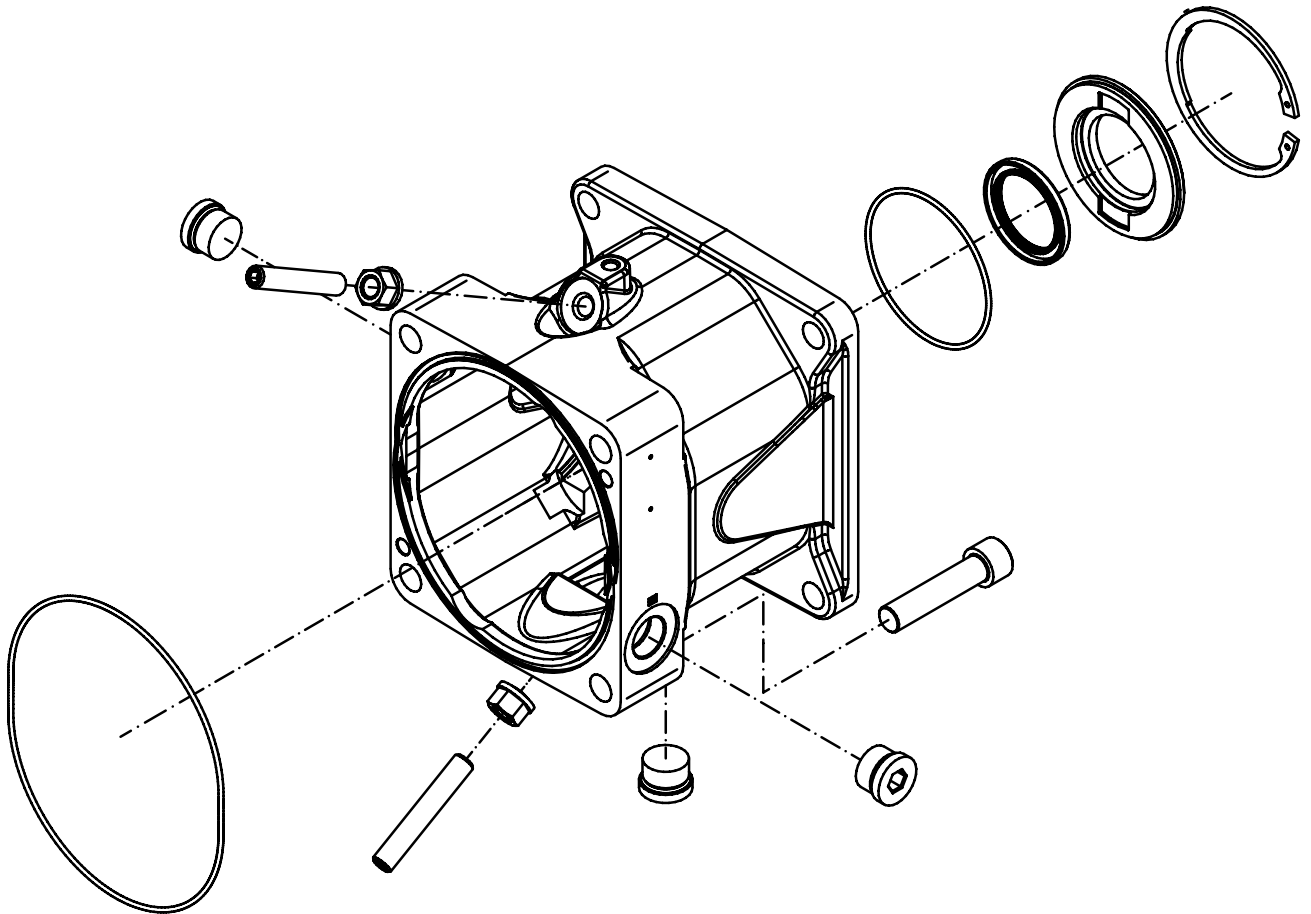


Parts Manual

D1 High Power Open Circuit Pump

Size 145



**Version****History**

Table of Revisions

Date	Page	Changed	Rev.
March 2017		Fifth edition	0202
January 2017		- L1410531 was splitted to 3 parts manuals from last edition. <ul style="list-style-type: none"> • L1410531: Parts Manual for Size 145 • AX00000310: Parts Manual for Size 193 • AX00000311: Parts Manual for Size 260 - Updated all part numbers and drawings	0201
June 2016		Third edition - added Size 260	0102
Apr 2016		Converted to Danfoss layout	0101
Jul 2015		Second edition	AB
Jan 2015		First edition	AA



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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 D1 145cc variable displacement pump.

The parts listed include all parts which may be used when performing either “Minor Repairs”, “Major Repairs” or “Conversions” on the D1 145cc pump.

Nameplate

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

Model Number

The Danfoss model number is used by the factory in manufacturing. On repeat orders, a complete unit can be ordered by the model number.

Model Code

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

Serial Number

The Danfoss serial number is used to identify the manufacture date and the unit sequence in the build. The serial number is also used to identify the units warranty time period.

The letter code indicates the location of original manufacture (assembly). “H” indicates the unit was originally assembled in Haiyan, China.

The first number (2 digits) indicates the year of manufacture. (“14” would indicate the unit was manufactured in 2014).

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.

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 D1 units results in a simplified service parts list and part number identification procedure.

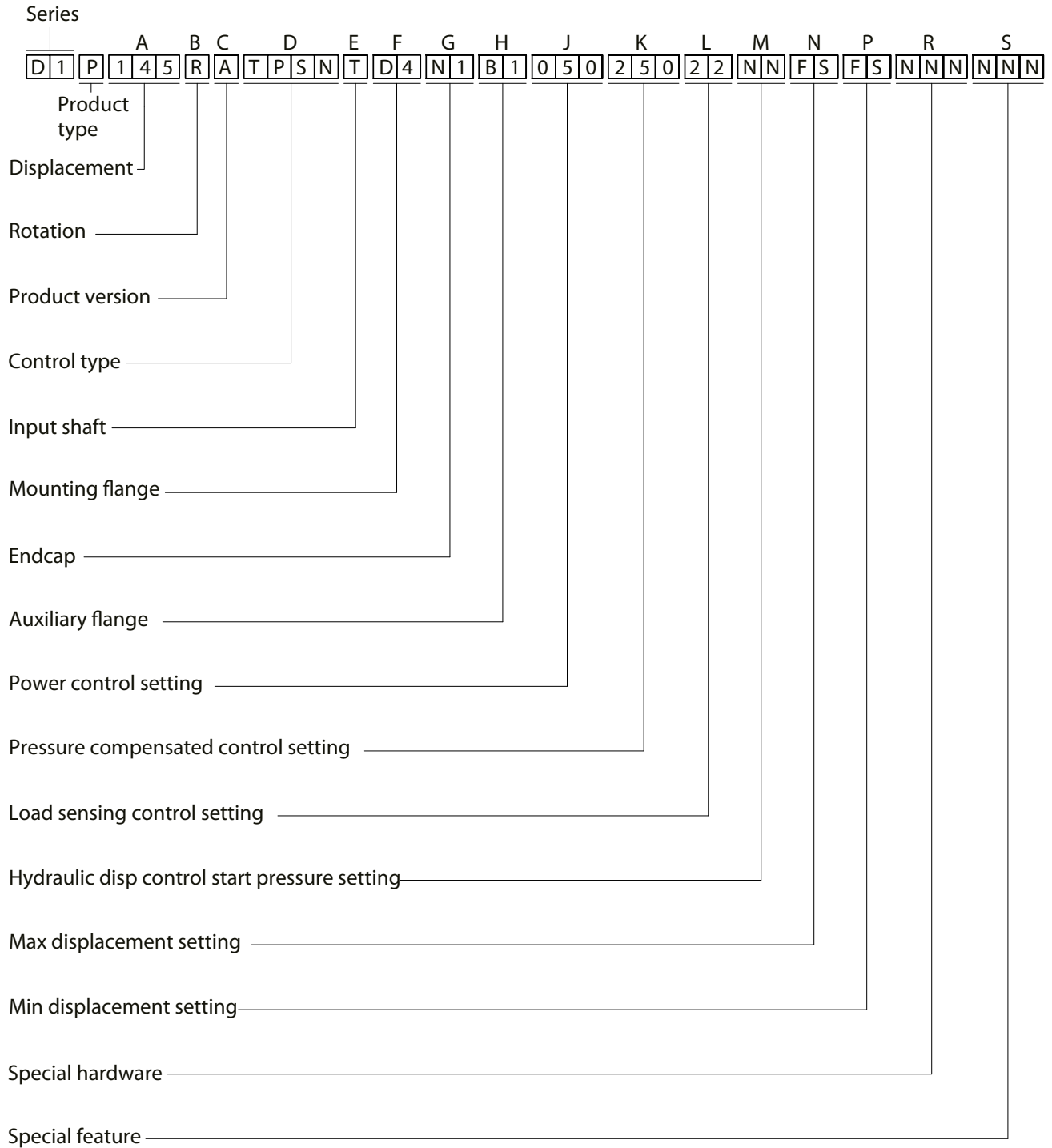
The same item numbers are used for same part names on all units within a product type. (Example: The shaft - Item E100 has the same item number on all pumps.)



Notes

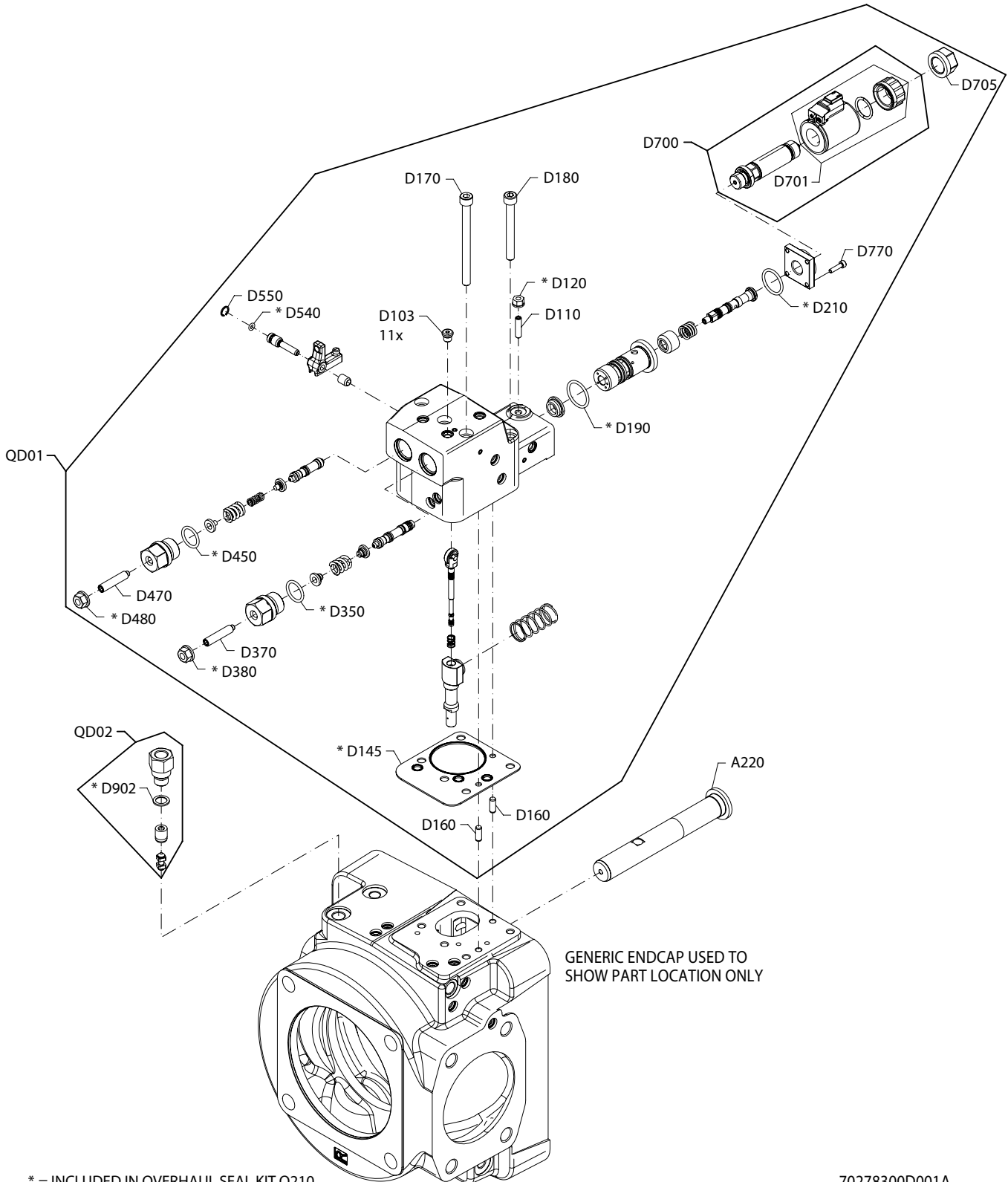


Order Code



Control Type

TPE5



* = INCLUDED IN OVERHAUL SEAL KIT Q210

70278300D001A



Control Type

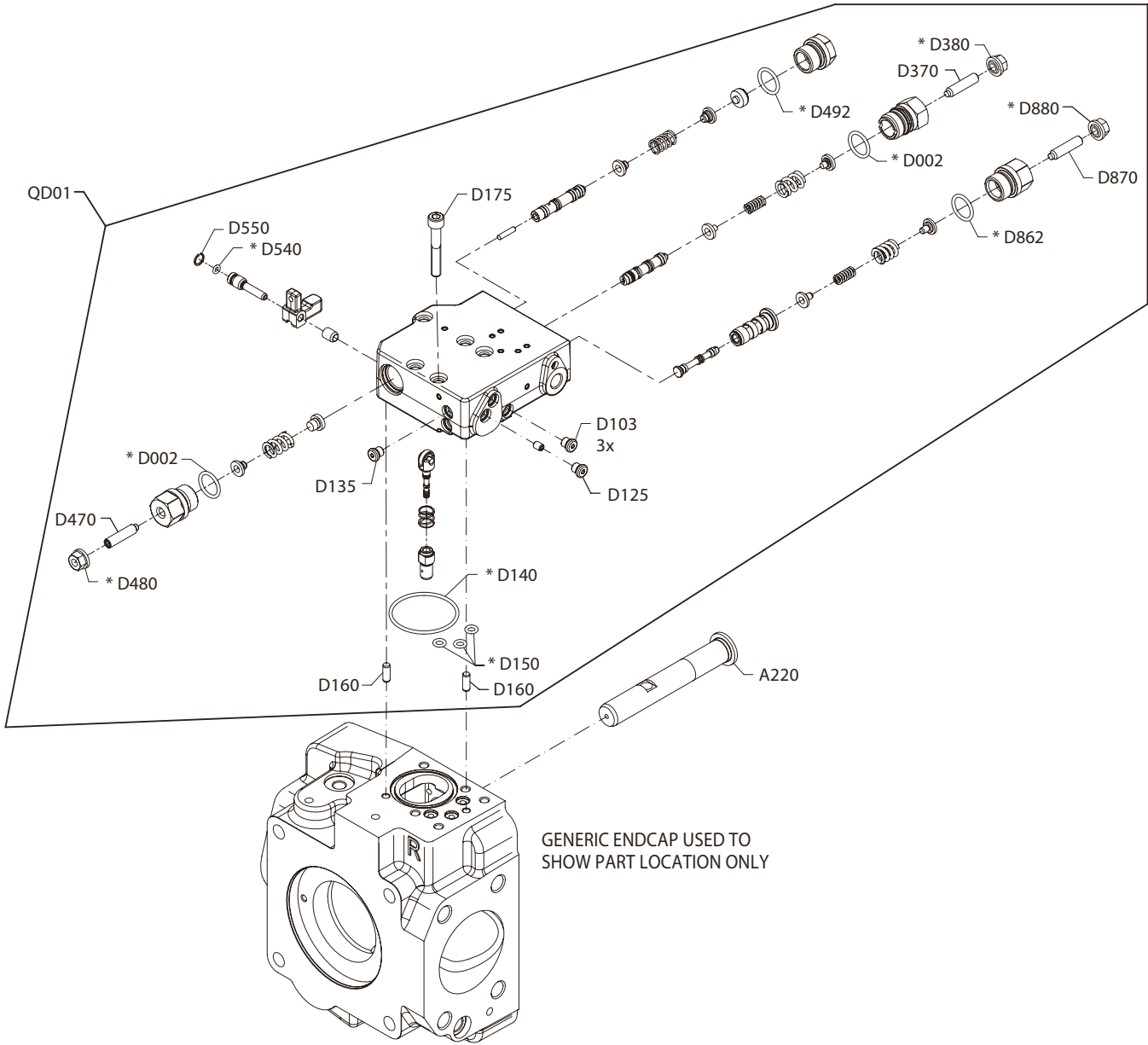
TPE5

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
TPE5	D103	16-01		11040532	PLUG ASSY	11
	D110	16-01		11126005	SCREW-SOC	1
	D120	16-01		9003509-0006	NUT-HEX SEAL	1
	D145	16-01		11168710	SEAL	1
	D160	16-01		11130807	PIN-DOWEL	2
	D170	16-01		11125762	SCREW-SOC	3
	D180	16-01		11128407	SCREW-SOC	2
	D190	16-01		9004104-1200	O-RING	1
	D210	16-01		11130945	O-RING	1
	D350	16-01		9004104-1160	O-RING	1
	D370	16-01		11167267	SCREW-SOC	1
	D380	16-01		612291	NUT-HEX SEAL	1
	D450	16-01		9004104-1160	O-RING	1
	D470	16-01		11167267	SCREW-SOC	1
	D480	16-01		612291	SEAL-LOCK NUT	1
	D540	16-01		9004104-0100	O-RING	1
	D550	16-01		11130806	RETAINER RING	1
	D700	16-01		11146859	SOLENOID	1
	D701	16-01		11189731	COIL-ASSY	1
	D705	16-01		11155340	CAP-SOLENOID	1
D902	16-01		11135346	SEAL	1	
A220	16-01		11169133	PISTON-BIAS	1	
QD01	16-01		11182020	SVC KIT-CONTROL	1	
QD02	16-01		11153191	SVC KIT-SHUTTLE VALVE	1	



Control Type

TPSN



* = INCLUDED IN CONTROL SEAL KIT QD210

70278300D003A



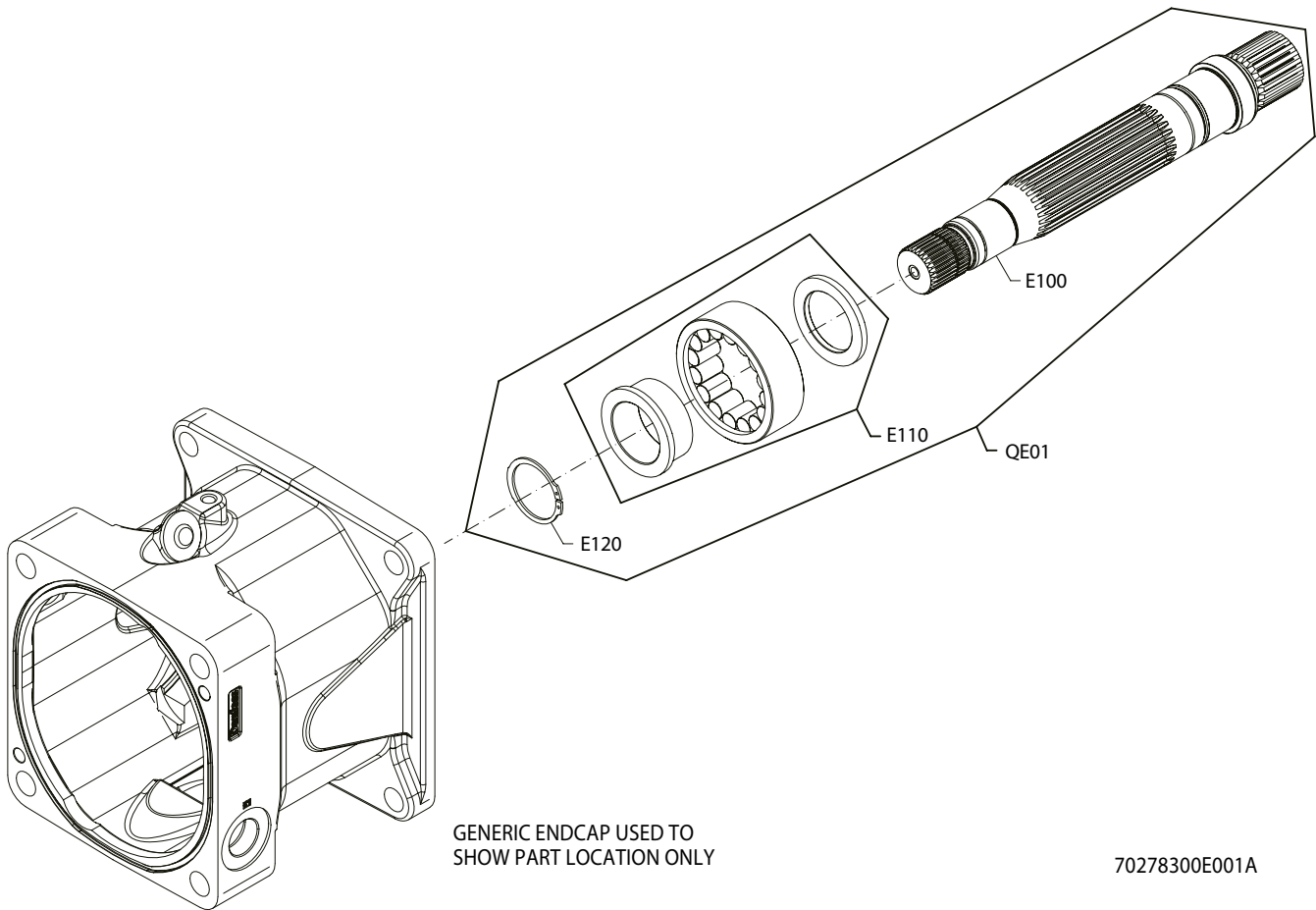
Control Type

TPSN

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
TPSN	D125	16-01		11040532	PLUG ASSY-SOC	1
	D135	16-01		11040532	PLUG ASSY-SOC	1
	D140	16-01		9004104-1350	O-RING	1
	D150	16-01		11131524	O-RING	3
	D160	16-01		11130807	PIN	2
	D175	16-01		527218	SCREW-SOC	5
	D002	16-01		9004104-1160	O-RING	2
	D370	16-01		11171317	SCREW-SOC	1
	D380	16-01		9003509-0008	NUT HEX HEAD_SEAL	1
	D470	16-01		11171317	SCREW-SOC	1
	D480	16-01		9003509-0008	NUT HEX HEAD_SEAL	1
	D492	16-01		9004104-1160	O-RING	1
	D540	16-01		9004104-0100	O-RING	1
	D550	16-01		11130806	RETAINER RING	1
	D862	16-01		11171316	O-RING	1
	D870	16-01		11171317	SCREW-SOC	1
	D880	16-01		9003509-0008	NUT HEX HEAD_SEAL	1
	A220	16-01		11128577	PISTON-BIAS	1
QD01	16-01		11160942	SVC KIT-CONTROL	1	

Input Shaft

Input Shaft: S, T





Input Shaft

Input Shaft: S

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
S	E100	16-01		11173280	SHAFT	1
	E110	16-01		11045851	BEARING	1
	E120	16-01		11146636	RETAINER RING	1
	QE01	16-01		11189651	SVC KIT-SHAFT	1

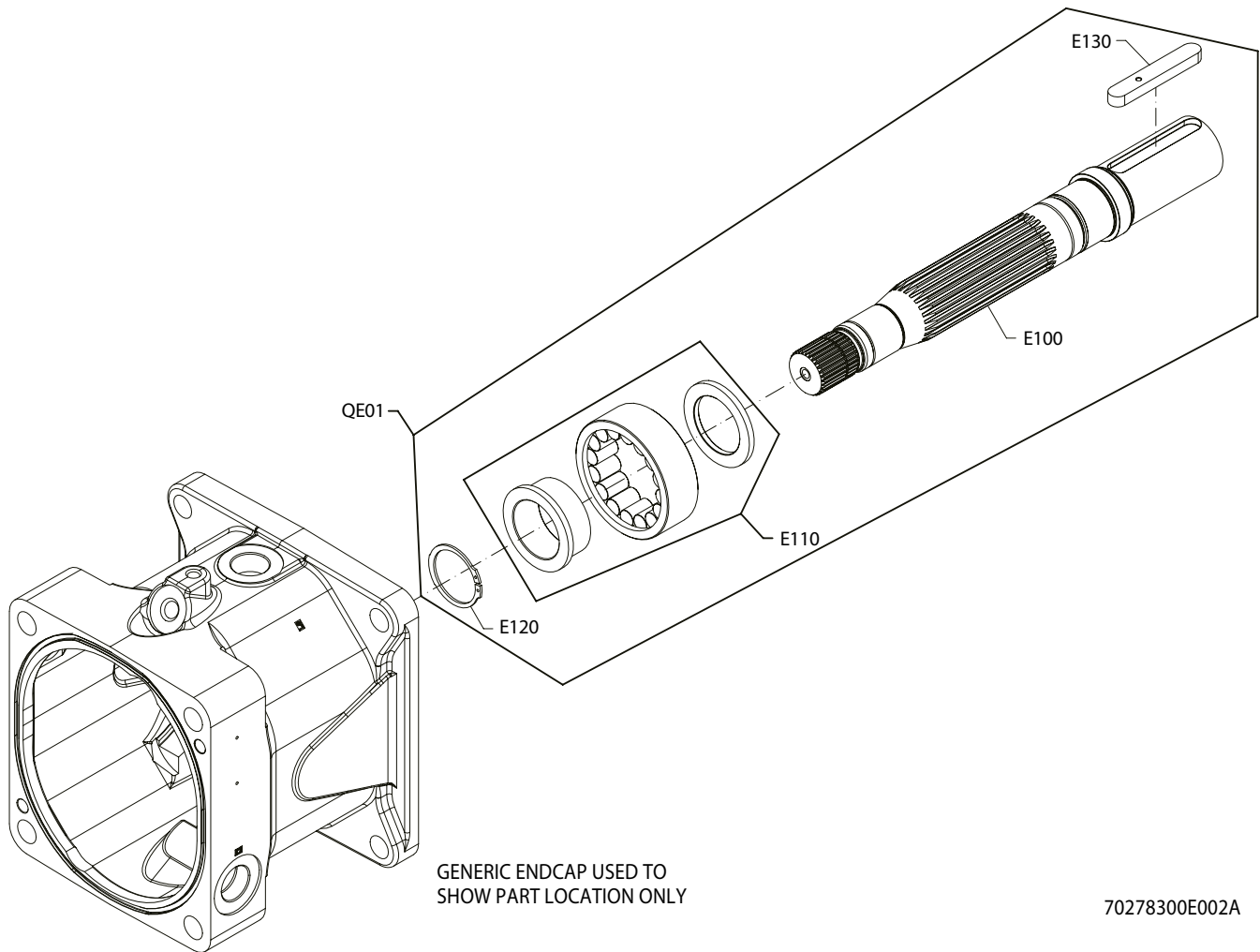
Input Shaft: T

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
T	E100	16-01		11126873	SHAFT	1
	E110	16-01		11045851	BEARING	1
	E120	16-01		11146636	RETAINER RING	1
	QE01	16-01		11189650	SVC KIT-SHAFT	1



Input Shaft

Input Shaft: P



GENERIC ENDCAP USED TO
SHOW PART LOCATION ONLY

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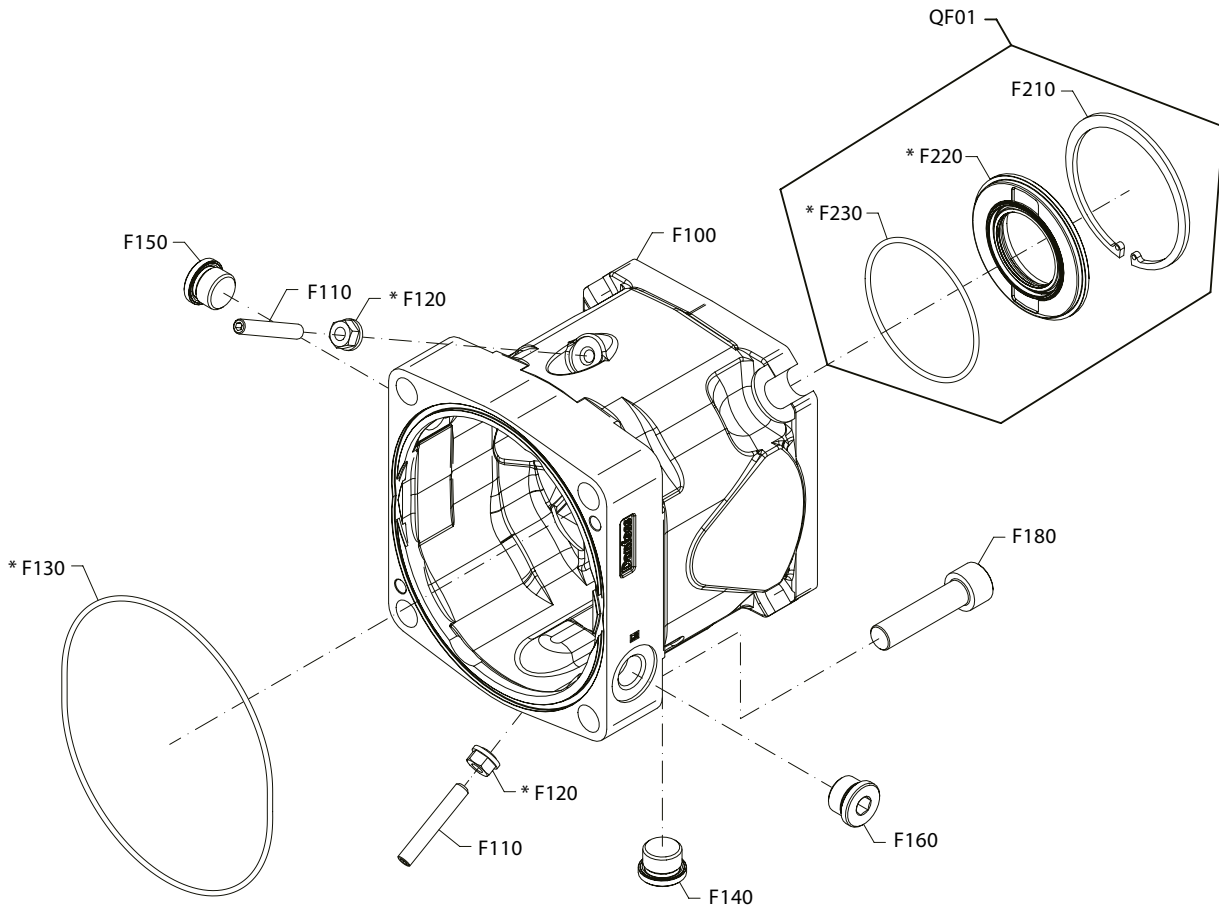
Input Shaft

Input Shaft: P

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
P	E100	16-01		11173292	SHAFT	1
	E110	16-01		11045851	BEARING	1
	E120	16-01		11146636	RETAINER RING	1
	E130	16-01		11173296	KEY	1
	QE01	16-01		11189652	SVC KIT-SHAFT	1

Mounting Flange

Mounting Flange: D4



* = INCLUDED IN OVERHAUL SEAL KIT Q210

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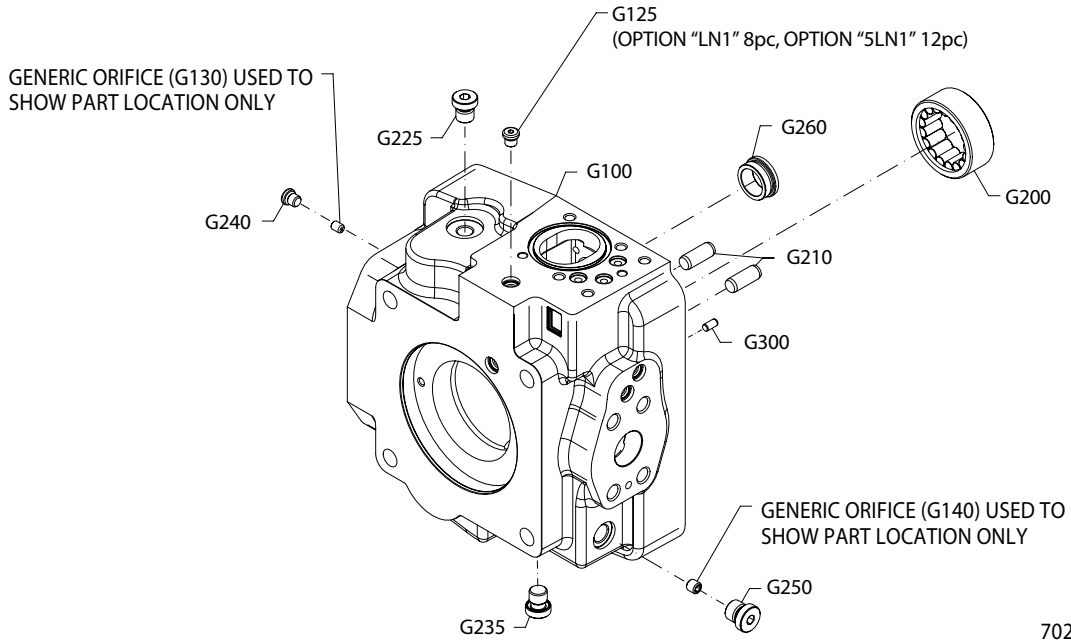
Mounting Flange

Mounting Flange: D4

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D4	F100	16-01		11146902	HOUSING	1
	F110	16-01		750638	SCREW-SET	2
	F120	16-01		042432	NUT-HEX SEAL	2
	F130	16-01		11146630	O-RING	1
	F140	16-01		11167123	PLUG ASSY-SOC	1
	F150	16-01		11167123	PLUG ASSY-SOC	1
	F160	16-01		11167123	PLUG ASSY-SOC	1
	F180	16-01		11149948	SCREW-SOC	4
	F210	16-01		11146633	RETAINER RING	1
	F220	16-01		11146634	SEAL CARRIER ASSY	1
	F230	16-01		11146635	O-RING	1
	QF01	16-01		11156592	SVC KIT-SHAFT SEAL	1

End Cap

End Cap: 5LN1, LN1



End Cap

End Cap: 5LN1

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
LN1	G100			11187892	END CAP ASSY	1
	G125			11040532	PLUG ASSY	12
	G200			11129442	BEARING	1
	G210			11149954	PIN	2
	G225			11135349	PLUG ASSY-SOC	1
	G235			11135349	PLUG ASSY-SOC	1
	G240			11040532	PLUG ASSY-SOC	1
	G250			11139781	PLUG ASSY-SOC	1
	G260			11128579	BUSHING	1
	G300			11152640	PIN	1

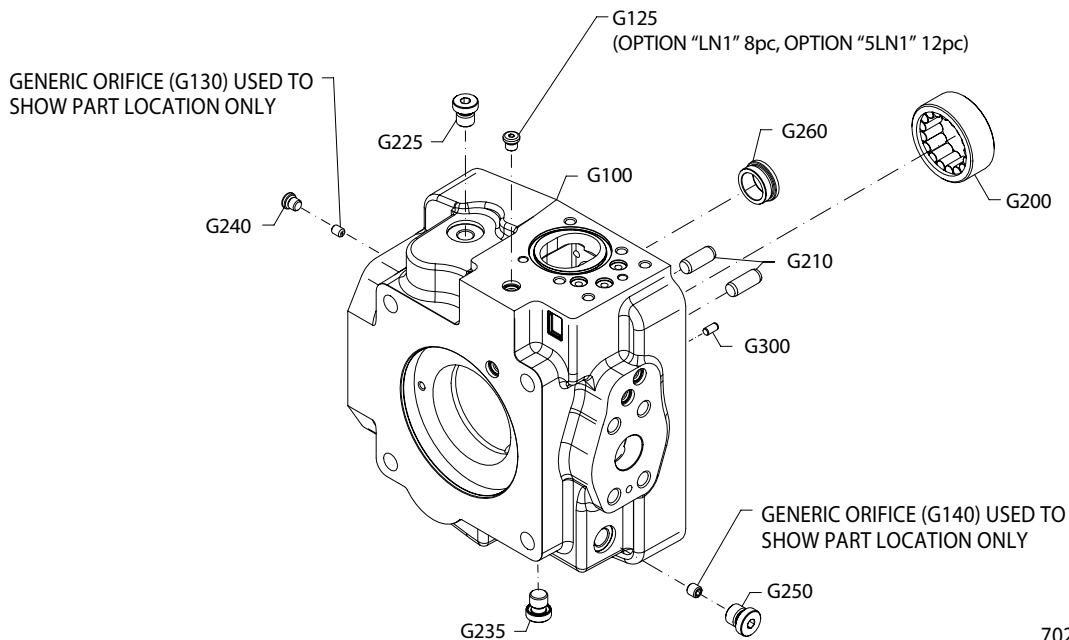
End Cap: LN1

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
LN1	G100			11180392	END CAP ASSY	1
	G125			11040532	PLUG ASSY	8
	G200			11129442	BEARING	1
	G210			11149954	PIN	2
	G225			11135349	PLUG ASSY-SOC	1
	G235			11135349	PLUG ASSY-SOC	1
	G240			11040532	PLUG ASSY-SOC	1
	G250			11139781	PLUG ASSY-SOC	1
	G260			11128579	BUSHING	1
	G300			11152640	PIN	1



End Cap

End Cap: RN1, 5RN1





End Cap

End Cap: RN1

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
RN1	G100			11152639	END CAP ASSY	1
	G200			11129442	BEARING-	1
	G210			11149954	PIN	2
	G225			11135349	PLUG ASSY-SOC	1
	G235			11135349	PLUG ASSY-SOC	1
	G240			11135424	PLUG ASSY-SOC	1
	G250			11139781	PLUG ASSY-SOC	1
	G260			11128579	BUSHING	1
	G300			11152640	PIN	1
	G300			11152640	PIN	1

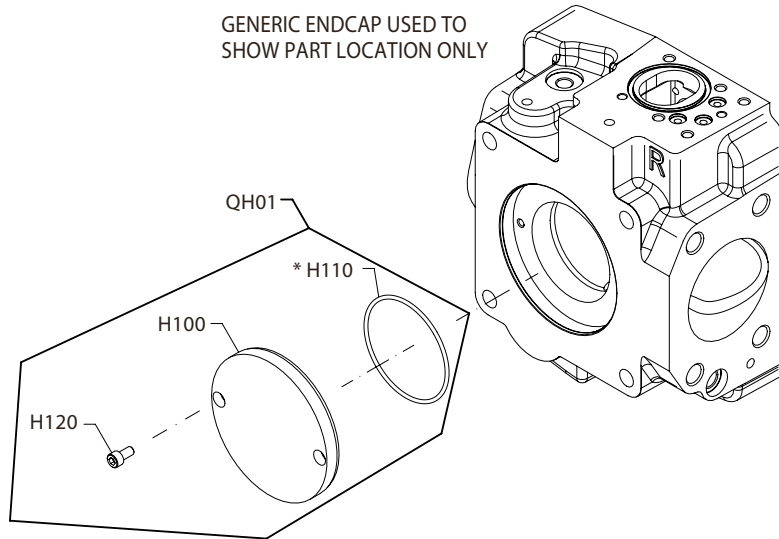
End Cap: 5RN1

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
5RN1	G100			11181525	END CAP ASSY	1
	G125			11040532	PLUG ASSY	11
	G200			11129442	BEARING	1
	G210			11149954	PIN	2
	G225			11135349	PLUG ASSY-SOC	1
	G235			11135349	PLUG ASSY-SOC	1
	G240			11040532	PLUG ASSY-SOC	1
	G250			11139781	PLUG ASSY-SOC	1
	G260			11128579	BUSHING	1
	G300			11152640	PIN	1



Auxiliary Mounting Flange

Auxiliary Mounting Flange:NN



* = INCLUDED IN OVERHAUL SEAL KIT Q210

70278300H011A



Auxiliary Mounting Flange

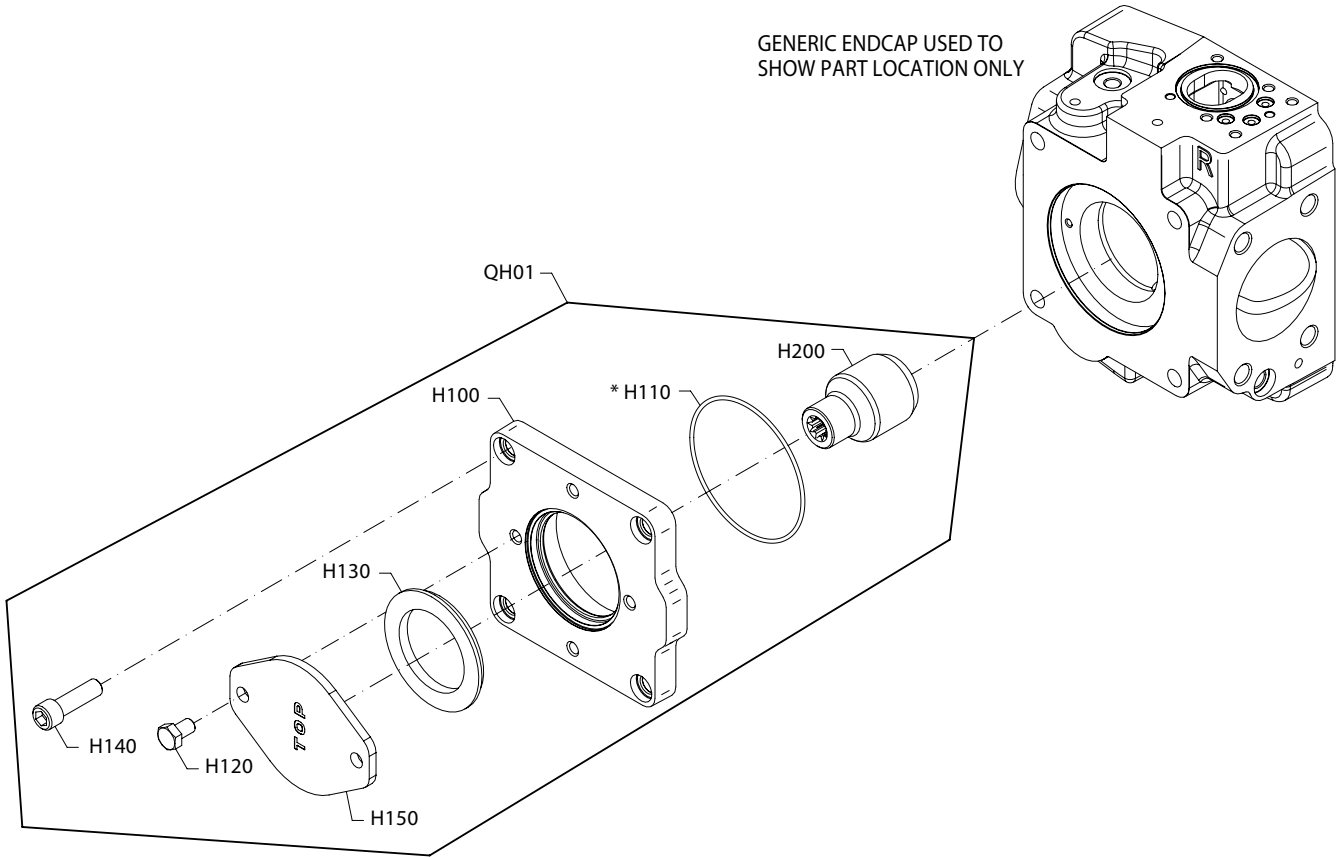
Auxiliary Mounting Flange:NN

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
NN	H100	16-01		11129000	COVER	1
	H110	16-01		071845	O-RING	1
	H120	16-01		11149951	SCREW-SOC	2
	QH01	16-01		11160944	SVC KIT-AUX PAD	1

Auxiliary Mounting Flange

Auxiliary Mounting Flange:A1

GENERIC ENDCAP USED TO
SHOW PART LOCATION ONLY



* = INCLUDED IN OVERHAUL SEAL KIT Q210

70278300H007A



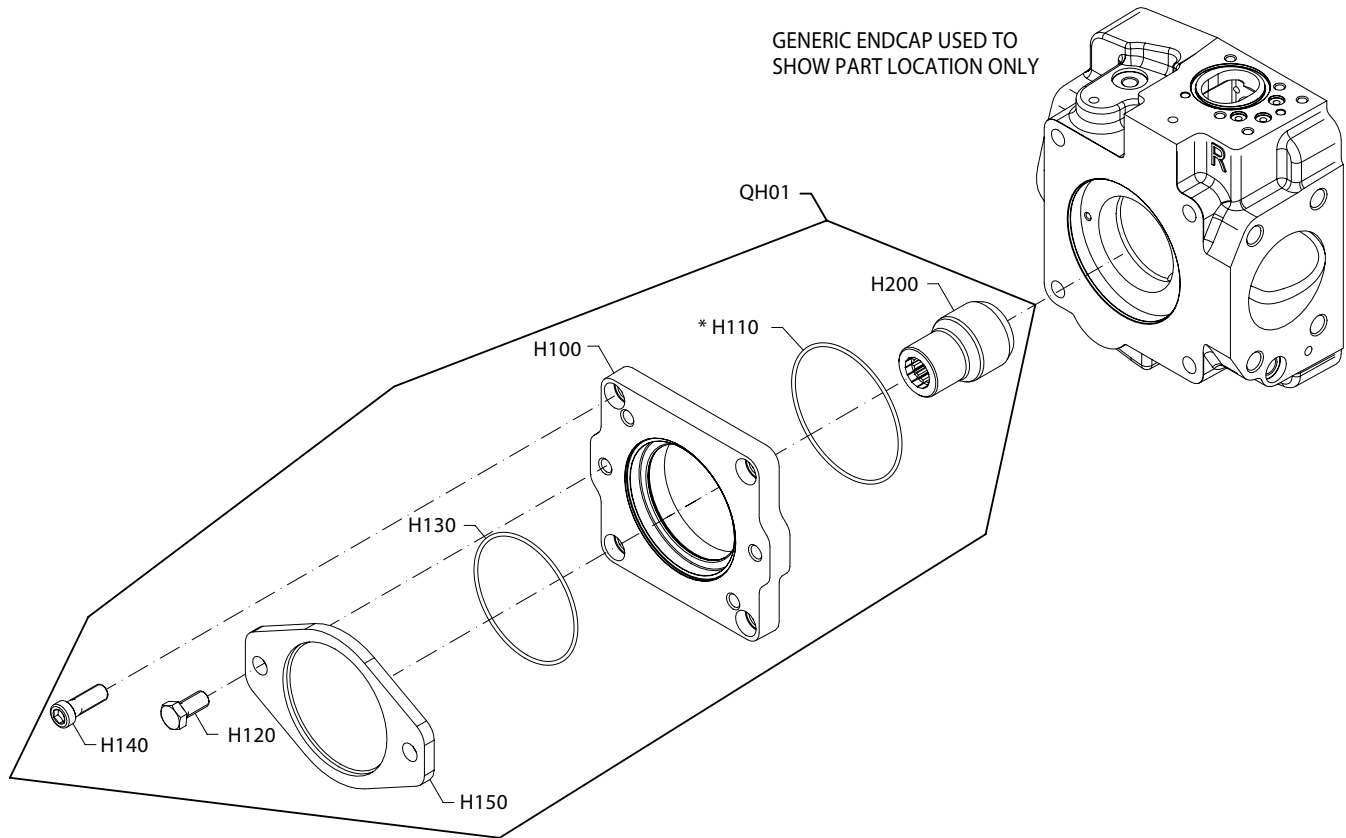
Auxiliary Mounting Flange

Auxiliary Mounting Flange:A1

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
A1	H100	16-01		11167824	ADAPTER	1
	H110	16-01		733295	O RING	1
	H120	16-01		290502	SCREW	4
	H130	16-01		4800482	SEAL	1
	H140	16-01		11139662	SCREW-HEX	2
	H150	16-01		4460586	COVER	1
	H200	16-01		11167826	COUPLING	1
	QH01	16-01		11169348	SVC KIT-AUX PAD	1

Auxiliary Mounting Flange

Auxiliary Mounting Flange:B1



* = INCLUDED IN OVERHAUL SEAL KIT Q210

70278300H008A



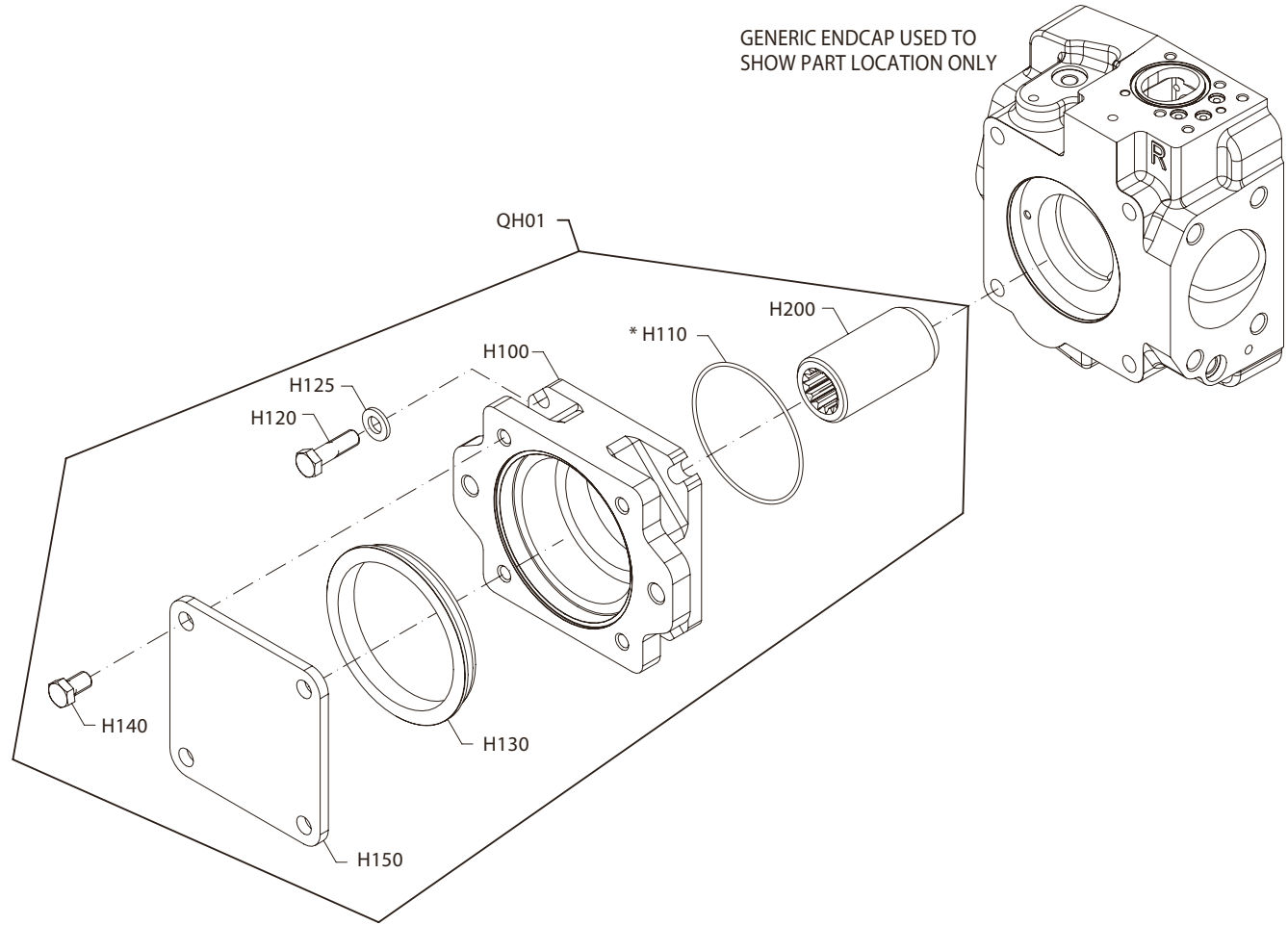
Auxiliary Mounting Flange

Auxiliary Mounting Flange:B1

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
B1	H100	16-01		11167822	ADAPTER	1
	H110	16-01		733295	O RING	1
	H120	16-01		11168343	SCREW-SOC	4
	H130	16-01		9004104-1540	O-RING	1
	H140	16-01		5000760	SCREW-HEX	2
	H150	16-01		4460370	COVER	1
	H200	16-01		11167829	COUPLING	1
	QH01	16-01		11169349	SVC KIT-AUX PAD	1

Auxiliary Mounting Flange

Auxiliary Mounting Flange:C5



* = INCLUDED IN OVERHAUL SEAL KIT Q210

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Auxiliary Mounting Flange

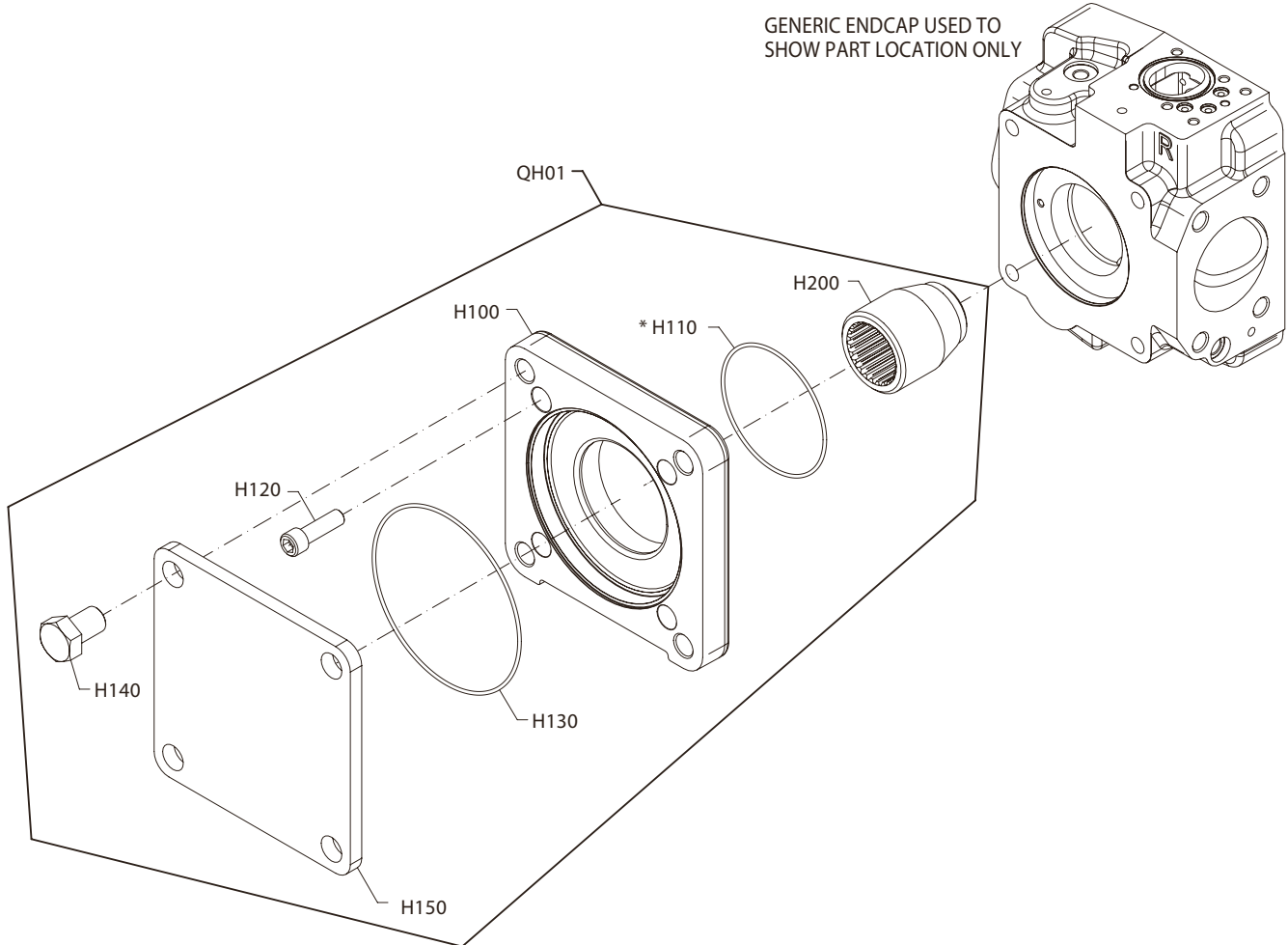
Auxiliary Mounting Flange:C5

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
C5	H100	16-01		11180851	ADAPTER	1
	H110	16-01		733295	O-RING	1
	H120	16-01		9007210-1209	SCREW-HEX	4
	H125	16-01		506753	WASHER	4
	H130	16-01		11081805	SEAL	1
	H140	16-01		509528	SCREW-HEX	4
	H150	16-01		8801060	COVER	1
	H200	16-01		11180060	COUPLING	1
	QH01	16-01		11176291	SVC KIT-AUX PAD	1

Auxiliary Mounting Flange

Auxiliary Mounting Flange:D5

GENERIC ENDCAP USED TO
SHOW PART LOCATION ONLY



* = INCLUDED IN OVERHAUL SEAL KIT Q210

70278300H010A



Auxiliary Mounting Flange

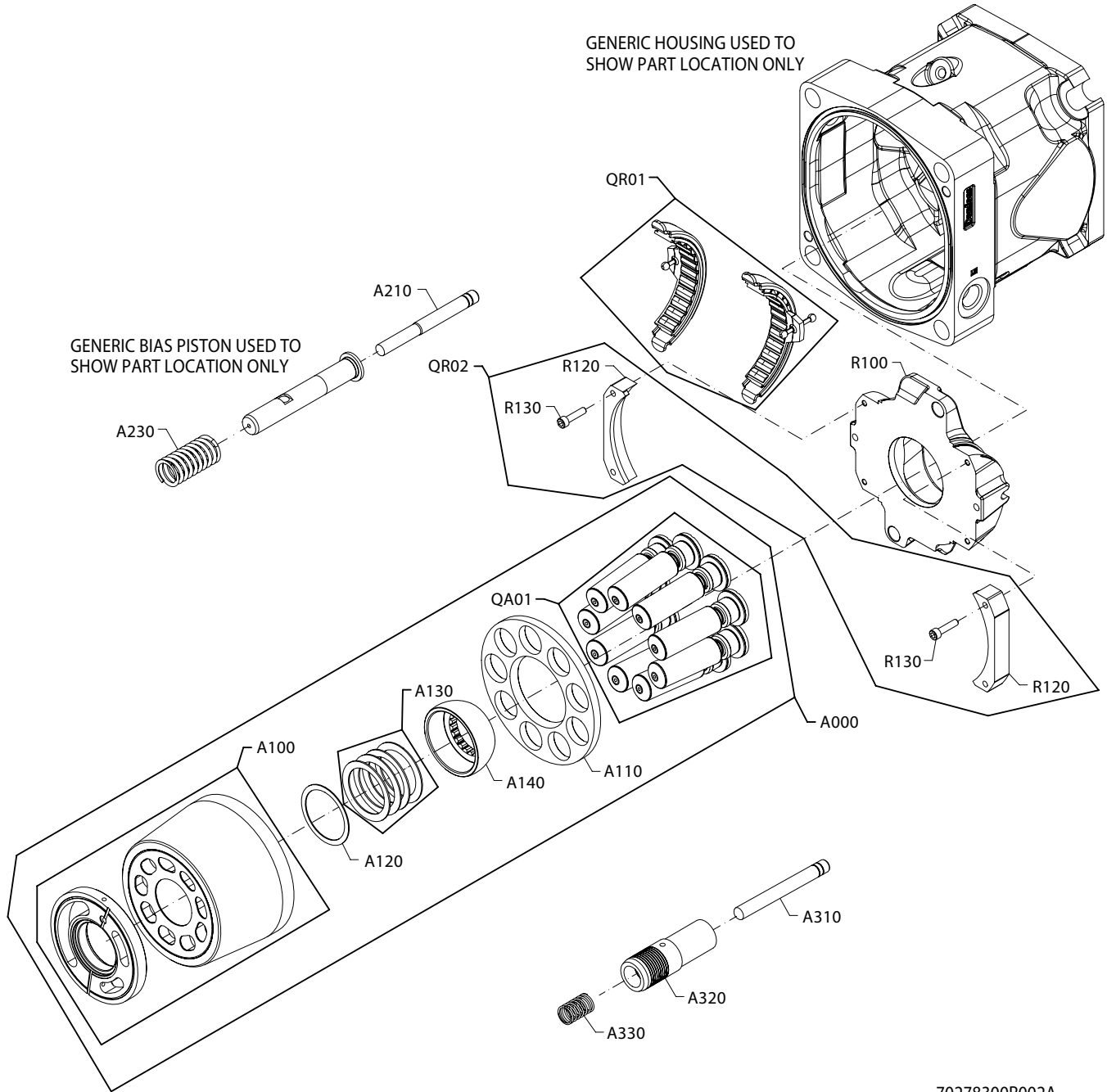
Auxiliary Mounting Flange:D5

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
D5	H100	16-01		11145126	ADAPTER	1
	H110	16-01		733295	O-RING	1
	H120	16-01		290502	SCREW-SOC	4
	H130	16-01		9004104-1620	O-RING	1
	H140	16-01		11024165	SCREW-HEX	4
	H150	16-01		338400	COVER	1
	H200	16-01		11150060	COUPLING	1
	QH01	16-01		11160943	SVC KIT-AUX PAD	1



Kit Group

Kit Group: LNNN



70278300R002A



Kit Group

Kit Group: LNNN

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
LNNN	A000	16-01		11180345	KIT ASSY	1
	A100	16-01		11179971	VALVEPLATE SET-CYLINDER BLOCK	1
	A110	16-01		11173587	RETAINER-SLIPPER	1
	A120	16-01		11128997	WASHER	1
	A130	16-01		11128998	SPRING-DISC	4
	A140	16-01		11173586	GUIDE-SLIPPER RETAINER	1
	A210	16-01		11154206	ROD-BIAS SHORT	1
	A230	16-01		11149490	SPRING-HELICAL COMP	1
	A310	16-01		11154203	ROD-SERVO LONG	1
	A320	16-01		11128578	PISTON-SERVO	1
	A330	16-01		11149491	SPRING	1
	R100	16-01		11160533	SWASHPLATE	1
	R130	16-01		11146637	SCREW-SOC	4
	QA01	16-01		11156596	SVC KIT-PISTON	1
	QR01	16-01		11187632	SVC KIT-BEARING	1
	QR02	16-01		11189656	SVC KIT-HOLDER	1

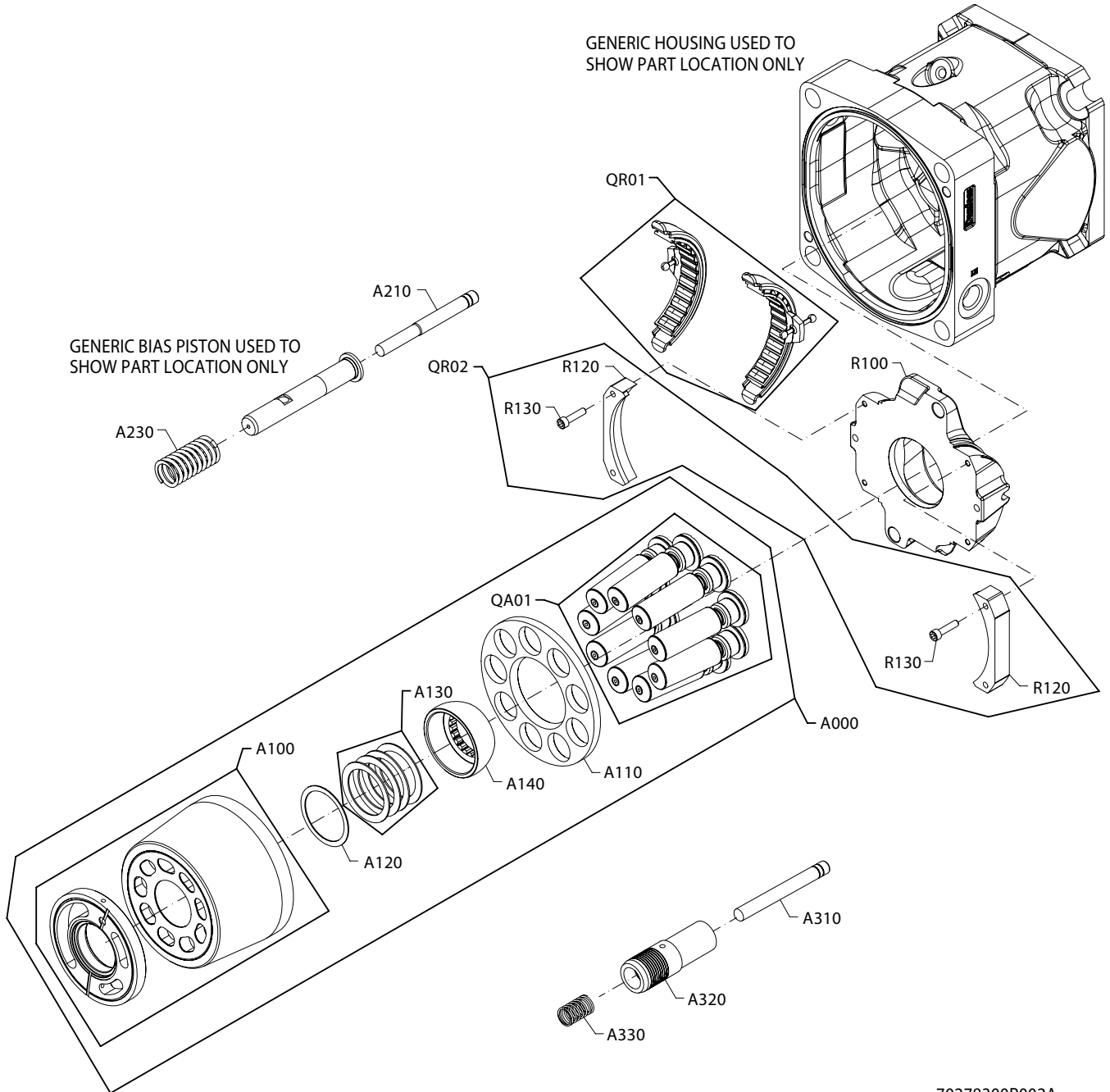


Kit Group

Kit Group: RNNN

GENERIC HOUSING USED TO SHOW PART LOCATION ONLY

GENERIC BIAS PISTON USED TO SHOW PART LOCATION ONLY



70278300R002A



Kit Group

Kit Group: RNNN

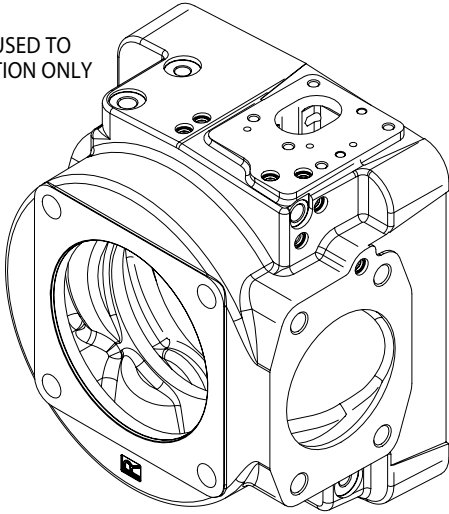
Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
RNNN	A000	16-01		11152644	KIT ASSY	1
	A100	16-01		11126854	CYLINDER BLOCK MATCHING SET	1
	A110	16-01		11173587	RETAINER-SLIPPER	1
	A120	16-01		11128997	WASHER	1
	A130	16-01		11128998	SPRING-DISC	4
	A140	16-01		11173586	GUIDE-SLIPPER RETAINER	1
	A210	16-01		11154206	ROD-BIAS SHORT	1
	A230	16-01		11149490	SPRING-HELICAL COMP	1
	A310	16-01		11154203	ROD-SERVO LONG	1
	A320	16-01		11128578	PISTON-SERVO	1
	A330	16-01		11149491	SPRING	1
	R100	16-01		11160533	SWASHPLATE	1
	R130	16-01		11146637	SCREW-SOC	4
	QA01	16-01		11156596	SVC KIT-PISTON	1
	QR01	16-01		11187632	SVC KIT-BEARING	1
	QR02	16-01		11189656	SVC KIT-HOLDER	1



Kit Group

Name Tag: NNN

GENERIC ENDCAP USED TO
SHOW PART LOCATION ONLY



G130
(DETAIL LOCATION SEE ENDCAP OPTION 70278300G-xxx)

G140
(DETAIL LOCATION SEE ENDCAP OPTION 70278300G-xxx)

70278300S001A



Kit Group

Name Tag: NNN

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
NNN	G130	16-01		516598	ORIFICE	1
	G140	16-01		11131955	ORIFICE	1

Over Haul Seal Kit

Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
Q210	16-01		11187636	SVC KIT-OVERHAUL SEAL	
BOM for Q210	D002	16-01	9004104-1160	O-RING	2
	D120	16-01	9003509-0006	NUT-HEX SEAL	1
	D140	16-01	9004104-1350	O-RING	1
	D145	16-01	11168710	SEAL	1
	D150	16-01	11131524	O-RING	3
	D190	16-01	9004104-1200	O-RING	1
	D210		11130945	O-RING	1
	D350		9004104-1160	O-RING	1
	D380		612291	NUT-HEX SEAL	1
	D380		9003509-0008	NUT HEX HEAD_SEAL	1
	D450		9004104-1160	O-RING	1
	D480		612291	SEAL-LOCK NUT	1
	D480		9003509-0008	NUT HEX HEAD_SEAL	1
	D492		9004104-1160	O-RING	1
	D540		9004104-0100	O-RING	1
	D862		11171316	O-RING	1
	D880		9003509-0008	NUT HEX HEAD_SEAL	1
	D902		11135346	SEAL	1
	F120		042432	NUT-HEX	2
	F130		11146630	O-RING	1
F220		11146634	SEAL CARRIER ASSY	1	
F230		11146635	O-RING	1	
H110		733295	O-RING	1	
H110		071845	O-RING	1	





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Local address:

Danfoss Power Solutions (US) Company

2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

Danfoss Power Solutions GmbH & Co. OHG

Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

Danfoss Power Solutions ApS

Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

Danfoss Power Solutions (Shanghai) Co. Ltd.

Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 3418 5200

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