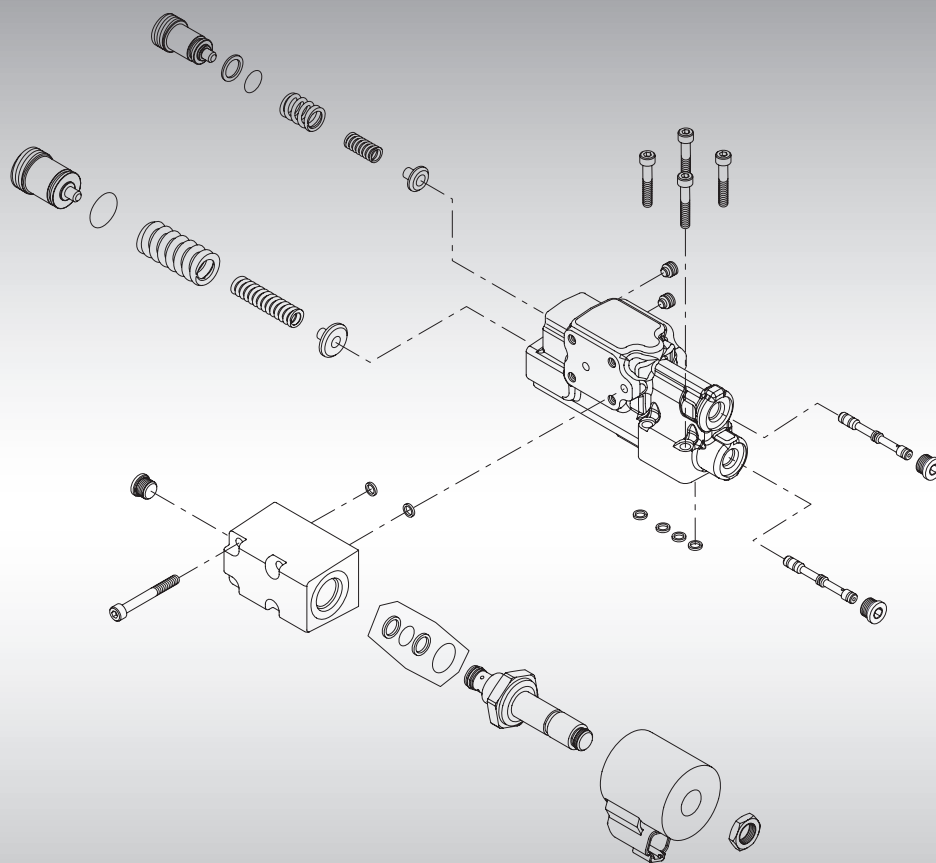


Parts Manual

Open Circuit Pumps

Series 45 Frame E 100, 130 and 147cc





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General information

Service parts identification

Use this information and procedure to identify the module group, item number, manufacture date, part number, and part name. The Frame E includes the 100, 130 and 147cc displacement pumps.

The parts listed include all parts that may be used when performing either "Minor Repairs", "Major Repairs" or "Conversions" on the Frame E open circuit pumps.

Nameplate

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

Model Code

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

Model Number

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

Serial Number

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

The letter code indicates the location of original manufacture (assembly). "A" indicates the unit was originally assembled in Ames, Iowa, USA. "N" indicates the unit was originally assembled in Neumunster, Germany.

The first number (2 digits) indicates the year of manufacture. ("02" would indicate the unit was manufactured in 2002)

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 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 the service part number you need to order.

EXAMPLE: The service part desired is Item C090

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
LB	C090	98-02		4570245	Spool	1
	C090	94-34	98-01	4570025	Spool (SB-1995-006)	1

All units using this order code with a date code of 94-34 and up to and including 98-01 must use part number "4570025".

All units with a date code of 98-02 and newer must use part number "4570245".

Service bulletins

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

Procedure to identify a part

General

The modular design of Series 45 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 K020 has the same item number on all pumps.)

A part number that has another number following it in parentheses makes this a world wide manual. The first number is sold in Germany. The number in parentheses is sold in the United States. (Example: 016014 (9006200-0206); customers would order 9006200-0206 if ordering the part in the United States.)

Example of a Part Identification

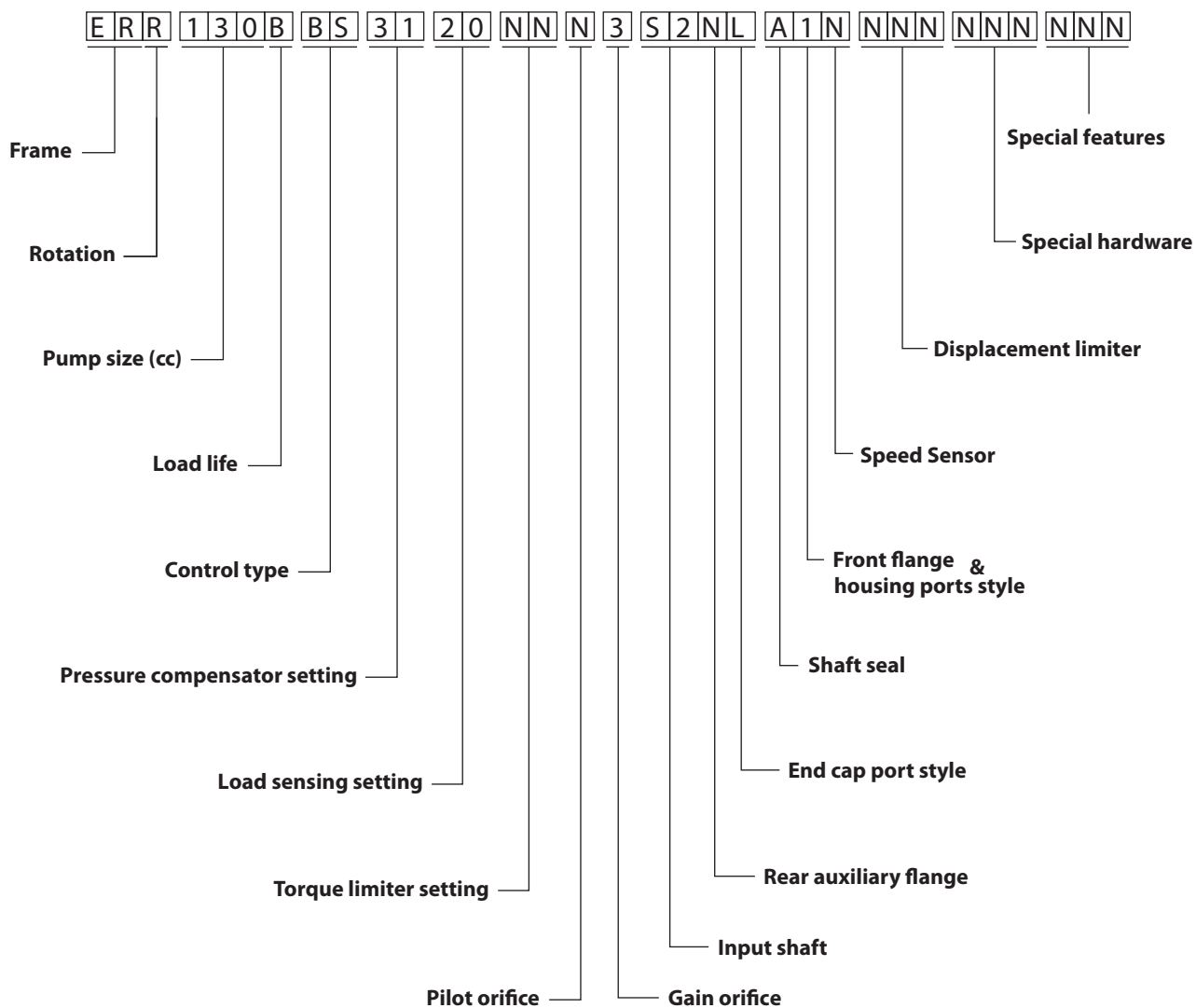
The nameplate on a Series 45 pump has an Order Code of ERR 130B BS 31 20 NN N 3 S2NL A1N NNN NNN NNN. Do this to determine the part number of the drive shaft used on this pump.

- 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 "S2NL". (ERR 130B BS 31 20 NN N 3 **S2NL** A1N NNN NNN NNN)
- 2) Referring to the Service Parts List, find the shaft group.
- 3) Next find the order code that relates to this unit, which is "S2NL". The shaft is found to be item J010 and part number 1700455.



Notes

Order code

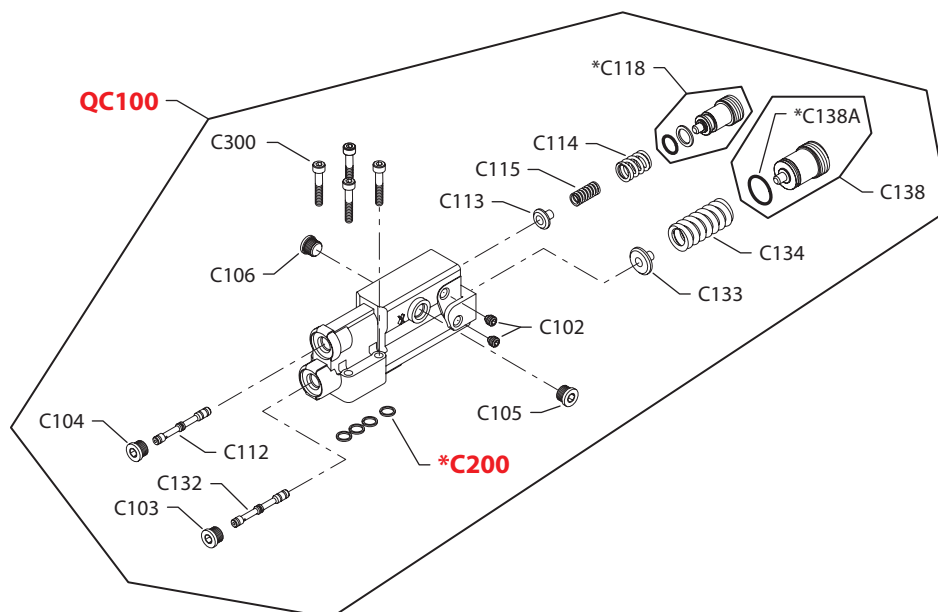


P100 610E



Control

(AB, AS, BB & BS)



E100 580E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Common load sensing control parts

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	C102	02-35		4740064	Set screw	2
	C103	02-35		327007 (9005110-4400)	Plug assembly	1
	C104	02-35		327007 (9005110-4400)	Plug assembly	1
	C105	02-35		327007 (9005110-4400)	Plug assembly	1
	C106	02-35		327007 (9005110-4400)	Plug assembly	1
	C113	02-35		4740246	Spring guide (SB-2002-031)	1
	C114	02-35		4740061	Spring	1
	C115	02-35		4740062	Spring	1
	C118	02-35		11062214	Adjusting plug assembly (SB-2007-047, SB-2010-026)	1
	C132	02-35		1701124	Spool	1
	C133	02-35		4740247	Spring guide (SB-2002-034)	1
	C138	02-35		1700597	Adjusting plug assembly	1
	C138A	02-35		5000656	O-ring	1
	C200	02-35		4740154	Seal ring	4
	C300	02-35		5000164 (9007315-0507)	Screw	4

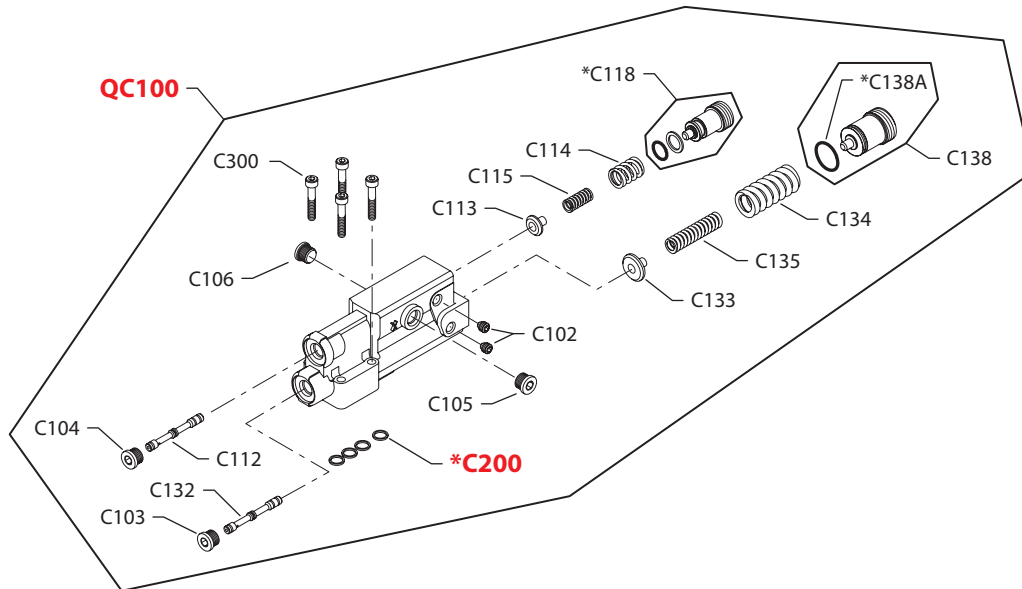
Load sensing control

AB	C112	02-35		4740309	Spool	1
	C134	02-35		4740318	Spring, PC light	1
	QC100	02-35		11112206	Control Kit, low pressure (SB-2012-011)	1
AS	C112	02-35		1701124	Spool	1
	C134	02-35		4740318	Spring, PC light	1
	QC100	02-35		11112210	Control Kit, low pressure (SB-2012-011)	1
BB	C112	02-36		4740309	Spool	1
	C134	02-36		4740324	Spring, PC heavy	1
	QC100	02-36		11112211	Control Kit, high pressure (SB-2012-011)	1
BS	C112	02-36		1701124	Spool	1
	C134	02-36		4740324	Spring, PC heavy	1
	QC100	02-36		11112207	Control Kit, high pressure (SB-2012-011)	1

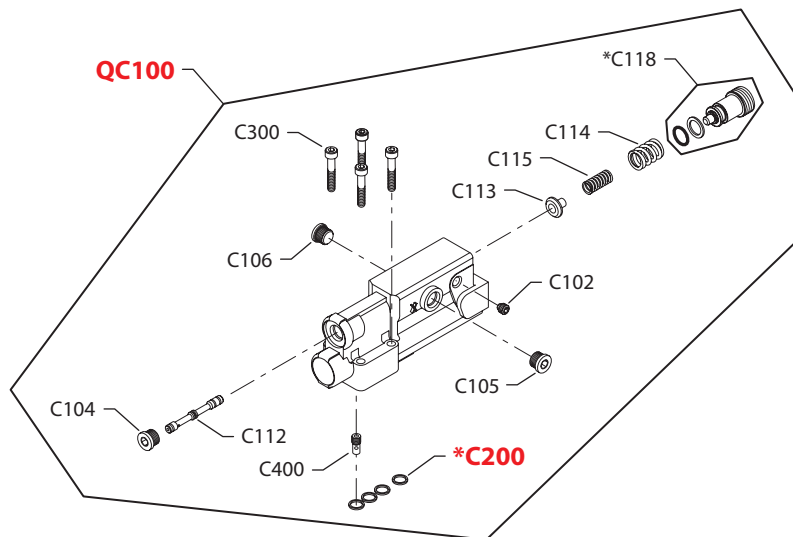


Control

(LB & LS)



(LE)



E100 581E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Common load sensing control Parts

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	C104	03-08		327007 (9005110-4400)	Plug assembly	1
	C105	03-08		327007 (9005110-4400)	Plug assembly	1
	C106	03-08		327007 (9005110-4400)	Plug assembly	1
	C113	03-08		4740246	Spring guide (SB-2002-031)	1
	C114	03-08		4740061	Spring	1
	C115	03-08		4740062	Spring	1
	C118	03-08		11062214	Adjusting plug assembly (SB-2007-047, SB-2010-026)	1
	C132	03-08		1701124	Spool	1
	C133	03-08		4740247	Spring guide (SB-2002-034)	1
	C134	03-08		4740051	Spring, PC, outer	1
	C135	03-08		4740052	Spring, PC inner	1
	C138	03-08		11062379	Adjusting Plug assembly (SB-2010-026)	1
	C138A	03-08		5000656	O-ring	1
	C200	03-08		4740154	Seal ring	4
	C300	03-08		5000164 (9007315-0507)	Screw	4

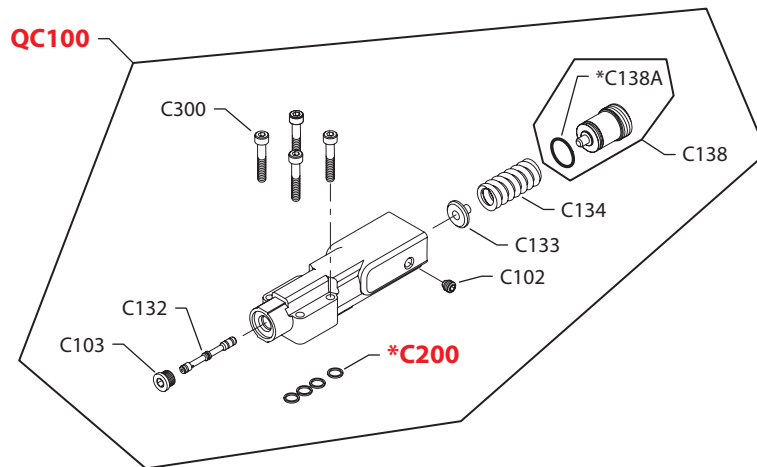
Load sensing control

LB	C102	03-08		4740064	Set screw	2
	C103	03-08		327007 (9005110-4400)	Plug assembly	1
	C112	03-08		4740309	Spool	1
	QC100	03-08		11112205	Control Kit (SB-2012-011)	1
LE	C102	06-30		4740064	Set screw	1
	C112	06-30		1701124	Spool	1
	C400	06-30		4740313	Edge filter Plug assembly	1
	QC100	06-30		4510400	Control Kit, load sensing only	1
LS	C102	03-08		4740064	Set screw	2
	C103	03-08		327007 (9005110-4400)	Plug assembly	1
	C112	03-08		1701124	Spool	1
	QC100	03-08		11112208	Control Kit (SB-2012-011)	1

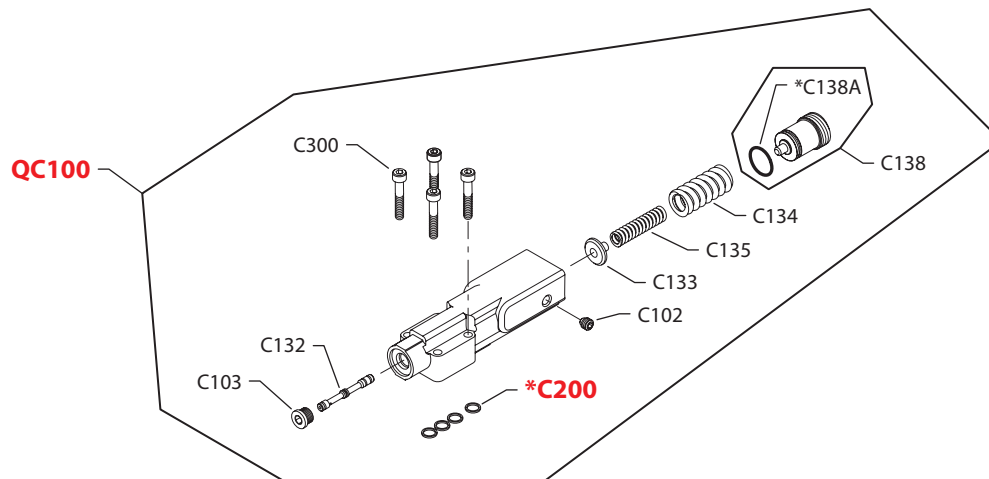


Control

(AC & BC)



(PC)



E100 517E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

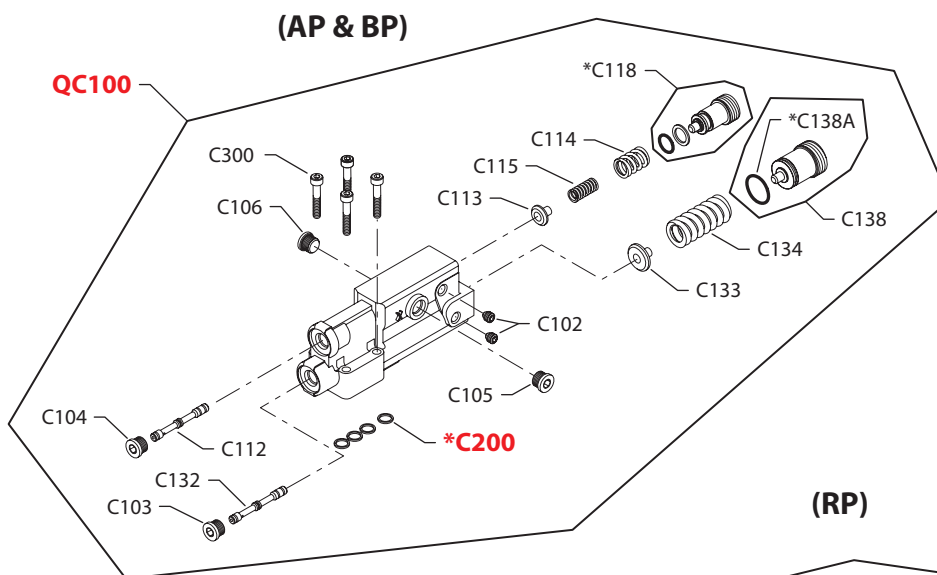
Control
Pressure compensating control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AC	C102	03-08		4740064	Set screw	1
	C103	03-08		327007 (9005110-4400)	Plug assembly	1
	C132	03-08		1701124	Spool	1
	C133	03-08		4740247	Spring guide (SB-2002-034)	1
	C134	03-08		4740318	Spring, PC, light	1
	C138	03-08		1700597	Adjusting plug	1
	C138A	03-08		5000656	O-ring	1
	C200	03-08		4740154	Seal ring	4
	C300	03-08		5000164 (9007315-0507)	Screw	4
	QC100	03-08		4510420	Control Kit, PC, low pressure	1
BC	C102	03-08		4740064	Set screw	1
	C103	03-08		327007 (9005110-4400)	Plug assembly	1
	C132	03-08		1701124	Spool	1
	C133	03-08		4740247	Spring guide (SB-2002-034)	1
	C134	03-08		4740324	Spring, PC, heavy	1
	C138	03-08		1700597	Adjusting plug	1
	C138A	03-08		5000656	O-ring	1
	C200	03-08		4740154	Seal ring	4
	C300	03-08		5000164 (9007315-0507)	Screw	4
	QC100	03-08		4510421	Control Kit, PC, high pressure	1
PC	C102	03-08		4740064	Set screw	1
	C103	03-08		327007 (9005110-4400)	Plug assembly	1
	C132	03-08		1701124	Spool	1
	C133	03-08		4740247	Spring guide (SB-2002-034)	1
	C134	03-08		4740051	Spring, outer	1
	C135	03-08		4740052	Spring, inner	1
	C138	03-08		11062379	Adjusting plug assembly	1
	C138A	03-08		5000656	O-ring	1
	C200	03-08		4740154	Seal ring	4
	C300	03-08		5000164 (9007315-0507)	Screw	4
	QC100	03-08		4510422	Control kit, PC	1

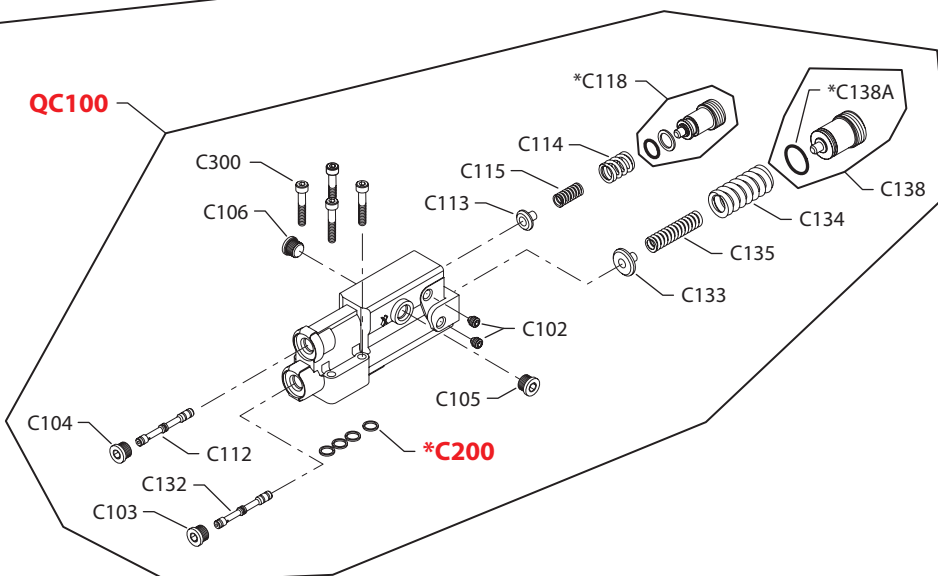


Control

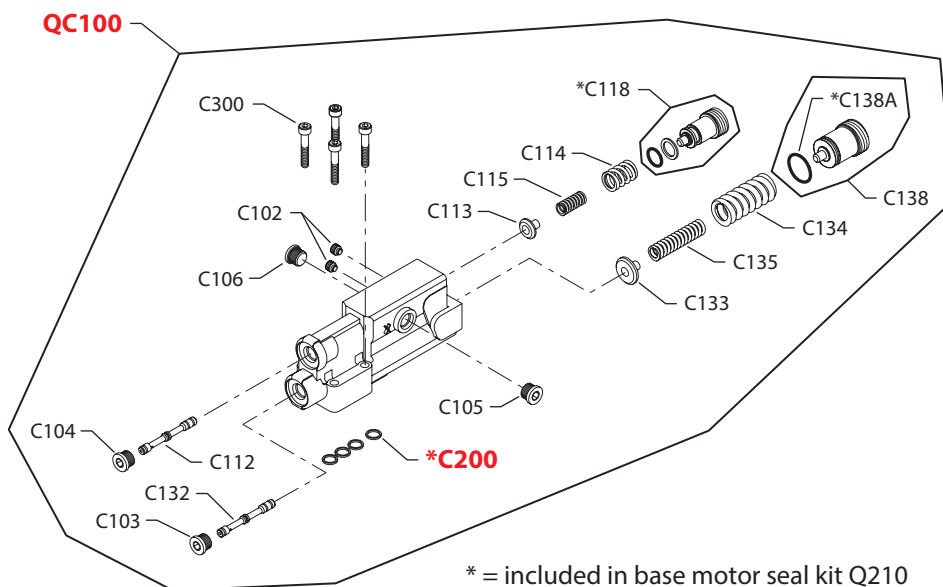
(AP & BP)



(RP)



(RY)



* = included in base motor seal kit Q210

E100 516E

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Common pressure compensating control parts, remote

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	C102	03-08		4740064	Set screw	2
	C103	03-08		327007 (9005110-4400)	Plug assembly	1
	C104	03-08		327007 (9005110-4400)	Plug assembly	1
	C105	03-08		327007 (9005110-4400)	Plug assembly	1
	C106	03-08		327007 (9005110-4400)	Plug assembly	1
	C112	03-08		4740300	Spool	1
	C113	03-08		4740301	Spring guide	1
	C114	03-08		4740061	Spring	1
	C115	03-08		4740062	Spring	1
	C118	03-08		11062214	Adjusting plug assembly (SB-2007-047, SB-2010-026)	1
	C132	03-08		1701124	Spool	1
	C133	03-08		4740247	Spring guide (SB-2002-034)	1
	C200	03-08		4740154	Seal ring	4
	C300	03-08		5000164 (9007314-0507)	Screw	4

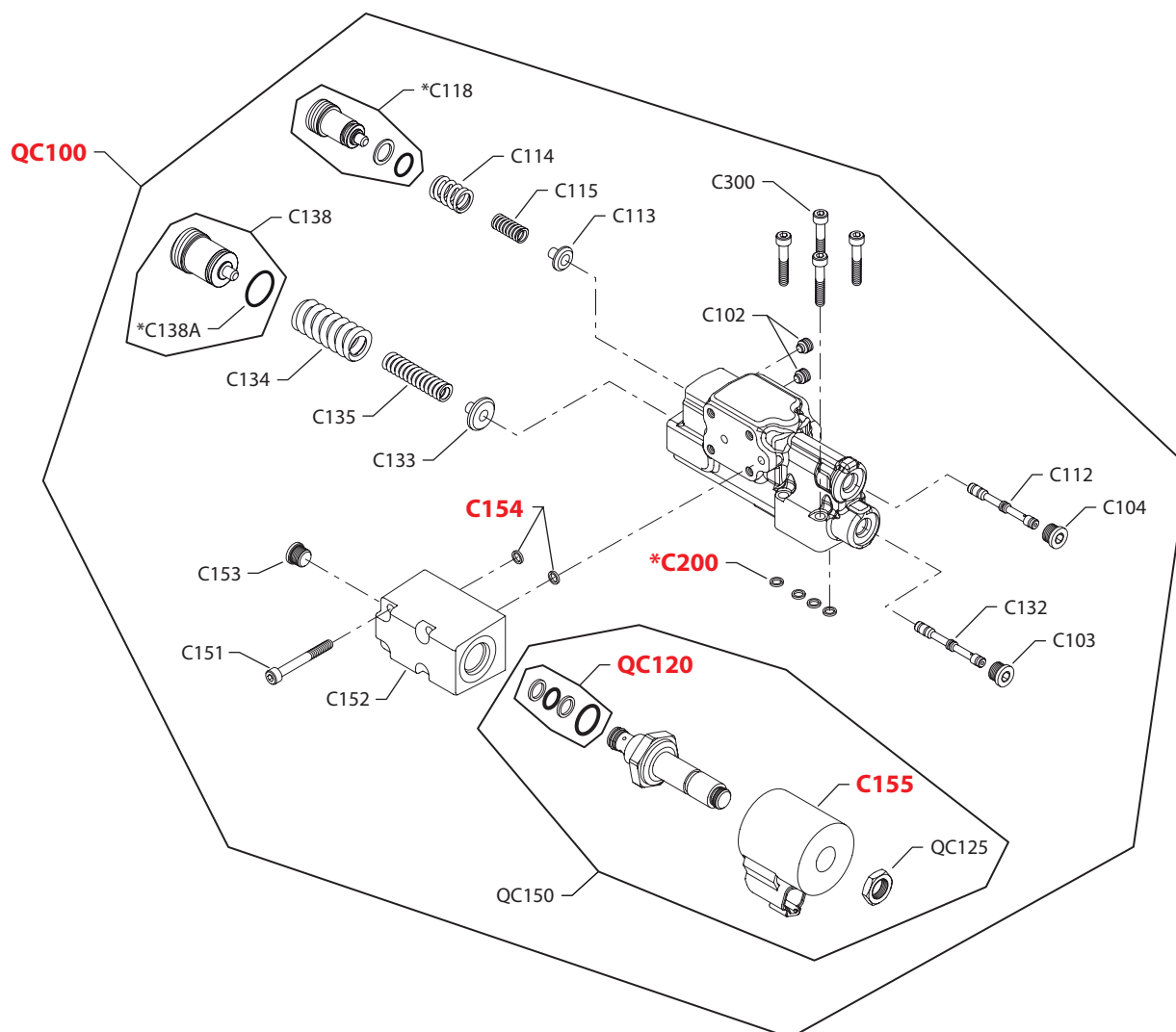
Pressure compensating control, remote

AP	C134	03-08		4740318	Spring, PC light	1
	C138	03-08		1700597	Adjusting Plug assembly	1
	C138A	03-08		5000656	O-ring	1
	QC100	03-08		11112209	Control Kit, remote PC, low pressure (SB-2012-011)	1
BP	C134	03-08		4740324	Spring, PC heavy	1
	C138	03-08		1700597	Adjusting Plug assembly	1
	C138A	03-08		5000656	O-ring	1
	QC100	03-08		11112212	Control Kit, remote PC, high pressure (SB-2012-011)	1
RP	C134	03-08		4740051	Spring, PC outer	1
	C135	03-08		4740052	Spring, PC inner	1
	C138	03-08		11062379	Adjusting Plug assembly (SB-2010-026)	1
	C138A	03-08		5000656	O-ring	1
	QC100	03-08		11112213	Control Kit, remote PC (SB-2012-011)	1
RY	C134	03-08		4740051	Spring, PC outer	1
	C135	03-08		4740052	Spring, PC inner	1
	C138	03-08		11062379	Adjusting Plug assembly	1
	C138A	03-08		5000656	O-ring	1
	QC100	03-08		11126785	Control Kit, remote PC	1



Control

(AF)



E101 700E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AF	C102	10-14		4740064	Set screw	2
	C103	10-14		327007 (9005110-4400)	Plug assembly	1
	C104	10-14		327007 (9005110-4400)	Plug assembly	1
	C112	10-14		4740300	Spool	1
	C113	10-14		4740301	Spring guide	1
	C114	10-14		4740061	Spring	1
	C115	10-14		4740062	Spring	1
	C118	10-14		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	10-14		1701124	Spool	1
	C133	10-14		4740247	Spring guide	1
	C134	10-14		4740051	Spring, PC outer	1
	C135	10-14		4740052	Spring, PC inner	1
	C138	10-14		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	10-14		5000656	O-ring	1
	C151	10-14		9007315-0510	Screw	4
	C152	10-14		11150082	Solenoid valve adapter	1
	C153	10-14		327007 (9005110-4400)	Plug assembly	1
	C154	10-14		4740154	Seal ring	2
	C155	10-14		1701291	Coil, 12 volt	1
	C200	10-14		4740154	Seal ring	4
	C300	10-14		5000164 (9007315-0507)	Screw	4
	QC100	10-14		11112296	Control Kit, electric on/off, 12 volt, n.o. (SB-2012-011)	1
	QC120	10-14		11103621	Solenoid valve seal kit	1
	QC125	10-14		11104457	Nut	1
	QC150	10-14		11104461	Solenoid valve kit, 12 volt	1

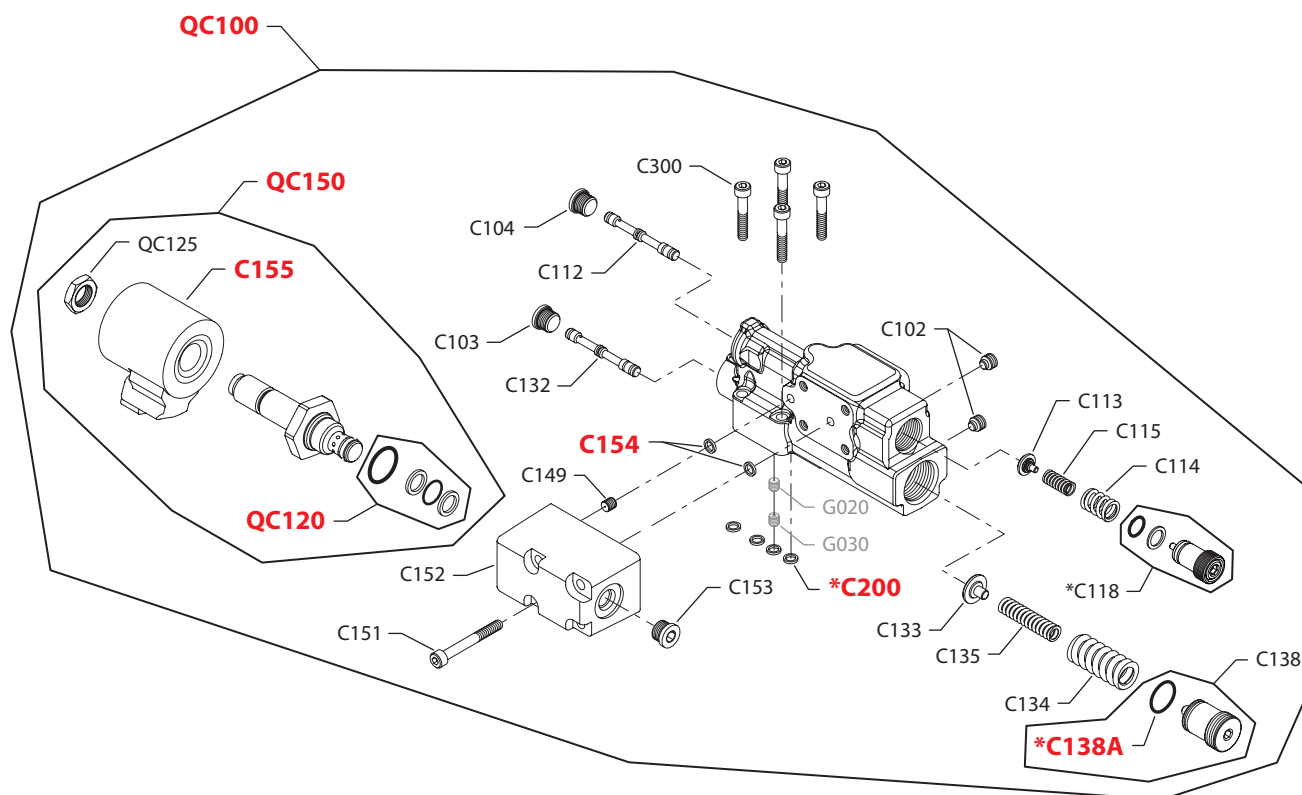
Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AG	C102	10-14		4740064	Set screw	2
	C103	10-14		327007 (9005110-4400)	Plug assembly	1
	C104	10-14		327007 (9005110-4400)	Plug assembly	1
	C112	10-14		4740300	Spool	1
	C113	10-14		4740301	Spring guide	1
	C114	10-14		4740061	Spring	1
	C115	10-14		4740062	Spring	1
	C118	10-14		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	10-14		1701124	Spool	1
	C133	10-14		4740247	Spring guide	1
	C134	10-14		4740051	Spring, PC outer	1
	C135	10-14		4740052	Spring, PC inner	1
	C138	10-14		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	10-14		5000656	O-ring	1
	C151	10-14		9007315-0510	Screw	4
	C152	10-14		11150082	Solenoid valve adapter	1
	C153	10-14		327007 (9005110-4400)	Plug assembly	1
	C154	10-14		4740154	Seal ring	2
	C155	10-14		1701291	Coil, 12 volt	1
	C200	10-14		4740154	Seal ring	4
	C300	10-14		5000164 (9007315-0507)	Screw	4
	QC100	10-14		11112295	Control Kit, electric on/off, 12 volt, n.c. (SB-2012-011)	1
	QC120	10-14		11103621	Solenoid valve seal kit	1
	QC125	10-14		11104457	Nut	1
	QC150	10-14		11104463	Solenoid valve kit, 12 volt	1



Control

(AH)



E101 621E

* = included in base motor seal kit Q210

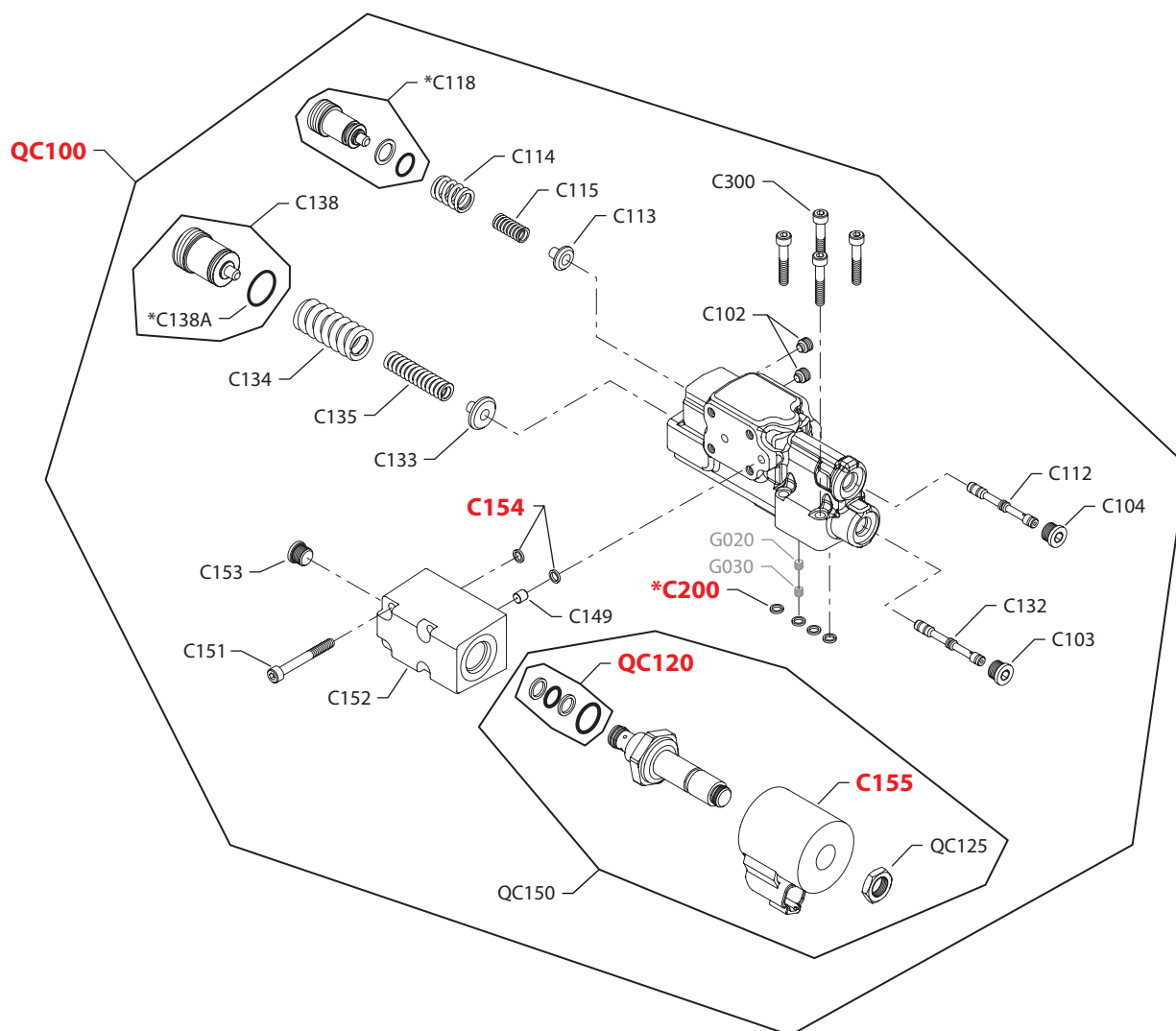
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AH	C102	09-08		4740064	Set screw	2
	C103	09-08		327007 (9005110-4400)	Plug assembly	1
	C104	09-08		327007 (9005110-4400)	Plug assembly	1
	C112	09-08		1701439	Spool	1
	C113	09-08		4740301	Spring guide	1
	C114	09-08		4740061	Spring	1
	C115	09-08		4740062	Spring	1
	C118	09-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	09-08		1701124	Spool	1
	C133	09-08		4740247	Spring guide	1
	C134	09-08		4740051	Spring, PC outer	1
	C135	09-08		4740052	Spring, PC inner	1
	C138	09-08		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	09-08		5000656	O-ring	1
	C149	09-08		739144	Orifice plug, 0.8mm	1
	C151	09-08		9007315-0510	Screw	4
	C152	09-08		11150082	Solenoid valve adapter	1
	C153	09-08		327007 (9005110-4400)	Plug assembly	1
	C154	09-08		4740154	Seal ring	2
	C155	09-08		1701291	Coil, 12 volt	1
	C200	09-08		4740154	Seal ring	4
	C300	09-08		5000164 (9007315-0507)	Screw	4
	QC100	09-08		11112221	Control Kit, electric prop. 12 volt, n.c. (SB-2012-011)	1
	QC120	09-08		11103621	Solenoid valve seal kit	1
	QC125	09-08		11104460	Nut	1
	QC150	09-08		11104467	Solenoid valve kit, 12 volt	1

Control

(AK)



E101 833E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

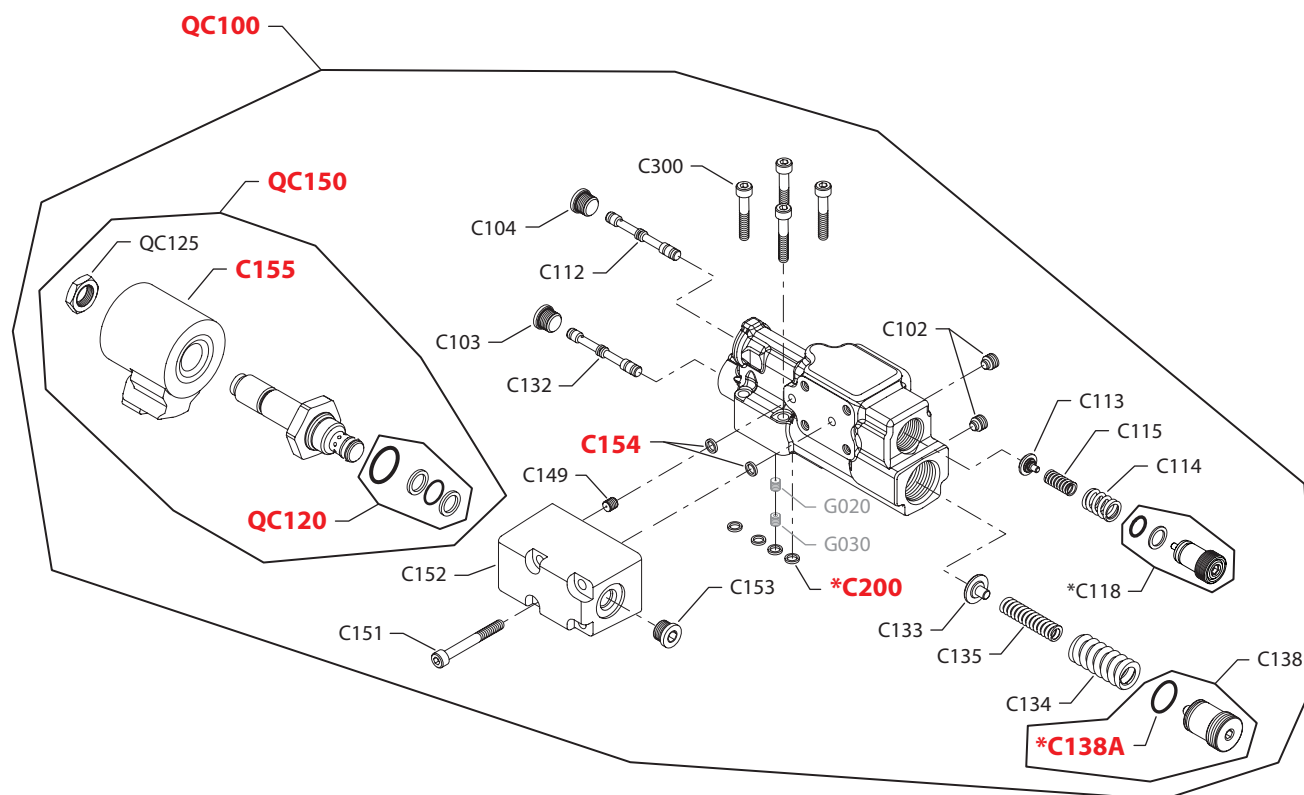
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AK	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		1701439	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	11-35		5000656	O-ring	1
	C149	11-35		739144	Orifice plug, 0.8mm	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		1701029	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701563	Coil, 24 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112291	Control Kit, electric prop. 24 volt, n.c. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104460	Nut	1
	QC150	11-35		11104468	Solenoid valve kit, 24 volt	1



Control

(AL)



E101 621E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

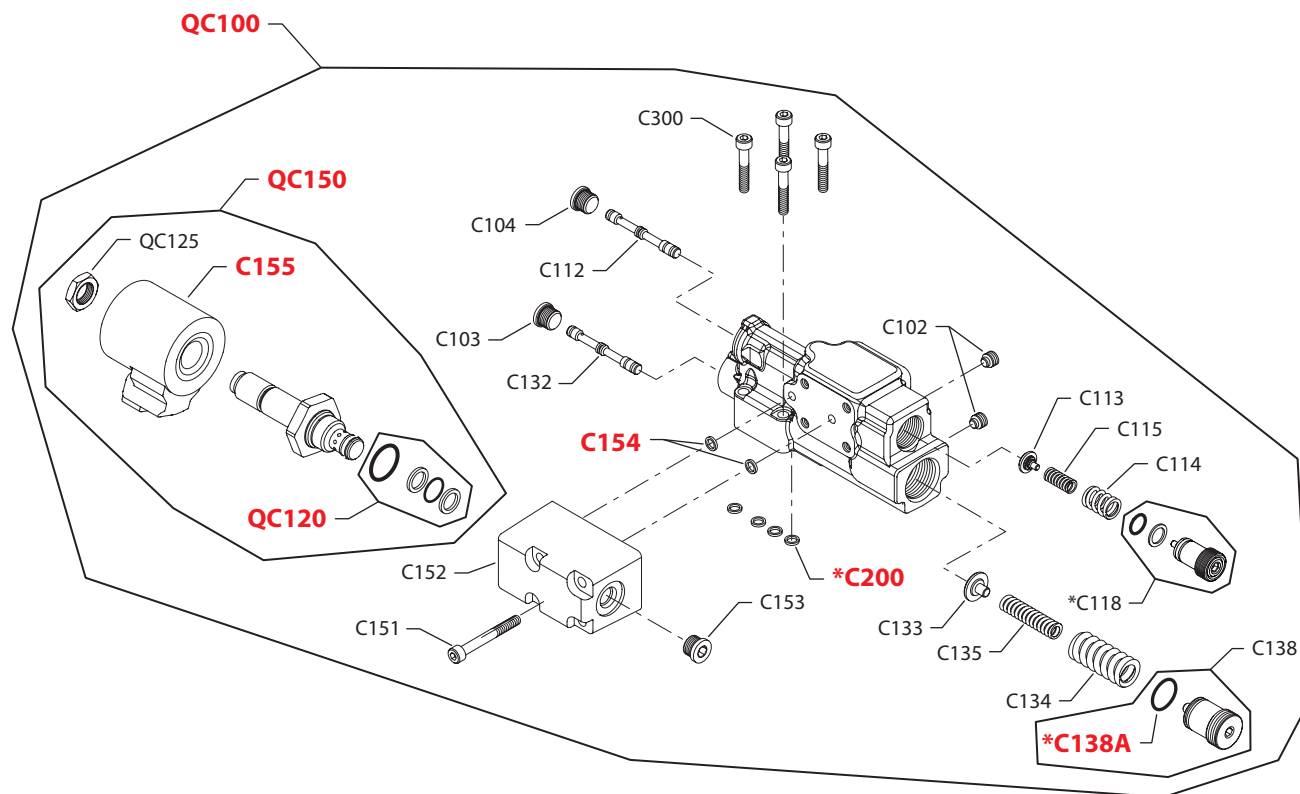
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AL	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		1701439	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	11-35		5000656	O-ring	1
	C149	11-35		739144	Orifice plug, 0.8mm	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701563	Coil, 24 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112218	Control Kit, electric prop. 24 volt, n.c. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104460	Nut	1
	QC150	11-35		11104468	Solenoid valve kit, 24 volt	1



Control

(AN)



E101 622E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

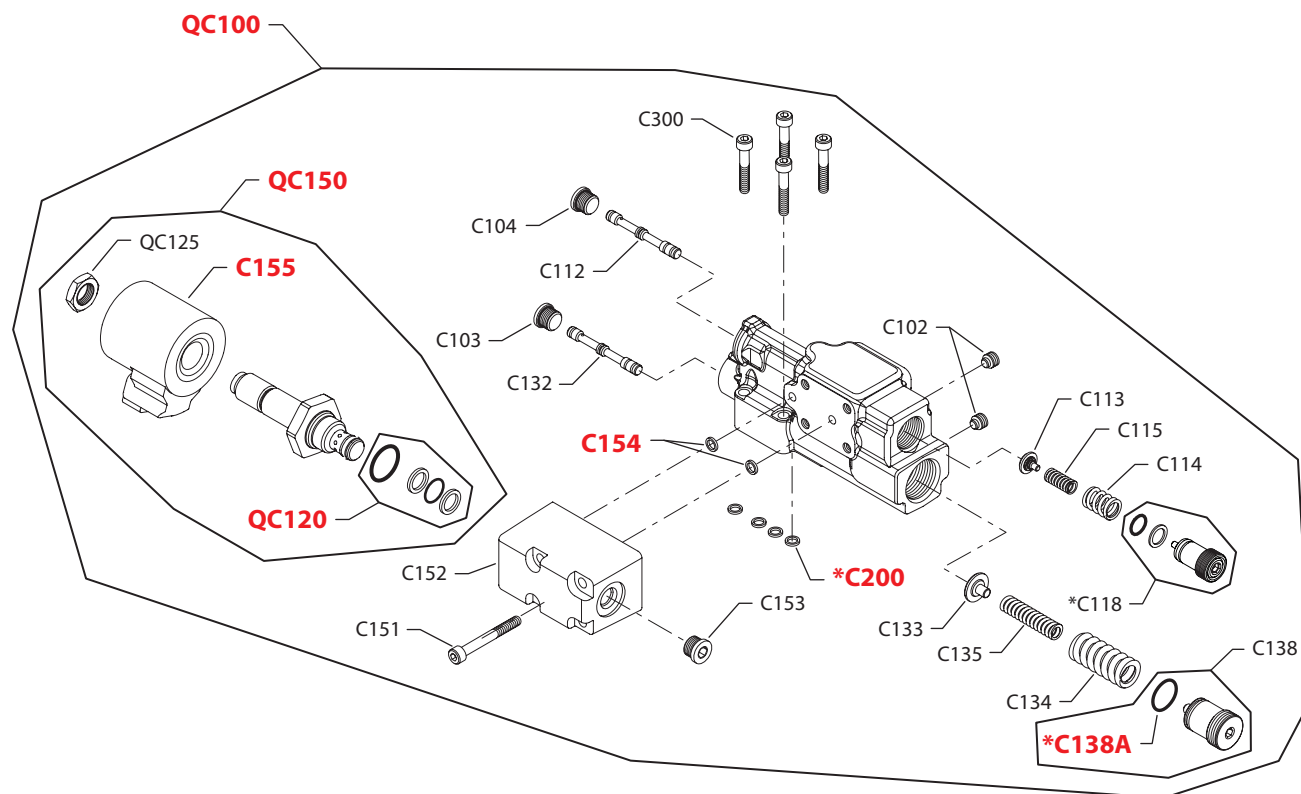
Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AN	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		4740300	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	11-35		5000656	O-ring	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701291	Coil, 12 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112229	Control Kit, electric on/off 12 volt, n.o. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104457	Nut	1
	QC150	11-35		11104461	Solenoid valve kit, 12 volt	1



Control

(AR)



E101 622E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

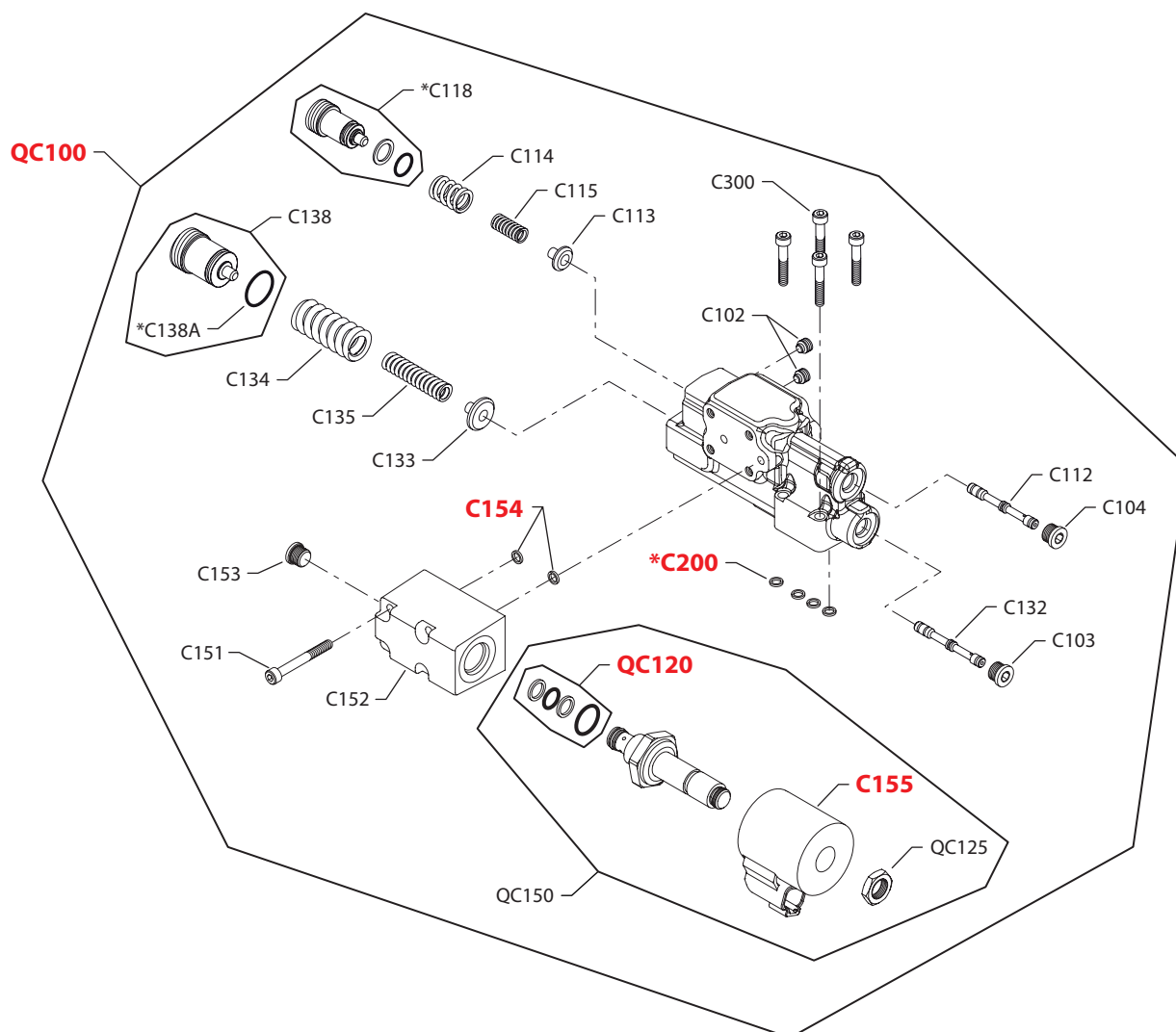
Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AR	C102	03-08		4740064	Set screw	2
	C103	03-08		327007 (9005110-4400)	Plug assembly	1
	C104	03-08		327007 (9005110-4400)	Plug assembly	1
	C112	03-08		4740300	Spool	1
	C113	03-08		4740301	Spring guide	1
	C114	03-08		4740061	Spring	1
	C115	03-08		4740062	Spring	1
	C118	03-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	03-08		1701124	Spool	1
	C133	03-08		4740247	Spring guide	1
	C134	03-08		4740051	Spring, PC outer	1
	C135	03-08		4740052	Spring, PC inner	1
	C138	03-08		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	03-08		5000656	O-ring	1
	C151	03-08		9007315-0510	Screw	4
	C152	03-08		11150082	Solenoid valve adapter	1
	C153	03-08		327007 (9005110-4400)	Plug assembly	1
	C154	03-08		4740154	Seal ring	2
	C155	03-08		1701291	Coil, 12 volt	1
	C200	03-08		4740154	Seal ring	4
	C300	03-08		5000164 (9007315-0507)	Screw	4
	QC100	03-08		11112220	Control Kit, electric on/off 12 volt, n.c. (SB-2012-011)	1
	QC120	03-08		11103621	Solenoid valve seal kit	1
	QC125	03-08		11104457	Nut	1
	QC150	03-08		11104463	Solenoid valve kit, 12 volt	1



Control

(AT)



E101 700E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

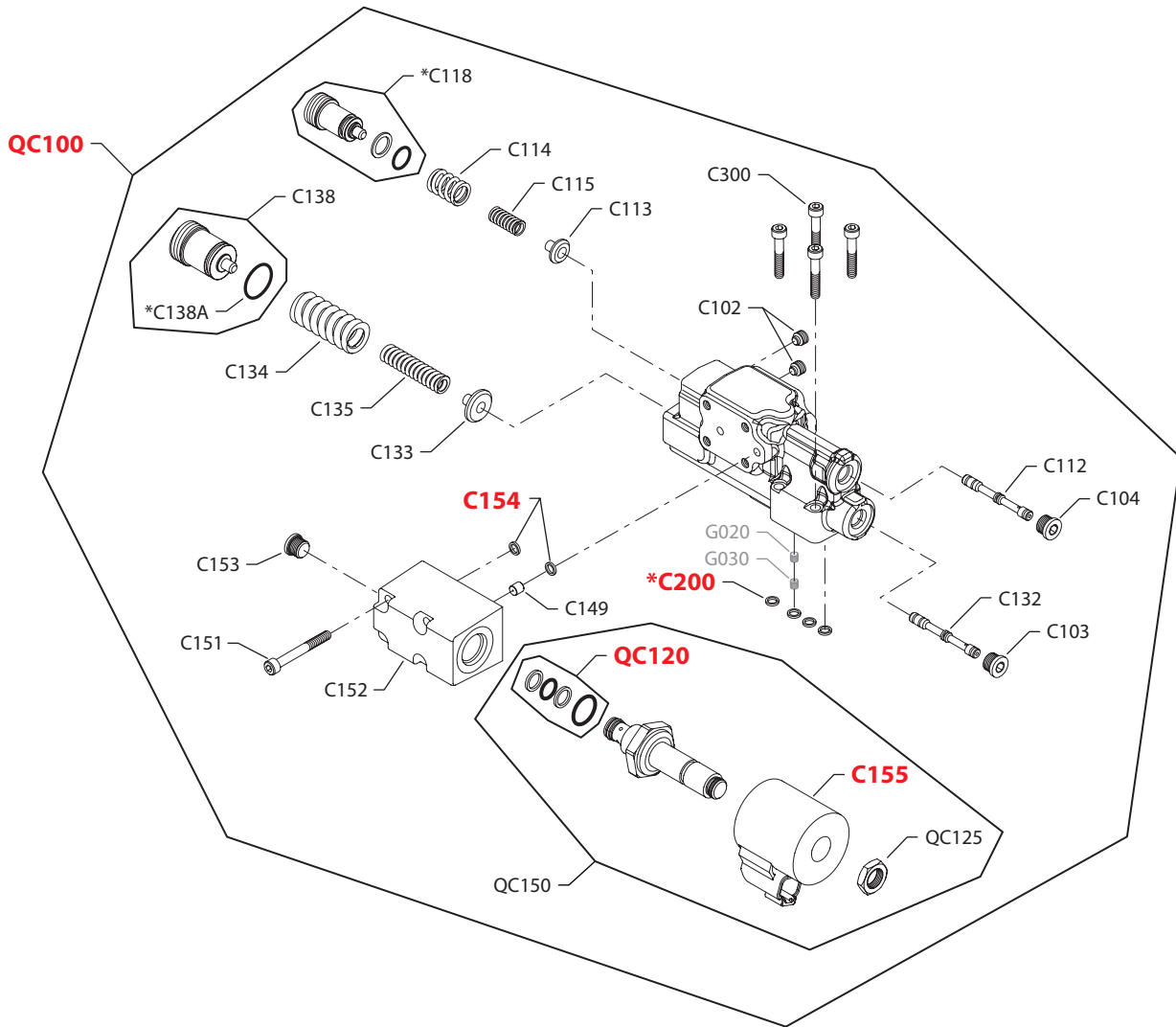
Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AT	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		4740300	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	11-35		5000656	O-ring	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701563	Coil, 24volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112292	Control Kit, electric on/off, 24 volt, n.o. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104457	Nut	1
	QC150	11-35		11104462	Solenoid valve kit, 24 volt	1



Control

(AV)



E101 833E

* = included in base motor seal kit Q210

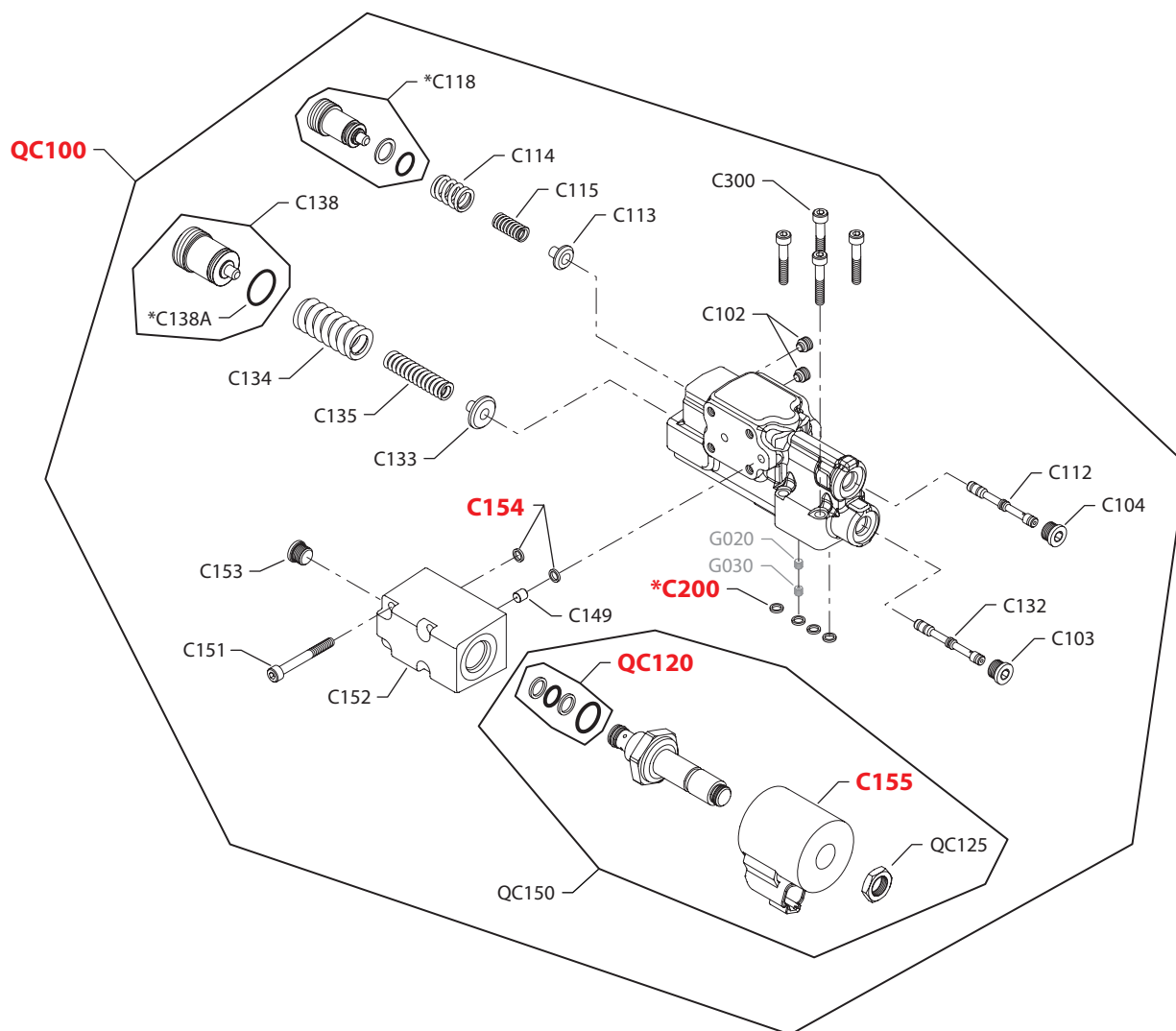
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AV	C102	09-08		4740064	Set screw	2
	C103	09-08		327007 (9005110-4400)	Plug assembly	1
	C104	09-08		327007 (9005110-4400)	Plug assembly	1
	C112	09-08		1701439	Spool	1
	C113	09-08		4740301	Spring guide	1
	C114	09-08		4740061	Spring	1
	C115	09-08		4740062	Spring	1
	C118	09-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	09-08		1701124	Spool	1
	C133	09-08		4740247	Spring guide	1
	C134	09-08		4740051	Spring, PC outer	1
	C135	09-08		4740052	Spring, PC inner	1
	C138	09-08		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	09-08		5000656	O-ring	1
	C149	09-08		739144	Orifice plug, 0.8mm	1
	C151	09-08		9007315-0510	Screw	4
	C152	09-08		11150082	Solenoid valve adapter	1
	C153	09-08		327007 (9005110-4400)	Plug assembly	1
	C154	09-08		4740154	Seal ring	2
	C155	09-08		1701291	Coil, 12 volt	1
	C200	09-08		4740154	Seal ring	4
	C300	09-08		5000164 (9007315-0507)	Screw	4
	QC100	09-08		11112301	Control Kit, electric proportional 12 volt, n.c.	1
	QC120	09-08		11103621	Solenoid valve seal kit	1
	QC125	09-08		11104460	Nut	1
	QC150	09-08		11104467	Solenoid valve kit, 12 volt	1

Control

(AW)



E101 833E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

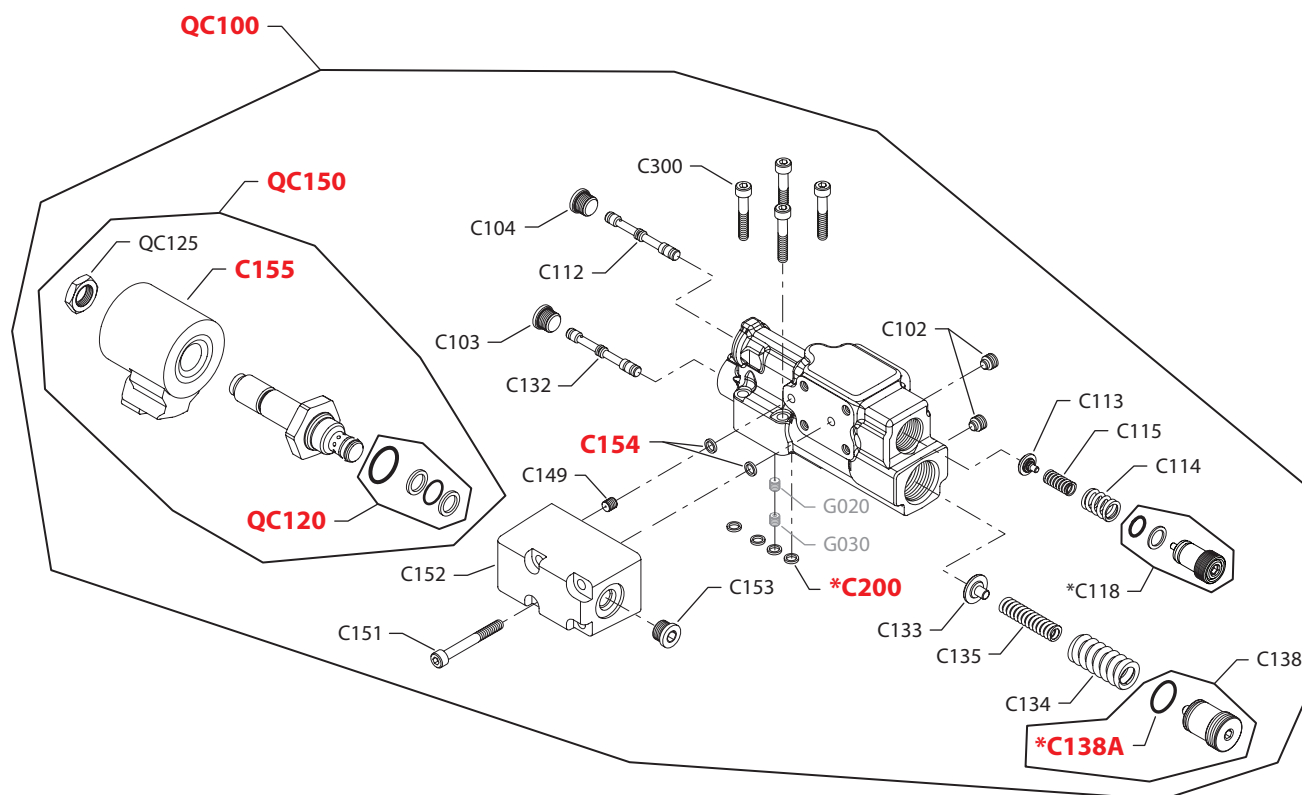
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AW	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		1701439	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	11-35		5000656	O-ring	1
	C149	11-35		739144	Orifice plug, 0.8mm	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701291	Coil, 12 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112294	Control Kit, electric prop. 12 volt, n.o. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104459	Nut	1
	QC150	11-35		11104465	Solenoid valve kit, 12 volt	1



Control

(AX)



E101 621E

* = included in base motor seal kit Q210

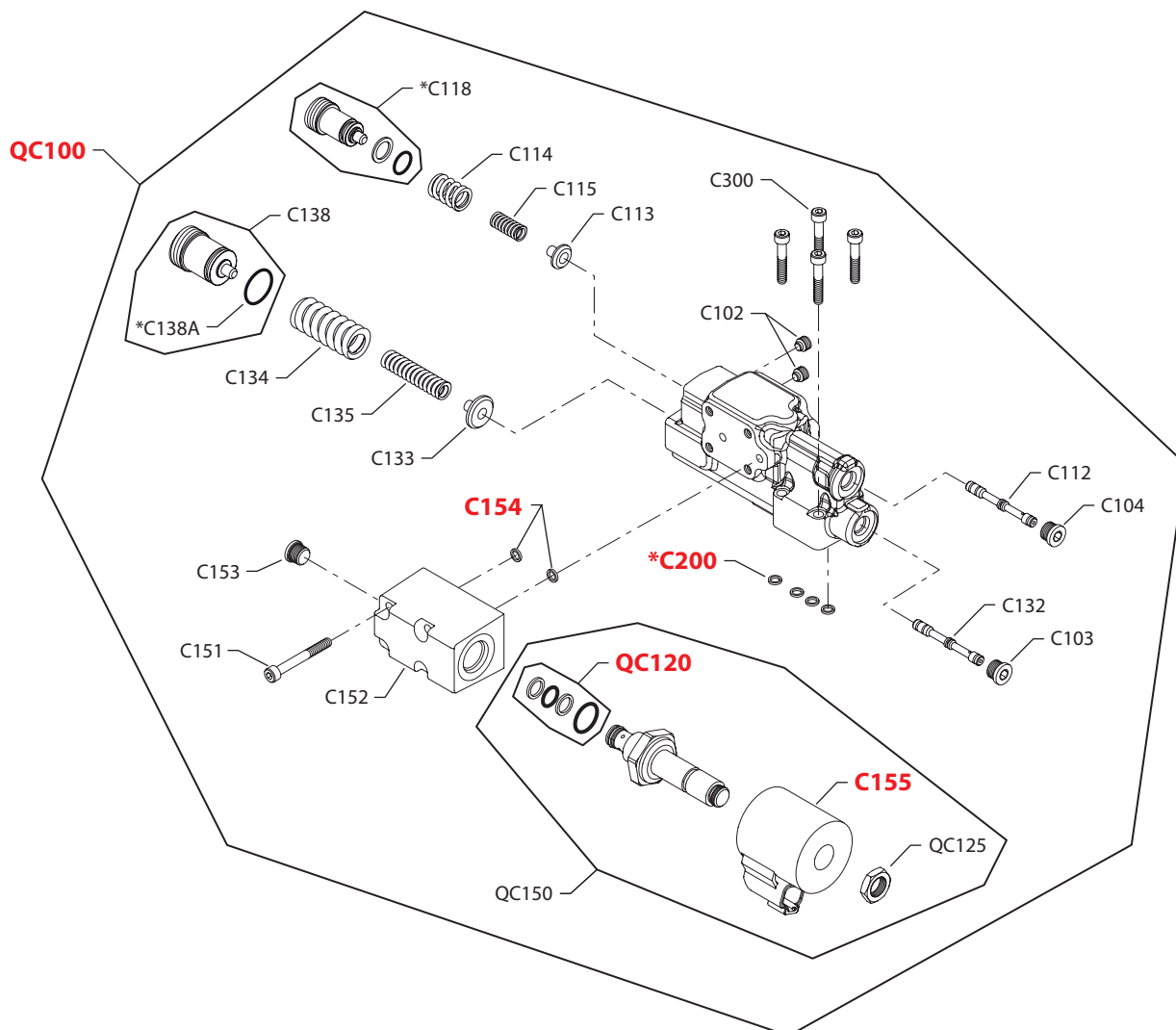
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AX	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		1701439	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	11-35		5000656	O-ring	1
	C149	11-35		739144	Orifice plug, 0.8mm	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701291	Coil, 12 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112230	Control Kit, electric prop 12 volt, n.o. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104459	Nut	1
	QC150	11-35		11104465	Solenoid valve kit, 12 volt	1

Control

(AY)



E101 700E

* = included in base motor seal kit Q210

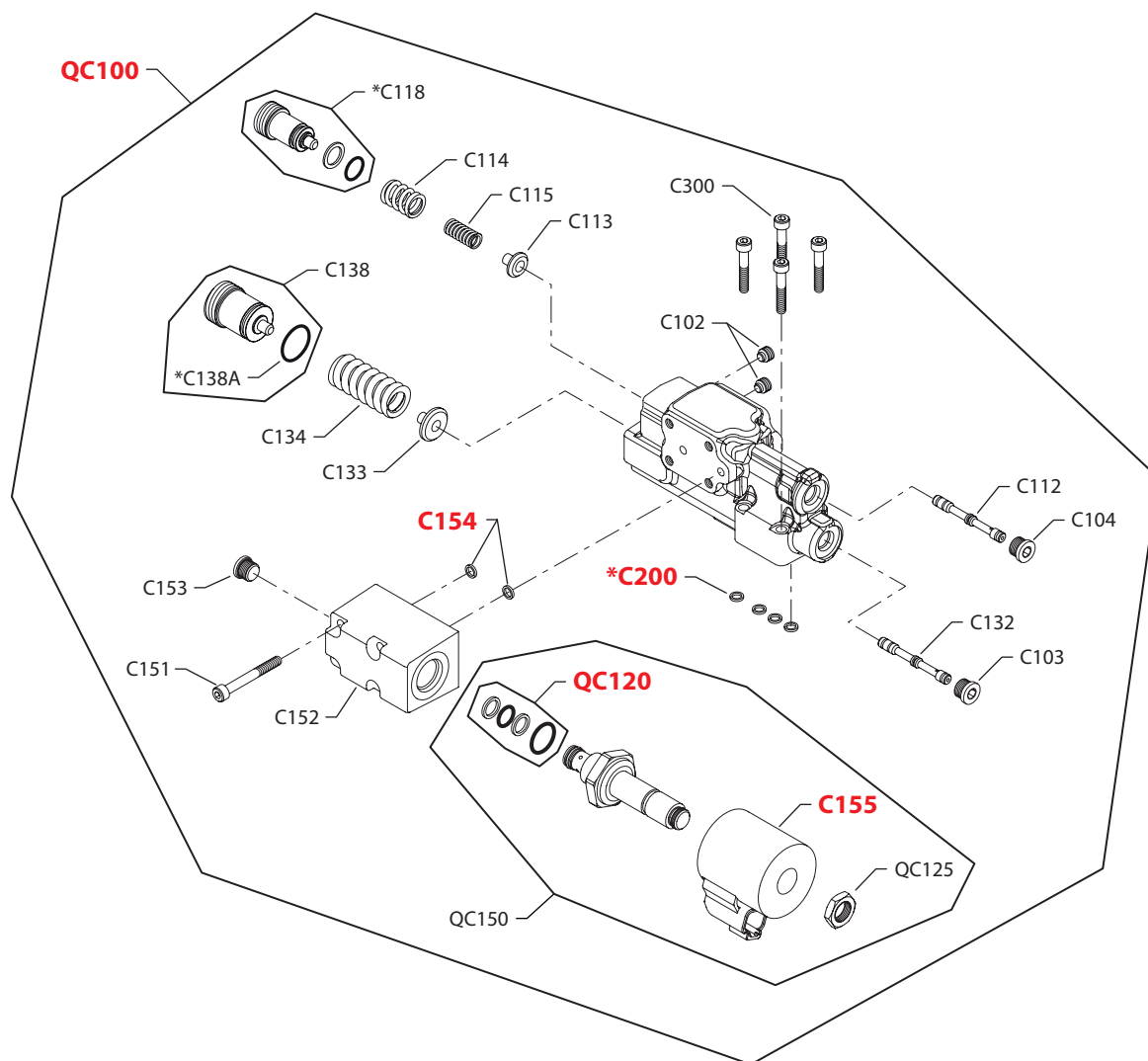
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AY	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		4740300	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	11-35		5000656	O-ring	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701563	Coil, 24 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112303	Control Kit, electric on/off, 24 volt, n.c.	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104457	Nut	1
	QC150	11-35		11104464	Solenoid valve kit, 24 volt	1

Control

(BE)



E101 624E

* = included in base motor seal kit Q210

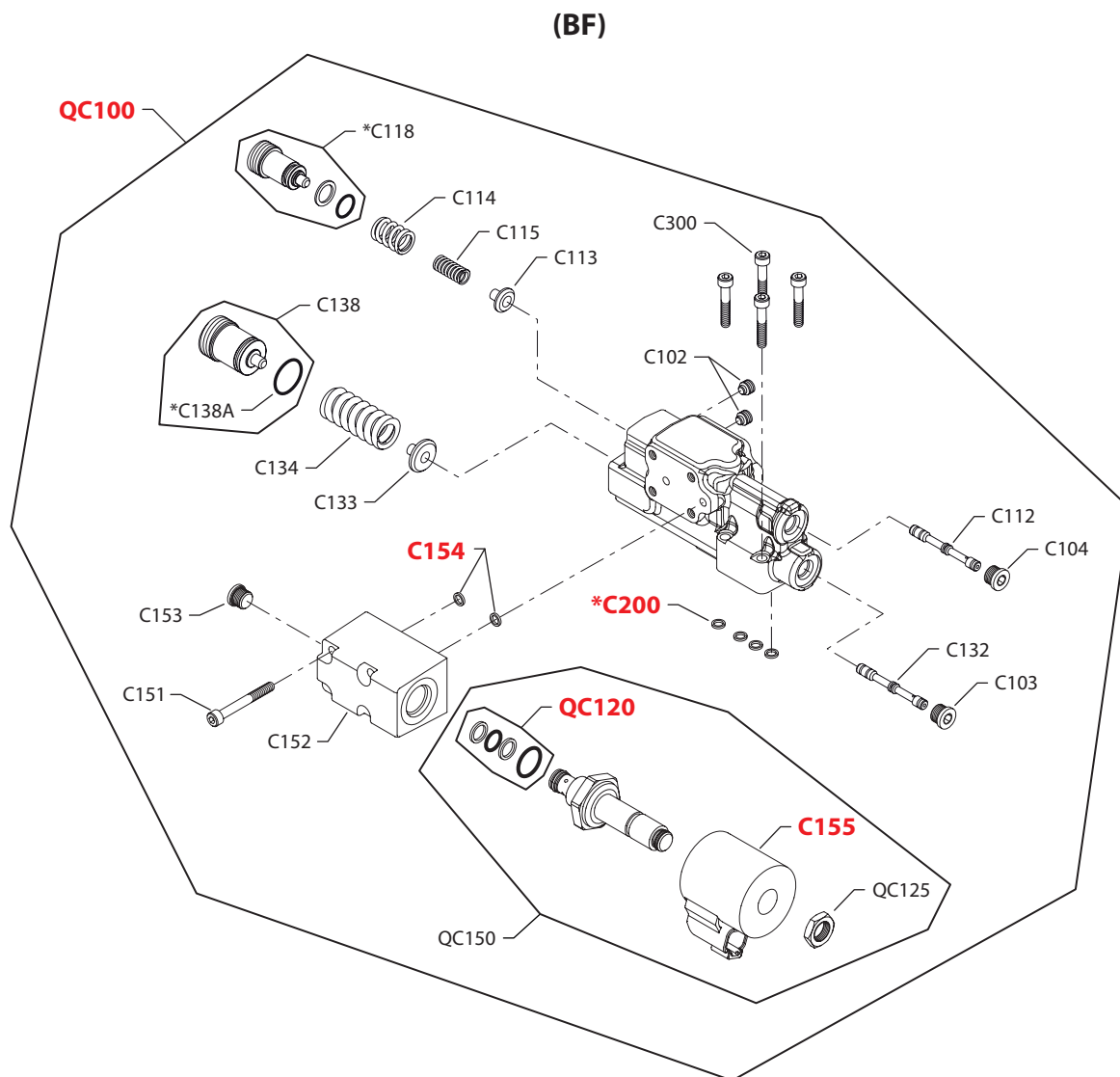
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BE	C102	08-08		4740064	Set screw	2
	C103	08-08		327007 (9005110-4400)	Plug assembly	1
	C104	08-08		327007 (9005110-4400)	Plug assembly	1
	C112	08-08		4740300	Spool	1
	C113	08-08		4740301	Spring guide	1
	C114	08-08		4740061	Spring	1
	C115	08-08		4740062	Spring	1
	C118	08-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	08-08		1701124	Spool	1
	C133	08-08		4740247	Spring guide	1
	C134	08-08		4740324	Spring, heavy	1
	C138	08-08		1700597	Adjusting plug assembly	1
	C138A	08-08		5000656	O-ring	1
	C151	08-08		9007315-0510	Screw	4
	C152	08-08		11150082	Solenoid valve adapter	1
	C153	08-08		327007 (9005110-4400)	Plug assembly	1
	C154	08-08		4740154	Seal ring	2
	C155	08-08		1701291	Coil, 12 volt	1
	C200	08-08		4740154	Seal ring	4
	C300	08-08		5000164 (9007315-0507)	Screw	4
	QC100	08-08		11112299	Control Kit, electric on/off, 12v, high, n.c. (SB-2012-011)	1
	QC120	08-08		11103621	Solenoid valve seal kit	1
	QC125	08-08		11104457	Nut	1
	QC150	08-08		11104463	Solenoid valve kit, 12 volt	1



Control



E101 624E

* = included in base motor seal kit Q210

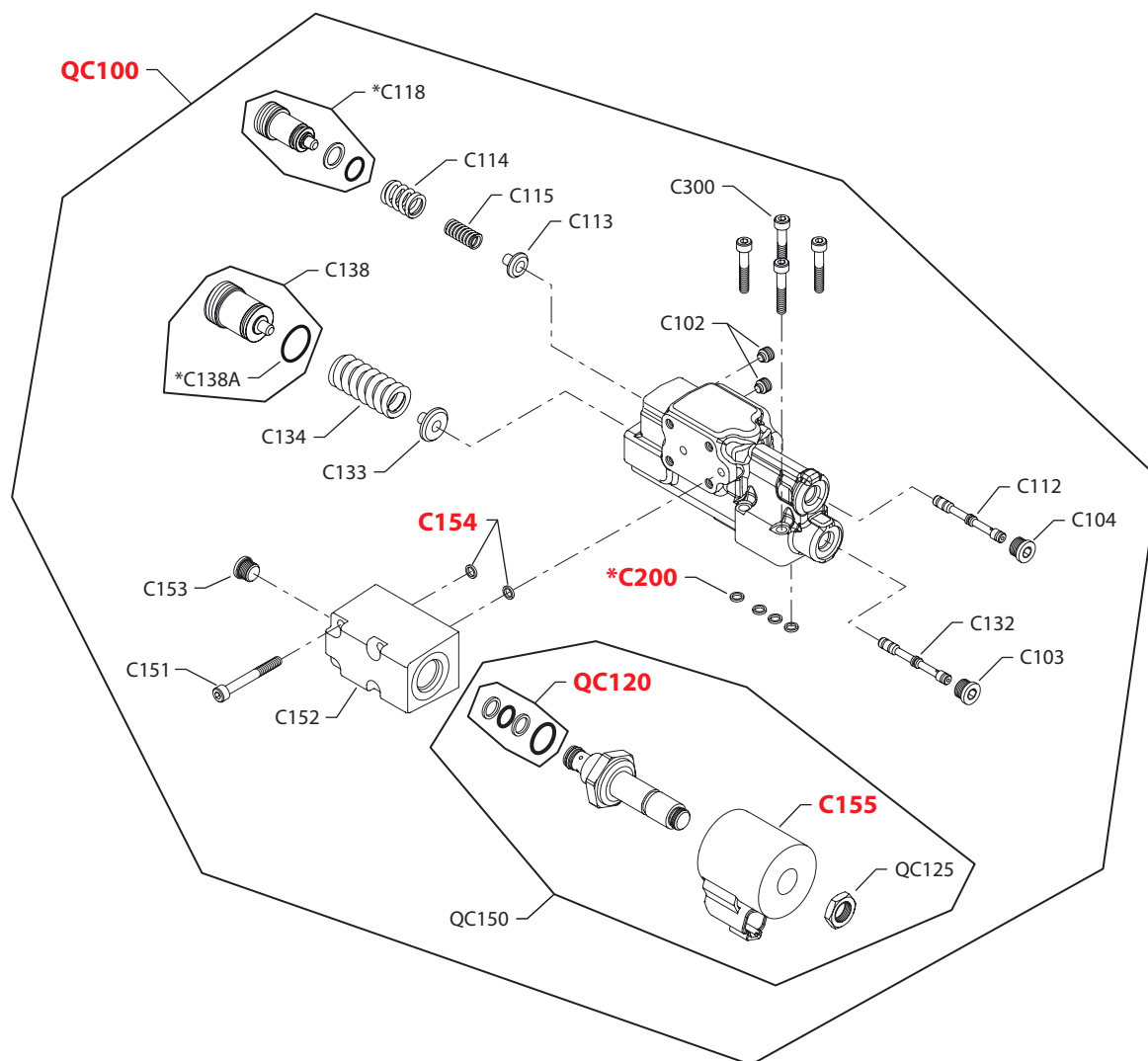
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BF	C102	08-08		4740064	Set screw	2
	C103	08-08		327007 (9005110-4400)	Plug assembly	1
	C104	08-08		327007 (9005110-4400)	Plug assembly	1
	C112	08-08		4740300	Spool	1
	C113	08-08		4740301	Spring guide	1
	C114	08-08		4740061	Spring	1
	C115	08-08		4740062	Spring	1
	C118	08-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	08-08		1701124	Spool	1
	C133	08-08		4740247	Spring guide	1
	C134	08-08		4740324	Spring, heavy	1
	C138	08-08		1700597	Adjusting plug assembly	1
	C138A	08-08		5000656	O-ring	1
	C151	08-08		9007315-0510	Screw	4
	C152	08-08		11150082	Solenoid valve adapter	1
	C153	08-08		327007 (9005110-4400)	Plug assembly	1
	C154	08-08		4740154	Seal ring	2
	C155	08-08		1701291	Coil, 12 volt	1
	C200	08-08		4740154	Seal ring	4
	C300	08-08		5000164 (9007315-0507)	Screw	4
	QC100	08-08		11112300	Control Kit, electric on/off, 12v, high, n.o. (SB-2012-011)	1
	QC120	08-08		11103621	Solenoid valve seal kit	1
	QC125	08-08		11104457	Nut	1
	QC150	08-08		11104461	Solenoid valve kit, 12 volt	1

Control

(BG)



E101 624E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

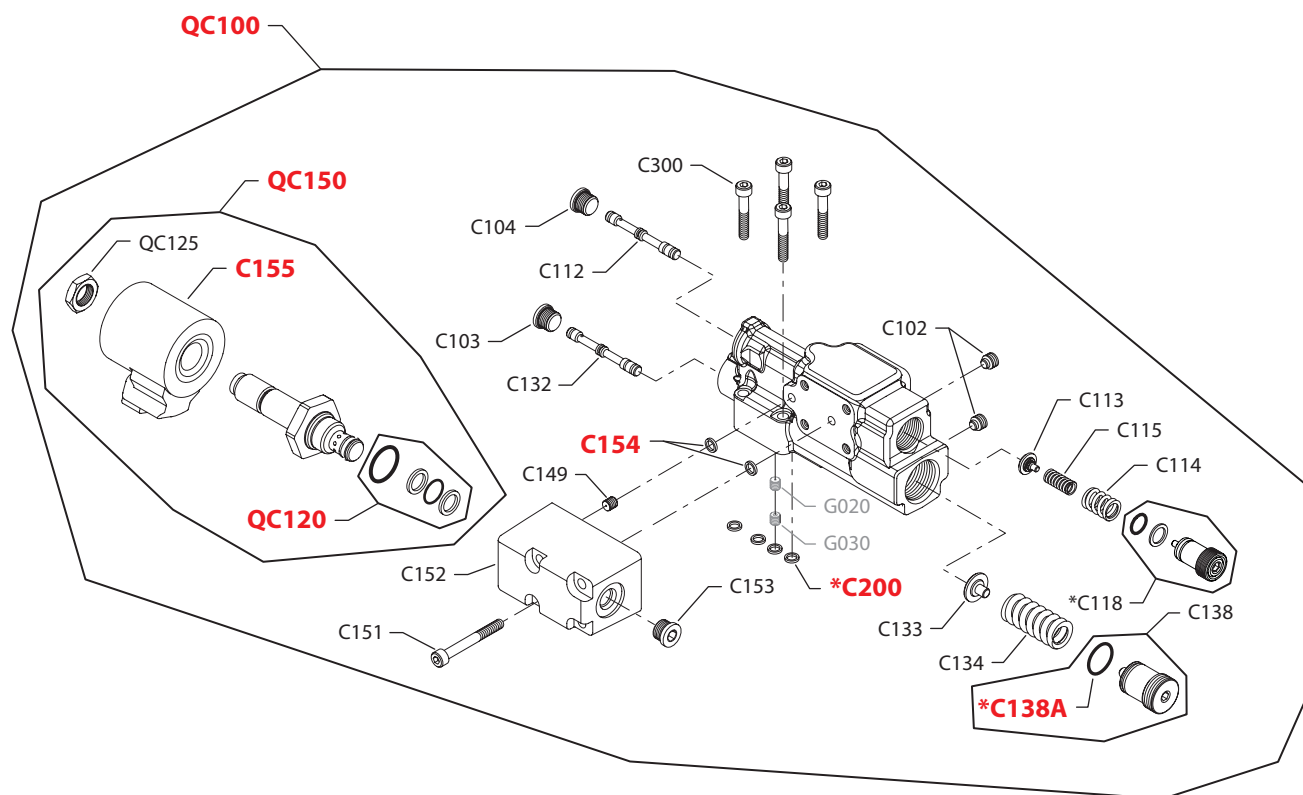

Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BG	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		4740300	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740324	Spring, heavy	1
	C138	11-35		1700597	Adjusting plug assembly	1
	C138A	11-35		5000656	O-ring	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701563	Coil, 24 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112289	Control Kit, electric on/off, 24v, high, n.c. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104457	Nut	1
	QC150	11-35		11104464	Solenoid valve kit, 24 volt	1



Control

(BH)



E101 831E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

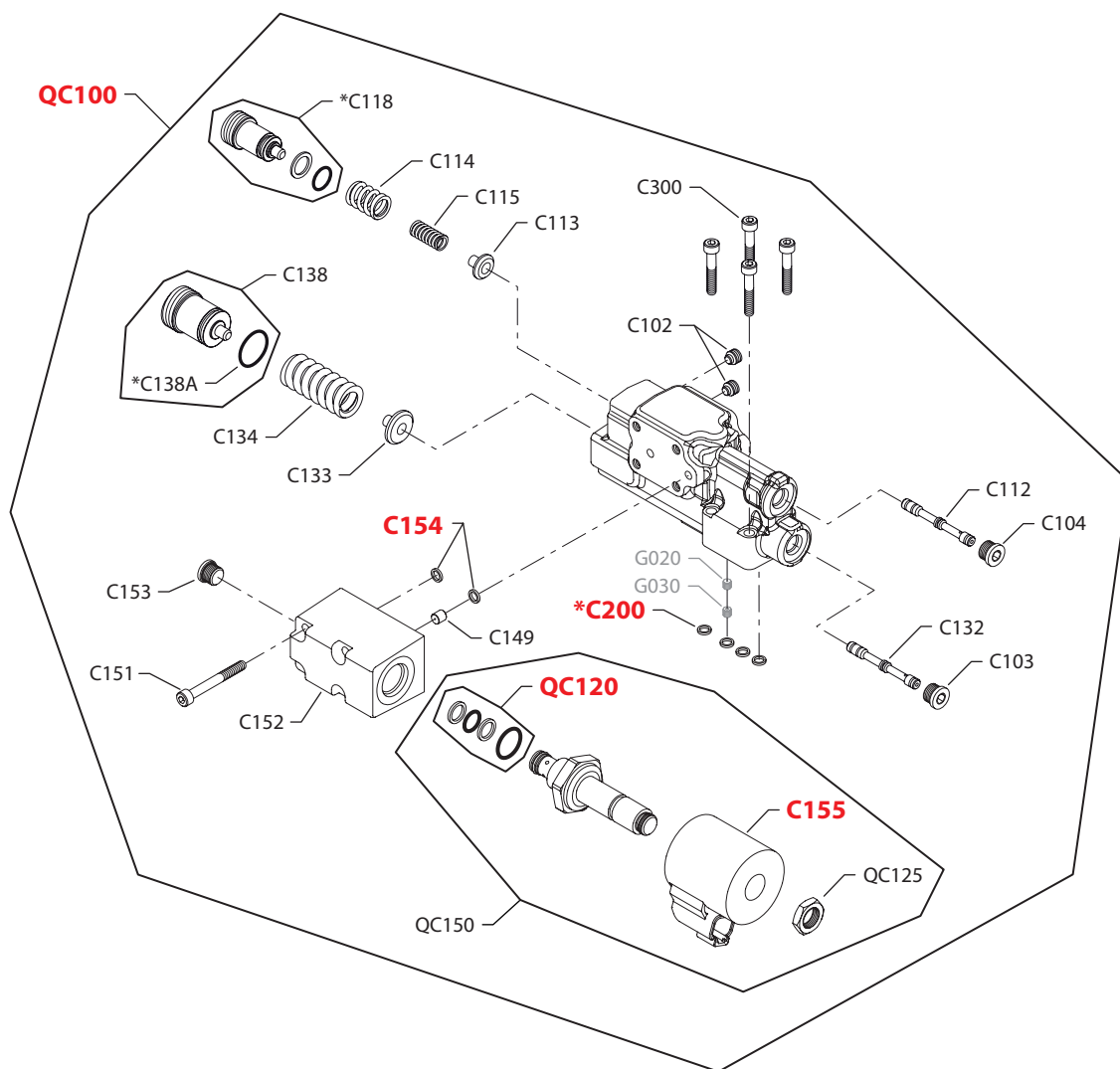
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BH	C102	11-51		4740064	Set screw	2
	C103	11-51		327007 (9005110-4400)	Plug assembly	1
	C104	11-51		327007 (9005110-4400)	Plug assembly	1
	C112	11-51		1701439	Spool	1
	C113	11-51		4740301	Spring guide	1
	C114	11-51		4740061	Spring	1
	C115	11-51		4740062	Spring	1
	C118	11-51		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-51		1701124	Spool	1
	C133	11-51		4740247	Spring guide	1
	C134	11-51		4740324	Spring, PC heavy	1
	C138	11-51		1700597	Adjusting plug assembly	1
	C138A	11-51		5000656	O-ring	1
	C149	11-51		739144	Orifice plug, 0.8mm	1
	C151	11-51		9007315-0510	Screw	4
	C152	11-51		11150082	Solenoid valve adapter	1
	C153	11-51		327007 (9005110-4400)	Plug assembly	1
	C154	11-51		4740154	Seal ring	2
	C155	11-51		1701291	Coil, 12 volt	1
	C200	11-51		4740154	Seal ring	4
	C300	11-51		5000164 (9007315-0507)	Screw	4
	QC100	11-51		11112216	Control Kit, electric prop. 12v, high, n.c. (SB-2012-011)	1
	QC120	11-51		11103621	Solenoid valve seal kit	1
	QC125	11-51		11104460	Nut	1
	QC150	11-51		11104467	Solenoid valve kit, 12 volt	1



Control

(BK)



E101 834E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

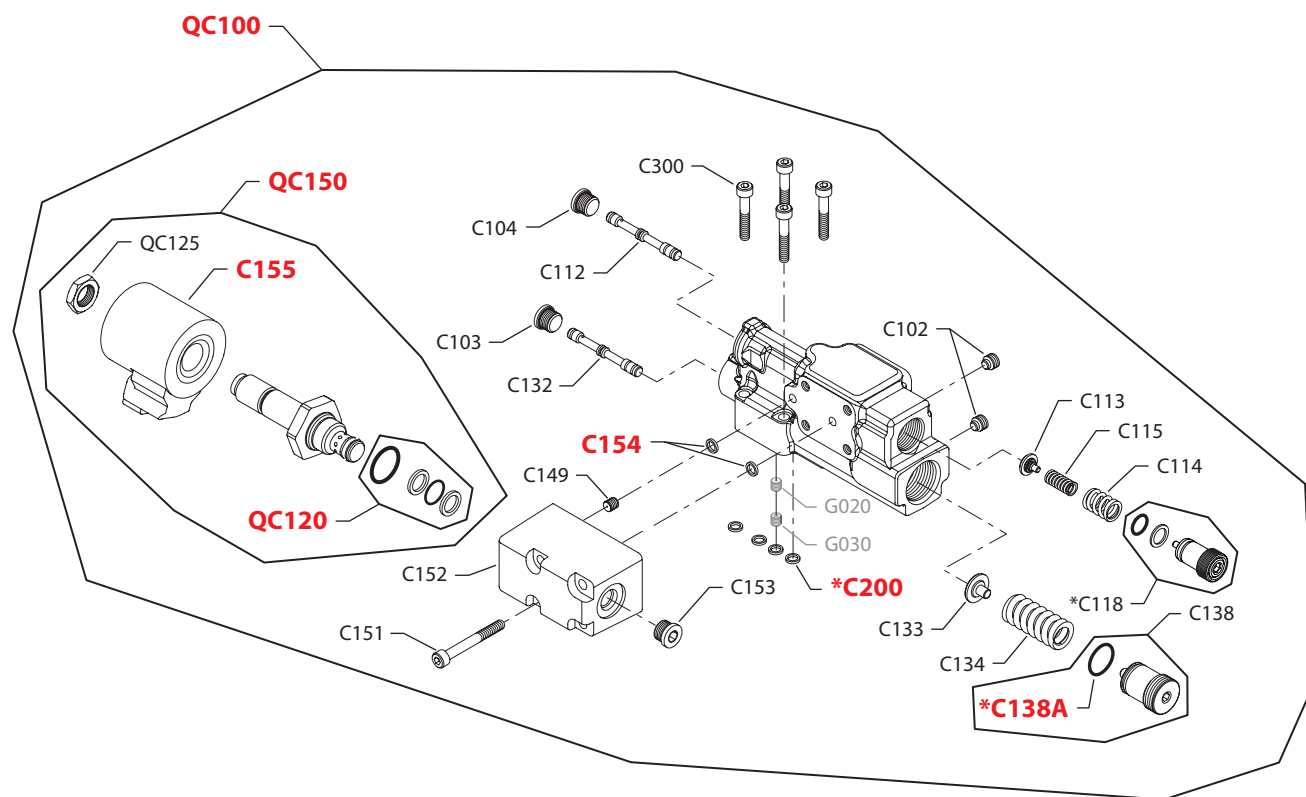
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BK	C102	08-08		4740064	Set screw	2
	C103	08-08		327007 (9005110-4400)	Plug assembly	1
	C104	08-08		327007 (9005110-4400)	Plug assembly	1
	C112	08-08		1701439	Spool	1
	C113	08-08		4740301	Spring guide	1
	C114	08-08		4740061	Spring	1
	C115	08-08		4740062	Spring	1
	C118	08-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	08-08		1701124	Spool	1
	C133	08-08		4740247	Spring guide	1
	C134	08-08		4740324	Spring, heavy	1
	C138	08-08		1700597	Adjusting plug assembly	1
	C138A	08-08		5000656	O-ring	1
	C149	08-08		739144	Orifice plug, 0.8mm	1
	C151	08-08		9007315-0510	Screw	4
	C152	08-08		11150082	Solenoid valve adapter	1
	C153	08-08		327007 (9005110-4400)	Plug assembly	1
	C154	08-08		4740154	Seal ring	2
	C155	08-08		1701563	Coil, 24 volt	1
	C200	08-08		4740154	Seal ring	4
	C300	08-08		5000164 (9007315-0507)	Screw	4
	QC100	08-08		11112302	Control Kit, electric prop., 24v, high, n.c. (SB-2012-011)	1
	QC120	08-08		11103621	Solenoid valve seal kit	1
	QC125	08-08		11104460	Nut	1
	QC150	08-08		11104468	Solenoid valve kit, 24 volt	1



Control

(BL)



E101 831E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

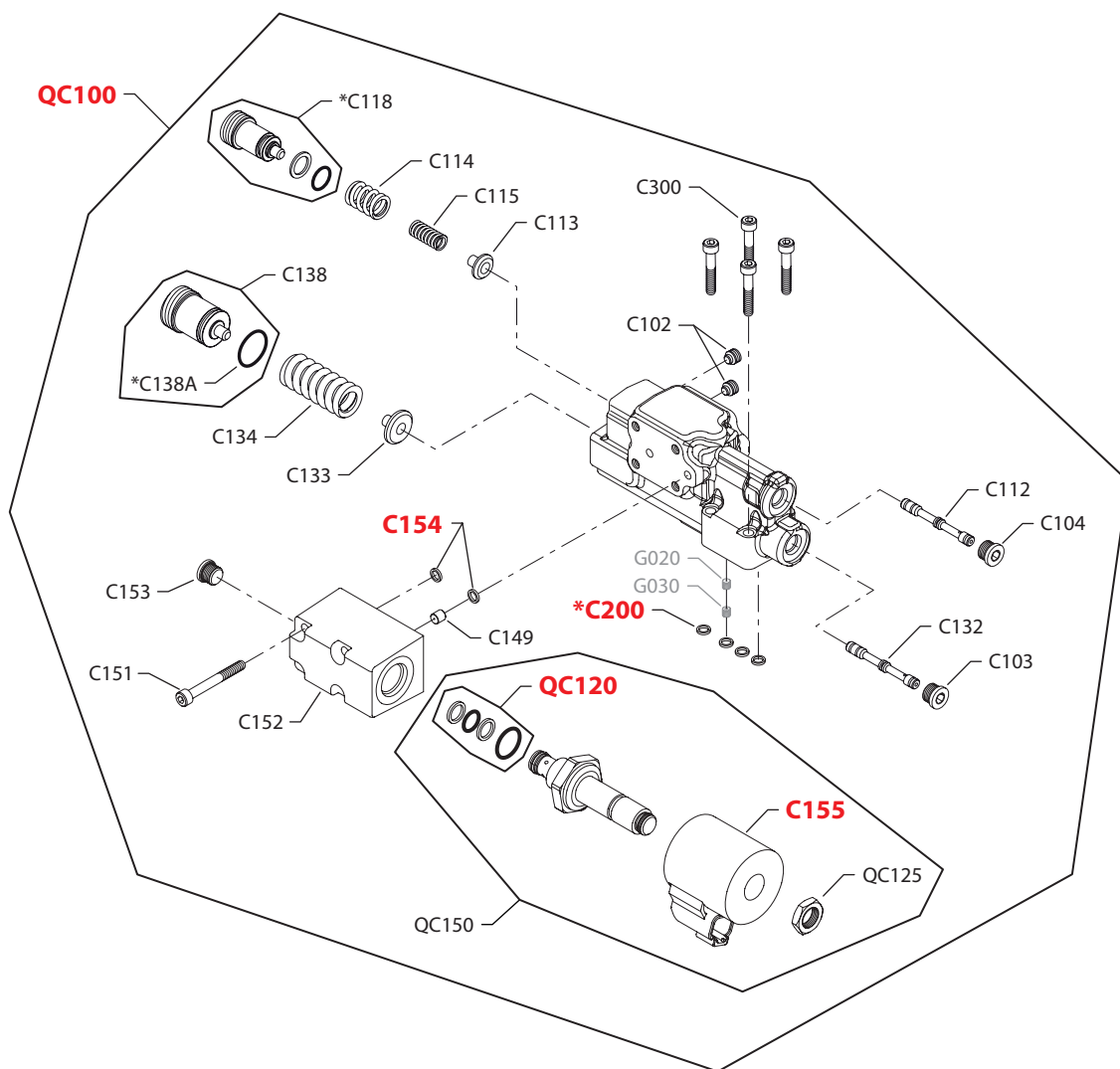
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BL	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		1701439	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740324	Spring, PC heavy	1
	C138	11-35		1700597	Adjusting plug assembly	1
	C138A	11-35		5000656	O-ring	1
	C149	11-35		739144	Orifice plug, 0.8mm	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701563	Coil, 24 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112224	Control Kit, electric prop. 24v, high, n.c. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104460	Nut	1
	QC150	11-35		11104468	Solenoid valve kit, 24 volt	1



Control

(BM)



E101 834E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

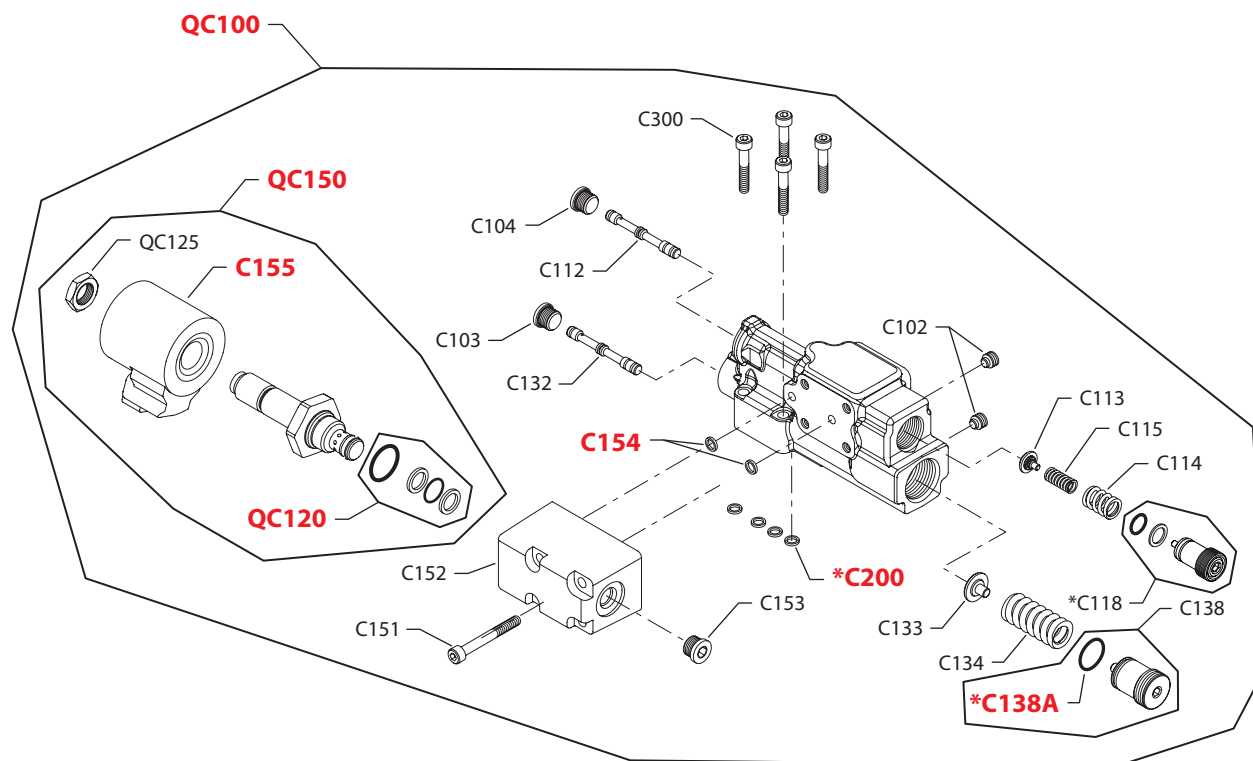

Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BM	C102	11-51		4740064	Set screw	2
	C103	11-51		327007 (9005110-4400)	Plug assembly	1
	C104	11-51		327007 (9005110-4400)	Plug assembly	1
	C112	11-51		1701439	Spool	1
	C113	11-51		4740301	Spring guide	1
	C114	11-51		4740061	Spring	1
	C115	11-51		4740062	Spring	1
	C118	11-51		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-51		1701124	Spool	1
	C133	11-51		4740247	Spring guide	1
	C134	11-51		4740324	Spring, heavy	1
	C138	11-51		1700597	Adjusting plug assembly	1
	C138A	11-51		5000656	O-ring	1
	C149	11-51		739144	Orifice plug, 0.8mm	1
	C151	11-51		9007315-0510	Screw	4
	C152	11-51		11150082	Solenoid valve adapter	1
	C153	11-51		327007 (9005110-4400)	Plug assembly	1
	C154	11-51		4740154	Seal ring	2
	C155	11-51		1701291	Coil, 12 volt	1
	C200	11-51		4740154	Seal ring	4
	C300	11-51		5000164 (9007315-0507)	Screw	4
	QC100	11-51		11112298	Control Kit, electric prop., 12v, high, n.c. (SB-2012-011)	1
	QC120	11-51		11103621	Solenoid valve seal kit	1
	QC125	11-51		11104460	Nut	1
	QC150	11-51		11104467	Solenoid valve kit, 12 volt	1



Control

(BN)



E101 832E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

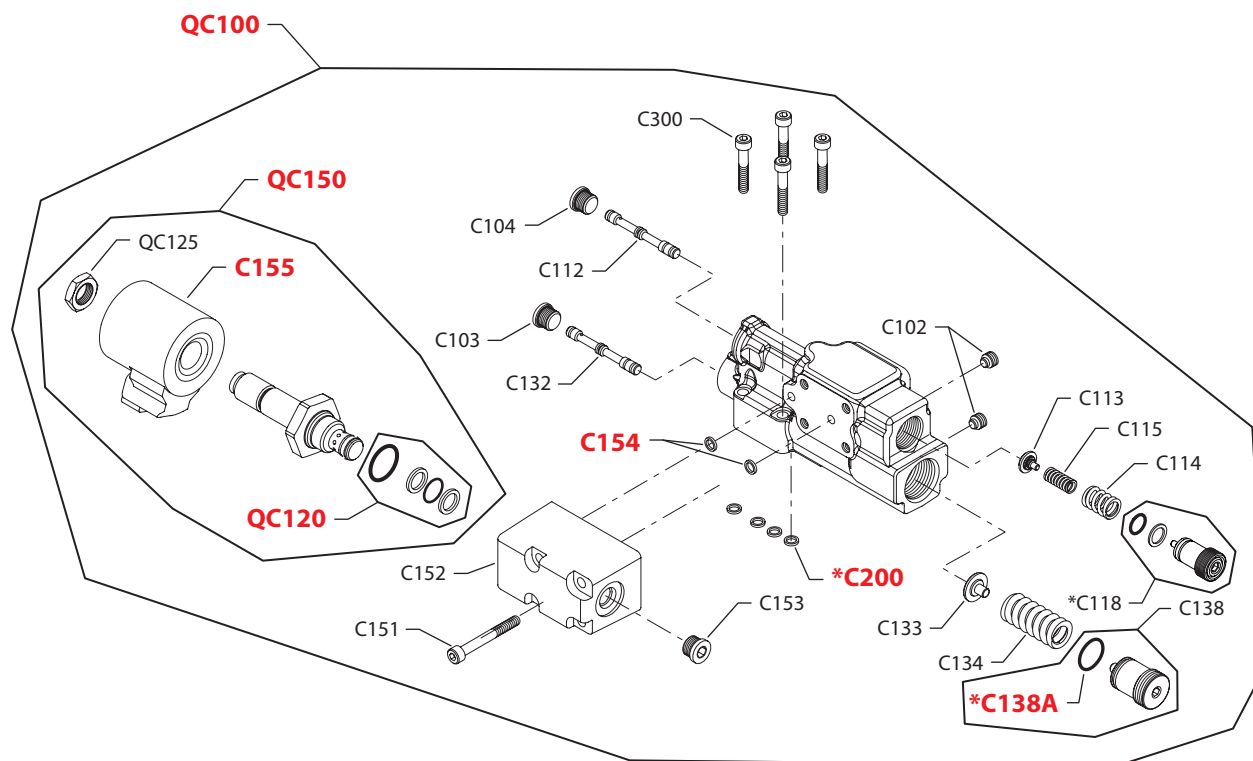

Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BN	C102	08-08		4740064	Set screw	2
	C103	08-08		327007 (9005110-4400)	Plug assembly	1
	C104	08-08		327007 (9005110-4400)	Plug assembly	1
	C112	08-08		4740300	Spool	1
	C113	08-08		4740301	Spring guide	1
	C114	08-08		4740061	Spring	1
	C115	08-08		4740062	Spring	1
	C118	08-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	08-08		1701124	Spool	1
	C133	08-08		4740247	Spring guide	1
	C134	08-08		4740324	Spring, PC heavy	1
	C138	08-08		1700597	Adjusting plug assembly	1
	C138A	08-08		5000656	O-ring	1
	C151	08-08		9007315-0510	Screw	4
	C152	08-08		11150082	Solenoid valve adapter	1
	C153	08-08		327007 (9005110-4400)	Plug assembly	1
	C154	08-08		4740154	Seal ring	2
	C155	08-08		1701291	Coil, 12 volt	1
	C200	08-08		4740154	Seal ring	4
	C300	08-08		5000164 (9007315-0507)	Screw	4
	QC100	08-08		11112222	Control Kit, electric on/off, 12v, high, n.o. (SB-2012-011)	1
	QC120	08-08		11103621	Solenoid valve seal kit	1
	QC125	08-08		11104457	Nut	1
	QC150	08-08		11104461	Solenoid valve kit, 12 volt	1



Control

(BR)



E101 832E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

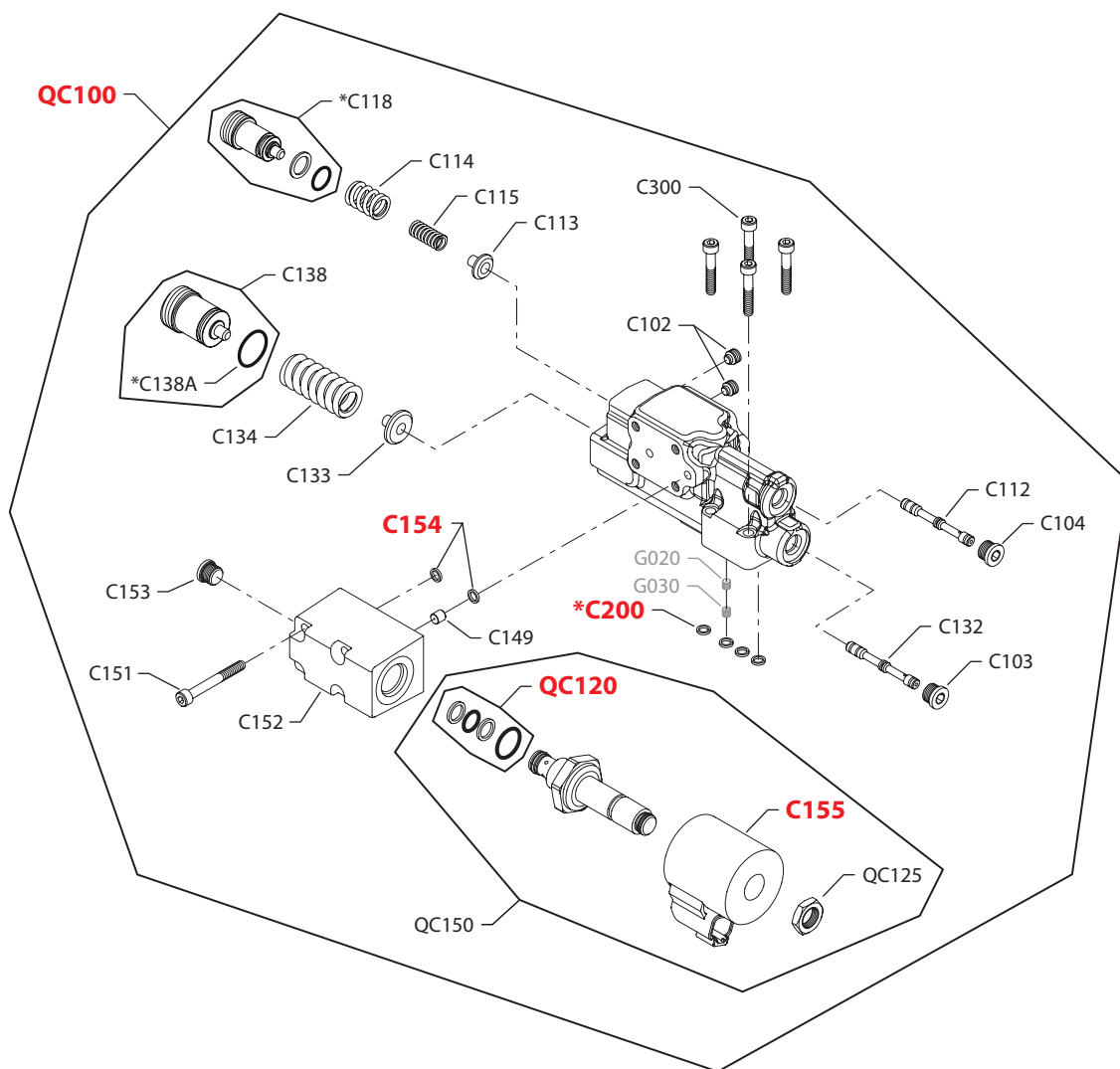

Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BR	C102	08-08		4740064	Set screw	2
	C103	08-08		327007 (9005110-4400)	Plug assembly	1
	C104	08-08		327007 (9005110-4400)	Plug assembly	1
	C112	08-08		4740300	Spool	1
	C113	08-08		4740301	Spring guide	1
	C114	08-08		4740061	Spring	1
	C115	08-08		4740062	Spring	1
	C118	08-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	08-08		1701124	Spool	1
	C133	08-08		4740247	Spring guide	1
	C134	08-08		4740324	Spring, PC heavy	1
	C138	08-08		1700597	Adjusting plug assembly	1
	C138A	08-08		5000656	O-ring	1
	C151	08-08		9007315-0510	Screw	4
	C152	08-08		11150082	Solenoid valve adapter	1
	C153	08-08		327007 (9005110-4400)	Plug assembly	1
	C154	08-08		4740154	Seal ring	2
	C155	08-08		1701291	Coil, 12 volt	1
	C200	08-08		4740154	Seal ring	4
	C300	08-08		5000164 (9007315-0507)	Screw	4
	QC100	08-08		11112219	Control Kit, electric on/off, 12v, high, n.c. (SB-2012-011)	1
	QC120	08-08		11103621	Solenoid valve seal kit	1
	QC125	08-08		11104457	Nut	1
	QC150	08-08		11104463	Solenoid valve kit, 12 volt	1



Control

(BW)



E101 834E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

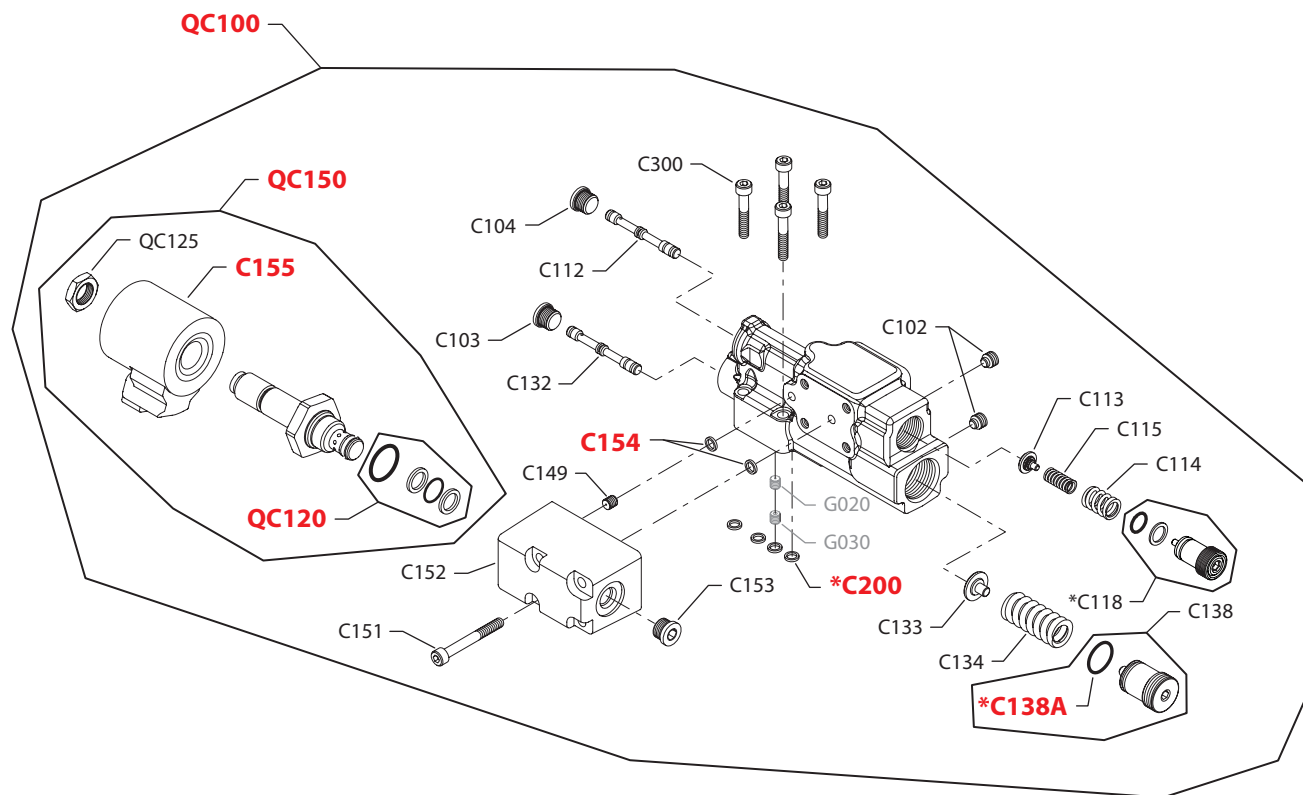
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BW	C102	11-51		4740064	Set screw	2
	C103	11-51		327007 (9005110-4400)	Plug assembly	1
	C104	11-51		327007 (9005110-4400)	Plug assembly	1
	C112	11-51		1701439	Spool	1
	C113	11-51		4740301	Spring guide	1
	C114	11-51		4740061	Spring	1
	C115	11-51		4740062	Spring	1
	C118	11-51		11062214	Adjusting plug assembly	1
	C132	11-51		1701124	Spool	1
	C133	11-51		4740247	Spring guide	1
	C134	11-51		4740324	Spring, heavy	1
	C138	11-51		1700597	Adjusting plug assembly	1
	C138A	11-51		5000656	O-ring	1
	C149	11-51		739144	Orifice plug, 0.8mm	1
	C151	11-51		9007315-0510	Screw	4
	C152	11-51		11150082	Solenoid valve adapter	1
	C153	11-51		327007 (9005110-4400)	Plug assembly	1
	C154	11-51		4740154	Seal ring	2
	C155	11-51		1701291	Coil, 12 volt	1
	C200	11-51		4740154	Seal ring	4
	C300	11-51		5000164 (9007315-0507)	Screw	4
	QC100	11-51		11112293	Control Kit, electric prop., 12v, high, n.o. (SB-2012-011)	1
	QC120	11-51		11103621	Solenoid valve seal kit	1
	QC125	11-51		11104459	Nut	1
	QC150	11-51		11104465	Solenoid valve kit, 12 volt	1



Control

(BX)



E101 831E

* = included in base motor seal kit Q210

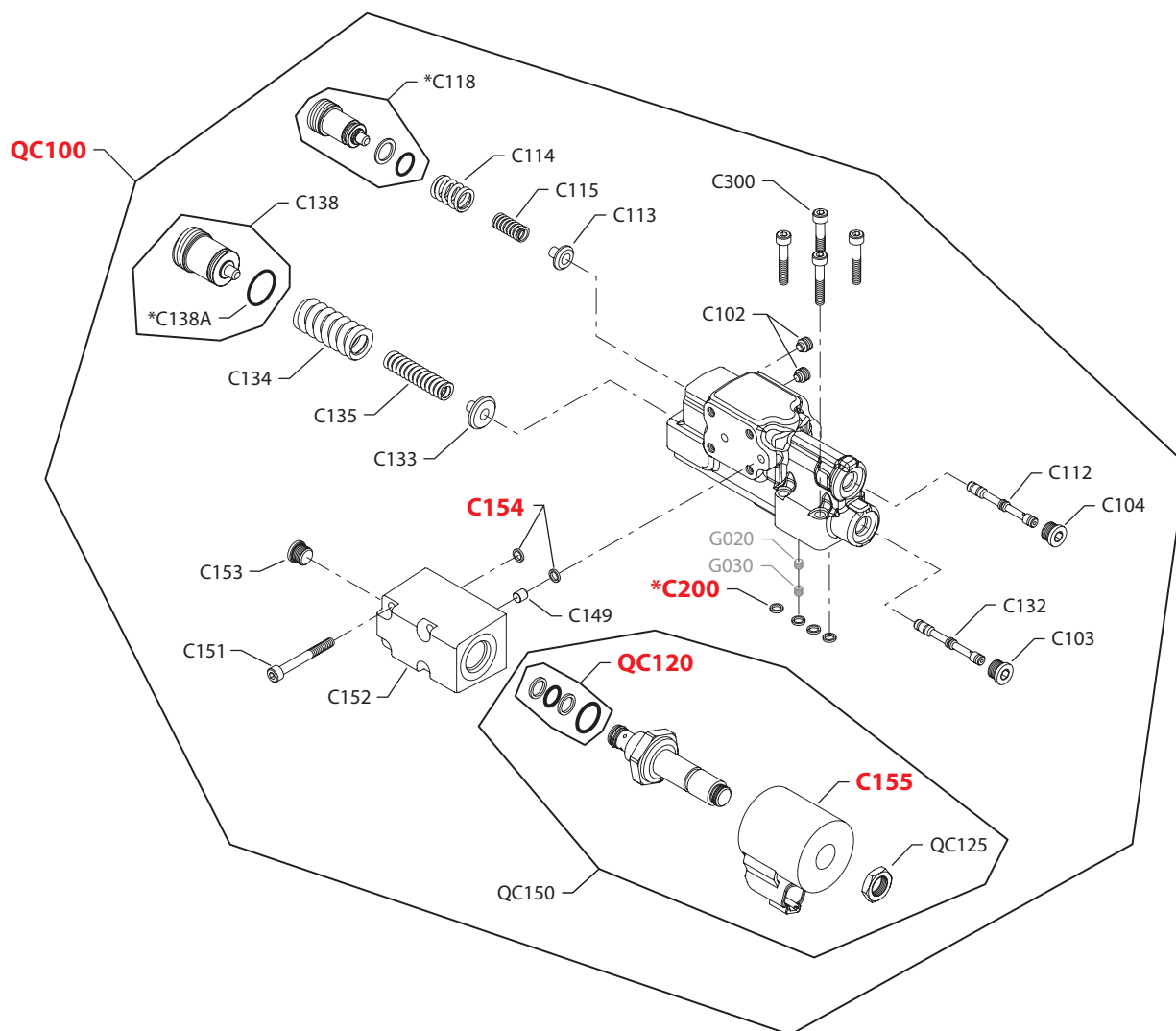
Enlarged **bold** type item numbers are recommended part to stock for servicing.


Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
BX	C102	11-51		4740064	Set screw	2
	C103	11-51		327007 (9005110-4400)	Plug assembly	1
	C104	11-51		327007 (9005110-4400)	Plug assembly	1
	C112	11-51		1701439	Spool	1
	C113	11-51		4740301	Spring guide	1
	C114	11-51		4740061	Spring	1
	C115	11-51		4740062	Spring	1
	C118	11-51		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-51		1701124	Spool	1
	C133	11-51		4740247	Spring guide	1
	C134	11-51		4740324	Spring, PC heavy	1
	C138	11-51		1700597	Adjusting plug assembly	1
	C138A	11-51		5000656	O-ring	1
	C149	11-51		739144	Orifice plug, 0.8mm	1
	C151	11-51		9007315-0510	Screw	4
	C152	11-51		11150082	Solenoid valve adapter	1
	C153	11-51		327007 (9005110-4400)	Plug assembly	1
	C154	11-51		4740154	Seal ring	2
	C155	11-51		1701291	Coil, 12 volt	1
	C200	11-51		4740154	Seal ring	4
	C300	11-51		5000164 (9007315-0507)	Screw	4
	QC100	11-51		11112214	Control Kit, electric prop. 12v, high, n.o. (SB-2012-011)	1
	QC120	11-51		11103621	Solenoid valve seal kit	1
	QC125	11-51		11104459	Nut	1
	QC150	11-51		11104465	Solenoid valve kit, 12 volt	1

Control

(CK)



E101 833E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

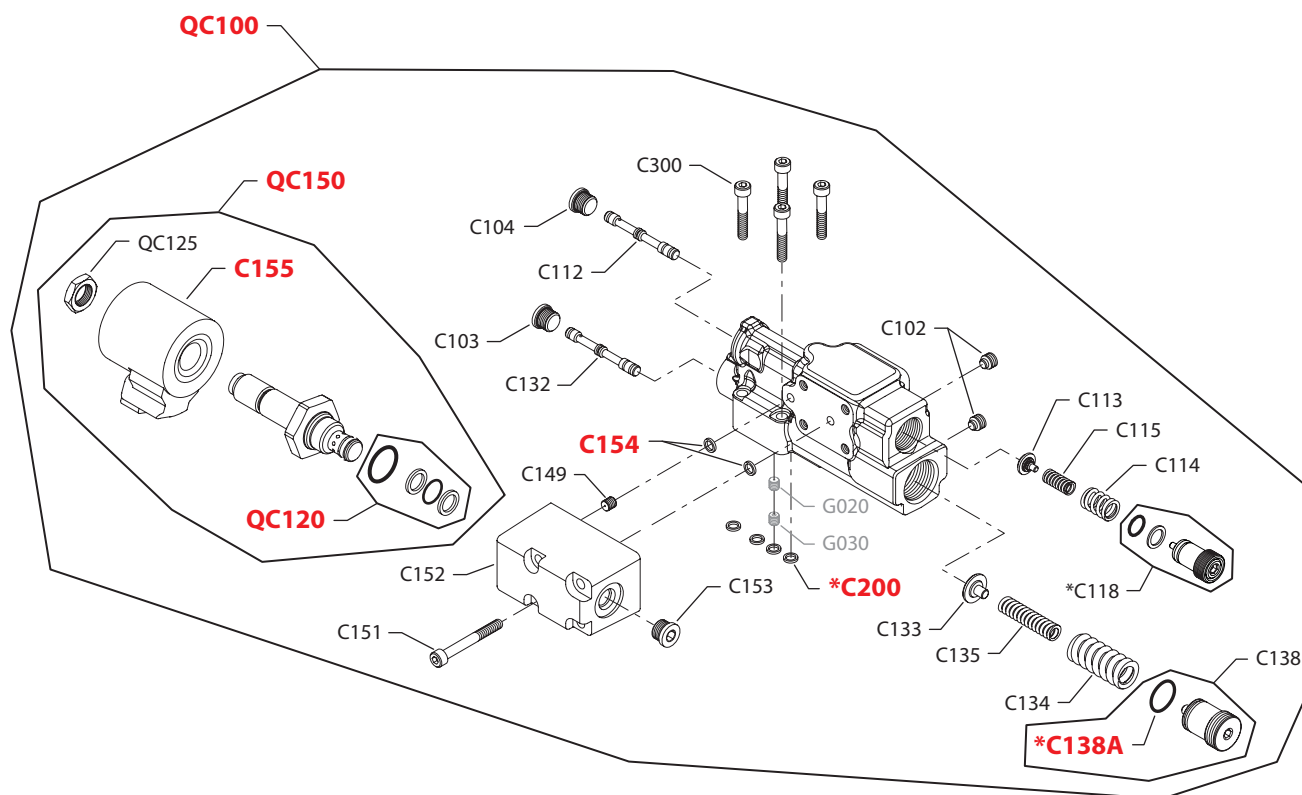

Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
CK	C102	11-42		4740064	Set screw	2
	C103	11-42		327007 (9005110-4400)	Plug assembly	1
	C104	11-42		327007 (9005110-4400)	Plug assembly	1
	C112	11-42		1701439	Spool	1
	C113	11-42		4740301	Spring guide	1
	C114	11-42		4740061	Spring	1
	C115	11-42		4740062	Spring	1
	C118	11-42		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-42		1701124	Spool	1
	C133	11-42		4740247	Spring guide	1
	C134	11-42		4740051	Spring, PC outer	1
	C135	11-42		4740052	Spring, PC inner	1
	C138	11-42		11062379	Adjusting plug assembly	1
	C138A	11-42		5000656	O-ring	1
	C149	11-42		739144	Orifice plug, 0.8mm	1
	C151	11-42		9007315-0510	Screw	4
	C152	11-42		11150082	Solenoid valve adapter	1
	C153	11-42		327007 (9005110-4400)	Plug assembly	1
	C154	11-42		4740154	Seal ring	2
	C155	11-42		1701563	Coil, 24 volt	1
	C200	11-42		4740154	Seal ring	4
	C300	11-42		5000164 (9007315-0507)	Screw	4
	QC100	11-42		11112305	Control Kit, electric prop. 24v, n.o. (SB-2012-011)	1
	QC120	11-42		11103621	Solenoid valve seal kit	1
	QC125	11-42		11104459	Nut	1
	QC150	11-42		11104466	Solenoid valve kit, 24 volt	1



Control

(CL)



E101 621E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

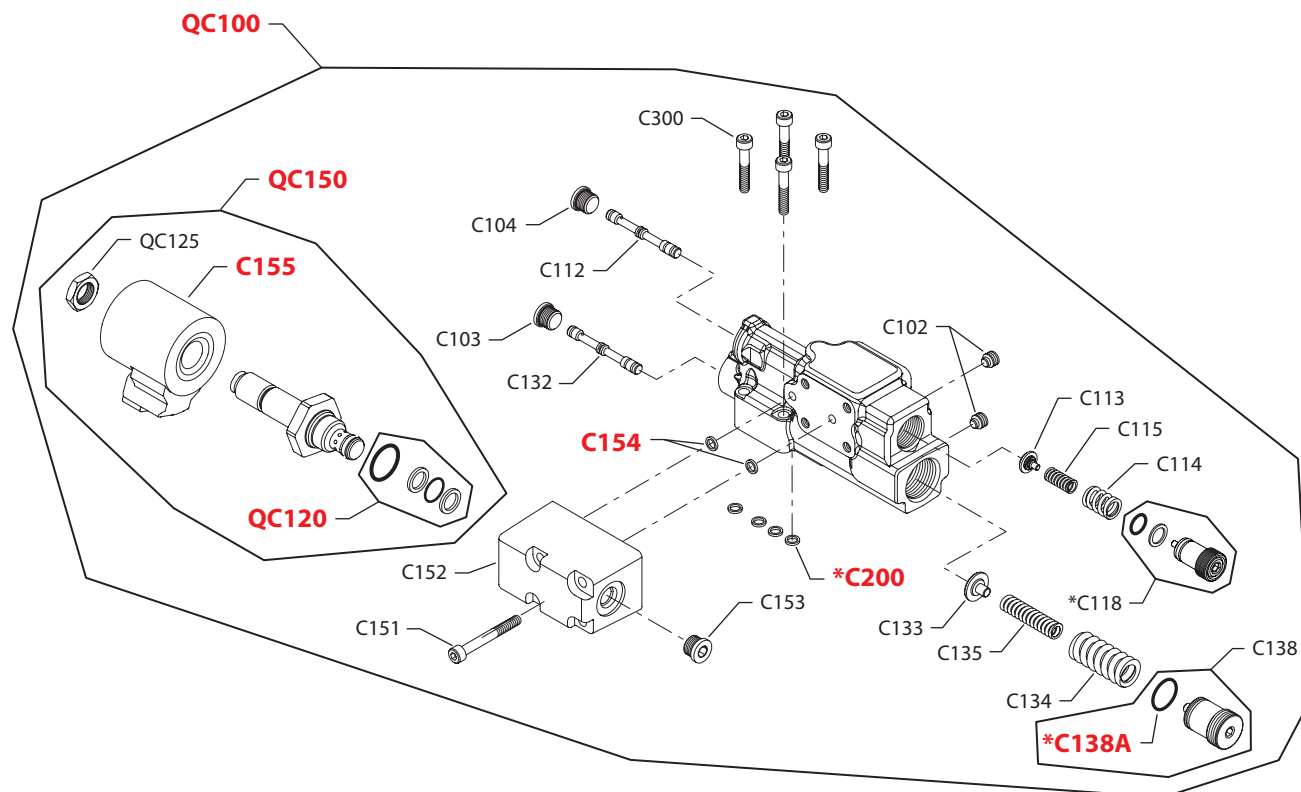
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
CL	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		1701439	Spool	1
	C113	11-35		4740301	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	11-35		5000656	O-ring	1
	C149	11-35		739144	Orifice plug, 0.8mm	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701563	Coil, 24 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112231	Control Kit, electric prop. 24v, n.o. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104459	Nut	1
	QC150	11-35		11104466	Solenoid valve kit, 24 volt	1



Control

(CN)



E101 622E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

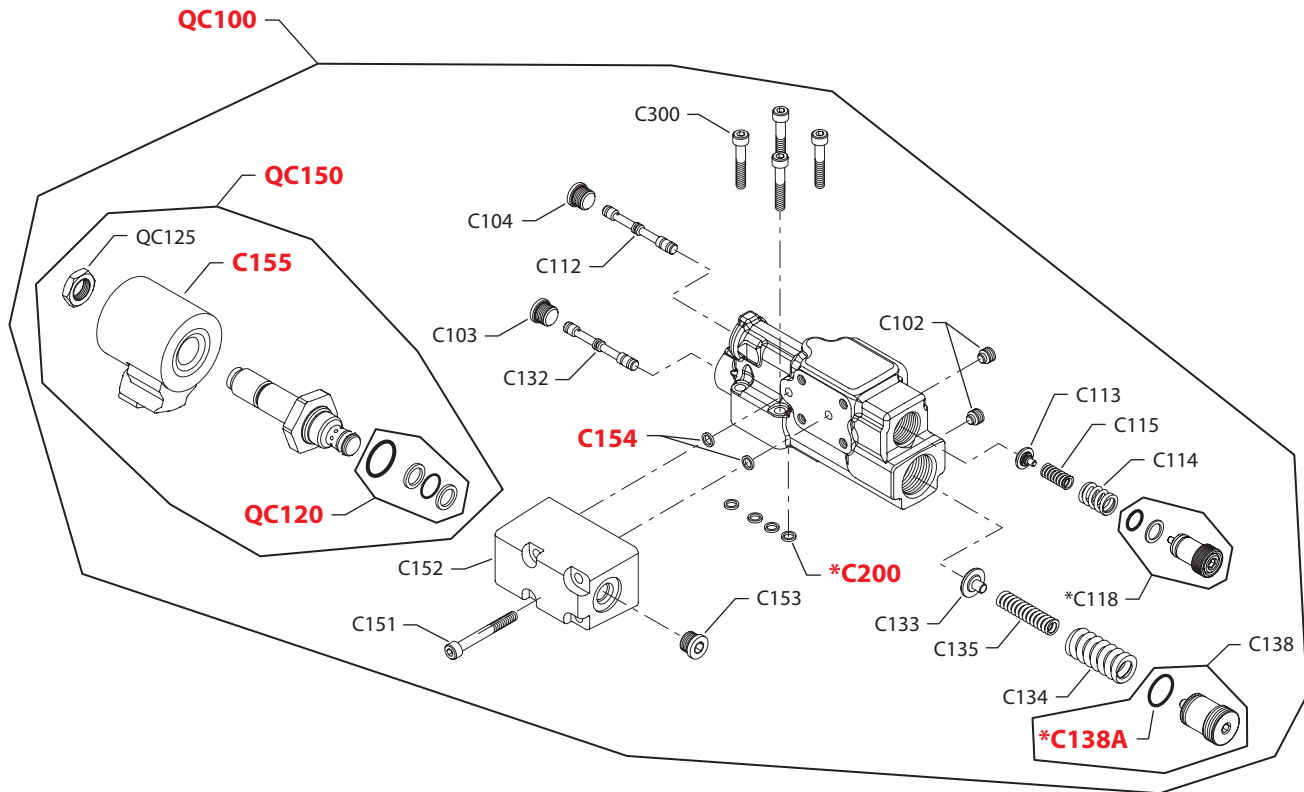
Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
CN	C102	11-51		4740064	Set screw	2
	C103	11-51		327007 (9005110-4400)	Plug assembly	1
	C104	11-51		327007 (9005110-4400)	Plug assembly	1
	C112	11-51		4740300	Spool	1
	C113	11-51		4740301	Spring guide	1
	C114	11-51		4740061	Spring	1
	C115	11-51		4740062	Spring	1
	C118	11-51		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-51		1701124	Spool	1
	C133	11-51		4740247	Spring guide	1
	C134	11-51		4740051	Spring, PC outer	1
	C135	11-51		4740052	Spring, PC inner	1
	C138	11-51		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	11-51		5000656	O-ring	1
	C151	11-51		9007315-0510	Screw	4
	C152	11-51		11150082	Solenoid valve adapter	1
	C153	11-51		327007 (9005110-4400)	Plug assembly	1
	C154	11-51		4740154	Seal ring	2
	C155	11-51		1701563	Coil, 24 volt	1
	C200	11-51		4740154	Seal ring	4
	C300	11-51		5000164 (9007315-0507)	Screw	4
	QC100	11-51		11112226	Control Kit, electric on/off 24 volt, n.o. (SB-2012-011)	1
	QC120	11-51		11103621	Solenoid valve seal kit	1
	QC125	11-51		11104457	Nut	1
	QC150	11-51		11104462	Solenoid valve kit, 24 volt	1



Control

(CR)



E101 622E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

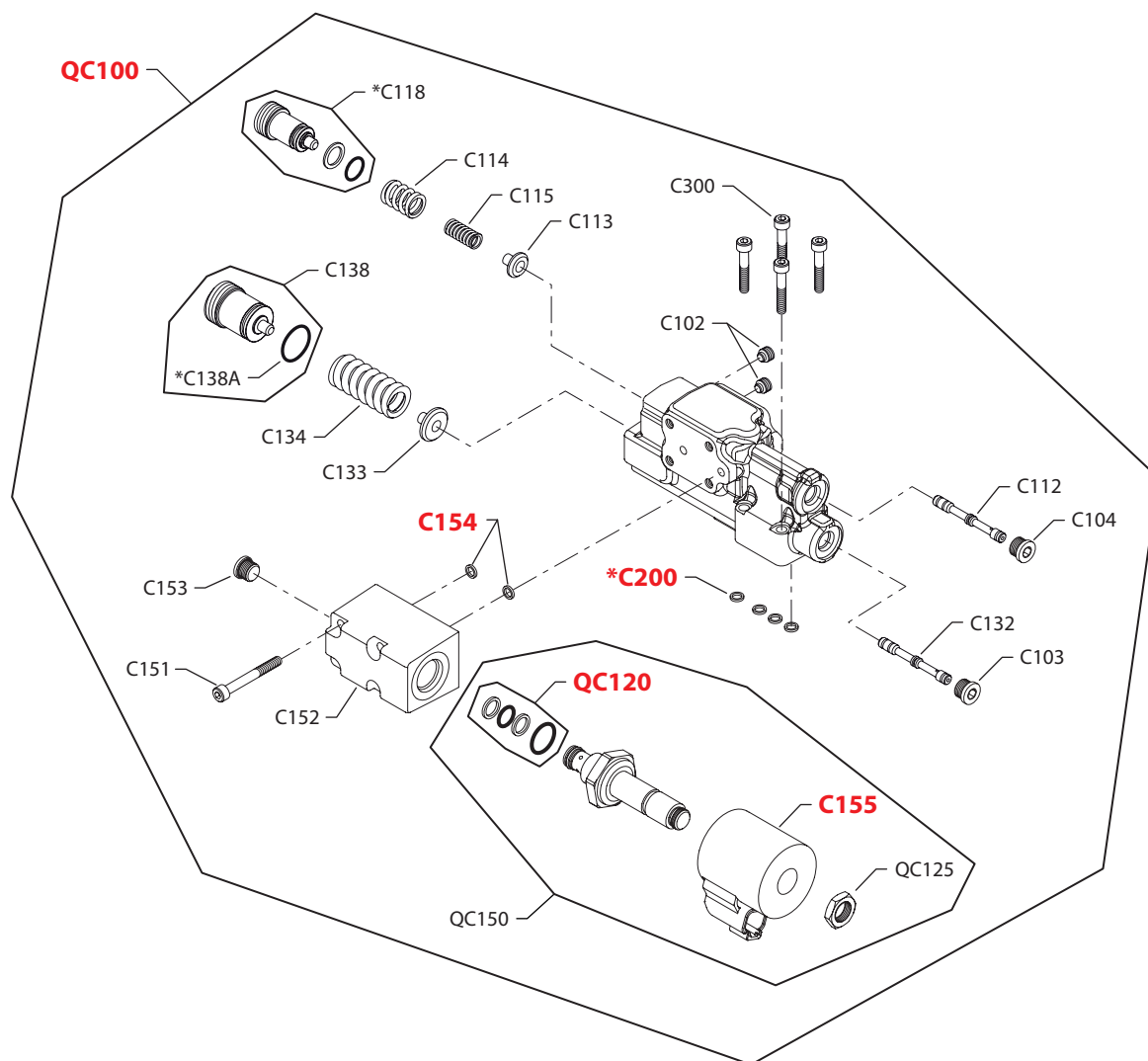
Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
CR	C102	09-05		4740064	Set screw	2
	C103	09-05		327007 (9005110-4400)	Plug assembly	1
	C104	09-05		327007 (9005110-4400)	Plug assembly	1
	C112	09-05		4740300	Spool	1
	C113	09-05		4740301	Spring guide	1
	C114	09-05		4740061	Spring	1
	C115	09-05		4740062	Spring	1
	C118	09-05		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	09-05		1701124	Spool	1
	C133	09-05		4740247	Spring guide	1
	C134	09-05		4740051	Spring, PC outer	1
	C135	09-05		4740052	Spring, PC inner	1
	C138	09-05		11062379	Adjusting plug assembly (SB-2010-026)	1
	C138A	09-05		5000656	O-ring	1
	C151	09-05		9007315-0510	Screw	4
	C152	09-05		11150082	Solenoid valve adapter	1
	C153	09-05		327007 (9005110-4400)	Plug assembly	1
	C154	09-05		4740154	Seal ring	2
	C155	09-05		1701563	Coil, 24 volt	1
	C200	09-05		4740154	Seal ring	4
	C300	09-05		5000164 (9007315-0507)	Screw	4
	QC100	09-05		11112217	Control Kit, electric on/off 24 volt, n.c. (SB-2012-011)	1
	QC120	09-05		11103621	Solenoid valve seal kit	1
	QC125	09-05		11104457	Nut	1
	QC150	09-05		11104464	Solenoid valve kit, 24 volt	1



Control

(DF)



E101 624E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

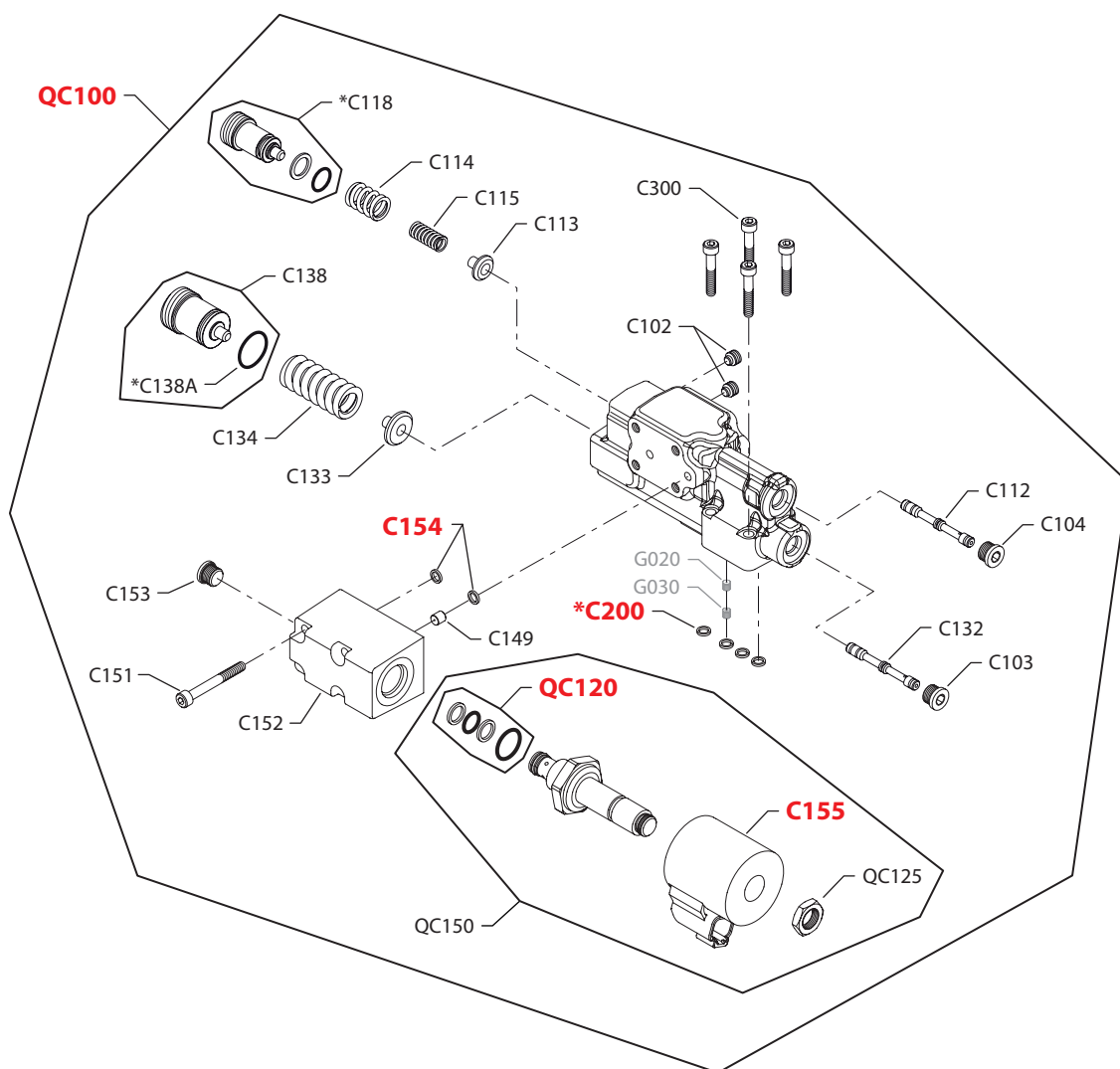
Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
DF	C102	08-08		4740064	Set screw	2
	C103	08-08		327007 (9005110-4400)	Plug assembly	1
	C104	08-08		327007 (9005110-4400)	Plug assembly	1
	C112	08-08		4740300	Spool	1
	C113	08-08		4740301	Spring guide	1
	C114	08-08		4740061	Spring	1
	C115	08-08		4740062	Spring	1
	C118	08-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	08-08		1701124	Spool	1
	C133	08-08		4740247	Spring guide	1
	C134	08-08		4740324	Spring, heavy	1
	C138	08-08		1700597	Adjusting plug assembly	1
	C138A	08-08		5000656	O-ring	1
	C151	08-08		9007315-0510	Screw	4
	C152	08-08		11150082	Solenoid valve adapter	1
	C153	08-08		327007 (9005110-4400)	Plug assembly	1
	C154	08-08		4740154	Seal ring	2
	C155	08-08		1701563	Coil, 24 volt	1
	C200	08-08		4740154	Seal ring	4
	C300	08-08		5000164 (9007315-0507)	Screw	4
	QC100	08-08		11112304	Control Kit, electric on/off, 24v, high, n.o. (SB-2012-011)	1
	QC120	08-08		11103621	Solenoid valve seal kit	1
	QC125	08-08		11104457	Nut	1
	QC150	08-08		11104462	Solenoid valve kit, 24 volt	1



Control

(DK)



E101 834E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

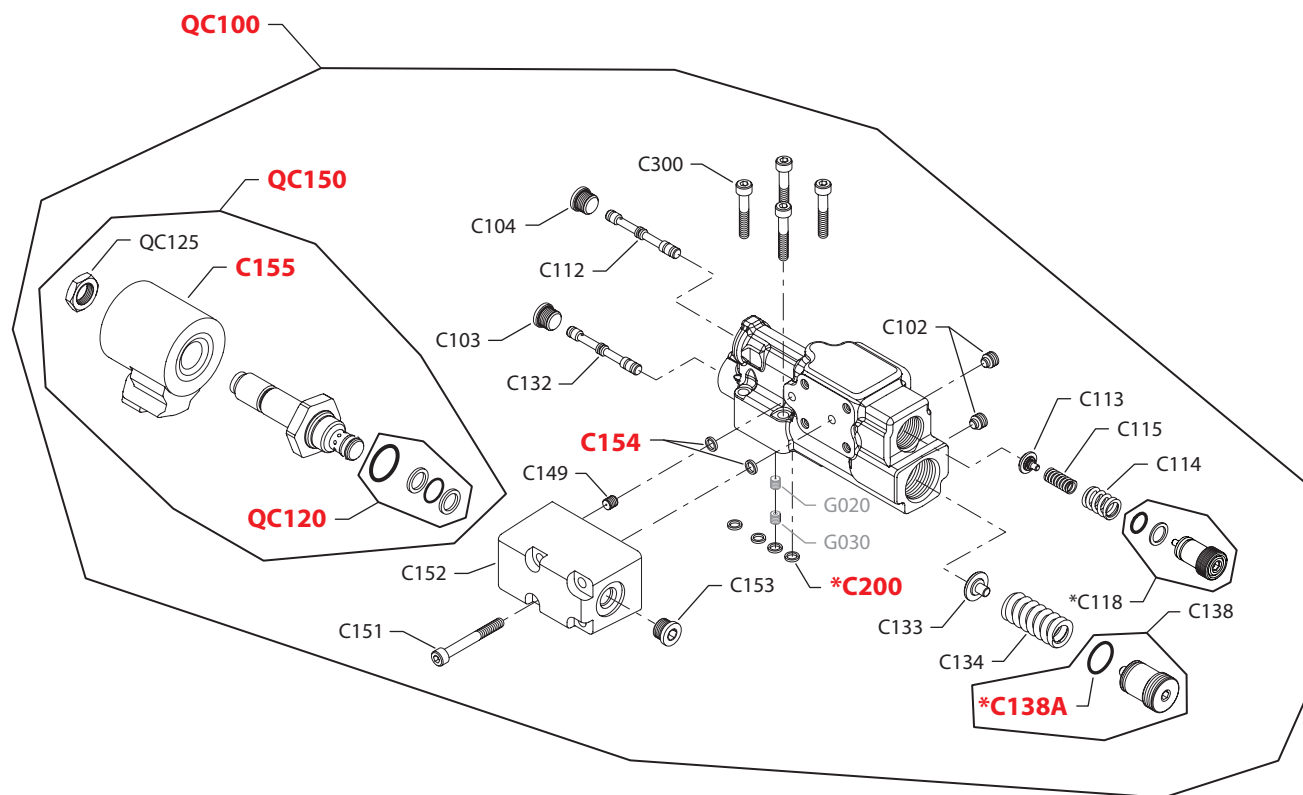
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
DK	C102	11-51		4740064	Set screw	2
	C103	11-51		327007 (9005110-4400)	Plug assembly	1
	C104	11-51		327007 (9005110-4400)	Plug assembly	1
	C112	11-51		1701439	Spool	1
	C113	11-51		4740301	Spring guide	1
	C114	11-51		4740061	Spring	1
	C115	11-51		4740062	Spring	1
	C118	11-51		11062214	Adjusting plug assembly	1
	C132	11-51		1701124	Spool	1
	C133	11-51		4740247	Spring guide	1
	C134	11-51		4740324	Spring, heavy	1
	C138	11-51		1700597	Adjusting plug assembly	1
	C138A	11-51		5000656	O-ring	1
	C149	11-51		739144	Orifice plug, 0.8mm	1
	C151	11-51		9007315-0510	Screw	4
	C152	11-51		11150082	Solenoid valve adapter	1
	C153	11-51		327007 (9005110-4400)	Plug assembly	1
	C154	11-51		4740154	Seal ring	2
	C155	11-51		1701563	Coil, 24 volt	1
	C200	11-51		4740154	Seal ring	4
	C300	11-51		5000164 (9007315-0507)	Screw	4
	QC100	11-51		11112290	Control Kit, electric prop., 24v, high, n.o. (SB-2012-011)	1
	QC120	11-51		11103621	Solenoid valve seal kit	1
	QC125	11-51		11104459	Nut	1
	QC150	11-51		11104466	Solenoid valve kit, 24 volt	1



Control

(DL)



E101 831E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

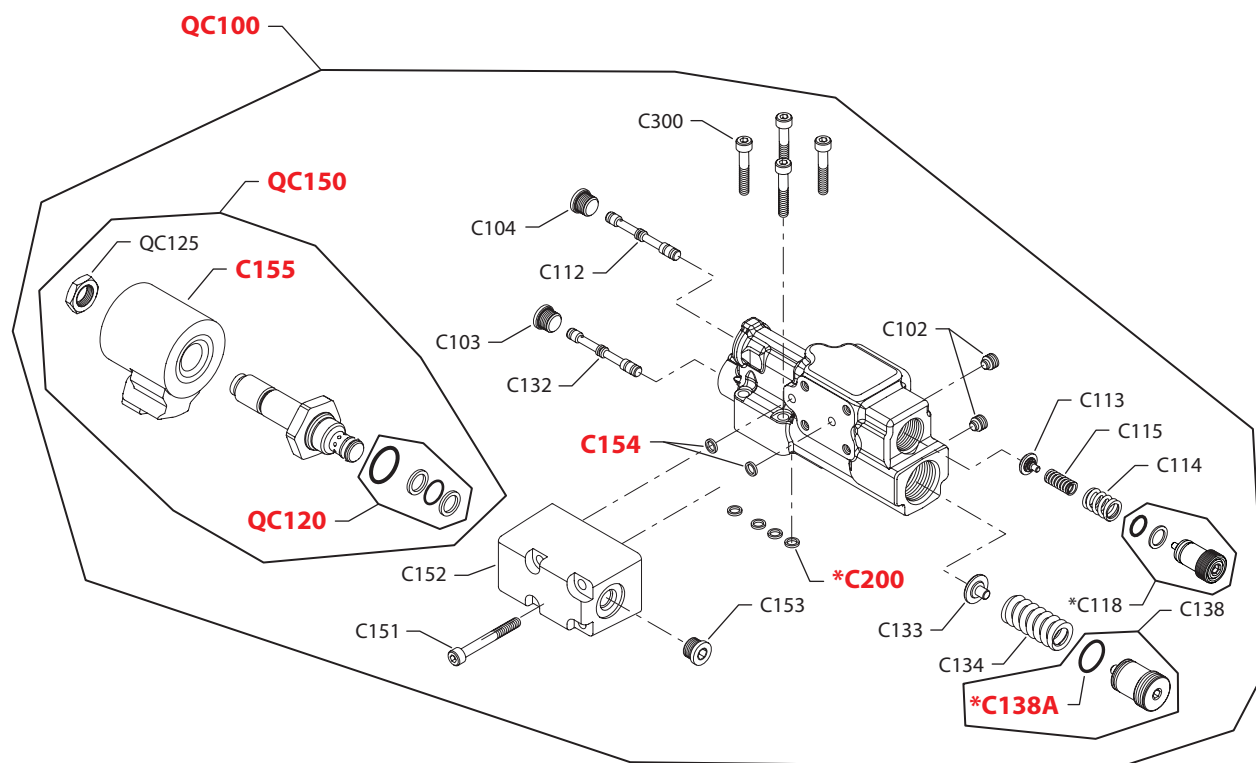
Control
Electric proportional control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
DL	C102	11-51		4740064	Set screw	2
	C103	11-51		327007 (9005110-4400)	Plug assembly	1
	C104	11-51		327007 (9005110-4400)	Plug assembly	1
	C112	11-51		1701439	Spool	1
	C113	11-51		4740301	Spring guide	1
	C114	11-51		4740061	Spring	1
	C115	11-51		4740062	Spring	1
	C118	11-51		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	11-51		1701124	Spool	1
	C133	11-51		4740247	Spring guide	1
	C134	11-51		4740324	Spring, PC heavy	1
	C138	11-51		1700597	Adjusting plug assembly	1
	C138A	11-51		5000656	O-ring	1
	C149	11-51		739144	Orifice plug, 0.8mm	1
	C151	11-51		9007315-0510	Screw	4
	C152	11-51		11150082	Solenoid valve adapter	1
	C153	11-51		327007 (9005110-4400)	Plug assembly	1
	C154	11-51		4740154	Seal ring	2
	C155	11-51		1701563	Coil, 24 volt	1
	C200	11-51		4740154	Seal ring	4
	C300	11-51		5000164 (9007315-0507)	Screw	4
	QC100	11-51		11112225	Control Kit, electric prop. 24v, high, n.o. (SB-2012-011)	1
	QC120	11-51		11103621	Solenoid valve seal kit	1
	QC125	11-51		11104459	Nut	1
	QC150	11-51		11104466	Solenoid valve kit, 24 volt	1



Control

(DN)



E101 832E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

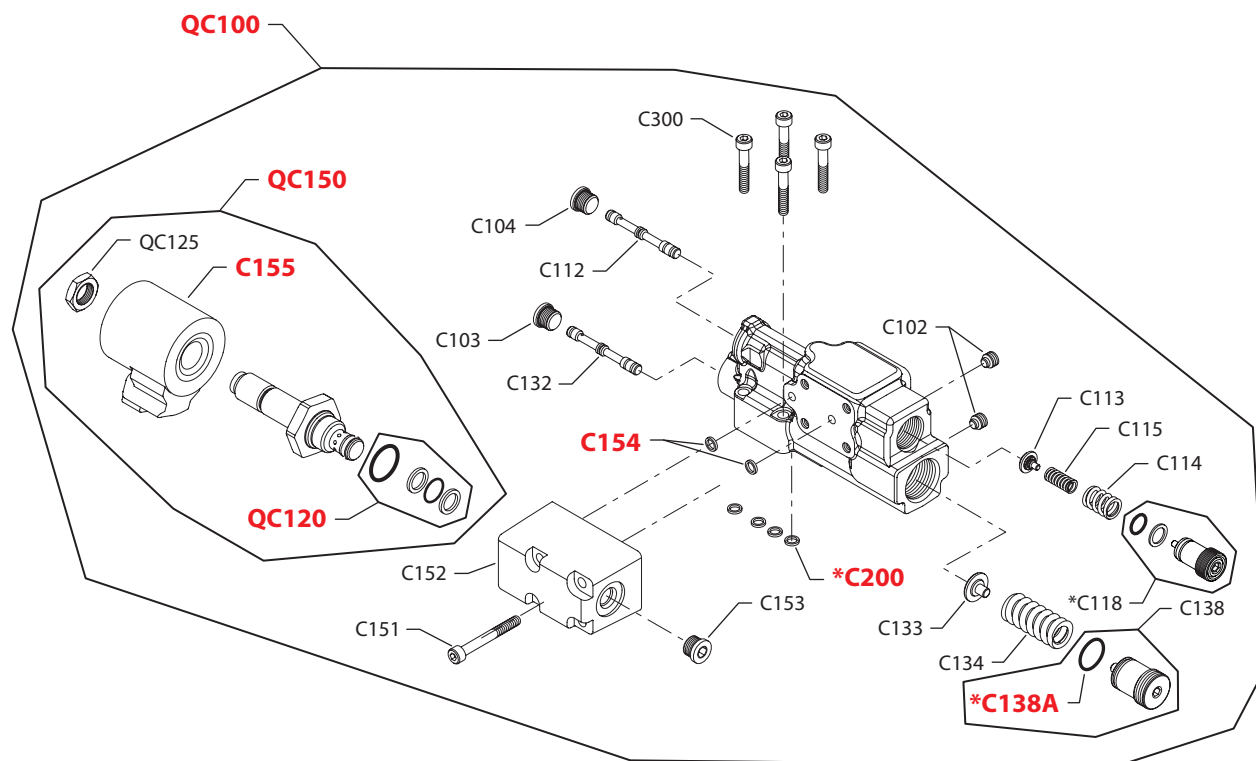

Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
DN	C102	08-08		4740064	Set screw	2
	C103	08-08		327007 (9005110-4400)	Plug assembly	1
	C104	08-08		327007 (9005110-4400)	Plug assembly	1
	C112	08-08		4740300	Spool	1
	C113	08-08		4740301	Spring guide	1
	C114	08-08		4740061	Spring	1
	C115	08-08		4740062	Spring	1
	C118	08-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	08-08		1701124	Spool	1
	C133	08-08		4740247	Spring guide	1
	C134	08-08		4740324	Spring, PC heavy	1
	C138	08-08		1700597	Adjusting plug assembly	1
	C138A	08-08		5000656	O-ring	1
	C151	08-08		9007315-0510	Screw	4
	C152	08-08		11150082	Solenoid valve adapter	1
	C153	08-08		327007 (9005110-4400)	Plug assembly	1
	C154	08-08		4740154	Seal ring	2
	C155	08-08		1701563	Coil, 24 volt	1
	C200	08-08		4740154	Seal ring	4
	C300	08-08		5000164 (9007315-0507)	Screw	4
	QC100	08-08		11112227	Control Kit, electric on/off, 24v, high, n.o. (SB-2012-011)	1
	QC120	08-08		11103621	Solenoid valve seal kit	1
	QC125	08-08		11104457	Nut	1
	QC150	08-08		11104462	Solenoid valve kit, 24 volt	1



Control

(DR)



E101 832E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

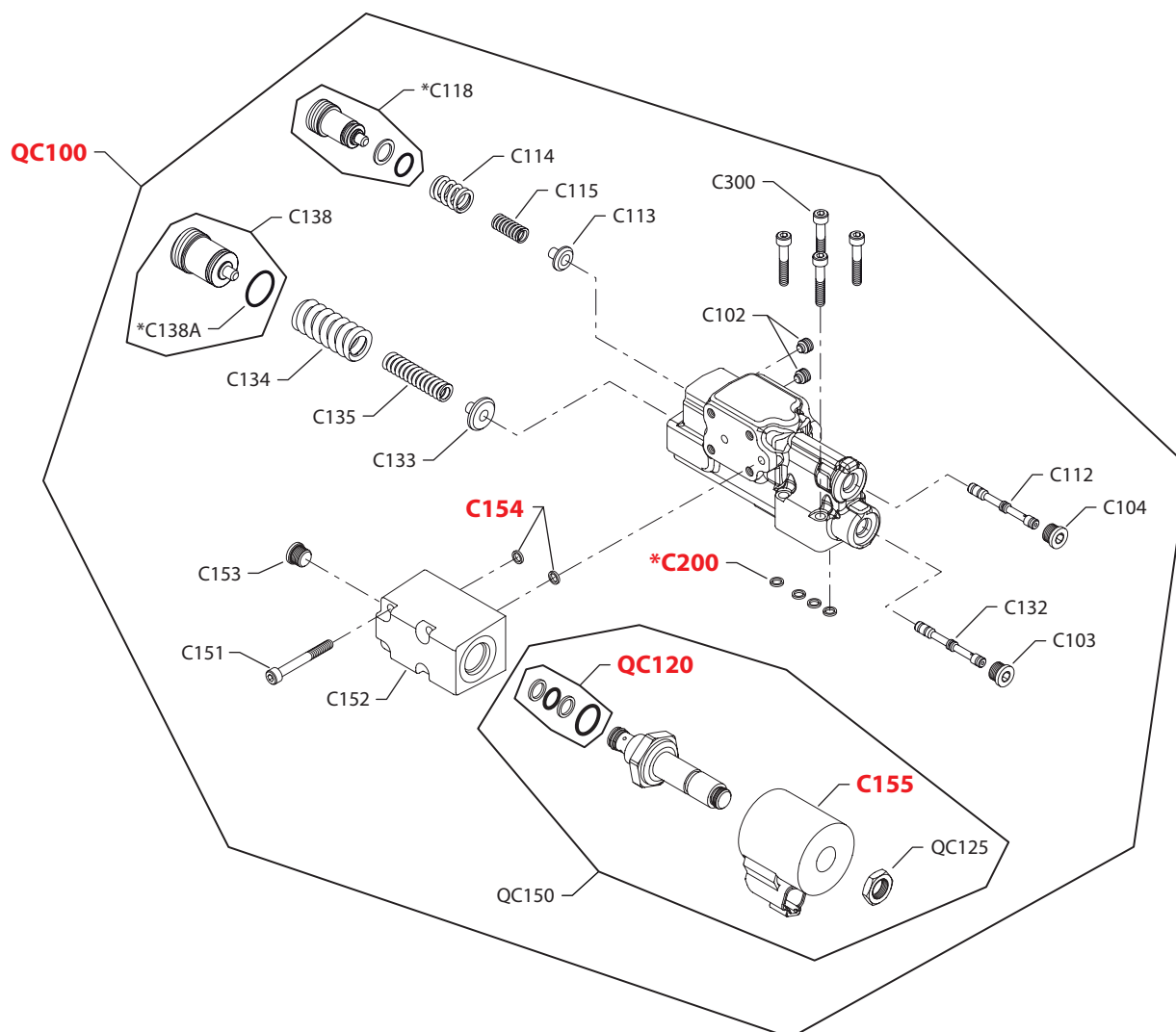
Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
DR	C102	08-08		4740064	Set screw	2
	C103	08-08		327007 (9005110-4400)	Plug assembly	1
	C104	08-08		327007 (9005110-4400)	Plug assembly	1
	C112	08-08		4740300	Spool	1
	C113	08-08		4740301	Spring guide	1
	C114	08-08		4740061	Spring	1
	C115	08-08		4740062	Spring	1
	C118	08-08		11062214	Adjusting plug assembly (SB-2010-026)	1
	C132	08-08		1701124	Spool	1
	C133	08-08		4740247	Spring guide	1
	C134	08-08		4740324	Spring, PC heavy	1
	C138	08-08		1700597	Adjusting plug assembly	1
	C138A	08-08		5000656	O-ring	1
	C151	08-08		9007315-0510	Screw	4
	C152	08-08		11150082	Solenoid valve adapter	1
	C153	08-08		327007 (9005110-4400)	Plug assembly	1
	C154	08-08		4740154	Seal ring	2
	C155	08-08		1701563	Coil, 24 volt	1
	C200	08-08		4740154	Seal ring	4
	C300	08-08		5000164 (9007315-0507)	Screw	4
	QC100	08-08		11112228	Control Kit, electric on/off, 24v, high, n.c. (SB-2012-011)	1
	QC120	08-08		11103621	Solenoid valve seal kit	1
	QC125	08-08		11104457	Nut	1
	QC150	08-08		11104464	Solenoid valve kit, 24 volt	1



Control

(FA)



E101 700E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

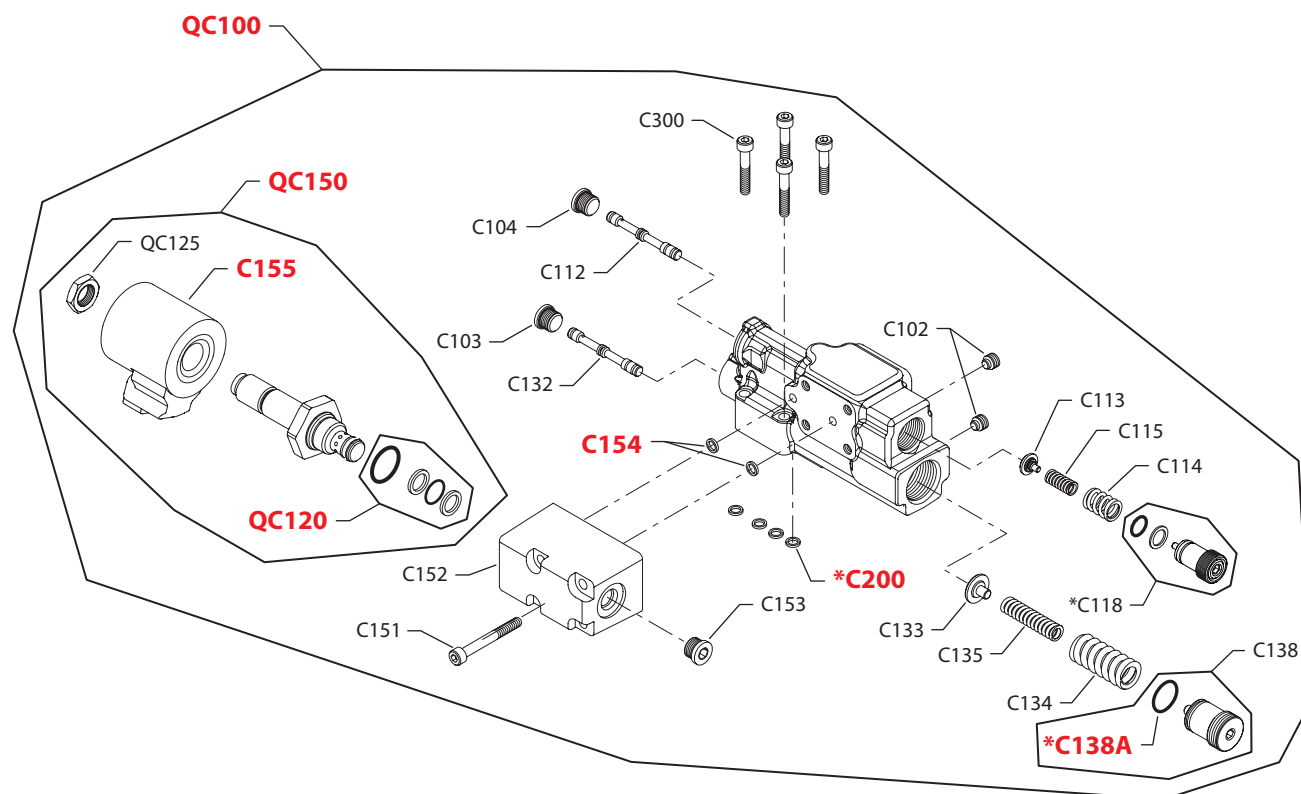
Control
Electric dump control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
FA	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		1701124	Spool	1
	C113	11-35		4740246	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly	1
	C138A	11-35		5000656	O-ring	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701291	Coil, 12 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112297	Control Kit, electric dump, 12 volt, n.c.,	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104457	Nut	1
	QC150	11-35		11104463	Solenoid valve kit, 12 volt	1



Control

(FB)



E101 622E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

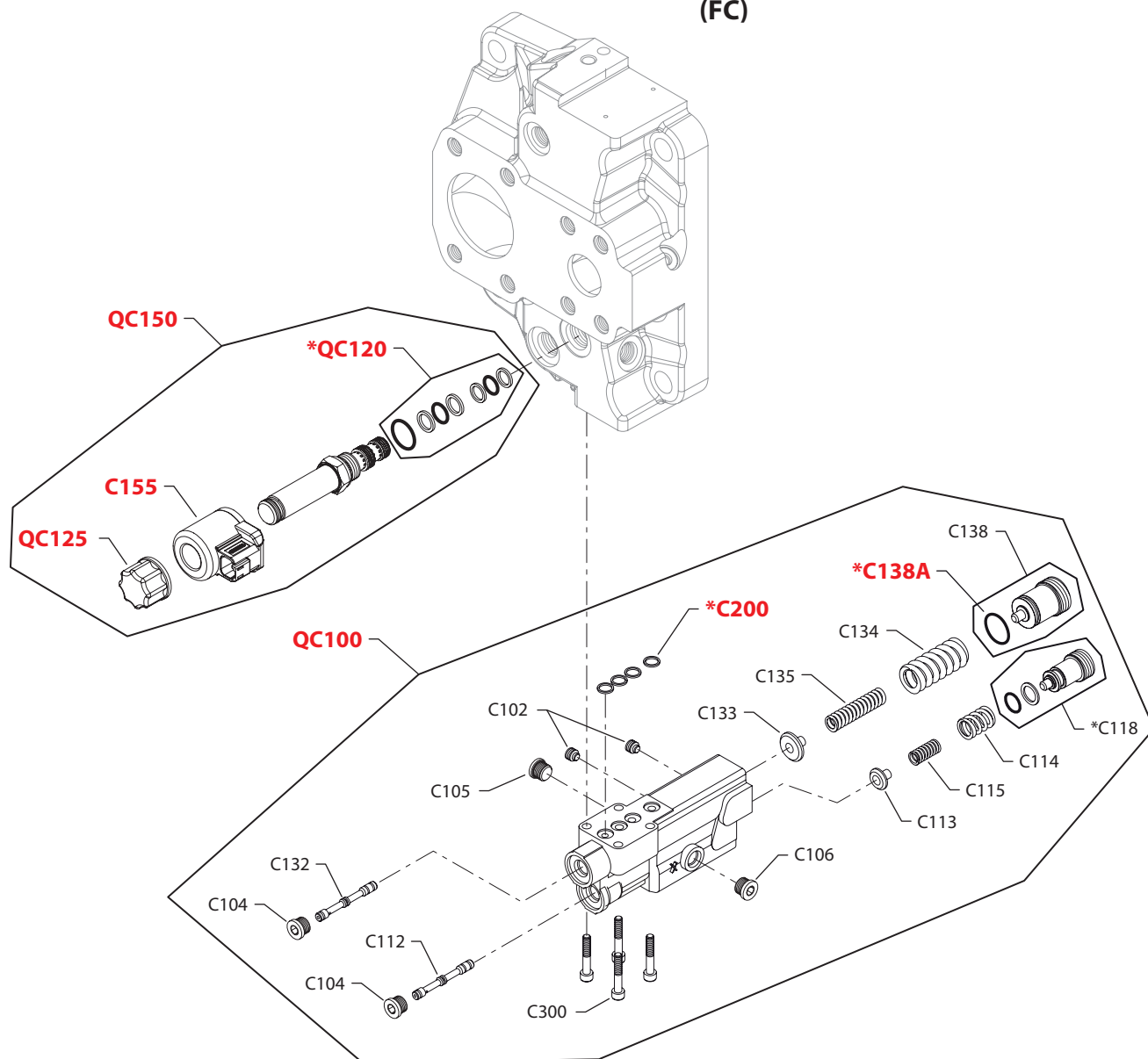
Control
Electric dump control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
FB	C102	11-35		4740064	Set screw	2
	C103	11-35		327007 (9005110-4400)	Plug assembly	1
	C104	11-35		327007 (9005110-4400)	Plug assembly	1
	C112	11-35		1701124	Spool	1
	C113	11-35		4740246	Spring guide	1
	C114	11-35		4740061	Spring	1
	C115	11-35		4740062	Spring	1
	C118	11-35		11062214	Adjusting plug assembly	1
	C132	11-35		1701124	Spool	1
	C133	11-35		4740247	Spring guide	1
	C134	11-35		4740051	Spring, PC outer	1
	C135	11-35		4740052	Spring, PC inner	1
	C138	11-35		11062379	Adjusting plug assembly	1
	C138A	11-35		5000656	O-ring	1
	C151	11-35		9007315-0510	Screw	4
	C152	11-35		11150082	Solenoid valve adapter	1
	C153	11-35		327007 (9005110-4400)	Plug assembly	1
	C154	11-35		4740154	Seal ring	2
	C155	11-35		1701291	Coil, 12 volt	1
	C200	11-35		4740154	Seal ring	4
	C300	11-35		5000164 (9007315-0507)	Screw	4
	QC100	11-35		11112223	Control Kit, electric dump 12 volt, n.c. (SB-2012-011)	1
	QC120	11-35		11103621	Solenoid valve seal kit	1
	QC125	11-35		11104457	Nut	1
	QC150	11-35		11104463	Solenoid valve kit, 12 volt	1



Control

(FC)



E101 835E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

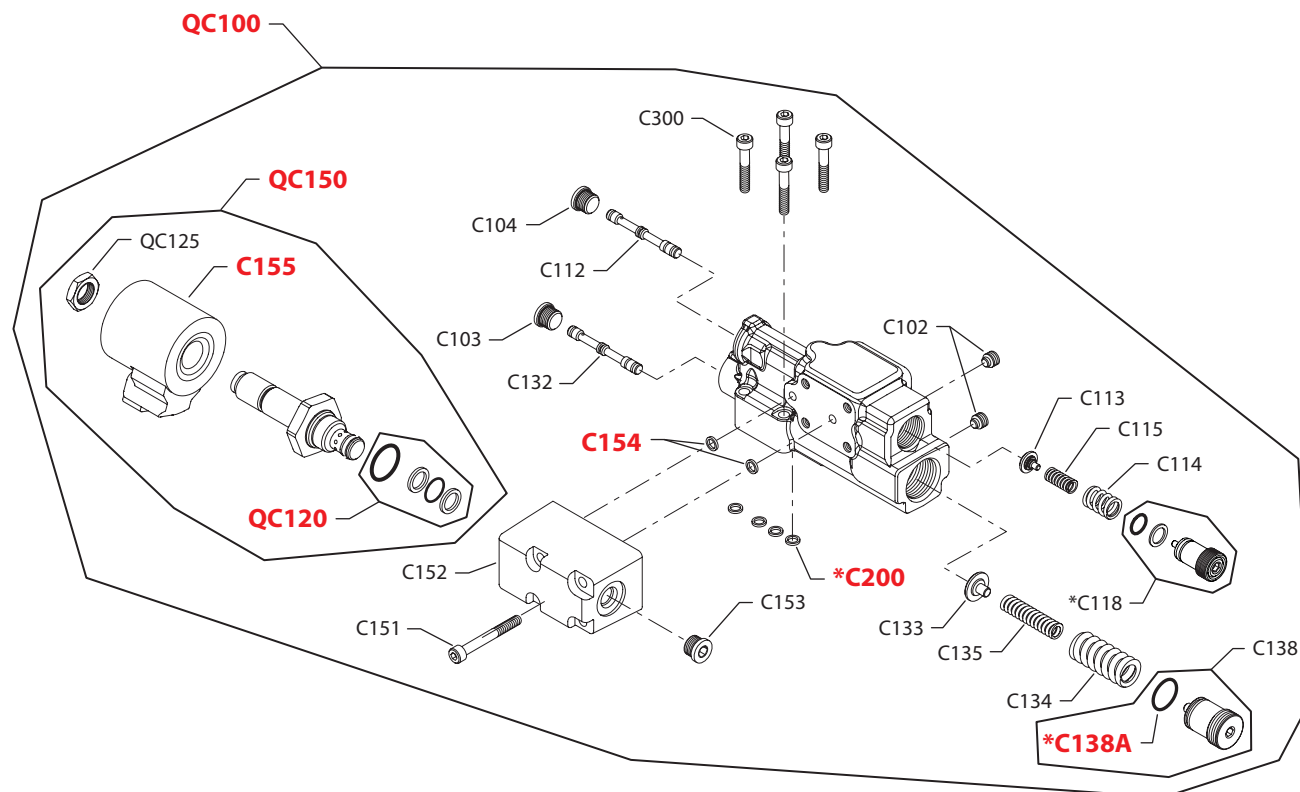

Control
load sensing Control with override

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
FC	C102	10-35		4740064	Set screw	2
	C103	10-35		327007 (9005110-4400)	Plug assembly	1
	C104	10-35		327007 (9005110-4400)	Plug assembly	1
	C105	10-35		327007 (9005110-4400)	Plug assembly	1
	C106	10-35		327007 (9005110-4400)	Plug assembly	1
	C112	10-35		1701124	Spool	1
	C113	10-35		4740246	Spring guide	1
	C114	10-35		4740061	Spring	1
	C115	10-35		4740062	Spring	1
	C118	10-35		11062214	Adjusting plug assembly	1
	C132	10-35		1701124	Spool	1
	C133	10-35		4740247	Spring guide	1
	C134	10-35		4740051	Spring, PC, outer	1
	C135	10-35		4740052	Spring, PC inner	1
	C138	10-35		11062379	Adjusting Plug assembly	1
	C138A	10-35		5000656	O-ring	1
	C155	10-35		11104541	Coil, 24 volt	1
	C200	10-35		4740154	Seal ring	4
	C300	10-35		5000164 (9007315-0507)	Screw	4
	QC100	10-35		11112208	Control Kit, LS (SB-2012-011)	1
	QC120	10-35		11104525	Solenoid valve seal kit	1
	QC125	10-35		11104531	Nut	1
	QC150	10-35		11104539	Solenoid valve kit, 24 volt	1



Control

(FE)



E101 622E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

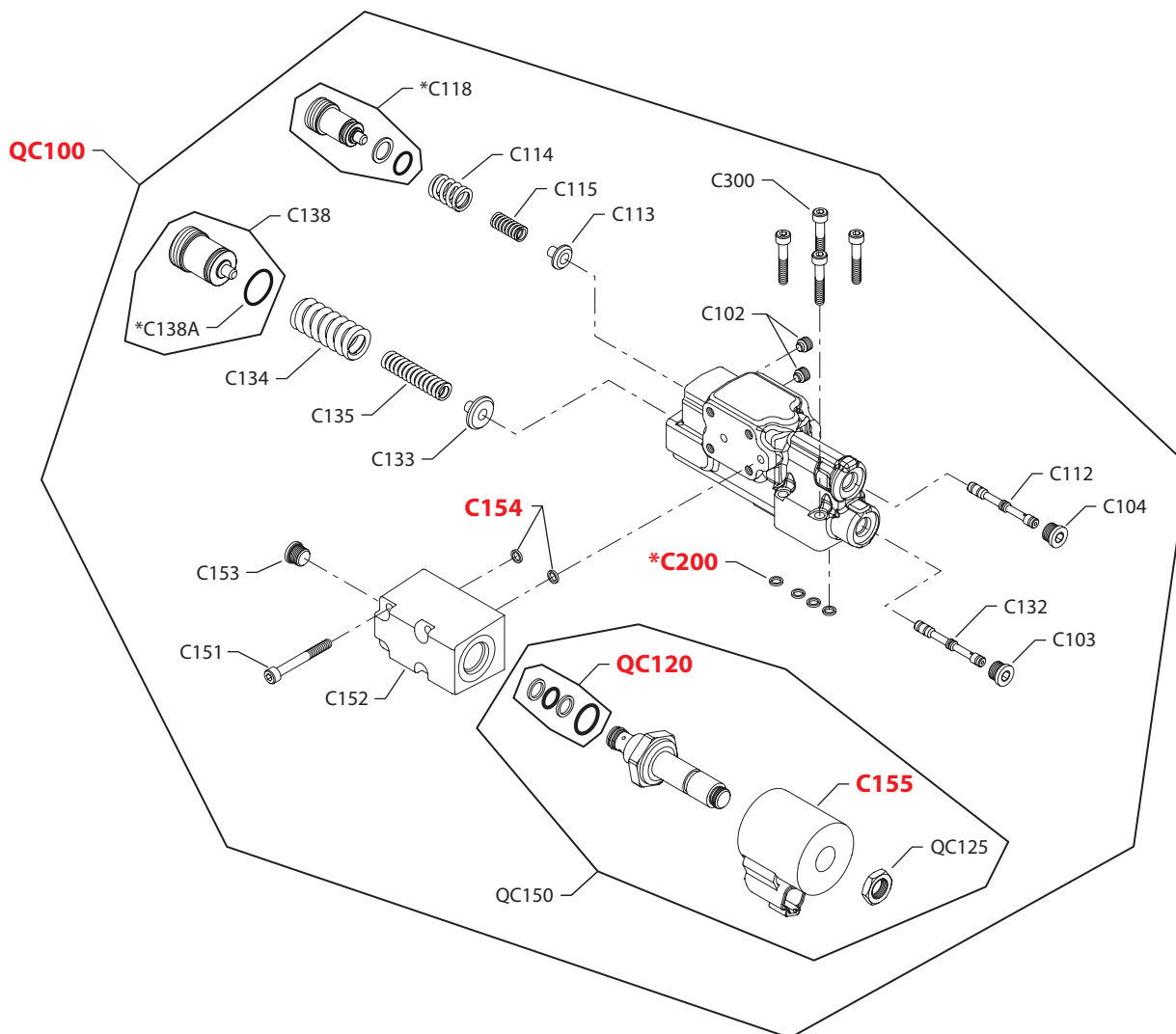
Control
Electric dump control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
FE	C102	12-26		4740064	Set screw	2
	C103	12-26		327007 (9005110-4400)	Plug assembly	1
	C104	12-26		327007 (9005110-4400)	Plug assembly	1
	C112	12-26		1701124	Spool	1
	C113	12-26		4740246	Spring guide	1
	C114	12-26		4740061	Spring	1
	C115	12-26		4740062	Spring	1
	C118	12-26		11062214	Adjusting plug assembly	1
	C132	12-26		1701124	Spool	1
	C133	12-26		4740247	Spring guide	1
	C134	12-26		4740051	Spring, PC outer	1
	C135	12-26		4740052	Spring, PC inner	1
	C138	12-26		11062379	Adjusting plug assembly	1
	C138A	12-26		5000656	O-ring	1
	C151	12-26		9007315-0510	Screw	4
	C152	12-26		11150082	Solenoid valve adapter	1
	C153	12-26		327007 (9005110-4400)	Plug assembly	1
	C154	12-26		4740154	Seal ring	2
	C155	12-26		1701563	Coil, 24 volt	1
	C200	12-26		4740154	Seal ring	4
	C300	12-26		5000164 (9007315-0507)	Screw	4
	QC100	12-26		11116538	Control Kit, electric dump 24 volt, n.c.	1
	QC120	12-26		11103621	Solenoid valve seal kit	1
	QC125	12-26		11104457	Nut	1
	QC150	12-26		11104464	Solenoid valve kit, 24 volt	1



Control

(FF)



E101 700E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

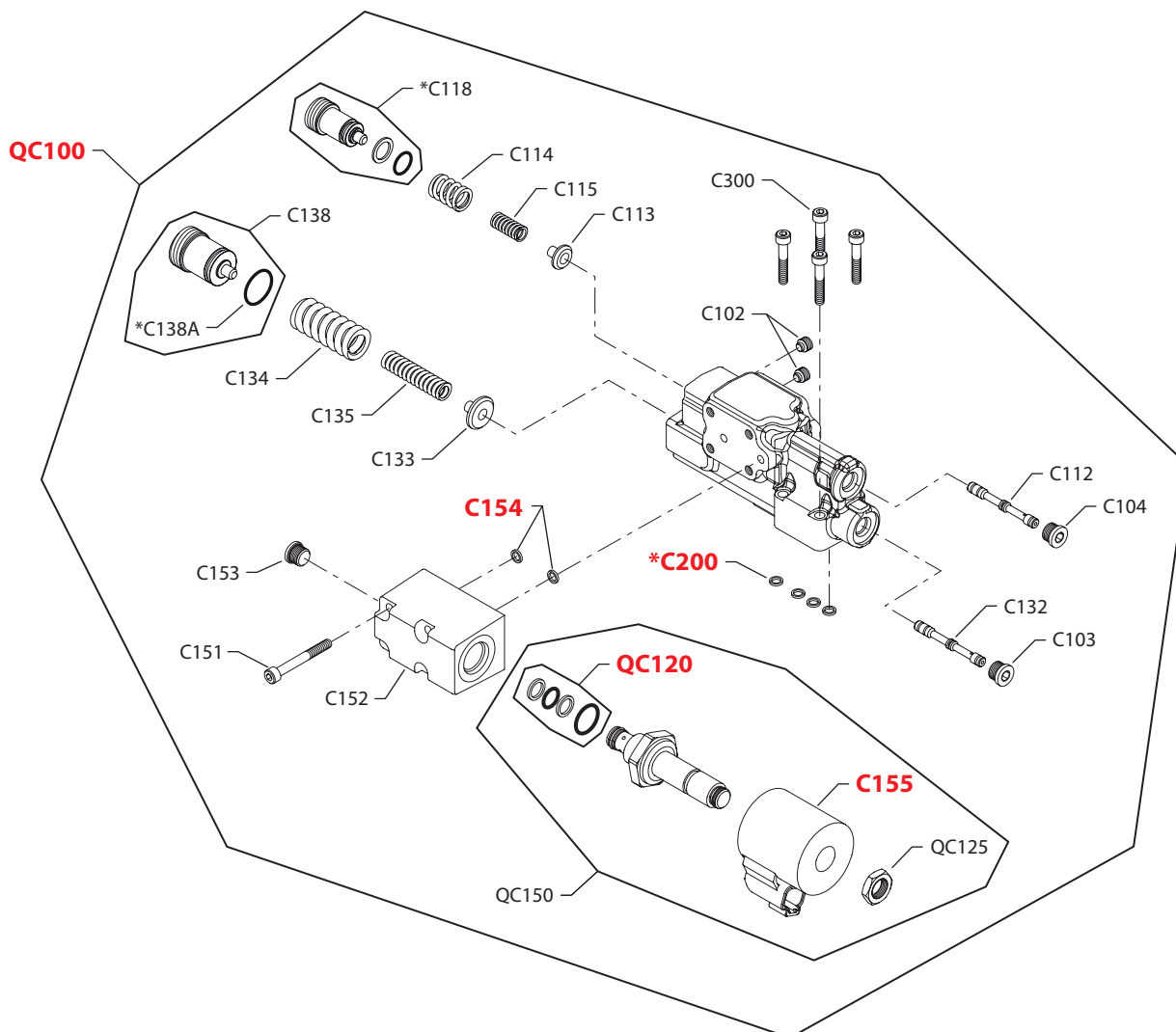
Control
Electric dump control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
FF	C102	13-08		4740064	Set screw	2
	C103	13-08		327007 (9005110-4400)	Plug assembly	1
	C104	13-08		327007 (9005110-4400)	Plug assembly	1
	C112	13-08		1701124	Spool	1
	C113	13-08		4740246	Spring guide	1
	C114	13-08		4740061	Spring	1
	C115	13-08		4740062	Spring	1
	C118	13-08		11062214	Adjusting plug assembly	1
	C132	13-08		1701124	Spool	1
	C133	13-08		4740247	Spring guide	1
	C134	13-08		4740051	Spring, PC outer	1
	C135	13-08		4740052	Spring, PC inner	1
	C138	13-08		11062379	Adjusting plug assembly	1
	C138A	13-08		5000656	O-ring	1
	C151	13-08		9007315-0510	Screw	4
	C152	13-08		11150082	Solenoid valve adapter	1
	C153	13-08		327007 (9005110-4400)	Plug assembly	1
	C154	13-08		4740154	Seal ring	2
	C155	13-08		1701563	Coil, 24 volt	1
	C200	13-08		4740154	Seal ring	4
	C300	13-08		5000164 (9007315-0507)	Screw	4
	QC100	13-08		11130227	Control Kit, electric dump, 24 volt, n.c.	1
	QC120	13-08		11103621	Solenoid valve seal kit	1
	QC125	13-08		11104457	Nut	1
	QC150	13-08		11104464	Solenoid valve kit, 24 volt	1



Control

(FG)



E101 700E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

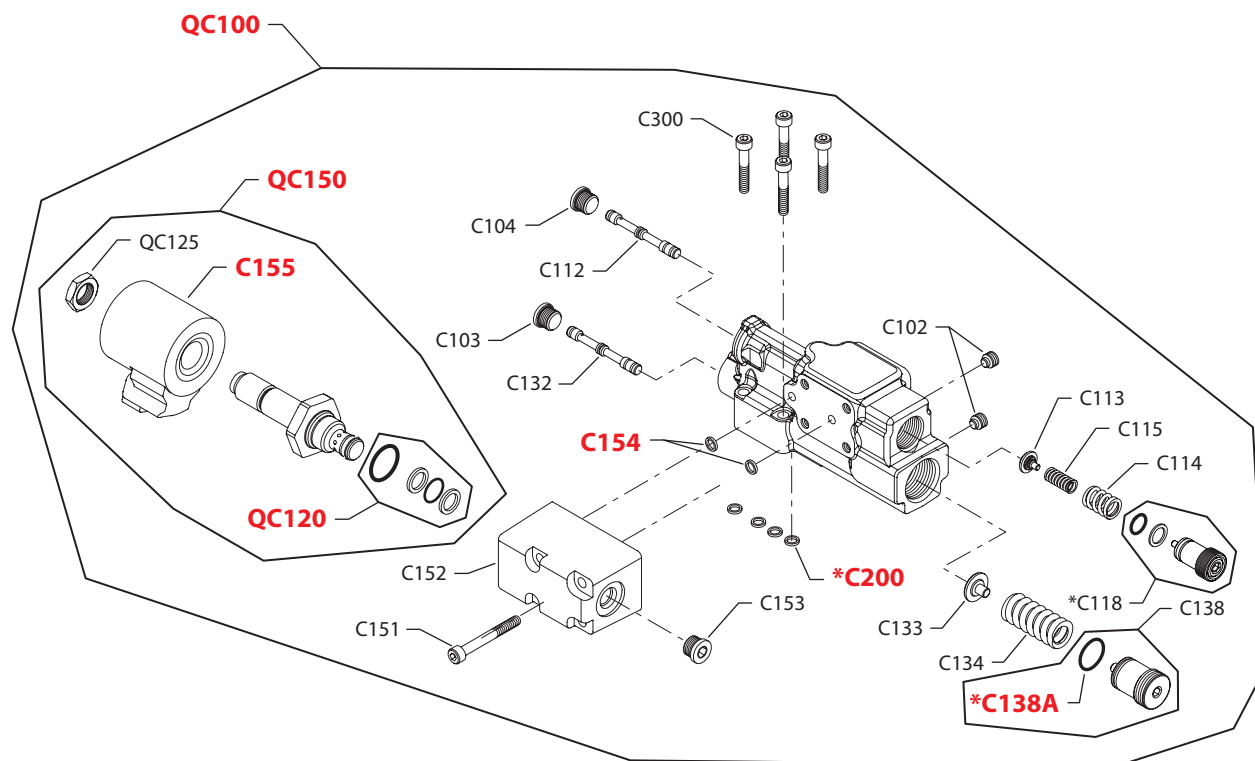
Control
Electric dump control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
FG	C102	14-18		4740064	Set screw	2
	C103	14-18		327007 (9005110-4400)	Plug assembly	1
	C104	14-18		327007 (9005110-4400)	Plug assembly	1
	C112	14-18		1701124	Spool	1
	C113	14-18		4740246	Spring guide	1
	C114	14-18		4740061	Spring	1
	C115	14-18		4740062	Spring	1
	C118	14-18		11062214	Adjusting plug assembly	1
	C132	14-18		1701124	Spool	1
	C133	14-18		4740247	Spring guide	1
	C134	14-18		4740051	Spring, PC outer	1
	C135	14-18		4740052	Spring, PC inner	1
	C138	14-18		11062379	Adjusting plug assembly	1
	C138A	14-18		5000656	O-ring	1
	C151	14-18		9007315-0510	Screw	4
	C152	14-18		11150082	Solenoid valve adapter	1
	C153	14-18		327007 (9005110-4400)	Plug assembly	1
	C154	14-18		4740154	Seal ring	2
	C155	14-18		1701291	Coil, 12 volt	1
	C200	14-18		4740154	Seal ring	4
	C300	14-18		5000164 (9007315-0507)	Screw	4
	QC100	14-18		11133856	Control Kit, electric dump, 12 volt, n.o.,	1
	QC120	14-18		11103621	Solenoid valve seal kit	1
	QC125	14-18		11104457	Nut	1
	QC150	14-18		11104461	Solenoid valve kit, 12 volt	1



Control

(FH)



E101 832E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

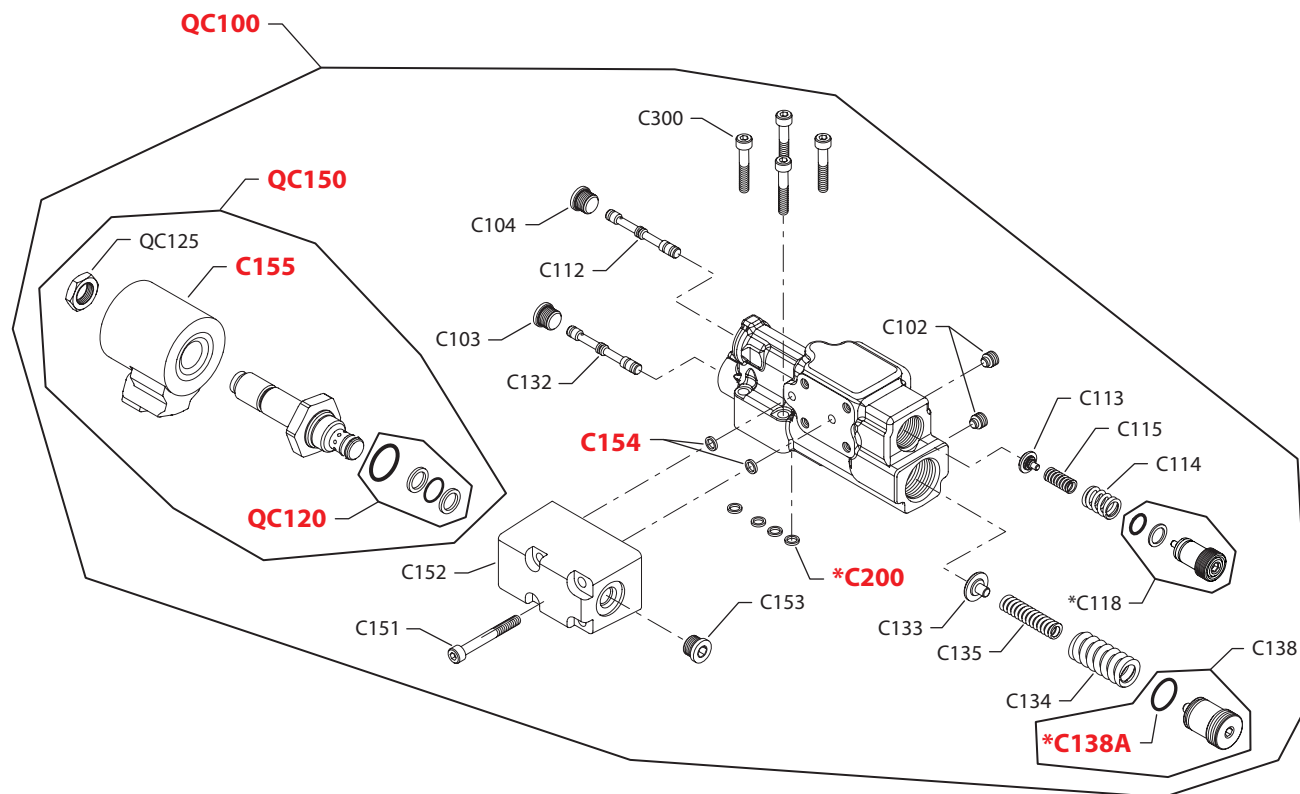

Control
Electric on/off control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
FH	C102	13-36		4740064	Set screw	2
	C103	13-36		327007 (9005110-4400)	Plug assembly	1
	C104	13-36		327007 (9005110-4400)	Plug assembly	1
	C112	13-36		1701124	Spool	1
	C113	13-36		4740246	Spring guide	1
	C114	13-36		4740061	Spring	1
	C115	13-36		4740062	Spring	1
	C118	13-36		11062214	Adjusting plug assembly	1
	C132	13-36		1701124	Spool	1
	C133	13-36		4740247	Spring guide	1
	C134	13-36		4740324	Spring, PC heavy	1
	C138	13-36		1700597	Adjusting plug assembly	1
	C138A	13-36		5000656	O-ring	1
	C151	13-36		9007315-0510	Screw	4
	C152	13-36		11150082	Solenoid valve adapter	1
	C153	13-36		327007 (9005110-4400)	Plug assembly	1
	C154	13-36		4740154	Seal ring	2
	C155	13-36		1701563	Coil, 24 volt	1
	C200	13-36		4740154	Seal ring	4
	C300	13-36		5000164 (9007315-0507)	Screw	4
	QC100	13-36		11135469	Control Kit, electric dump, 24 volt, n.c.	1
	QC120	13-36		11103621	Solenoid valve seal kit	1
	QC125	13-36		11104457	Nut	1
	QC150	13-36		11104464	Solenoid valve kit, 24 volt	1



Control

(FJ)



E101 622E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

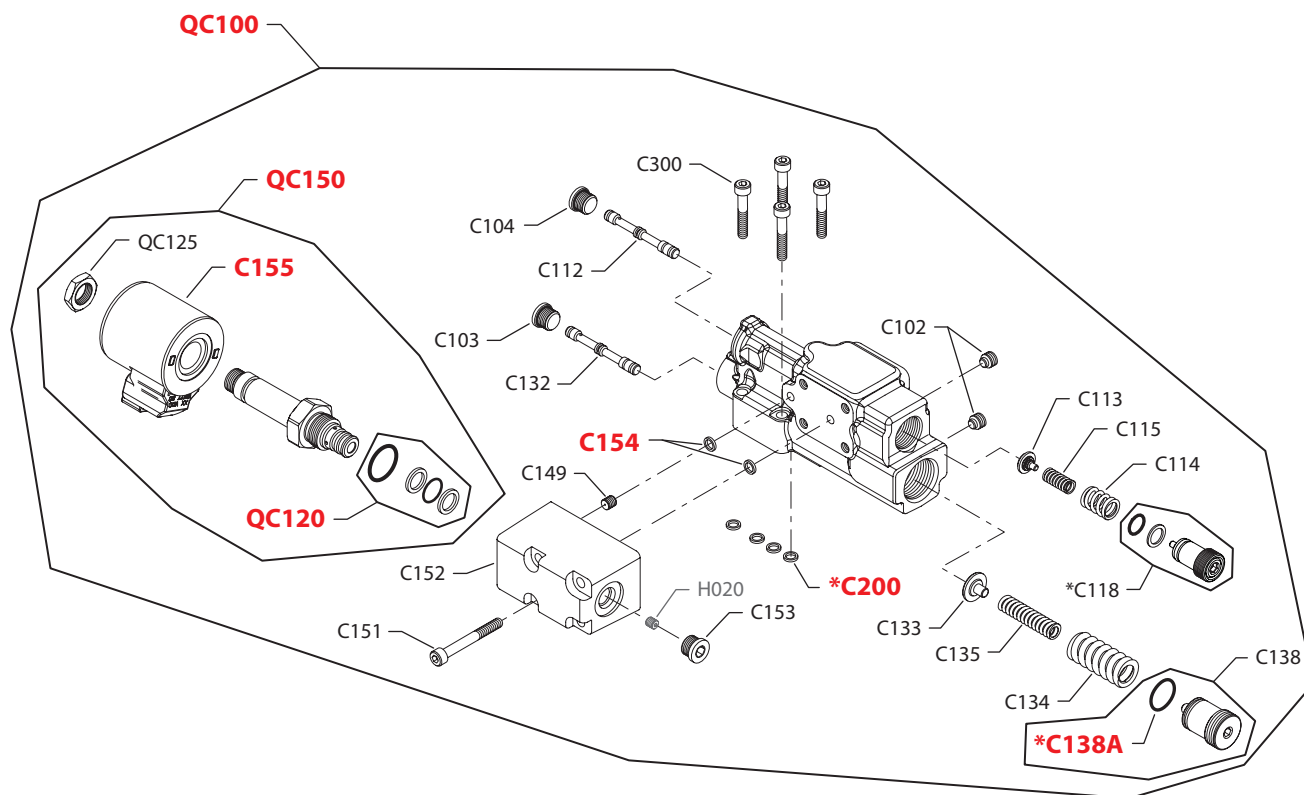
Control
Electric dump control

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
FJ	C102	13-36		4740064	Set screw	2
	C103	13-36		327007 (9005110-4400)	Plug assembly	1
	C104	13-36		327007 (9005110-4400)	Plug assembly	1
	C112	13-36		1701124	Spool	1
	C113	13-36		4740246	Spring guide	1
	C114	13-36		4740061	Spring	1
	C115	13-36		4740062	Spring	1
	C118	13-36		11062214	Adjusting plug assembly	1
	C132	13-36		1701124	Spool	1
	C133	13-36		4740247	Spring guide	1
	C134	13-36		4740051	Spring, PC outer	1
	C135	13-36		4740052	Spring, PC inner	1
	C138	13-36		11062379	Adjusting plug assembly	1
	C138A	13-36		5000656	O-ring	1
	C151	13-36		9007315-0510	Screw	4
	C152	13-36		11150082	Solenoid valve adapter	1
	C153	13-36		327007 (9005110-4400)	Plug assembly	1
	C154	13-36		4740154	Seal ring	2
	C155	13-36		1701291	Coil, 12 volt	1
	C200	13-36		4740154	Seal ring	4
	C300	13-36		5000164 (9007315-0507)	Screw	4
	QC100	13-36		11140029	Control Kit, electric dump 12 volt, n.o.	1
	QC120	13-36		11103621	Solenoid valve seal kit	1
	QC125	13-36		11104457	Nut	1
	QC150	13-36		11104461	Solenoid valve kit, 12 volt	1



Control

(TA)



E103 409E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Pressure compensating/load sensing control, electric torque limiting

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
TA	C102	14-52		4740064	Set screw	2
	C103	14-52		327007 (9005110-4400)	Plug assembly	1
	C104	14-52		327007 (9005110-4400)	Plug assembly	1
	C112	14-52		1701124	Spool	1
	C113	14-52		4740246	Spring guide	1
	C114	14-52		4740061	Spring	1
	C115	14-52		4740062	Spring	1
	C118	14-52		11062214	Adjusting plug assembly	1
	C132	14-52		1701124	Spool	1
	C133	14-52		4740247	Spring guide	1
	C134	14-52		4740051	Spring, PC outer	1
	C135	14-52		4740052	Spring, PC inner	1
	C138	14-52		11062379	Adjusting plug assembly	1
	C138A	14-52		5000656	O-ring	1
	C149	14-52		739144	Orifice plug, 0.8mm	1
	C151	14-52		9007315-0510	Screw	4
	C152	14-52		11150082	Solenoid valve adapter	1
	C153	14-52		327007 (9005110-4400)	Plug assembly	1
	C154	14-52		4740154	Seal ring	2
	C155	14-52		1701291	Coil, 12 volt	1
	C200	14-52		4740154	Seal ring	4
	C300	14-52		5000164 (9007315-0507)	Screw	4
	QC100	14-52		11150230	Control Kit, 12v, n.c.	1
	QC120	14-52		11103621	Solenoid valve seal kit	1
	QC125	14-52		11104460	Nut	1
	QC150	14-52		11104467	Solenoid valve kit, 12 volt	1

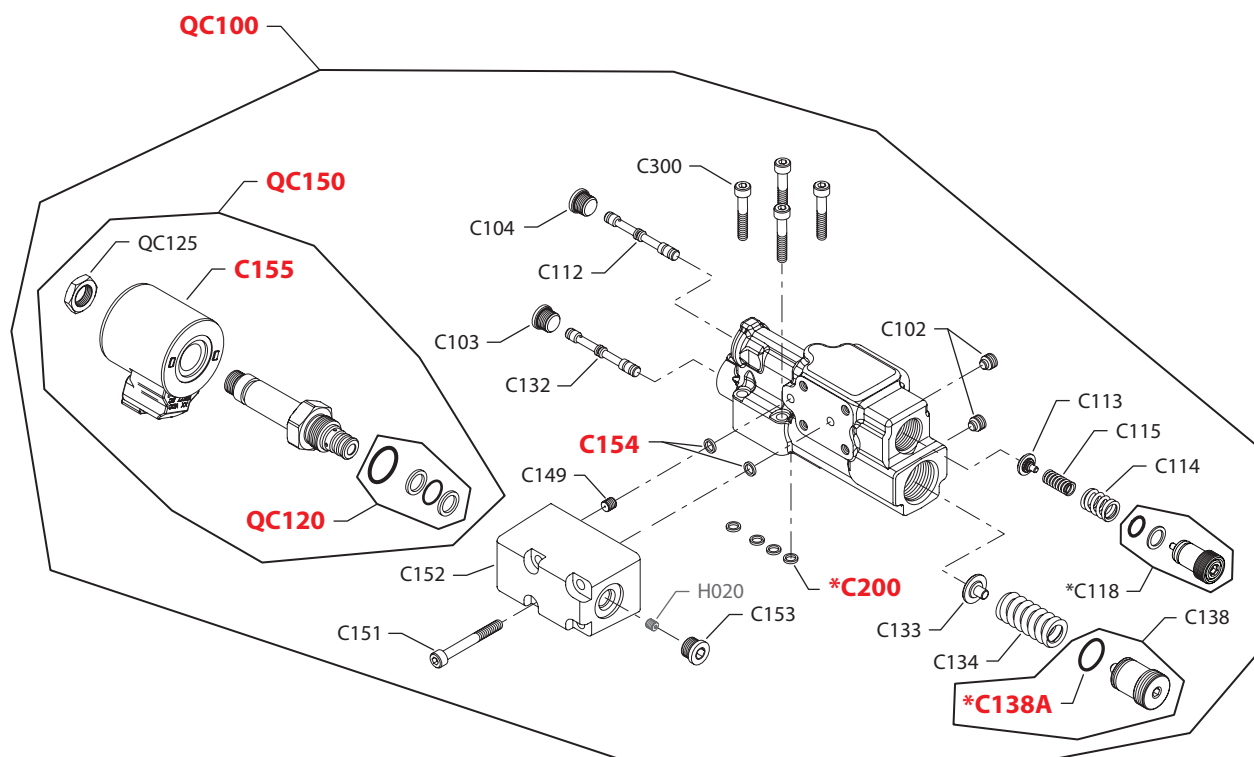
Control
Pressure compensating/load sensing control, electric torque limiting

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
TB	C102	14-52		4740064	Set screw	2
	C103	14-52		327007 (9005110-4400)	Plug assembly	1
	C104	14-52		327007 (9005110-4400)	Plug assembly	1
	C112	14-52		1701124	Spool	1
	C113	14-52		4740246	Spring guide	1
	C114	14-52		4740061	Spring	1
	C115	14-52		4740062	Spring	1
	C118	14-52		11062214	Adjusting plug assembly	1
	C132	14-52		1701124	Spool	1
	C133	14-52		4740247	Spring guide	1
	C134	14-52		4740051	Spring, PC outer	1
	C135	14-52		4740052	Spring, PC inner	1
	C138	14-52		11062379	Adjusting plug assembly	1
	C138A	14-52		5000656	O-ring	1
	C149	14-52		739144	Orifice plug, 0.8mm	1
	C151	14-52		9007315-0510	Screw	4
	C152	14-52		11150082	Solenoid valve adapter	1
	C153	14-52		327007 (9005110-4400)	Plug assembly	1
	C154	14-52		4740154	Seal ring	2
	C155	14-52		1701563	Coil, 24 volt	1
	C200	14-52		4740154	Seal ring	4
	C300	14-52		5000164 (9007315-0507)	Screw	4
	QC100	14-52		11150231	Control Kit, 24v, n.c.	1
	QC120	14-52		11103621	Solenoid valve seal kit	1
	QC125	14-52		11104460	Nut	1
	QC150	14-52		11104468	Solenoid valve kit, 24 volt	1



Control

(TC)



E103 409E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

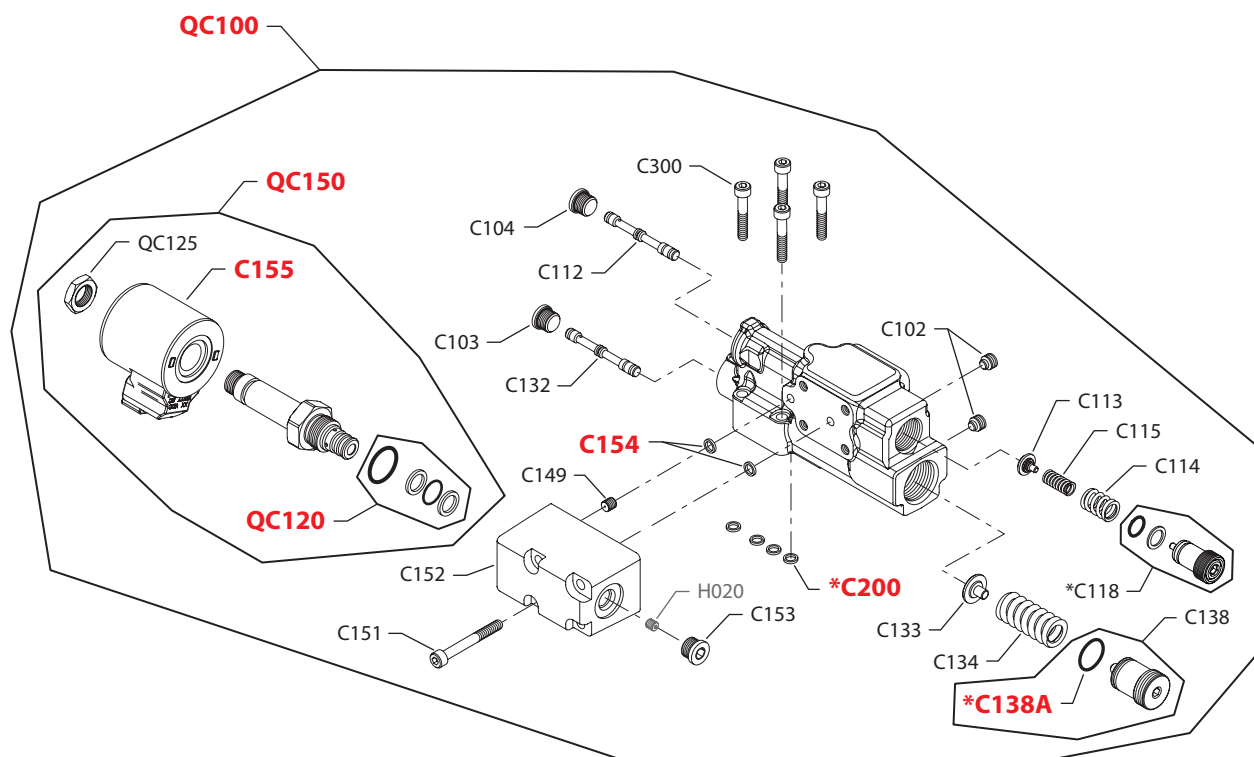
Control
Pressure compensating/load sensing control, electric torque limiting

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
TC	C102	14-52		4740064	Set screw	2
	C103	14-52		327007 (9005110-4400)	Plug assembly	1
	C104	14-52		327007 (9005110-4400)	Plug assembly	1
	C112	14-52		1701124	Spool	1
	C113	14-52		4740246	Spring guide	1
	C114	14-52		4740061	Spring	1
	C115	14-52		4740062	Spring	1
	C118	14-52		11062214	Adjusting plug assembly	1
	C132	14-52		1701124	Spool	1
	C133	14-52		4740247	Spring guide	1
	C134	14-52		4740324	Spring, PC heavy	1
	C138	14-52		1700597	Adjusting plug assembly	1
	C138A	14-52		5000656	O-ring	1
	C149	14-52		739144	Orifice plug, 0.8mm	1
	C151	14-52		9007315-0510	Screw	4
	C152	14-52		11150082	Solenoid valve adapter	1
	C153	14-52		327007 (9005110-4400)	Plug assembly	1
	C154	14-52		4740154	Seal ring	2
	C155	14-52		1701291	Coil, 12 volt	1
	C200	14-52		4740154	Seal ring	4
	C300	14-52		5000164 (9007315-0507)	Screw	4
	QC100	14-52		11150234	Control Kit, 12v, high, n.c.	1
	QC120	14-52		11103621	Solenoid valve seal kit	1
	QC125	14-52		11104460	Nut	1
	QC150	14-52		11104467	Solenoid valve kit, 12 volt	1



Control

(TD)



E103 409E

* = included in base motor seal kit Q210

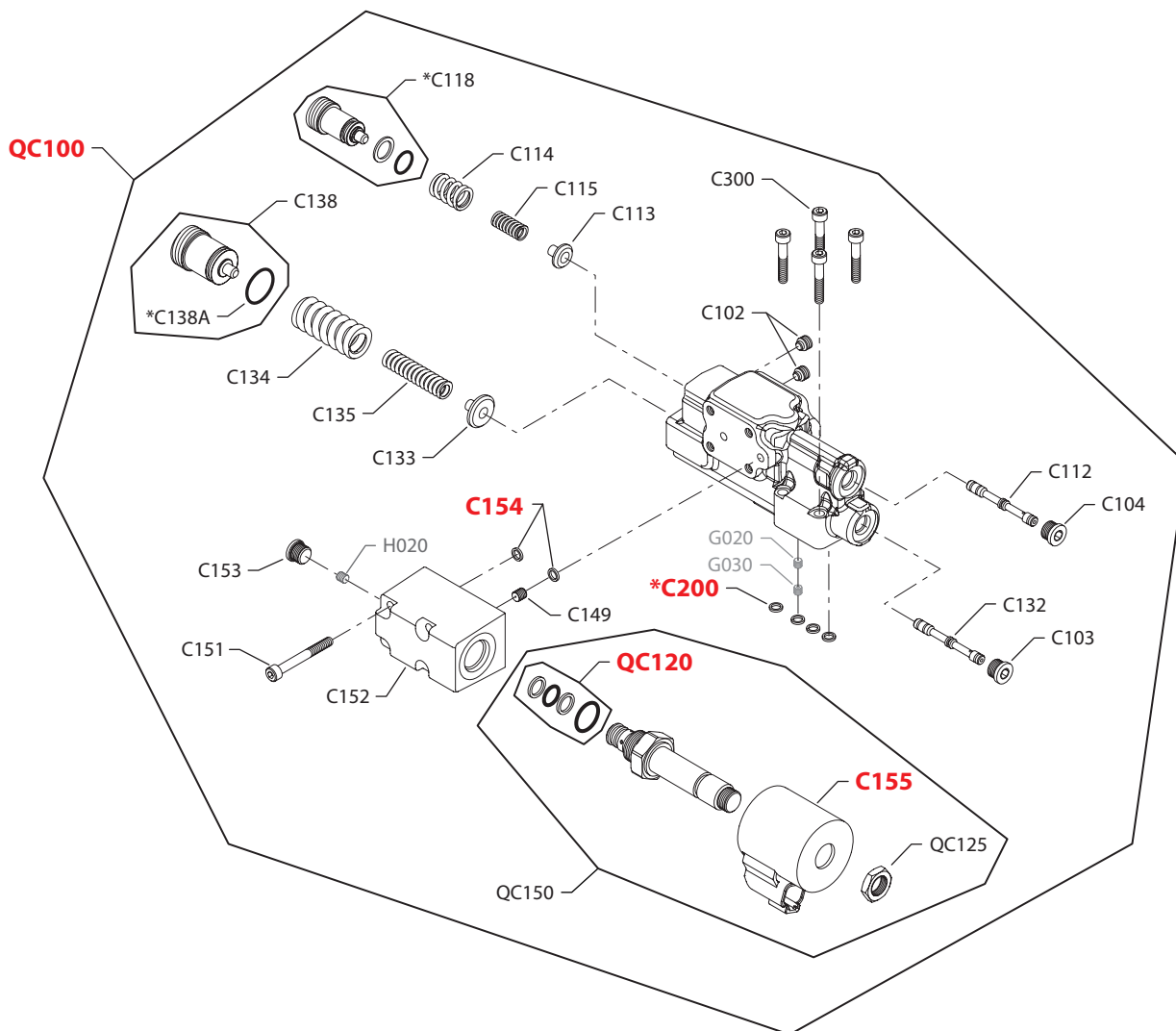
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Pressure compensating/load sensing control, electric torque limiting

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
TD	C102	14-52		4740064	Set screw	2
	C103	14-52		327007 (9005110-4400)	Plug assembly	1
	C104	14-52		327007 (9005110-4400)	Plug assembly	1
	C112	14-52		1701124	Spool	1
	C113	14-52		4740246	Spring guide	1
	C114	14-52		4740061	Spring	1
	C115	14-52		4740062	Spring	1
	C118	14-52		11062214	Adjusting plug assembly	1
	C132	14-52		1701124	Spool	1
	C133	14-52		4740247	Spring guide	1
	C134	14-52		4740324	Spring, PC heavy	1
	C138	14-52		1700597	Adjusting plug assembly	1
	C138A	14-52		5000656	O-ring	1
	C149	14-52		739144	Orifice plug, 0.8mm	1
	C151	14-52		9007315-0510	Screw	4
	C152	14-52		11150082	Solenoid valve adapter	1
	C153	14-52		327007 (9005110-4400)	Plug assembly	1
	C154	14-52		4740154	Seal ring	2
	C155	14-52		1701563	Coil, 24 volt	1
	C200	14-52		4740154	Seal ring	4
	C300	14-52		5000164 (9007315-0507)	Screw	4
	QC100	14-52		11150235	Control Kit, 24v, high, n.c.	1
	QC120	14-52		11103621	Solenoid valve seal kit	1
	QC125	14-52		11104460	Nut	1
	QC150	14-52		11104468	Solenoid valve kit, 24 volt	1

Control

(TE)



E103 410E

* = included in base motor seal kit Q210

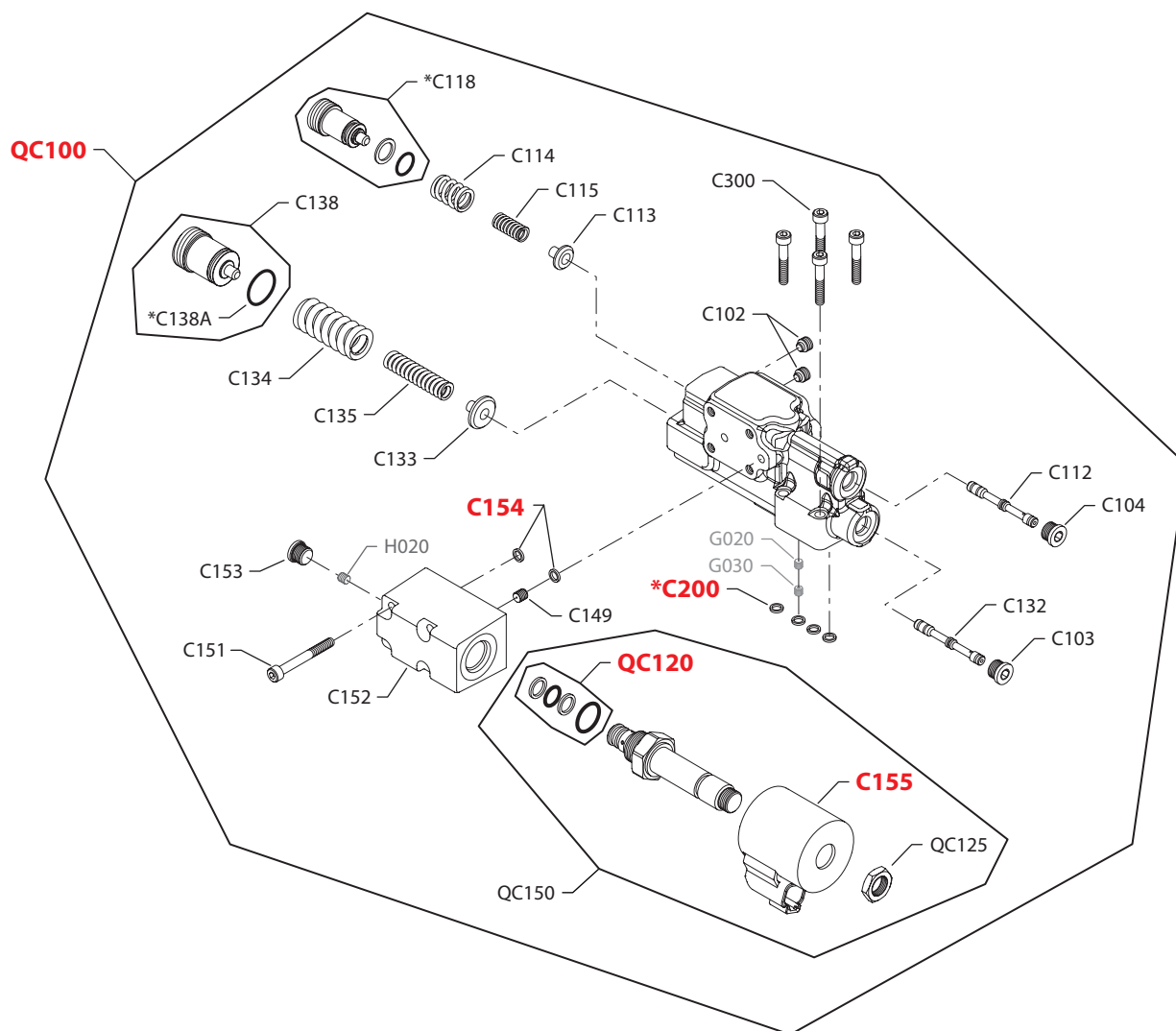
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Pressure compensating/load sensing control, electric torque limiting

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
TE	C102	14-52		4740064	Set screw	2
	C103	14-52		327007 (9005110-4400)	Plug assembly	1
	C104	14-52		327007 (9005110-4400)	Plug assembly	1
	C112	14-52		1701124	Spool	1
	C113	14-52		4740246	Spring guide	1
	C114	14-52		4740061	Spring	1
	C115	14-52		4740062	Spring	1
	C118	14-52		11062214	Adjusting plug assembly	1
	C132	14-52		1701124	Spool	1
	C133	14-52		4740247	Spring guide	1
	C134	14-52		4740051	Spring, PC outer	1
	C135	14-52		4740052	Spring, PC inner	1
	C138	14-52		11062379	Adjusting plug assembly	1
	C138A	14-52		5000656	O-ring	1
	C149	14-52		739144	Orifice plug, 0.8mm	1
	C151	14-52		9007315-0510	Screw	4
	C152	14-52		11150082	Solenoid valve adapter	1
	C153	14-52		327007 (9005110-4400)	Plug assembly	1
	C154	14-52		4740154	Seal ring	2
	C155	14-52		1701291	Coil, 12 volt	1
	C200	14-52		4740154	Seal ring	4
	C300	14-52		5000164 (9007315-0507)	Screw	4
	QC100	14-52		11150237	Control Kit, 12v, n.c.	1
	QC120	14-52		11103621	Solenoid valve seal kit	1
	QC125	14-52		11104460	Nut	1
	QC150	14-52		11104467	Solenoid valve kit, 12 volt	1

Control

(TF)



E103 410E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

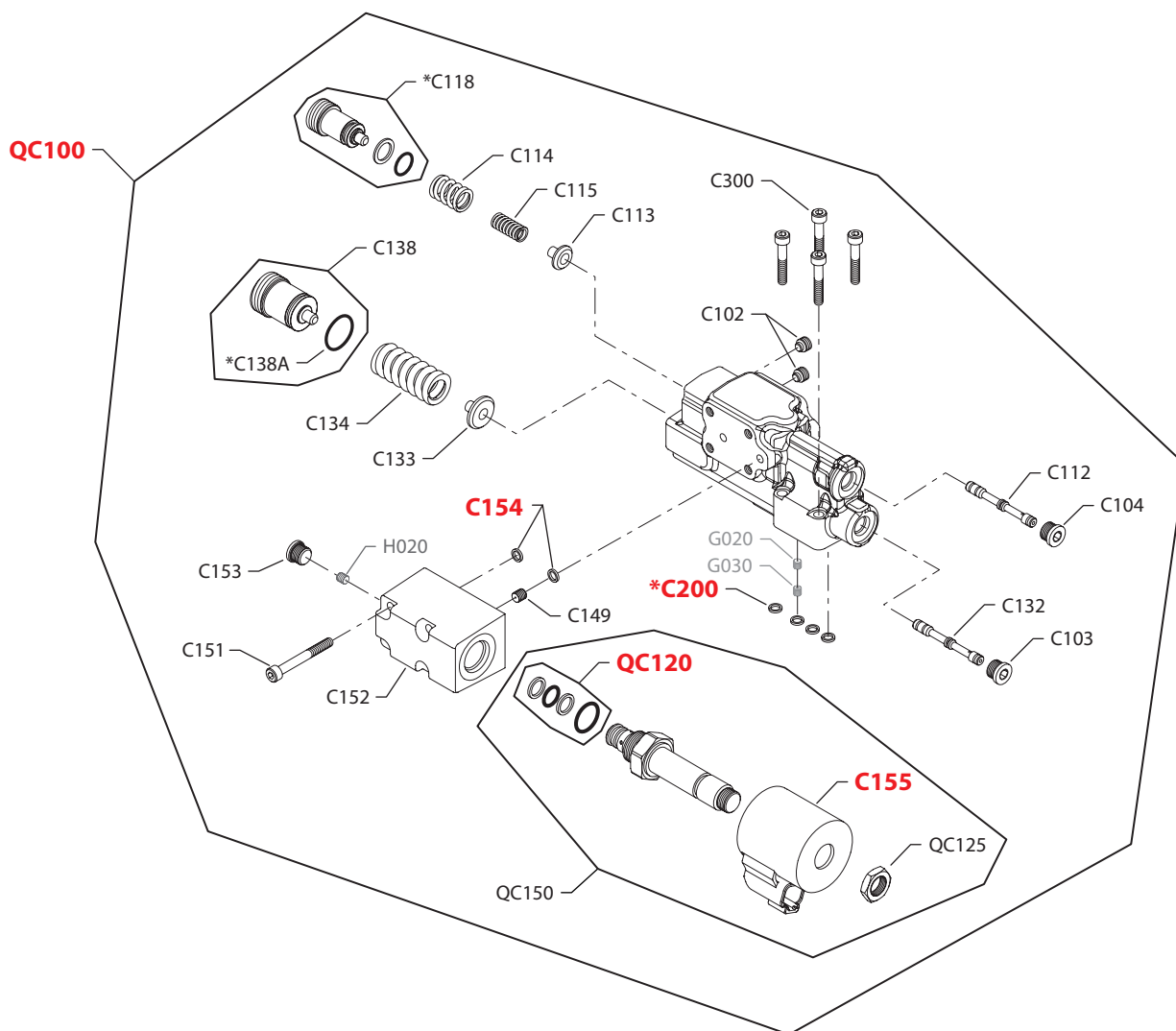
Control
Pressure compensating/load sensing control, electric torque limiting

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
TF	C102	14-52		4740064	Set screw	2
	C103	14-52		327007 (9005110-4400)	Plug assembly	1
	C104	14-52		327007 (9005110-4400)	Plug assembly	1
	C112	14-52		1701124	Spool	1
	C113	14-52		4740246	Spring guide	1
	C114	14-52		4740061	Spring	1
	C115	14-52		4740062	Spring	1
	C118	14-52		11062214	Adjusting plug assembly	1
	C132	14-52		1701124	Spool	1
	C133	14-52		4740247	Spring guide	1
	C134	14-52		4740051	Spring, PC outer	1
	C135	14-52		4740052	Spring, PC inner	1
	C138	14-52		11062379	Adjusting plug assembly	1
	C138A	14-52		5000656	O-ring	1
	C149	14-52		739144	Orifice plug, 0.8mm	1
	C151	14-52		9007315-0510	Screw	4
	C152	14-52		11150082	Solenoid valve adapter	1
	C153	14-52		327007 (9005110-4400)	Plug assembly	1
	C154	14-52		4740154	Seal ring	2
	C155	14-52		1701563	Coil, 24 volt	1
	C200	14-52		4740154	Seal ring	4
	C300	14-52		5000164 (9007315-0507)	Screw	4
	QC100	14-52		11150238	Control Kit, 24v, n.c.	1
	QC120	14-52		11103621	Solenoid valve seal kit	1
	QC125	14-52		11104460	Nut	1
	QC150	14-52		11104468	Solenoid valve kit, 24 volt	1



Control

(TG)



E103 411E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

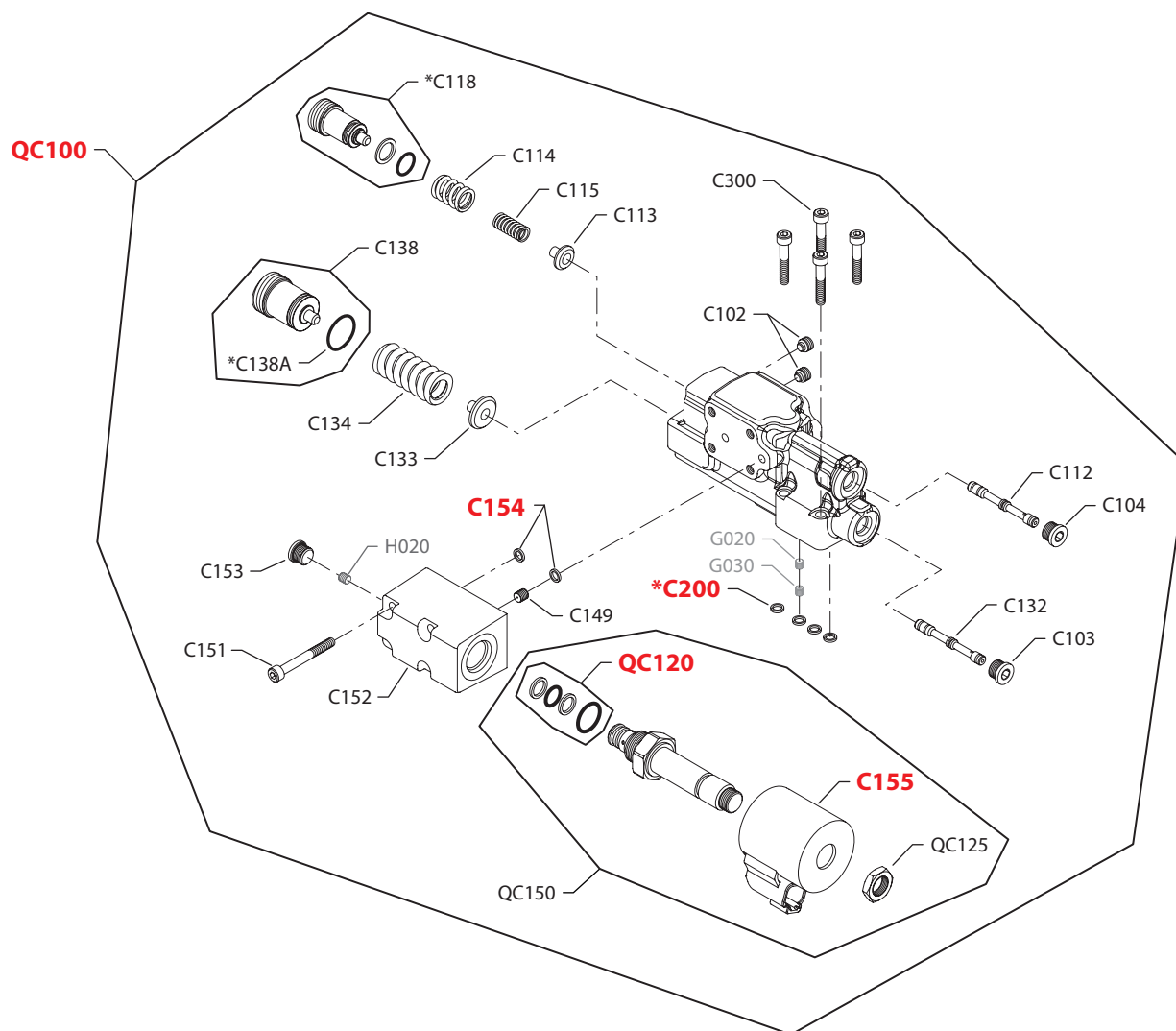

Control
Pressure compensating/load sensing control, electric torque limiting

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
TG	C102	14-52		4740064	Set screw	2
	C103	14-52		327007 (9005110-4400)	Plug assembly	1
	C104	14-52		327007 (9005110-4400)	Plug assembly	1
	C112	14-52		1701124	Spool	1
	C113	14-52		4740246	Spring guide	1
	C114	14-52		4740061	Spring	1
	C115	14-52		4740062	Spring	1
	C118	14-52		11062214	Adjusting plug assembly	1
	C132	14-52		1701124	Spool	1
	C133	14-52		4740247	Spring guide	1
	C134	14-52		4740324	Spring, PC heavy	1
	C138	14-52		1700597	Adjusting plug assembly	1
	C138A	14-52		5000656	O-ring	1
	C149	14-52		739144	Orifice plug, 0.8mm	1
	C151	14-52		9007315-0510	Screw	4
	C152	14-52		11150082	Solenoid valve adapter	1
	C153	14-52		327007 (9005110-4400)	Plug assembly	1
	C154	14-52		4740154	Seal ring	2
	C155	14-52		1701291	Coil, 12 volt	1
	C200	14-52		4740154	Seal ring	4
	C300	14-52		5000164 (9007315-0507)	Screw	4
	QC100	14-52		11150239	Control Kit, 12v, high, n.c.	1
	QC120	14-52		11103621	Solenoid valve seal kit	1
	QC125	14-52		11104460	Nut	1
	QC150	14-52		11104467	Solenoid valve kit, 12 volt	1



Control

(TH)



E103 411E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Control
Pressure compensating/load sensing control, electric torque limiting

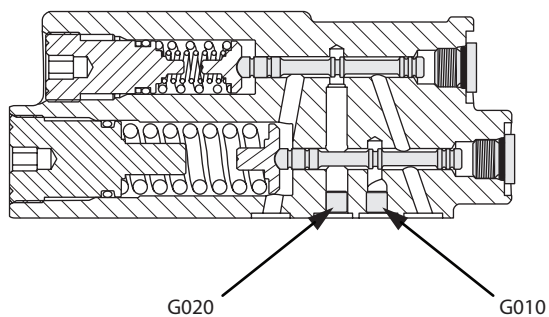
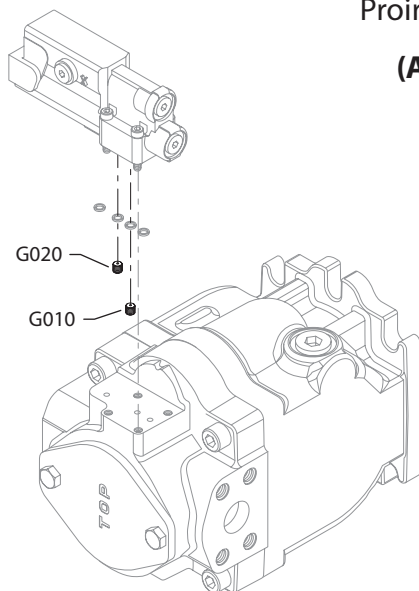
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
TH	C102	14-52		4740064	Set screw	2
	C103	14-52		327007 (9005110-4400)	Plug assembly	1
	C104	14-52		327007 (9005110-4400)	Plug assembly	1
	C112	14-52		1701124	Spool	1
	C113	14-52		4740246	Spring guide	1
	C114	14-52		4740061	Spring	1
	C115	14-52		4740062	Spring	1
	C118	14-52		11062214	Adjusting plug assembly	1
	C132	14-52		1701124	Spool	1
	C133	14-52		4740247	Spring guide	1
	C134	14-52		4740324	Spring, PC heavy	1
	C138	14-52		1700597	Adjusting plug assembly	1
	C138A	14-52		5000656	O-ring	1
	C149	14-52		739144	Orifice plug, 0.8mm	1
	C151	14-52		9007315-0510	Screw	4
	C152	14-52		11150082	Solenoid valve adapter	1
	C153	14-52		327007 (9005110-4400)	Plug assembly	1
	C154	14-52		4740154	Seal ring	2
	C155	14-52		1701563	Coil, 24 volt	1
	C200	14-52		4740154	Seal ring	4
	C300	14-52		5000164 (9007315-0507)	Screw	4
	QC100	14-52		11150240	Control Kit, 24v, high, n.c.	1
	QC120	14-52		11103621	Solenoid valve seal kit	1
	QC125	14-52		11104460	Nut	1
	QC150	14-52		11104468	Solenoid valve kit, 24 volt	1



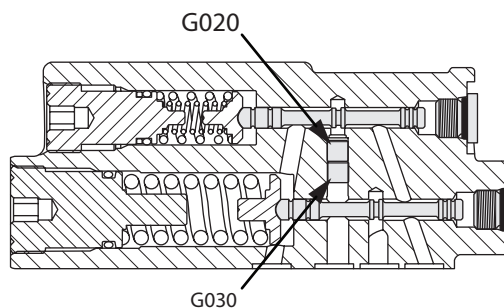
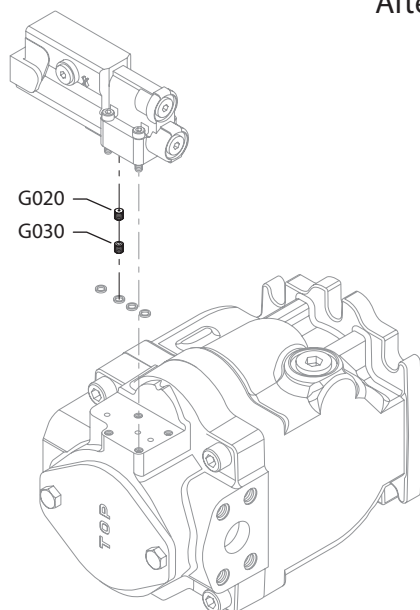
Chock orifice

Proir to 12-40 (10/1/2012)

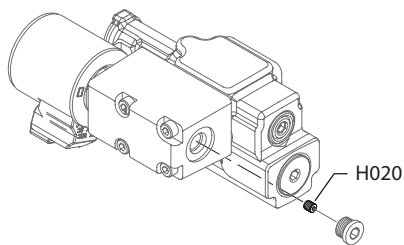
(A, B, C, D & F)



After 12-39 (10/1/2012)



(C & D)



E100 625E

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Chock orifice
Choke orifice (servo control orifice)

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A	G010	03-23	12-39	739144	Orifice plug, 0.8 mm (SB-2012-011)	1
	G020	12-40		739144	Orifice plug, 0.8 mm	1
	G030	12-40		518215	Orifice plug, 2.2 mm	1
B	G010	03-23	12-39	519659	Orifice plug, 1.0 mm (SB-2012-011)	1
	G020	12-40		519659	Orifice plug, 1.0 mm	1
	G030	12-40		518215	Orifice plug, 2.2 mm	1
C	G010	03-23	12-39	763680	Orifice plug, 0.6 mm (SB-2012-011)	1
	G020	12-40		763680	Orifice plug, 0.6 mm	1
	G030	12-40		518215	Orifice plug, 2.2 mm	1
E	G020	12-40		739144	Orifice plug, 0.8 mm (SB-2012-011)	1
	G030	12-40		518215	Orifice plug, 2.2 mm	1
F	G020	03-23		519659	Orifice plug, 1.0 mm (SB-2012-011)	1
	G030	12-40		518215	Orifice plug, 2.2 mm	1
N				None		

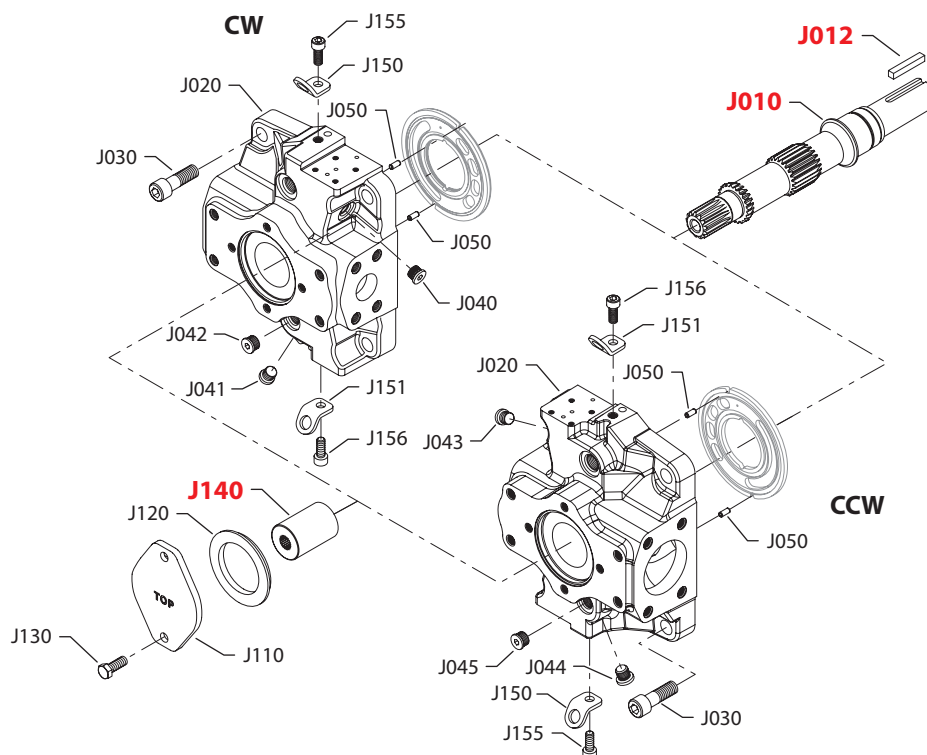
Gain orifice

3		14-52		None		
C	H020	14-52		11062004	Orifice plug, 0.8mm	1
D	H020	15-10		11066593	Orifice plug, 1.0mm	1
N		15-10		None		

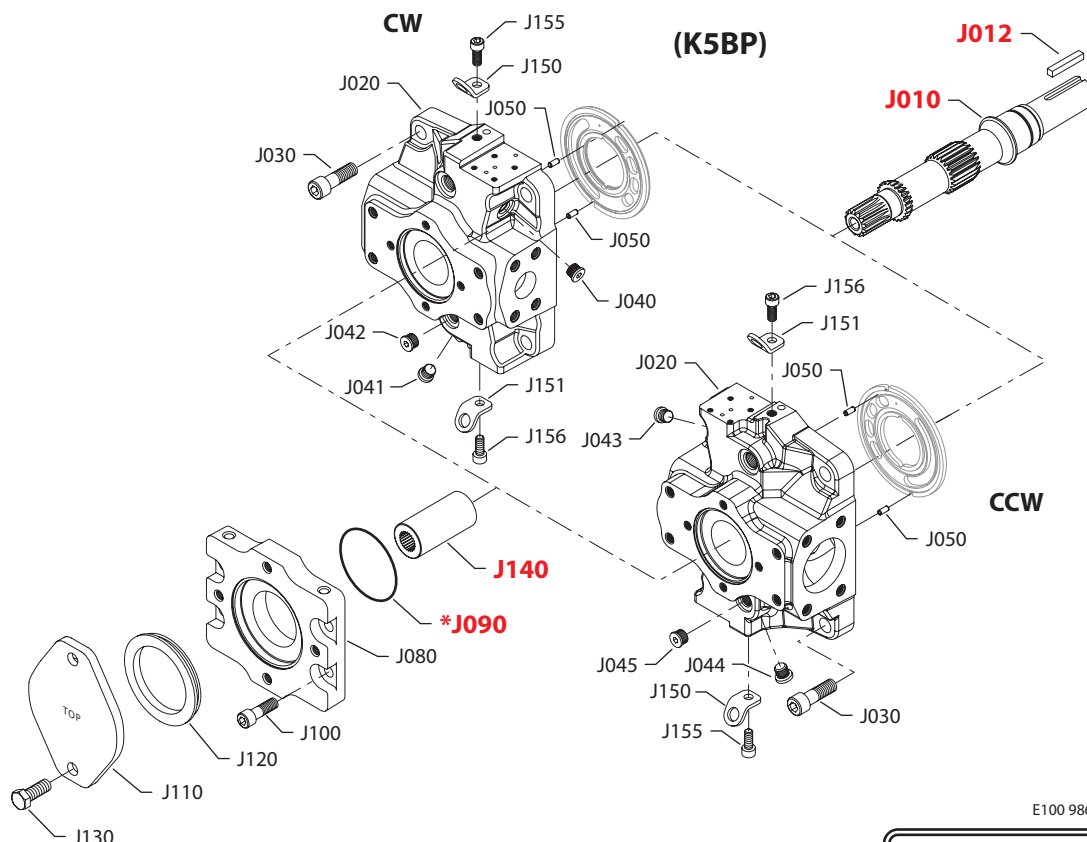


Shaft/auxiliary flange and end cap

(K5AP)



(K5BP)



* = included in base motor seal kit Q210

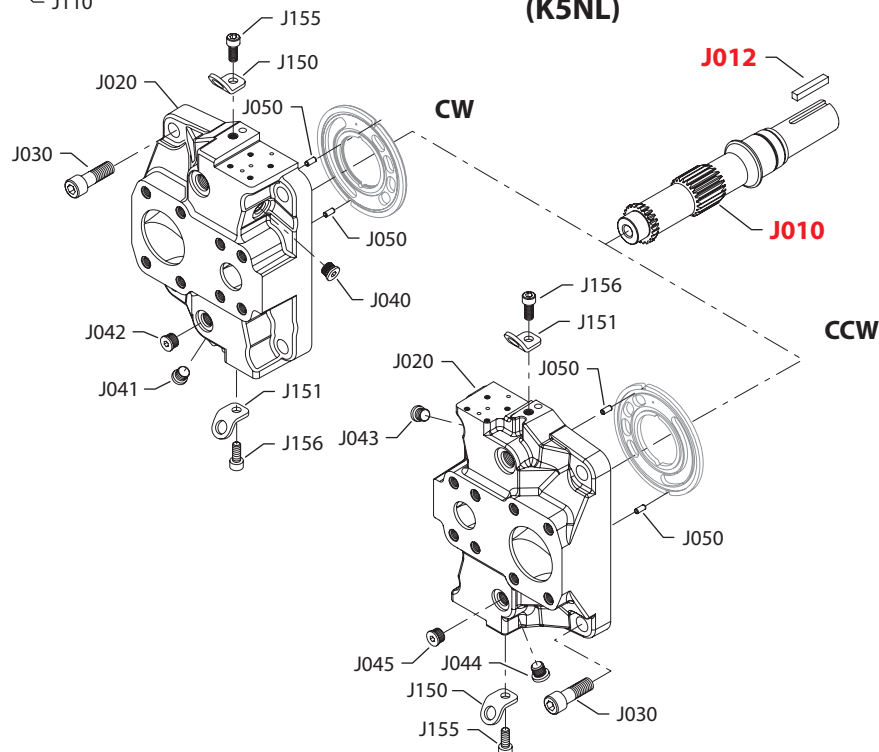
E100 986E

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
K5AP	J010	03-08		11082275	Shaft, straight key (SB-2010-019)	1
	J012	03-08		331603 (9003261-3724)	Key, square	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J140	03-08		1700402	Coupling, 9-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
K5BP	J010	03-08		11082275	Shaft, straight key (SB-2010-019)	1
	J012	03-08		331603 (9003261-3724)	Key, square	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700565	Adapter flange, SAE B	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801059	Cover plate	1
	J120	03-08		8801061	B pad seal	1
	J130	03-08		9007200-5021	Screw	2
	J140	03-08		1700404	Coupling, 13-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

(K5CP)



Enlarged **bold** type item numbers are recommended part to stock for servicing.

Parts Manual

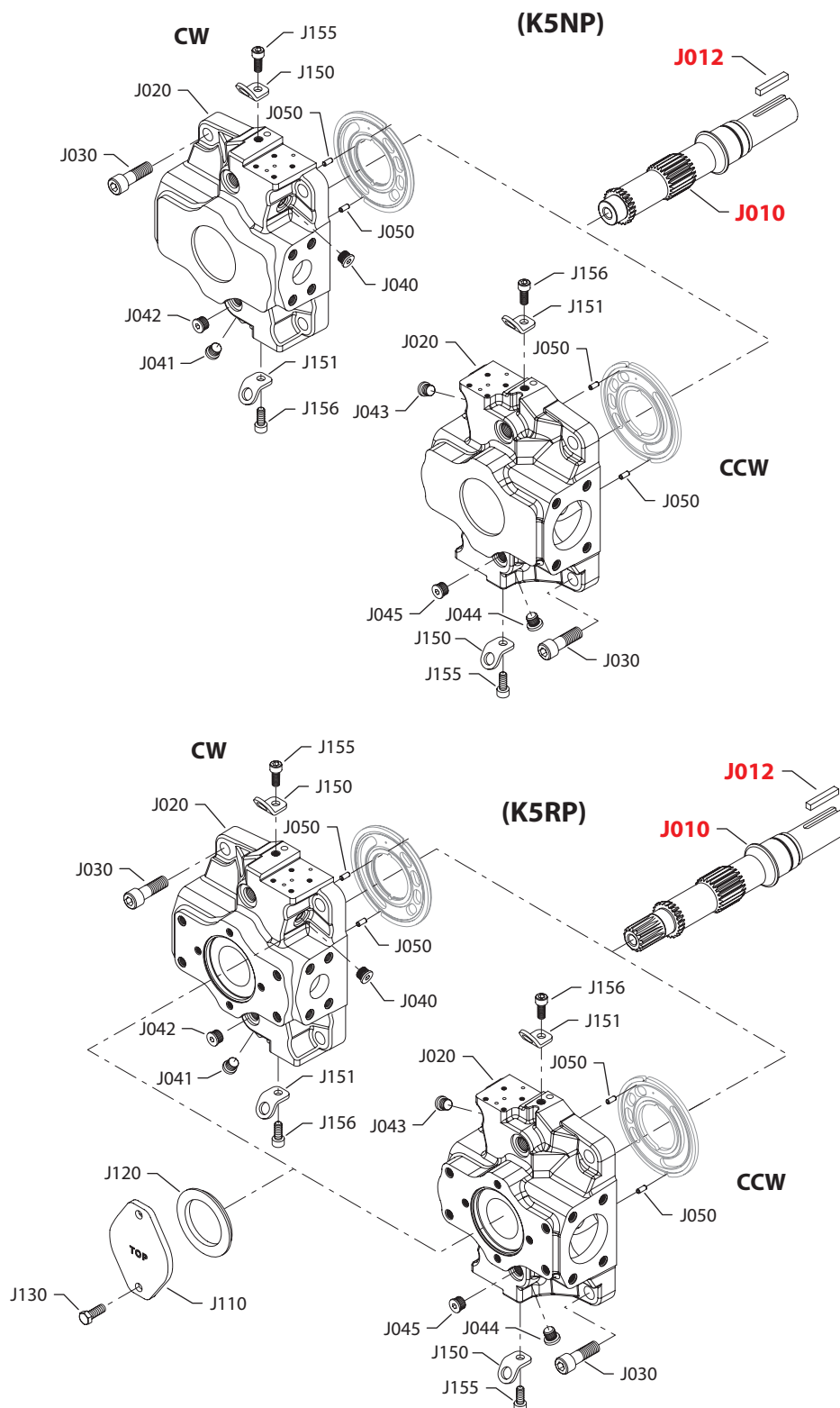
Series 45 Frame E 100, 130 and 147cc O. C. Pumps

Shaft/auxiliary flange and end cap

Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
K5CP	J010	03-08		11082275	Shaft, straight key (SB-2010-019)	1
	J012	03-08		331603 (9003261-3724)	Key, square	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700566	Adapter flange, SAE C	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801060	Cover plate	1
	J120	03-08		11081805	C pad seal, (SB-2010-017)	1
	J130	03-08		907200-5021	Screw	4
	J140	03-08		1700405	Coupling, 14-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
K5NL	J010	03-08		11082274	Shaft, straight key (SB-2010-019)	1
	J012	03-08		331603 (9003261-3724)	Key, square	1
	J020	03-08		1701481	End cap, cw, axial ports, ERR	1
	J020	03-08		1700326	End cap, ccw, axial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

Shaft/auxiliary flange and end cap



E100 582E

* = included in base motor seal kit Q210

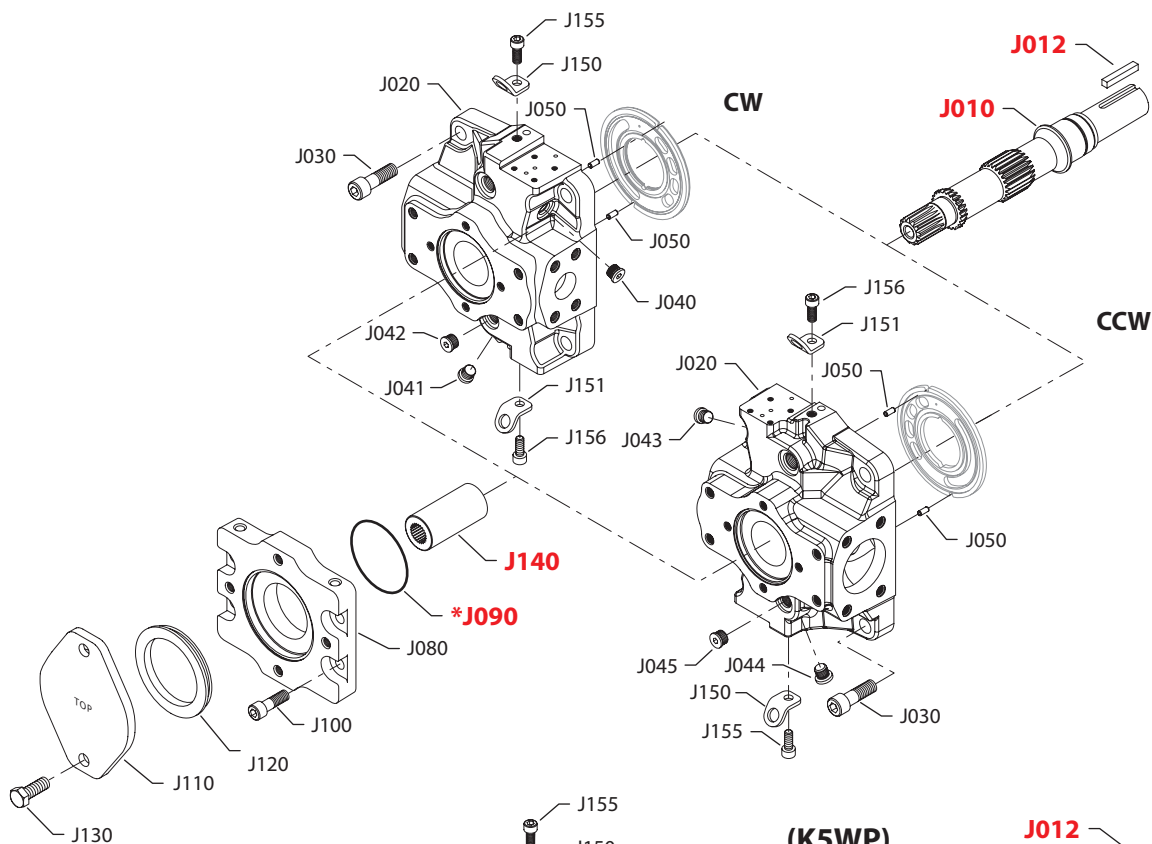
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

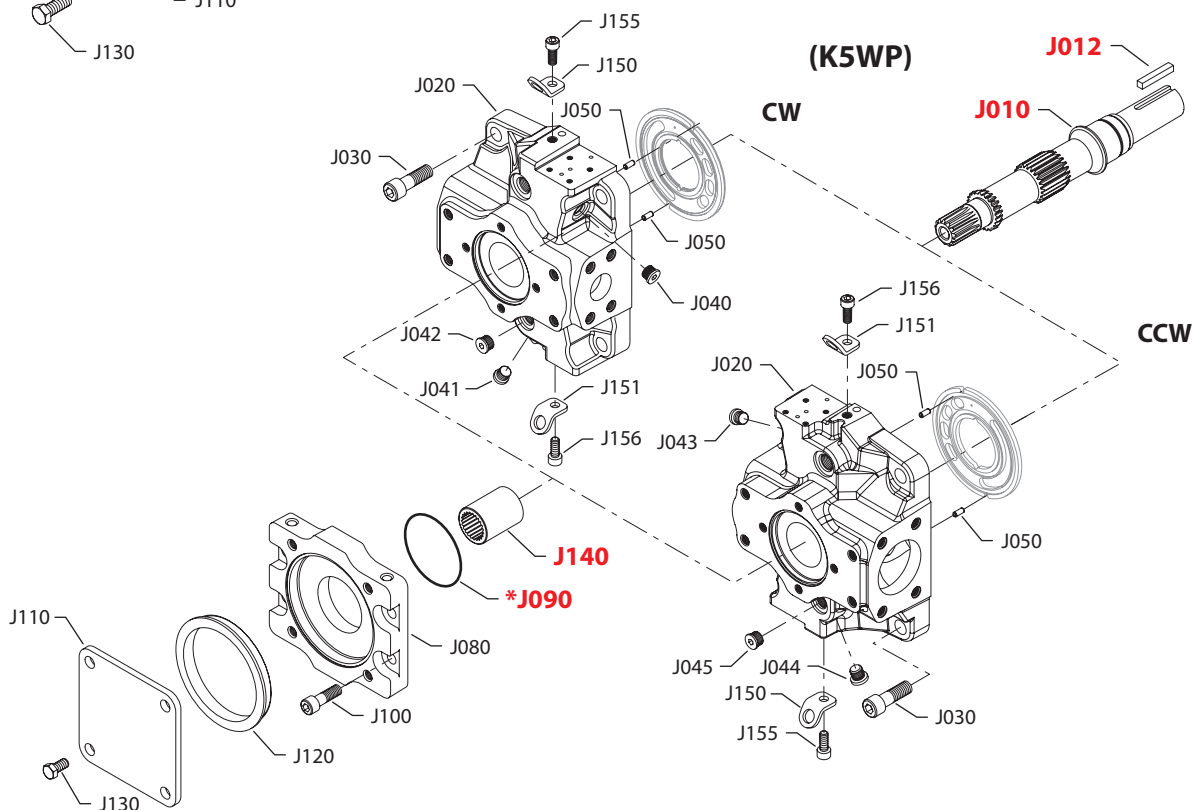
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
K5NP	J010	03-08		11082274	Shaft, straight key (SB-2010-019)	1
	J012	03-08		331603 (9003261-3724)	Key, square	1
	J020	03-08		1701482	End cap, cw, radial ports, ERR	1
	J020	03-08		1700330	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	01-07		5000611	Pin	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
K5RP	J010	03-08		11082275	Shaft, straight key (SB-2010-019)	1
	J012	03-08		331603 (9003261-3724)	Key, square	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

Shaft/auxiliary flange and end cap

(K5VP)



(K5WP)



E100 987E

* = included in base motor seal kit Q210

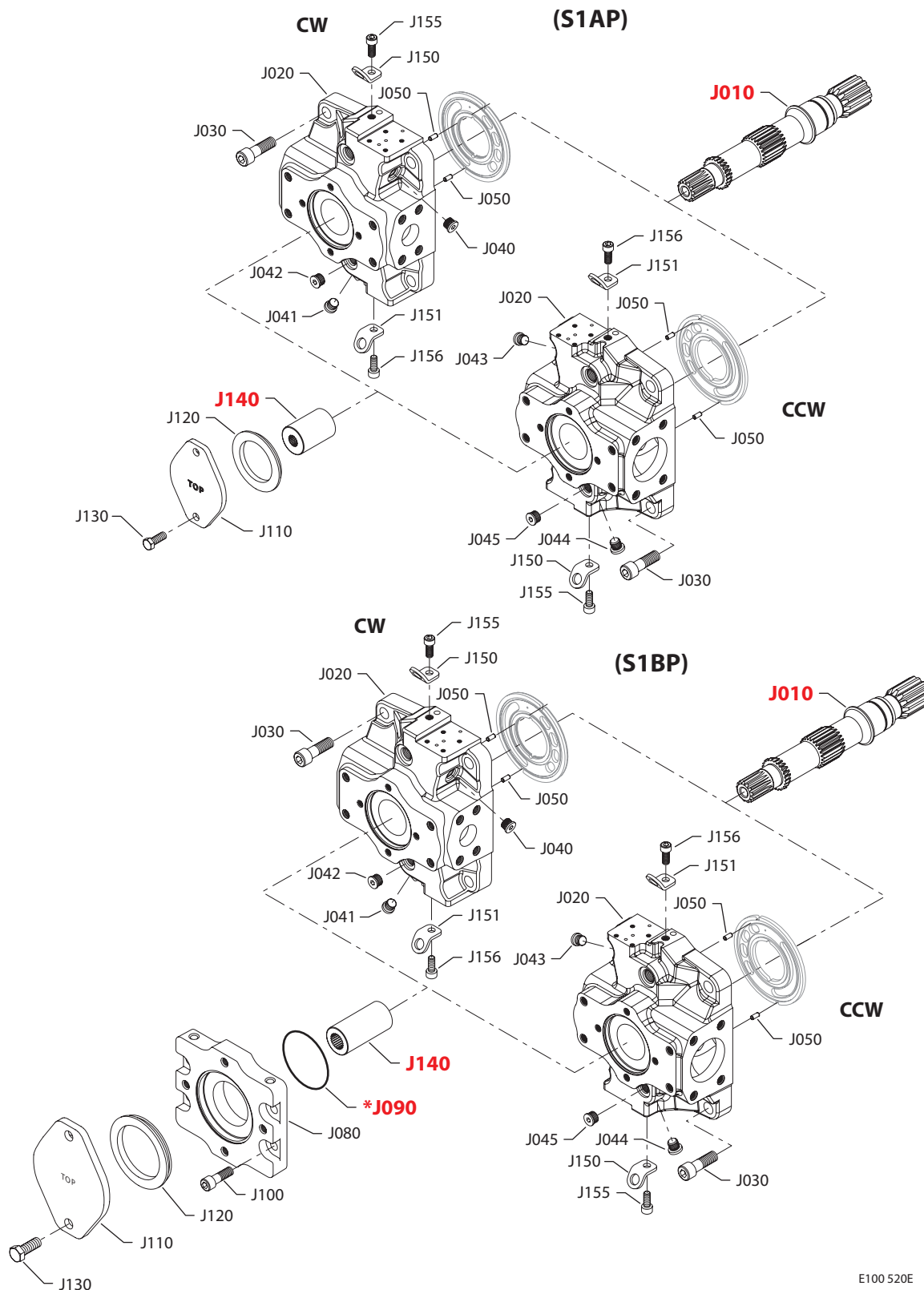
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
K5VP	J010	03-08		11082275	Shaft, straight key (SB-2010-019)	1
	J012	03-08		331603 (9003261-3724)	Key, square	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700565	Adapter flange, SAE B	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801059	Cover plate	1
	J120	03-08		8801061	B pad seal	1
	J130	03-08		9007200-5021	Screw	2
	J140	03-08		1700406	Coupling, 15-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
K5WP	J010	03-08		11082275	Shaft, straight key (SB-2010-019)	1
	J012	03-08		331603 (9003261-3724)	Key, square	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700566	Adapter flange, SAE C	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801060	Cover plate	1
	J120	03-08		11081805	C pad seal, (SB-2010-017)	1
	J130	03-08		9007200-5021	Screw	2
	J140	03-08		1700497	Coupling, 17-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1



Shaft/auxiliary flange and end cap



E100 520E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

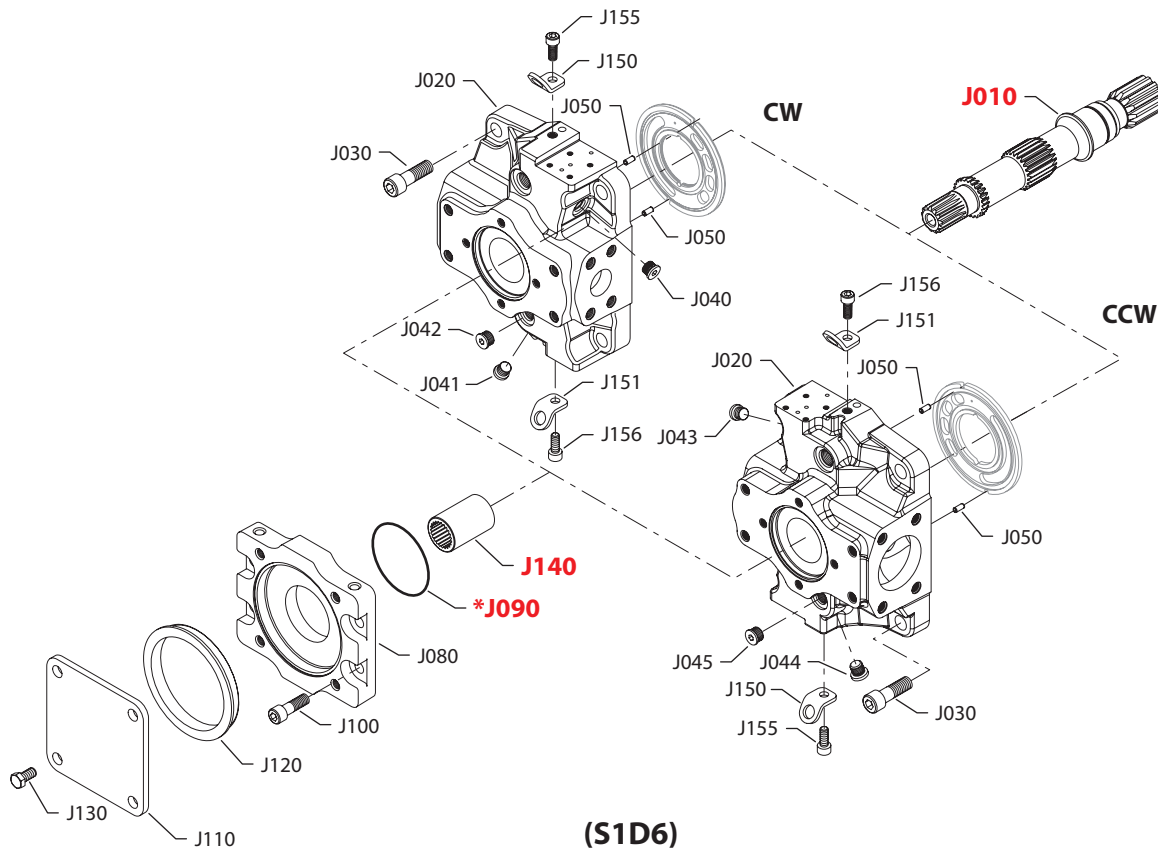

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S1AP	J010	03-08		11087475	Shaft, 14-tooth spline (SB-2007-029 & SB-2011-027)	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J140	03-08		1700402	Coupling, 9-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S1BP	J010	03-08		11087475	Shaft, 14-tooth spline (SB-2007-029 & SB-2011-027)	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700565	Adapter flange, SAE B	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801059	Cover plate	1
	J120	03-08		8801061	B pad seal	1
	J130	03-08		907200-5021	Screw	2
	J140	03-08		1700404	Coupling, 13-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

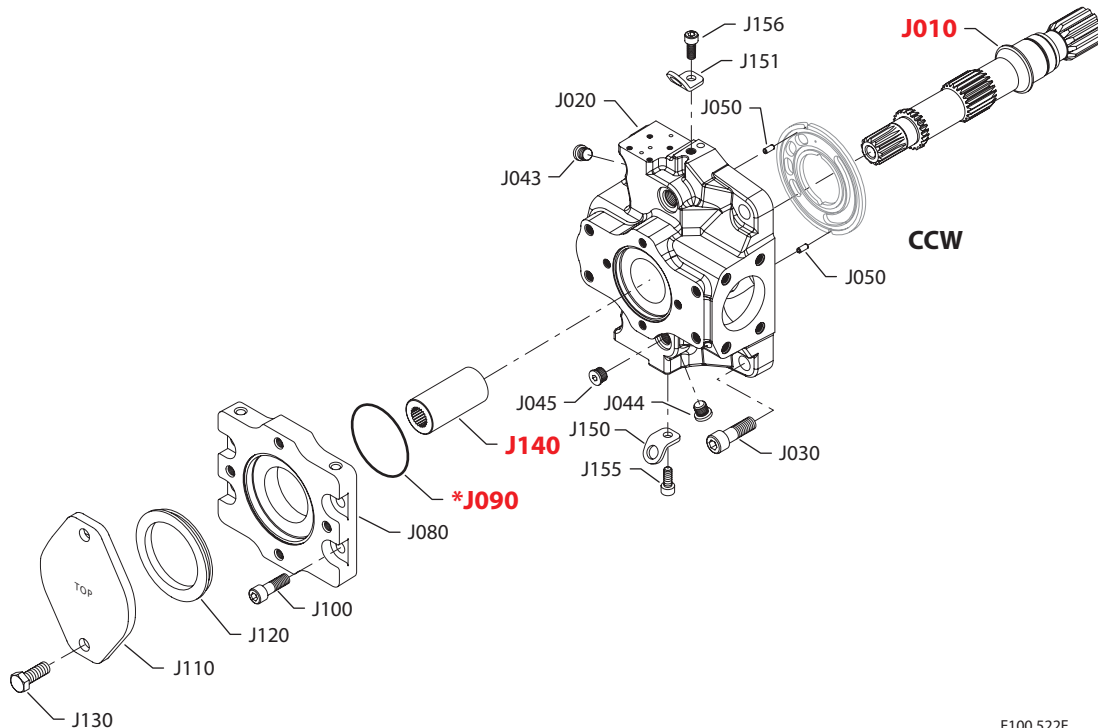


Shaft/auxiliary flange and end cap

(S1CP)



(S1D6)



E100 522E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Parts Manual

Series 45 Frame E 100, 130 and 147cc O. C. Pumps

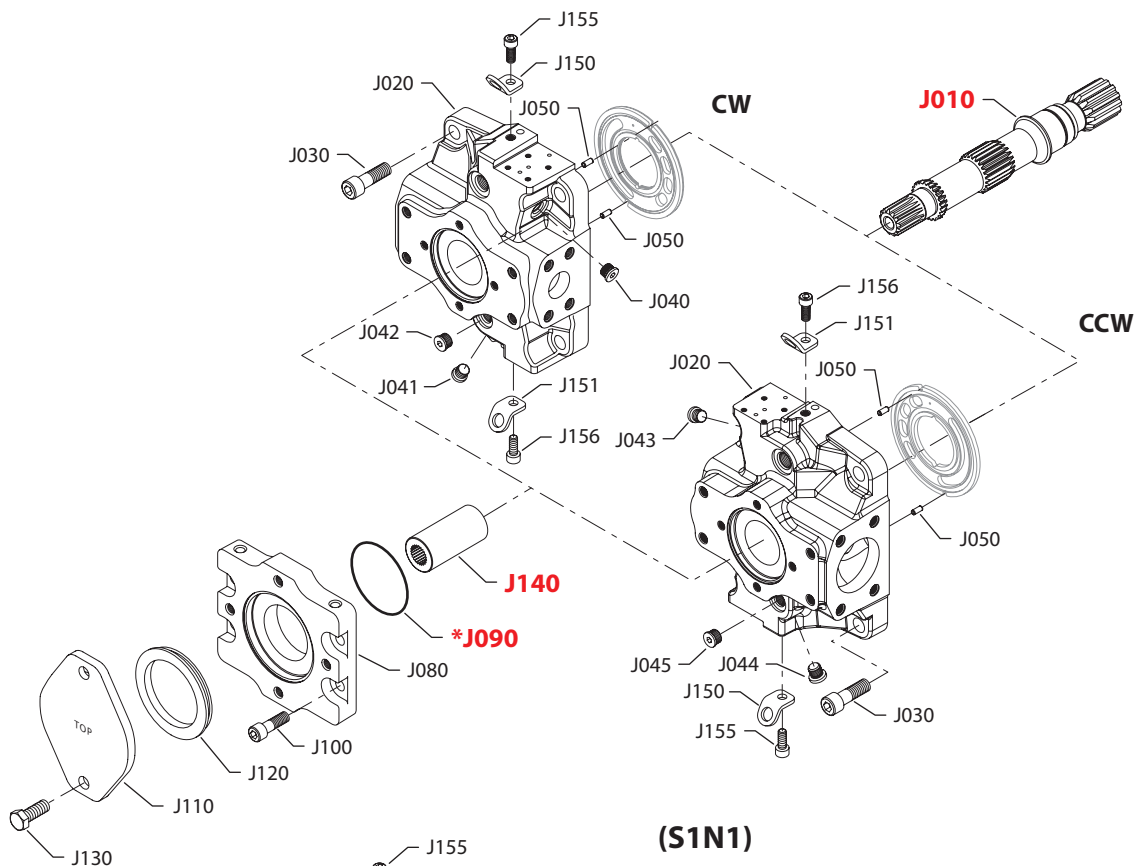
Shaft/auxiliary flange and end cap

Shaft/auxiliary flange/end cap

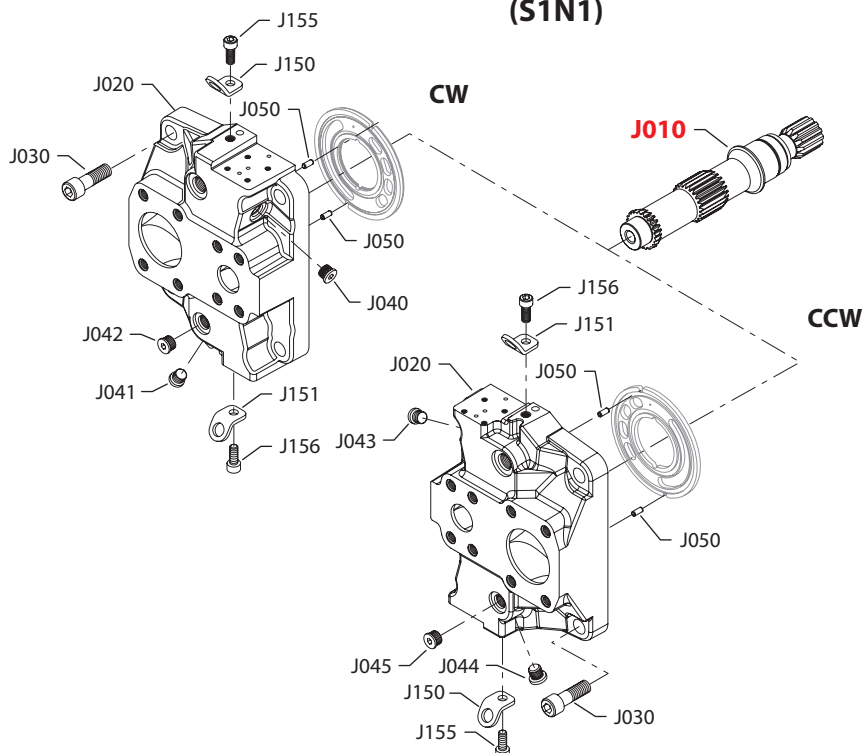
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S1CP	J010	03-08		11087475	Shaft, 14 tooth spline (SB-2007-029 & SB-2011-027)	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700566	Adapter flange, SAE C	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801060	Cover plate	1
	J120	03-08		11081805	C pad seal, (SB-2010-017)	1
	J130	03-08		907200-5021	Screw	4
	J140	03-08		1700405	Coupling, 14-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S1D6	J010	09-21		11087475	Shaft, 14-tooth spline (SB-2011-027)	1
	J020	12-31		11118957	End cap, cw, radial ports, metric, ERR	1
	J020	09-21		11062731	End cap, ccw, radial ports, metric, ERL	1
	J030	09-21		5000633	Screw	4
	J040	12-31		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	12-31		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	12-31		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	09-21		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	09-21		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	09-21		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	09-21		5000611	Pin	2
	J080	09-21		11062443	Adapter flange, SAE B, metric	1
	J090	09-21		673533	O-ring	1
	J100	09-21		737866 (9007314-1207)	Screw	4
	J110	09-21		8801059	Cover plate	1
	J120	09-21		8801061	B pad seal	1
	J130	09-21		370320	Screw	2
	J140	09-21		1700404	Coupling, 13-tooth	1
	J150	09-21		11040737	Lifting bracket	1
	J151	09-21		11040737	Lifting bracket	1
	J155	09-21		9007200-3712	Screw	1
	J156	09-21		9007200-3712	Screw	1

Shaft/auxiliary flange and end cap

(S1LP)



(S1N1)



* = included in base motor seal kit Q210

E100 988E

Enlarged **bold** type item numbers are recommended part to stock for servicing.

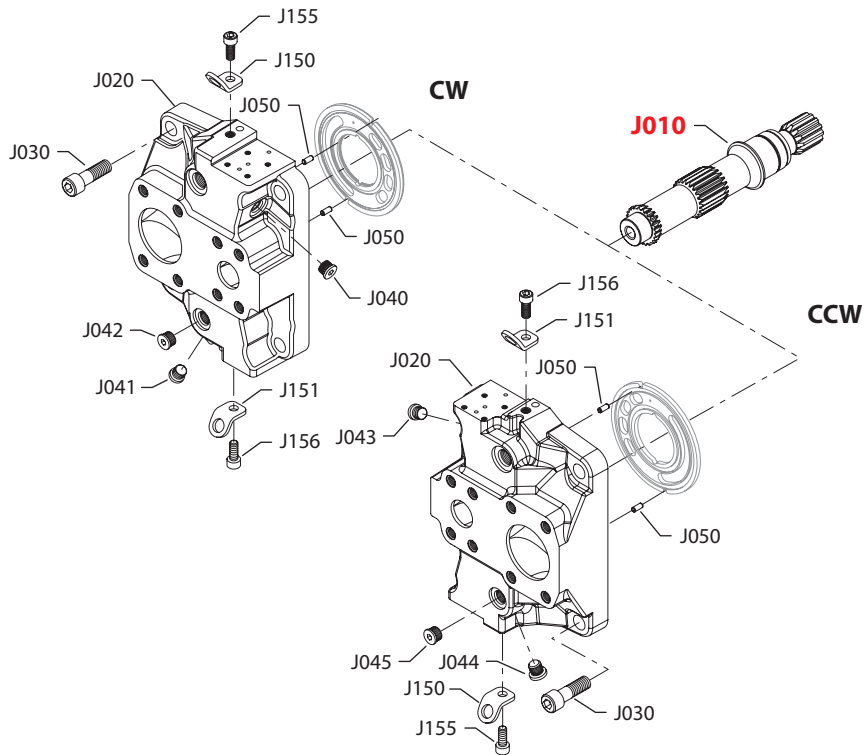
Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S1LP	J010	09-33		11087475	Shaft, 14-tooth spline (SB-2011-027)	1
	J020	09-33		1701483	End cap, cw, radial ports, ERR	1
	J020	09-33		1700408	End cap, ccw, radial ports, ERL	1
	J030	09-33		5000633	Screw	4
	J040	09-33		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	09-33		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	09-33		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	09-33		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	09-33		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	09-33		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	09-33		5000611	Pin	2
	J080	09-33		1700565	Adapter flange, SAE B	1
	J090	09-33		673533	O-ring	1
	J100	09-33		737866 (9007314-1207)	Screw	4
	J110	09-33		8801059	Cover plate	1
	J120	09-33		8801061	B pad seal	1
	J130	09-33		907200-5021	Screw	2
	J140	09-33		1700405	Coupling, 14-tooth	1
	J150	09-33		11040737	Lifting bracket	1
	J151	09-33		11040737	Lifting bracket	1
	J155	09-33		9007200-3712	Screw	1
	J156	09-33		9007200-3712	Screw	1
S1N1	J010	14-04		11100384	Shaft, 14-tooth spline	1
	J020	14-46		11157878	End cap, cw, axial ports, metric, ERR	1
	J020	14-04		11147225	End cap, ccw, axial ports, metric, ERL	1
	J030	14-04		5000633	Screw	4
	J040	14-46		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	14-46		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	14-46		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	14-04		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	14-04		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	14-04		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	14-04		5000611	Pin	2
	J150	14-04		11040737	Lifting bracket	1
	J151	14-04		11040737	Lifting bracket	1
	J155	14-04		9007200-3712	Screw	1
	J156	14-04		9007200-3712	Screw	1

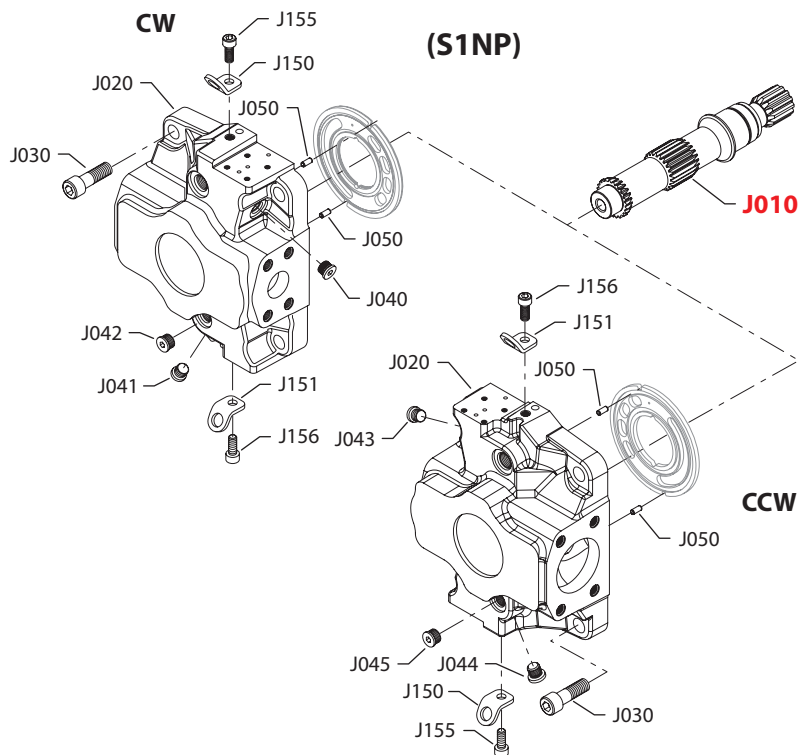


Shaft/auxiliary flange and end cap

(S1NL)



(S1NP)



E103 412E

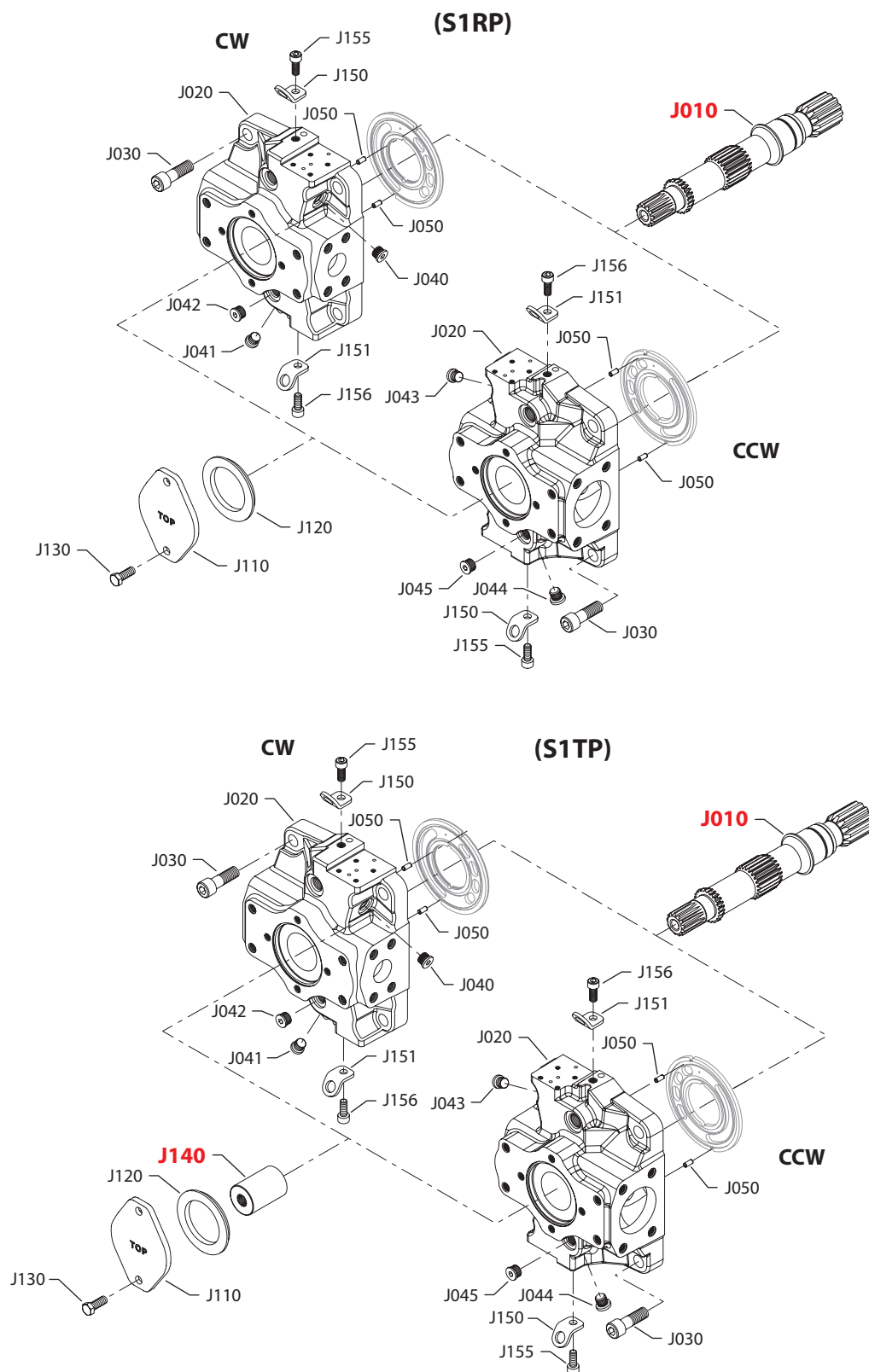
* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S1NL	J010	03-08		11100384	Shaft, 14-tooth spline (SB-2007-029 & SB-2011-027)	1
	J020	03-08		1701481	End cap, cw, axial ports, ERR	1
	J020	03-08		1700326	End cap, ccw, axial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S1NP	J010	03-08		11100384	Shaft, 14-tooth spline (SB-2007-029 & SB-2011-027)	1
	J020	03-08		1701482	End cap, cw, radial ports, ERR	1
	J020	03-08		1700330	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	01-07		5000611	Pin	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

Shaft/auxiliary flange and end cap



E100 523E

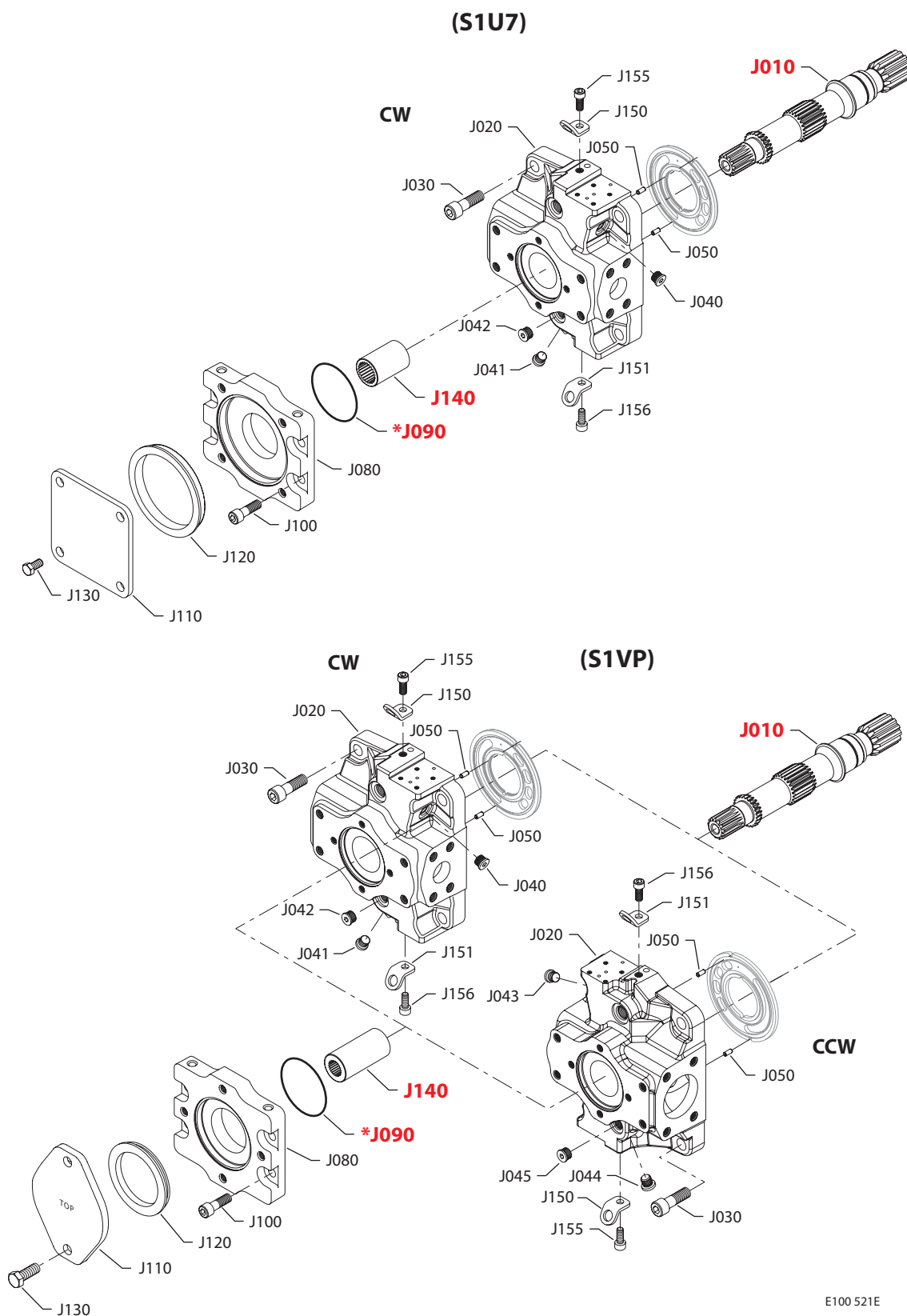
* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S1RP	J010	03-08		11087475	Shaft, 14-tooth spline (SB-2007-029 & SB-2011-027)	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S1TP	J010	03-08		11087475	Shaft, 14 tooth spline (SB-2007-029 & SB-2011-027)	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J140	03-08		1700403	Coupling, 11-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

Shaft/auxiliary flange and end cap



E100 521E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Parts Manual

Series 45 Frame E 100, 130 and 147cc O. C. Pumps

Shaft/auxiliary flange and end cap

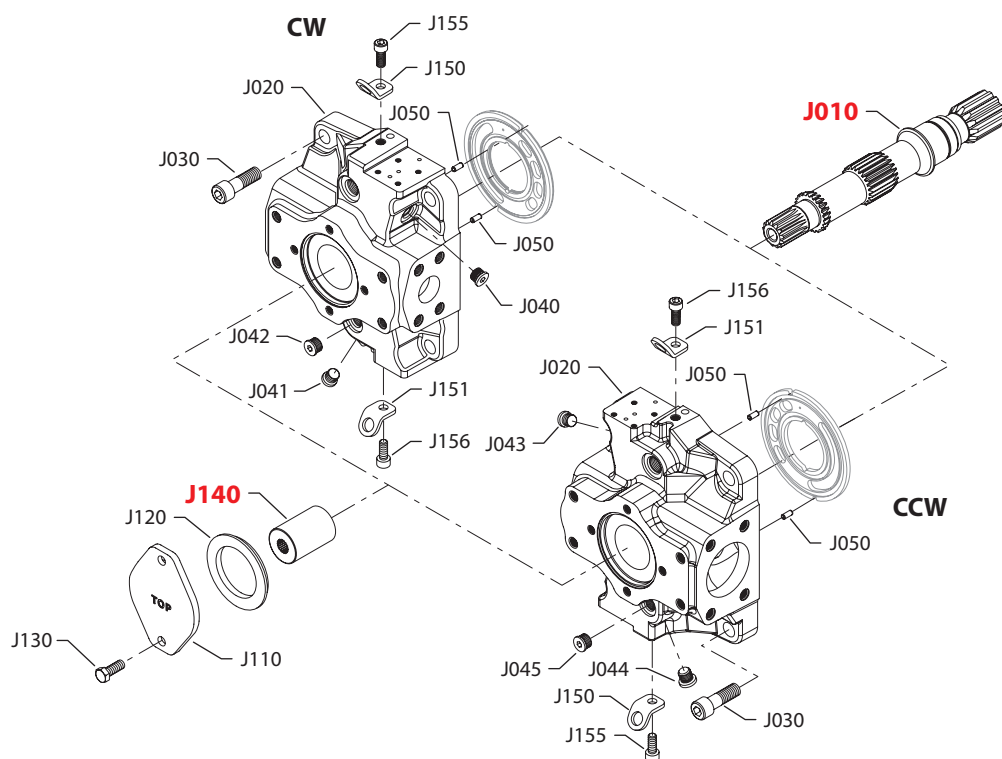
Shaft/auxiliary flange/end cap

Order Code	Item	Date Begin	Date End	Part Number	Part Name	Qty. per Model/Kit
S1U7	J010	15-10		11087475	Shaft, 14-tooth spline	1
	J020	15-10		11118957	End cap, cw, radial ports, metric, ERR	1
	J030	15-10		5000633	Screw	4
	J040	15-10		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	15-10		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	15-10		515965 (9005110-5600)	Plug assembly, ERR	1
	J050	15-10		5000611	Pin	2
	J080	15-10		11163467	Adapter flange, SAE C, metric	1
	J090	15-10		673533	O-ring	1
	J100	15-10		737866 (9007314-1207)	Screw	4
	J110	15-10		8801060	Cover plate	1
	J120	15-10		11081805	C pad seal	1
	J130	15-10		370320	Screw	4
	J140	15-10		1700405	Coupling, 14-tooth	1
	J150	15-10		11040737	Lifting bracket	1
	J151	15-10		11040737	Lifting bracket	1
	J155	15-10		9007200-3712	Screw	1
	J156	15-10		9007200-3712	Screw	1
S1VP	J010	03-08		11087475	Shaft, 14-tooth spline (SB-2007-029 & SB-2011-027)	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700565	Adapter flange, SAE B	1
	J090	03-08		673533	O-ring	1
	J100	03-08		5000007 (9007314-1207)	Screw	4
	J110	03-08		8801059	Cover plate	1
	J120	03-08		8801061	B pad seal	1
	J130	03-08		907200-5021	Screw	2
	J140	03-08		1700406	Coupling, 15-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

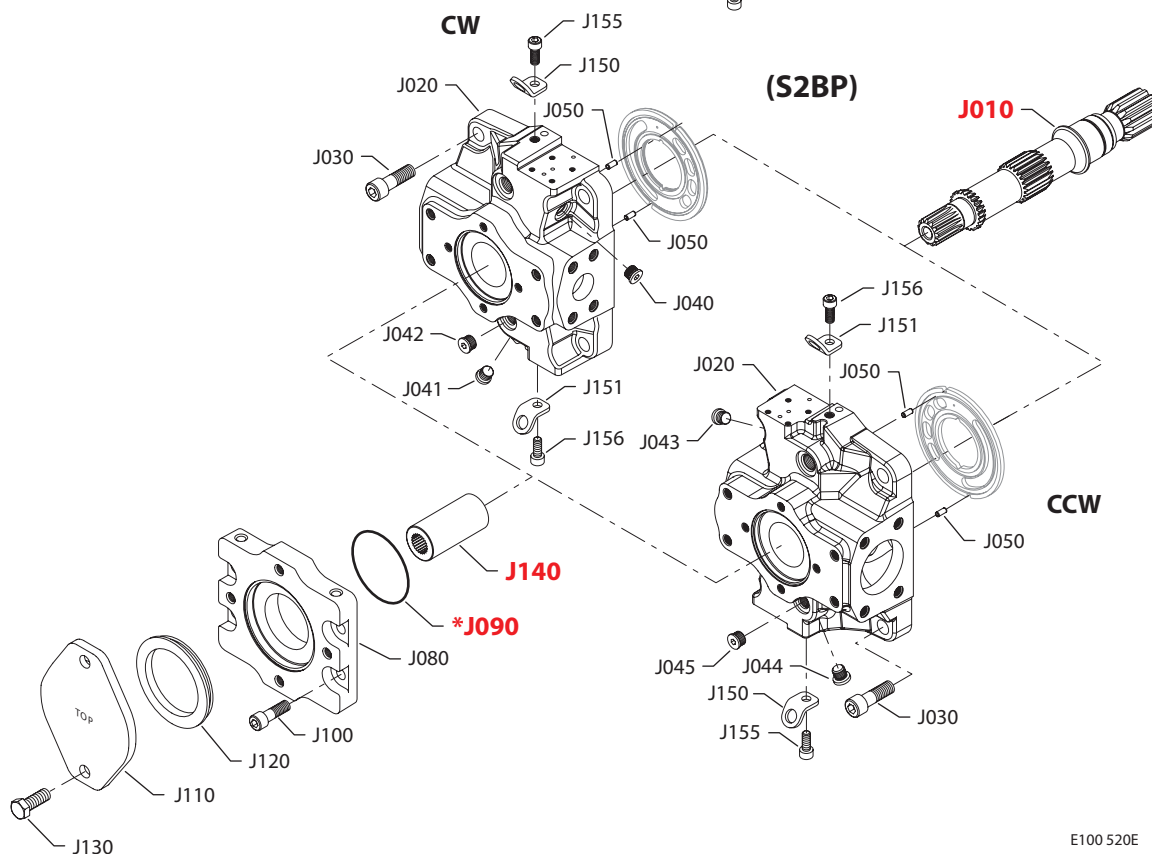


Shaft/auxiliary flange and end cap

(S2AP)



(S2BP)



E100 520E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

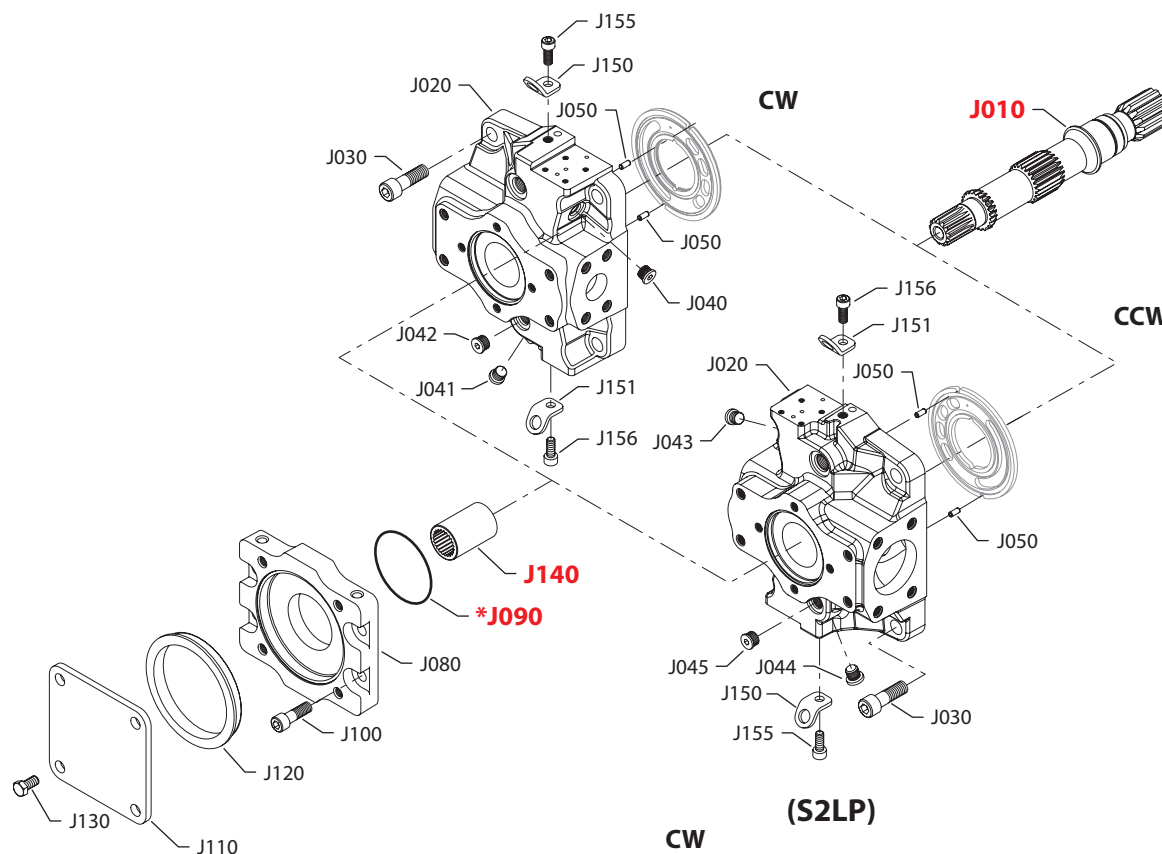
Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S2AP	J010	03-08		1700400	Shaft, 17-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J140	03-08		1700402	Coupling, 9-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S2BP	J010	03-08		1700400	Shaft, 17-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700565	Adapter flange, SAE B	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801059	Cover plate	1
	J120	03-08		8801061	B pad seal	1
	J130	03-08		907200-5021	Screw	2
	J140	03-08		1700404	Coupling, 13-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

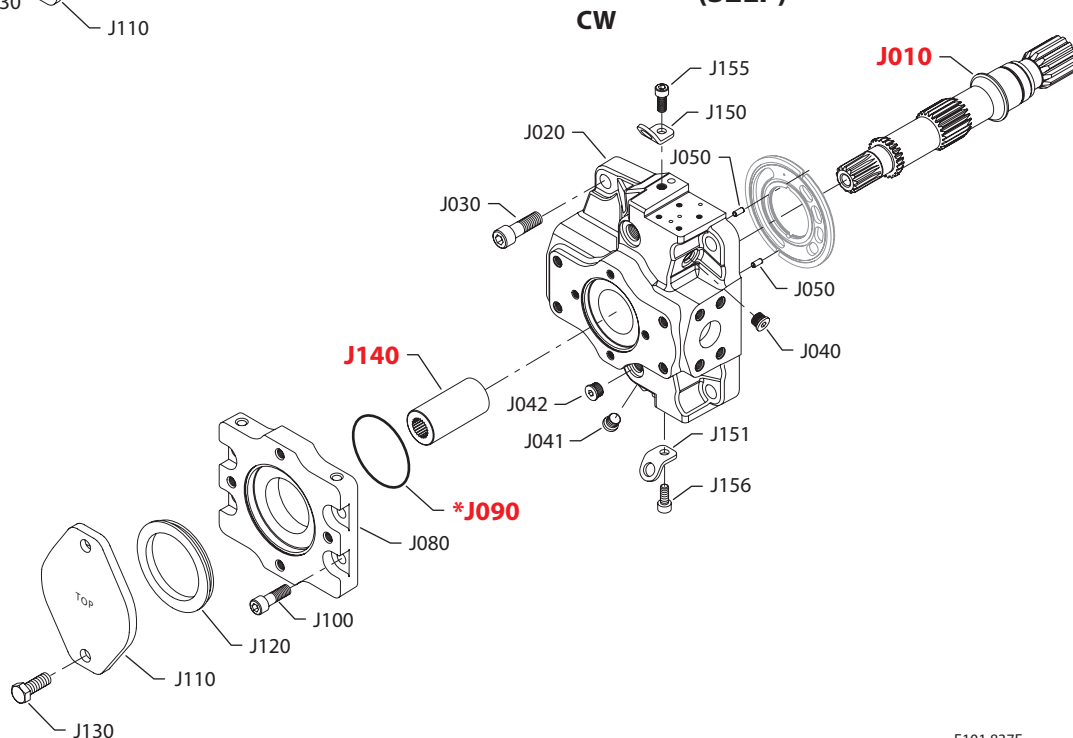


Shaft/auxiliary flange and end cap

(S2CP)



(S2LP)



E101 837E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Parts Manual

Series 45 Frame E 100, 130 and 147cc O. C. Pumps

Shaft/auxiliary flange and end cap

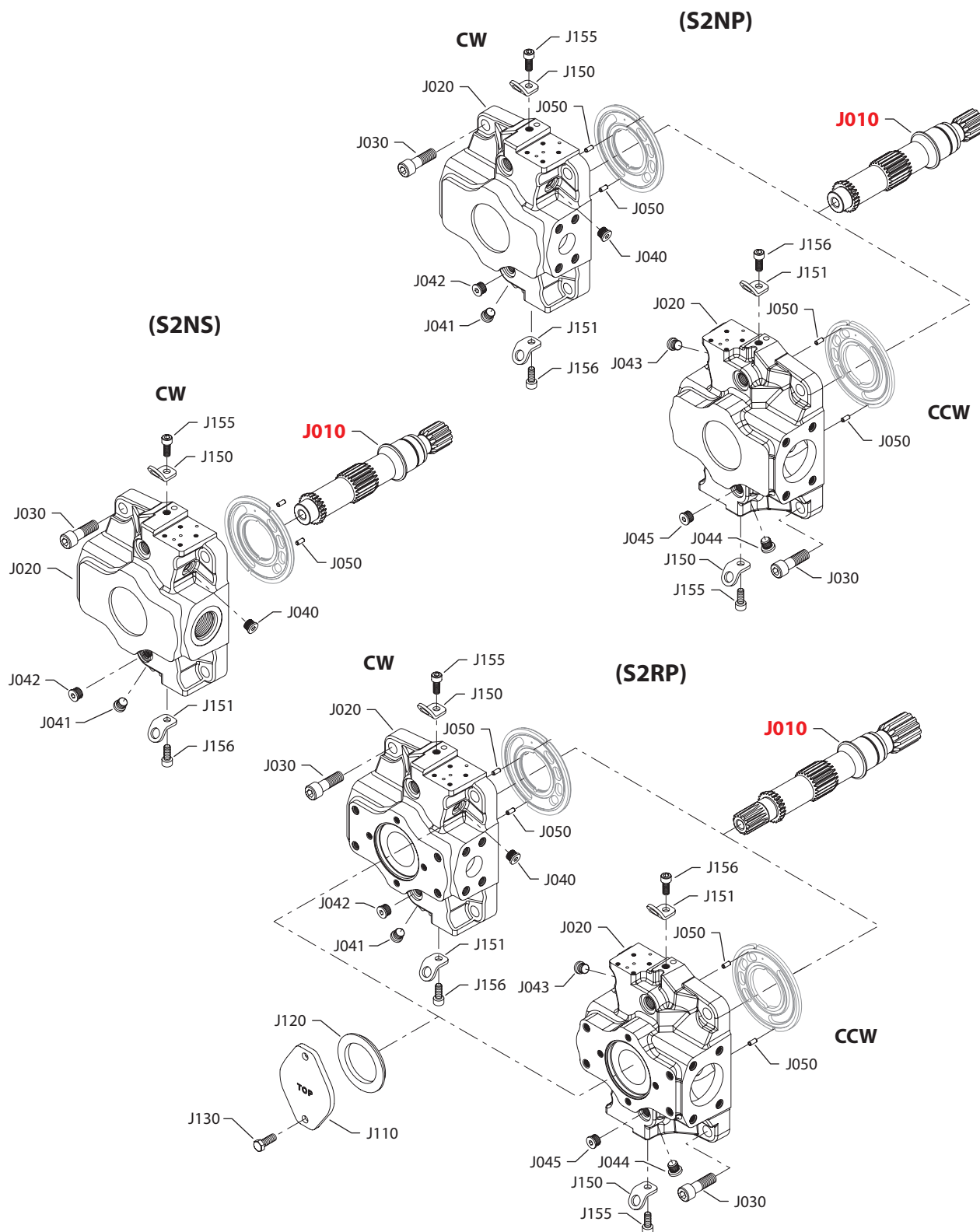
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S2CP	J010	03-08		1700400	Shaft, 17 tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700566	Adapter flange, SAE C	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801060	Cover plate	1
	J120	03-08		11081805	C pad seal, (SB-2010-017)	1
	J130	03-08		907200-5021	Screw	4
	J140	03-08		1700405	Coupling, 14-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S2LP	J010	11-19		1700400	Shaft, 14-tooth spline	1
	J020	11-19		1701483	End cap, cw, radial ports, ERR	1
	J030	11-19		5000633	Screw	4
	J040	11-19		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	11-19		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	11-19		515965 (9005110-5600)	Plug assembly, ERR	1
	J050	11-19		5000611	Pin	2
	J080	11-19		1700565	Adapter flange, SAE B	1
	J090	11-19		673533	O-ring	1
	J100	11-19		737866 (9007314-1207)	Screw	4
	J110	11-19		8801059	Cover plate	1
	J120	11-19		8801061	B pad seal	1
	J130	11-19		907200-5021	Screw	2
	J140	11-19		1700405	Coupling, 14-tooth	1
	J150	11-19		11040737	Lifting bracket	1
	J151	11-19		11040737	Lifting bracket	1
	J155	11-19		9007200-3712	Screw	1
	J156	11-19		9007200-3712	Screw	1


Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S2NL	J010	03-08		1700455	Shaft, 17-tooth spline	1
	J020	03-08		1701481	End cap, cw, axial ports, ERR	1
	J020	03-08		1700326	End cap, ccw, axial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S2NN	J010	10-35		1700455	Shaft, 17-tooth spline	1
	J020	10-35		11083633	End cap, ccw, axial ports, ERL	1
	J030	10-35		5000633	Screw	4
	J043	10-35		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	10-35		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	10-35		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	10-35		5000611	Pin	2
	J150	10-35		11040737	Lifting bracket	1
	J151	10-35		11040737	Lifting bracket	1
	J155	10-35		9007200-3712	Screw	1
	J156	10-35		9007200-3712	Screw	1

Shaft/auxiliary flange and end cap



E100 524E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Parts Manual

Series 45 Frame E 100, 130 and 147cc O. C. Pumps

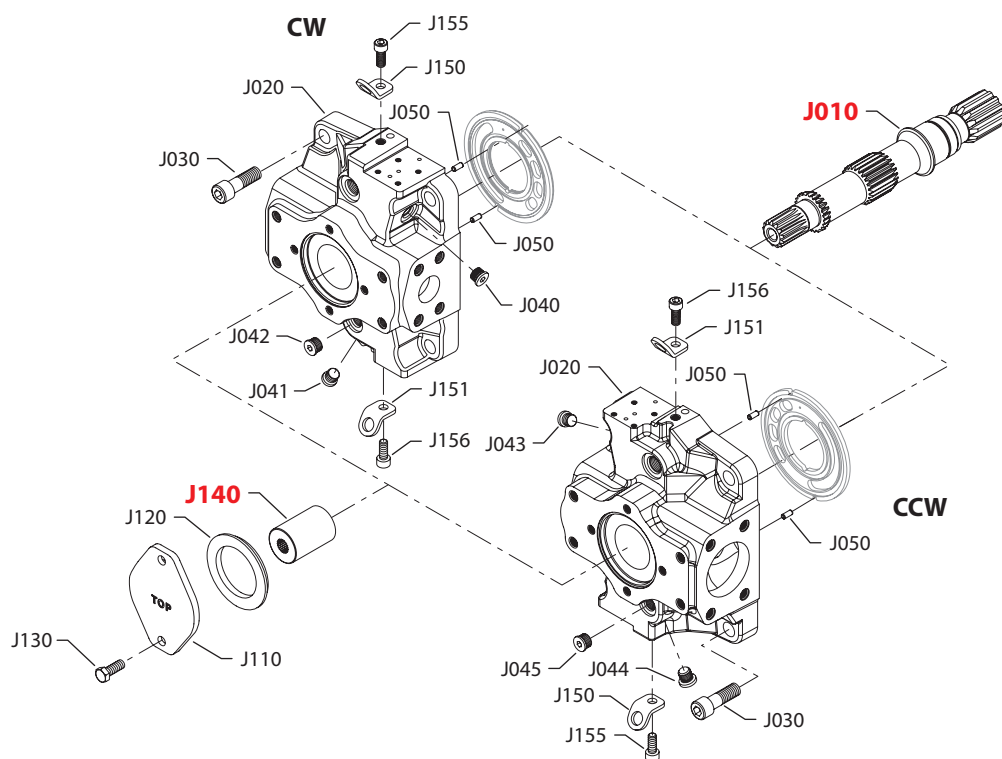
Shaft/auxiliary flange and end cap

Shaft/auxiliary flange/end cap

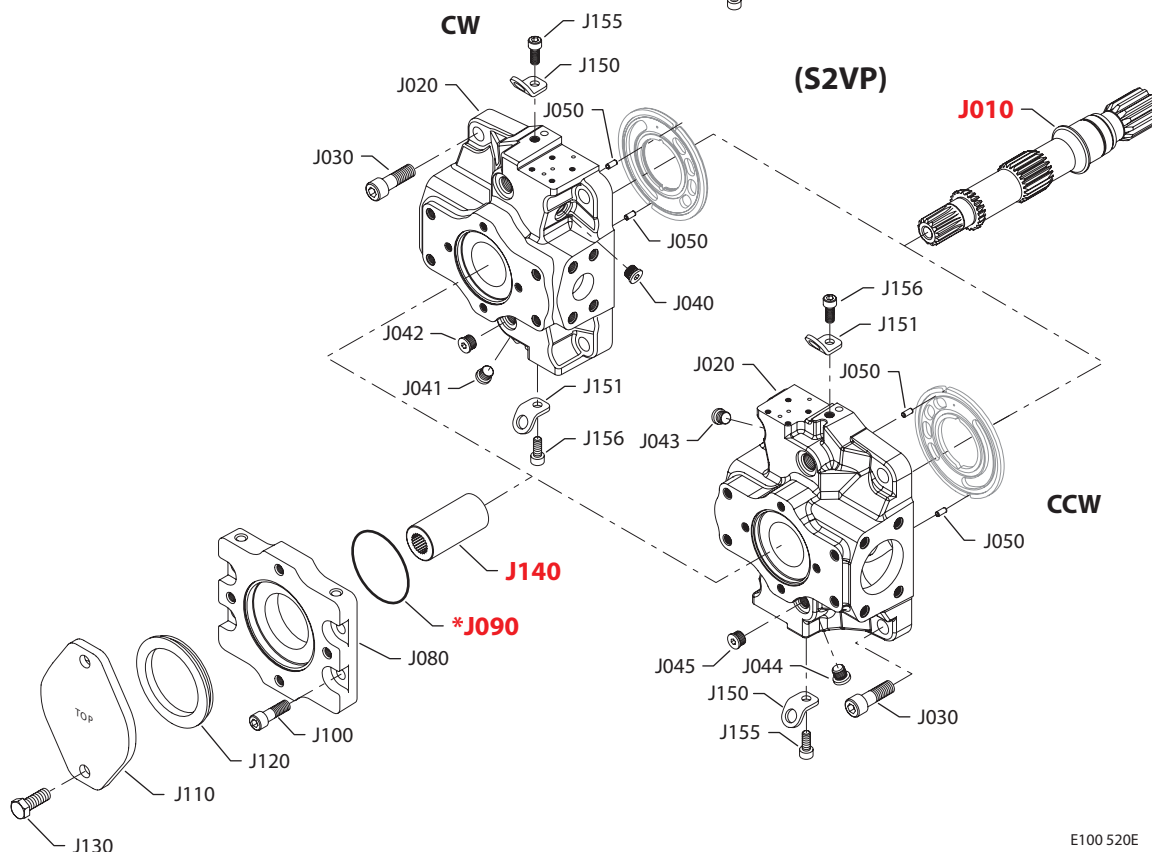
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S2NP	J010	03-08		1700455	Shaft, 17-tooth spline	1
	J020	03-08		1701482	End cap, cw, radial ports, ERR	1
	J020	03-08		1700330	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	01-07		5000611	Pin	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S2NS	J010	03-08	11-31	1700455	Shaft, 17-tooth spline	1
	J020	03-08	11-31	obsolete	End cap, cw, radial ports, ERR	1
	J030	03-08	11-31	5000633	Screw	4
	J040	03-08	11-31	515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08	11-31	515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08	11-31	515965 (9005110-5600)	Plug assembly, ERR	1
	J050	03-08	11-31	5000611	Pin	2
	J150	03-08	11-31	11040737	Lifting bracket	1
	J151	03-08	11-31	11040737	Lifting bracket	1
	J155	03-08	11-31	9007200-3712	Screw	1
	J156	03-08	11-31	9007200-3712	Screw	1
S2RP	J010	03-08		1700400	Shaft, 17-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		049874 (9007200-3712)	Screw	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

Shaft/auxiliary flange and end cap

(S2TP)



(S2VP)



E100 520E

* = included in base motor seal kit Q210

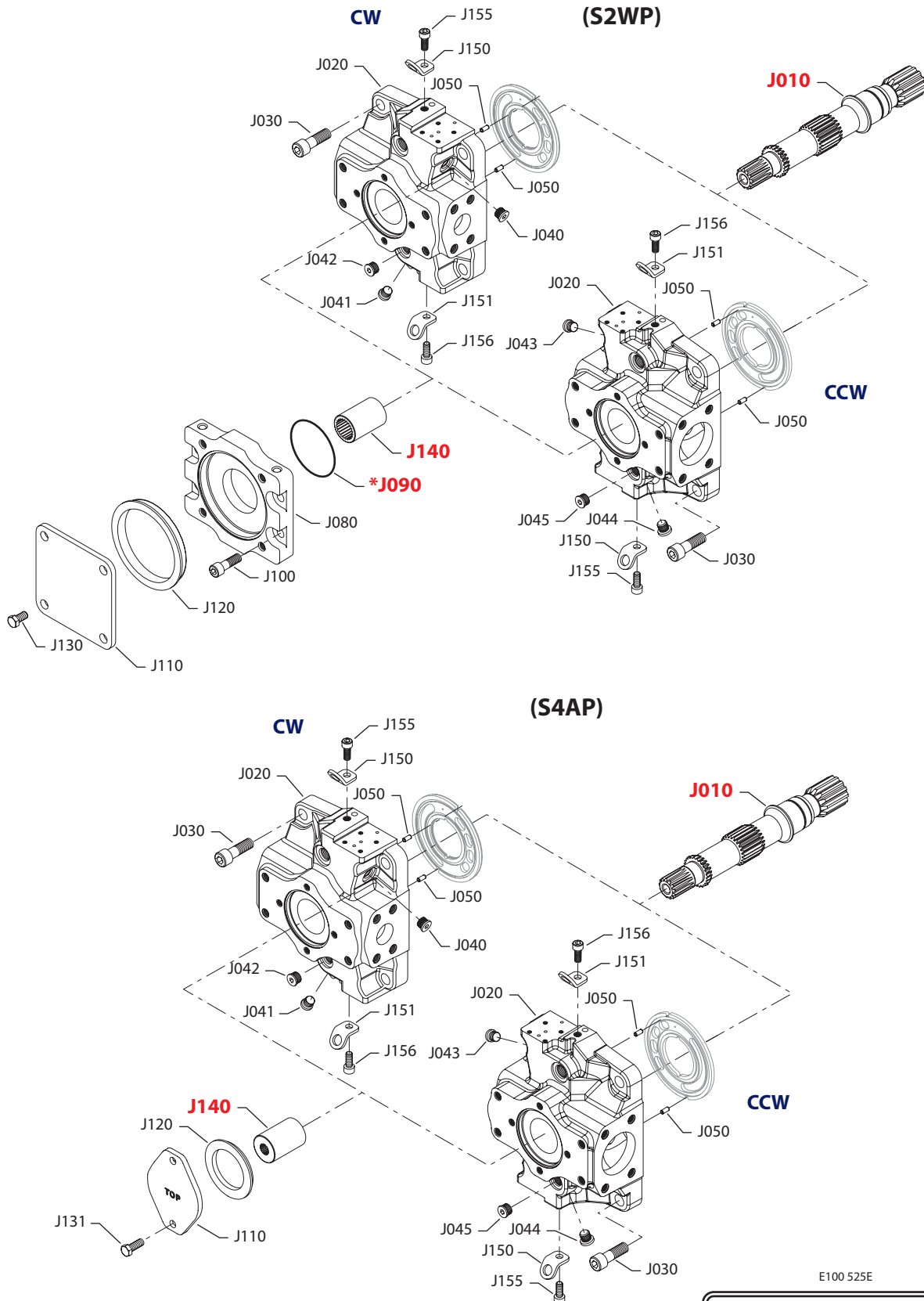
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S2TP	J010	03-08		1700400	Shaft, 17 tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J140	03-08		1700403	Coupling, 11-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S2VP	J010	03-08		1700400	Shaft, 17-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700565	Adapter flange, SAE B	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801059	Cover plate	1
	J120	03-08		8801061	B pad seal	1
	J130	03-08		907200-5021	Screw	2
	J140	03-08		1700406	Coupling, 15-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1



Shaft/auxiliary flange and end cap



* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S2WP	J010	03-08		1700400	Shaft, 17-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700566	Adapter flange, SAE C	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801060	Cover plate	1
	J120	03-08		11081805	C pad seal, (SB-2010-017)	1
	J130	03-08		907200-5021	Screw	4
	J140	03-08		1700497	Coupling, 17-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S4AP	J010	03-08		1700401	Shaft, 13-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J140	03-08		1700402	Coupling, 9-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

(S4BP)



Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S4BP	J010	03-08		1700401	Shaft, 13-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700565	Adapter flange, SAE B	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801059	Cover plate	1
	J120	03-08		8801061	B pad seal	1
	J130	03-08		907200-5021	Screw	2
	J140	03-08		1700404	Coupling, 13-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S4CP	J010	03-08		1700401	Shaft, 13-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700566	Adapter flange, SAE C	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801060	Cover plate	1
	J120	03-08		11081805	C pad seal, (SB-2010-017)	1
	J130	03-08		907200-5021	Screw	4
	J140	03-08		1700405	Coupling, 14-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

(S4LP)



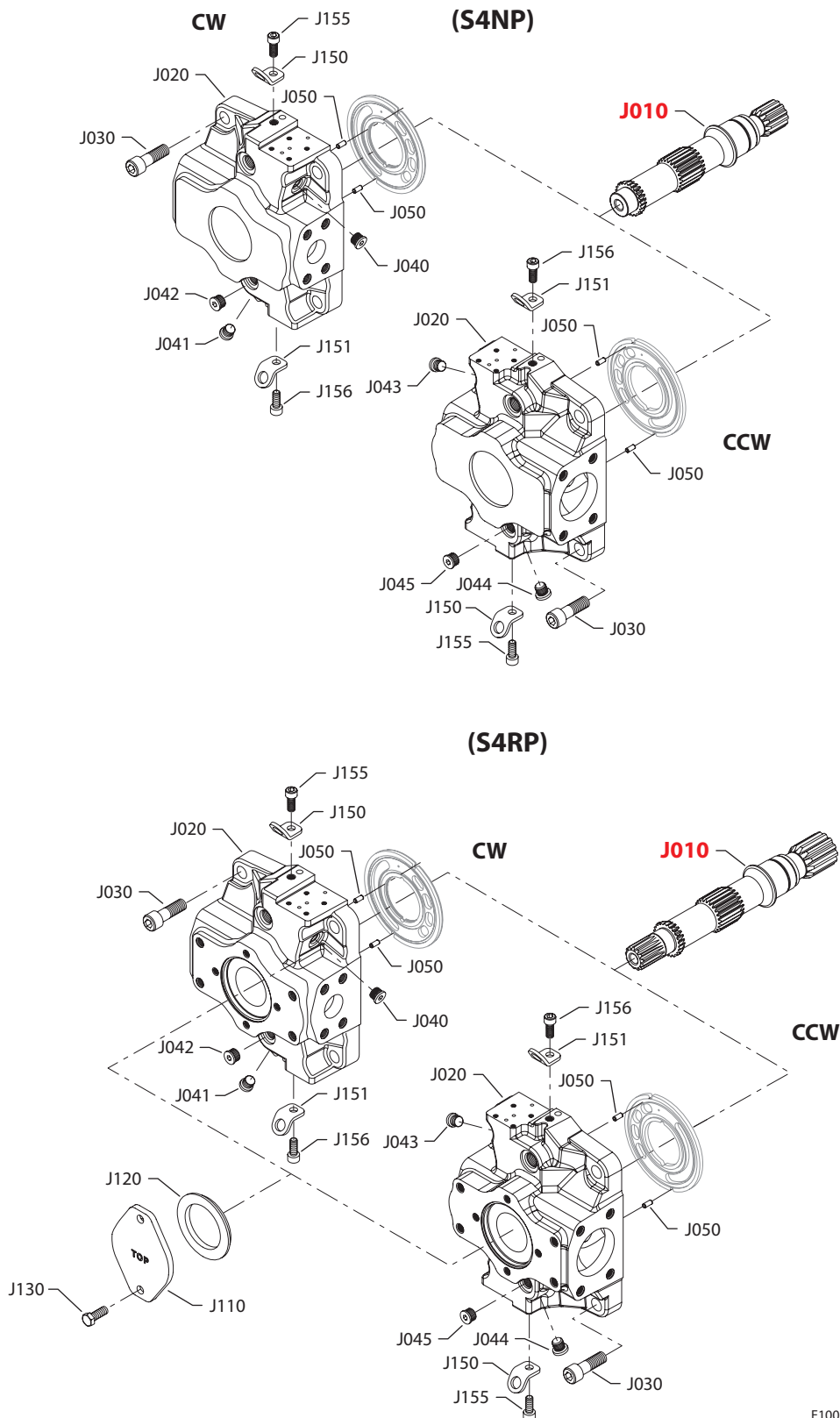
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S4LP	J010	03-08		1700401	Shaft, 13-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700565	Adapter flange, SAE B	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801059	Cover plate	1
	J120	03-08		8801061	B pad seal	1
	J130	03-08		907200-5021	Screw	2
	J140	03-08		1700405	Coupling, 14-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S4NL	J010	03-08		1700794	Shaft, 13-tooth spline	1
	J020	03-08		1701481	End cap, cw, axial ports, ERR	1
	J020	03-08		1700326	End cap, ccw, axial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S4NN	J010	12-33		1700794	Shaft, 13-tooth spline	1
	J020	12-33		11083633	End cap, ccw, axial ports, ERL	1
	J030	12-33		5000633	Screw	4
	J043	12-33		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	12-33		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	12-33		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	12-33		5000611	Pin	2
	J150	12-33		11040737	Lifting bracket	1
	J151	12-33		11040737	Lifting bracket	1
	J155	12-33		9007200-3712	Screw	1
	J156	12-33		9007200-3712	Screw	1



Shaft/auxiliary flange and end cap



E100 531E

* = included in base motor seal kit Q210

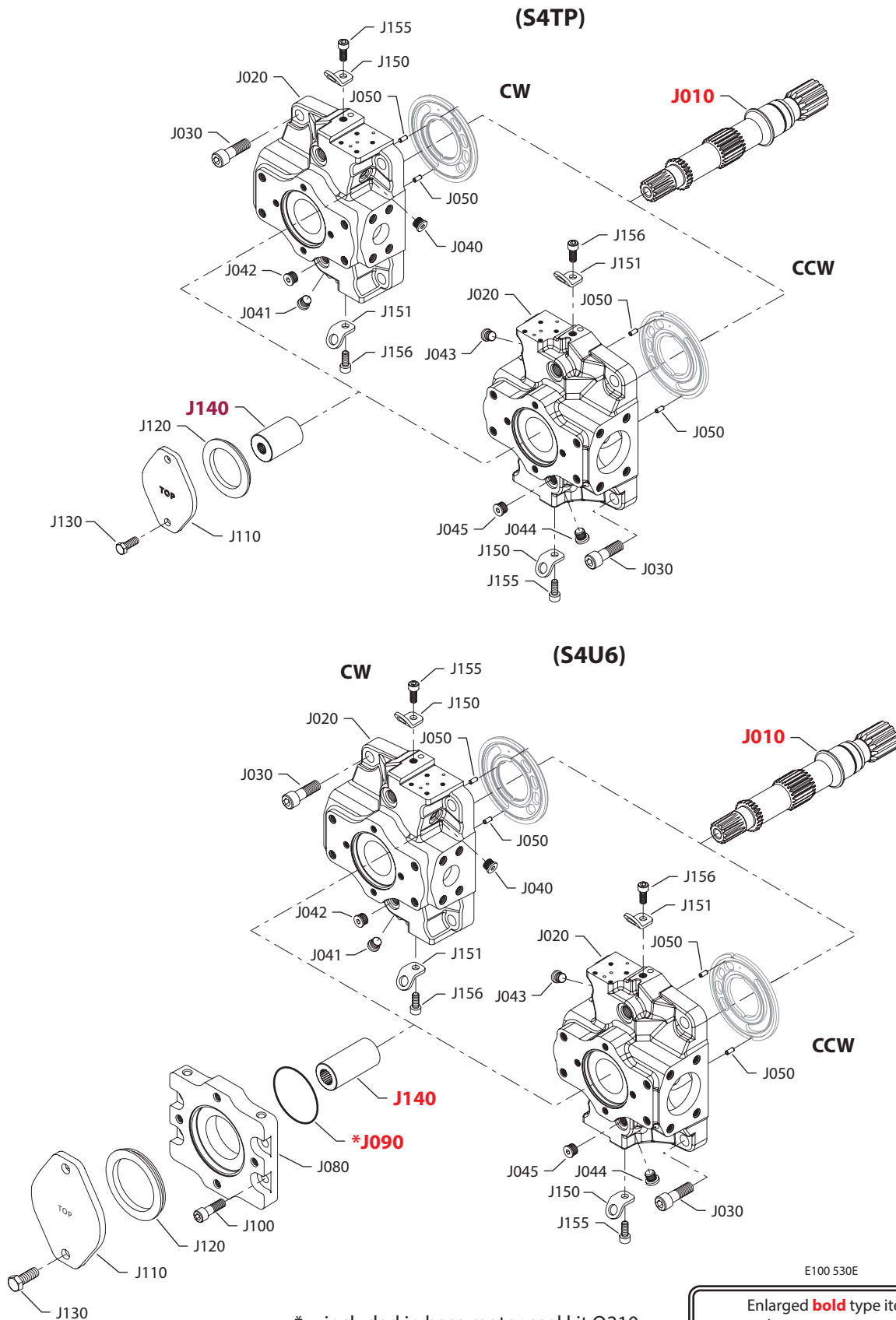
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S4NP	J010	03-08		1700794	Shaft, 13-tooth spline	1
	J020	03-08		1701482	End cap, cw, radial ports, ERR	1
	J020	03-08		1700330	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	01-07		5000611	Pin	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S4RP	J010	03-08		1700401	Shaft, 13-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1



Shaft/auxiliary flange and end cap



E100 530E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Parts Manual

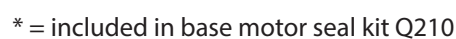
Series 45 Frame E 100, 130 and 147cc O. C. Pumps

Shaft/auxiliary flange and end cap

Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S4TP	J010	03-08		1700401	Shaft, 13 tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J140	03-08		1700403	Coupling, 11-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S4U6	J010	11-23		1700401	Shaft, 13-tooth spline	1
	J020	11-23		11062731	End cap, ccw, radial ports, metric, ERL	1
	J030	11-23		5000633	Screw	4
	J043	11-23		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	11-23		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	11-23		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	11-23		5000611	Pin	2
	J080	11-23		11062443	Adapter flange, SAE B, metric	1
	J090	11-23		673533	O-ring	1
	J100	11-23		737866 (9007314-1207)	Screw	4
	J110	11-23		8801059	Cover plate	1
	J120	11-23		8801061	B pad seal	1
	J130	11-23		370320	Screw	2
	J140	11-23		1700406	Coupling, 15-tooth	1
	J150	11-23		11040737	Lifting bracket	1
	J151	11-23		11040737	Lifting bracket	1
	J155	11-23		9007200-3712	Screw	1
	J156	11-23		9007200-3712	Screw	1

(S4VP)



Enlarged **bold** type item numbers are recommended part to stock for servicing.

Parts Manual

Series 45 Frame E 100, 130 and 147cc O. C. Pumps

Shaft/auxiliary flange and end cap

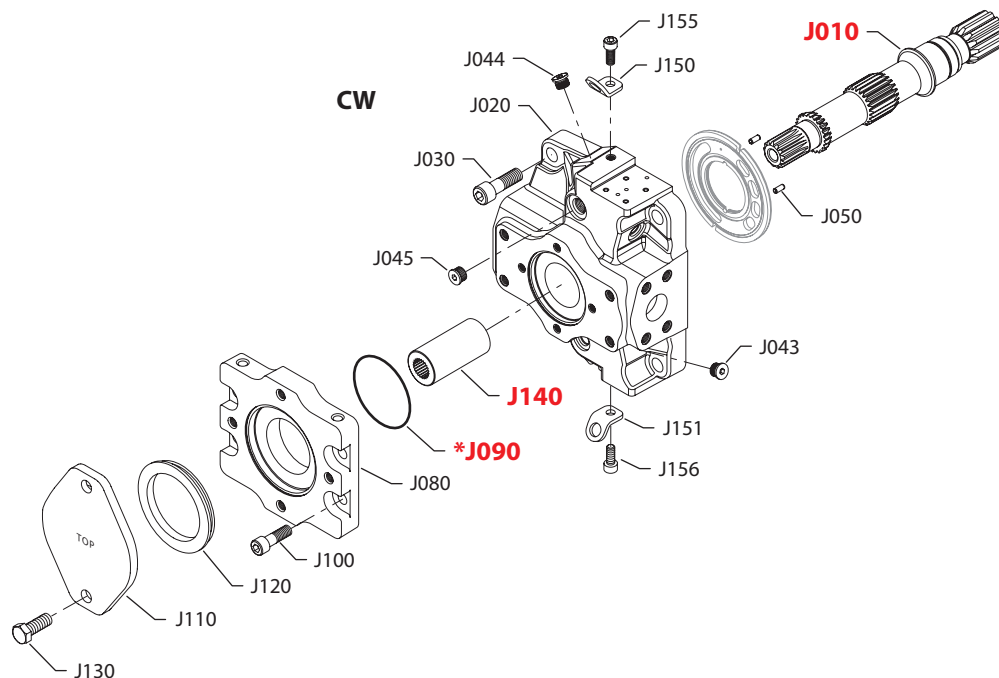
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S4VP	J010	03-08		1700401	Shaft, 13-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700565	Adapter flange, SAE B	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801059	Cover plate	1
	J120	03-08		8801061	B pad seal	1
	J130	03-08		907200-5021	Screw	2
	J140	03-08		1700406	Coupling, 15-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1
S4WP	J010	03-08		1700401	Shaft, 13-tooth spline	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J020	03-08		1700408	End cap, ccw, radial ports, ERL	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J043	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J044	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J045	03-08		515965 (9005110-5600)	Plug assembly, ERL	1
	J050	03-08		5000611	Pin	2
	J080	03-08		1700566	Adapter flange, SAE C	1
	J090	03-08		673533	O-ring	1
	J100	03-08		737866 (9007314-1207)	Screw	4
	J110	03-08		8801060	Cover plate	1
	J120	03-08		11081805	C pad seal, (SB-2010-017)	1
	J130	03-08		907200-5021	Screw	4
	J140	03-08		1700497	Coupling, 17-tooth	1
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1

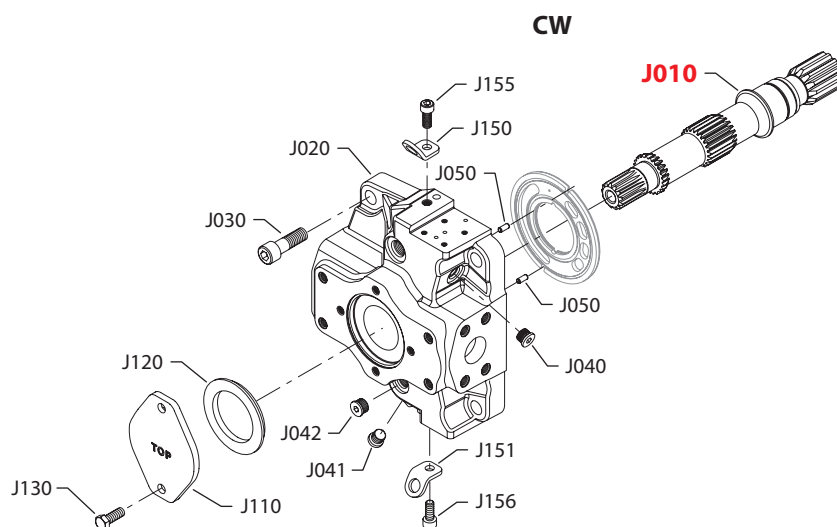


Shaft/auxiliary flange and end cap

(S6BP)



(S6RP)



E103 264E

* = included in base motor seal kit Q210

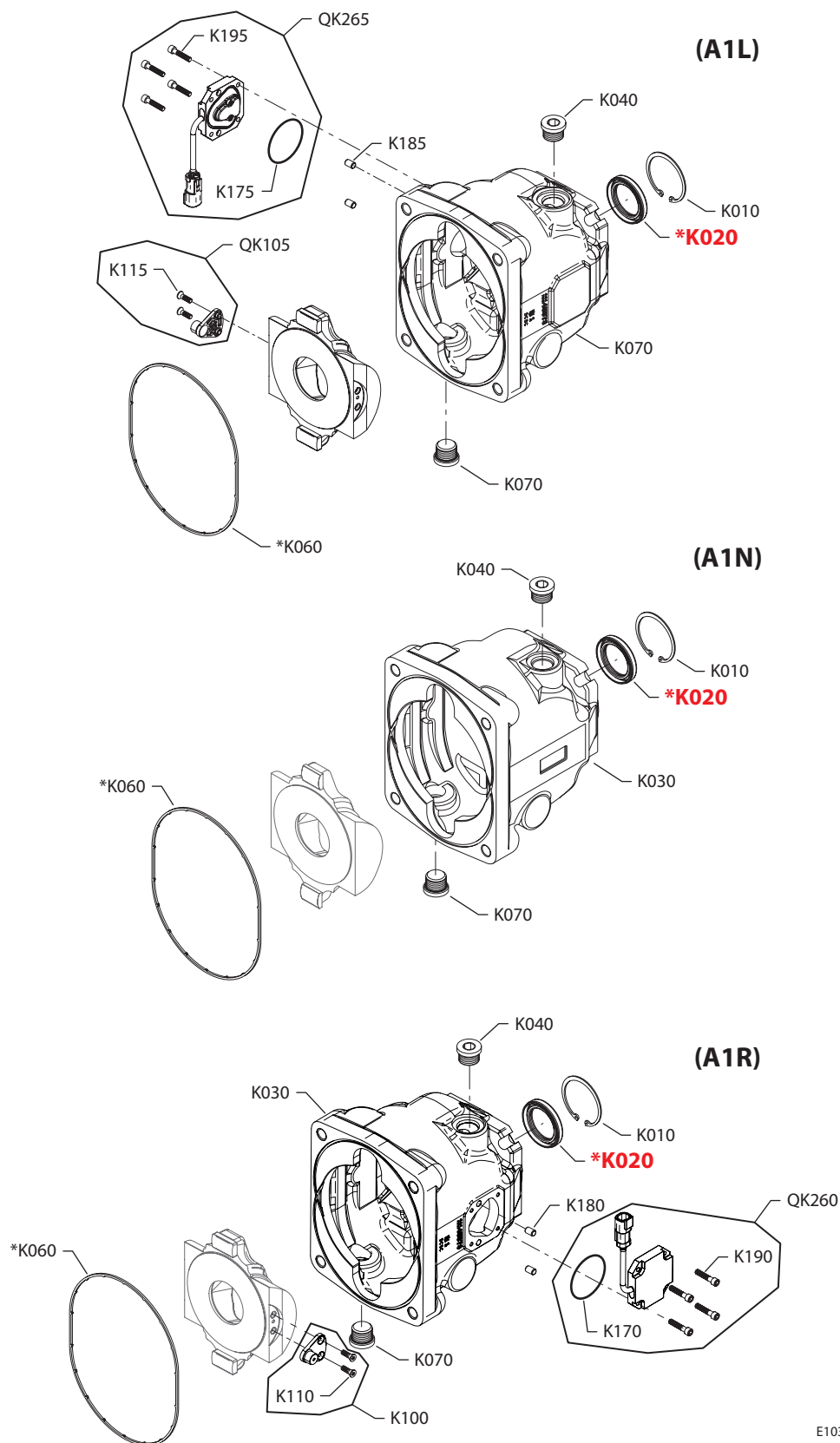
Enlarged **bold** type item numbers are recommended part to stock for servicing.

Shaft/auxiliary flange and end cap
Shaft/auxiliary flange/end cap

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
S6BP	J010	12-13		11109022	Shaft, 14-tooth spline, tapped	1
	J020	12-13		1701483	End cap, cw, radial ports, ERR	1
	J030	12-13		5000633	Screw	4
	J040	12-13		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	12-13		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	12-13		515965 (9005110-5600)	Plug assembly, ERR	1
	J050	12-13		5000611	Pin	2
	J080	12-13		1700565	Adapter flange, SAE B	1
	J090	12-13		673533	O-ring	1
	J100	12-13		737866 (9007314-1207)	Screw	4
	J110	12-13		8801059	Cover plate	1
	J120	12-13		8801061	B pad seal	1
	J130	12-13		907200-5021	Screw	2
	J140	12-13		1700404	Coupling, 13-tooth	1
	J150	12-13		11040737	Lifting bracket	1
	J151	12-13		11040737	Lifting bracket	1
	J155	12-13		9007200-3712	Screw	1
	J156	12-13		9007200-3712	Screw	1
S6RP	J010	03-08		11109022	Shaft, 14-tooth spline, tapped	1
	J020	03-08		1701483	End cap, cw, radial ports, ERR	1
	J030	03-08		5000633	Screw	4
	J040	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J041	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J042	03-08		515965 (9005110-5600)	Plug assembly, ERR	1
	J050	03-08		5000611	Pin	2
	J110	03-08		4460586	Cover plate	1
	J120	03-08		4800482	A pad seal	1
	J130	03-08		9007200-3712	Screw	2
	J150	03-08		11040737	Lifting bracket	1
	J151	03-08		11040737	Lifting bracket	1
	J155	03-08		9007200-3712	Screw	1
	J156	03-08		9007200-3712	Screw	1



Housing



E103 413E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

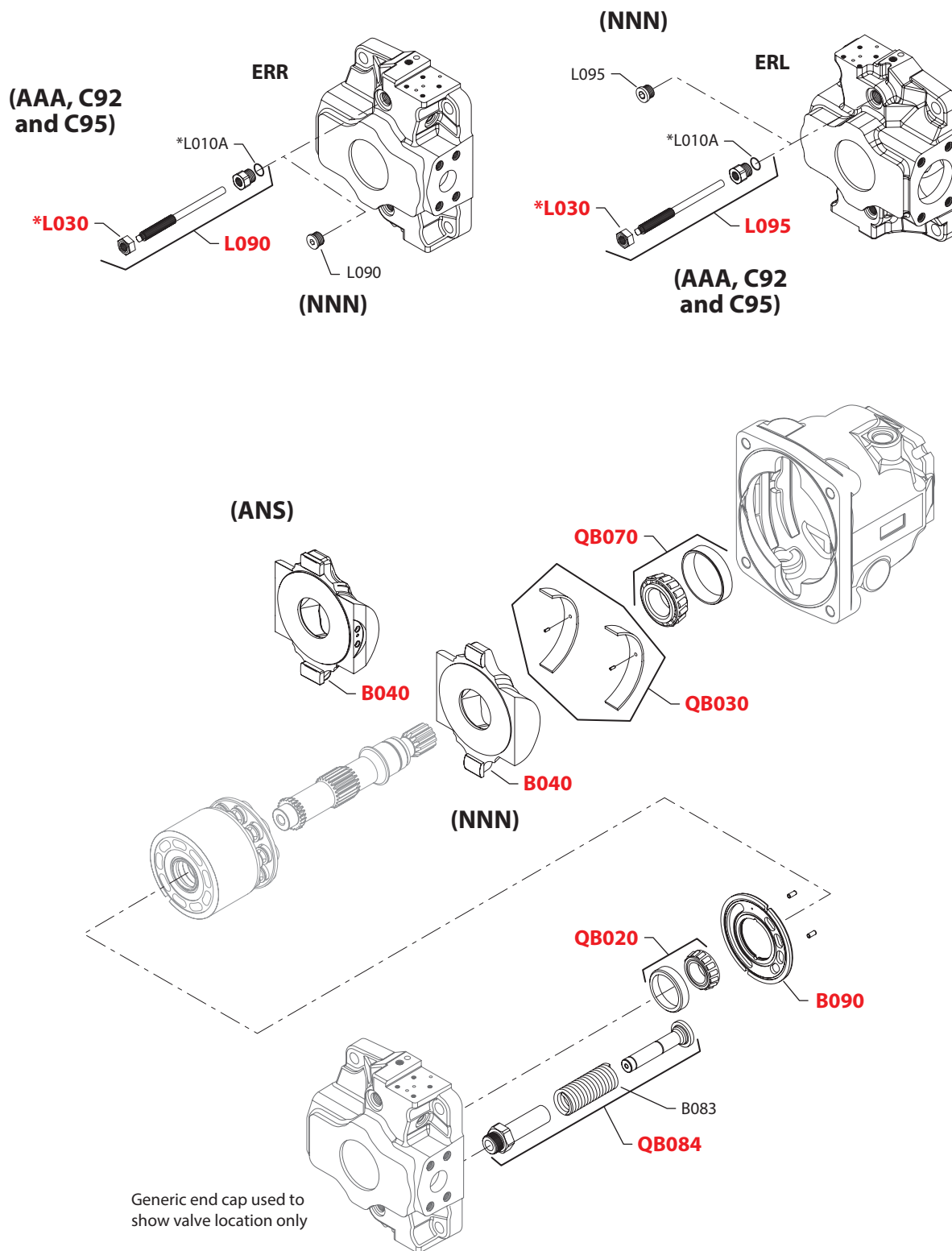
Housing

Housing/shaft seal

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A1L	K010	14-52		5000634	Retaining ring	1
	K020	14-52		11157955	Lip seal	1
	K030	14-52		11145574	Housing, sensor on left	1
	K040	14-52		664524 (9005110-9000)	Plug assembly	1
	K060	14-52		11037106	End cap seal	1
	K070	14-52		664524 (9005110-9000)	Plug assembly	1
	K115	14-52		11137909	Screw	2
	K175	14-52		9004104-0350	O-ring	1
	K185	14-52		11137294	Bushing	2
	K195	14-52		9007315-0504	Screw	4
	QK105	14-52		11153285	Magnetic carrier kit	1
	QK265	14-52		11153284	Angle sensor kit	1
A1N	K010	03-08		5000634	Retaining ring	1
	K020	03-08		11157955	Lip seal	1
	K030	03-08		1700567	Housing	1
	K040	03-08		664524 (9005110-9000)	Plug assembly	1
	K060	03-08		11037106	End cap seal SB-2008-005	1
	K070	03-08		664524 (9005110-9000)	Plug assembly	1
A1R	K010	14-52		5000634	Retaining ring	1
	K020	14-52		11157955	Lip seal	1
	K030	14-52		11145575	Housing, sensor on right	1
	K040	14-52		664524 (9005110-9000)	Plug assembly	1
	K060	14-52		11037106	End cap seal	1
	K070	14-52		664524 (9005110-9000)	Plug assembly	1
	K110	14-52		11137909	Screw	2
	K170	14-52		9004104-0350	O-ring	1
	K180	14-52		11137294	Bushing	2
	K190	14-52		9007315-0504	Screw	4
	QK100	14-52		11153285	Magnetic carrier kit	1
	QK260	14-52		11153284	Angle sensor kit	1



Displacement limiter and special hardware



E100 519E

* = included in base motor seal kit Q210

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Displacement limiter and special hardware
Displacement limiter

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AAA	L010A	03-08		9004201-5000	O-ring	1
	L030	06-24		9003509-0012	Seal nut, M12 (SB-2005-009)	1
	L030	03-08	06-23	5000661	Seal nut, .500-20 UNF-2B thread	1
	L090	03-08		11099077	Displacement limiter assembly, ERR	1
	L095	03-08		11099077	Displacement limiter assembly, ERL	1
C92	L010A	09-20		9004201-5000	O-ring	1
	L030	09-20		9003509-0012	Seal nut, M12	1
	L090	09-20		11099077	Displacement limiter assembly, ERR	1
	L095	09-20		11099077	Displacement limiter assembly, ERL	1
C95	L010A	12-42		9004201-5000	O-ring	1
	L030	12-42		9003509-0012	Seal nut, M12	1
	L090	12-42		11099077	Displacement limiter assembly, ERR	1
	L095	12-42		11099077	Displacement limiter assembly, ERL	1
NNN	L090	03-08		9005110-7500	Plug assembly, ERR	1
	L095	03-08		9005110-7500	Plug assembly, ERL	1

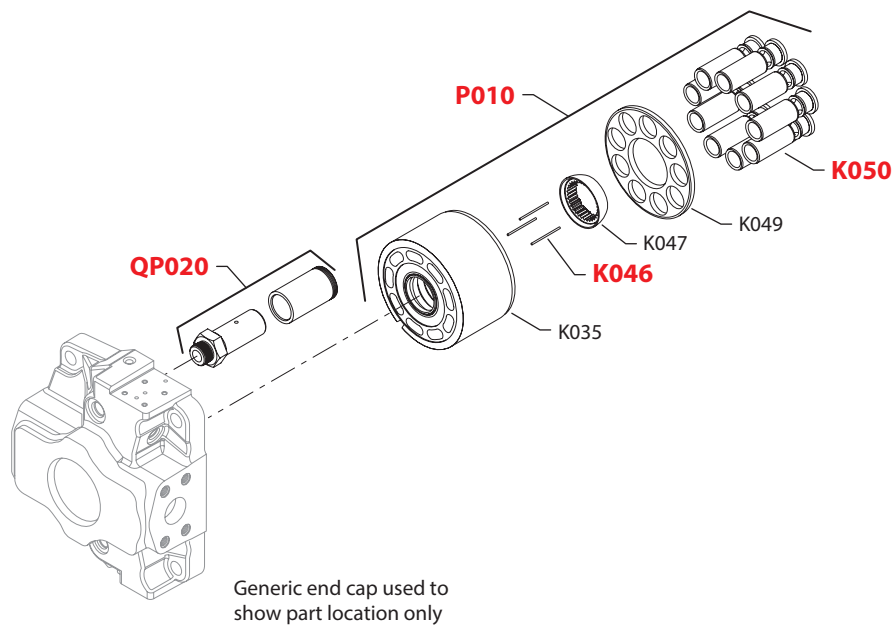
Special hardware

ANS	B040	03-08		11150760	Swashplate assembly	1
	B083	03-08		1700324	Bias spring	1
	B090	03-08		1700647	Valve plate, CW	1
	B090	03-08		1700772	Valve plate, CCW	1
	QB020	03-08		4510096	Bearing kit, rear	1
	QB030	03-08		4510424	Swashplate bearing kit	1
	QB070	03-08		4510423	Bearing kit, front	1
	QB084	03-08		4510425	Bias piston kit, (SB-2008-018)	1
NNN	B040	03-08		1700800	Swashplate assembly	1
	B083	03-08		1700324	Bias spring	1
	B090	03-08		1700647	Valve plate, CW	1
	B090	03-08		1700772	Valve plate, CCW	1
	QB020	03-08		4510096	Bearing kit, rear	1
	QB030	03-08		4510424	Swashplate bearing kit	1
	QB070	03-08		4510423	Bearing kit, front	1
	QB084	03-08		4510425	Bias piston kit, (SB-2008-018)	1



Displacement

(100B, 130B and 147C)



E100 989E

Enlarged **bold** type item numbers are recommended part to stock for servicing.

Displacement/ seal kit
Displacement

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
100B	P010	03-08		11077350	Cylinder block kit	1
	K035	11-04		11089525	Cylinder block assembly, (SB-2010-050)	1
	K046	03-08		1700384	Holddown pin	3
	K047	03-08		1700035	Slipper retainer guide	1
	K049	03-08		1700049	Slipper retainer	1
	K050	11-04		11077348	Piston assembly, (SB-2010-050)	9
	QP020	03-08		4510426	Servo piston kit, 100cc (SB-2006-016)	1
130B	P010	03-08		11077350	Cylinder block kit	1
	K035	11-04		11089525	Cylinder block assembly, (SB-2010-050)	1
	K046	03-08		1700384	Holddown pin	3
	K047	03-08		1700035	Slipper retainer guide	1
	K049	03-08		1700049	Slipper retainer	1
	K050	11-04		11077348	Piston assembly, (SB-2010-050)	9
	QP020	03-08		4510427	Servo piston kit, 130cc (SB-2006-016)	1
147C	P010	03-08		11077350	Cylinder block kit	1
	K035	11-04		11089525	Cylinder block assembly, (SB-2010-050)	1
	K046	03-08		1700384	Holddown pin	3
	K047	03-08		1700035	Slipper retainer guide	1
	K049	03-08		1700049	Slipper retainer	1
	K050	11-04		11077348	Piston assembly, (SB-2010-050)	9
	QP020	03-08		4510428	Servo piston kit, 147cc (SB-2006-016)	1

Overhaul seal kit

	Q210	03-08		11106334	Overhaul seal kit (SB-2012-029)	1
	C118	03-08		11062214	LS adjusting plug assembly (SB-2007-047)	1
	C138A	03-08		5000656	O-ring, .674 x .103, viton, 75D	1
	C200	03-08		4740154	Seal ring	4
	J090	03-08		673533	O-ring	1
	K020	03-08		11157955	Lip seal	1
	K060	03-08		11037106	End cap seal	1
	L010A	03-08		001131 (9004201-5000)	O-ring, .644 x .087, nitrile, 90D	1
	L030	06-24		9003509-0012	Seal nut, M12 (SB-2005-009)	1
	L030	03-08	06-23	5000661	Seal nut, .500-20 UNF-2B thread	1



Service Bulletin: SB-2002-031

Products affected

Series 45 frame E, G, J, K, and L open circuit pumps

Subject

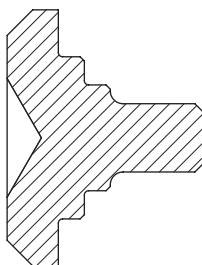
Load sense spool spring guide change

Description

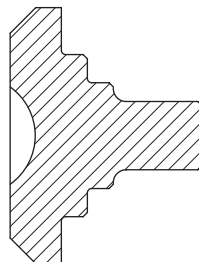
As a product improvement, Sauer-Danfoss is changing the load sense spool spring guide used in the 2 spool controls.

The spring guide changes from a conical interface with the spool to a spherical interface.

The new spring guide is interchangeable with the old one. The old spring guide is obsolete and no longer available as a service part.



Old style



New style

Models affected

Series 45 frame E, G, J, K, and L open circuit pumps using the 2 spool style control.

Serial numbers

This change became effective at serial number A-02-38-xxxxx.

Part numbers affected

Old part number	New part number
4740156	4740246

Parts disposition

■ Interchangeable

Service Bulletin: SB-2002-034

Products affected

Series 45 frame E, G, J, K, and L open circuit pumps

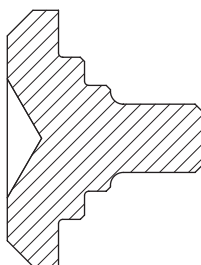
Subject

Pressure compensator spool spring guide change

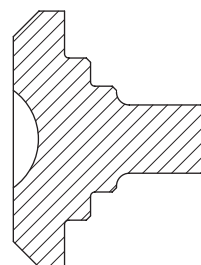
Description

As a product improvement, Sauer-Danfoss is changing the pressure compensator spool spring guide used in series 45 control assemblies. The spring guide changes from a conical interface with the spool to a spherical interface.

The new spring guide is interchangeable with the old one. The old spring guide is obsolete. It is no longer available as a service part.



Old style



New style

Models affected

Series 45 frame E, G, J, K, and L open circuit pump control assemblies.

Serial numbers

This change became effective at serial number A-03-02-xxxxx.

Part numbers affected

Old part number	New part number
4740053	4740247

Parts disposition

■ Interchangeable



Service Bulletin: SB-2005-009

Products affected

Series 45 frame E open circuit pumps

Subject

Adjustable displacement limiter change

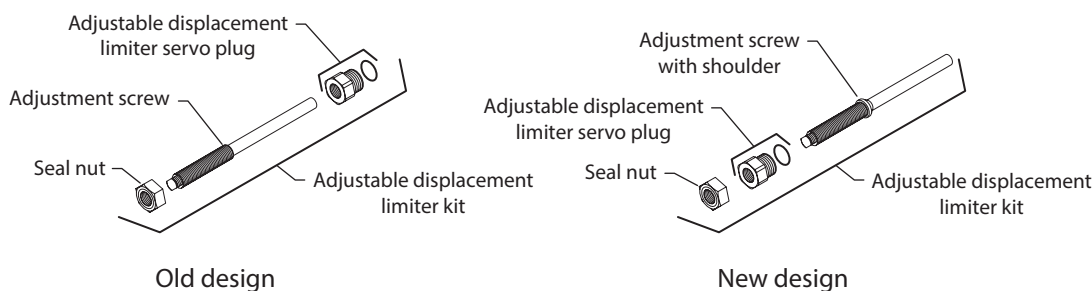
Description

As a product improvement, Sauer-Danfoss has made a change to the adjustable displacement limiter for the series 45 Frame E open circuit pumps. A possible interference between the adjustment screw and the auxiliary mounting flange may occur if the adjustment screw is backed out too far.

The adjustment screw has been redesigned with a shoulder to limit how far the screw can be turned out, which will prevent interference with the auxiliary mounting flange. The addition of the shoulder will also prevent the screw from disengaging from the pump.

The new adjustment screw is designed with a metric thread which makes it non-interchangeable with the current adjustable displacement limiter servo plug and seal nut.

The adjustable displacement limiter kit part number (4510439) did not change.



Models affected

Series 45 frame E open circuit pumps with adjustable displacement limiters.

Serial numbers

This change became effective at serial number A-06-24-xxxxx.

Part numbers affected

Description	Old part number	New part number
Servo Plug assembly	1700750	1701250
Displacement limiter Plug assembly	1700891	1701412
Seal nut	5000661	9003509-0012

Parts disposition

■ Interchangeable - if all new hardware is used.

Service Bulletin: SB-2006-016

Products affected

Series 45 frame E open circuit pumps

Subject

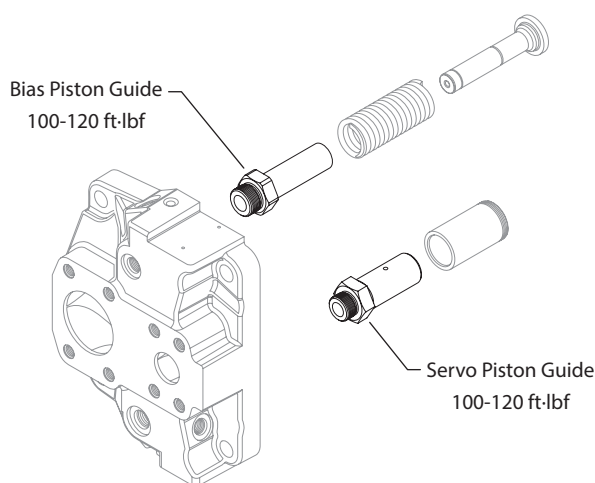
Torque specification change to the servo piston guide and bias piston guide.

Description

To prevent the servo piston guide and bias piston guide from cracking during assembly, the torque specification has been reduced.

The servo piston guide torque is now; 100 to 120 foot pounds force.

The bias piston guide torque is now; 100 to 120 foot pounds force.



Models affected

All series 45 frame E open circuit pumps.

Serial numbers

N/A

Part numbers affected

N/A

Parts disposition

■ Not applicable



Service Bulletin: SB-2007-029

Products affected

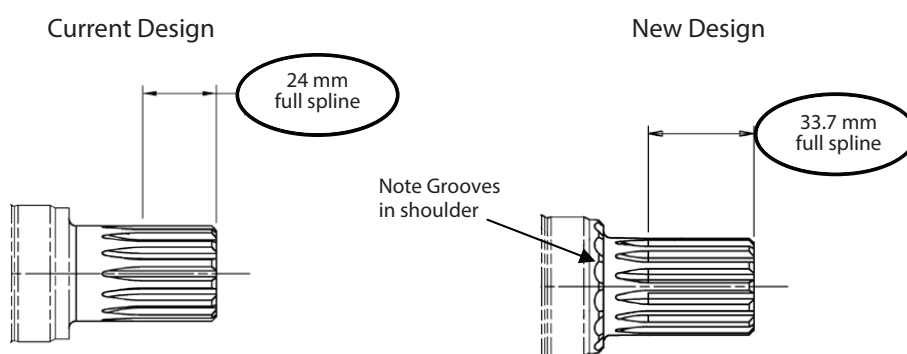
Series 45 frame E

Subject

Shaft

Description

As a product improvement, Sauer_Danfoss has changed the 14 tooth shaft used in the frame E pumps. The new pump shafts have a longer spline engagement. New shafts can be used in place of the old shaft. Old shafts should not be used in place of the new shaft. The old shaft is obsolete and no longer available for service.



Models affected

All series 45 frame E using 14 tooth shaft

Serial numbers

This change became effective at serial number A-07-38-24211.

Part numbers affected

Description	Old part number	New part number
Shaft, 14 tooth	1700782	11025142
Shaft, 14 tooth w/aux. drive	1700783	11025144

Parts disposition

■ Interchangeable

Service Bulletin: SB-2007-047

Products affected

Series 45 frame E, F, G, and J open circuit pumps

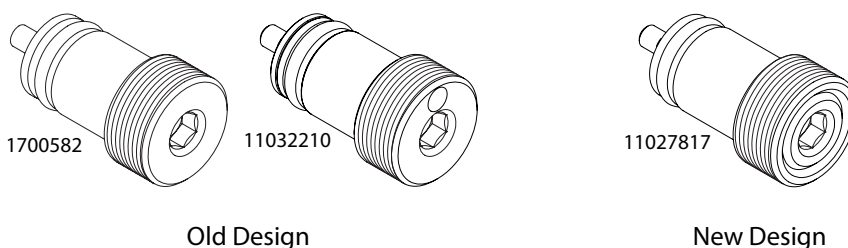
Subject

Load sense plug change

Description

As a product improvement, Sauer-Danfoss has changed the LS adjustment plug. The new LS plug assembly has better sealing capabilities than both styles of old plug assemblies. The new plug assembly is interchangeable with both styles of old plugs. It is recommended that the old plugs be replaced with the new plug at first service. The old plugs are no longer available for service.

The overhaul seal kit part numbers have also changed. They will now include the new LS plug assembly instead of the individual seals for the LS plug. The old seal kits are obsolete and no longer available for service.



Models affected

All series 45 frame E, F, G, and J frame pumps with LS..

Serial numbers

This change became effective at serial number A-07-39-23181.

Part numbers affected

Description	Old part number	New part number
LS adjustment Plug	1700582 & 11032210	11027817
Overhaul seal kit, S45 E	4510433	11034352
Overhaul seal kit, S45 F	4510455	11034341
Overhaul seal kit, S45 G	4510289	11034340
Overhaul seal kit, S45 J	4510438	11032927
Control kit, high press. LS	11032452	4510416
Control kit, elec. on/off	11032453	4510462

Parts disposition

■ Interchangeable



Service Bulletin: SB-2008-005

Products affected

Series 45 frame E open circuit pumps

Subject

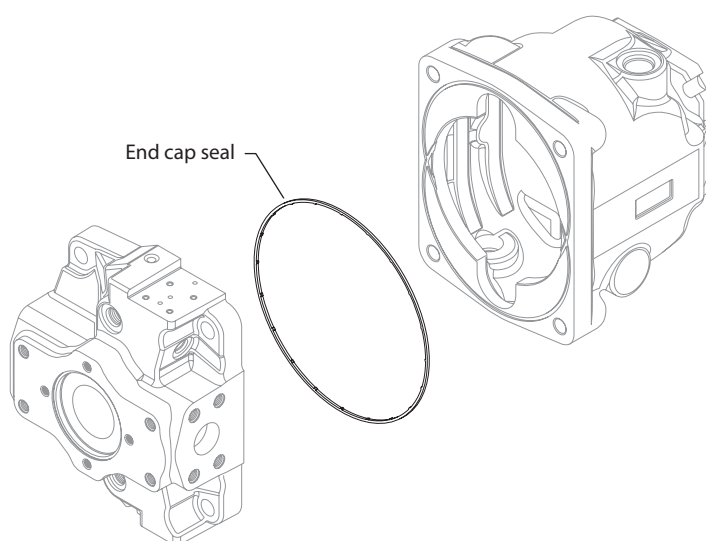
End cap seal change

Description

As a product improvement, Sauer-Danfoss is changing the end cap seal for Series 45, frame E open circuit pumps.

The new end cap seal is interchangeable with the old end cap seal.

The old end cap seal is obsolete and no longer available for service.



Models affected

All series 45 frame E open circuit pumps.

Serial numbers

This change became effective at serial number A-08-06-XXXXX.

Part numbers affected

Description	Old part number	New part number
End cap seal	1700501	11037106

Parts disposition

■ Interchangeable

Service Bulletin: SB-2008 018

Products affected

Series 45 frame E open circuit pumps

Subject

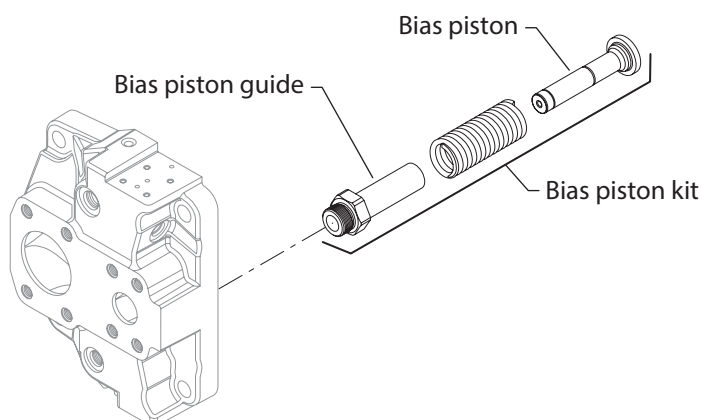
Bias piston change

Description

As a product improvement, Sauer-Danfoss has changed the design of the bias piston used in E frame open circuit pumps.

The change includes the addition of a bronze sleeve on the stem portion of the bias piston. In-house lab development testing has shown signs of adhesive wear between the bias piston and bias piston guide, which resulted in decreased performance.

The new bias piston with the bronze sleeve is interchangeable only when replacing the bias piston guide also. The bias piston is only available in a service kit. The service kit part number did not change. The old bias piston is no longer available for service.



Models affected

All series 45 frame E open circuit pumps.

Serial numbers

This change became effective at serial number A-08-22-XXXXX.

Part numbers affected

The bias piston kit part number is 4510425.

Parts disposition

■ Interchangeable only when replacing the bias piston and the bias piston guide.



Service Bulletin: SB-2010-017

Products affected

Series 45 frame E open circuit pumps

Subject

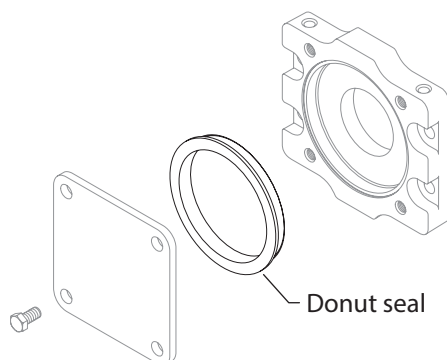
SAE "C" auxiliary flange seal

Description

As a product improvement, Sauer-Danfoss is changing the donut seal between the auxiliary flange pilot and the auxiliary flange cover. The auxiliary flange donut seal was originally designed as a slip fit with the pilot diameter of the flange adapter. The slip fit allowed the seal to move during assembly such that the lip does not completely fill the groove in the auxiliary flange. In a very limited number of cases this lead to oil leaks or entrainment of air into the charge pumps.

The new donut seal design has a larger diameter which makes the assembly of the donut seal a slight interference fit between the donut seal and the flange adapter. A chamfer was added to the end of the seal to aid with assembly.

The new donut seal is interchangeable with the old donut seal. The old donut seal is obsolete and no longer available as a service part.



Models affected

All Series 45 frame E open circuit pumps using an SAE "C" auxiliary mounting flange and auxiliary flange cover.

Serial numbers

This change became effective at serial number; A-11-05-XXXXX. (01-Feb-2011)

Part numbers affected

Description	Old part number	New part number
Donut seal	8801062	11081805

Parts disposition

■ Interchangeable

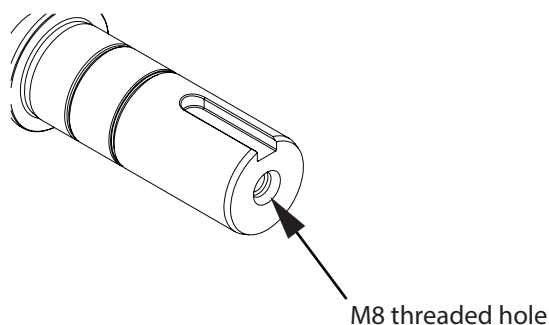
Service Bulletin: SB-2010-019

Products affected Series 45 frame E open circuit pumps

Subject 1.50 inch straight keyed shaft

Description As a product improvement, Sauer-Danfoss has added a new feature on the 1.50 inch straight keyed shaft for through and non-through drives on series 45 frame E open circuit pumps. The end of this shaft will be drilled and tapped allowing for securing a gear, drive pulley, etc. The thread size of this hole is M8 x 1.25-6H thread.

This shaft is interchangeable with the old shaft. The old shaft is obsolete and no longer available as a service part.



Models affected Series 45 frame E pumps using a 1.5 inch straight key shaft with or without auxiliary drive.

Serial numbers This change became effective at serial number A-10-42-XXXXX. (15-Oct-2010).

Part numbers affected	Description	Old part number	New part number
	1.5 Str. Key w/ auxiliary drive	1700913	11082275
	1.5 Str. Key w/o auxiliary drive	1700806	11082274

Parts disposition

■ Interchangeable



Service Bulletin: SB-2010-026

Products affected

Series 45 open circuit piston pumps

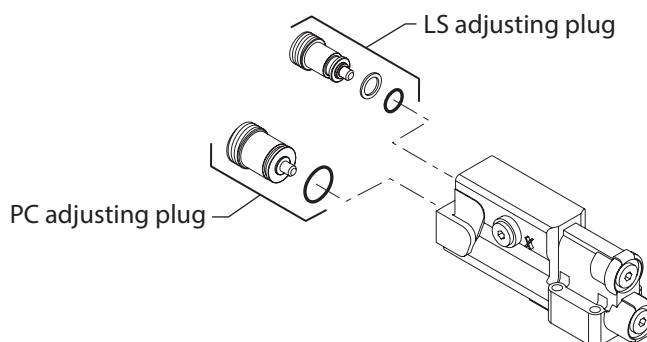
Subject

Pressure compensator and load sense adjusting plugs

Description

The supplier has changed for the pressure compensator and load sense adjusting plugs used in all series 45, frame E, F, G, J, K, and L open circuit controls. The new adjusting plugs are interchangeable with the old adjusting plugs. The part numbers have changed for tracking purposes.

The old adjusting plugs are obsolete and no longer available for service.



Models affected

Series 45, frame E, F, G, J, K, and L open circuit controls.

Serial numbers

This change became effective at serial number A-11-08-xxxxx (22-Feb-2011)

Part numbers affected

Description	Old part number	New part number
LS adjustment plug assembly	11027817	11062214
PC adjustment plug assembly	1700581	11062379

Parts disposition

■ Interchangeable

Service Bulletin: SB-2010-050

Products affected

Series 45 frame E open circuit pumps

Subject

Rotating group change

Description

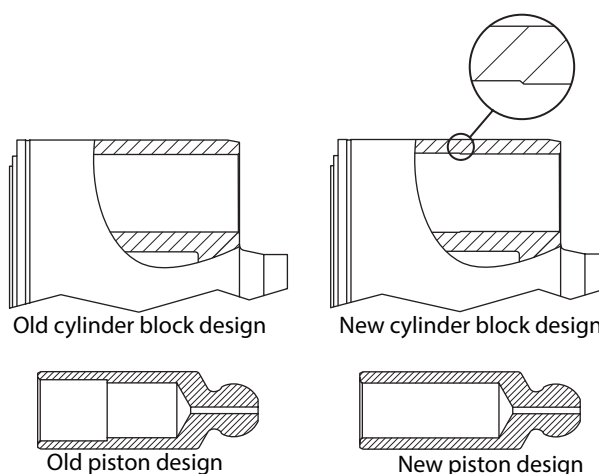
As a product improvement, Sauer-Danfoss has made some design improvements to the rotating group used in the frame E 100cc, 130cc, and 147cc open circuit pumps. These design improvements increase the robustness of the rotating group above 1800 rpm by reducing internal stresses and increasing kit lubrication.

There are two main differences between the old rotating group and the new rotating group. One difference is the piston bores in the new cylinder block have an undercut. The undercut is approximately 1.316" [33.43mm] from the top of the piston bore. The second difference is in the piston wall thickness. The new pistons have a wall thickness of approximately 0.150" [3.8mm]. The old style pistons have a wall thickness of approximately 0.103" [2.6mm].

The new rotating group is interchangeable with the old rotating group. The old rotating group should not be used to replace a new rotating group.

Individual parts from the old and new rotating groups cannot be intermixed.

Intermixing old pistons with the new cylinder block or new pistons and an old cylinder block will decrease the kit lubrication which could result in a premature pump failure.



Models affected

All Series 45, frame E open circuit pumps.

Serial numbers

This change became effective at serial number A-11-04-XXXXX. (20-Jan-2011)

Part numbers affected

Description	Old part number	New part number
Slipper/Piston assembly	1700044	11077350
Cylinder block	1700450	11077350
Cylinder block kit	1700449	11077350

Parts disposition

■ Interchangeable - only when changing complete new cylinder block kit.



Service Bulletin: SB-2011-027

Products affected

Series 45, frame E open circuit pumps

Subject

Frame E 14 tooth shaft design change

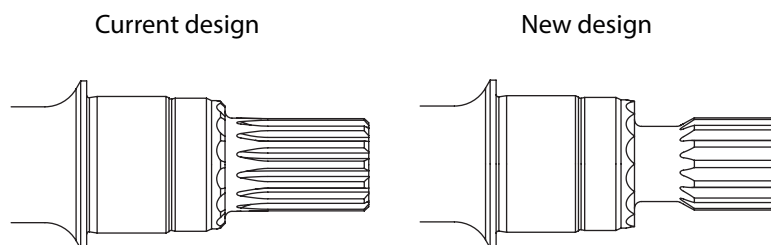
Description

Sauer-Danfoss has redesigned the Series 45, frame E, 14 tooth shaft with and without auxiliary drive capability. The current design does not have an undercut which in some applications had a coupling interference issue.

The new design 14 tooth shafts will have an undercut spline which reduces possible coupling interference issues.

The new design 14 tooth shafts can be used in place of the old design 14 tooth shafts. The old design 14 tooth shafts should not be used in place of the new design 14 tooth shafts.

The old shafts are obsolete and no longer available for service.



Models affected

Series 45, frame E pumps that use the 14 tooth shaft (S1) option.

Serial numbers

This change became effective at serial number A-12-01-XXXXX. (4-Jan-2012)

Part numbers affected

Description	Old part number	New part number
Shaft, 14 tooth	11025142	11100384
Shaft, 14 tooth w/aux. drive	11025144	11087475

Parts disposition

■ Interchangeable

Service Bulletin: SB-2012-011

Products affected

Series 45 E, F, G, and J frame open circuit pumps

Subject

Servo control (choke) orifice design improvement

Description

Sauer-Danfoss is implementing a change to the servo control (choke) orifice design for the Series 45 E, F, G, and J frame pumps.

The current servo control (choke) orifice design dampens all servo activity, increasing high pressure overshoots and response time to de-stroke the pump. This is done with an orifice in the servo piston port in the control housing.

The new servo control (choke) orifice design does not dampen PC response, reducing the high pressure overshoots, and dampens all other servo activity. This is done with an orifice and a locking plug located between the pressure compensator spool and the load sense spool. The locking plug has been added to ensure that the orifice is held securely in place.

Installing the orifice in its new location requires the removal of the control from the pump and the pressure compensator spool via spool plug hole, opposite of the spring adjustment plug hole. The torque to tighten the orifice is 18-30 in-lbs. and the Orifice plug torque is 18-30 in-lbs. Re-install the pressure compensator spool correctly.

This change affects the PC/LS, Remote PC/LS, Electric PC/LS, and Electric proportional PC/LS controls.

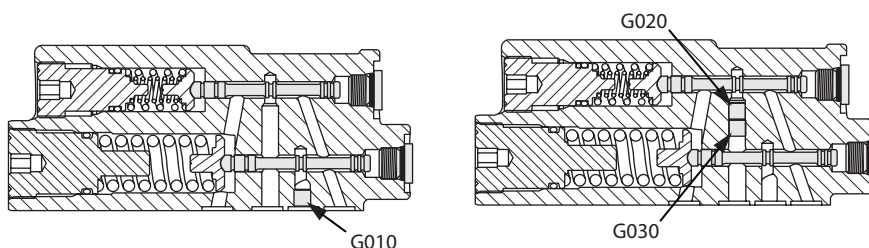
This change does not include the PC only and LS only controls.

There will be new control kit part numbers assigned to replace the old control kit part numbers.

The new control kits for the electric proportional controls will have a 0.8mm orifice and Orifice plug installed in the control assembly, and a 1.0mm orifice included in the package.

The old control kits will be obsolete and no longer available for service.

The servo control (choke) orifice can be found in the G module of the order code.



Models affected

Series 45, E, F, G and J frame open circuit pumps as described.

Serial numbers

This change became effective at serial number A-12-40-XXXXX. (01-Oct-2012)


Service Bulletin: SB-2012-011
Part numbers affected

Code	Description	Old p/n	New p/n
AB	Low pressure LB	4510413	11112206
AF	Electric ON/OFF solenoid, 12VDC, n.o.	11020464	11112296
AG	Electric ON/OFF solenoid, 12VDC, n.c.	4510462	11112295
AH	Electric proportional solenoid, 12VDC, n.c.	11022601	11112221
AK	Electric proportional solenoid, 24VDC, n.c.	11050837	11112291
AL	Electric proportional solenoid, 12VDC, n.c.	11048818	11112218
AN	Electric ON/OFF solenoid, n.o., 12VDC	11022612	11112229
AP	Remote PC, Low pressure	4510417	11112209
AR	Electric ON/OFF solenoid, n.c., 12VDC	4510490	11112220
AS	Low pressure LS	4510414	11112210
AT	Electric ON/OFF solenoid, n.o., 24VDC	11059898	11112292
AV	Electric proportional solenoid, 12VDC, n.c.	11022613	11112301
AW	Electric proportional solenoid, 12VDC, NO	11106466	11112294
AX	Electric proportional solenoid, 12VDC, NO	11106462	11112230
AY	Electric ON/OFF solenoid NC, 24VDC	11047274	11112303
BB	High pressure LB	4510415	11112211
BE	Electric ON/OFF solenoid, n.c., 12VDC	11082406	11112299
BF	Electric ON/OFF solenoid, n.o., 12VDC	11082407	11112300
BG	Electric ON/OFF solenoid, 24VDC, n.c.	11043397	11112289
BH	Electric proportional solenoid, 12VDC, n.c.	11106967	11112216
BK	Electric proportional solenoid, 24VDC, NC	11082408	11112302
BL	Electric proportional solenoid, 24VDC, n.c.	11082409	11112224
BM	Electric proportional solenoid, 12VDC, n.c.	11106966	11112298
BN	Electric ON/OFF solenoid, 12VDC, n.o.	11082410	11112222
BP	Remote PC, high pressure	4510418	11112212
BR	Electric ON/OFF solenoid, 12VDC, n.c.	11082411	11112219
BS	High pressure LS	4510416	11112207
BW	Electric proportional solenoid, 12VDC, n.o.	11106968	11112293
BX	Electric proportional solenoid, 12VDC, n.o.	11106965	11112214
CK	Electric proportional solenoid, 24VDC, n.o.	11106463	11112305
CL	Electric proportional solenoid, 24VDC, n.o.	11106464	11112231
CN	Electric ON/OFF solenoid, 24VDC, n.o.	11106964	11112226
CR	Electric ON/OFF solenoid, 24VDC, n.c.	11066415	11112217
DF	Electric ON/OFF solenoid, 24VDC, n.o.	11082432	11112304
DK	Electric proportional solenoid, 24VDC, n.o.	11106969	11112290
DL	Electric proportional solenoid, 24VDC, n.o.	11106970	11112225
DN	Electric ON/OFF solenoid, 24VDC, n.o.	11082433	11112227
DR	Electric ON/OFF solenoid, 24VDC, n.c.	11082434	11112228
FA	Electric dump valve, solenoid, 12VDC, n.c.	11082435	11112297
FB	Electric dump valve, solenoid, 12VDC, n.c.	11082436	11112223
LB	LB control	4510388	11112205
LS	LS control	4510412	11112208
RP	Remote PC	4510419	11112213

Parts disposition

- Interchangeable
- Use parts in stock

Service Bulletin: SB-2012-020
Products affected

Series 45 E, F, G, H and J frame open circuit pumps

Subject

Displacement limiter kits

Description

In an effort to reduce duplication of displacement limiter kits used for service and production, Sauer-Danfoss has obsoleted the service displacement limiter kit part numbers and will use the production displacement limiter kits for service.

The production displacement limiter kits are completely interchangeable with the old service displacement limiter kits.

The service displacement limiter kits are obsolete and no longer available for service.

Models affected

Series 45 E, F, G, H, and J frame open circuit pumps with displacement limiters.

Serial numbers

This change became effective at serial number A-12-24-XXXXX. (12-Jun-2012)

Part numbers affected

Description	Old part number	New part number
H frame, 57cc	4510168	11099072
H frame, 90cc	4510372	11099073
G frame, 74cc	4510373	11099074
G frame, 90cc	4510374	11099075
E frame	4510439	11099077
F frame	4510488	11099076
J frame	4510488	11099076

Parts disposition

■ Interchangeable


Service Bulletin: SB-2012-029
Products affected

Series 45, E, F, G, and H frame open circuit pumps

Subject

Component changes to the overhaul seal kits

Description

Sauer-Danfoss has made a change to the overhaul seal kits for the Series 45 E, F, G and H frame open circuit pumps. This change removes the standard plug O-rings.

The new seal kits are interchangeable with the old seal kits.

The overhaul seal kit part numbers have changed for tracking purposes. The old seal kits are obsolete and no longer available for service.

Models affected

All Series 45 E, F, G, and H frame open circuit pumps

Serial numbers

This change became effective at serial number A-13-10-XXXX. (05-Mar-2013)

Part numbers affected

Description	Old part number	New part number
E frame overhaul seal kit	11034352	11106334
F frame overhaul seal kit	11034341	11106335
G frame overhaul seal kit	11034340	11106336
H frame overhaul seal kit	4510094	11106337

Parts disposition

■ Interchangeable

**Notes**



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**Notes**



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