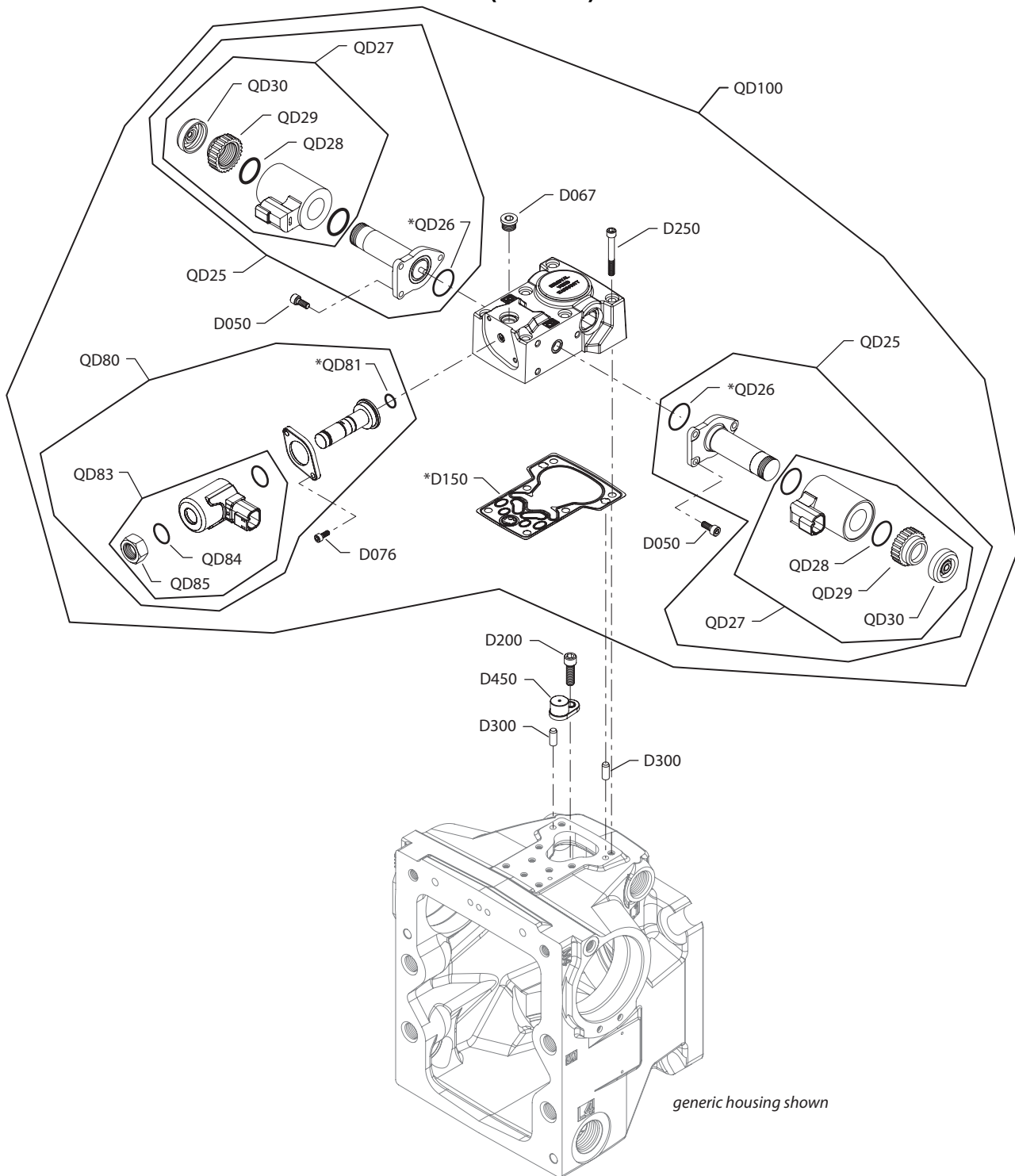

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
N1	D050	16-30		716860	Screw, M5 x 12	6	
	D065	16-30		140642	Plug assembly	1	
	D150	16-30		11173377	Control gasket (SB-2016-033)	1	
	D250	16-30		505038	Screw, M6 x 45	6	
	D300	16-30		310979	Dowel pin	2	
	QD25	16-30		140750	Proportional solenoid, 12v, Deutsch connector	2	
	QD26	16-30		11001952	O-ring	2	
	QD27	16-30		11004698	Coil kit, 12v, Deutsch connector	2	
	QD28	16-30		063172	O-ring	2	
	QD29	16-30		11004749	Coil nut	2	
	QD30	16-30		11027883	Cap	2	
	QD100	16-30		11147921	NFPE control kit, 12v, manual override, Deutsch conn.	1	
	N2	D050	16-30		716860	Screw, M5 x 12	6
		D065	16-30		140642	Plug assembly	1
D150		16-30		11173377	Control gasket (SB-2016-033)	1	
D250		16-30		505038	Screw, M6 x 45	6	
D300		16-30		310979	Dowel pin	2	
QD25		16-30		140751	Proportional solenoid, 24v, Deutsch connector	2	
QD26		16-30		11001952	O-ring	2	
QD27		16-30		11004700	Coil kit, 24v, Deutsch connector	2	
QD28		16-30		063172	O-ring	2	
QD29		16-30		11004750	Coil nut	2	
QD30		16-30		11027883	Cap	2	
QD100		16-30		11147925	NFPE control kit, 24v, manual override, Deutsch conn.	1	



Variable displacement pump

(N3 & N4)



E103 608E

* = included in overhaul seal kit Q210

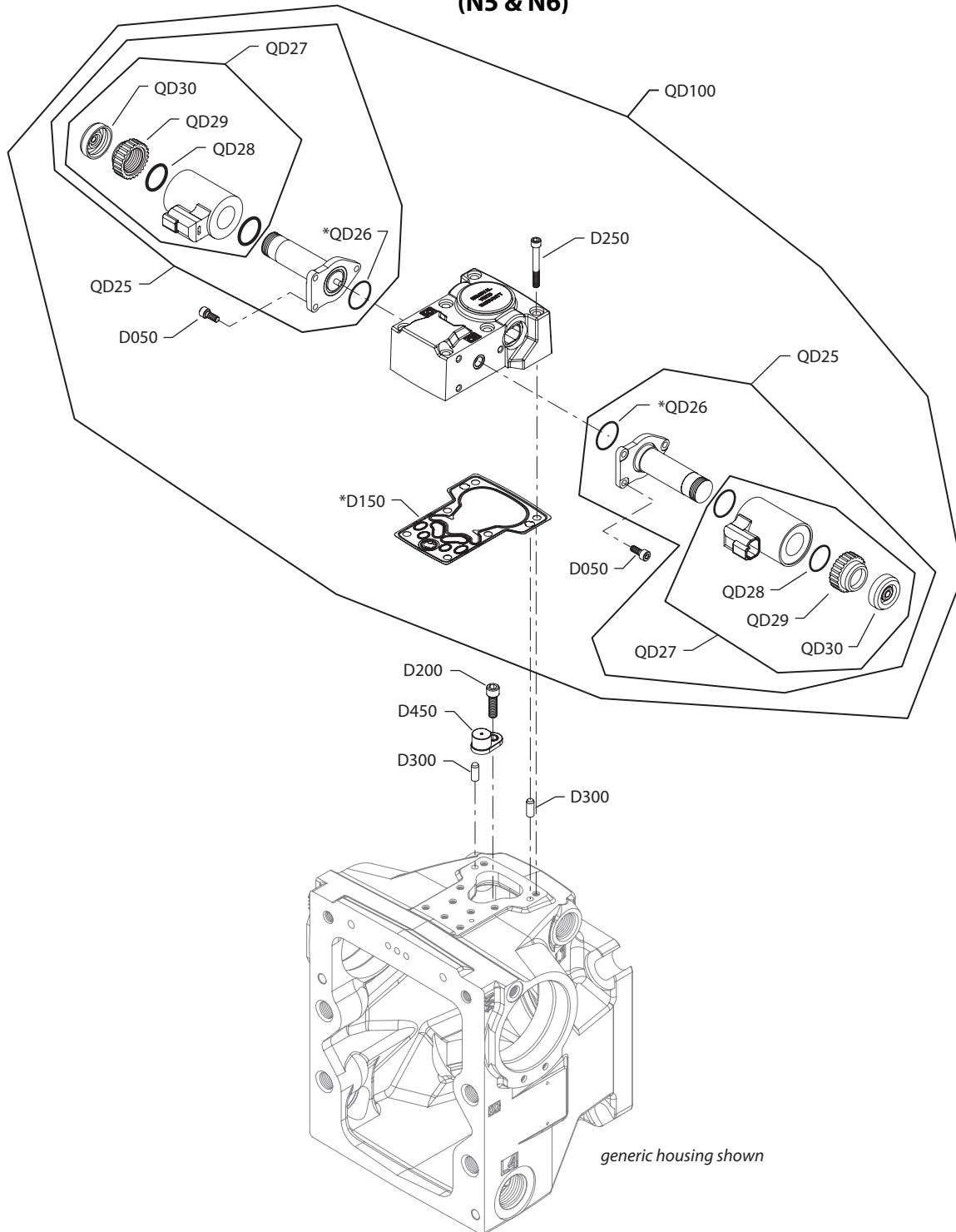

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
N3	D050	16-30		716860	Screw, M5 x 12	6
	D067	16-30		140642	Plug assembly	1
	D076	16-30		067694	Screw, M4 x 10	2
	D150	16-30		11173377	Control gasket (SB-2016-033)	1
	D200	16-30		141472	Screw, special	1
	D250	16-30		505038	Screw, M6 x 45	6
	D300	16-30		310979	Dowel pin	2
	D450	16-30		11003097	Magnetic carrier	1
	QD25	16-30		140750	Proportional solenoid, 12v	2
	QD26	16-30		11001952	O-ring	2
	QD27	16-30		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	16-30		063172	O-ring	2
	QD29	16-30		11004749	Coil nut	2
	QD30	16-30		11027883	Cap	2
	QD80	16-30		11129914	Solenoid, 12V, Deutsch connector	1
	QD81	16-30		11152257	O-ring	1
	QD83	16-30		11147301	Coil kit, 12V, Deutsch connector	1
	QD84	16-30		11140393	O-ring	1
	QD85	16-30		11140394	Nut	1
	QD100	16-30		11147920	NFPE control kit, 12v, CCO	1
N4	D050	16-30		716860	Screw, M5 x 12	6
	D067	16-30		140642	Plug assembly	1
	D076	16-30		067694	Screw, M4 x 10	2
	D150	16-30		11173377	Control gasket (SB-2016-033)	1
	D200	16-30		141472	Screw, special	1
	D250	16-30		505038	Screw, M6 x 45	6
	D300	16-30		310979	Dowel pin	2
	D450	16-30		11003097	Magnetic carrier	1
	QD25	16-30		140751	Proportional solenoid, 24v	2
	QD26	16-30		11001952	O-ring	2
	QD27	16-30		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	16-30		063172	O-ring	2
	QD29	16-30		11004750	Coil nut	2
	QD30	16-30		11027883	Cap	2
	QD80	16-30		11129915	Solenoid, 24V, Deutsch connector	1
	QD81	16-30		11152257	O-ring	1
	QD83	16-30		11147332	Coil kit, 24V, Deutsch connector	1
	QD84	16-30		11140393	O-ring	1
	QD85	16-30		11140394	Nut	1
	QD100	16-30		11147924	NFPE control kit, 24v, CCO	1



Variable displacement pump

(N5 & N6)



generic housing shown

E103 609E

* = included in overhaul seal kit Q210

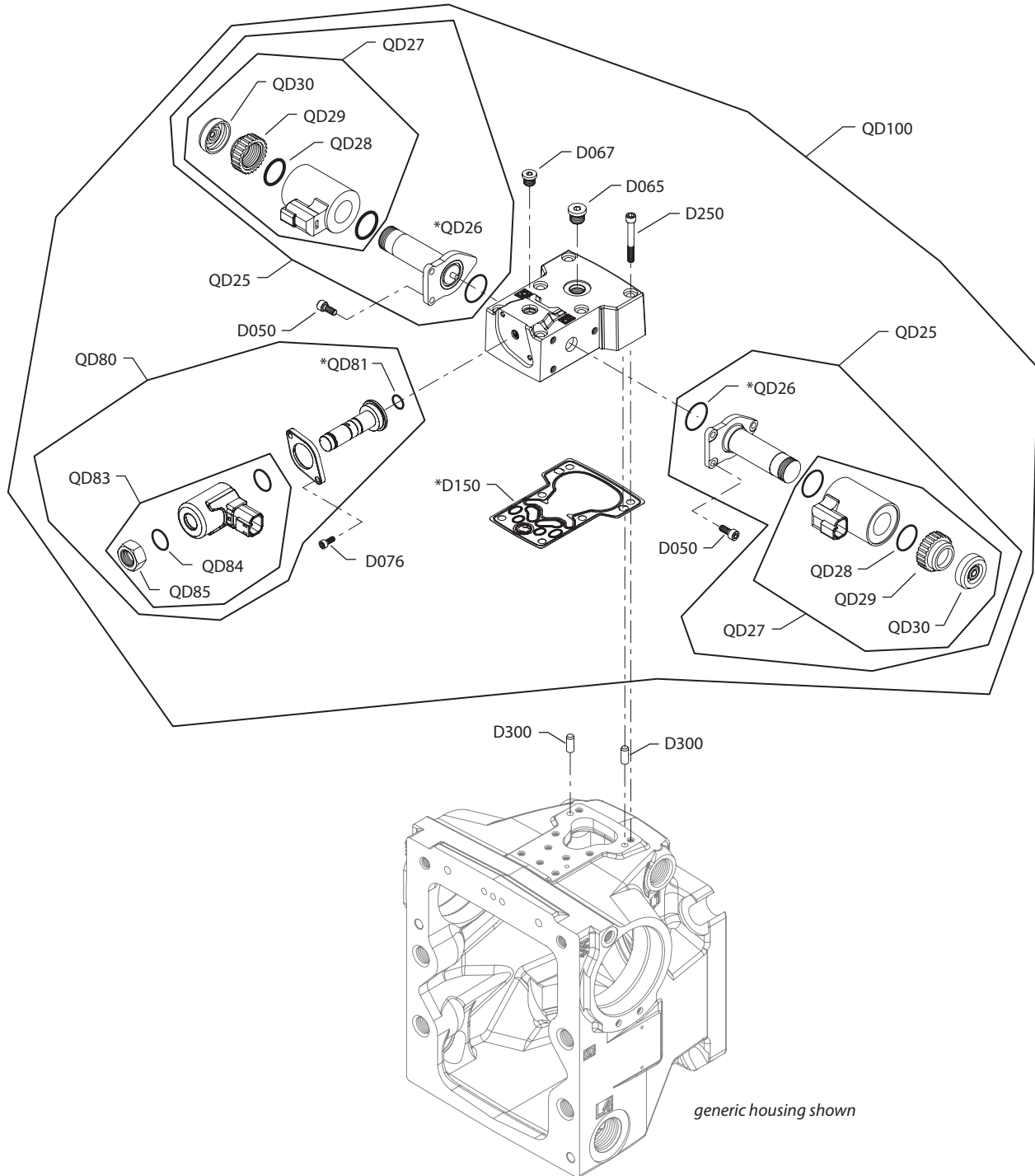

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
N5	D050	16-30		716860	Screw, M5 x 12	6
	D150	16-30		11173377	Control gasket (SB-2016-033)	1
	D200	16-30		141472	Screw, special	1
	D250	16-30		505038	Screw, M6 x 45	6
	D300	16-30		310979	Dowel pin	2
	D450	16-30		11003097	Magnetic carrier	1
	QD25	16-30		140750	Proportional solenoid, 12v	2
	QD26	16-30		11001952	O-ring	2
	QD27	16-30		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	16-30		063172	O-ring	2
	QD29	16-30		11004749	Coil nut	2
	QD30	16-30		11027883	Cap	2
	QD100	16-30		11147918	NFPE control kit, 12v, manual override	1
	N6	D050	16-30		716860	Screw, M5 x 12
D150		16-30		11173377	Control gasket (SB-2016-033)	1
D200		16-30		141472	Screw, special	1
D250		16-30		505038	Screw, M6 x 45	6
D300		16-30		310979	Dowel pin	2
D450		16-30		11003097	Magnetic carrier	1
QD25		16-30		140751	Proportional solenoid, 24v	2
QD26		16-30		11001952	O-ring	2
QD27		16-30		11004700	Coil kit, 24v, Deutsch connector	2
QD28		16-30		063172	O-ring	2
QD29		16-30		11004750	Coil nut	2
QD30		16-30		11027883	Cap	2
QD100		16-30		11147922	NFPE control kit, 24v, manual override	1



Variable displacement pump

(N7 & N8)



E103 610E

* = included in overhaul seal kit Q210



Variable displacement pump

Control

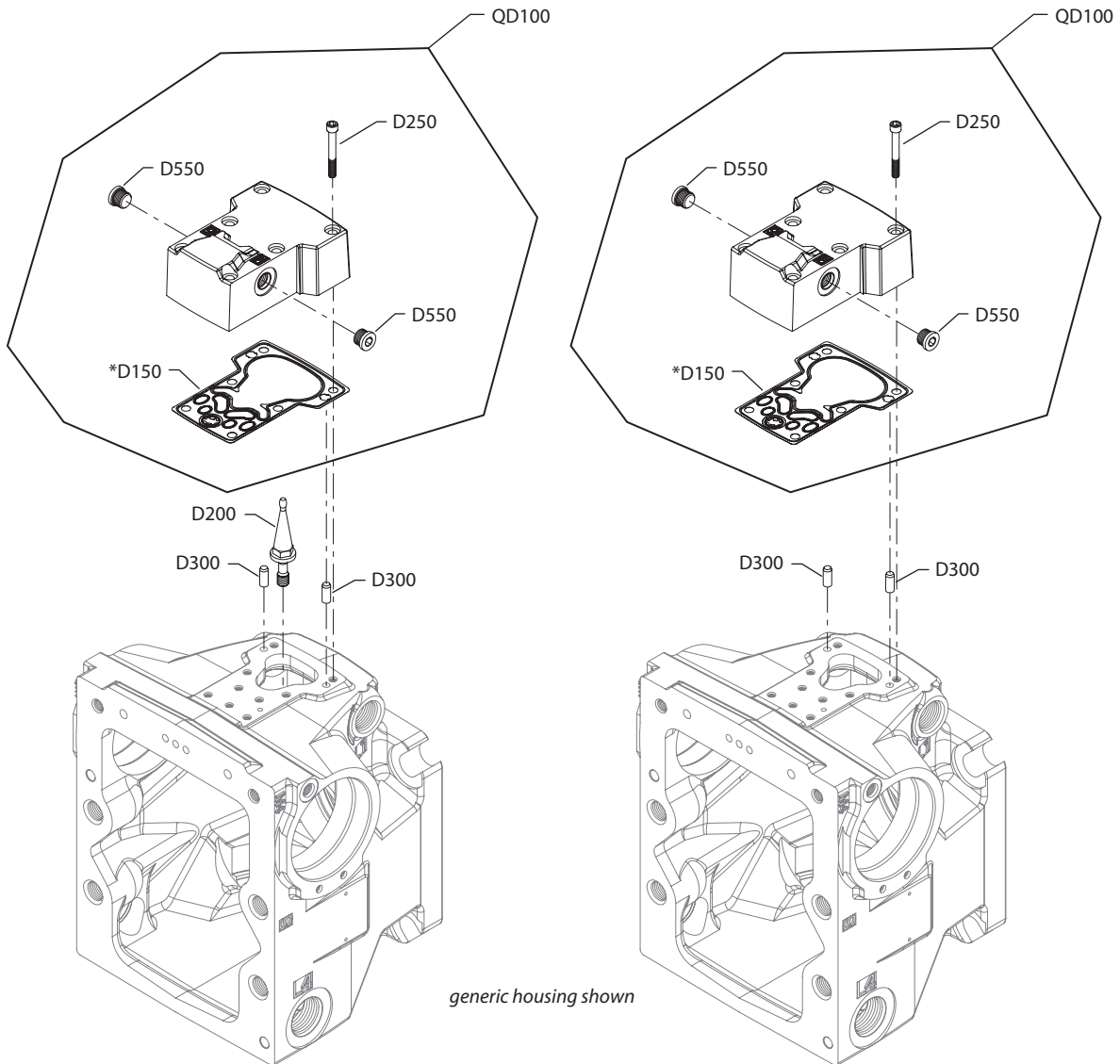
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
N7	D050	16-30		716860	Screw, M5 x 12	6	
	D067	16-30		140642	Plug assembly	1	
	D076	16-30		067694	Screw, M4 x 10	2	
	D150	16-30		11173377	Control gasket (SB-2016-033)	1	
	D250	16-30		505038	Screw, M6 x 45	6	
	D300	16-30		310979	Dowel pin	2	
	QD25	16-30		140750	Proportional solenoid, 12v	2	
	QD26	16-30		11001952	O-ring	2	
	QD27	16-30		11004698	Coil kit, 12v, Deutsch connector	2	
	QD28	16-30		063172	O-ring	2	
	QD29	16-30		11004749	Coil nut	2	
	QD30	16-30		11027883	Cap	2	
	QD80	16-30		11129914	Solenoid, 12V, Deutsch connector	1	
	QD81	16-30		11152257	O-ring	1	
	QD83	16-30		11147301	Coil kit, 12V, Deutsch connector	1	
	QD84	16-30		11140393	O-ring	1	
	QD85	16-30		11140394	Nut	1	
	QD100	16-30		11147919	NFPE control kit, 12v, CCO	1	
	N8	D050	16-30		716860	Screw, M5 x 12	6
		D067	16-30		140642	Plug assembly	1
D076		16-30		067694	Screw, M4 x 10	2	
D150		16-30		11173377	Control gasket (SB-2016-033)	1	
D250		16-30		505038	Screw, M6 x 45	6	
D300		16-30		310979	Dowel pin	2	
QD25		16-30		140751	Proportional solenoid, 24v	2	
QD26		16-30		11001952	O-ring	2	
QD27		16-30		11004700	Coil kit, 24v, Deutsch connector	2	
QD28		16-30		063172	O-ring	2	
QD29		16-30		11004750	Coil nut	2	
QD30		16-30		11027883	Cap	2	
QD80		16-30		11129915	Solenoid, 24V, Deutsch connector	1	
QD81		16-30		11152257	O-ring	1	
QD83		16-30		11147332	Coil kit, 24V, Deutsch connector	1	
QD84		16-30		11140393	O-ring	1	
QD85		16-30		11140394	Nut	1	
QD100		16-30		11147923	NFPE control kit, 24v, CCO	1	



Variable displacement pump

(ND)

(NN)



E103 360E

* = included in overhaul seal kit Q210



Variable displacement pump

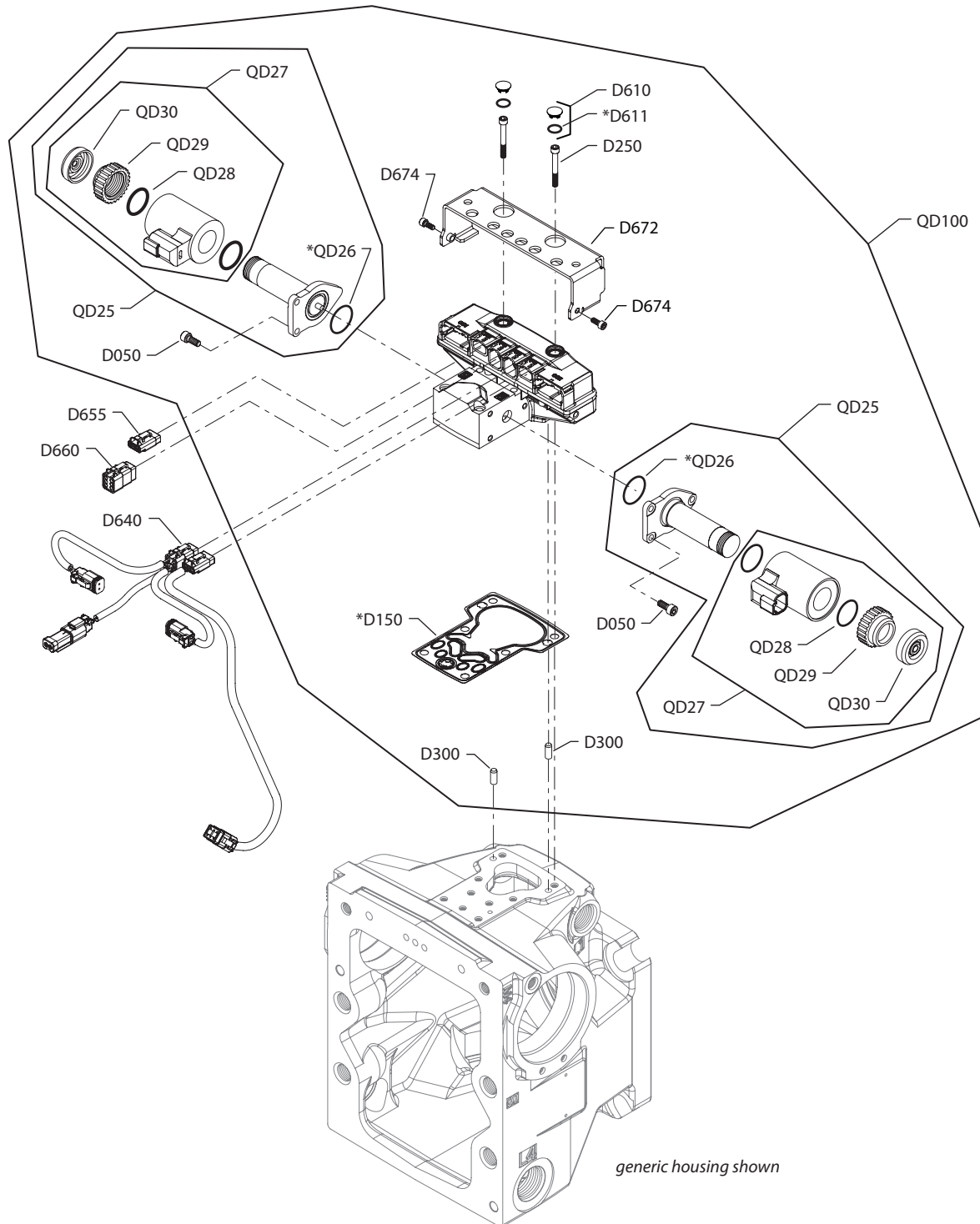
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
ND	D150	16-02		11173377	Control gasket (SB-2016-033)	1
	D200	16-02		11148827	Swashplate feedback link	1
	D250	16-02		505038	Screw, M6 x 45	6
	D300	16-02		310979	Dowel pin	2
	D550	16-02		140644	Plug assembly	2
	QD100	16-02		11121984	Control cover kit	1
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

(P6 & P7)



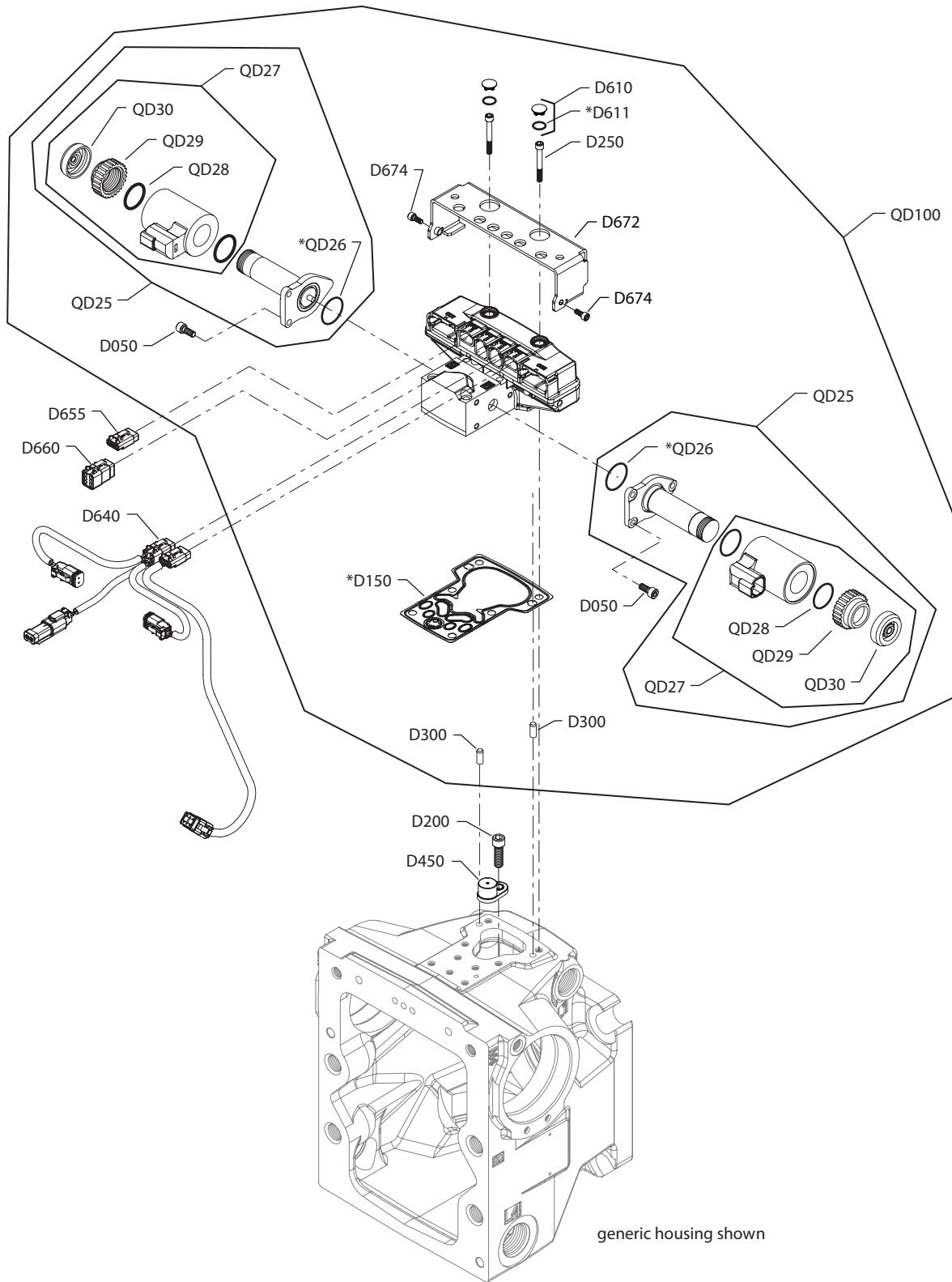

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
P6	D050	16-30		716860	Screw, M5 x 12	6	
	D150	16-30		11173377	Control gasket (SB-2016-033)	1	
	D250	16-30		505038	Screw, M6 x 45	6	
	D300	16-30		11036469	Dowel pin	2	
	D610	16-30		11000467	Plug assembly	2	
	D611	16-30		11066774	O-ring	2	
	D640	16-30		11023348	AC wiring harness	1	
	D655	16-30		11084827	Blank, connector DTM 06-3S	1	
	D660	16-30		11084822	Blank, connector DTM 06-6S	1	
	D672	16-30		11151875	Protection	1	
	D674	16-30		716860	Screw, M5 x 12	2	
	QD25	16-30		140750	Proportional solenoid, 12 volt	2	
	QD26	16-30		11001952	O-ring	2	
	QD27	16-30		11004698	Coil kit, 12v, Deutsch connector	2	
	QD28	16-30		063172	O-ring	2	
	QD29	16-30		11004749	Coil nut	2	
	QD30	16-30		11027883	Cap	2	
	QD100	16-30		11147941	Automotive control kit, 12v, manual override	1	
	P7	D050	16-30		716860	Screw, M5 x 12	6
		D150	16-30		11173377	Control gasket (SB-2016-033)	1
D250		16-30		505038	Screw, M6 x 45	6	
D300		16-30		11036469	Dowel pin	2	
D610		16-30		11000467	Plug assembly	2	
D611		16-30		11066774	O-ring	2	
D640		16-30		11023348	AC wiring harness	1	
D655		16-30		11084827	Blank, connector DTM 06-3S	1	
D660		16-30		11084822	Blank, connector DTM 06-6S	1	
D672		16-30		11151875	Protection	1	
D674		16-30		716860	Screw, M5 x 12	2	
QD25		16-30		140751	Proportional solenoid, 24 volt	2	
QD26		16-30		11001952	O-ring	2	
QD27		16-30		11004700	Coil kit, 24v, Deutsch connector	2	
QD28		16-30		063172	O-ring	2	
QD29		16-30		11004750	Coil nut	2	
QD30		16-30		11027883	Cap	2	
QD100		16-30		11147943	Automotive control kit, 24v, manual override	1	



Variable displacement pump

(P8 & P9)



E103 612E

* = included in overhaul seal kit Q210



Variable displacement pump

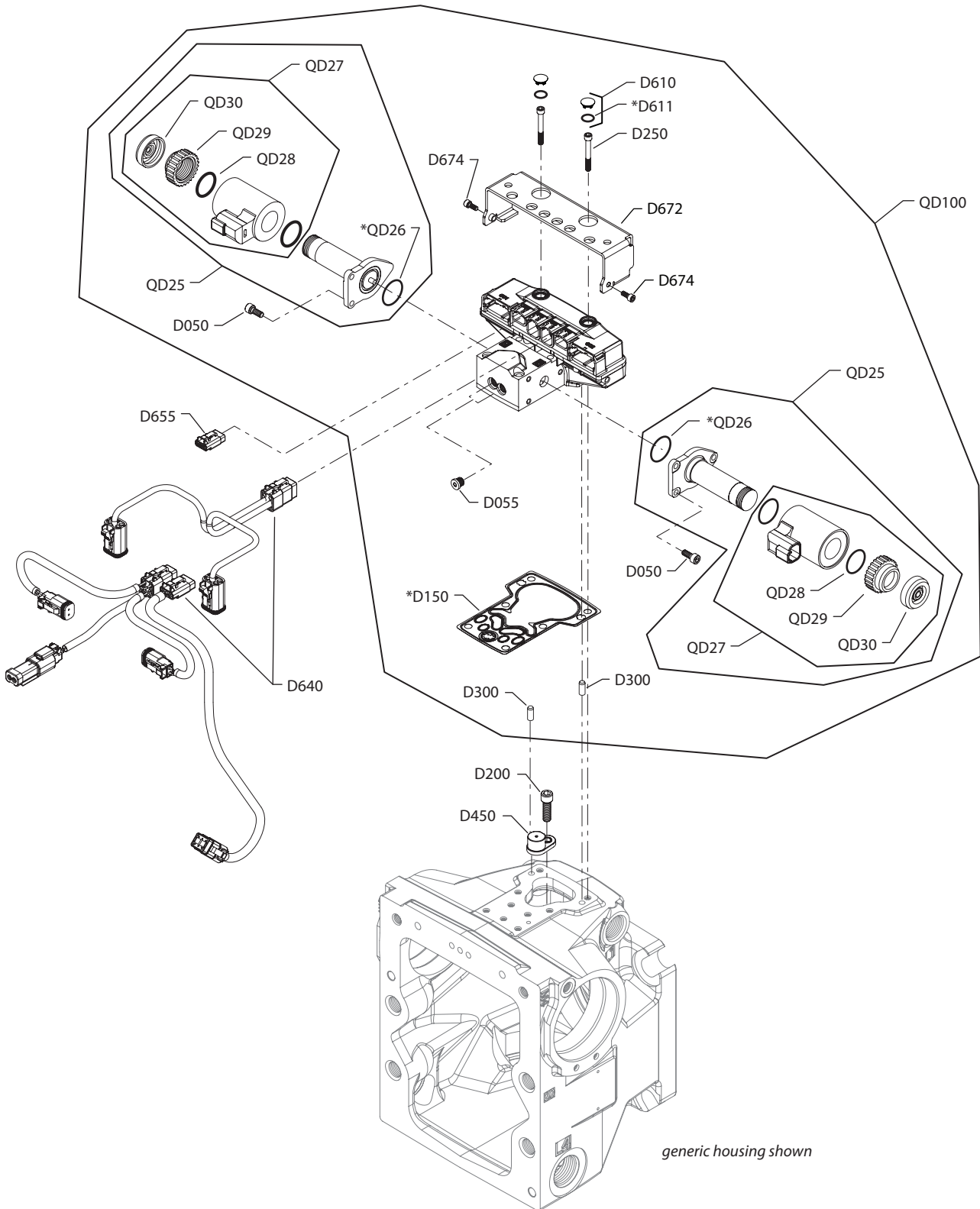
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
P8	D050	16-30		716860	Screw, M5 x 12	6
	D150	16-30		11173377	Control gasket (SB-2016-033)	1
	D200	16-30		141472	Screw, special	1
	D250	16-30		505038	Screw, M6 x 45	6
	D300	16-30		11036469	Dowel pin	2
	D450	16-30		11003097	Magnetic carrier	1
	D610	16-30		11000467	Plug assembly	2
	D611	16-30		11066774	O-ring	2
	D640	16-30		11023348	AC wiring harness	1
	D655	16-30		11084827	Blank, connector DTM 06-3S	1
	D660	16-30		11084822	Blank, connector DTM 06-6S	1
	D672	16-30		11151875	Protection	1
	D674	16-30		716860	Screw, M5 x 12	2
	QD25	16-30		140750	Proportional solenoid, 12 volt	2
	QD26	16-30		11001952	O-ring	2
	QD27	16-30		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	16-30		063172	O-ring	2
	QD29	16-30		11004749	Coil nut	2
	QD30	16-30		11027883	Cap	2
	QD100	16-30		11147940	Automotive control kit, 12v, manual override	1
P9	D050	16-30		716860	Screw, M5 x 12	6
	D150	16-30		11173377	Control gasket (SB-2016-033)	1
	D200	16-30		141472	Screw, special	1
	D250	16-30		505038	Screw, M6 x 45	6
	D300	16-30		11036469	Dowel pin	2
	D450	16-30		11003097	Magnetic carrier	1
	D610	16-30		11000467	Plug assembly	2
	D611	16-30		11066774	O-ring	2
	D640	16-30		11023348	AC wiring harness	1
	D655	16-30		11084827	Blank, connector DTM 06-3S	1
	D660	16-30		11084822	Blank, connector DTM 06-6S	1
	D672	16-30		11151875	Protection	1
	D674	16-30		716860	Screw, M5 x 12	2
	QD25	16-30		140751	Proportional solenoid, 24 volt	2
	QD26	16-30		11001952	O-ring	2
	QD27	16-30		11004700	Coil kit, 24v, Deutsch connector	2
	QD28	16-30		063172	O-ring	2
	QD29	16-30		11004750	Coil nut	2
	QD30	16-30		11027883	Cap	2
	QD100	16-30		11147942	Automotive control kit, 24v, manual override	1



Variable displacement pump

(R1 & R2)



generic housing shown

E103 619E

* = included in overhaul seal kit Q210

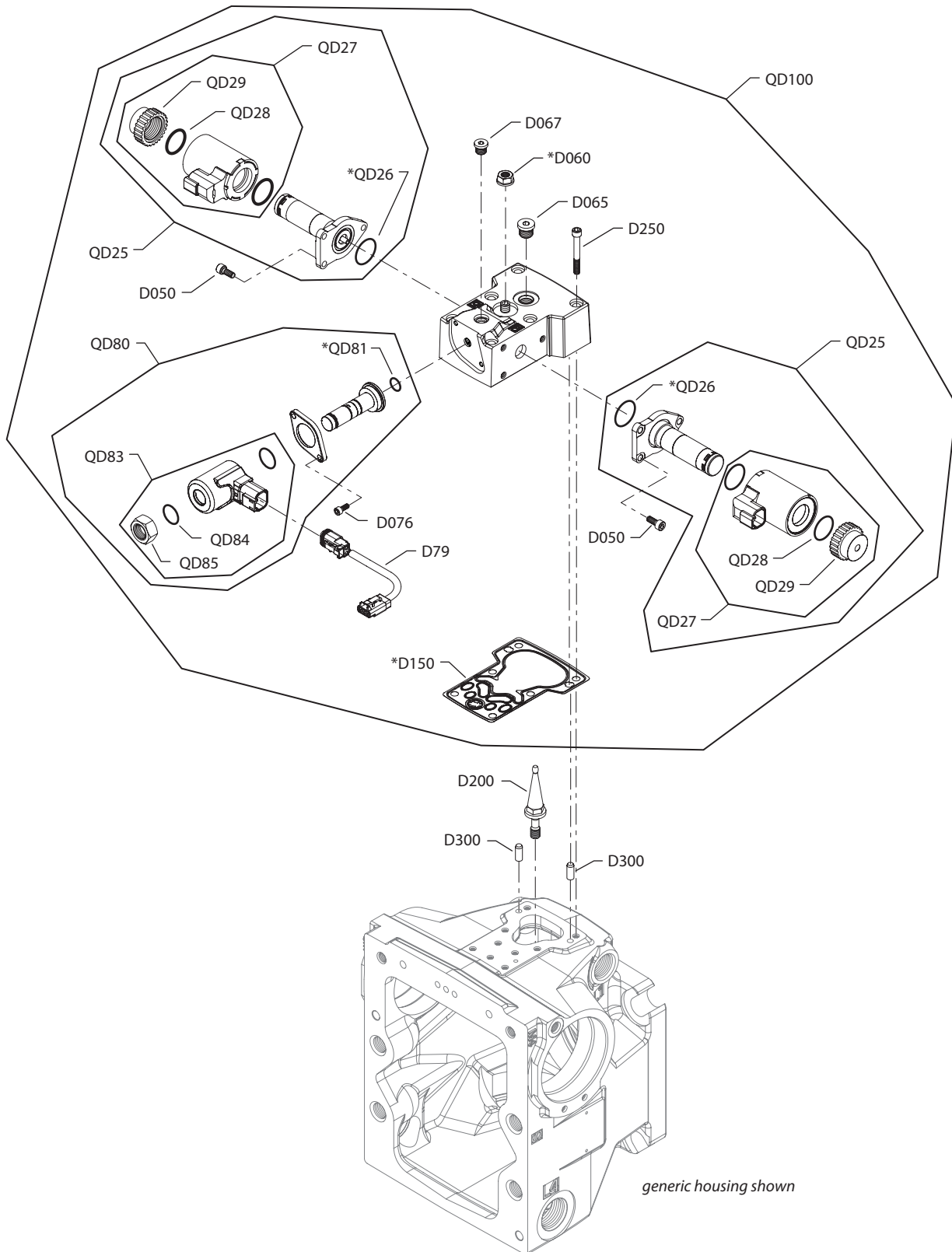

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
R1	D050	16-30		716860	Screw, M5 x 12	6
	D150	16-30		11173377	Control gasket (SB-2016-033)	1
	D200	16-30		141472	Screw, special	1
	D250	16-30		505038	Screw, M6 x 45	6
	D300	16-30		11036469	Dowel pin	2
	D450	16-30		11003097	Magnetic carrier	1
	D610	16-30		11000467	Plug assembly	2
	D611	16-30		11066774	O-ring	2
	D640	16-30		11105876	AC wiring harness	1
	D655	16-30		11084827	Blank, connector DTM 06-3S	1
	D672	16-30		11151875	Protection	1
	D674	16-30		716860	Screw, M5 x 12	2
	QD25	16-30		140750	Proportional solenoid, 12 volt	2
	QD26	16-30		11001952	O-ring	2
	QD27	16-30		11004698	Coil kit, 12v, Deutsch connector	2
	QD28	16-30		063172	O-ring	2
	QD29	16-30		11004749	Coil nut	2
	QD30	16-30		11027883	Cap	2
	QD100	16-30		11147940	Automotive control kit, 12v, manual override	1
	R2	D050	16-30		716860	Screw, M5 x 12
D150		16-30		11173377	Control gasket (SB-2016-033)	1
D200		16-30		141472	Screw, special	1
D250		16-30		505038	Screw, M6 x 45	6
D300		16-30		11036469	Dowel pin	2
D450		16-30		11003097	Magnetic carrier	1
D610		16-30		11000467	Plug assembly	2
D611		16-30		11066774	O-ring	2
D640		16-30		11105876	AC wiring harness	1
D655		16-30		11084827	Blank, connector DTM 06-3S	1
D672		16-30		11151875	Protection	1
D674		16-30		716860	Screw, M5 x 12	2
QD25		16-30		140751	Proportional solenoid, 24 volt	2
QD26		16-30		11001952	O-ring	2
QD27		16-30		11004700	Coil kit, 24v, Deutsch connector	2
QD28		16-30		063172	O-ring	2
QD29		16-30		11004750	Coil nut	2
QD30		16-30		11027883	Cap	2
QD100		16-30		11147942	Automotive control kit, 24v, manual override	1



Variable displacement pump

(S6)



generic housing shown

E103 378E

* = included in overhaul seal kit Q210

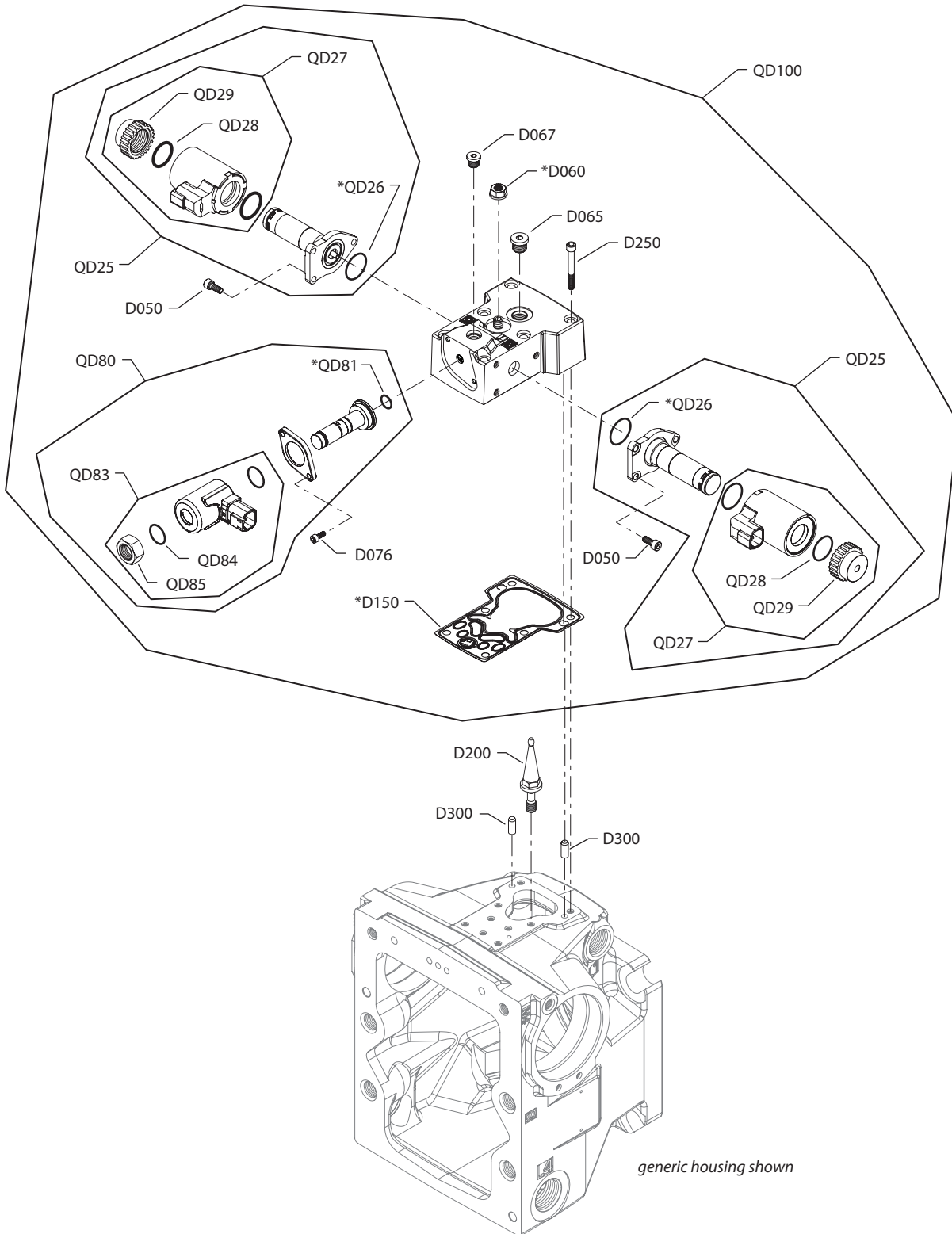

Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
S6	D79	14-25		11150437	Cable adapter	1
	D050	14-25		716860	Screw, M5 x 12	6
	D060	14-25		612291 (9003508-0008)	Seal nut, M8	1
	D065	14-25		140642	Plug assembly	1
	D067	14-25		11040532	Plug assembly	1
	D076	14-25		067694	Screw, M4 x 10	2
	D150	14-25		11173377	Control gasket (SB-2016-033)	1
	D200	14-25		11148827	Swashplate feedback link	1
	D250	14-25		505038	Screw, M6 x 45	6
	D300	14-25		310979	Dowel pin	2
	QD25	14-25		11012457	Proportional solenoid, 12v	2
	QD26	14-25		11001952	O-ring	2
	QD27	14-25		11028018	Coil kit, 12v, Deutsch connector	2
	QD28	14-25		063172	O-ring	2
	QD29	14-25		11027046	Coil nut	2
	QD80	14-25		11129914	Solenoid vale, on/off, 12v	1
	QD81	14-25		11152257	O-ring	1
	QD83	14-25		11147301	Coil kit, 12v	1
	QD84	14-25		11140393	O-ring	1
	QD85	14-25		11140394	Coil nut	1
	QD100	14-25		11152574	EDC kit, 12v, CORF	1



Variable displacement pump

(S7)



E103 356E

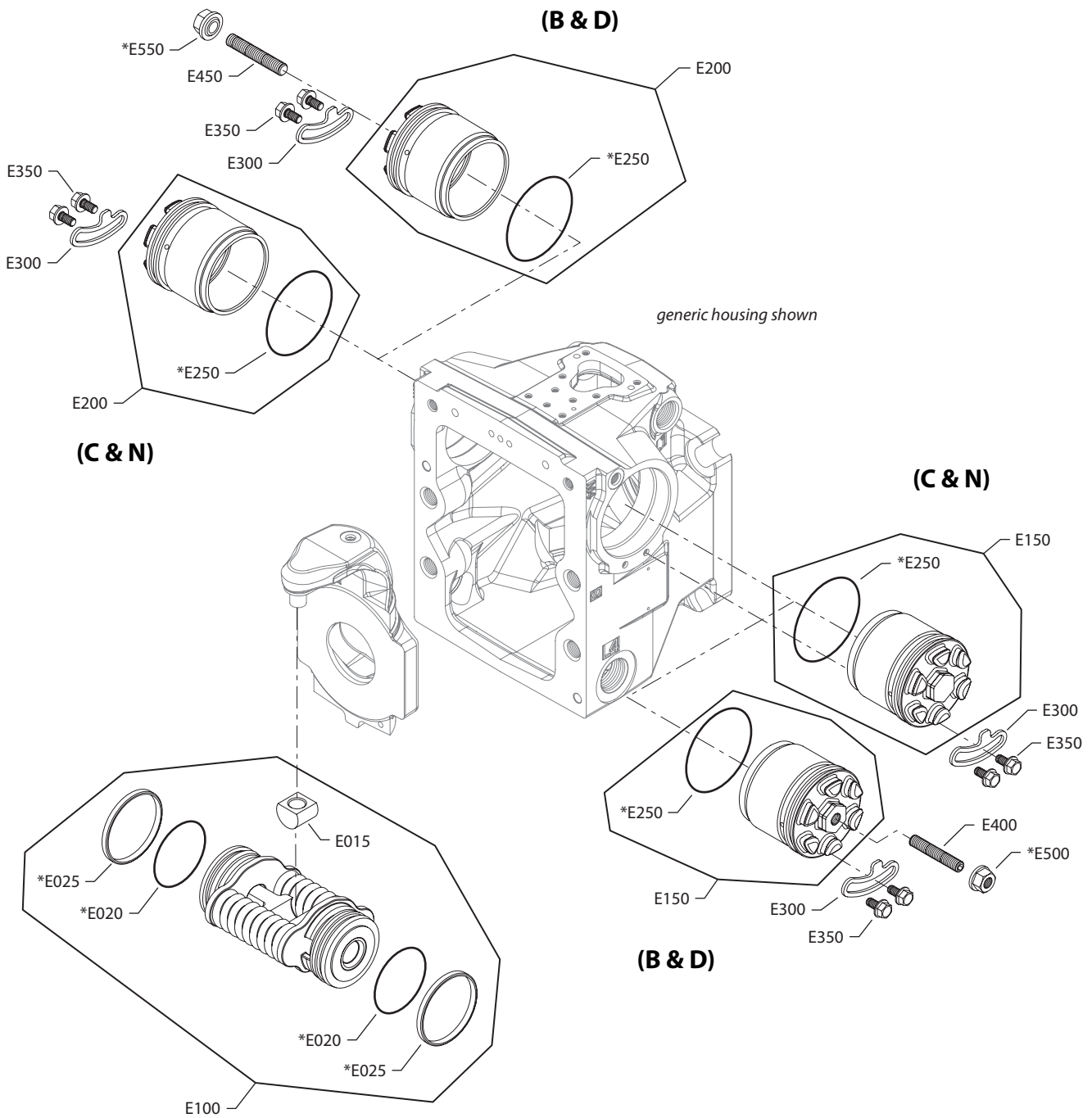
* = included in overhaul seal kit Q210


Variable displacement pump
Control

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
S7	D050	14-31		716860	Screw, M5 x 12	6
	D060	14-31		612291 (9003508-0008)	Seal nut, M8	1
	D065	14-31		140642	Plug assembly	1
	D067	14-31		11040532	Plug assembly	1
	D076	14-25		067694	Screw, M4 x 10	2
	D150	14-31		11173377	Control gasket (SB-2016-033)	1
	D200	14-31		11148827	Swashplate feedback link	1
	D250	14-31		505038	Screw, M6 x 45	6
	D300	14-31		310979	Dowel pin	2
	QD25	14-31		11012457	Proportional solenoid, 12v	2
	QD26	14-31		11001952	O-ring	2
	QD27	14-31		11028018	Coil kit, 12v, Deutsch connector	2
	QD28	14-31		063172	O-ring	2
	QD29	14-31		11027046	Coil nut	2
	QD80	14-31		11129914	Solenoid vale, on/off, 12v	1
	QD81	14-31		11152257	O-ring	1
	QD83	14-31		11147301	Coil kit, 12v	1
	QD84	14-31		11140393	O-ring	1
	QD85	14-31		11140394	Coil nut	1
	QD100	14-31		11152574	EDC kit, 12v, CORF	1



Variable displacement pump



E100 915E

* = included in overhaul seal kit Q210



Variable displacement pump

Common displacement limitation parts

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

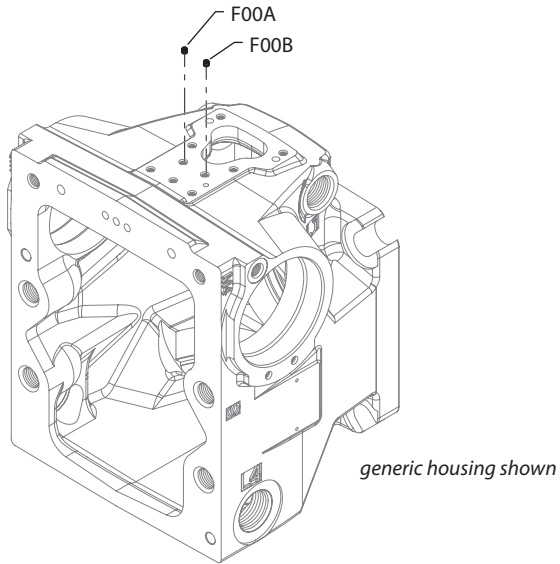
Displacement limitation

B	E100	05-18		11005250	Servo piston assembly (SB-2006-030)	1
	E150	05-18		11162485	Servo cylinder assembly (SB-2009-046)	1
	E200	05-18		11162485	Servo cylinder assembly (SB-2009-046)	1
	E400	05-18		11000798	Set screw	1
	E450	05-18		11000798	Set screw	1
	E500	05-18		649822	Seal nut, M14	1
	E550	05-18		649822	Seal nut, M14	1
	C	E100	05-18		11005249	Servo piston assy. w/nested springs (SB-2006-030)
E150		05-18		11089775	Servo cylinder assembly (SB-2009-046)	1
E200		05-18		11089775	Servo cylinder assembly (SB-2009-046)	1
D	E100	05-18		11005249	Servo piston assy. w/nested springs (SB-2006-030)	1
	E150	05-18		11162485	Servo cylinder assembly (SB-2009-046)	1
	E200	05-18		11162485	Servo cylinder assembly (SB-2009-046)	1
	E400	05-18		11000798	Set screw	1
	E450	05-18		11000798	Set screw	1
	E500	05-18		649822	Seal nut, M14	1
	E550	05-18		649822	Seal nut, M14	1
	N	E100	05-18		11005250	Servo piston assembly (SB-2006-030)
E150		05-18		11089775	Servo cylinder assembly (SB-2009-046)	1
E200		05-18		11089775	Servo cylinder assembly (SB-2009-046)	1

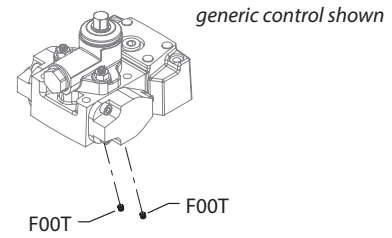


Variable displacement pump

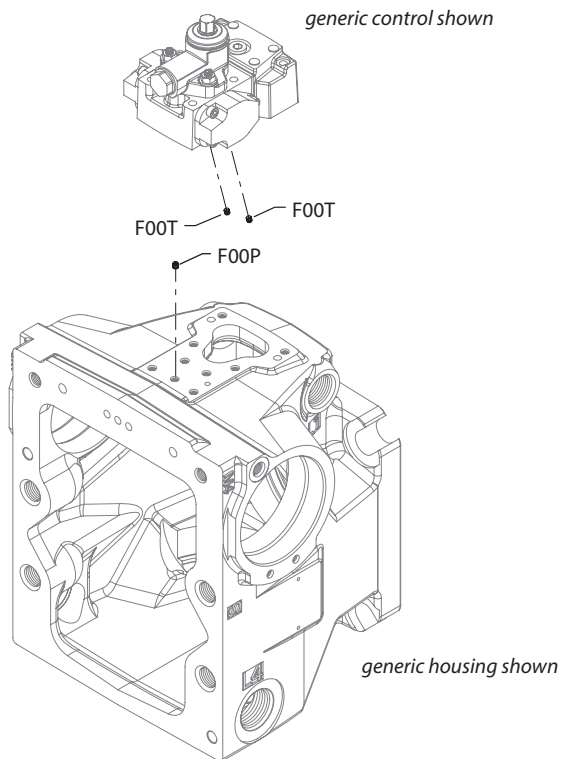
(C1, C2 & C4)



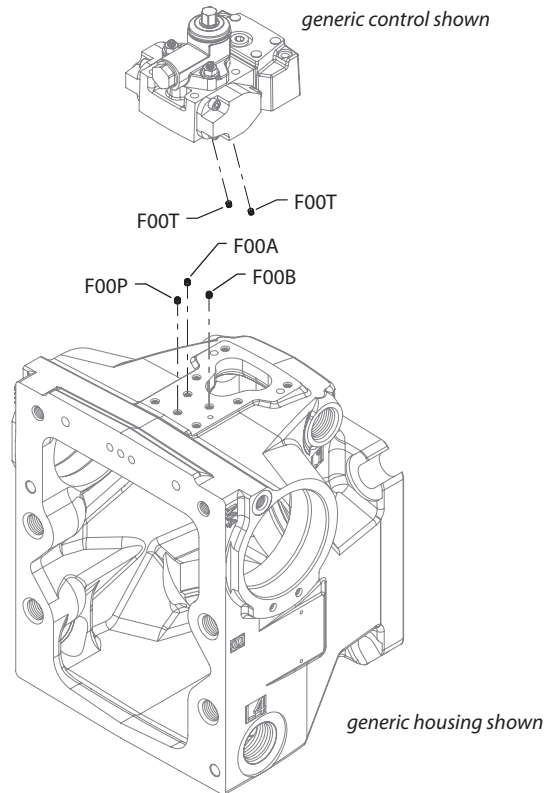
(C6 & C7)



(D3 & D6)



(D4)



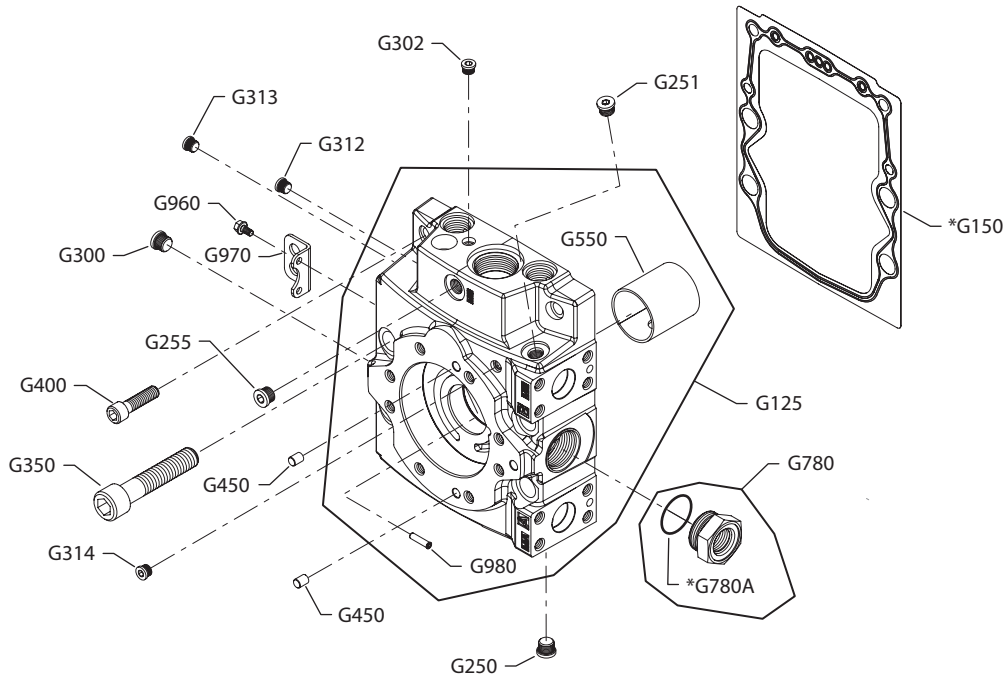

Variable displacement pump
Orifice

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C1	F00A	05-18		140611	Orifice, 0.8, M6 x 0.75 mm	1
	F00B	05-18		140611	Orifice, 0.8, M6 x 0.75 mm	1
C2	F00A	05-18		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00B	05-18		140754	Orifice, 1.3, M6 x 0.75 mm	1
C3				No parts		
C4	F00A	14-01		140757	Orifice, 1.8, M6 x 0.75 mm	1
	F00B	14-01		140757	Orifice, 1.8, M6 x 0.75 mm	1
C6	F00T	14-01		11151734	Orifice, 1.0 M6 x 0.75 mm	2
C7	F00T	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	2
D3	F00P	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-01		11151734	Orifice, 1.0 M6 x 0.75 mm	2
D4	F00A	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00B	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00P	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-01		11151734	Orifice, 1.0 M6 x 0.75 mm	2
D6	F00P	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	1
	F00T	14-01		140754	Orifice, 1.3, M6 x 0.75 mm	2

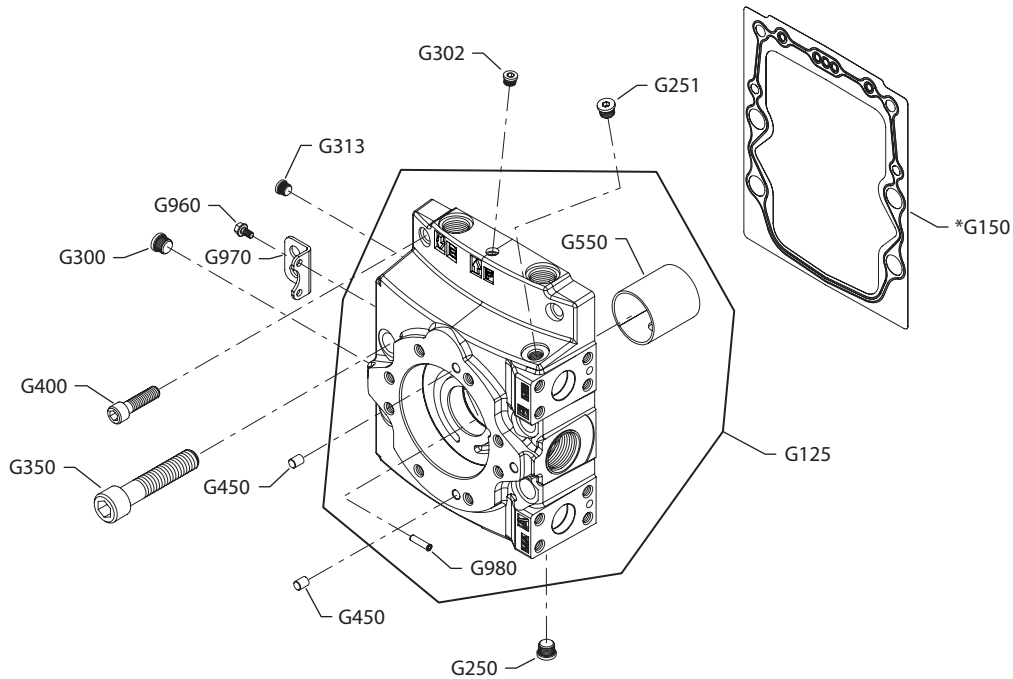


Variable displacement pump

(D2)



(D3)



E100 759E

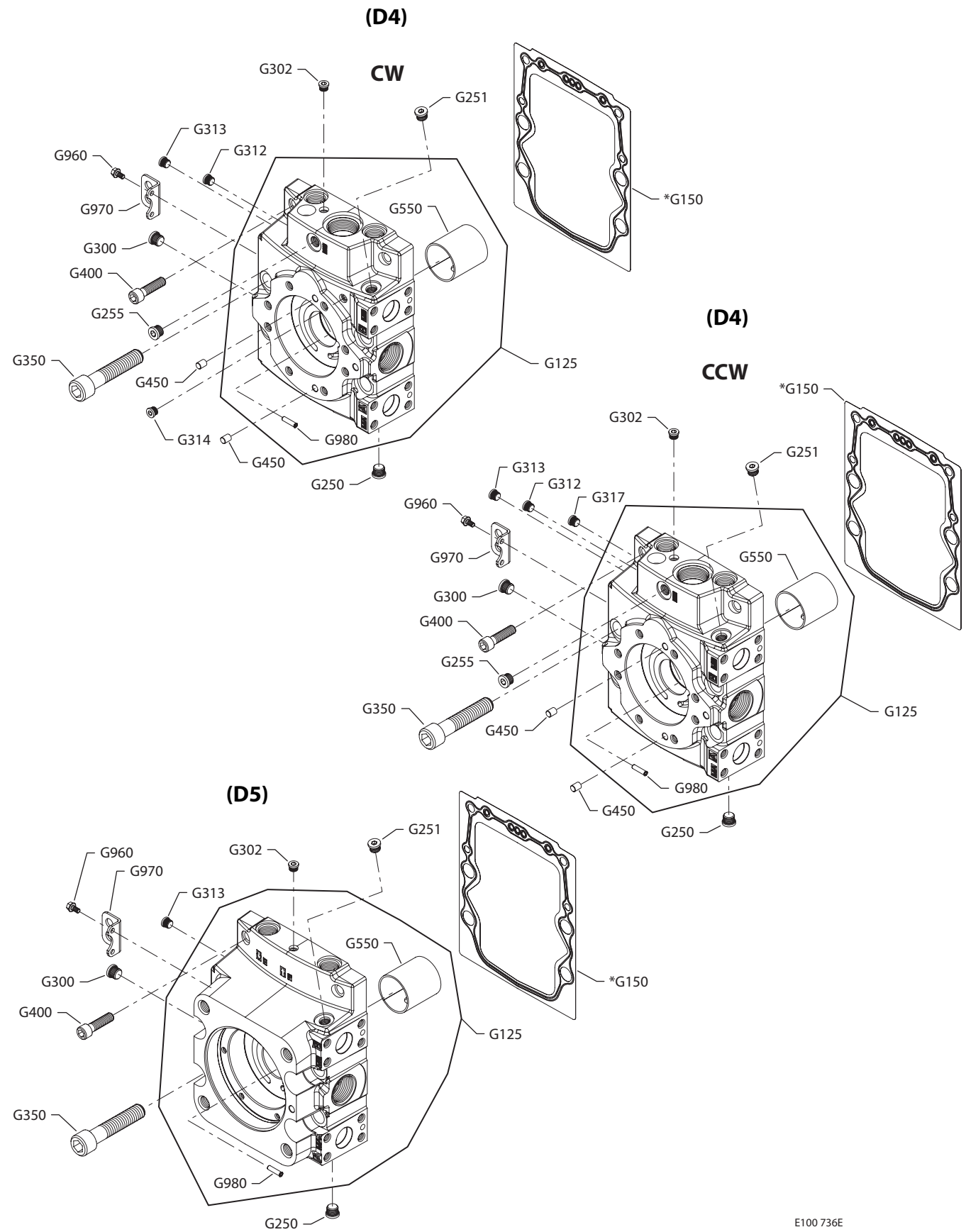
* = included in overhaul seal kit Q210



Variable displacement pump

End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D2	G125	10-39		11050309	End cap assembly, CW, ISL (SB-2011-002)	1
	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G255	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G312	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G314	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G450	05-18		9004800-3708	Dowel pin	2
	G550	05-18		11070150	Journal bearing	1
	G780	05-18		521318	Reducer plug assembly	1
	G780A	05-18		093823 (9004201-9200)	O-ring	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1
	D3	G125	10-39		11050310	End cap assembly, CW (SB-2011-002)
G125		10-39		11050350	End cap assembly, CCW (SB-2011-002)	1
G150		05-18		140518	End cap gasket	1
G250		05-18		140644	Plug assembly	1
G251		05-18		140644	Plug assembly	1
G300		05-18		140644	Plug assembly	1
G302		05-18		11040532	Plug assembly	1
G313		05-18		11040532	Plug assembly	1
G350		05-18		140314	Screw, M20 x 100	4
G400		05-18		503499	Screw, M12 x 45	2
G450		05-18		9004800-3708	Dowel pin	2
G550		05-18		11070150	Journal bearing	1
G960		05-18		508438	Screw, M6 x 12	2
G970		05-18		4460311	Lifting bracket	1
G980		05-18		11000229	Lubrication orifice	1

Variable displacement pump

E100 736E

* = included in overhaul seal kit Q210

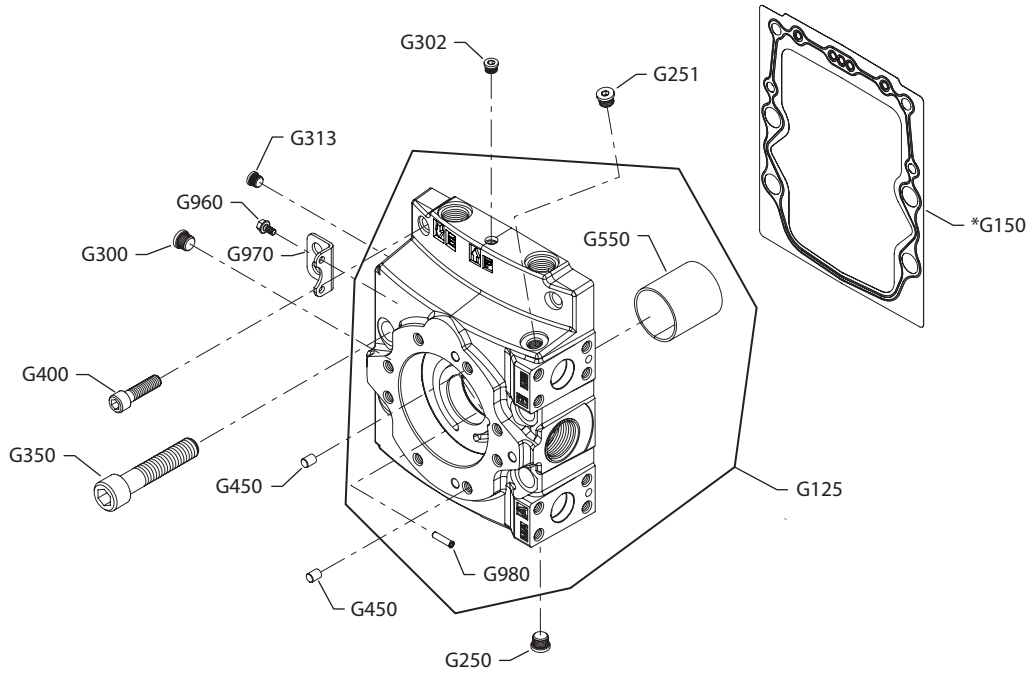

Variable displacement pump
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D4	G125	10-39		11050342	End cap assembly, CW, ISL (SB-2011-002)	1
(CW)	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G255	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G312	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G314	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G450	05-18		9004800-3708	Dowel pin	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1
D4	G125	10-39		11050351	End cap assembly, CCW, ISL (SB-2011-002)	1
(CCW)	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G255	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G312	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G317	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G450	05-18		9004800-3708	Dowel pin	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1
D5	G125	10-39		11050343	End cap assembly, CW (SB-2011-002)	1
	G125	10-39		11050352	End cap assembly, CCW (SB-2011-002)	1
	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1

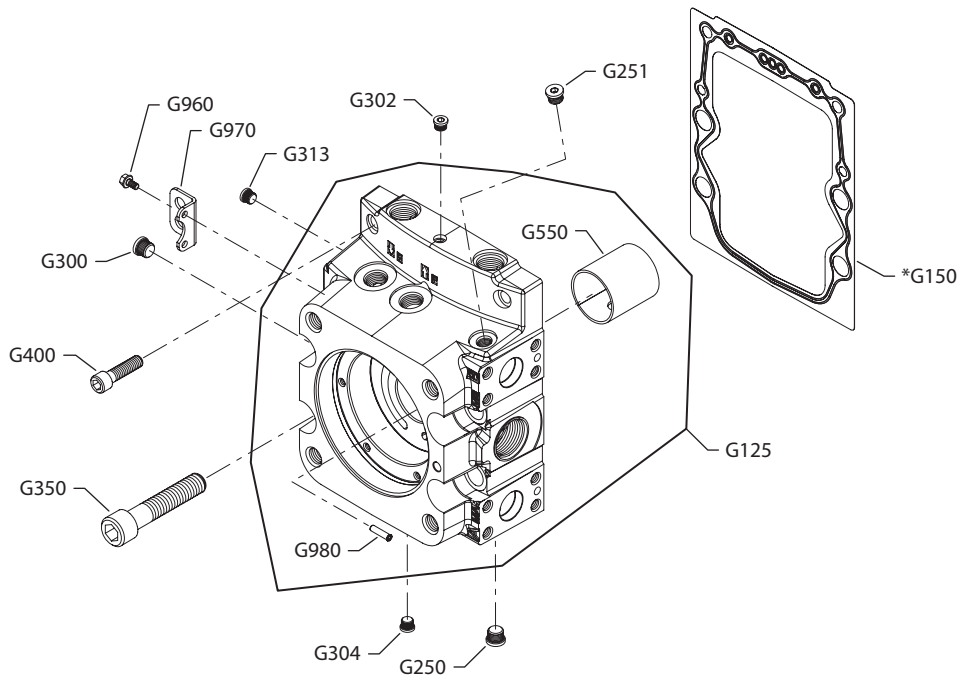


Variable displacement pump

(D6)



(D7)



E100 737E

* = included in overhaul seal kit Q210

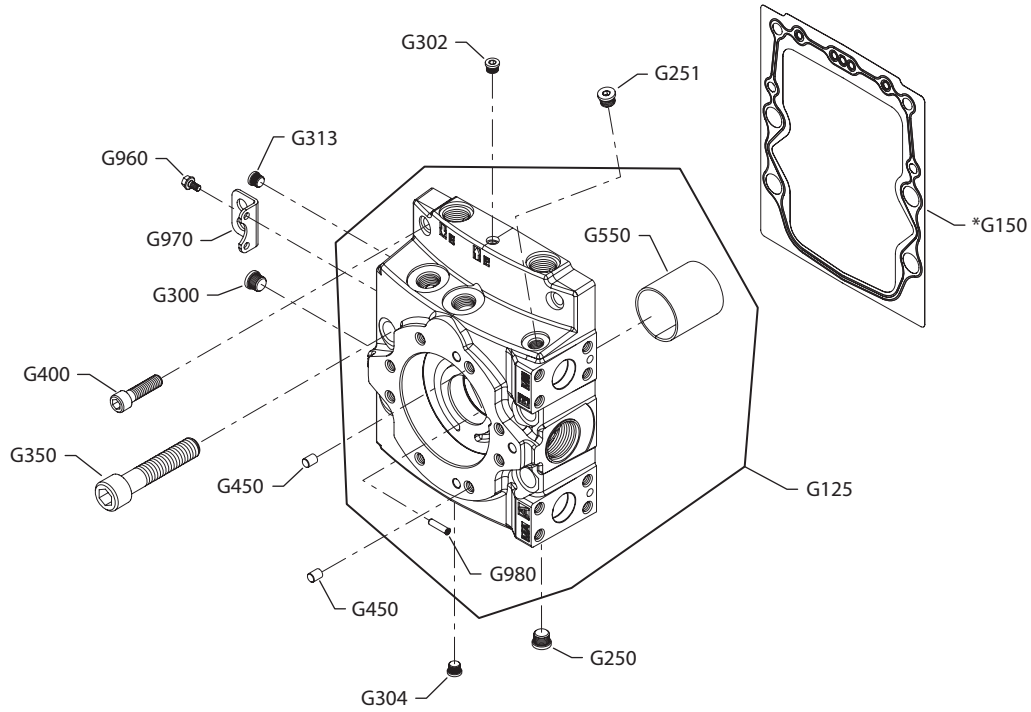

Variable displacement pump
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D6	G125	10-39		11050344	End cap assembly, CW (SB-2011-002)	1
	G125	10-39		11050353	End cap assembly, CCW (SB-2011-002)	1
	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G450	05-18		9004800-3708	Dowel pin	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1
D7	G125	10-39		11050346	End cap assembly, CW (SB-2011-002)	1
	G125	10-39		11050354	End cap assembly, CCW (SB-2011-002)	1
	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G304	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1

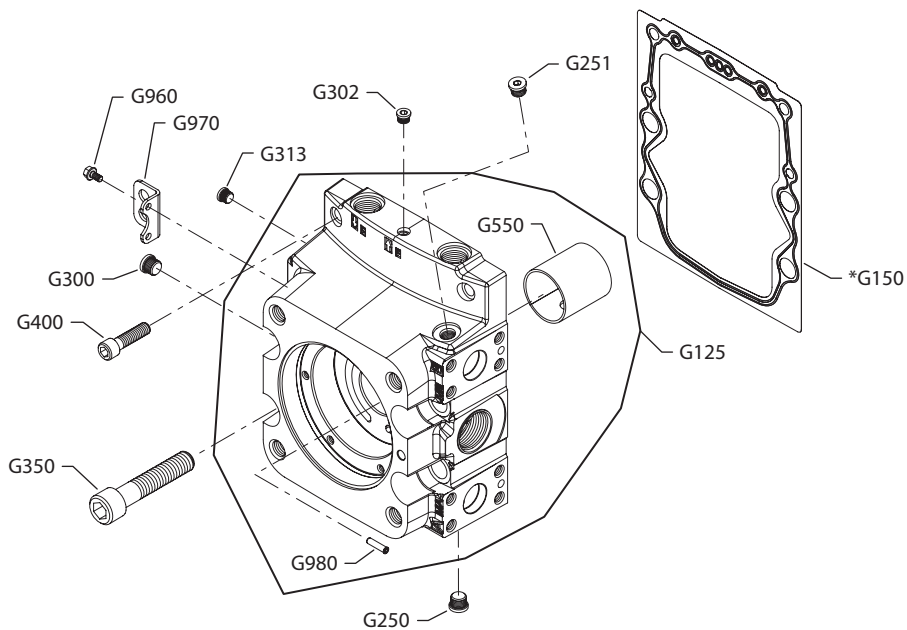


Variable displacement pump

(D8)



(D9)



E100 739E

* = included in overhaul seal kit Q210

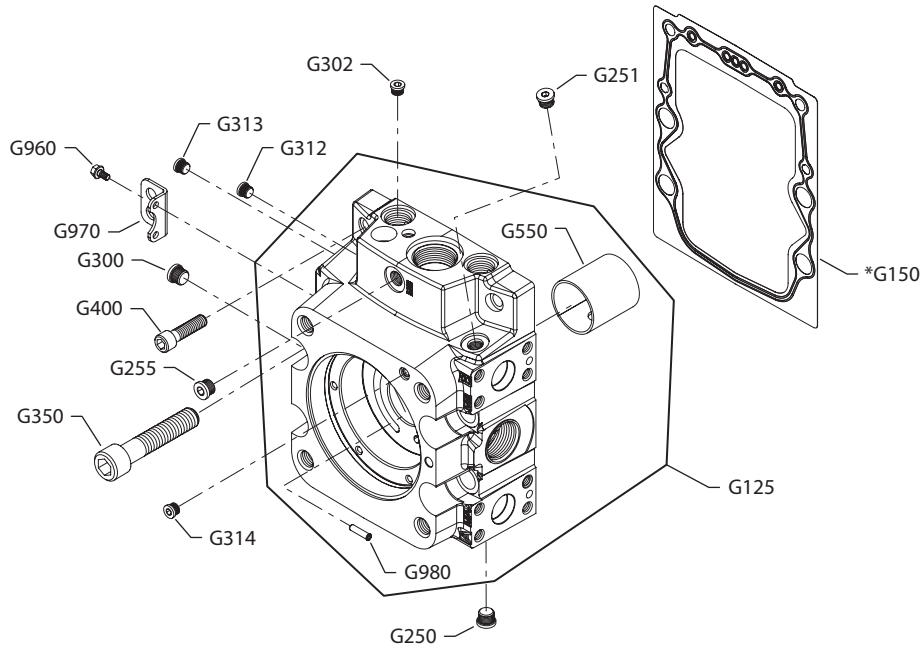

Variable displacement pump
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D8	G125	10-39		11050347	End cap assembly, CW (SB-2011-002)	1
	G125	10-39		11050355	End cap assembly, CCW (SB-2011-002)	1
	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G304	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G450	05-18		9004800-3708	Dowel pin	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1
	- D9	G125	10-39		11050348	End cap assembly, CW (SB-2011-002)
G125		10-39		11050356	End cap assembly, CCW (SB-2011-002)	1
G150		05-18		140518	End cap gasket	1
G250		05-18		140644	Plug assembly	1
G251		05-18		140644	Plug assembly	1
G300		05-18		140644	Plug assembly	1
G302		05-18		11040532	Plug assembly	1
G313		05-18		11040532	Plug assembly	1
G350		05-18		140314	Screw, M20 x 100	4
G400		05-18		503499	Screw, M12 x 45	2
G550		05-18		11070150	Journal bearing	1
G960		05-18		508438	Screw, M6 x 12	2
G970		05-18		4460311	Lifting bracket	1
G980		05-18		11000229	Lubrication orifice	1

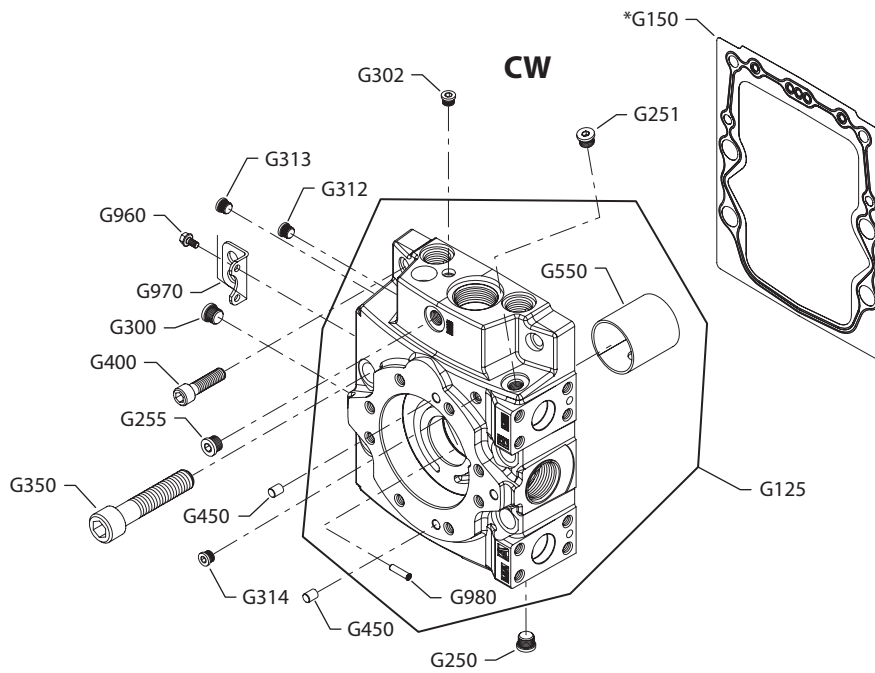


Variable displacement pump

(E3)



(E8)



E101 961E

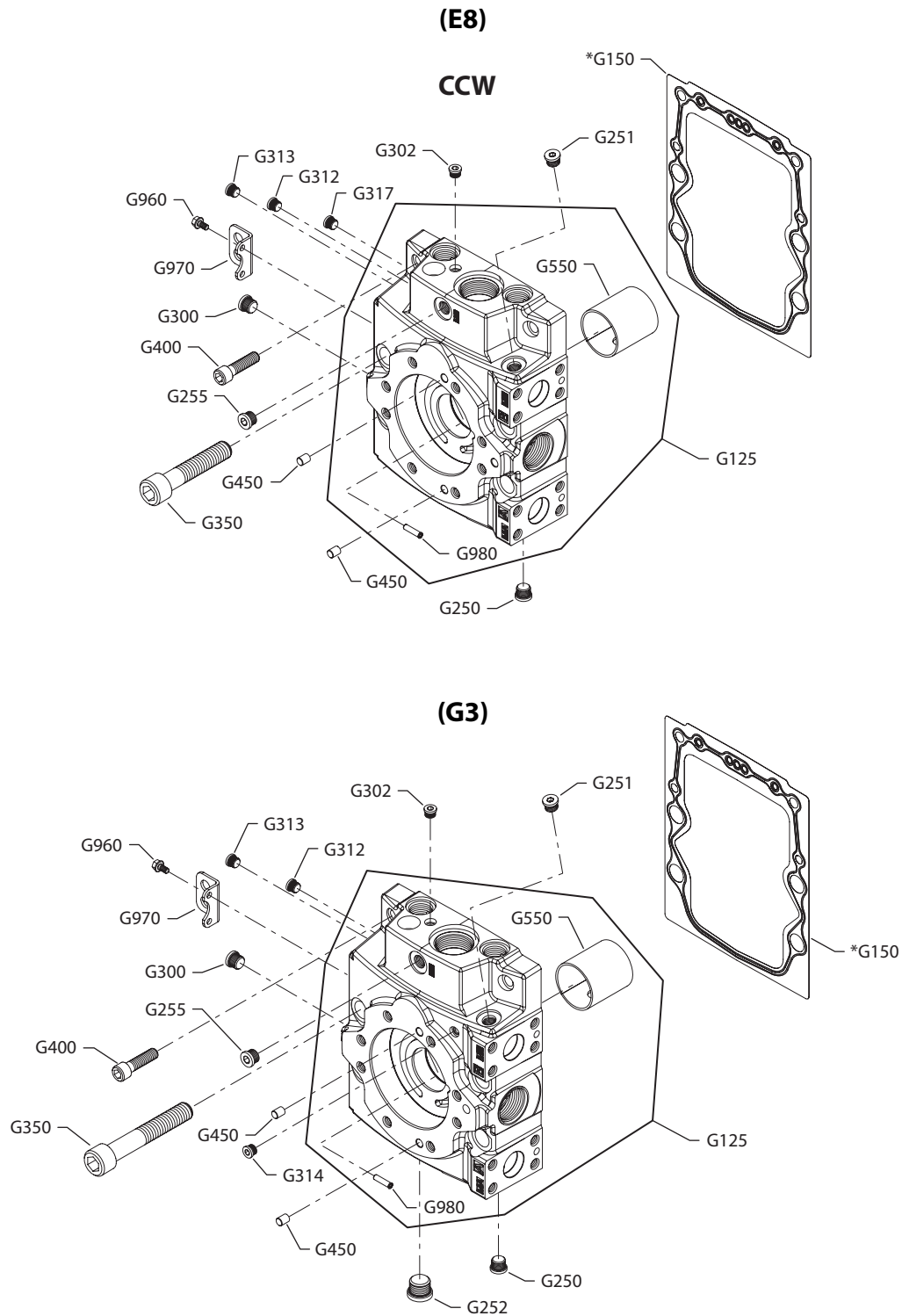
* = included in overhaul seal kit Q210


Variable displacement pump
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E3	G125	12-42		11017678	End cap assembly, CW, ISL	1
	G150	12-42		140518	End cap gasket	1
	G250	12-42		140644	Plug assembly	1
	G251	12-42		140644	Plug assembly	1
	G255	12-42		140644	Plug assembly	1
	G300	12-42		140644	Plug assembly	1
	G302	12-42		11040532	Plug assembly	1
	G312	12-42		11040532	Plug assembly	1
	G313	12-42		11040532	Plug assembly	1
	G314	12-42		11040532	Plug assembly	1
	G350	12-42		140314	Screw, M20 x 100	4
	G400	12-42		503499	Screw, M12 x 45	2
	G550	12-42		11070150	Journal bearing	1
	G960	12-42		508438	Screw, M6 x 12	2
	G970	12-42		4460311	Lifting bracket	1
	G980	12-42		11000229	Lubrication orifice	1
E8	G125	10-39		11050349	End cap assembly, CW, ISL (SB-2011-002)	1
(CW)	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G255	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G312	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G314	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G450	05-18		9004800-3708	Dowel pin	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1



Variable displacement pump



E103 380E

* = included in overhaul seal kit Q210



Variable displacement pump

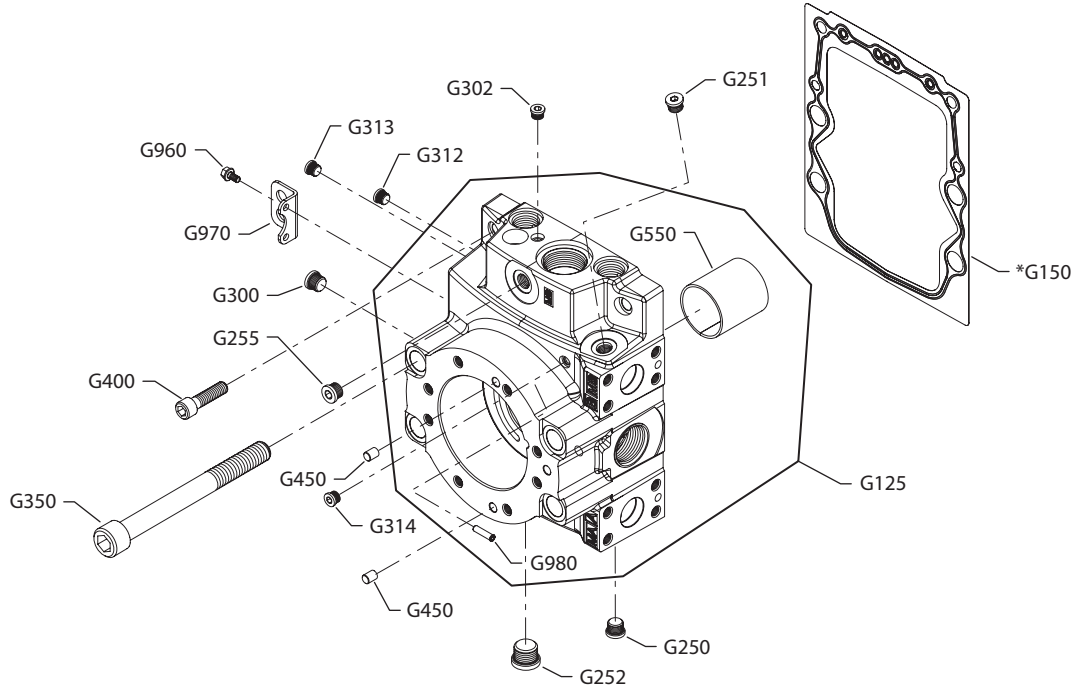
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
E8	G125	10-39		11050357	End cap assembly, CCW, ISL (SB-2011-002)	1
(CCW)	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G255	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G312	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G317	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G450	05-18		9004800-3708	Dowel pin	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1
G3	G125	08-04		11089753	End cap assembly, CW, ISL	1
	G150	08-04		140518	End cap gasket	1
	G250	08-04		140644	Plug assembly	1
	G251	08-04		140644	Plug assembly	1
	G252	08-04		315325 (9005110-8700)	Plug assembly	1
	G255	08-04		140644	Plug assembly	1
	G300	08-04		140644	Plug assembly	1
	G302	08-04		11040532	Plug assembly	1
	G312	08-04		11040532	Plug assembly	1
	G313	08-04		11040532	Plug assembly	1
	G314	08-04		11040532	Plug assembly	1
	G350	08-04		140314	Screw, M20 x 100	4
	G400	08-04		503499	Screw, M12 x 45	2
	G450	08-04		9004800-3708	Pin	2
	G550	08-04		11070150	Journal bearing	1
	G960	08-04		508438	Screw, M6 x 12	2
	G970	08-04		4460311	Lifting bracket	1
	G980	08-04		11000229	Lubrication orifice	1



Variable displacement pump

(G4 & G5)



E103 633E

* = included in overhaul seal kit Q210



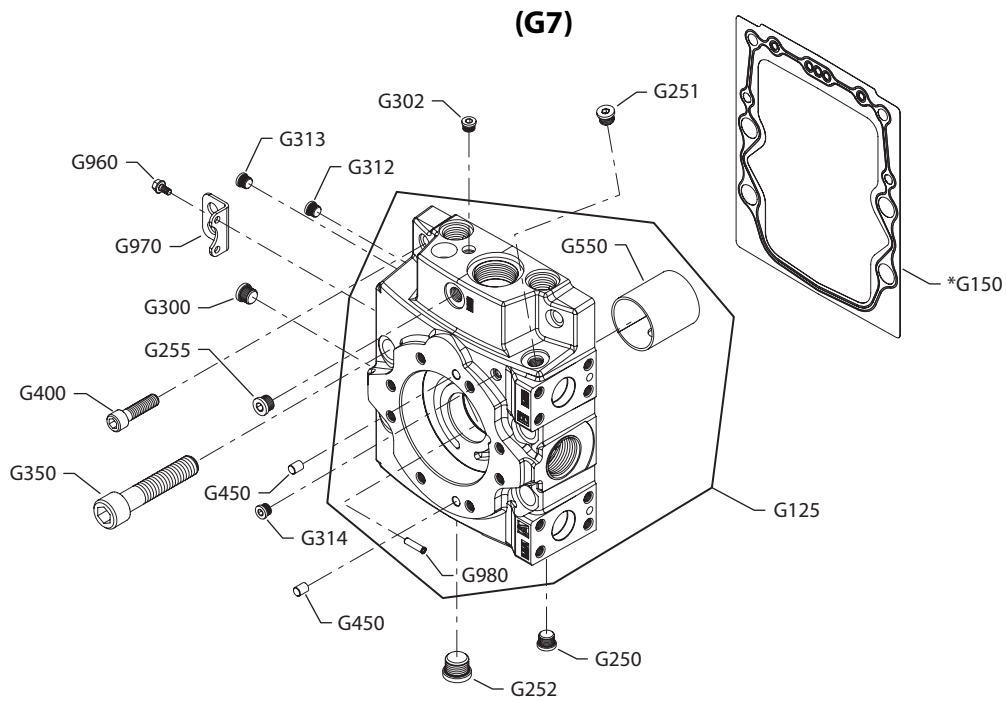
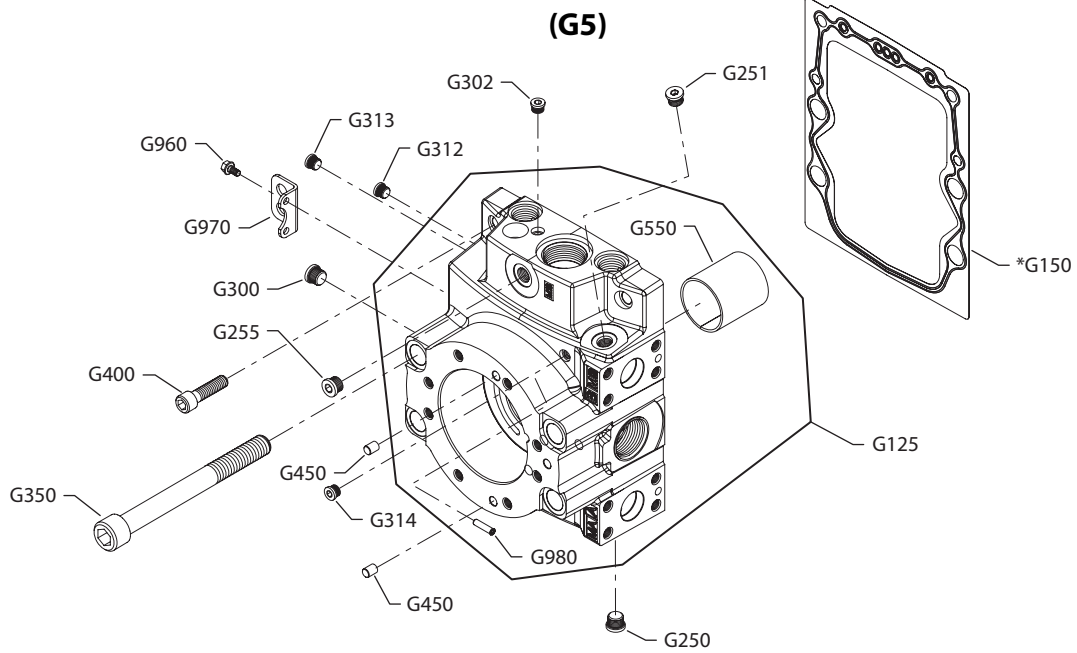
Variable displacement pump

End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G4	G125	11-45		11093337	End cap assembly, CW, ISL	1
	G150	11-45		140518	End cap gasket	1
	G250	11-45		140644	Plug assembly	1
	G251	11-45		140644	Plug assembly	1
	G255	11-45		140644	Plug assembly	1
	G300	11-45		140644	Plug assembly	1
	G302	11-45		11040532	Plug assembly	1
	G312	11-45		11040532	Plug assembly	1
	G313	11-45		11040532	Plug assembly	1
	G314	11-45		11040532	Plug assembly	1
	G350	11-45		11104091	Screw, M20 x 160	4
	G400	11-45		503499	Screw, M12 x 45	2
	G450	11-45		9004800-3708	Dowel pin	2
	G550	11-45		11061889	Journal bearing	1
	G960	11-45		508438	Screw, M6 x 12	2
	G970	11-45		4460311	Lifting bracket	1
	G980	11-45		11000229	Lubrication orifice	1
G5	G125	11-45		11106206	End cap assembly, CW, ISL	1
	G150	11-45		140518	End cap gasket	1
	G250	11-45		140644	Plug assembly	1
	G251	11-45		140644	Plug assembly	1
	G255	11-45		140644	Plug assembly	1
	G300	11-45		140644	Plug assembly	1
	G302	11-45		11040532	Plug assembly	1
	G312	11-45		11040532	Plug assembly	1
	G313	11-45		11040532	Plug assembly	1
	G314	11-45		11040532	Plug assembly	1
	G350	11-45		11104091	Screw, M20 x 160	4
	G400	11-45		503499	Screw, M12 x 45	2
	G450	11-45		9004800-3708	Pin	2
	G550	11-45		11061889	Journal bearing	1
	G960	11-45		508438	Screw, M6 x 12	2
	G970	11-45		4460311	Lifting bracket	1
	G980	11-45		11000229	Lubrication orifice	1



Variable displacement pump



E103 381E

* = included in overhaul seal kit Q210



Variable displacement pump

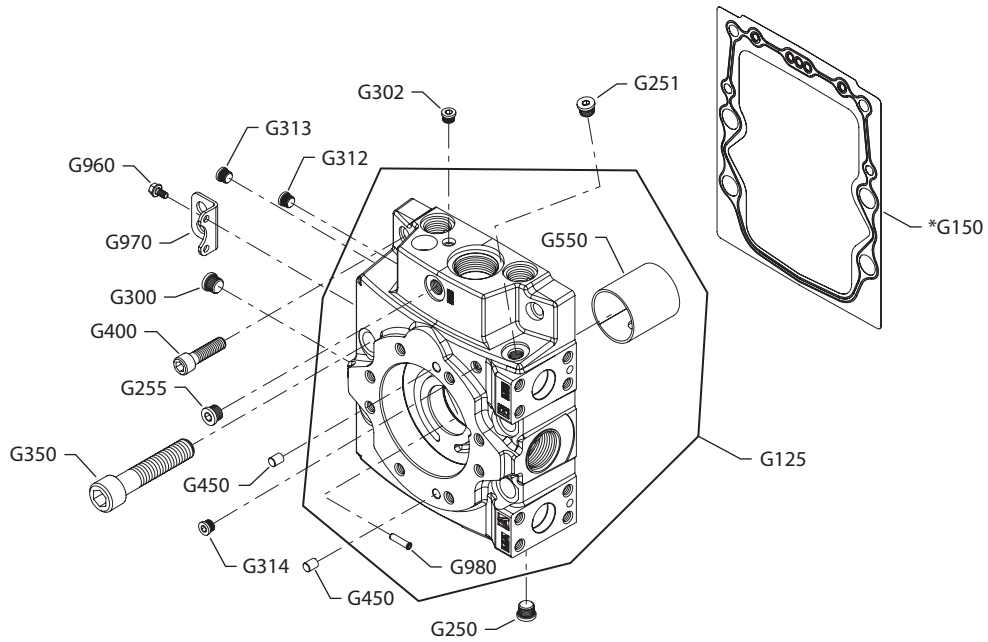
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G5 (metric)	G125	11-45		11176898	End cap assembly, metric, CW, ISL	1
	G150	11-45		140518	End cap gasket	1
	G250	11-45		11178808	Plug assembly, M14	1
	G251	11-45		11178808	Plug assembly, M14	1
	G255	11-45		11178808	Plug assembly, M14	1
	G300	11-45		11178808	Plug assembly, M14	1
	G302	11-45		11040532	Plug assembly	1
	G312	11-45		11040532	Plug assembly	1
	G313	11-45		11040532	Plug assembly	1
	G314	11-45		11040532	Plug assembly	1
	G350	11-45		11104091	Screw, M20 x 160	4
	G400	11-45		503499	Screw, M12 x 45	2
	G450	11-45		9004800-3708	Pin	2
	G550	11-45		11061889	Journal bearing	1
	G960	11-45		508438	Screw, M6 x 12	2
	G970	11-45		4460311	Lifting bracket	1
	G980	11-45		11000229	Lubrication orifice	1
G7	G125	12-40		11117000	End cap assembly, CW, ISL	1
	G150	12-40		140518	End cap gasket	1
	G250	12-40		140644	Plug assembly	1
	G251	12-40		140644	Plug assembly	1
	G252	12-40		315325 (9005110-8700)	Plug assembly	1
	G255	12-40		140644	Plug assembly	1
	G300	12-40		140644	Plug assembly	1
	G302	12-40		11040532	Plug assembly	1
	G312	12-40		11040532	Plug assembly	1
	G313	12-40		11040532	Plug assembly	1
	G314	12-40		11040532	Plug assembly	1
	G350	12-40		140314	Screw, M20 x 100	4
	G400	12-40		503499	Screw, M12 x 45	2
	G450	12-40		9004800-3708	Dowel pin	2
	G550	12-40		11070150	Journal bearing	1
	G960	12-40		508438	Screw, M6 x 12	2
	G970	12-40		4460311	Lifting bracket	1
G980	12-40		11000229	Lubrication orifice	1	



Variable displacement pump

(G8)



E103 383E

* = included in overhaul seal kit Q210

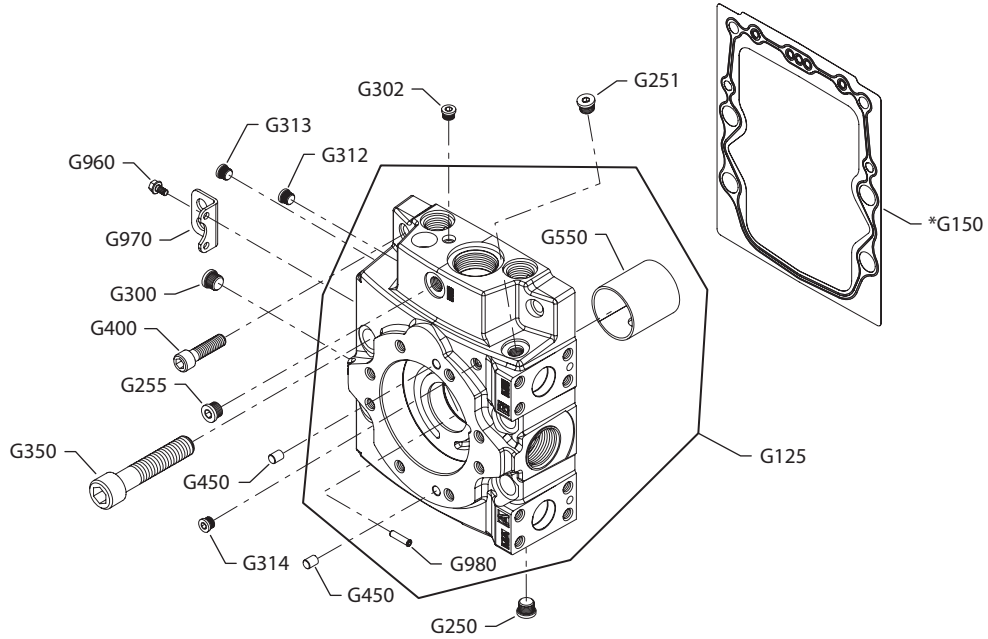

Variable displacement pump
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
G8	G125	14-50		11160968	End cap assembly, CW, ISL	1
	G150	14-50		140518	End cap gasket	1
	G250	14-50		140644	Plug assembly	1
	G251	14-50		140644	Plug assembly	1
	G255	14-50		140644	Plug assembly	1
	G300	14-50		140644	Plug assembly	1
	G302	14-50		11040532	Plug assembly	1
	G312	14-50		11040532	Plug assembly	1
	G313	14-50		11040532	Plug assembly	1
	G314	14-50		11040532	Plug assembly	1
	G350	14-50		140314	Screw, M20 x 100	4
	G400	14-50		503499	Screw, M12 x 45	2
	G450	14-50		9004800-3708	Pin	2
	G550	14-50		11070150	Journal bearing	1
	G960	14-50		508438	Screw, M6 x 12	2
	G970	14-50		4460311	Lifting bracket	1
	G980	14-50		11000229	Lubrication orifice	1
G8	G125	14-50		11172780	End cap assembly, metric, CW, ISL	1
(metric)	G150	14-50		140518	End cap gasket	1
	G250	14-50		11178808	Plug assembly, M14	1
	G251	14-50		11178808	Plug assembly, M14	1
	G255	14-50		11178808	Plug assembly, M14	1
	G300	14-50		11178808	Plug assembly, M14	1
	G302	14-50		11040532	Plug assembly	1
	G312	14-50		11040532	Plug assembly	1
	G313	14-50		11040532	Plug assembly	1
	G314	14-50		11040532	Plug assembly	1
	G350	14-50		140314	Screw, M20 x 100	4
	G400	14-50		503499	Screw, M12 x 45	2
	G450	14-50		9004800-3708	Pin	2
	G550	14-50		11070150	Journal bearing	1
	G960	14-50		508438	Screw, M6 x 12	2
	G970	14-50		4460311	Lifting bracket	1
	G980	14-50		11000229	Lubrication orifice	1



Variable displacement pump

(J8 & J9)



E103 383E

* = included in overhaul seal kit Q210



Variable displacement pump

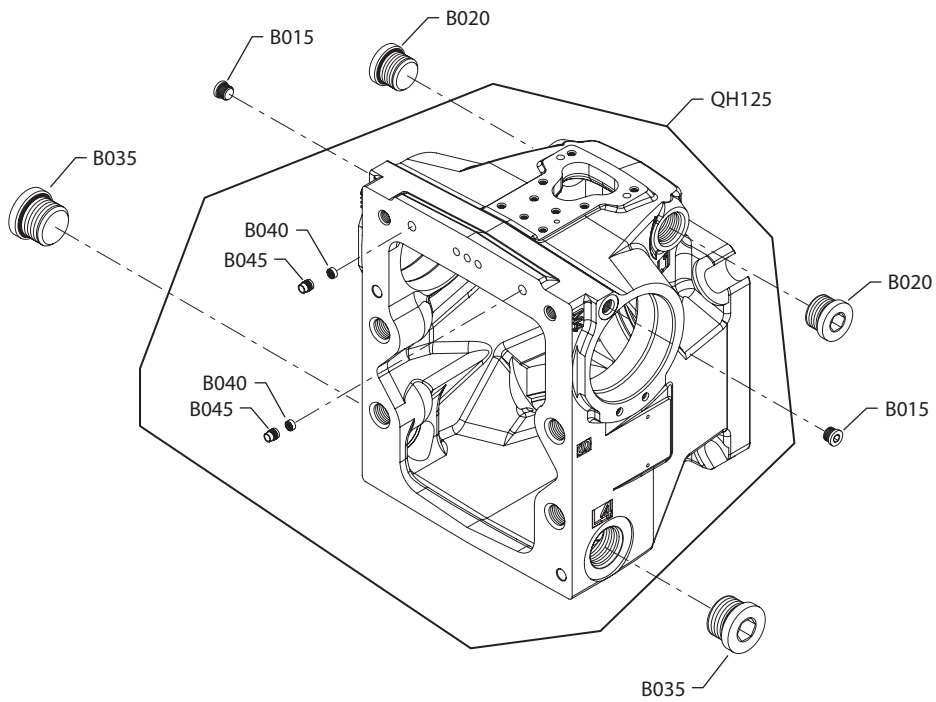
End cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
J8	G125	10-39		11181477	End cap assembly, CW, ISL	1
	G150	05-18		140518	End cap gasket	1
	G250	05-18		140644	Plug assembly	1
	G251	05-18		140644	Plug assembly	1
	G255	05-18		140644	Plug assembly	1
	G300	05-18		140644	Plug assembly	1
	G302	05-18		11040532	Plug assembly	1
	G312	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G314	05-18		11040532	Plug assembly	1
	G350	05-18		140314	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G450	05-18		9004800-3708	Dowel pin	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1
J9	G125	10-39		11187239	End cap assembly, metric, CW, ISL	1
(metric)	G150	05-18		140518	End cap gasket	1
	G250	05-18		11178808	Plug assembly, M14	1
	G251	05-18		11178808	Plug assembly, M14	1
	G255	05-18		11178808	Plug assembly, M14	1
	G300	05-18		11178808	Plug assembly, M14	1
	G302	05-18		11040532	Plug assembly	1
	G312	05-18		11040532	Plug assembly	1
	G313	05-18		11040532	Plug assembly	1
	G314	05-18		11040532	Plug assembly	1
	G350	05-18		5000676	Screw, M20 x 100	4
	G400	05-18		503499	Screw, M12 x 45	2
	G450	05-18		9004800-3708	Dowel pin	2
	G550	05-18		11070150	Journal bearing	1
	G960	05-18		508438	Screw, M6 x 12	2
	G970	05-18		4460311	Lifting bracket	1
	G980	05-18		11000229	Lubrication orifice	1

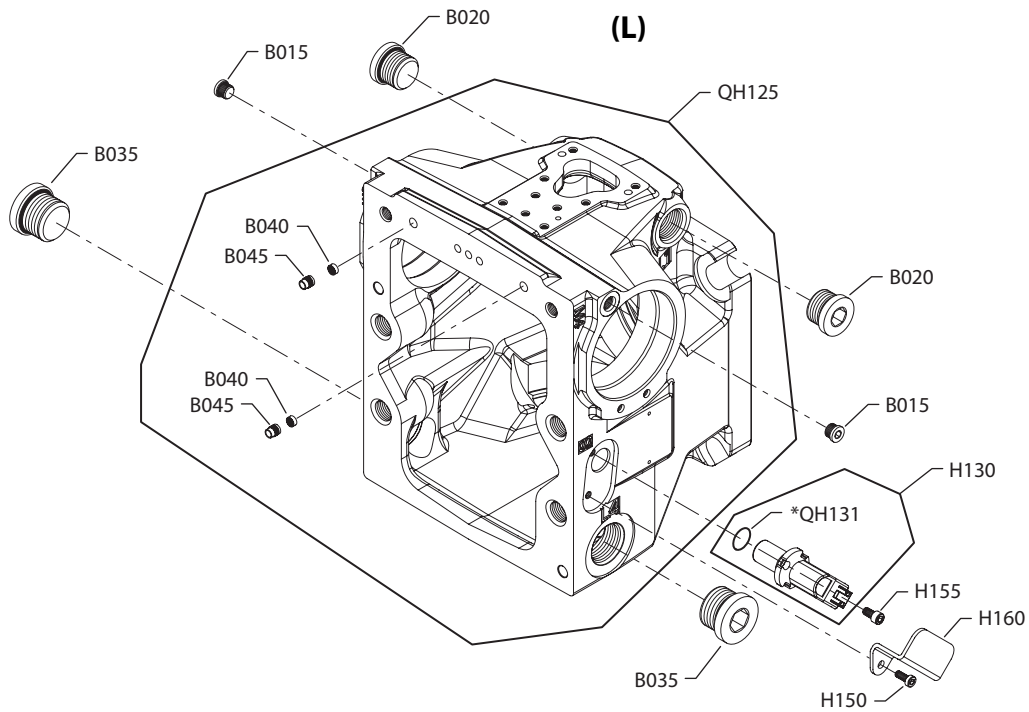


Variable displacement pump

(G and Z)



(L)



E100 741E

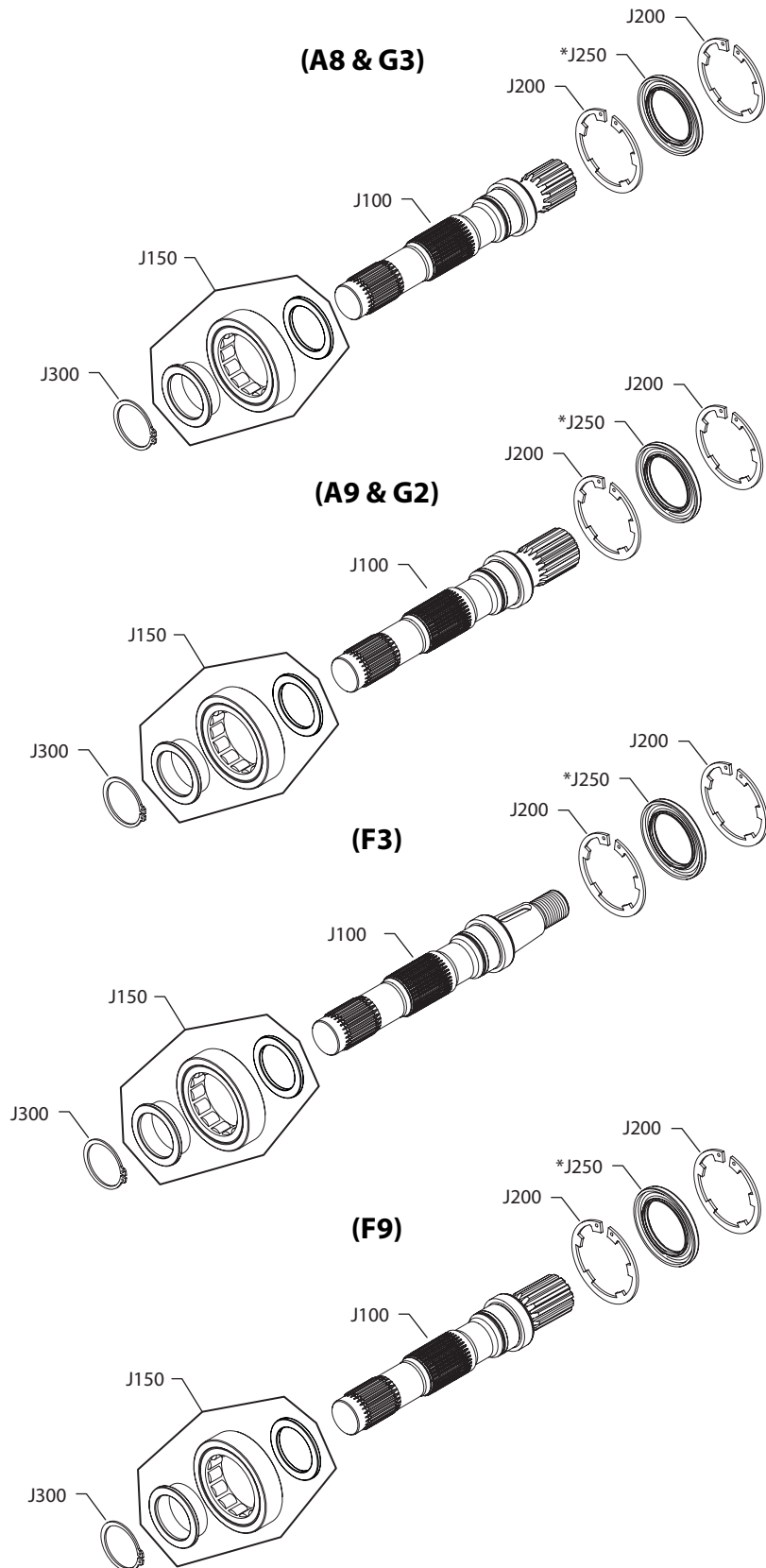
* = included in overhaul seal kit Q210


Variable displacement pump
Housing

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
G	B015	05-18		140642	Plug assembly	2	
	B020	05-18		664524 (9005110-9000)	Plug assembly	2	
	B035	05-18		320002 (9005110-9200)	Plug assembly	2	
	B040	07-01		140967	Screen, 8 mm, 125 micron (SB-2009-068)	2	
	B045	09-25		11062684	Screen retainer (SB-2009-068)	2	
	QH125	07-01		11005674	Housing assembly H1, 6-screw control (SB-2009-068)	1	
	QH125	05-18	06-52	11019987 (A2 control option)	Housing replacement kit (SB-2006-030)	1	
	QH125	05-18	06-52	11019988 (A3 control option)	Housing replacement kit (SB-2006-030)	1	
	QH125	05-18	06-52	11019989 (A4 control option)	Housing replacement kit (SB-2006-030)	1	
	QH125	05-18	06-52	11019990 (A5 control option)	Housing replacement kit (SB-2006-030)	1	
	QH125	05-18	06-52	11019991 (A6 control option)	Housing replacement kit (SB-2006-030)	1	
G (metric)	B015	16-09		5000572	Plug assembly, M12	2	
	B020	16-09		11178807	Plug assembly, M27	2	
	B035	16-09		11164204	Plug assembly, M33	2	
	B040	16-09		140967	Screen, 8 mm, 125 micron	2	
	B045	16-09		11062684	Screen retainer	2	
	QH125	16-09		11172778	Housing assembly, metric	1	
	L	B015	05-18		140642	Plug assembly	2
B020		05-18		664524 (9005110-9000)	Plug assembly	2	
B035		05-18		320002 (9005110-9200)	Plug assembly	2	
B040		10-14		140967	Screen, 8 mm, 125 micron	2	
B045		10-14		11062684	Screen retainer	2	
H130		10-14		149055	Speed sensor	1	
H150		10-14		508438	Screw, M6 x 12 10.9	1	
H155		10-14		376749	Screw, M6 x 12 8.8 (SB-2012-027)	1	
H160		10-14		11025029	Speed sensor protector	1	
QH125		10-14		11082252	Housing assembly	1	
QH131		10-14		11013397	O-ring	1	
Z		B015	05-18		140642	Plug assembly	2
		B020	05-18		664524 (9005110-9000)	Plug assembly	2
	B035	05-18		320002 (9005110-9200)	Plug assembly	2	
	B040	07-25		140967	Screen, 8 mm, 125 micron	2	
	B045	09-25		11062684	Screen retainer (SB-2009-068)	2	
	QH125	07-25		11005677	Housing assembly	1	



Variable displacement pump



E103 382E

* = included in overhaul seal kit Q210



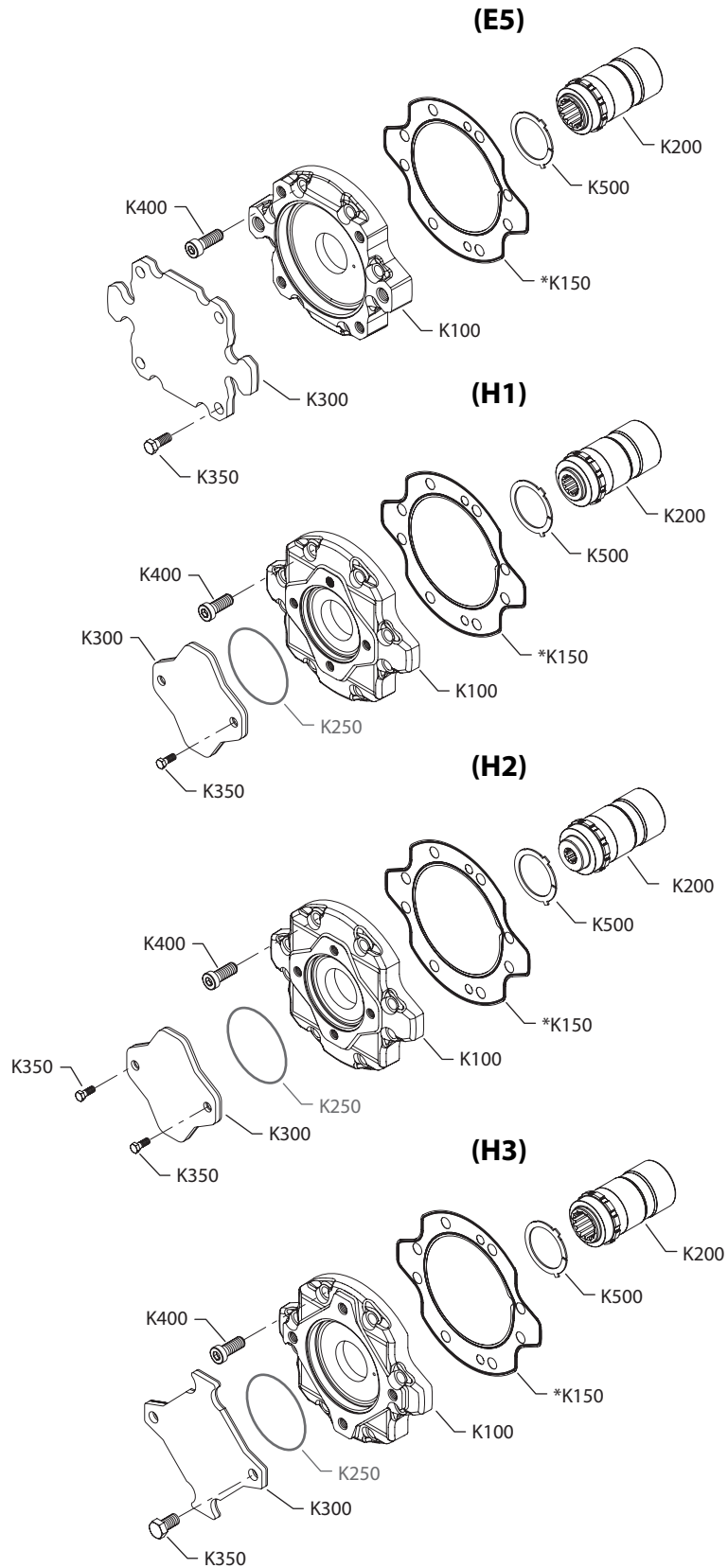
Variable displacement pump

Shaft

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A8	J100	15-06		11119638	Shaft, 13 tooth spline, 8/16 pitch	1
	J150	15-06		11056379	Roller bearing	1
	J200	15-06		140063	Retaining ring	2
	J250	15-06		11066133	Lip seal	1
	J300	15-06		140094	Retaining ring	1
A9	J100	15-06		11123699	Shaft, 27 tooth spline, 16/32 pitch	1
	J150	15-06		11056379	Roller bearing	1
	J200	15-06		140063	Retaining ring	2
	J250	15-06		11066133	Lip seal	1
	J300	15-06		140094	Retaining ring	1
F3	J100	10-08		11119640	Shaft, tapered (SB-2012-003)	1
	J100	07-29	10-07	11022051	Shaft, tapered (SB-2011-023)	1
	J150	07-29		11056379	Roller bearing	1
	J200	07-29		140063	Retaining ring	2
	J250	07-29		11024711	Lip seal (SB-2008-014)	1
	J300	07-29		140094	Retaining ring	1
F9	J100	12-33		11120572	Shaft, 13 tooth spline, 8/16 pitch, special	1
	J150	12-33		11056379	Roller bearing	1
	J200	12-33		140063	Retaining ring	2
	J250	12-33		11024711	Lip seal	1
	J300	12-33		140094	Retaining ring	1
G2	J100	10-08		11123699	Shaft, 27 tooth spline, 16/32 pitch (SB-2012-003)	1
	J100	05-18	10-07	140254	Shaft, 27 tooth spline, 16/32 pitch (SB-2011-023)	1
	J150	05-18		11056379	Roller bearing	1
	J200	05-18		140063	Retaining ring	2
	J250	05-18		11024711	Lip seal (SB-2008-014)	1
	J300	05-18		140094	Retaining ring	1
G3	J100	10-08		11119638	Shaft, 13 tooth spline, 8/16 pitch (SB-2012-003)	1
	J100	05-18	10-07	140412	Shaft, 13 tooth spline, 8/16 pitch (SB-2011-023)	1
	J150	05-18		11056379	Roller bearing	1
	J200	05-18		140063	Retaining ring	2
	J250	05-18		11024711	Lip seal (SB-2008-014)	1
	J300	05-18		140094	Retaining ring	1



Variable displacement pump



E100 742E

* = included in overhaul seal kit Q210

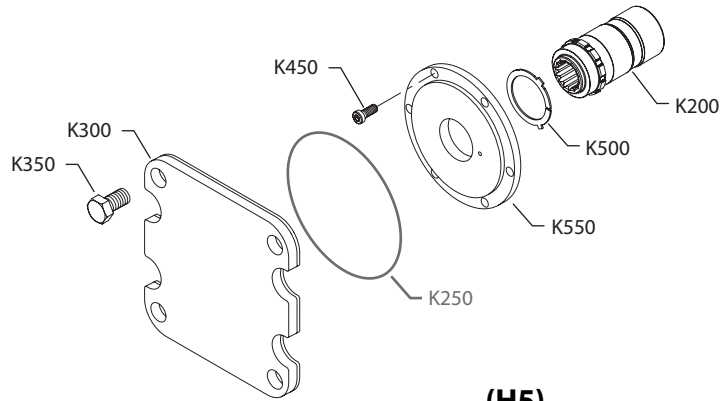

Variable displacement pump
Auxiliary mounting

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit	
E5	K100	13-38		11002193	Adapter flange, SAE C	1	
	K150	13-38		11002236	Adapter seal	1	
	K200	13-38		11045667	Charge pump shaft, 13 tooth, 8/16 pitch	1	
	K300	13-38		11023748	Flange cover	1	
	K350	13-38		509528	Screw, M12 x 20	4	
	K400	13-38		11071462	Screw, M12 x 35	8	
	K500	13-38		11001182	Thrust washer	1	
	H1	K100	10-39		11002191	Adapter flange, SAE A	1\
K100		06-41	10-38	11086818	Adapter flange replacement kit (SB-2011-002)	1	
K150		10-39		11002236	Adapter seal (SB-2011-002)	1	
K150		06-41	10-38	140703	Adapter seal	1	
K200		10-08		11064258	Charge pump shaft, 11 tooth, 16/32 pitch	1	
K200		06-41	10-07	140704	Charge pump shaft, 11 tooth (SB-2011-023)	1	
K250		06-41	08-11	9004104-1520	O-ring (SB-2008-038)	1	
K300		06-41		11017125	Flange cover (SB-2008-038)	1	
K350		06-41		370247	Screw, M10 x 20	2	
K400		06-41		140700	Screw, M12 x 30	8	
K500		10-39		11001182	Thrust washer (SB-2011-002)	1	
H2		K100	10-39		11002191	Adapter flange, SAE A	1
		K100	05-18	10-38	11086818	Adapter flange replacement kit (SB-2011-002)	1
	K150	10-39		11002236	Adapter seal (SB-2011-002)	1	
	K150	05-18	10-38	140703	Adapter seal	1	
	K200	10-08		11064260	Charge pump shaft, 9 tooth, 16/32 pitch	1	
	K200	05-18	10-07	140972	Charge pump shaft, 9 tooth (SB-2011-023)		
	K250	05-18	08-11	9004104-1520	O-ring (SB-2008-038)	1	
	K300	05-18		11017125	Flange cover (SB-2008-038)	1	
	K350	05-18		370247	Screw, M10 x 20	2	
	K400	05-18		140700	Screw, M12 x 30	8	
	K500	10-39		11001182	Thrust washer (SB-2011-002)	1	
	H3	K100	10-39		11002192	Adapter flange, SAE B	1
		K100	05-18	10-38	11086817	Adapter flange replacement kit (SB-2011-002)	1
K150		10-39		11002236	Adapter seal (SB-2011-002)	1	
K150		05-18	10-38	140703	Adapter seal	1	
K200		10-08		11064272	Charge pump shaft, 13 tooth, 16/32 pitch	1	
K200		05-18	10-07	140975	Charge pump shaft, 13 tooth (SB-2011-023)	1	
K250		05-18	08-35	327627 (9004104-1540)	O-ring (SB-2008-038)	1	
K300		05-18		11023747	Flange cover (SB-2008-038)	1	
K350		05-18		509528	Screw, M12 x 20	2	
K400		05-18		140700	Screw, M12 x 30	8	
K500		10-39		11001182	Thrust washer (SB-2011-002)	1	

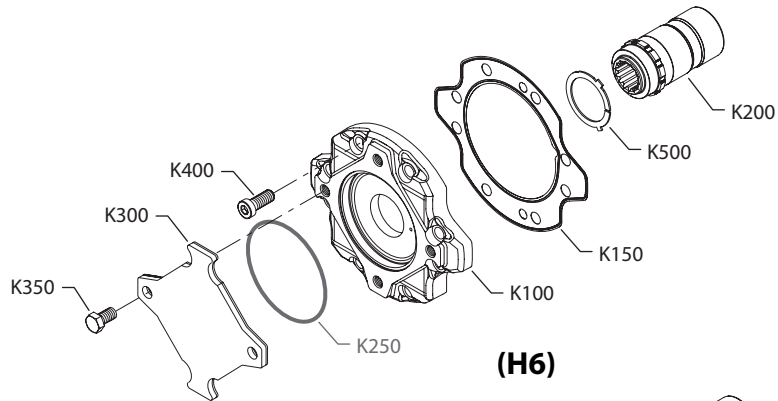


Variable displacement pump

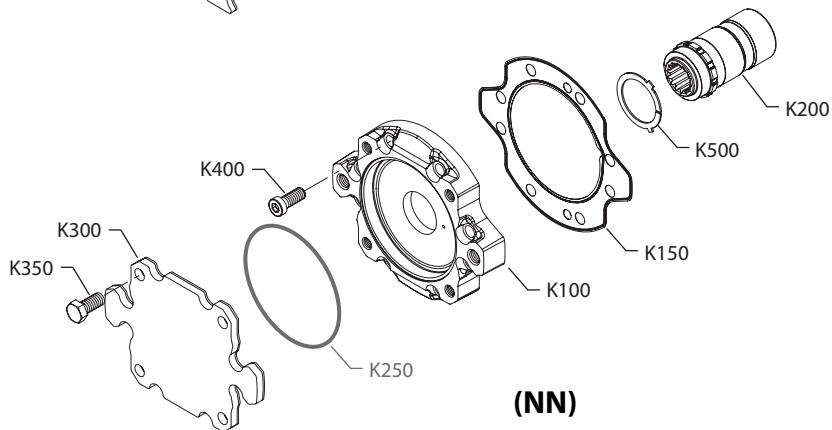
(H4)



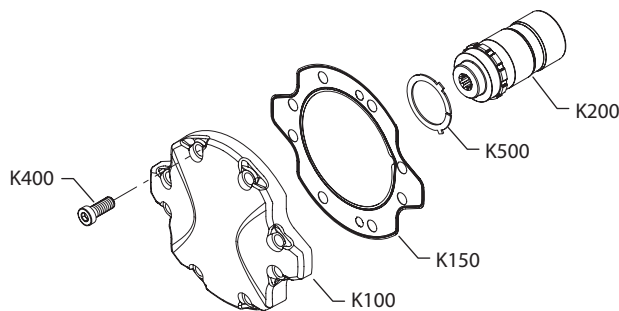
(H5)



(H6)



(NN)



E101 736E

* = included in overhaul seal kit Q210

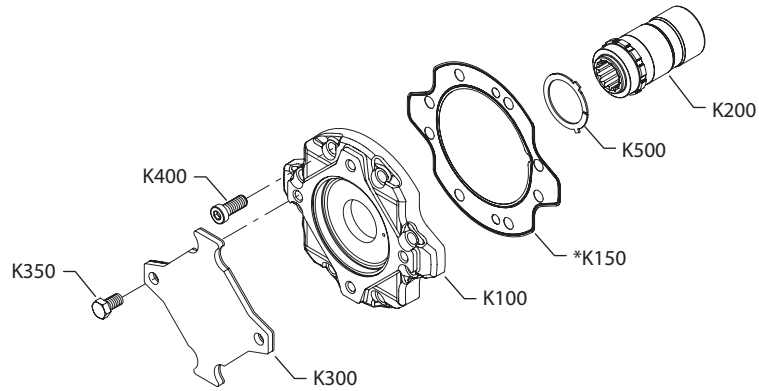

Variable displacement pump
Auxiliary mounting

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
H4	K200	10-08		11045667	Charge pump shaft, 13 tooth, 8/16 pitch	1
	K200	05-18	10-07	140966	Charge pump shaft, 13 tooth (SB-2011-023)	1
	K250	05-18	08-35	726927	O-ring (SB-2008-038)	1
	K300	05-18		11023751	Flange cover (SB-2008-038)	1
	K350	05-18		11024165	Screw, M20 x 30	4
	K450	05-18		11001141	Screw, M8 x 20	6
	K500	10-39		11001182	Thrust washer (SB-2011-002)	1
	K550	10-39		11158373	Charge pump cover	1
	K550	06-41	10-38	11086882	Charge pump cover replacement kit	1
H5	K100	10-39		11002192	Adapter flange, SAE B	1
	K100	06-41	10-38	11086817	Adapter flange replacement kit (SB-2011-002)	1
	K150	10-39		11002236	Adapter seal (SB-2011-002)	1
	K150	05-18	10-38	140703	Adapter seal	1
	K200	10-08		11064275	Charge pump shaft, 15 tooth, 16/32 pitch	1
	K200	05-18	10-07	11000658	Charge pump shaft, 15 tooth (SB-2011-023)	1
	K250	05-18	08-35	327627 (9004104-1540)	O-ring (SB-2008-038)	1
	K300	05-18		11023747	Flange cover (SB-2008-038)	1
	K350	05-18		509528	Screw, M12 x 20	2
	K400	05-18		140700	Screw, M12 x 30	8
	K500	10-39		11001182	Thrust washer (SB-2011-002)	1
	H6	K100	10-39		11002193	Adapter flange, SAE C
K100		06-41	10-38	11086816	Adapter flange replacement kit (SB-2011-002)	1
K150		10-39		11002236	Adapter seal (SB-2011-002)	1
K150		05-18	10-38	140703	Adapter seal	1
K200		10-08		11064276	Charge pump shaft, 14 tooth, 12/24 pitch	1
K200		05-18	10-07	140965	Charge pump shaft, 14 tooth (SB-2011-023)	1
K250		05-18	08-35	056739 (9004104-1580)	O-ring (SB-2008-038)	1
K300		05-18		11023748	Flange cover (SB-2008-038)	1
K350		05-18		509528	Screw, M12 x 20	2
K400		05-18		11071462	Screw, M12 x 35	8
K500		10-39		11001182	Thrust washer (SB-2011-002)	1
NN		K100	10-39		11002194	Adapter flange, no pad
	K100	06-41	10-38	11086819	Adapter flange replacement kit (SB-2011-002)	1
	K150	10-39		11002236	Adapter seal (SB-2011-002)	1
	K150	05-18	10-38	140703	Adapter seal	1
	K200	10-08		11064260	Charge pump shaft	1
	K200	05-18	10-07	140704	Charge pump shaft (SB-2011-023)	1
	K400	05-18		140700	Screw, M12 x 30	8
	K500	10-39		11001182	Thrust washer (SB-2011-002)	1

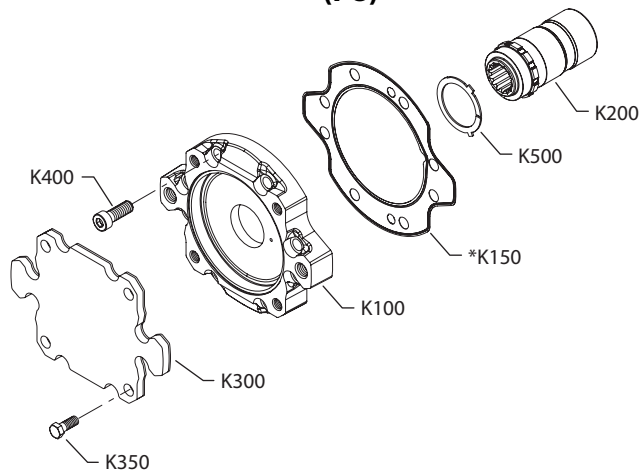


Variable displacement pump

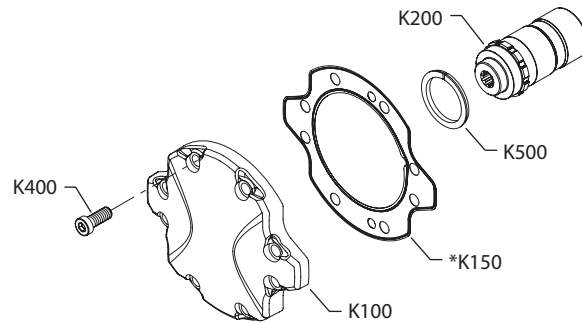
(P3 & P6)



(P8)



(SN)



E101 903E

* = included in overhaul seal kit Q210

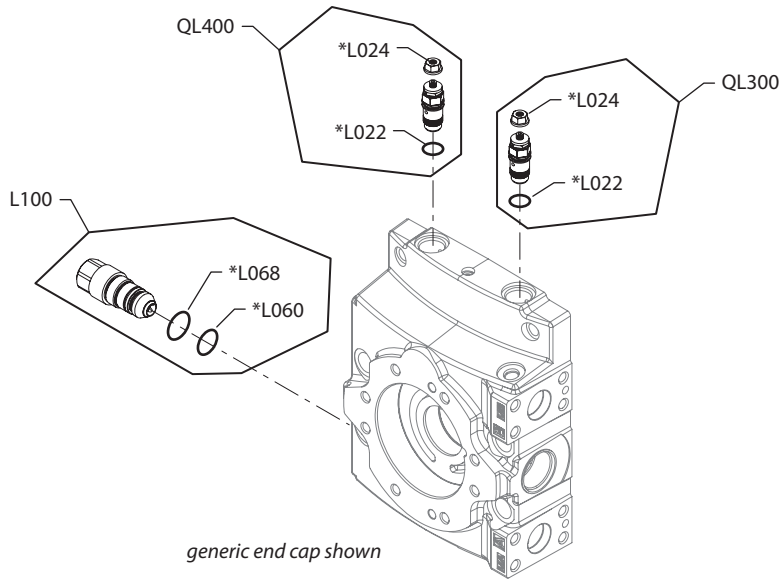

Variable displacement pump
Auxiliary mounting

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
P3	K100	14-43		11002192	Adapter flange assembly, SAE B	1
	K150	14-43		11002236	Adapter seal	1
	K200	14-43		11092010	Charge pump shaft, 13 tooth, 16/32 pitch	1
	K300	14-43		11023747	Cover	1
	K350	14-43		509528	Screw, M12 x 20	2
	K400	14-43		140700	Screw, M12 x 30	8
	K500	14-43		11001182	Thrust washer	1
P6	K100	14-43		11002192	Adapter flange assembly, SAE B	1
	K150	14-43		11002236	Adapter seal	1
	K200	14-43		11152424	Charge pump shaft, 14 tooth, 12/24 pitch	1
	K300	14-43		11023747	Cover	1
	K350	14-43		509528	Screw, M12 x 20	2
	K400	14-43		140700	Screw, M12 x 30	8
	K500	14-43		11001182	Thrust washer	1
P8	K100	15-41		11002193	Adapter flange, SAE C	1
	K150	15-41		11002236	Adapter seal	1
	K200	15-41		11152424	Charge pump shaft, 14 tooth, 12/24 pitch	1
	K300	15-41		11023748	Flange cover	1
	K350	15-41		509528	Screw, M12 x 20	4
	K400	15-41		11071462	Screw, M12 x 35	8
	K500	15-41		11001182	Thrust washer	1
SN	K100	12-49		11002194	Adapter flange assembly, no pad	1
	K150	12-49		11002236	Adapter seal	1
	K200	12-49		11064260	Charge pump shaft	1
	K400	12-49		140700	Screw, M12 x 30	8
	K500	12-49		11113698	Thrust washer, 40cc	1

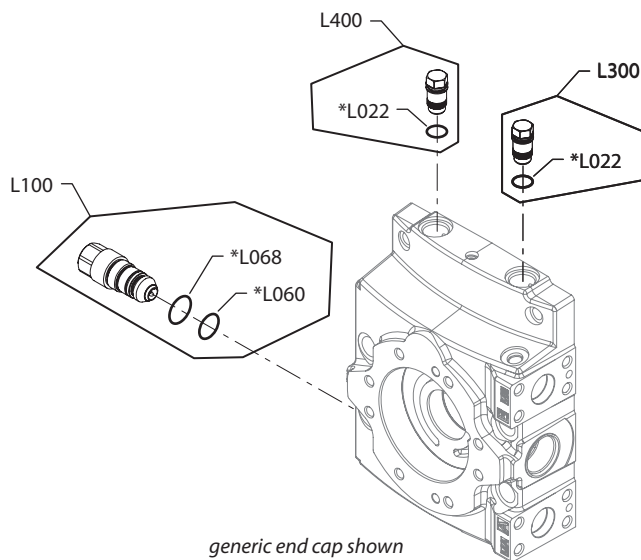


Variable displacement pump

(F01 - F04)



(K20 - K35)





Variable displacement pump

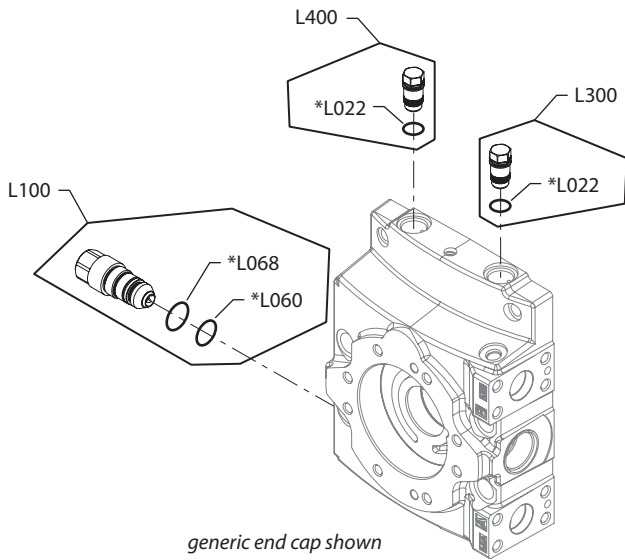
High pressure setting, port A

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	05-18		504207	O-ring	1
	L060	05-18		365023	O-ring	1
	L068	05-18		11052201	O-ring	1
F01	L024	13-14		336826	Seal nut	1
	L100	13-14		11049147	High pressure relief valve, 250 bar	1
	QL300	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
F02	L024	13-14		336826	Seal nut	1
	L100	13-14		11049149	High pressure relief valve, 300 bar	1
	QL300	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
F03	L024	13-14		336826	Seal nut	1
	L100	13-14		11049151	High pressure relief valve, 350 bar	1
	QL300	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
F04	L024	13-14		336826	Seal nut	1
	L100	13-14		11049153	High pressure relief valve, 400 bar	1
	QL300	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
K20	L100	05-18		11049144	High pressure relief valve, 200 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K23	L100	05-18		11049146	High pressure relief valve, 230 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K25	L100	05-18		11049147	High pressure relief valve, 250 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K28	L100	05-18		11049148	High pressure relief valve, 280 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K30	L100	05-18		11049149	High pressure relief valve, 300 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K33	L100	05-18		11049150	High pressure relief valve, 330 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K35	L100	05-18		11049151	High pressure relief valve, 350 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

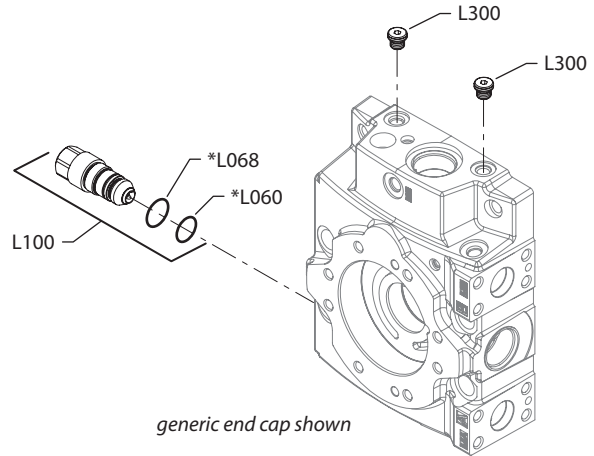


Variable displacement pump

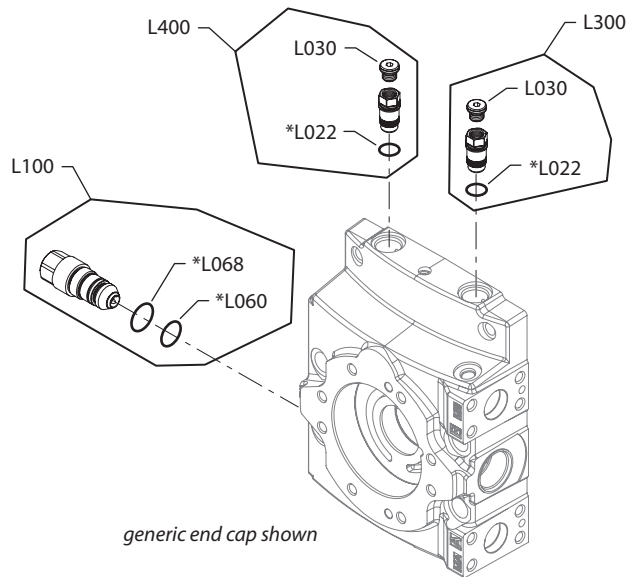
(K38 -K48)



(KBD)



(KDC -KWY)



E101 905E

* = included in overhaul seal kit Q210

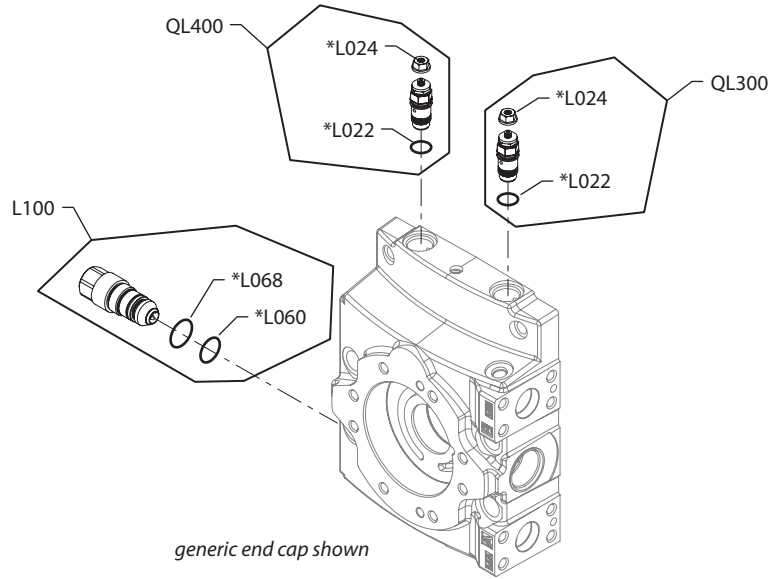

Variable displacement pump
High pressure setting, port A

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	05-18		504207	O-ring	1
	L060	05-18		365023	O-ring	1
	L068	05-18		11052201	O-ring	1
K38	L100	05-18		11049152	High pressure relief valve, 380 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K40	L100	05-18		11049153	High pressure relief valve, 400 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K42	L100	05-18		11049154	High pressure relief valve, 420 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K45	L100	05-18		11049155	High pressure relief valve, 450 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K46	L100	05-18		11106573	High pressure relief valve, 460 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K48	L100	05-18		11049156	High pressure relief valve, 480 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
KDB	L100	05-18		11049154	High pressure relief valve, 420 bar	1
	L300	05-18		513443	Plug assembly, CCW rotation pump	1
	L400	05-18		513443	Plug assembly, CW rotation pump	1
KDC	L030	05-18		513443	Plug assembly	1
	L100	05-18		11069762	High pressure relief valve, 430 bar	1
	L300	05-18		11035112	Pressure sensor adapter, CCW rotation pump	1
	L400	05-18		11035112	Pressure sensor adapter, CW rotation pump	1
KWY	L030	05-18		513443	Plug assembly	1
	L100	05-18		11049155	High pressure relief valve, 450 bar	1
	L300	05-18		11035112	Pressure sensor adapter, CCW rotation pump	1
	L400	05-18		11035112	Pressure sensor adapter, CW rotation pump	1



Variable displacement pump

(L15 -L41)



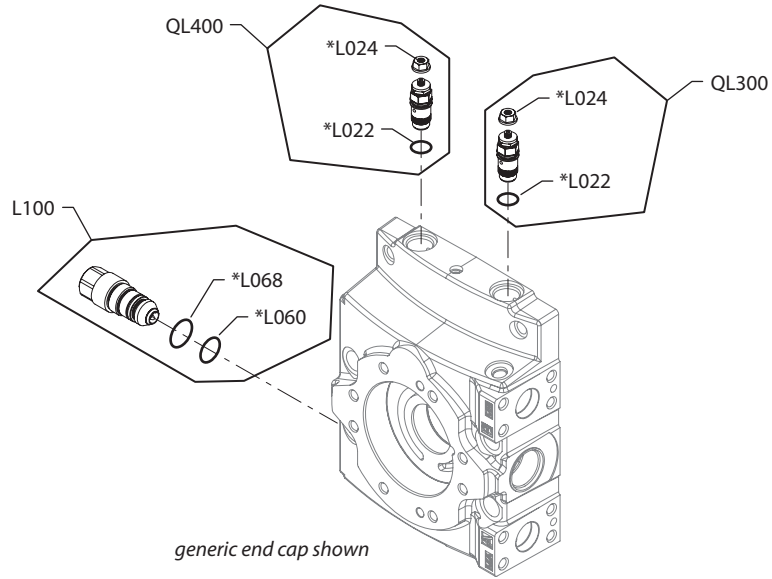

Variable displacement pump
High pressure setting, port A

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	05-18		504207	O-ring	1
	L024	05-18		336826	Seal nut	1
	L060	05-18		365023	O-ring	1
	L068	05-18		11052201	O-ring	1
L15	L100	05-18		11049144	High pressure relief valve, 200 bar	1
	QL300	05-18		11119002	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11119002	Pressure limiter kit, adjustable, CW rotation pump	1
L20	L100	05-18		11049147	High pressure relief valve, 250 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L23	L100	05-18		11049148	High pressure relief valve, 280 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L25	L100	05-18		11049149	High pressure relief valve, 300 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L28	L100	05-18		11049150	High pressure relief valve, 330 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L30	L100	05-18		11049151	High pressure relief valve, 350 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L33	L100	05-18		11049152	High pressure relief valve, 380 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L35	L100	05-18		11049153	High pressure relief valve, 400 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L38	L100	05-18		11049154	High pressure relief valve, 420 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L40	L100	05-18		11049155	High pressure relief valve, 450 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L41	L100	05-18		11049155	High pressure relief valve, 450 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1



Variable displacement pump

(L42 - L48 & LEG)





Variable displacement pump

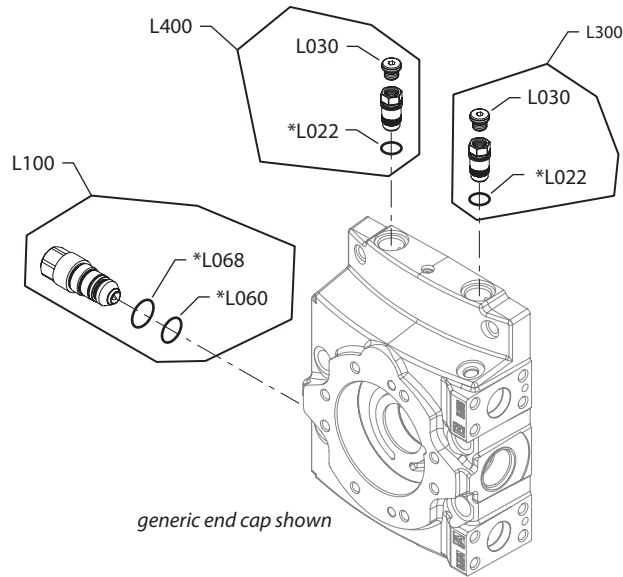
High pressure setting, port A

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	05-18		504207	O-ring	1
	L024	05-18		336826	Seal nut	1
	L060	05-18		365023	O-ring	1
	L068	05-18		11052201	O-ring	1
L42	L100	05-18		11049155	High pressure relief valve, 450 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L43	L100	05-18		11049156	High pressure relief valve, 480 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
L44	L100	05-18		11049156	High pressure relief valve, 480 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable,CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
L45	L100	05-18		11049156	High pressure relief valve, 480 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable,CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
L46	L100	05-18		11049157	High pressure relief valve, 510 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
L47	L100	05-18		11049157	High pressure relief valve, 510 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
L48	L100	05-18		11049157	High pressure relief valve, 510 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
LEG	L100	05-18		11049156	High pressure relief valve, 480 bar	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1

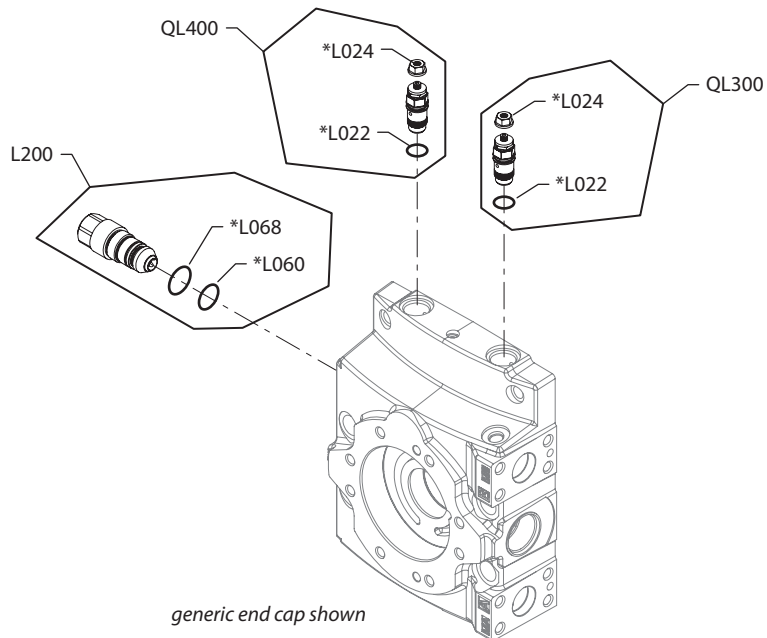


Variable displacement pump

(S42, S44 & S45)



(F01 - F04)





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	05-18		504207	O-ring	1
	L060	05-18		365023	O-ring	1
	L068	05-18		11052201	O-ring	1
S42	L030	12-04		140644	Plug assembly	1
	L100	12-04		11049154	High pressure relief valve, 420 bar	1
	L300	12-02		11085422	Pressure sensor adapter, CCW rotation pump	1
	L400	12-04		11085422	Pressure sensor adapter, CW rotation pump	1
S44	L030	12-02		140644	Plug assembly	1
	L100	12-02		11116160	High pressure relief valve, 440 bar	1
	L300	12-02		11085422	Pressure sensor adapter, CCW rotation pump	1
	L400	12-02		11085422	Pressure sensor adapter, CW rotation pump	1
S45	L030	12-22		140644	Plug assembly	1
	L100	12-22		11049155	High pressure relief valve, 450 bar	1
	L300	12-22		11085422	Pressure sensor adapter, CCW rotation pump	1
	L400	12-22		11085422	Pressure sensor adapter, CW rotation pump	1

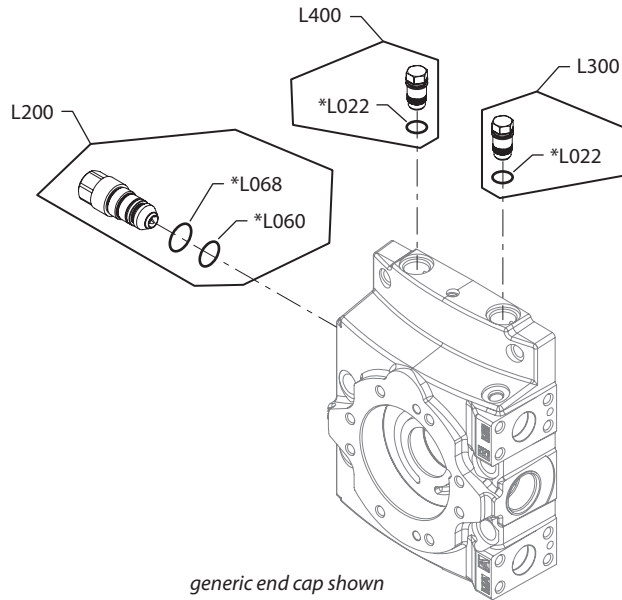
High pressure setting, port B

F01	L024	13-14		336826	Seal nut	1
	L200	13-14		11049147	High pressure relief valve, 250 bar	1
	QL300	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
F02	L024	13-14		336826	Seal nut	1
	L200	13-14		11049149	High pressure relief valve, 300 bar	1
	QL300	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
F03	L024	13-14		336826	Seal nut	1
	L200	13-14		11049151	High pressure relief valve, 350 bar	1
	QL300	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
F04	L024	13-14		336826	Seal nut	1
	L200	13-14		11049153	High pressure relief valve, 400 bar	1
	QL300	13-14		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	13-14		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1



Variable displacement pump

(K20 -K45)





Variable displacement pump

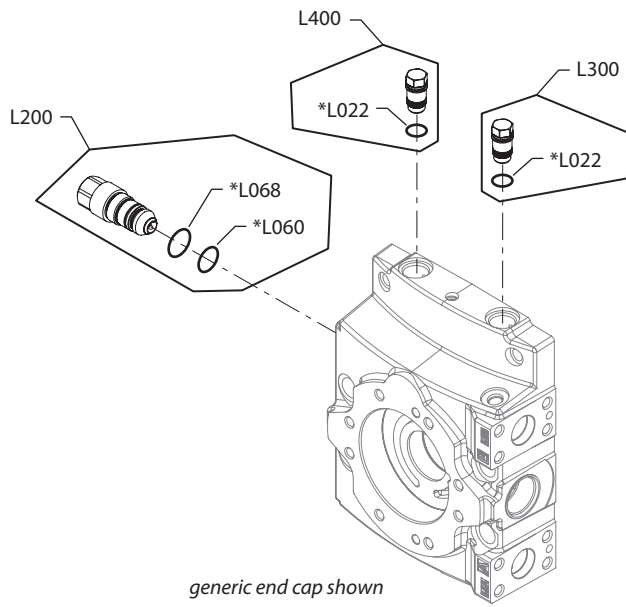
High pressure setting, port B

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	05-18		504207	O-ring	1
	L060	05-18		365023	O-ring	1
	L068	05-18		11052201	O-ring	1
K20	L200	05-18		11049144	High pressure relief valve, 200 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K23	L200	05-18		11049146	High pressure relief valve, 230 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K25	L200	05-18		11049147	High pressure relief valve, 250 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K28	L200	05-18		11049148	High pressure relief valve, 280 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K30	L200	05-18		11049149	High pressure relief valve, 300 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K33	L200	05-18		11049150	High pressure relief valve, 330 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K35	L200	05-18		11049151	High pressure relief valve, 350 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K38	L200	05-18		11049152	High pressure relief valve, 380 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K40	L200	05-18		11049153	High pressure relief valve, 400 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K42	L200	05-18		11049154	High pressure relief valve, 420 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K45	L200	05-18		11049155	High pressure relief valve, 450 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1

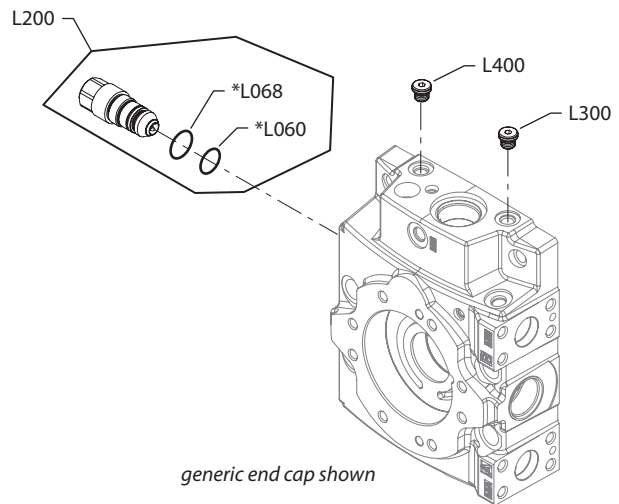


Variable displacement pump

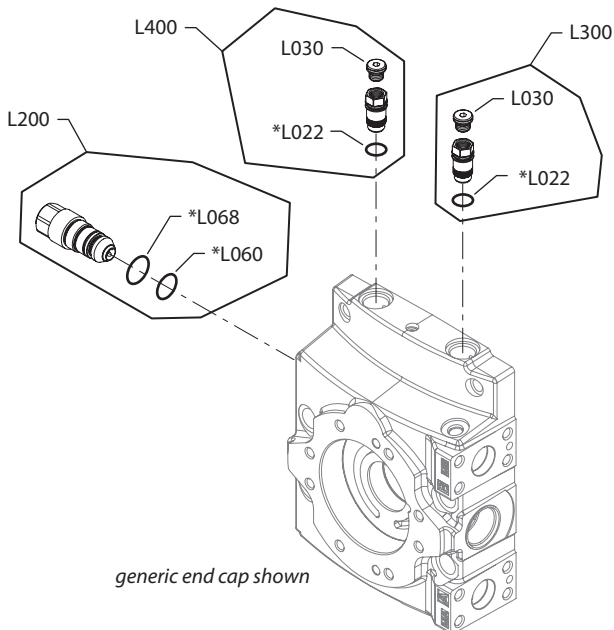
(K42 -K48)



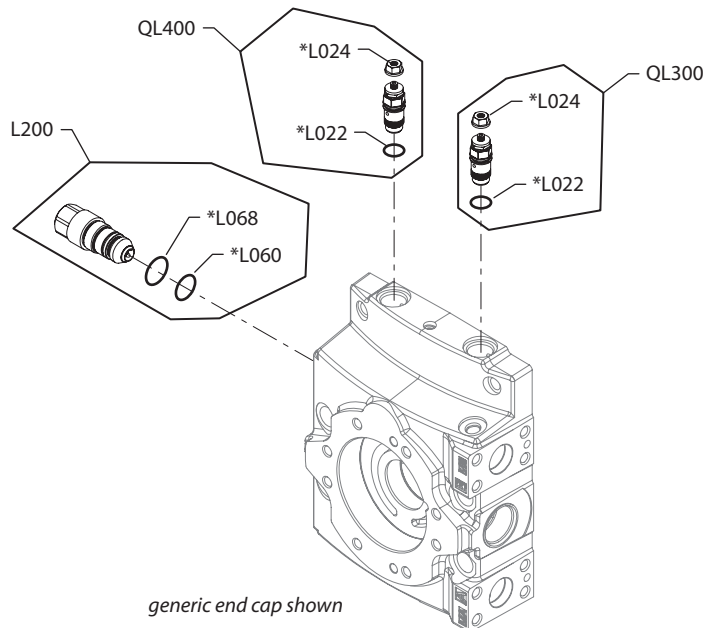
(KBD)



(KDC -KWY)



(L15 -L23)



E100 757E

* = included in overhaul seal kit Q210

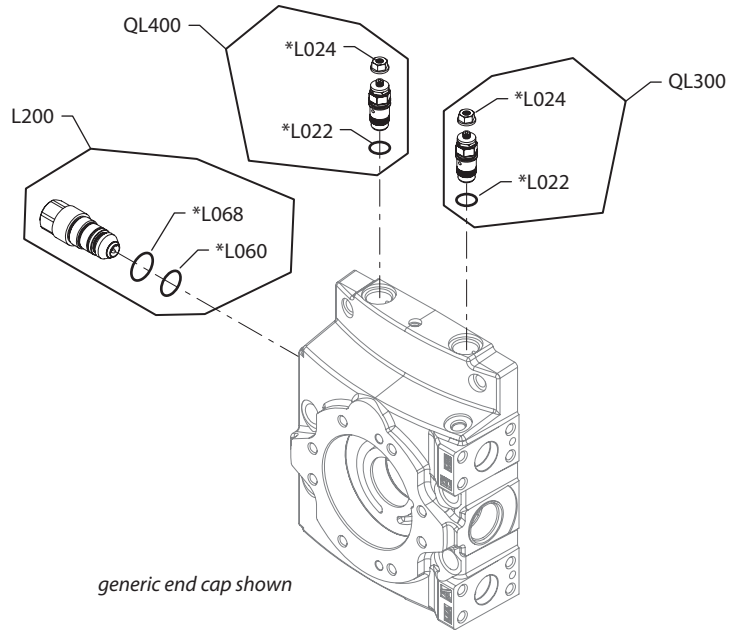
Variable displacement pump
High pressure setting, port B

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L060	05-18		365023	O-ring	1
	L068	05-18		11052201	O-ring	1
K46	L022	05-18		504207	O-ring	1
	L200	05-18		11106573	High pressure relief valve, 460 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
K48	L022	05-18		504207	O-ring	1
	L200	05-18		11049156	High pressure relief valve, 480 bar	1
	L300	05-18		11002302	Pressure limiter plug assembly, CCW rotation pump	1
	L400	05-18		11002302	Pressure limiter plug assembly, CW rotation pump	1
KDB	L200	05-18		11049154	High pressure relief valve, 420 bar	1
	L300	05-18		513443	Plug assembly, CCW rotation pump	1
	L400	05-18		513443	Plug assembly, CW rotation pump	1
KDC	L022	05-18		504207	O-ring	1
	L030	05-18		513443	Plug assembly	1
	L200	05-18		11069762	High pressure relief valve, 430 bar	1
	L300	05-18		11035112	Pressure sensor adapter, CCW rotation pump1	1
	L400	05-18		11035112	Pressure sensor adapter, CCW rotation pump1	1
KWY	L022	05-18		504207	O-ring	1
	L030	05-18		513443	Plug assembly	1
	L200	05-18		11049155	High pressure relief valve, 450 bar	1
	L300	05-18		11035112	Pressure sensor adapter, CCW rotation pump1	1
	L400	05-18		11035112	Pressure sensor adapter, CCW rotation pump1	1
L15	L022	05-18		504207	O-ring	1
	L024	05-18		336826	Seal nut	1
	L200	05-18		11049144	High pressure relief valve, 200 bar	1
	QL300	05-18		11119002	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11119002	Pressure limiter kit, adjustable, CCW rotation pump	1
L20	L022	05-18		504207	O-ring	1
	L024	05-18		336826	Seal nut	1
	L200	05-18		11049147	High pressure relief valve, 250 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L23	L022	05-18		504207	O-ring	1
	L024	05-18		336826	Seal nut	1
	L200	05-18		11049148	High pressure relief valve, 280 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1



Variable displacement pump

(L25 - L44)



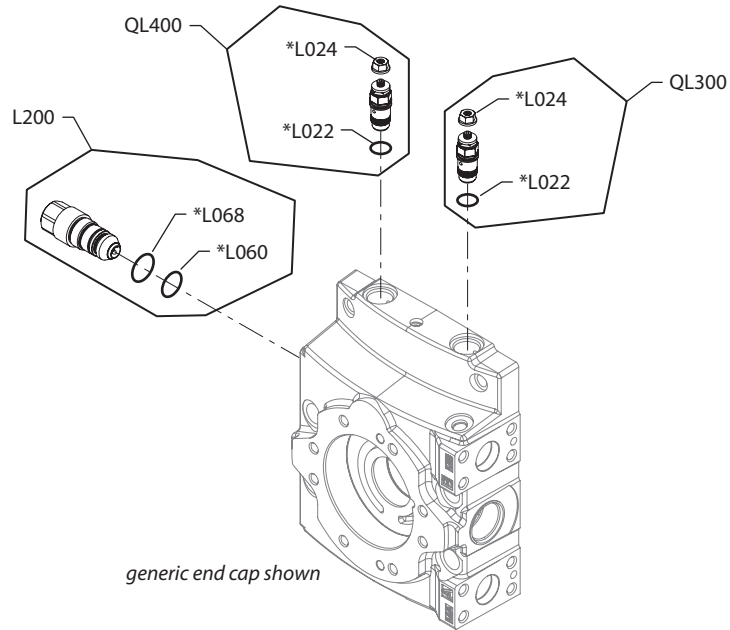

Variable displacement pump
High pressure setting, port B

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	05-18		504207	O-ring	1
	L024	05-18		336826	Seal nut	1
	L060	05-18		365023	O-ring	1
	L068	05-18		11052201	O-ring	1
L25	L200	05-18		11049149	High pressure relief valve, 300 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L28	L200	05-18		11049150	High pressure relief valve, 330 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L30	L200	05-18		11049151	High pressure relief valve, 350 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L33	L200	05-18		11049152	High pressure relief valve, 380 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L35	L200	05-18		11049153	High pressure relief valve, 400 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L38	L200	05-18		11049154	High pressure relief valve, 420 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L40	L200	05-18		11049155	High pressure relief valve, 450 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L41	L200	05-18		11049155	High pressure relief valve, 450 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L42	L200	05-18		11049155	High pressure relief valve, 450 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L43	L200	05-18		11049156	High pressure relief valve, 480 bar	1
	QL300	05-18		11004709	Pressure limiter kit, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter kit, adjustable, CCW rotation pump	1
L44	L200	05-18		11049156	High pressure relief valve, 480 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1

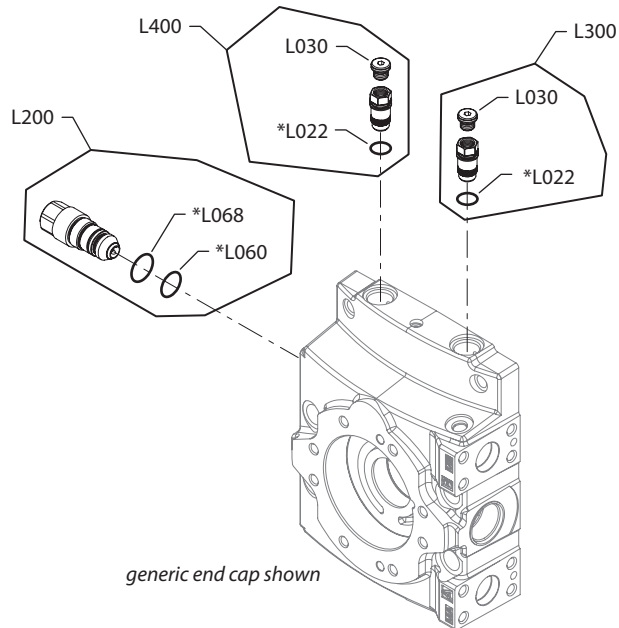


Variable displacement pump

(L45 - L48 & LEG)



(S42, S44 & S45)



E101 909E

* = included in overhaul seal kit Q210



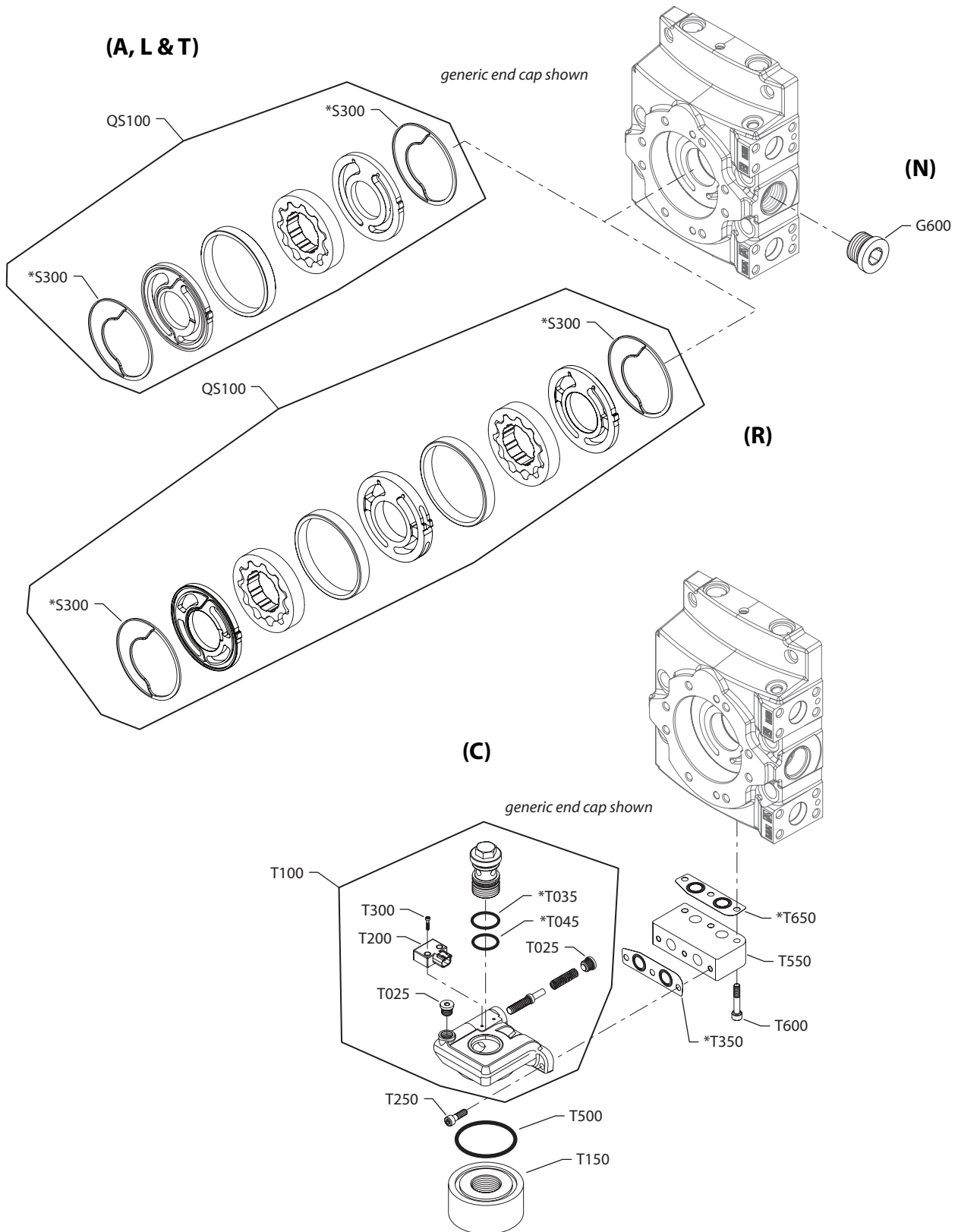
Variable displacement pump

High pressure setting, port B

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
all	L022	05-18		504207	O-ring	1
	L060	05-18		365023	O-ring	1
	L068	05-18		11052201	O-ring	1
L45	L024	05-18		336826	Seal nut	1
	L200	05-18		11049156	High pressure relief valve, 480 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable,CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1
L46	L024	05-18		336826	Seal nut	1
	L200	05-18		11049157	High pressure relief valve, 510 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1
L47	L024	05-18		336826	Seal nut	1
	L200	05-18		11049157	High pressure relief valve, 510 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1
L48	L024	05-18		336826	Seal nut	1
	L200	05-18		11049157	High pressure relief valve, 510 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable, CW rotation pump	1
	QL400	05-18		11004709	Pressure limiter, adjustable, CCW rotation pump	1
LEG	L024	05-18		336826	Seal nut	1
	L200	05-18		11049156	High pressure relief valve, 480 bar	1
	QL300	05-18		11004709	Pressure limiter, adjustable,CW rotation pump	1
S42	L030	12-04		140644	Plug assembly	1
	L200	12-04		11049154	High pressure relief valve, 420 bar	1
	L300	12-02		11085422	Pressure sensor adapter, CW rotation pump	1
	L400	12-04		11085422	Pressure sensor adapter, CCW rotation pump	1
S44	L030	12-02		140644	Plug assembly	1
	L200	12-02		11116160	High pressure relief valve, 440 bar	1
	L300	12-02		11085422	Pressure sensor adapter, CW rotation pump	1
	L400	12-02		11085422	Pressure sensor adapter, CCW rotation pump	1
S45	L030	12-22		140644	Plug assembly	1
	L200	12-22		11049155	High pressure relief valve, 450 bar	1
	L300	12-22		11085422	Pressure sensor adapter, CW rotation pump	1
	L400	12-22		11085422	Pressure sensor adapter, CCW rotation pump	1



Variable displacement pump



E100 744E

* = included in overhaul seal kit Q210


Variable displacement pump
Charge pump

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A	QS100	10-08		11075695	Charge pump kit, 26 cc (SB-2011-023)	1
	QS100	05-18	10-07	11004702	Charge pump kit, 26 cc	1
	S300	06-19		11126778	Seal ring (SB-2013-019)	2
L	QS100	10-08		11069135	Charge pump kit, 34 cc (SB-2011-023)	1
	QS100	05-18	10-07	11004704	Charge pump kit, 34 cc	1
	S300	06-19		11126778	Seal ring (SB-2013-019)	2
N	G600	10-15		676734 (9005110-9500)	Plug assembly	1
N (metric)	G600	10-15		11164205	Plug assembly, M42	1
R	QS100	11-45		11070194	Charge pump kit, 52 cc	1
	S300	11-45		11126778	Seal ring (SB-2013-019)	2
T	QS100	09-47		11124502	Charge pump kit, 40 cc	1
	S300	09-47		11126778	Seal ring (SB-2013-019)	2

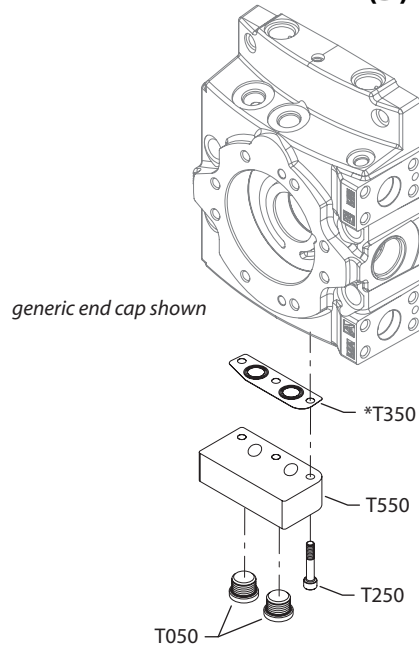
Filtration

C	T025	07-25		141269	Plug assembly	2
	T035	07-25		761148 (9004100-0260)	O-ring	1
	T045	07-25		314500 (9004100-1250)	O-ring	1
	T100	07-25		140736	Pressure filter adapter assembly	1
	T150	07-25		11008261	Cover	1
	T200	07-25		11031852	Filtration sensor (SB-2007-052)	1
	T250	07-25		11128665	Screw, M8 x 25	3
	T300	07-25		140560	Screw, M3 x 16	2
	T350	07-25		140737	Filter adapter gasket	1
	T500	07-25		000943 (9004100-2300)	O-ring	1
	T550	07-25		11008273	Adapter plate	1
	T600	07-25		376624	Screw, M8 x 45	3
	T650	07-25		140737	Gasket	1

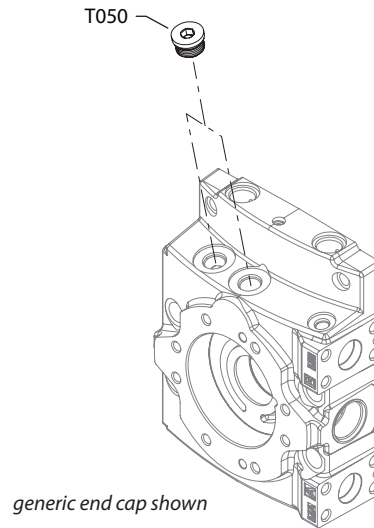


Variable displacement pump

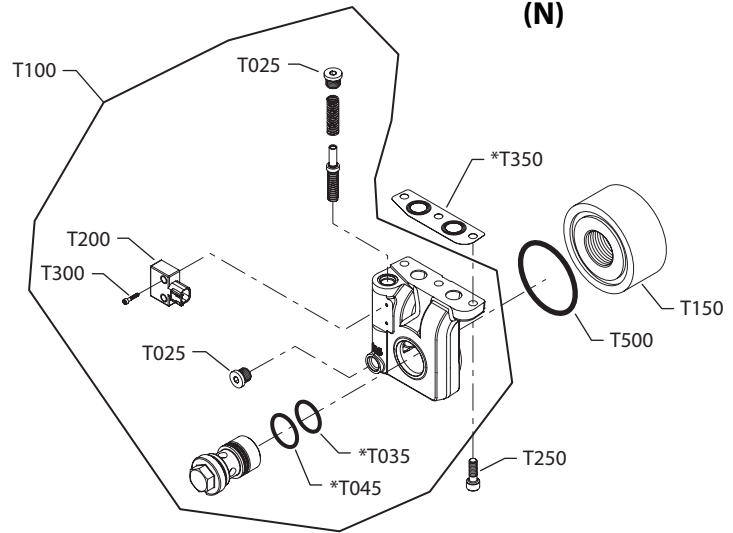
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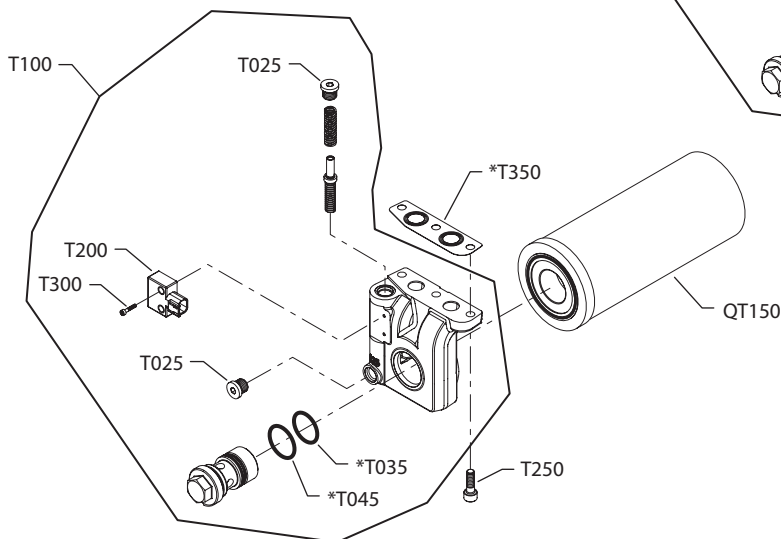
(E & P)



(N)



(M & S)



E101 910E

* = included in overhaul seal kit Q210

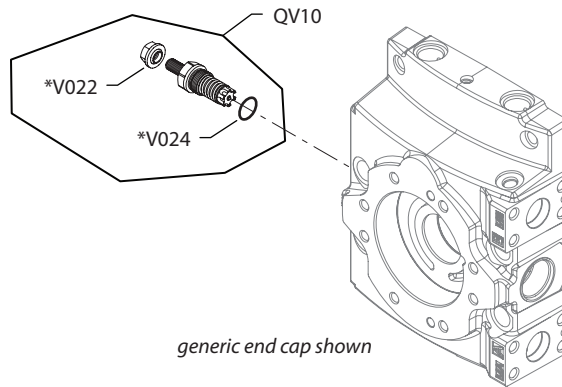

Variable displacement pump
Filtration

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D	T050	09-43		664524 (9005110-9000)	Plug assembly	2
	T250	09-43		092106	Screw, M8 x 35	3
	T350	09-43		140737	Filter adapter gasket	1
	T550	09-43		11074118	Adapter plate	1
D (metric)	T050	09-43		11178807	Plug assembly, M27	2
	T250	09-43		092106	Screw, M8 x 35	3
	T350	09-43		140737	Filter adapter gasket	1
	T550	09-43		11172774	Adapter plate, metric	1
E	T050	09-43		664524 (9005110-9000)	Plug assembly	2
L		05-18		None		
M	QT150	05-18		11004919	Filter assembly	1
	T025	05-18		141269	Plug assembly	2
	T035	05-18		761148 (9004100-0260)	O-ring	1
	T045	05-18		314500 (9004100-1250)	O-ring	1
	T100	05-18		140736	Pressure filter adapter assembly	1
	T200	05-18		11031852	Filtration sensor (SB-2007-052)	1
	T250	05-18		11128665	Screw, M8 x 25	3
	T300	05-18		140560	Screw, M3 x 16	2
	T350	05-18		140737	Filter adapter gasket	1
	N	T025	08-47		141269	Plug assembly
T035		08-47		761148 (9004100-0260)	O-ring	1
T045		08-47		314500 (9004100-1250)	O-ring	1
T100		08-47		140736	Pressure filter adapter assembly	1
T150		08-47		11008261	Cover	1
T200		08-47		11031852	Filtration sensor (SB-2007-052)	1
T250		08-47		11128665	Screw, M8 x 25	3
T300		08-47		140560	Screw, M3 x 16	2
T350		08-47		140737	Filter adapter gasket	1
T500		08-47		000943 (9004100-2300)	O-ring	1
P	T050	05-18		664524 (9005110-9000)	Plug assembly	2
S	QT150	05-18		11004919	Filter assembly	1
	T025	05-18		141269	Plug assembly	2
	T035	05-18		761148 (9004100-0260)	O-ring	1
	T045	05-18		314500 (9004100-1250)	O-ring	1
	T100	05-18		11000746	Pressure filter adapter assembly	1
	T200	05-18		11031853	Filtration sensor (SB-2007-052)	1
	T250	05-18		11128665	Screw, M8 x 25	3
	T300	05-18		140560	Screw, M3 x 16	2
	T350	05-18		140737	Filter adapter gasket	1



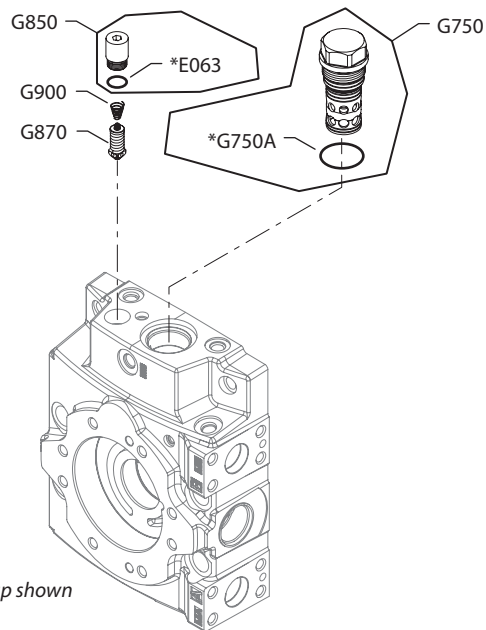
Variable displacement pump

(18 - 34)



generic end cap shown

(G14 - G34)



generic end cap shown

E100 758E

* = included in overhaul seal kit Q210


Variable displacement pump
Charge pressure relief

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
18-22	QV10	05-18		11004711	Charge relief valve kit	1
	V022	05-18		612291 (9003508-0008)	Seal nut	1
	V024	05-18		001149 (9004201-6200)	O-ring	1
24-34	QV10	05-18		11017127	Charge relief valve kit	1
	V022	05-18		612291 (9003508-0008)	Seal nut	1
	V024	05-18		001149 (9004201-6200)	O-ring	1

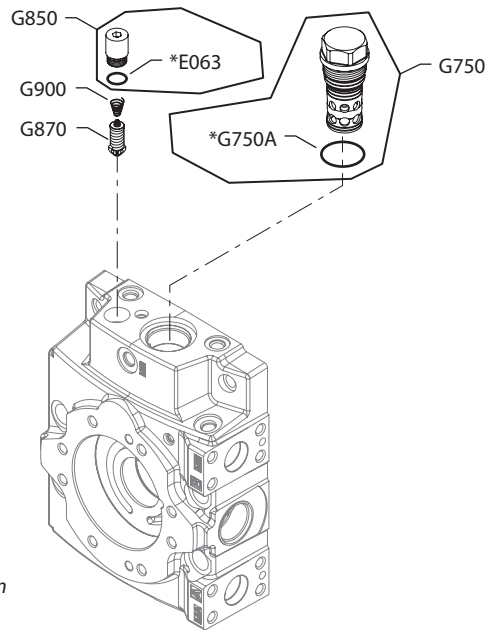
ISL settings

G14	E063	05-18		001131 (9004201-5000)	O-ring	1
	G750	05-18		11137759	ISL valve assembly, 5.5mm orifice	1
	G750A	05-18		140866	O-ring	1
	G850	05-18		11126727	Plug assembly	1
	G870	05-18		3103375-0140	SCR valve assembly, 140 bar [2030 psi]	1
	G900	05-18		4800780	Spring	1
	G18	E063	05-18		001131 (9004201-5000)	O-ring
G750		05-18		11137759	ISL valve assembly, 5.5mm orifice	1
G750A		05-18		140866	O-ring	1
G850		05-18		11126727	Plug assembly	1
G870		05-18		3103375-0175	SCR valve assembly, 175 bar [2538 psi]	1
G900		05-18		4800780	Spring	1
G21		E063	05-18		001131 (9004201-5000)	O-ring
	G750	05-18		11137759	ISL valve assembly, 5.5mm orifice	1
	G750A	05-18		140866	O-ring	1
	G850	05-18		11126727	Plug assembly	1
	G870	05-18		3103375-0210	SCR valve assembly, 210 bar [3045 psi]	1
	G900	05-18		4800780	Spring	1
	G23	E063	05-18		001131 (9004201-5000)	O-ring
G750		05-18		11137759	ISL valve assembly, 5.5mm orifice	1
G750A		05-18		140866	O-ring	1
G850		05-18		11126727	Plug assembly	1
G870		05-18		3103375-0230	SCR valve assembly, 230 bar [3335 psi]	1
G900		05-18		4800780	Spring	1
G25		E063	05-18		001131 (9004201-5000)	O-ring
	G750	05-18		11137759	ISL valve assembly, 5.5mm orifice	1
	G750A	05-18		140866	O-ring	1
	G850	05-18		11126727	Plug assembly	1
	G870	05-18		3103375-0250	SCR valve assembly, 250 bar [3625 psi]	1
	G900	05-18		4800780	Spring	1
	G34	E063	05-18		001131 (9004201-5000)	O-ring
G750		05-18		11137759	ISL valve assembly, 5.5mm orifice	1
G750A		05-18		140866	O-ring	1
G850		05-18		11126727	Plug assembly	1
G870		05-18		3103375-0345	SCR valve assembly, 345 bar [5000 psi]	1
G900		05-18		4800780	Spring	1



Variable displacement pump

(GAA, GAB, GAC, GAD, GAE, GAS & GAT)



generic end cap shown

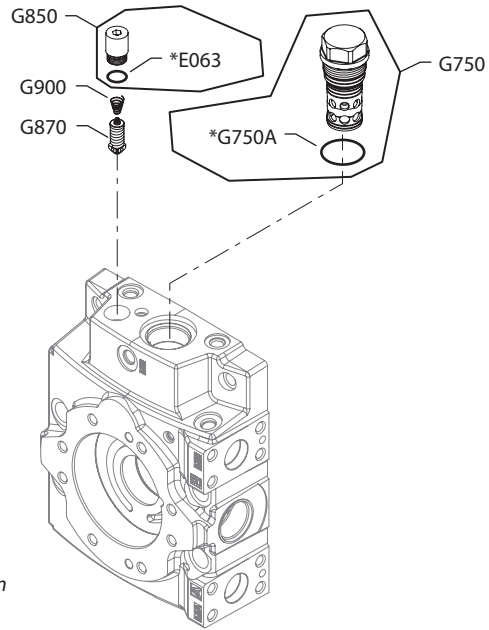

Variable displacement pump
ISL settings

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
GAA	E063	05-18		001131 (9004201-5000)	O-ring	1
	G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
	G750A	05-18		140866	O-ring	1
	G850	05-18		11126727	Plug assembly	1
	G870	05-18		3103375-0140	SCR valve assembly, 140 bar [2030 psi]	1
	G900	05-18		4800780	Spring	1
	GAB	E063	05-18		001131 (9004201-5000)	O-ring
G750		05-18		11145639	ISL valve assembly, 4.4mm orifice	1
G750A		05-18		140866	O-ring	1
G850		05-18		11126727	Plug assembly	1
G870		05-18		3103375-0175	SCR valve assembly, 175 bar [2538 psi]	1
G900		05-18		4800780	Spring	1
GAC		E063	05-18		001131 (9004201-5000)	O-ring
	G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
	G750A	05-18		140866	O-ring	1
	G850	05-18		11126727	Plug assembly	1
	G870	05-18		3103375-0210	SCR valve assembly, 210 bar [3045 psi]	1
	G900	05-18		4800780	Spring	1
	GAD	E063	05-18		001131 (9004201-5000)	O-ring
G750		05-18		11145639	ISL valve assembly, 4.4mm orifice	1
G750A		05-18		140866	O-ring	1
G850		05-18		11126727	Plug assembly	1
G870		05-18		3103375-0230	SCR valve assembly, 230 bar [3335 psi]	1
G900		05-18		4800780	Spring	1
GAE		E063	05-18		001131 (9004201-5000)	O-ring
	G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
	G750A	05-18		140866	O-ring	1
	G850	05-18		11126727	Plug assembly	1
	G870	05-18		3103375-0250	SCR valve assembly, 250 bar [3625 psi]	1
	G900	05-18		4800780	Spring	1
	GAS	E063	05-18		001131 (9004201-5000)	O-ring
G750		15-16		11145639	ISL valve assembly, 4.4mm orifice	1
G750A		15-16		140866	O-ring	1
G850		15-16		11126727	Plug assembly	1
G870		15-16		11165436	SCR valve assembly, 110 bar [1595 psi]	1
G900		15-16		4800780	Spring	1
GAT		E063	05-18		001131 (9004201-5000)	O-ring
	G750	16-09		11155320	ISL valve assembly, 5.5mm orifice	1
	G750A	16-09		140866	O-ring	1
	G850	16-09		11126727	Plug assembly	1
	G870	16-09		11165436	SCR valve assembly, 110 bar [1595 psi]	1
	G900	16-09		4800780	Spring	1



Variable displacement pump

(MAA, MAB & YAJ)



generic end cap shown

E103 377E

* = included in overhaul seal kit Q210


Variable displacement pump
ISL settings

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
MAA	063	05-18		001131 (9004201-5000)	O-ring	1
	G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
	G750A	05-18		140866	O-ring	1
	G850	05-18		11126727	Plug assembly	1
	G870	05-18		3103375-0140	SCR valve assembly, 140 bar [2030 psi]	1
	G900	05-18		4800780	Spring	1
	MAB	E063	05-18		001131 (9004201-5000)	O-ring
G750		05-18		11145639	ISL valve assembly, 4.4mm orifice	1
G750A		05-18		140866	O-ring	1
G850		05-18		11126727	Plug assembly	1
G870		05-18		3103375-0175	SCR valve assembly, 175 bar [2538 psi]	1
G900		05-18		4800780	Spring	1
YAJ		E063	05-18		001131 (9004201-5000)	O-ring
	G750	05-18		11145639	ISL valve assembly, 4.4mm orifice	1
	G750A	05-18		140866	O-ring	1
	G850	05-18		11126727	Plug assembly	1
	G870	05-18		3103375-0140	SCR valve assembly, 140 bar [2030 psi]	1
	G900	05-18		4800780	Spring	1


Variable displacement pump
Overhaul seal kit

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



Service Bulletin: SB-2006-030

Products affected

H1 147 and 165cc pumps

Subject

Control, Servo piston and Housing

Description

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

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

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

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

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

Models affected

All H1 147 and 165cc pumps.

Serial numbers

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

Part numbers affected

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

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

Parts disposition

■ Interchangeable



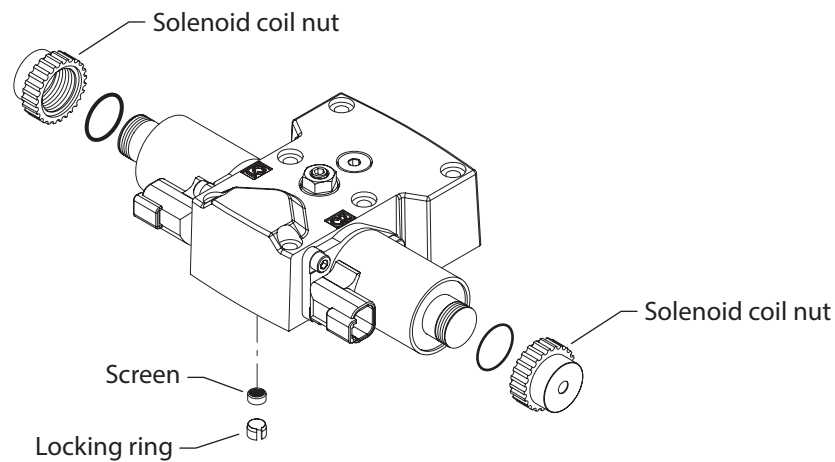
Service Bulletin: SB-2007-033

Products affected H1 pumps

Subject Control solenoid nut and screen locking ring

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

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



Models affected All H1 147 and 165cc pumps.

Serial numbers Locking ring and solenoid nut.

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

Locking ring only

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

Part numbers affected

Description	Part number
Locking ring	11012505

Parts disposition

- Interchangeable
- Use parts in stock

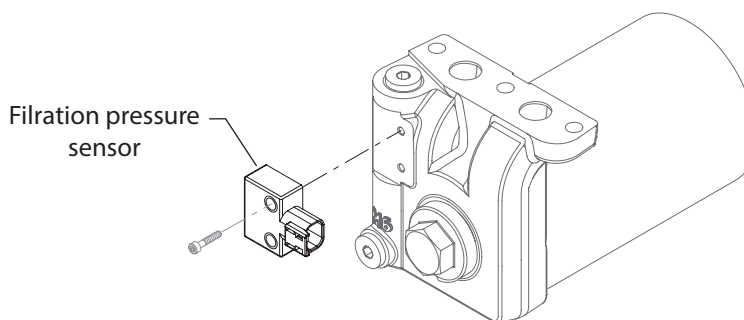
Service Bulletin: SB-2007-052

Products affected H1 pumps

Subject Filtration pressure sensor

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

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



Models affected All H1 pumps with 'M' or 'S' filtration option.

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

Part numbers affected

Description/Option	Old part number	New part number
Sensor/M	140355	11031852
Sensor/S	11000357	11031853

Parts disposition

- Interchangeable
- Use parts in stock



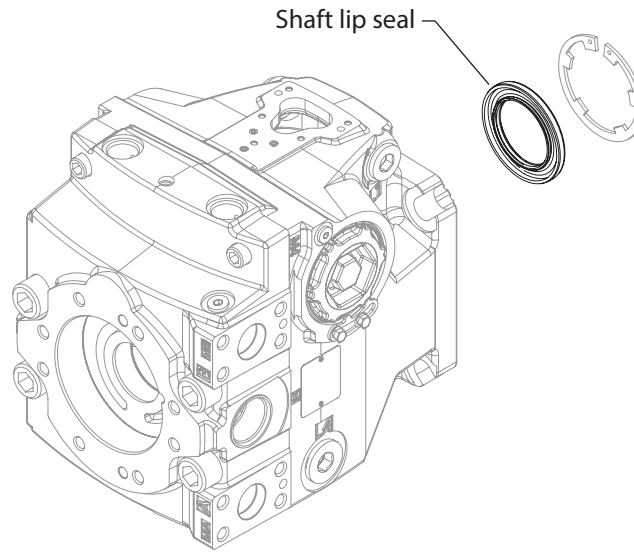
Service Bulletin: SB-2008-014

Products affected H1 147 and 165cc pumps

Subject Shaft lip seal

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

The new seal is completely interchangeable with the old seal.



Models affected All H1 147 and 165cc pumps.

Serial numbers This change became effective at serial number N-08-09-xxxxx.

Part numbers affected

Description	Old part number	New part number
Lip seal	140093	11024711

Parts disposition ■ Interchangeable

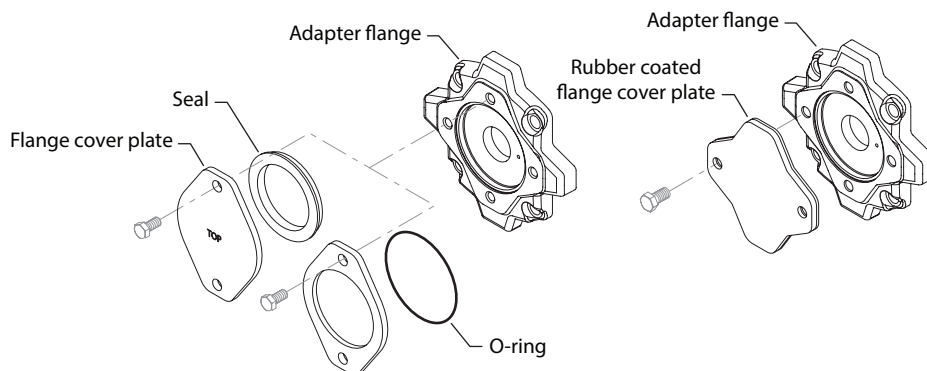


Service Bulletin: SB-2008-038

Products affected H1 pumps

Subject Rubber coated auxiliary flange cover

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



Models affected All H1 pumps.

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

Part numbers affected	Pump size	Pad type	Description	Old part number	New part number
	45 and 53 cc	A	Cover plate	4460586	11017125
			Seal	4800482	
	78 cc	A	Cover plate	9802336	11017125
			O-ring	9004104-1520	
	147 and 165 cc	A	Cover plate	9802336	11017125
			O-ring	9004104-1520	
	45 and 53 cc	B	Cover plate	8801059	11023746
			Seal	8801061	
	78 cc	B	Cover plate	4460370	11023746
			O-ring	9004104-1540	
	147 and 165 cc	B	Cover plate	4460370	11023747
			O-ring	9004104-1540	
	78 cc	C	Cover plate	8800406	11023750
			O-ring	9004104-1580	
	147 and 165 cc	C	Cover plate	8800406	11023748
			O-ring	9004104-1580	
	147 and 165 cc	D	Cover plate	338400	11023751
			O-ring	726977	

Parts disposition ■ Interchangeable

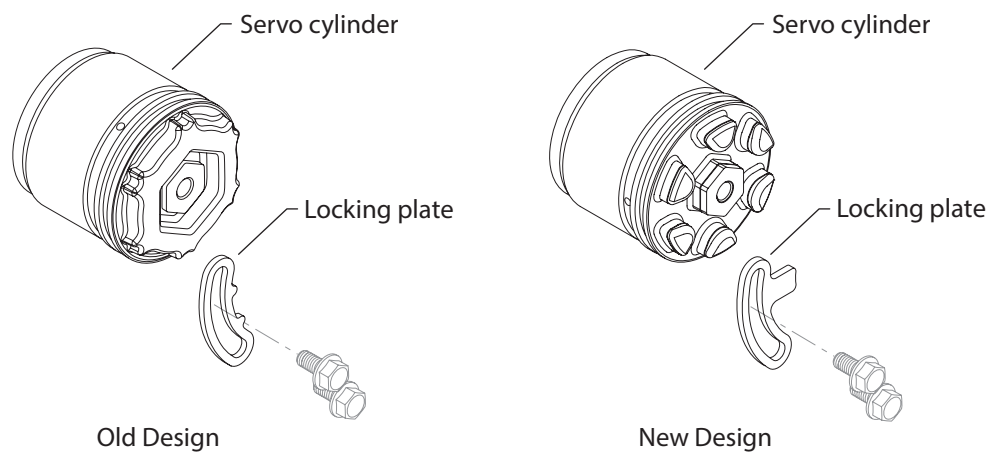


Service Bulletin: SB-2009-046

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

Subject Servo cylinder and locking plate design change

Description As a product improvement, Sauer-Danfoss has changed the servo cylinder and locking plate. The new servo cylinder has a larger locking area to allow for a larger locking plate tab for added strength. The old servo cylinders are obsolete and no longer available for service. The old locking plate will remain available for repair. The new and old designs are interchangeable, if both parts are replaced together.



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

Serial numbers This change became effective at serial number:

78 cc pumps	N-10-29-xxxxx (21 July 2010)
115/130 cc pumps	N-10-35-xxxxx (30 August 2010)
147/165 cc pumps	N-10-28-xxxxx. (15 July 2010)

Part numbers affected

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

Parts disposition ■ Interchangeable - only if both parts are replaced together

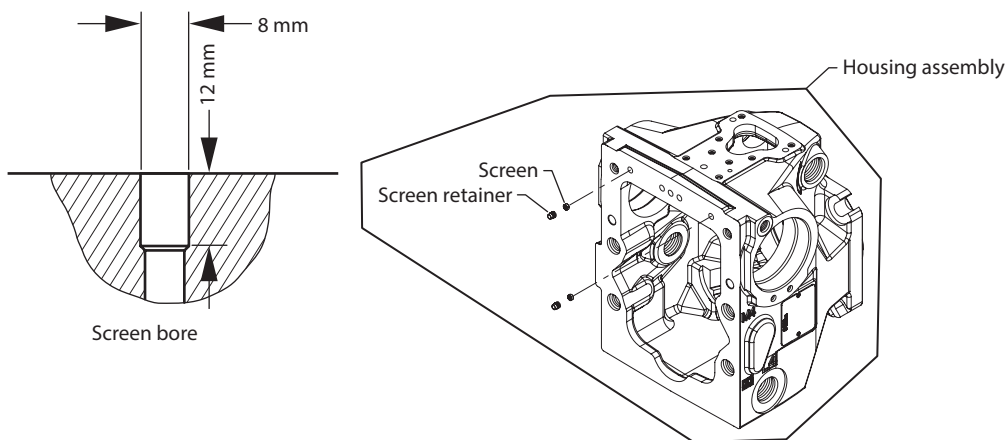


Service Bulletin: SB-2009-068

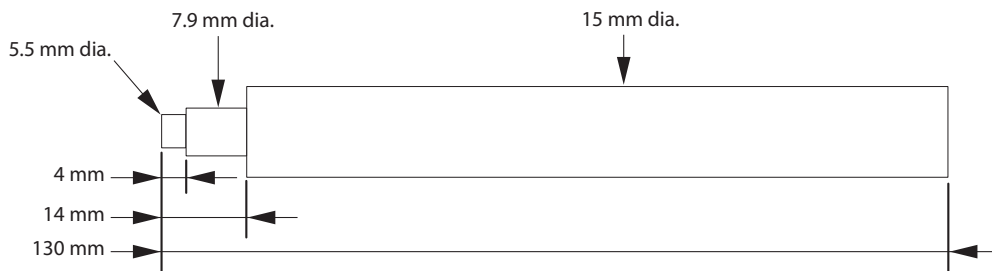
Products affected H1 69/78, 115/130 and 147/165cc pumps

Subject Design of servo screen retention in pump housing

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



Installation tool



Models affected H1 147 and 165cc pumps.

Serial numbers This change became effective at serial number:
 H000G - N09-25-00059
 H000Z - N09-26-00036

Part numbers affected

Description	Old part number	New assembly part number
147/165 cc (H000G)	11004991	11005674
147/165 cc (H000Z)	11005012	11005677

Parts disposition ■ Interchangeable when old housings are reworked.



Service Bulletin: SB-2011-002

Products affected

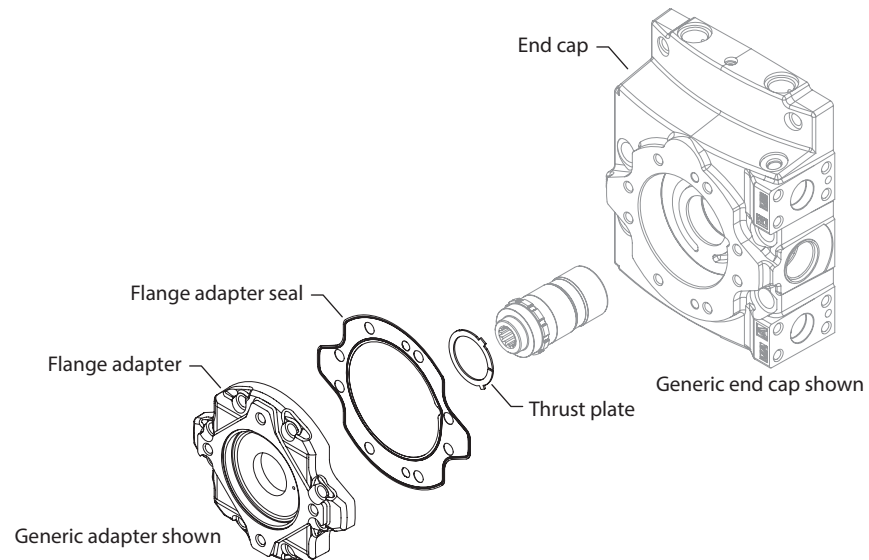
H1 147/165cc pumps

Subject

Flange adapter and end cap redesign

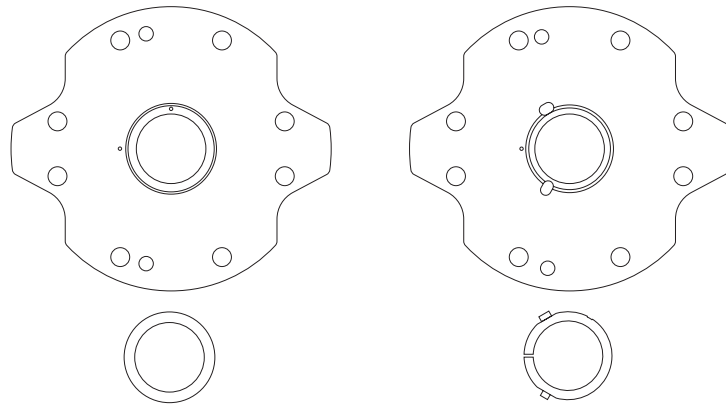
Description

As a product improvement, Sauer-Danfoss has redesigned the flange adapter and end cap. The new design also requires the use of a new thrust plate and flange adapter seal. Individual piece parts are not interchangeable. The old adapter, end cap and thrust plate are no longer available. The old seal will remain available. Both seals are now included in the overhaul seal kit. A flange replacement kit has been created to be used with the old end cap and seal. If a new end cap is required, all parts must be replaced.



Old design

New design




Service Bulletin: SB-2011-002

Models affected H1 147 and 165cc pumps

Serial numbers The change became effective at serial number N10-39-xxxxx. (26 September 2010)

Part numbers affected

Description	Old part #	New part #	Replacement adapter kit (to be used prior to 10-39)
Thrust plate	140973	11001182	see appropriate replacement kit
Adapter seal	140703	11002236	-
Adapter (NN)	140969	11002194	11086819
Adapter SAE A (H1)	140694	11002191	11086819
Adapter SAE A (H2)	140694	11002191	11086818
Adapter SAE B (H3)	140696	11002192	11086817
Adapter SAE B (H5)	140696	11002192	11086817
Adapter SAE C (H6)	140698	11002193	11086816
End cap assembly CW (D2)	11003533	11050309	-
End cap assembly CW (D3)	11003536	11050310	-
End cap assembly CCW (D3)	11003549	11050350	-
End cap assembly CW (D4)	11003545	11050342	-
End cap assembly CCW (D4)	11003556	11050351	-
End cap assembly CW (D5)	11003537	11050343	-
End cap assembly CCW (D5)	11003550	11050352	-
End cap assembly CW (D6)	11003539	11050344	-
End cap assembly CCW (D6)	11003552	11050353	-
End cap assembly CW (D7)	11003540	11050346	-
End cap assembly CCW (D7)	11003553	11050354	-
End cap assembly CW (D8)	11003542	11050347	-
End cap assembly CCW (D8)	11003554	11050355	-
End cap assembly CW (D9)	11003544	11050348	-
End cap assembly CCW (D9)	11003558	11050356	-
End cap assembly CW (E8)	11003543	11050349	-
End cap assembly CCW (E8)	11003555	11050357	-

Parts disposition

- Non-interchangeable
- Use parts in stock



Service Bulletin: SB-2011-023

products affected

H1 147/165cc pumps

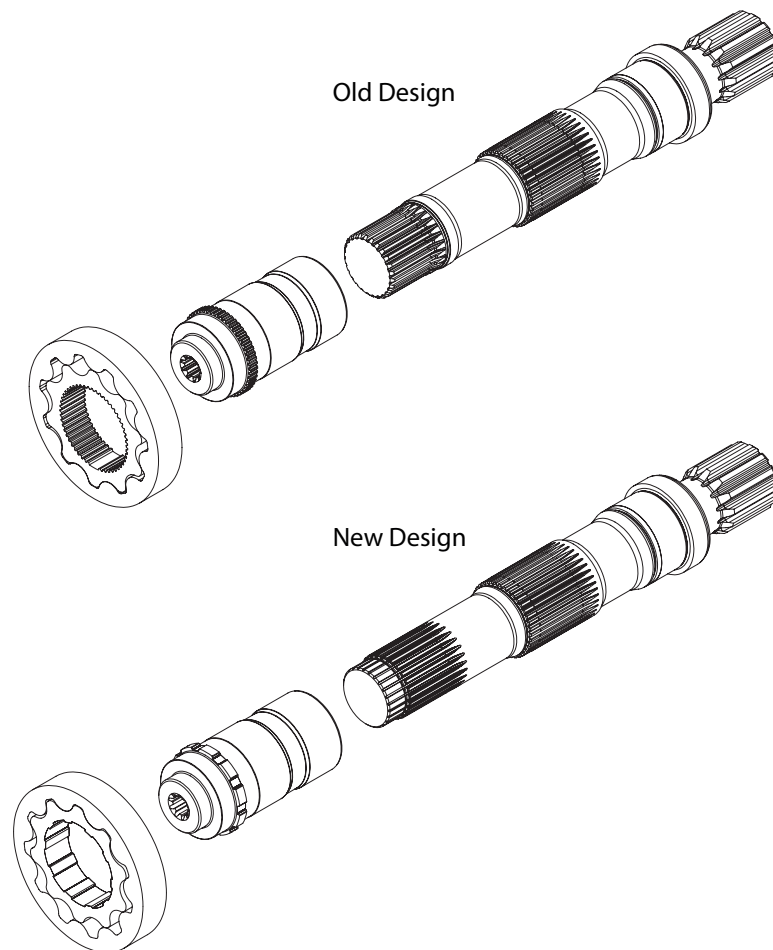
subject

Gerotor, charge pump shaft and pump shaft design change

description

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

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





Service Bulletin: SB-2011-023

Models affected H1 147 and 165cc pumps.

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

Part numbers affected	Description	Old part number	New part number
	Charge kit 26 cc	11004702	11075695
	Charge kit 34 cc	11004704	11069135
	Charge pump shaft, H1P147-165 9t 16/32	140972	11064260
	Charge pump shaft, H1P147-165 13t 16/32	140975	11064272
	Charge pump shaft, H1P147-165 14t 12/24	140965	11064276
	Charge pump shaft, H1P147-165 13t 8/16	140966	11045667
	Charge pump shaft, H1P147-165 15t 16/32	11000658	11064275
	Charge pump shaft, H1P147-165 11t 16/32	140704	11064258
	Shaft H1P147-165 27t 16/32 special	140254	11047745
	Shaft H1P147-165 13t 8/16	140412	11049118
	Shaft H1P147-165 taper 44-3 keyway	11022051	11049119

- Parts disposition**
- Non-interchangeable
 - Use parts in stock



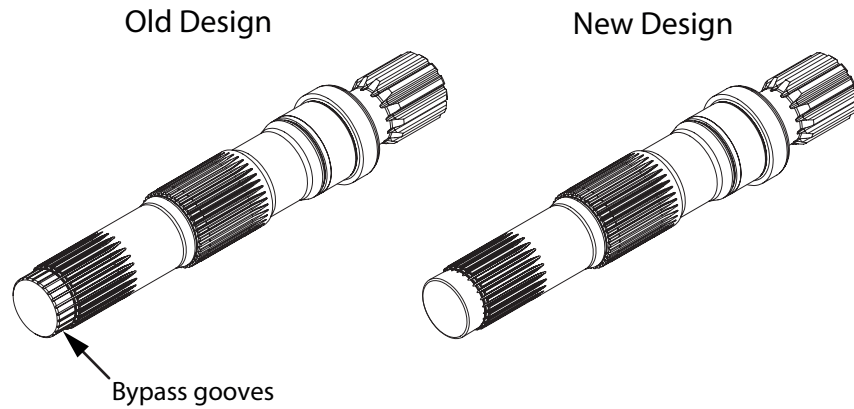
Service Bulletin: SB-2012-003

Products affected H1 147/165cc pumps

Subject Shaft change

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

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



Models affected H1 147 and 165cc pumps.

Serial numbers see chart below

Part numbers affected

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

Parts disposition

- Non-interchangeable
- Use parts in stock



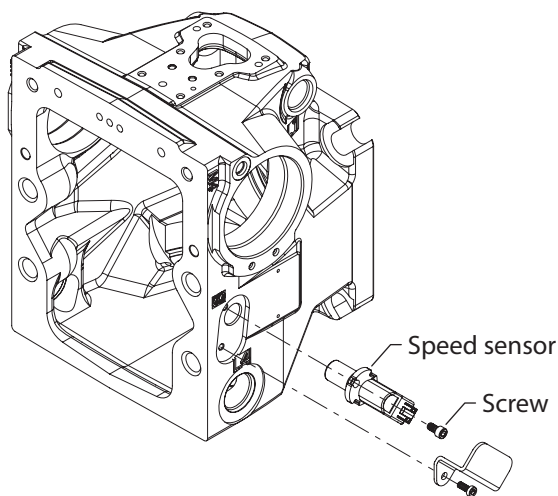
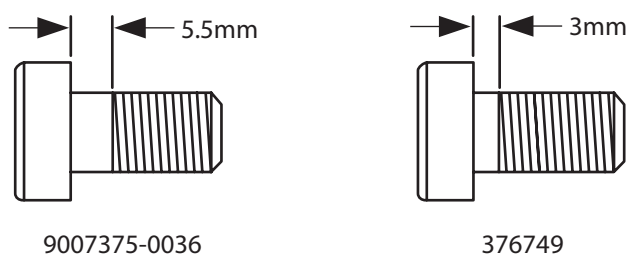
Service Bulletin: SB-2012-027

Products affected H1 pumps

Subject Speed sensor screw change

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

This part is not interchangeable due to shoulder length.



Models affected H1 pumps with speed sensors

Serial numbers This change took effect at serial number A-12-38-xxxxx (17-September-2012) for 45 thru 68cc pumps.
This change took effect at serial number N-12-43-xxxxx (19-October-2012) for 78 thru 165cc pumps.

Part numbers affected

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

parts disposition

- Interchangeable
- Scrap used parts



Service Bulletin: SB-2012-035

Products affected

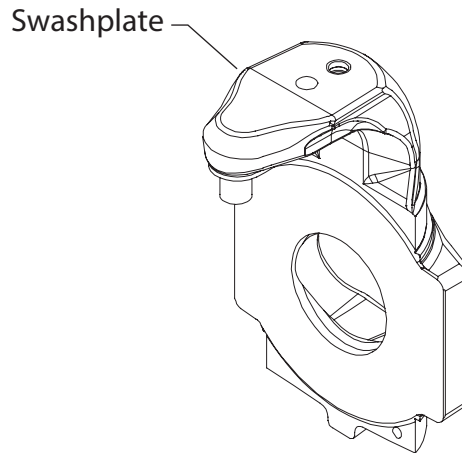
H1 147/165cc pumps

Subject

Swashplate design change

Description

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



Models affected

H1 147/165cc pumps

Serial numbers

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

Part numbers affected

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

Parts disposition

- Non-interchangeable
- Use parts in stock



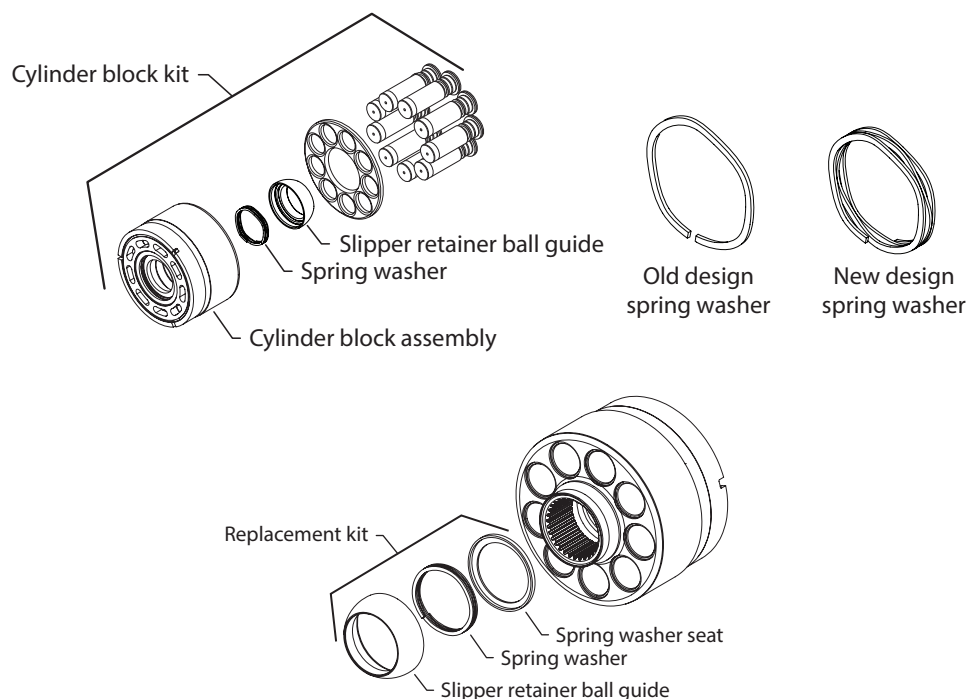
Service Bulletin: SB-2012-037

Products affected H1 147/165cc pumps

Subject Slipper retainer ball guide and spring washer change

Description As a product improvement, the cylinder block kit on H1 147/165cc pumps has been redesigned. The cylinder block, spring washer and slipper retainer ball guide have been changed.

The new parts are not interchangeable with the old parts, and the old parts are no longer available. The cylinder block kit part number has not changed. If an old cylinder block is needed, a new cylinder block kit must be used. If an old spring washer or slipper retainer ball guide is needed, the replacement kit must be used. Replacement kit includes a spring washer seat, which is necessary when using with an old cylinder block.



Models affected H1 147 and 165cc pumps.

Serial numbers This change became effective at serial number N-11-15-xxxxx. (14 April 2011)

Part numbers affected

Description	Part number	Replacement kit
Slipper retainer ball guide	140288	11091046
Spring washer	140291	11091046
Cylinder block kit, 147cc	140478/P	no change
Cylinder block kit with speed ring, 147cc	11082253	no change
Cylinder block kit, 165cc	140284/P	no change
Cylinder block kit with speed ring, 165cc	11082255	no change

Parts disposition

- Non-interchangeable
- Use parts in stock

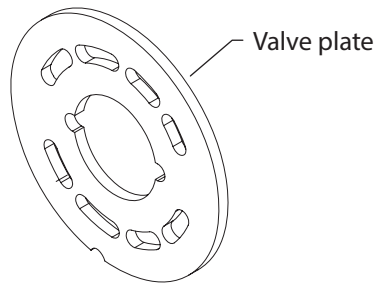


Service Bulletin: SB-2013-003

Products affected H1 pumps

Subject Valve plate change

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



Models affected H1 69 thru 165cc pumps.

Serial numbers see table below

Part numbers affected	Description	Old part number	New part number	Affectivity date
	069/078 R CP17-1.5	11075607	11125564	N-13-05-xxxxx (31 Jan 2013)
	069/078 R CP17+2.5	11076863	11125563	N-13-05-xxxxx (31 Jan 2013)
	069/078 L CP17+2.5	11076865	11125551	N-13-05-xxxxx (31 Jan 2013)
	069/078 L CP17-1.5	11076866	11125562	N-13-05-xxxxx (31 Jan 2013)
	089/100 R CP17-1.5	11077025	11125566	N-13-05-xxxxx (31 Jan 2013)
	089/100 R CP17+2.5	11077027	11125567	N-12-50-xxxxx (12 Dec 2012)
	089/100 L CP17-1.5	11077026	11125568	N-13-05-xxxxx (31 Jan 2013)
	089/100 L CP17+2.5	11077028	11125565	N-12-49-xxxxx (5 Dec 2012)
	115/130 R CP17+2.5	11077029	11125572	N-13-05-xxxxx (25 Jan 2013)
	115/130 R CP17-1.5	11077031	11123707	N-13-05-xxxxx (31 Jan 2013)
	115/130 L CP17+2.5	11077030	11125569	N-13-05-xxxxx (31 Jan 2013)
	115/130 L CP17-1.5	11077062	11125571	N-13-03-xxxxx (16 Jan 2013)
	147/165 R CP17-1.5	11077063	11123708	N-13-05-xxxxx (31 Jan 2013)
	147/165 R CP17+2.5	11077065	11125576	N-13-05-xxxxx (31 Jan 2013)
	147/165 R (larger dia.)	11093335	11126989	N-13-05-xxxxx (31 Jan 2013)
	147/165 L CP17-1.5	11077064	11125575	N-13-03-xxxxx (14 Jan 2013)
	147/165 L CP17+2.5	11077066	11125574	N-13-05-xxxxx (31 Jan 2013)

Parts disposition

- Non-interchangeable
- Use parts in stock



Service Bulletin: SB-2013-019

Products affected

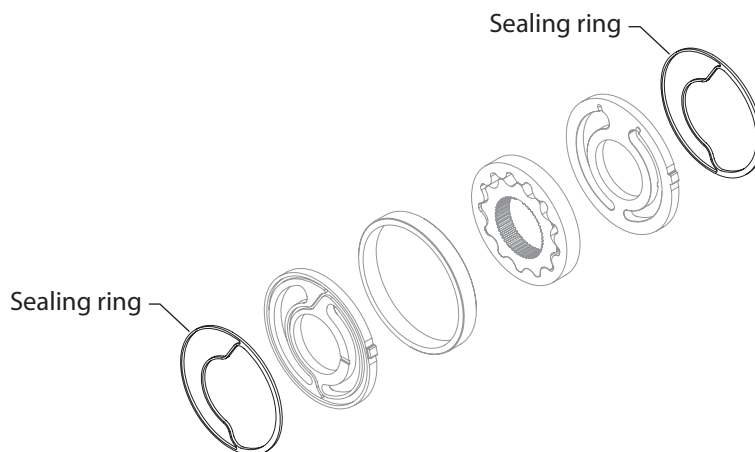
H1 pumps

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



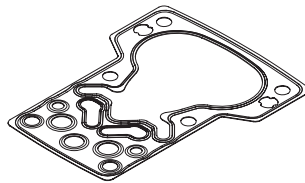
Service Bulletin: SB-2016-033

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

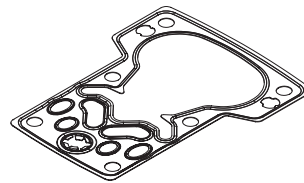
Subject Control Gasket

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

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



Old gasket



New gasket

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

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

Part numbers affected

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

Parts disposition ■ Non-interchangeable - may substitute new gasket for old



Service Bulletin: SB-2016-040

Products affected

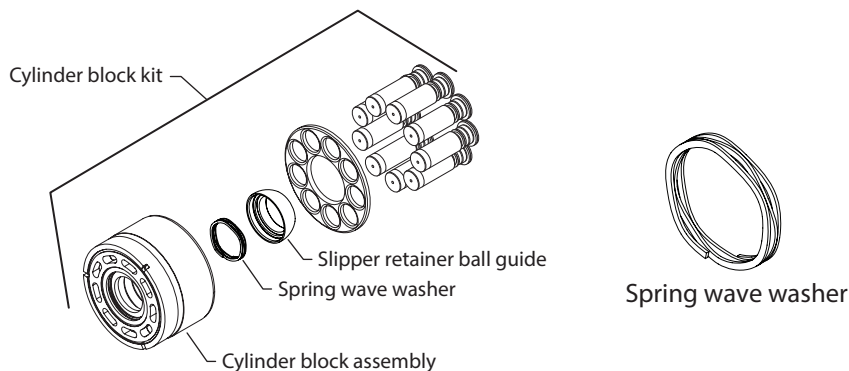
H1 69/78, 89/100, 115/130, 147/165 cc pumps

Subject

Cylinder block wave spring

Description

Danfoss Power Solutions has made a supplier change to the wave spring washer. The part number has also been changed for tracking purposes. Parts are completely interchangeable. Old parts will become obsolete and no longer available as a service part.



Models affected

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

Serial numbers

This change became effective for 69/78cc pumps on N-16-37-xxxxx (12Sept2016)
 This change became effective for 89/100cc pumps on N-16-37-xxxxx (12Sept2016)
 This change became effective for 115/130cc pumps on N-16-47-xxxxx (18Nov2016)
 This change became effective for 147/165cc pumps on N-16-44-xxxxx (04Nov2016)

Part numbers affected

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

Parts disposition

■ Interchangeable



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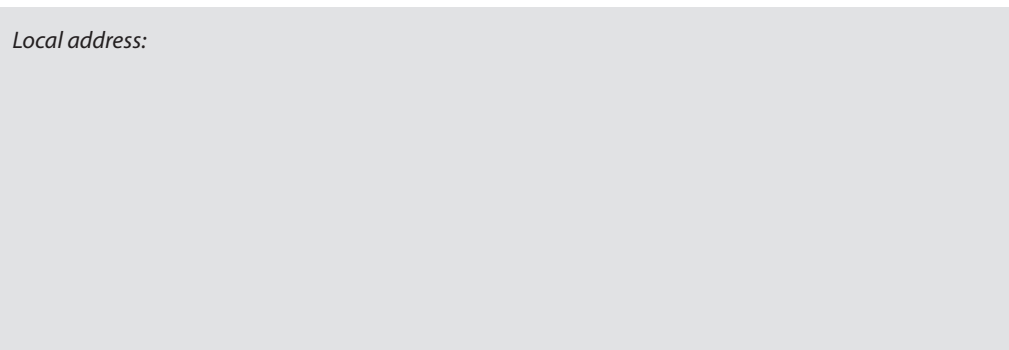
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