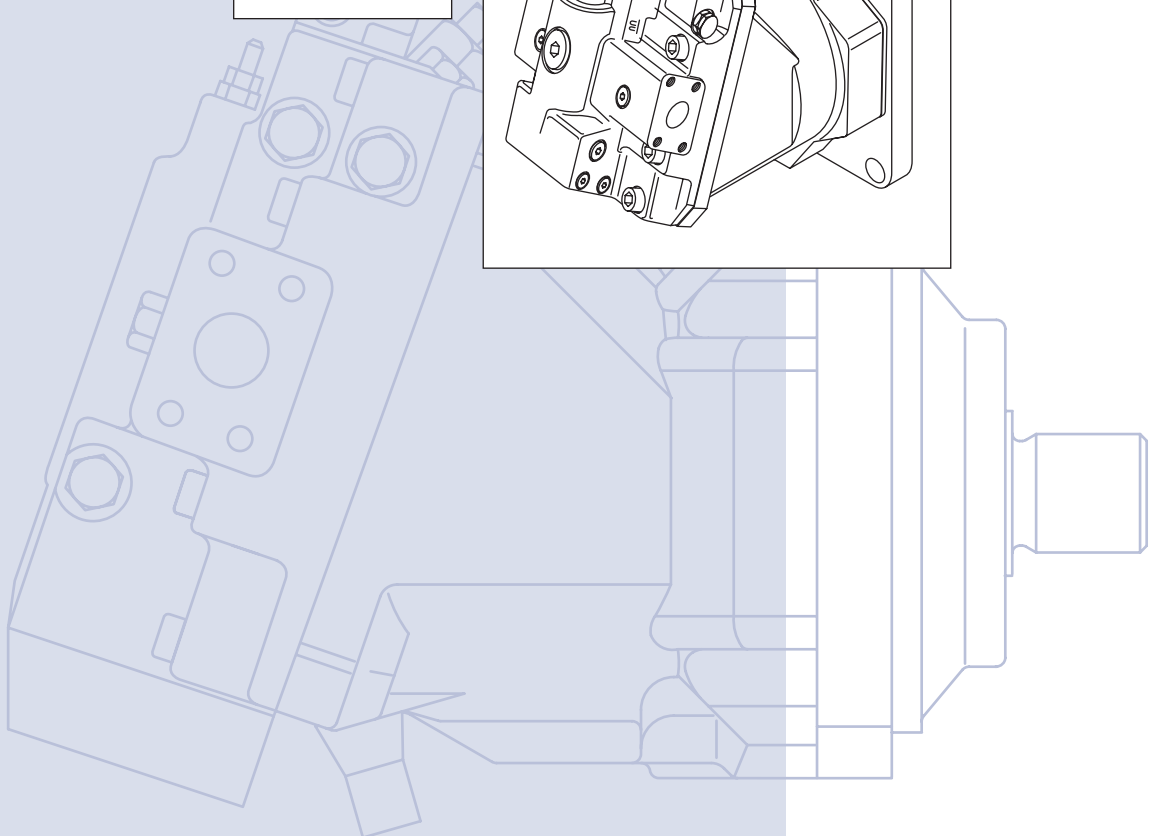
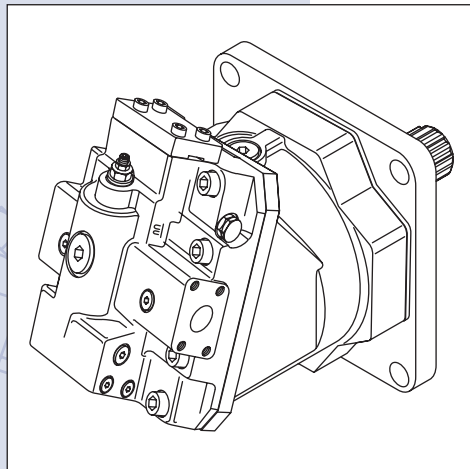
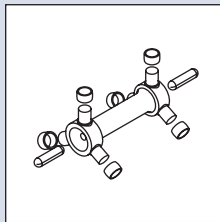
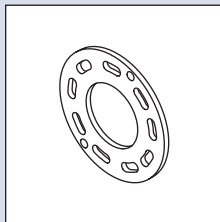
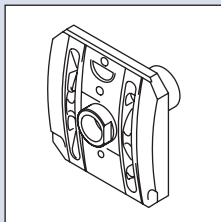




Series 51:60 cc
Variable
Displacement
Motors

Service Parts
Manual



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**SERVICE PARTS
 IDENTIFICATION**

Use this information and procedure to identify the module group, item number, manufacture date, part number, and part name of the parts included in the Series 51: 60cc variable displacement motor. Use the parts listed when performing minor repairs, major repairs, or conversions on Series 51: 60cc motors. Refer to BLN-10043 Service Manual when doing this.

NAMEPLATE

Each unit has a nameplate affixed to its housing. The nameplate includes this information:

Model Code

The Sauer-Danfoss model code defines the specific unit. Use it when ordering parts to service this product.

Model Number

The manufacturing factory uses Sauer-Danfoss' model number. On repeat orders, order a complete unit by the model number.

Serial Number

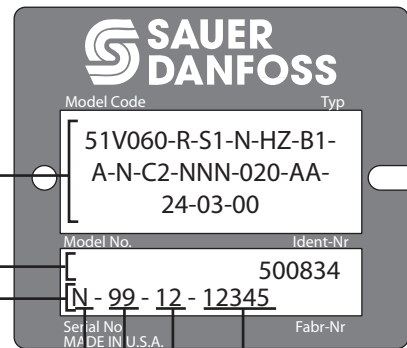
The Sauer-Danfoss serial number identifies the manufacture date and unit sequence in the build. The serial number also identifies the unit's warranty time period.

The letter code indicates the location of original manufacture (assembly). **N** indicates the unit was originally assembled in Neumunster, Germany.

The first number (2 digits) indicates the year of manufacture. (**99** would indicate the unit was manufactured in 1999).

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.



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 different part numbers. Find the date code of your unit on the nameplate to determine the service part number you need to order.

EXAMPLE: The service part desired is Item L35.

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
V	L35	00-25		515752	Bearing housing (SB-2000-049)	1
	L35	92-07	00-24	743831	Bearing housing	1

All units using this order code with a date code of 92-07, up to and including 00-24, must use part number 743831. All units with a date code of 00-25, and newer, must use part number 515752..

SERVICE BULLETINS

A Service Bulletin Number (SB-____-____) may follow the part name of the part you desire. Read that Service Bulletin before ordering that part. The information contained in these Service Bulletins, as of the print date, are at the end of this manual. Service Bulletins contain more detailed information such as interchangeability, what additional parts are involved, and so forth. We suggest that you add additional Service Bulletins to this manual as you receive them.

**PROCEDURE TO IDENTIFY
A PART**

General

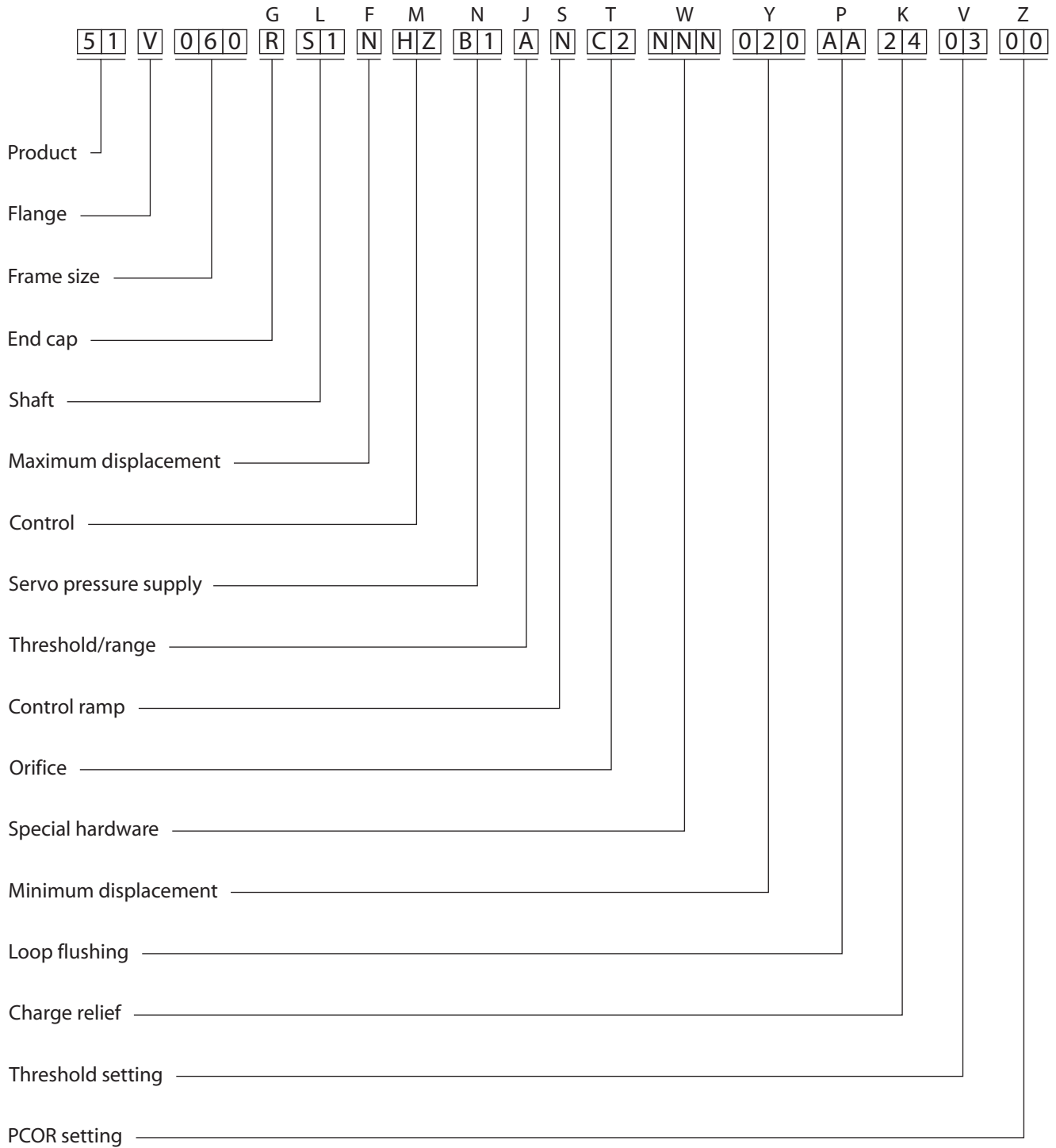
The modular design of Series 51 units results in a simplified service parts list and part number identification procedure. The same item numbers are used for same part names on all units within a product type. (Example: The lip seal, Item L40, has the same item number on all motors.)

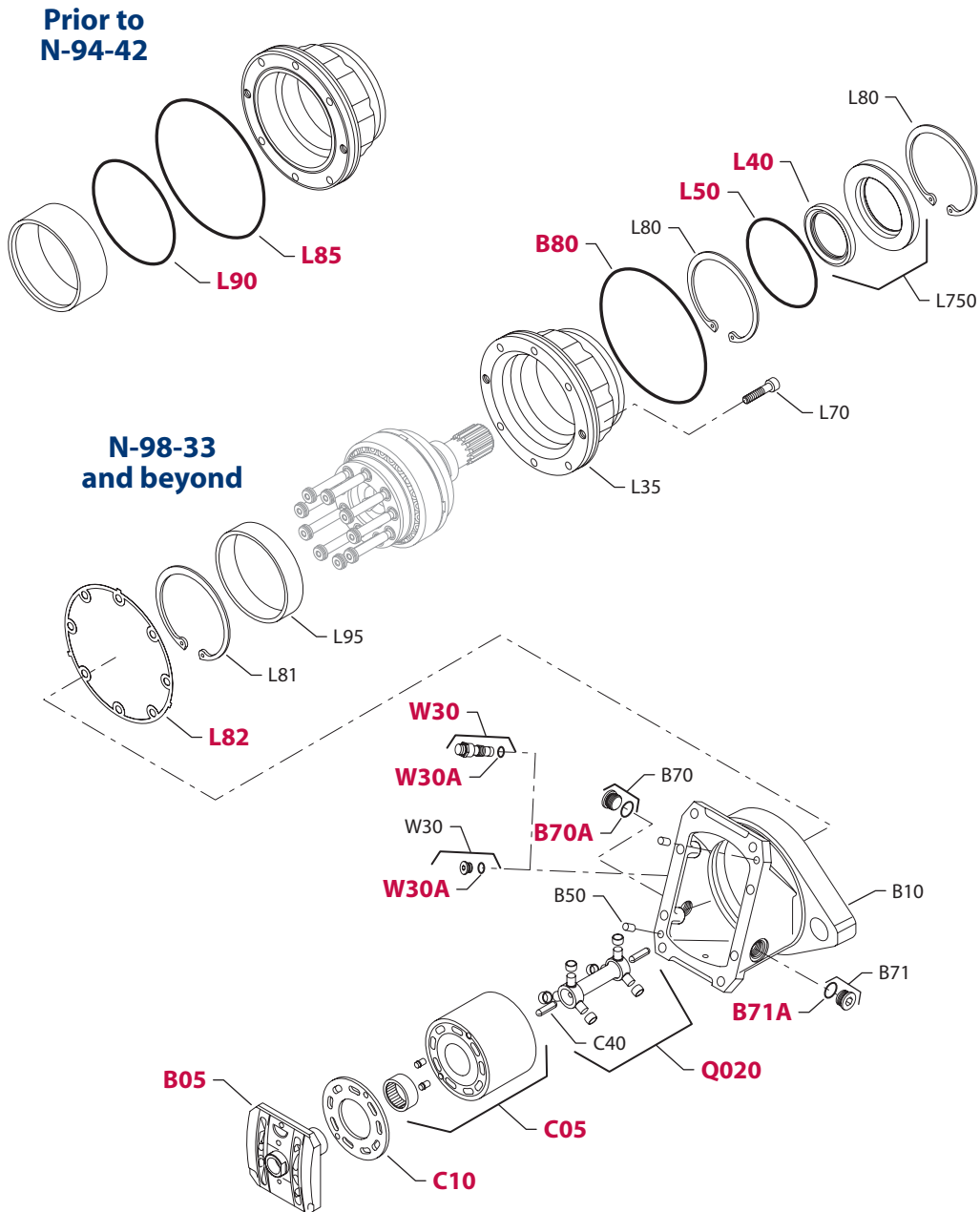
A part number that has another number following in parentheses makes this a world-wide manual. The first number is sold in Germany. The number in parentheses is sold in the United States. (Example: 001289 (9004800-3708); customers order 9004800-3708 if ordering the part in the United States.)

Example of a part identification

The nameplate on a Series 51 motor has an Order Code of 51V060 R S1 N HZ B1 A N C2 NNN 020 AA 24 03 00. Do this to determine the part number of the drive shaft used on this motor:

- 1) Referring to the shaft module in the Order Code (see page 7), the shaft option for this motor is identified by the code **S1** (51V060 R **S1** N HZ B1 A N C2 NNN 020 AA 24 03 00)
- 2) Referring to the Service Parts List, find the shaft group.
- 3) Find the order code that relates to this unit, which is **S1**.
- 4) The shaft is Item L1.
- 5) The part number 732685.





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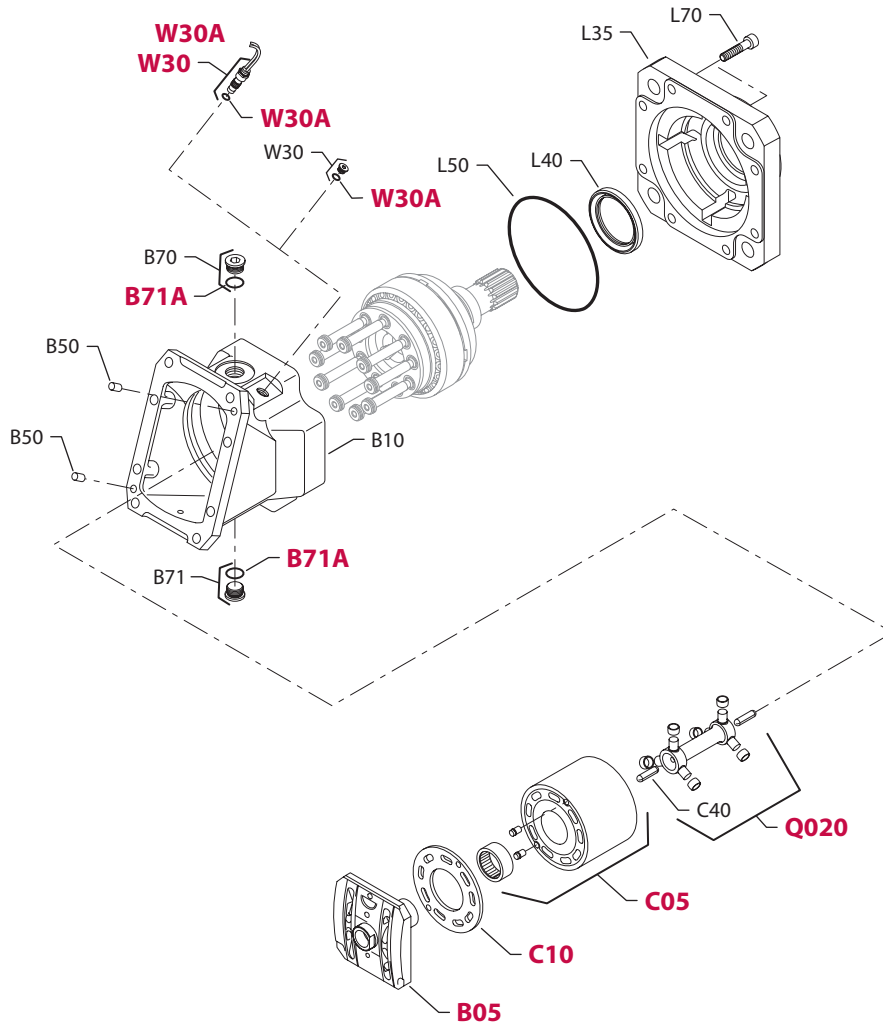
Enlarged **bold** type item numbers are recommended part to stock for servicing.

COMMON PARTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
C	B05	92-07		508197	Valve segment (SB-1996-005 & SB-1997-030)	1
	B10	94-42		501103	Housing with speed sensor port (SB-1998-035)	1
	B50	92-07		001289 (9004800-3708)	Pin	2
	B70	92-07		664524 (9005110-9000)	Plug	1
	B70A	92-07		001156 (9004201-7500)	O-ring	1
	B71	92-07		664524 (9005110-9000)	Plug	1
	B71A	92-07		001156 (9004201-7500)	O-ring	1
	B80	92-07		726927	O-ring	1
	C05	92-07		732719	Cylinder block assembly	1
	C10	92-07		515366	Bearing plate	1
	C40	92-07		357798	Support pin	2
	L35	98-33		501108	Bearing housing (SB-1998-035)	1
	L40	92-07		673525 (9008000-0114)	Lip seal	1
	L50	92-07		501879	O-ring	1
	L70	92-07		710855	Screw	8
	L80	92-07		392456	Retaining ring	2
	L81	94-42		501120	Retaining ring (SB-1998-035)	1
	L82	94-42		501019	Gasket	1
	L85	92-07	94-41	916759	O-ring (SB-1998-035)	1
	L90	92-07	94-41	279570	O-ring (SB-1998-035)	1
	L95	94-42		501116	Distance ring (SB-1998-035)	1
	"	92-07	94-41	741702	Distance ring	1
	L750	92-07		510482	Seal carrier assembly	1
	Q020	92-07		517308	Synch shaft kit (SB-2001-015)	1

SPECIAL HARDWARE

ABA	W30	92-07		515965 (9005110-5600)	Plug	1
	W30A	92-07		085043 (9004201-3700)	O-ring	1
ADA	W30	95-40		512667 (KPPG256)	Speed sensor	1
	W30A	95-40		085043 (9004201-3700)	O-ring	1
ADJ	W30	95-40		512667 (KPPG256)	Speed sensor	1
	W30A	95-40		085043 (9004201-3700)	O-ring	1
NNN	W30	92-07		515965 (9005110-5600)	Plug	1
	W30A	92-07		085043 (9004201-3700)	O-ring	1



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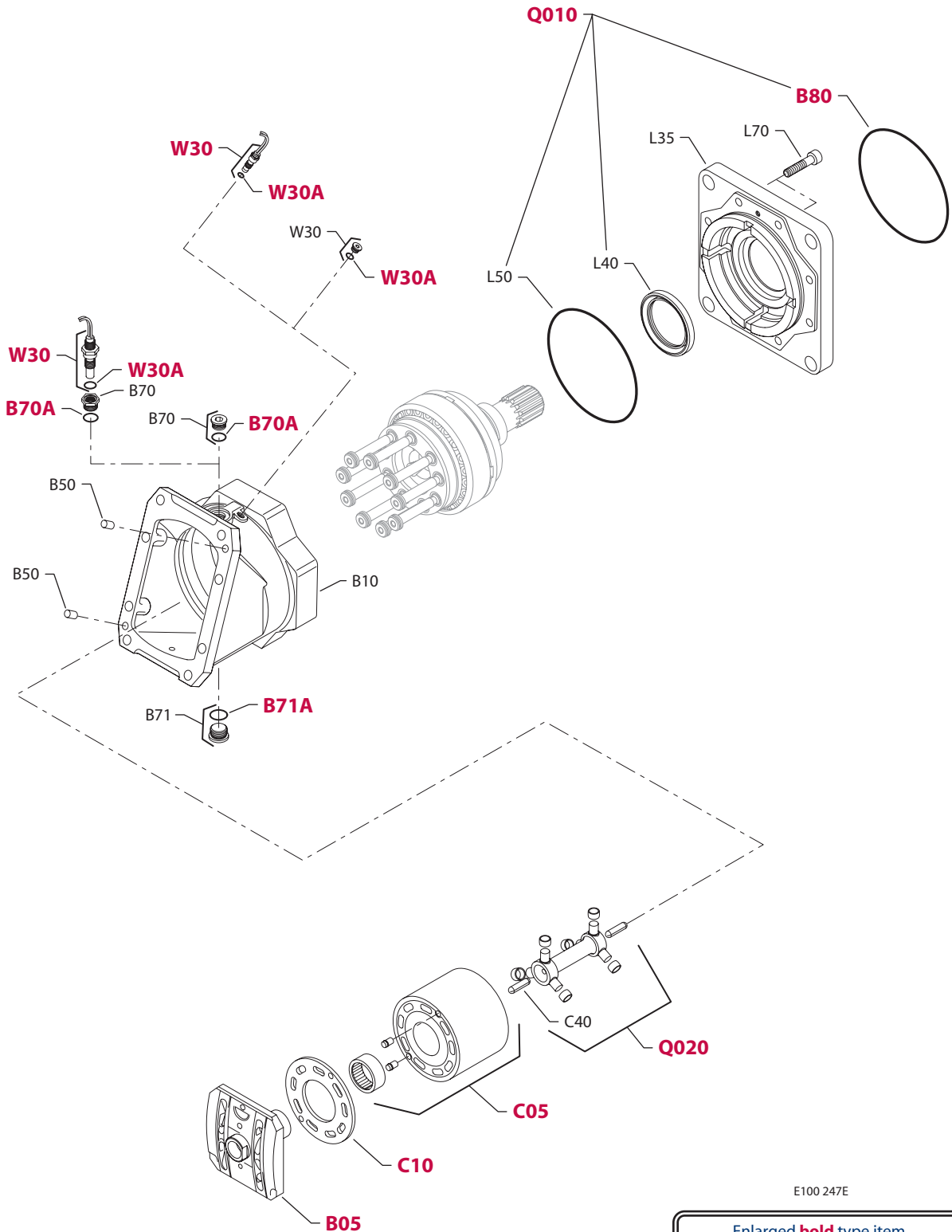
Enlarged **bold** type item numbers are recommended part to stock for servicing.

COMMON PARTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
D	B05	92-01		508197	Valve segment (SB-1996-005 & SB-1997-030)	1
	B50	92-01		001289 (9004800-3708)	Pin	2
	B70	92-01		664524 (9005110-9000)	Plug	1
	B70A	92-01		001156 (9004201-7500)	O-ring	1
	B71	92-01		664524 (9005110-9000)	Plug	1
	B71A	92-01		001156 (9004201-7500)	O-ring	1
	C05	92-01		732719	Cylinder block assembly	1
	C10	92-01		515366	Bearing plate	1
	C40	92-01		357798	Support pin	2
	L35	92-01		775973	Bearing housing	1
	L40	92-01		673525 (9008000-0114)	Lip seal	1
	L50	92-01		767962	O-ring	1
	L70	92-01		506969	Screw	8
	Q020	92-01		517308	Synch shaft kit (SB-2001-015)	1

SPECIAL HARDWARE

ABA	B10	92-01		504577	Housing with speed sensor port	1
	W30	92-01		515965 (9005110-5600)	Plug	1
	W30A	92-01		085043 (9004201-3700)	O-ring	1
NNN	B10	92-01		776013	Housing without speed sensor port	1



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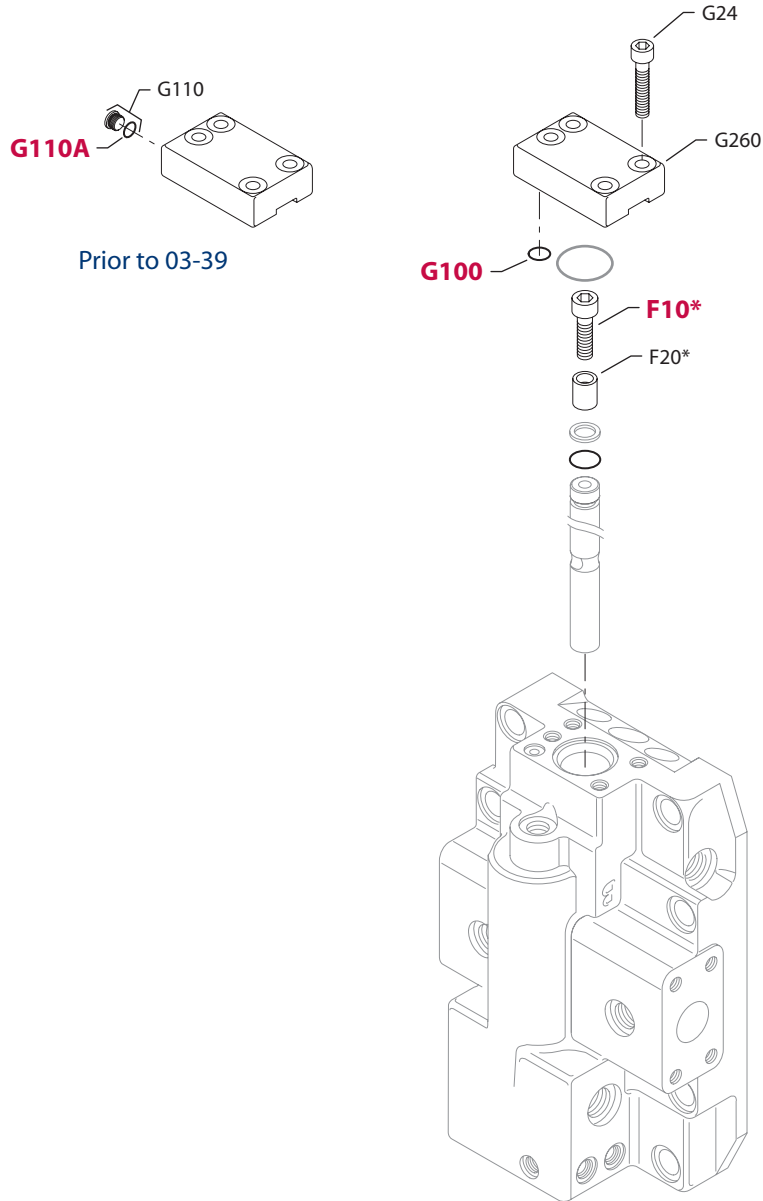
Enlarged **bold** type item numbers are recommended part to stock for servicing.

COMMON PARTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
V	B05	92-07		508197	Valve segment (SB-1996-005 & SB-1997-030)	1
	B10	93-35		504575	Housing with speed sensor port	1
	B50	92-07		001289 (9004800-3708)	Pin	2
	B70	95-51		664524 (9005110-9000)	Plug	1
	"	95-35	95-50	774885	Adapter plug	1
	B70A	92-07		001156 (9004201-7500)	O-ring	1
	B71	92-07		664524 (9005110-9000)	Plug	1
	B71A	92-07		001156 (9004201-7500)	O-ring	1
	B80	92-07		930511	O-ring	1
	C05	92-07		732719	Cylinder block assembly	1
	C10	92-07		515366	Bearing plate	1
	C40	92-07		357798	Support pin	2
	L35	92-07		763540	Bearing housing	1
	L40	92-07		673525 (9008000-0114)	Lip seal	1
	L50	92-07		917088	O-ring	1
	L70	92-07		506969	Screw	8
	Q010	92-07		771618	Shaft seal kit	1
	Q020	92-07		517308	Synch shaft kit (SB-2001-015)	1

SPECIAL HARDWARE

AAA	W30	93-35		512659 (KPPG12508)	Speed sensor	1
	W30A	93-35		085043 (9004201-3700)	O-ring	1
ABA	W30	95-51		515965 (9005110-5600)	Plug	1
	W30A	95-51		085043 (9004201-3700)	O-ring	1
ACA	W30	94-04		512660 (KPPG13408)	Speed sensor	1
	W30A	94-04		085043 (9004201-3700)	O-ring	1
ADA	W30	94-12		512666 (KPPG156)	Speed sensor	1
	W30A	94-12		085043 (9004201-3700)	O-ring	1
AHA	W30	00-08		509271 (KPPG166)	Speed sensor	1
	W30A	00-08		085043 (9004201-3700)	O-ring	1
DAA	W30	95-15		515965 (9005110-5600)	Plug	1
	W30A	95-15		085043 (9004201-3700)	O-ring	1
NNN	W30	92-07		515965 (9005110-5600)	Plug	1
	W30A	92-07		085043 (9004201-3700)	O-ring	1



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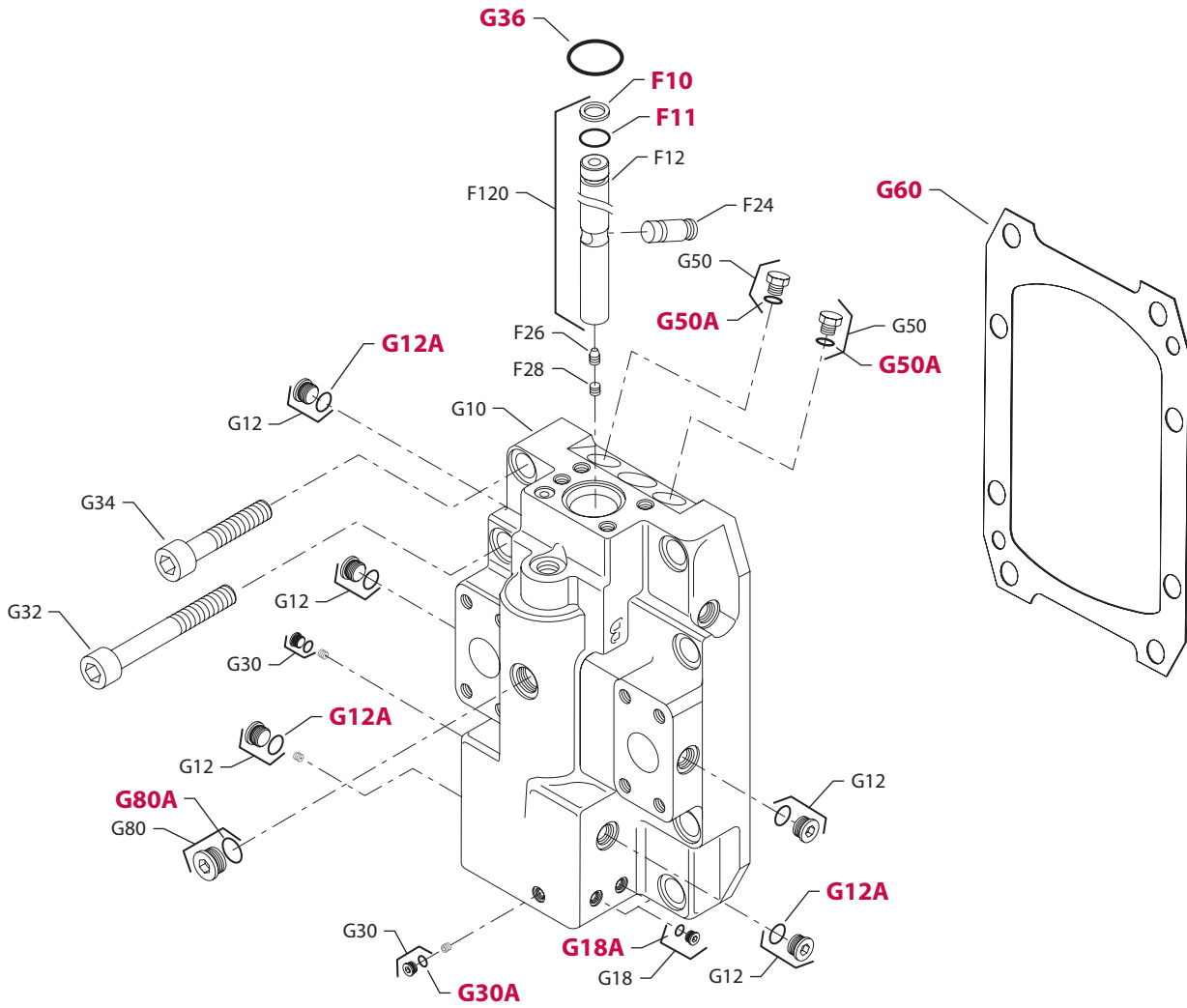
Enlarged **bold** type item numbers are recommended part to stock for servicing.

MAXIMUM DISPLACEMENT COMMON PARTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	G24	92-07		727586 (9007314-1008)	Screw	4
	G100	92-07		792739	O-ring	1
	G110	92-07	03-38	504519	Plug	1
	G110A	92-07	03-38	039297 (9004201-1200)	O-ring	1
	G26	92-07		518364	Cover	1

MAXIMUM DISPLACEMENT

A	F10A	92-40		393603 (9007315-0806)	Screw, M8 x 25 mm	1
	F20A	92-40		780890	Spacer, 3.5 mm	1
B	F10B	92-40		393603 (9007315-0806)	Screw, M8 x 25 mm	1
	F20B	92-40		780890	Spacer, 3.5 mm	1
C	F10C	94-12		393611	Screw, M8 x 30 mm	1
	F20C	94-12		500088	Spacer, 9.5 mm	1
D	F10D	94-12		393611	Screw, M8 x 30 mm	1
	F20D	94-12		789594	Spacer, 12.5 mm	1
F	F10F	94-40		124156	Screw, M8 x 40 mm	1
	F20F	94-40		781906	Spacer, 18.5 mm	1
G	F10G	92-40		124156	Screw, M8 x 40 mm	1
	F20G	92-40		781922	Spacer, 21.5 mm	1
N	F10N	92-07		395723 (9007315-0805)	Screw, M8 x 20 mm	1

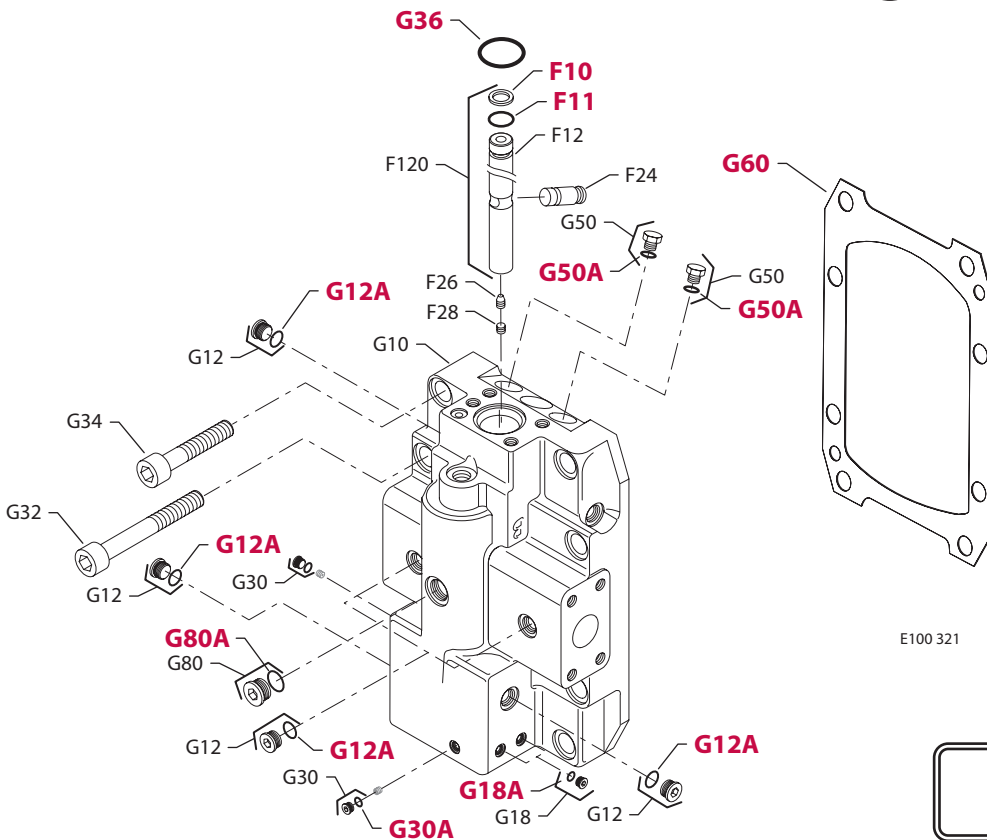
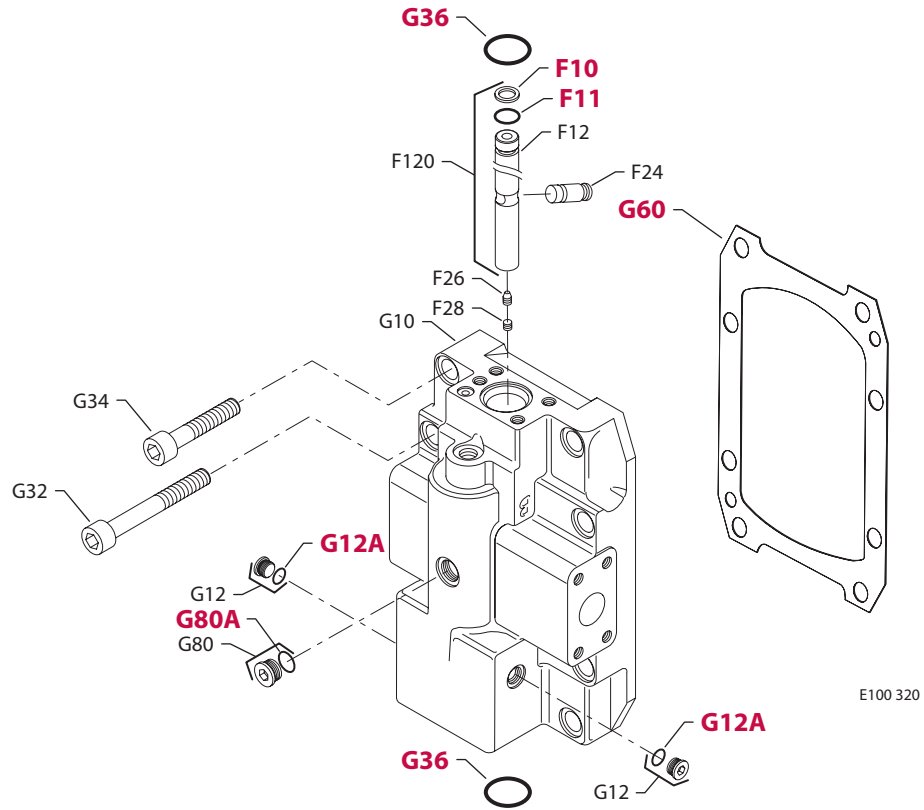


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AXIAL PORTS

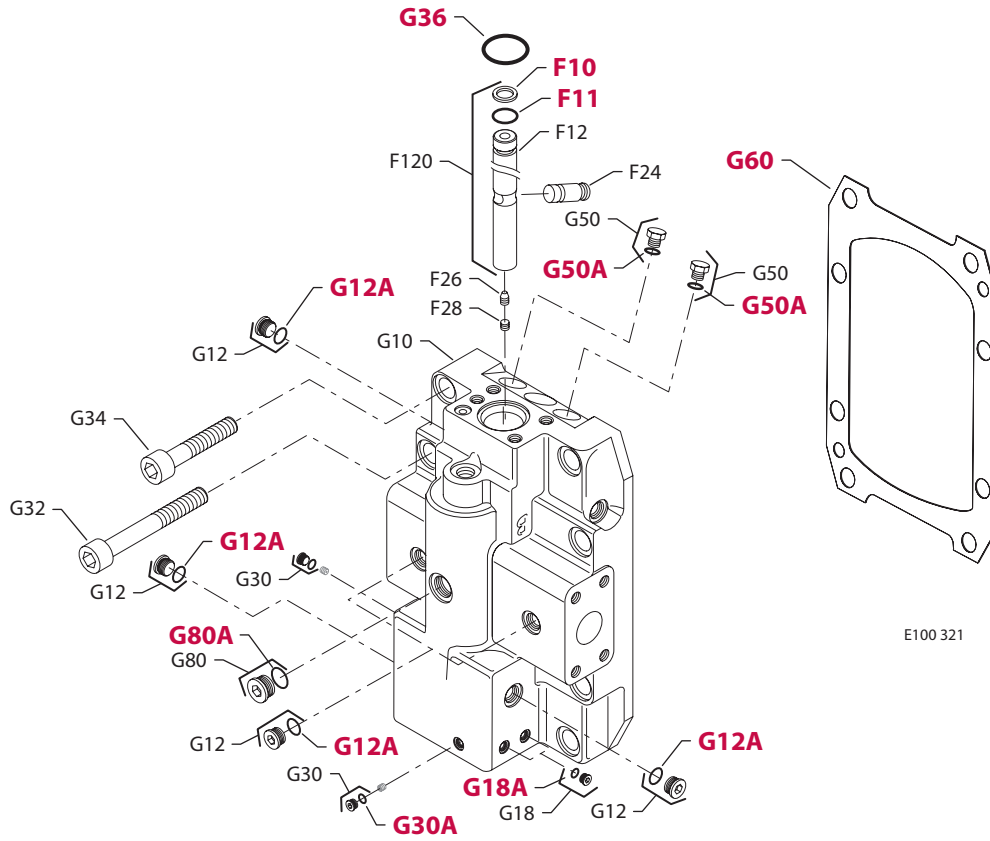
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A	F10	92-07		508131	Servo piston seal ring (SB-1997-009)	1
	F11	92-07		015404	O-ring	1
	F12	92-07	92-18	358580	Servo piston	1
	F24	92-07		511118	Feedback lever	1
	F26	92-07		733089	Set screw	1
	F28	92-07		010397	Set screw	1
	F120	92-19		510074	Servo piston assembly	1
	G10	92-07		515695	End cap, axial ports (SB-1996-005, SB-2002-001)	1
	G12	95-13		515965 (9005110-5600)	Plug	5
	"	92-07	95-12	515965 (9005110-5600)	Plug	7
	G12A	95-13		085043 (9004201-3700)	O-ring	5
	"	92-07	95-12	085043 (9004201-3700)	O-ring	7
	G18	95-13		504519	Plug	2
	"	92-07	95-12	092114 (9007712-0604)	Set screw	2
	G18A	95-13		039297 (9004201-1200)	O-ring	2
	G30	92-07		504519	Plug	2
	G30A	92-07		039297 (9004201-1200)	O-ring	2
	G32	92-07		654053	Screw	4
	G34	92-07		672295	Screw	4
	G36	92-07		071878	O-ring	1
	G50	92-07		001511 (9005100-4400)	Plug	2
	G50A	92-07		001123 (9004201-2500)	O-ring	2
	G60	92-07		501198	End cap gasket (SB-1993-006)	1
	G80	92-07		315325 (9005110-8700)	Plug	1
	G80A	92-07		001149 (9004201-6200)	O-ring	1



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

SIDE PORTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit	
G	F10	96-04		508131	Servo piston seal ring (SB-1997-009)	1	
	F11	96-04		015404	O-ring	1	
	F24	96-04		511118	Feedback lever	1	
	F26	96-04		733089	Set screw	1	
	F28	96-04		010397	Set screw	1	
	F120	96-04		510074	Servo piston assembly	1	
	G10	96-04		508159	End cap, side ports	1	
	G12	96-04		515965 (9005110-5600)	Plug	2	
	G12A	96-04		085043 (9004201-3700)	O-ring	2	
	G32	96-04		654053	Screw	4	
	G34	96-04		672295	Screw	4	
	G36	96-04		071878	O-ring	2	
	G60	96-04		501198	End cap gasket (SB-1993-006)	1	
	G80	96-04		315325 (9005110-8700)	Plug	1	
	G80A	96-04		001149 (9004201-6200)	O-ring	1	
	R	F10	92-07		508131	Servo piston seal ring (SB-1997-009)	1
		F11	92-07		015404	O-ring	1
F12		92-07	92-18	358580	Servo piston	1	
F24		92-07		511118	Feedback lever	1	
F26		92-07		733089	Set screw	1	
F28		92-07		010397	Set screw	1	
F120		92-19		510074	Servo piston assembly	1	
G10		92-07		516057	End cap, side ports (SB-1996-005, SB-2002-001)	1	
G12		95-13		515965 (9005110-5600)	Plug	5	
"		92-07	95-12	515965 (9005110-5600)	Plug	7	
G12A		95-13		085043 (9004201-3700)	O-ring	5	
"		92-07	95-12	085043 (9004201-3700)	O-ring	7	
G18		95-13		504519	Plug	2	
"		92-07	95-12	092114 (9007712-0604)	Set screw	2	
G18A		95-13		039297 (9004201-1200)	O-ring	2	
G30		92-07		504519	Plug	2	
G30A		92-07		039297 (9004201-1200)	O-ring	2	
G32		92-07		654053	Screw	4	
G34		92-07		672295	Screw	4	
G36		92-07		071878	O-ring	1	
G50		92-07		001511 (9005100-4400)	Plug	2	
G50A		92-07		001123 (9004201-2500)	O-ring	2	
G60		92-07		501198	End cap gasket (SB-1993-006)	1	
G80		92-07		315325 (9005110-8700)	Plug	1	
G80A		92-07		001149 (9004201-6200)	O-ring	1	

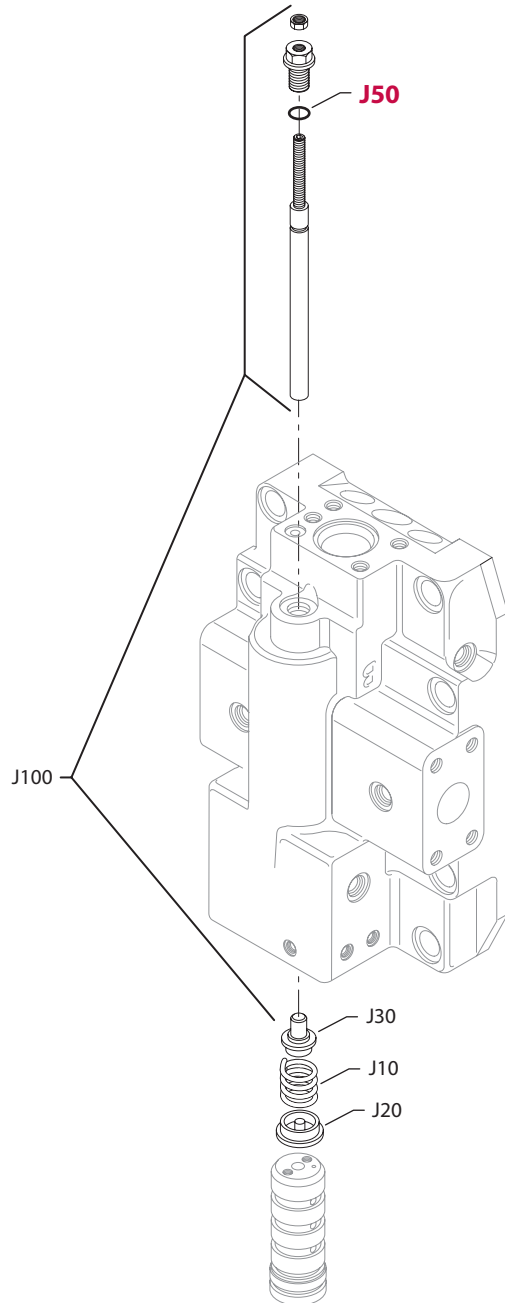


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Enlarged **bold** type item numbers are recommended part to stock for servicing.

SIDE PORTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
V	F10	01-01		508131	Servo piston seal ring	1
	F11	01-01		015404	O-ring	1
	F24	01-01		511118	Feedback lever	1
	F26	01-01		733089	Set screw	1
	F28	01-01		010397	Set screw	1
	F120	01-01		510074	Servo piston assembly	1
	G10	01-01		519526	End cap, metric side ports (SB-2002-001)	1
	G12	01-01		515965 (9005110-5600)	Plug	5
	G12A	01-01		085043 (9004201-3700)	O-ring	5
	G18	01-01		504519	Plug	2
	G18A	01-01		039297 (9004201-1200)	O-ring	2
	G30	01-01		504519	Plug	2
	G30A	01-01		039297 (9004201-1200)	O-ring	2
	G32	01-01		654053	Screw	4
	G34	01-01		672295	Screw	4
	G36	01-01		071878	O-ring	1
	G50	01-01		001511 (9005100-4400)	Plug	2
	G50A	01-01		001123 (9004201-2500)	O-ring	2
	G60	01-01		501198	End cap gasket	1
	G80	01-01		315325 (9005110-8700)	Plug	1
	G80A	01-01		001149 (9004201-6200)	O-ring	1



E100 299E

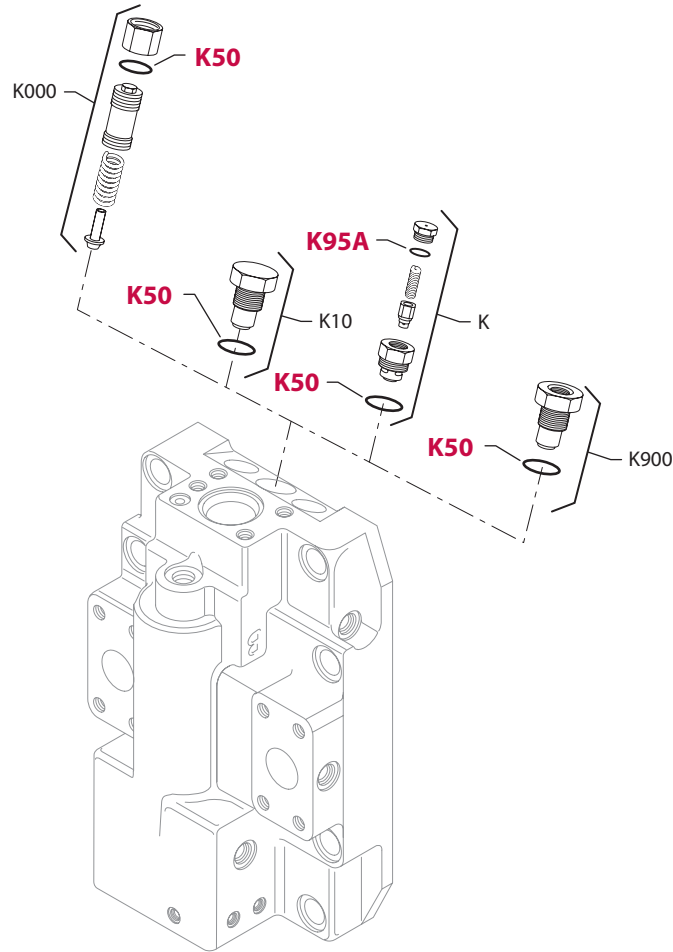
Enlarged **bold** type item numbers are recommended part to stock for servicing.

THRESHOLD/RANGE COMMON PARTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	J20	93-34		501347	Spring seat	1
	"	92-07	93-33	722231	Spring seat - OBSOLETE	1
	J30	96-07		507670	Spring seat (SB-1995-013)	1
	J50	92-07		732479 (9004105-0100)	O-ring	1
	J100	92-07		507691	Threshold adjustment kit (SB-1995-013)	1

MAXIMUM DISPLACEMENT

A	J10	92-07		507638	Spring	1
2-5 bar						
B	J10	92-07		722215	Spring	1
5-12 bar						
C	J10	92-07		722207	Spring	1
12-50 bar						
G	J10	92-07		722207	Spring	1
3-5 bar						
H	J10	92-07		722207	Spring	1
5-8 bar						
J	J10	92-07		722215	Spring	1
15-50 mA						
K	J10	92-07		722207	Spring	1
50-85 mA						
L	J10	92-07		722215	Spring	1
110-370 bar						
N				No parts		
None						
P	J10	95-24		722215	Spring	1
None						
R	J10	99-35		507638	Spring	1
320 mA						
S	J10	99-35		507638	Spring	1
640 mA						
V	J10	95-35		507638	Spring	1
220 mA						
W	J10	97-41		507638	Spring	1
44mA						

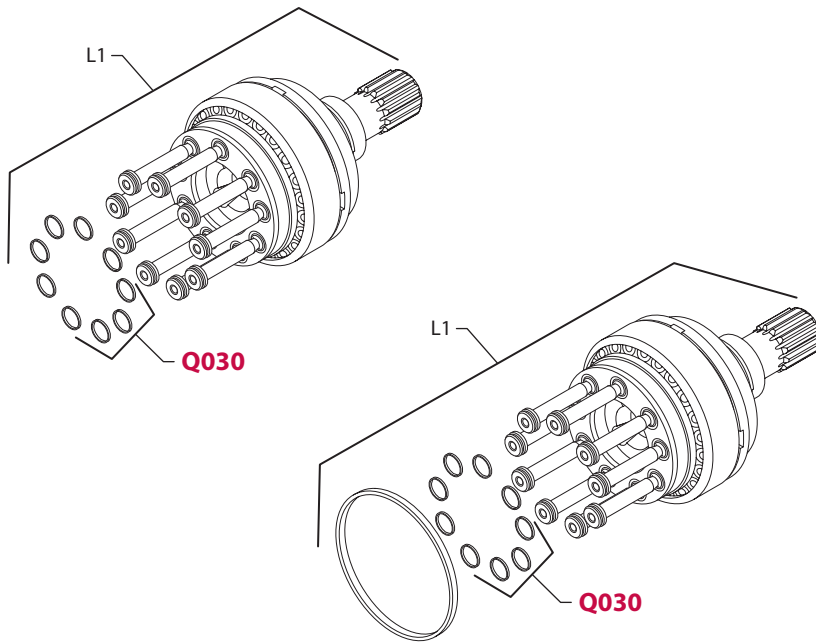
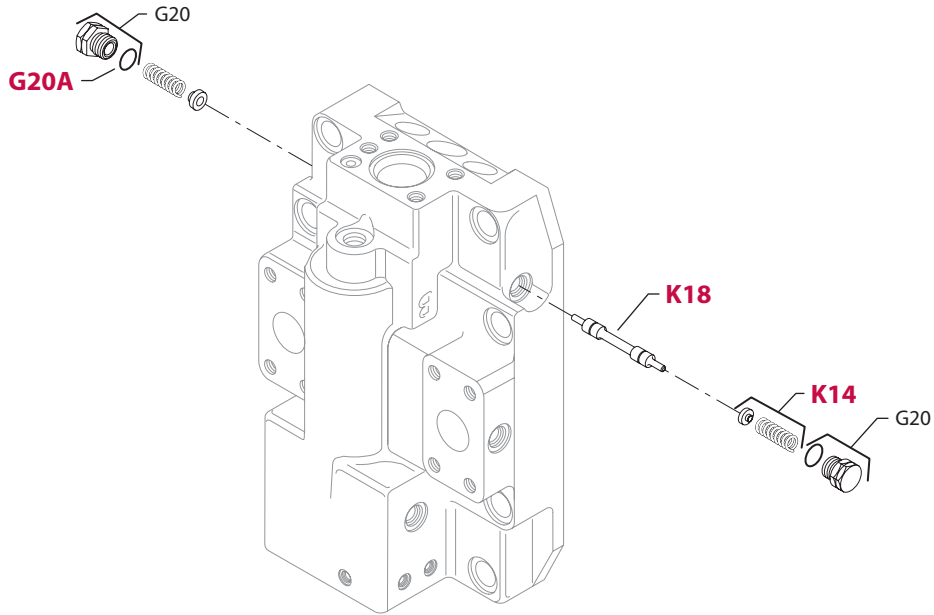


E100 255E

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

CHARGE RELIEF

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
00		92-07	01-18	None		
10-99	K000	92-07	01-17	8510012	Charge relief valve kit	1
	K50	92-07	01-17	001149 (9004201-6200)	O-ring	1
A0	K	97-25		8510253	Cartridge kit, 13 bar, 11 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
A3	K	97-25		8510256	Cartridge kit, 13 bar, 16 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
B0	K	97-25		8510254	Cartridge kit, 13 bar, 22 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
B3	K	97-25		8510243	Cartridge kit, 13 bar, 27 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
E4	K	97-25		8510261	Cartridge kit, 16 bar, 4 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
E6	K	97-25		8510252	Cartridge kit, 16 bar, 7 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
F0	K	97-25		8510259	Cartridge kit, 16 bar, 11 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
F3	K	97-25		8510262	Cartridge kit, 16 bar, 16 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
J4	K900	02-13		518164	Adapter	1
	K50	02-13		001149 (9004201-6200)	O-ring	1
N4	K	97-25		8510255	Cartridge kit, 13 bar, 4 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
N6	K	97-25		8510251	Cartridge kit, 13 bar, 7 l/min	1
	K50	97-25		001149 (9004201-6200)	O-ring	1
	K95A	97-25		085043 (9004201-3700)	O-ring	1
NN	K10	97-25		511826	Plug	1
	K50	97-25		001149 (9004201-6200)	O-ring	1



E100 663E

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

LOOP FLUSHING

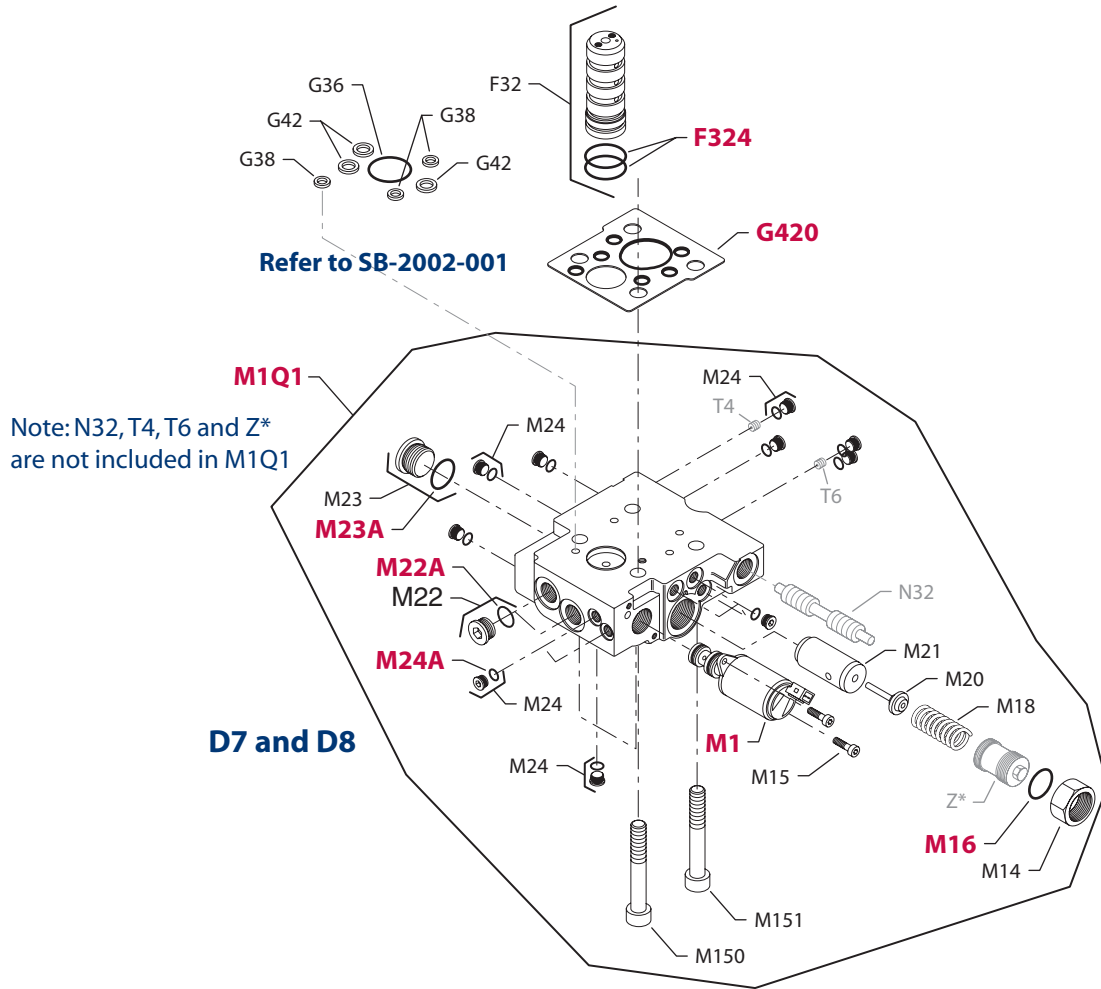
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
AA	G20	92-07		518016	Plug assembly	2
	G20A	92-07		085043 (9004201-3700)	O-ring	2
	K14	92-07		513596	Spring guide assembly (SB-2000-044)	2
	K18	92-07		367789	Shuttle spool	1
NN				No parts		

SHAFT COMMON PARTS

	Q030	92-07		771667	Piston ring kit	1
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SHAFT

C6	L1	92-07		737957	Shaft, 21 tooth spline without speed ring	1
D1	L1	92-07		513034	Shaft, 14 t. spline without speed ring (SB-1999-059)	1
	"	92-07		516816	Shaft, 14 tooth spline with speed ring (SB-1999-059)	1
D2	L1	92-07		513033	Shaft, 16 tooth without speed ring (SB-1999-059)	1
S1	L1	92-07		732685	Shaft, 14 tooth spline without speed ring	1
	"	92-07		513025	Shaft, 14 tooth spline with speed ring	1

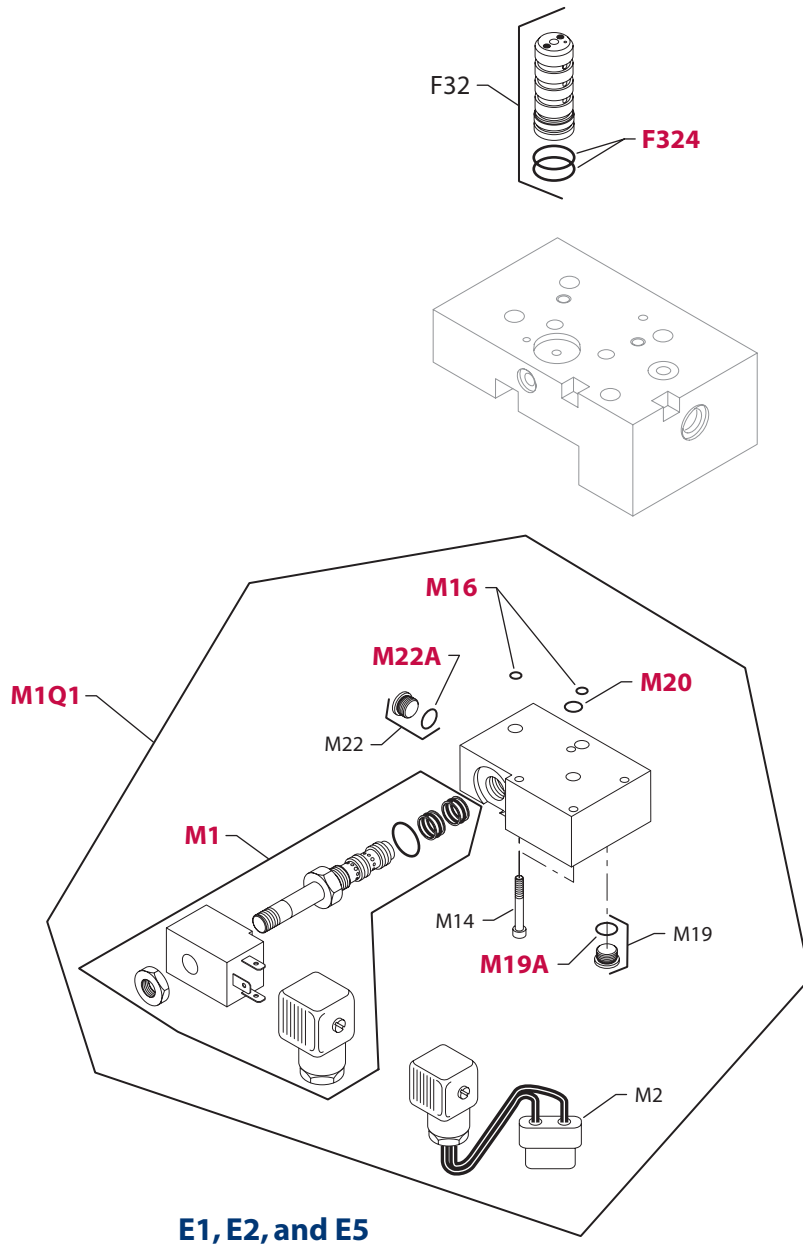


E100 655E

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

SOLENOID PROPORTIONAL

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
D7 & D8	F32	99-35		727115	4-way valve assembly	1
	F324	99-35		730036	O-ring	2
	G36	99-35	03-07	364968	O-ring (SB-2002-001) <i>not included in M1Q1</i>	1
	G38	99-35	03-07	792739	O-ring (SB-2002-001) <i>not included in M1Q1</i>	3
	G42	99-35	03-07	754580	O-ring (SB-2002-001) <i>not included in M1Q1</i>	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001) <i>not included in M1Q1</i>	1
(D7)	M1	99-35		518080	Solenoid valve, 12 volt, Jet connector	1
(D8)	M1	99-35		518081	Solenoid valve, 24 volt, Jet connector	1
(D7)	M1Q1	99-35		518257	Control kit, 12 volt, Jet connector	1
(D8)	M1Q1	99-35		518256	Control kit, 24 volt, Jet connector	1
	M14	99-35		342709	Nut	1
	M15	99-35		067694	Screw	2
	M16J	99-35		001149 (9004201-6200)	O-ring	1
	M18	99-35		509152	Spring	1
	M20	99-35		501876	PCOR spool	1
	M21	99-35		501885	PCOR valve bushing	1
	M22	99-35		515965 (9005110-5600)	Plug	2
	M22A	99-35		085043 (9004201-3700)	O-ring	2
	M23	99-35		315325	Plug	1
	M23A	99-35		001149 (9004201-6200)	O-ring	1
	M24	99-35		504519	Plug	15
	M24	99-35		039297 (9004201-1200)	O-ring	15
	M150	99-35		739664	Screw	2
	M151	99-35		680686	Screw	2

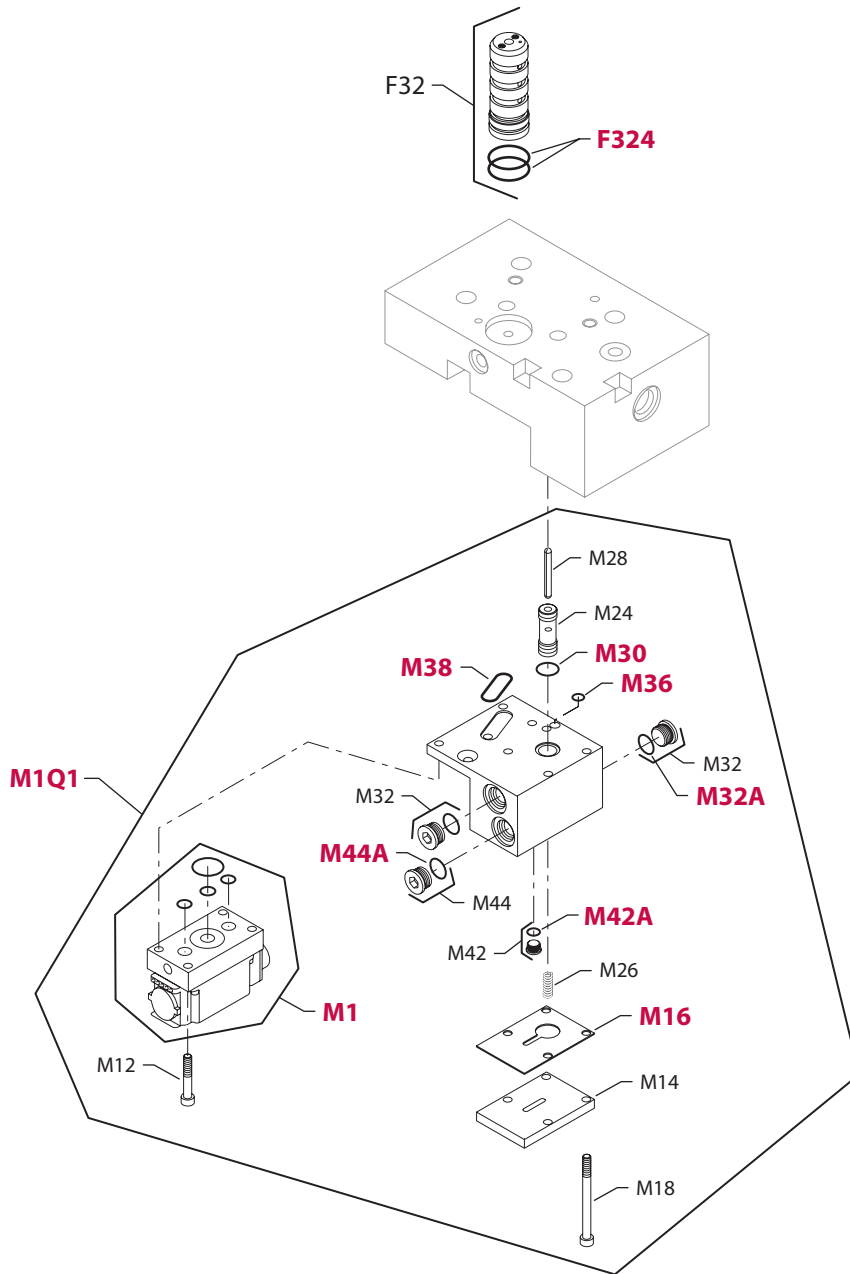


E100 257E

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

ELECTRIC 2-POSITION

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
E1	F32	92-07		727115	4-way valve assembly	1
	F324	92-07		730036	O-ring	2
	M1	92-07		784942	Solenoid valve, 12 volt, DIN connector	1
	M1Q1	92-07		503618	Control kit, 12 volt, DIN connector	1
	M14	92-07		329599	Screw	4
	M16	92-07		732479 (9004105-0100)	O-ring	2
	M19	92-07		515965 (9005110-5600)	Plug	1
	M19A	92-07		085043 (9004201-3700)	O-ring	1
	M20	92-07		365015	O-ring	1
	M22	92-07		515965 (9005110-5600)	Plug	1
	M22A	92-07		085043 (9004201-3700)	O-ring	1
	E2	F32	92-07		727115	4-way valve assembly
F324		92-07		730036	O-ring	2
M1		92-07		784934	Solenoid valve, 24, volt, DIN connector	1
M1Q1		92-07		503617	Control kit, 24 volt, DIN connector	1
M14		92-07		329599	Screw	4
M16		92-07		732479 (9004105-0100)	O-ring	2
M19		92-07		515965 (9005110-5600)	Plug	1
M19A		92-07		085043 (9004201-3700)	O-ring	1
M20		92-07		365015	O-ring	1
M22		92-07		515965 (9005110-5600)	Plug	1
M22A		92-07		085043 (9004201-3700)	O-ring	1
E5		F32	92-07		727115	4-way valve assembly
	F324	92-07		730036	O-ring	2
	M1	92-07		784942	Solenoid valve, 12 volt, DIN connector	1
	M2	92-07		770115	Packard adapter	1
	M1Q1	92-07		503619	Control kit, 12 volt, with Packard adapter	1
	M14	92-07		329599	Screw	4
	M16	92-07		732479 (9004105-0100)	O-ring	2
	M19	92-07		515965 (9005110-5600)	Plug	1
	M19A	92-07		085043 (9004201-3700)	O-ring	1
	M20	92-07		365015	O-ring	1
	M22	92-07		515965 (9005110-5600)	Plug	1
	M22A	92-07		085043 (9004201-3700)	O-ring	1



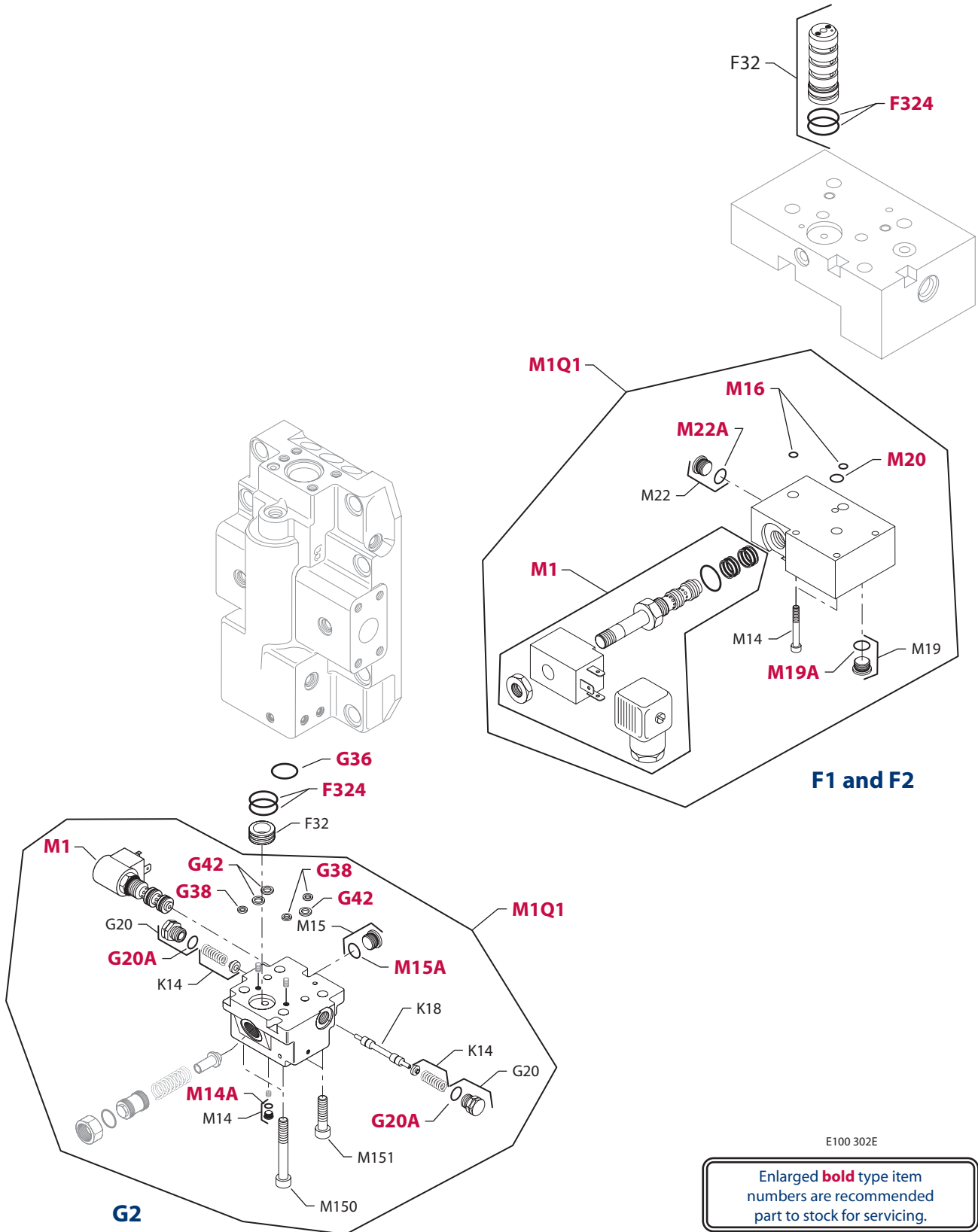
EP, EQ, ER and ES

E100 258E

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

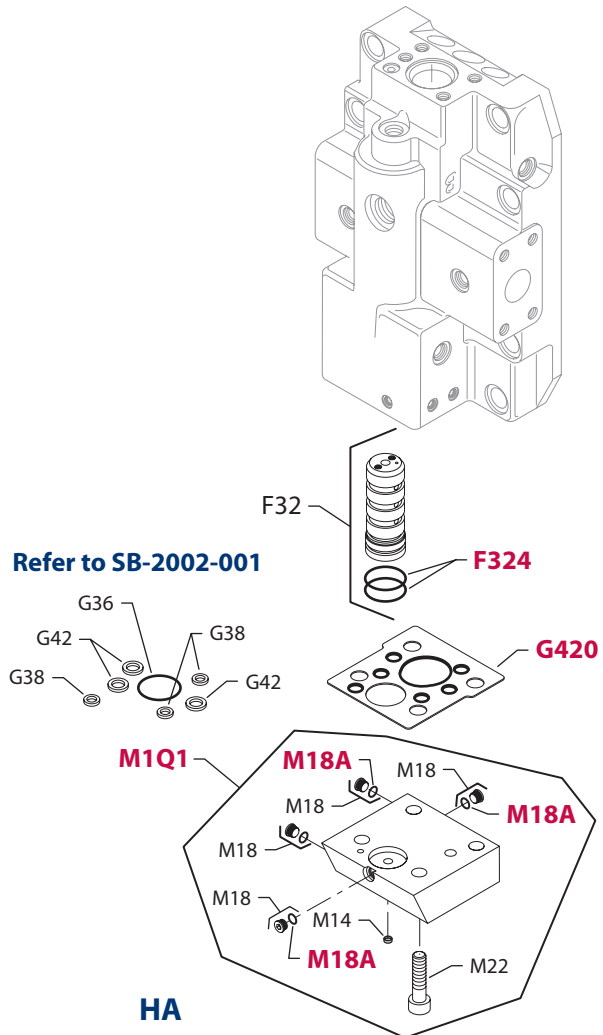
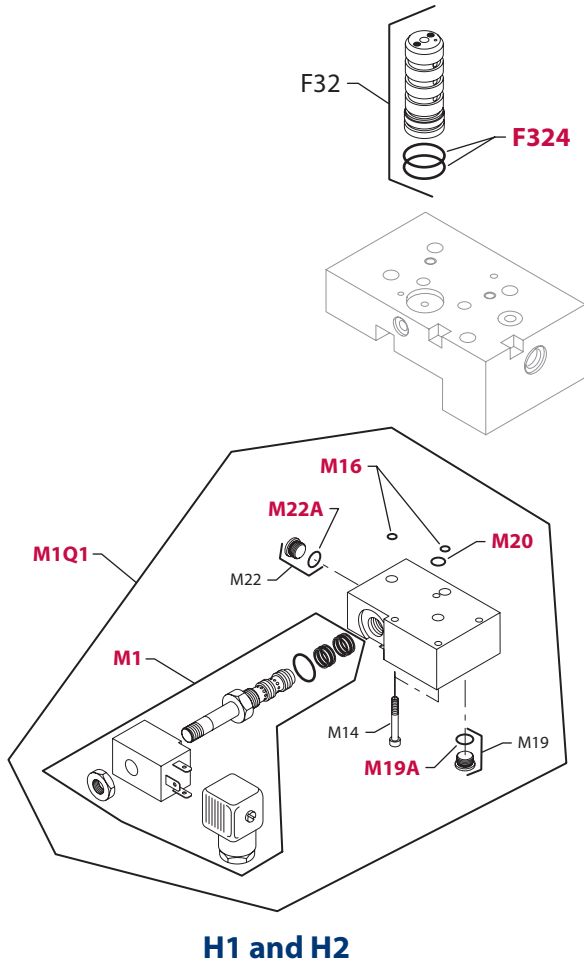
ELECTRIC-HYDRAULIC PROPORTIONAL

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	F32	92-07		753186	4-way valve assembly	1
	F324	92-07		730036	O-ring	2
	M12	92-07		067678 (9007315-0504)	Screw	4
	M14	92-07		751883	Cover	1
	M16	92-07		504358	Gasket	1
	M18	92-07		771832	Screw	4
	M24	92-07		741942	Piston	1
	M26	92-07		717454	Spring	1
	M28	92-07		742320	Pin	1
	M30	92-07		056770 (9004105-0150)	O-ring	1'
	M32	92-07		515965 (9005110-5600)	Plug	2
	M32A	92-07		085043 (9004201-3700)	O-ring	2
	M36	92-07		732479 (9004105-0100)	O-ring	1
	M38	92-07		011395 (9004104-0230)	O-ring	1
	M42	92-07		504519	Plug	1
	M42A	92-07		039297 (9004201-1200)	O-ring	1
EP	M1	92-07		731109 (MCV110A1058)	PCP, Packard connector	1
	M1Q1	92-07		503791	Control kit, Packard connector	1
EQ	M1	92-07		701417 (MCV110A1017)	PCP, MS connector	1
	M1Q1	92-07		503790	Control kit, MS connector	1
ER	M1	95-17		731109 (MCV110A1058)	PCP, Packard connector	1
	M1Q1	95-17		507391	Control kit, Packard connector	1
	M44	95-17		515965 (9005110-5600)	Plug	1
	M44A	95-17		085043 (9004201-3700)	O-ring	1
ES	M1	95-17		701417 (MCV110A1017)	PCP, MS connector	1
	M1Q1	95-17		507393	Control kit, MS connector	1
	M44	95-17		515965 (9005110-5600)	Plug	1
	M44A	95-17		085043 (9004201-3700)	O-ring	1



ELECTRIC/HYDRAULIC 2-POSITION

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
F1	F32	92-07		500820	4-way valve assembly	1
	F324	92-07		730036	O-ring	2
	M1	92-07		784942	Solenoid valve, 12 volt, DIN connector	1
	M1Q1	92-07		503618	Control kit, 12 volt, DIN connector	1
	M14	92-07		329599 (9007315-0508)	Screw	4
	M16	92-07		732479 (9004105-0100)	O-ring	2
	M19	92-07		515965 (9005110-5600)	Plug	1
	M19A	92-07		085043 (9004201-3700)	O-ring	1
	M20	92-07		365015	O-ring	1
	M22	92-07		515965 (9005110-5600)	Plug	1
	M22A	92-07		085043 (9004201-3700)	O-ring	1
	F2	F32	92-07		500820	4-way valve assembly
F324		92-07		730036	O-ring	2
M1		92-07		784934	Solenoid valve, 24 volt, DIN connector	1
M1Q1		92-07		503617	Control kit, 24 volt, DIN connector	1
M14		92-07		329599 (9007315-0508)	Screw	4
M16		92-07		732479 (9004105-0100)	O-ring	2
M19		92-07		515965 (9005110-5600)	Plug	1
M19A		92-07		085043 (9004201-3700)	O-ring	1
M20		92-07		365015	O-ring	1
M22		92-07		515965 (9005110-5600)	Plug	1
M22A		92-07		085043 (9004201-3700)	O-ring	1
G2		F32	96-20		509723	4-way valve assembly
	F324	96-20		730036	O-ring	2
	G20	96-20		518016	Plug	2
	G20A	96-20		085043 (9004201-3700)	O-ring	2
	G36	96-20		364968	O-ring	1
	G38	96-20		792739	O-ring	3
	G42	96-20		754580	O-ring	3
	K14	96-20		513596	Spring guide assembly	2
	K18	96-20		502398	Spool	1
	M1	96-20		502114	Solenoid valve, 24 volt, DIN connector	1
	M1Q1	96-20		507132	Control kit, 24 volt, DIN connector	1
	M14	96-20		504519	Plug	1
	M14A	96-20		039297 (9004201-1200)	O-ring	1
	M15	96-20		515965 (9005110-5600)	Plug	1
	M15A	96-20		085043 (9004201-3700)	O-ring	1
	M150	96-20		502580	Screw	2
	M151	96-20		732982	Screw	2



E100 260 E

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

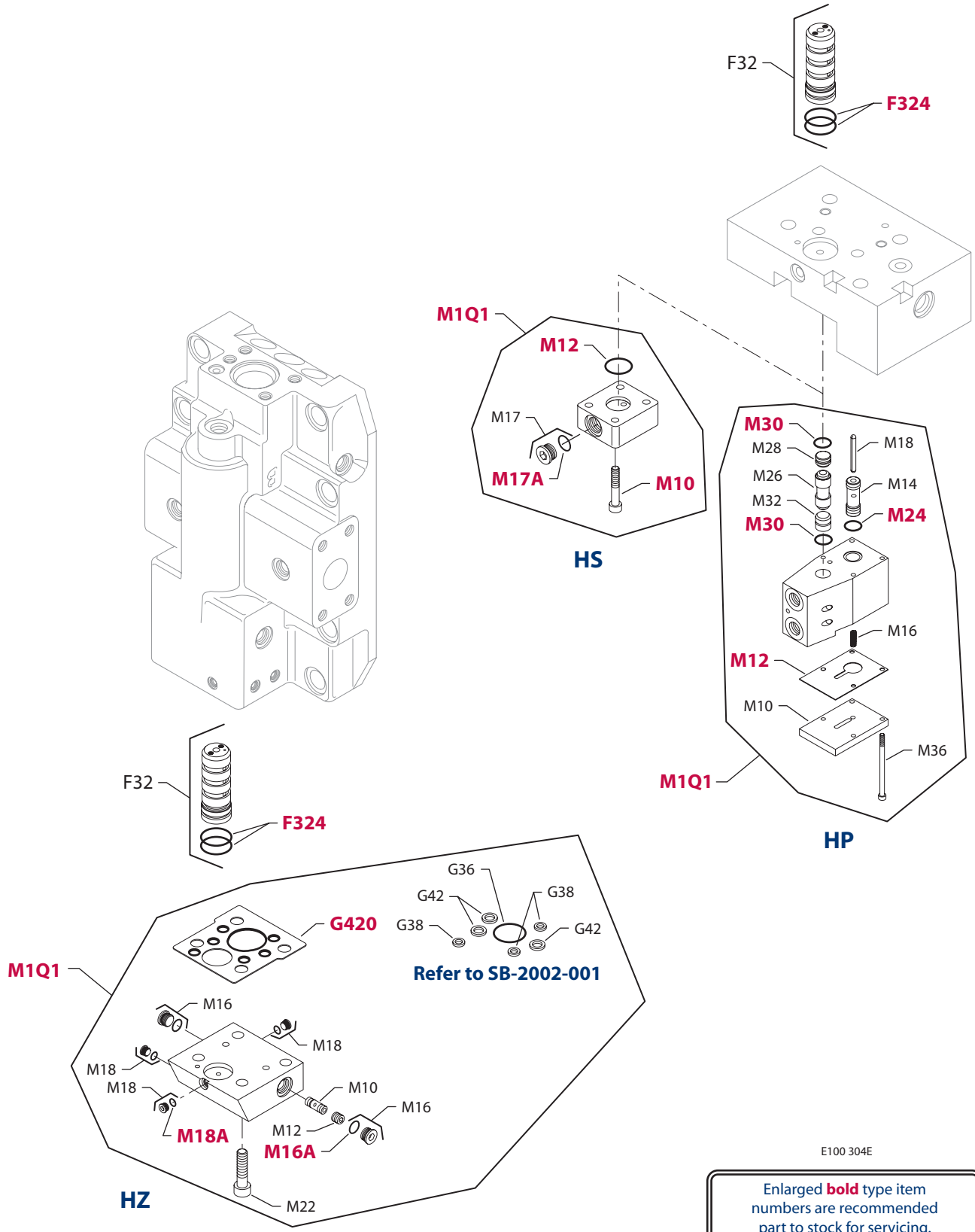
HYDRAULIC PROPORTIONAL WITH ELECTRIC OVERRIDE

H1	F32	92-07		727115	4-way valve assembly	1
	F324	92-07		730036	O-ring	2
	M1	92-07		784942	Solenoid valve, 12 volt, DIN connector	1
	M1Q1	92-07		503613	Control kit, 12 volt, DIN connector	1
	M14	92-07		329599 (9007315-0508)	Screw	4
	M16	92-07		732479 (9004105-0100)	O-ring	2
	M19	92-07		515965 (9005110-5600)	Plug	1
	M19A	92-07		085043 (9004201-3700)	O-ring	1
	M20	92-07		365015	O-ring	1

H2	F32	92-07		727115	4-way valve assembly	1
	F324	92-07		730036	O-ring	2
	M1	92-07		784934	Solenoid valve, 24 volt, DIN connector	1
	M1Q1	92-07		503614	Control kit, 24 volt, DIN connector	1
	M14	92-07		329599 (9007315-0508)	Screw	4
	M16	92-07		732479 (9004105-0100)	O-ring	2
	M19	92-07		515965 (9005110-5600)	Plug	1
	M19A	92-07		085043 (9004201-3700)	O-ring	1
	M20	92-07		365015	O-ring	1

HYDRAULIC PROPORTIONAL

HA	F32	94-12		727115	4-way valve assembly	1
	F324	94-12		730036	O-ring	2
	G36	94-12	03-07	364968	O-ring (SB-2002-001) <i>not included in M1Q1</i>	1
	G38	94-12	03-07	792739	O-ring (SB-2002-001) <i>not included in M1Q1</i>	3
	G42	94-12	03-07	754580	O-ring (SB-2002-001) <i>not included in M1Q1</i>	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001) <i>not included in M1Q1</i>	1
	M1Q1	94-12		507504	Control kit	1
	M18	94-12		504519	Plug	4
	M18A	94-12		039297 (9004201-1200)	O-ring	4
	M22	94-12		732982 (9007314-1009)	Screw	4

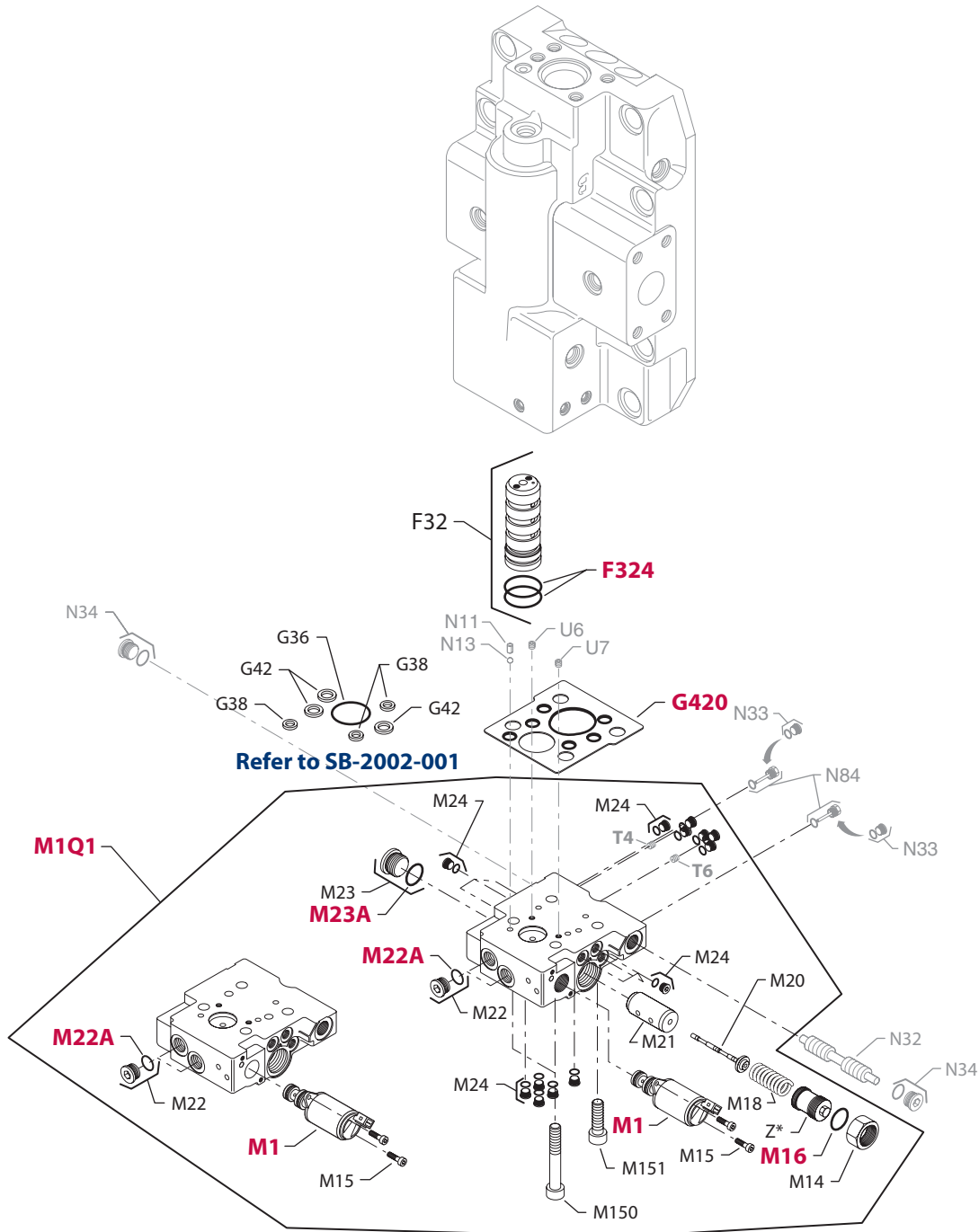


E100 304E

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

HYDRAULIC PROPORTIONAL

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
HP	F32	92-07		753186	4-way valve assembly	1
	F324	92-07		730036	O-ring	2
	M1Q1	92-07		796482	Control kit	1
	M10	92-07		751883	Cover	1
	M12	92-07		504358	Gasket	1
	M14	92-07		741942	Shuttle piston	1
	M16	92-07		717454	Spring	1
	M18	92-07		742320	Pin	1
	M24	92-07		056770	O-ring	1
	M26	92-07		751644	Shuttle valve	1
	M28	92-07		342246	Sealing plug	1
	M30	92-07		011296 (9004105-0120)	O-ring	2
	M32	92-07		353615	Sealing plug	1
	M36	92-07		771832	Screw	4
HS	F32	92-07		727115	4-way valve assembly	1
	F324	92-07		730036	O-ring	2
	M1Q1	92-07		503804	Control kit	1
	M10	92-07		124115	Screw	4
	M17	92-07		515965 (9005110-5600)	Plug	1
	M17A	92-07		085043 (9004201-3700)	O-ring	1
	HZ	F32	92-07		727115	4-way valve assembly
F324		92-07		730036	O-ring	2
G36		92-07	03-07	364968	O-ring (SB-2002-001)	1
G38		92-07	03-07	792739	O-ring (SB-2002-001)	3
G42		92-07	03-07	754580	O-ring (SB-2002-001)	3
G420		03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
M1Q1		92-07		503563	Control kit (SB-2002-001)	1
M10		92-07		759415	Spool valve	1
M12		92-07		759423	Orifice	1
M16		92-07		515965 (9005110-5600)	Plug	2
M16A		92-07		085043 (9004201-3700)	O-ring	2
M18		92-07		504519	Plug	3
M18A		92-07		039297 (9004201-1200)	O-ring	3
M22		92-07		290502	Screw	4



Note: T4, T6 and Z* are not included in M1Q1

E100 305E

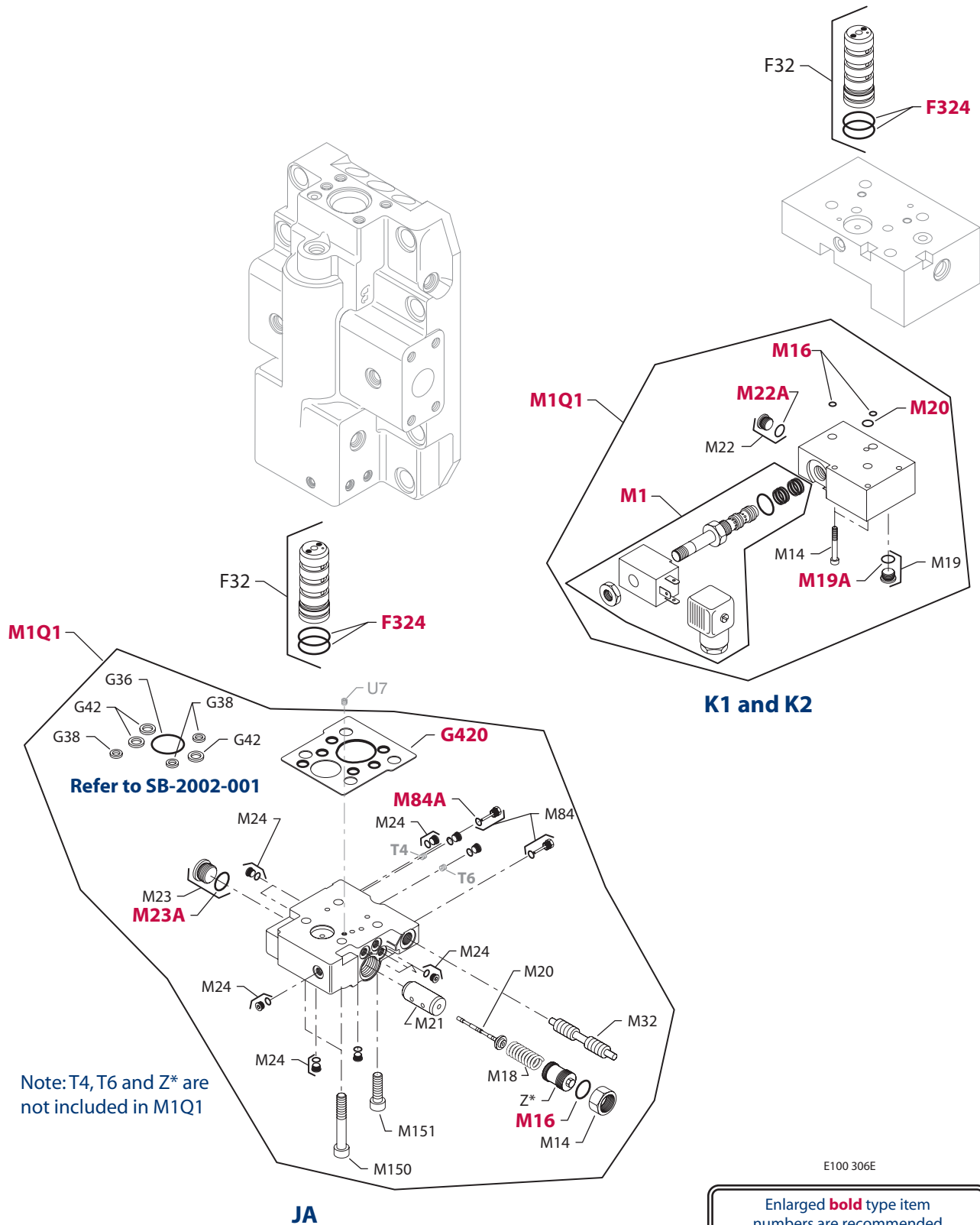
Enlarged **bold** type item numbers are recommended part to stock for servicing.

HYDRAULIC PROPORTIONAL WITH ELECTRIC OVERRIDE COMMON PARTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	F32	94-47		727115	4-way valve assembly	1
	F324	94-47		730036	O-ring	2
	G36	94-47	03-07	364968	O-ring (SB-2002-001) <i>not included in M1Q1</i>	1
	G38	94-47	03-07	792739	O-ring (SB-2002-001) <i>not included in M1Q1</i>	3
	G42	94-47	03-07	754580	O-ring (SB-2002-001) <i>not included in M1Q1</i>	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001) <i>not included in M1Q1</i>	1
	M14	94-47		342709 (9003575-0101)	Nut	1
	M16	94-47		001149 (9004201-6200)	O-ring	1
	M18	94-47		509152	Spring	1
	M20	94-47		746016	PCOR spool assembly	1
	M21	94-47		732081	PCOR valve bushing	1
	M23	94-47		315325 (9005110-8700)	Plug	1
	M23A	94-47		001149 (9004201-6200)	O-ring	1
	M150	94-47		739664	Screw	2
	M151	94-47		680686	Screw	2
	Z*	94-47		745661	Adjuster, 100-260 bar	1
	"	94-47		745679	Adjuster, 270-370 bar	1

HYDRAULIC PROPORTIONAL WITH ELECTRIC OVERRIDE

J1	M1	94-47		784942	Solenoid valve, 12 volt, DIN connector	1
	M1Q1	94-47		518230	Control kit, 12 volt, DIN connector	1
	M22	94-47		515965 (9005110-5600)	Plug	1
	M22A	94-47		085043 (9004201-3700)	O-ring	1
	M24	94-47		504519	Plug	21
	M24A	94-47		039297 (9004201-1200)	O-ring	21
J2	M1	98-20		784934	Solenoid valve, 24 volt, DIN connector	1
	M1Q1	98-20		518238	Control kit, 24 volt, DIN connector	1
	M22	98-20		515965 (9005110-5600)	Plug	1
	M22A	98-20		085043 (9004201-3700)	O-ring	1
	M24	98-20		504519	Plug	21
	M24A	98-20		039297 (9004201-1200)	O-ring	21
J3	M1	96-48		518079	Solenoid valve, 12 volt, Jet connector	1
	M1Q1	96-48		507725	Control kit, 12 volt, Jet connector	1
	M15	96-48		067694	Screw	2
	M22	96-48		515965 (9005110-5600)	Plug	2
	M22A	96-48		085043 (9004201-3700)	O-ring	2
	M24	96-48		504519	Plug	17
	M24A	96-48		039297 (9004201-1200)	O-ring	17



E100 306E

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

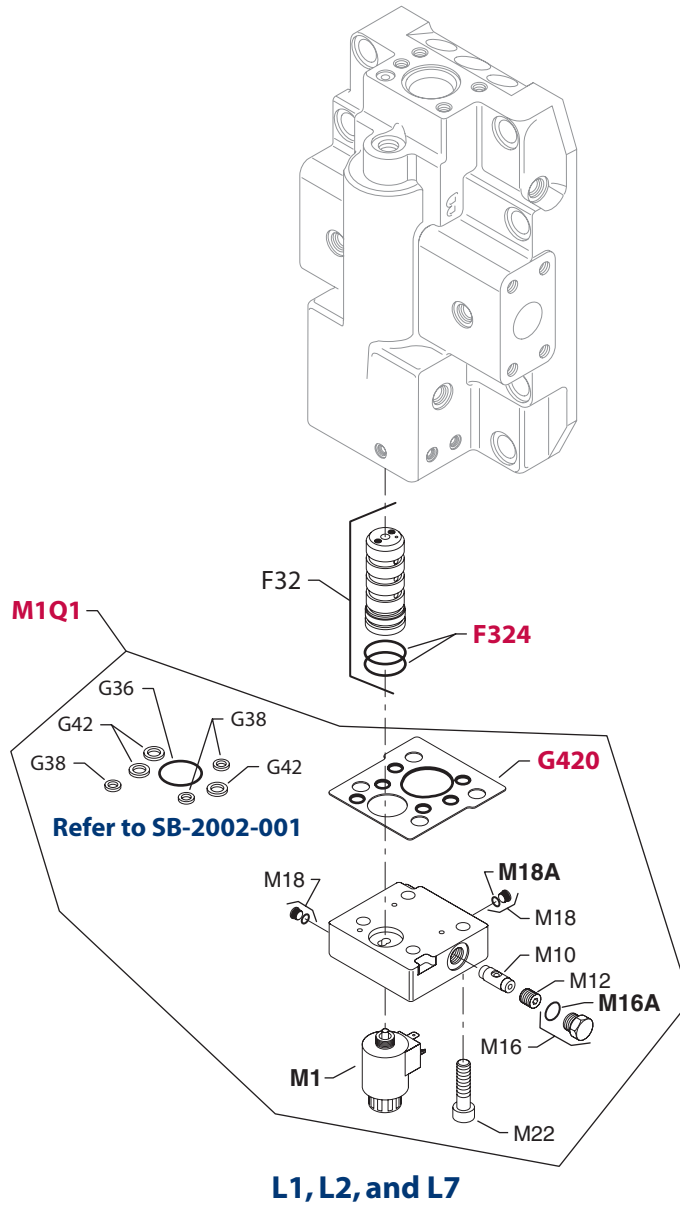
HYDRAULIC PROPORTIONAL

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
JA	F32	95-50		727115	4-way valve assembly	1
	F324	95-50		730036	O-ring	2
	G36	95-50	03-07	364968	O-ring (SB-2002-001)	1
	G38	95-50	03-07	792739	O-ring (SB-2002-001)	3
	G42	95-50	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	M1Q1	95-50		510264	Control kit	1
	M14	95-50		342709 (9003575-0101)	Nut	1
	M16	95-50		001149 (9004201-6200)	O-ring	1
	M18	95-50		509152	Spring	1
	M20	95-50		501876	PCOR spool assembly	1
	M21	95-50		501885	PCOR valve bushing	1
	M23	95-50		315325 (9005110-8700)	Plug	1
	M23A	95-50		001149 (9004201-6200)	O-ring	1
	M24	95-50		504519	Plug	11
	M24A	95-50		039297 (9004201-1200)	O-ring	11
	M32	95-50		346080	Spool	1
	M84	95-50		735266	Plug assembly	2
	M84A	95-50		039297 (9004201-1200)	O-ring	2
	M150	95-50		739664	Screw	2
	M151	95-50		680686	Screw	2
	Z*	95-50		745661	Adjuster, 100-260 bar	1
	"	95-50		745679	Adjuster. 270-370 bar	1

HYDRAULIC PROPORTIONAL WITH ELECTRIC OVERRIDE

K1	F32	91-35		727115	4-way valve assembly	1
	F324	91-35		730036	O-ring	2
	M1	91-35		784942	Solenoid valve, 12 volt, DIN connector	1
	M1Q1	91-35		503620	Control kit, 12 volt, DIN connector	1
	M14	91-35		329599	Screw	4
	M16	91-35		732479 (9004105-0100)	O-ring	2
	M19	91-35		515965 (9005110-5600)	Plug	1
	M19A	91-35		085043 (9004201-3700)	O-ring	1
	M20	91-35		365015	O-ring	1

K2	F32	91-35		727115	4-way valve assembly	1
	F324	91-35		730036	O-ring	2
	M1	91-35		784934	Solenoid valve, 24 volt, DIN connector	1
	M1Q1	91-35		503806	Control kit, 24 volt, DIN connector	1
	M14	91-35		329599	Screw	4
	M16	91-35		732479 (9004105-0100)	O-ring	2
	M19	91-35		515965 (9005110-5600)	Plug	1
	M19A	91-35		085043 (9004201-3700)	O-ring	1
	M20	91-35		365015	O-ring	1



E100 307E

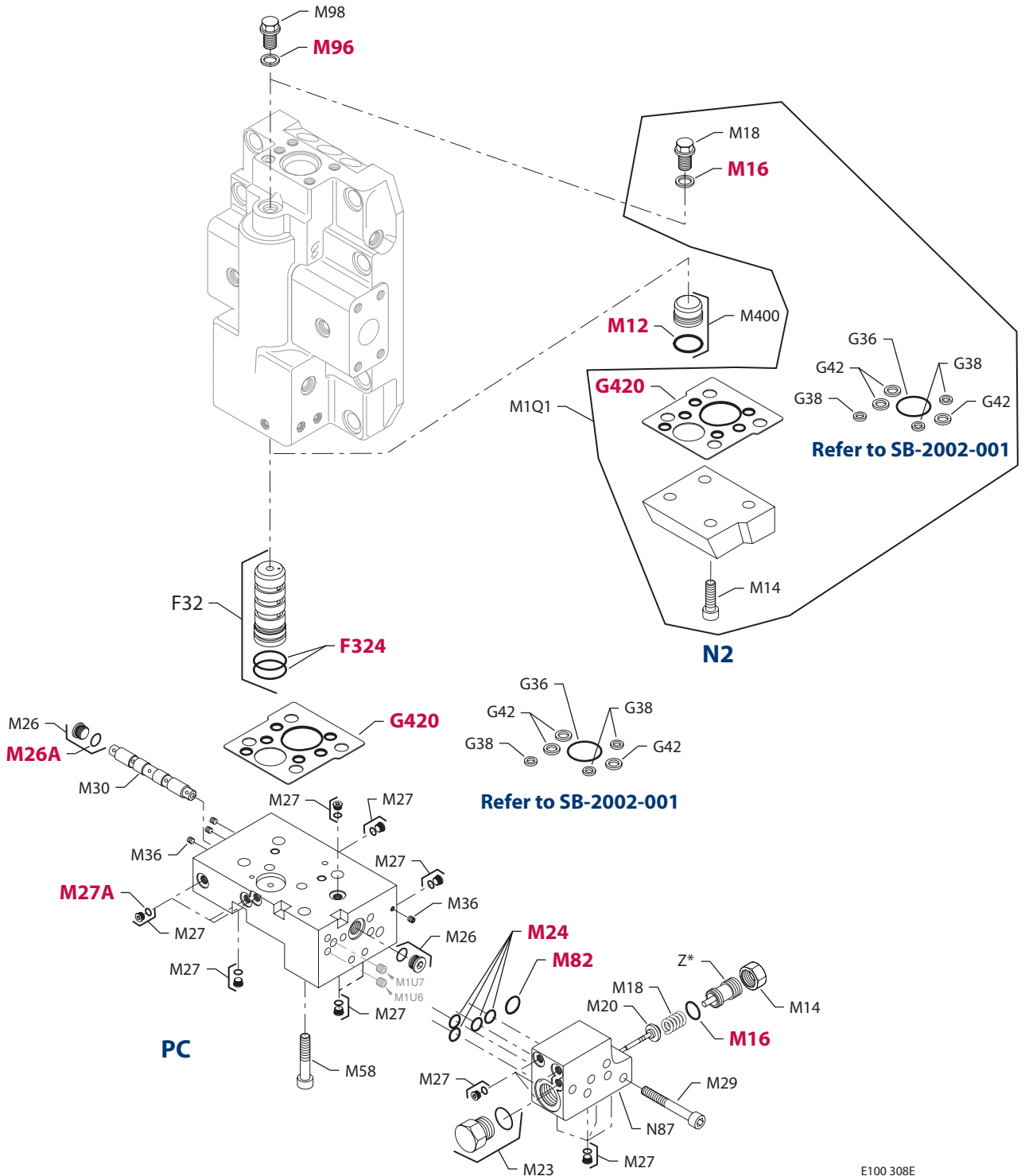
Enlarged **bold** type item numbers are recommended part to stock for servicing.

SOLENOID PROPORTIONAL COMMON PARTS

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	F32	95-35		509845	4-way valve assembly	1
	F324	95-35		730036	O-ring	2
	G36	95-35	03-07	364968	O-ring (SB-2002-001)	1
	G38	95-35	03-07	792739	O-ring (SB-2002-001)	3
	G42	95-35	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	M10	95-35		759415	Spool	1
	M12	95-35		759423	Orifice	1
	M16	95-35		515965 (9005110-5600)	Plug	1
	M16A	95-35		085043 (9004201-3700)	O-ring	1
	M18	95-35		504519	Plug	2
	M18A	95-35		039297 (9004201-1200)	O-ring	2
	M22	95-35		727586 (9007314-1008)	Screw	4

SOLENOID PROPORTIONAL

L1	M1	95-35		509712	Solenoid, 12 volt, DIN connector	1
	M1Q1	95-35		509827	Control kit, 12 volt, DIN connector	1
L2	M1	95-35		509713	Solenoid, 24 volt, DIN connector	1
	M1Q1	95-35		509839	Control kit, 24 volt, DIN connector	1
L3	M1	01-19		517567	Solenoid, 12 volt, Deutsch connector	1
	M1Q1	01-19		517566	Control kit, 12 volt, Deutsch connector	1
L7	M1	96-24		509706	Solenoid, 12 volt, Jet connector	1
	M1Q1	96-24		509841	Control kit, 12 volt, Jet connector	1



E100 308E

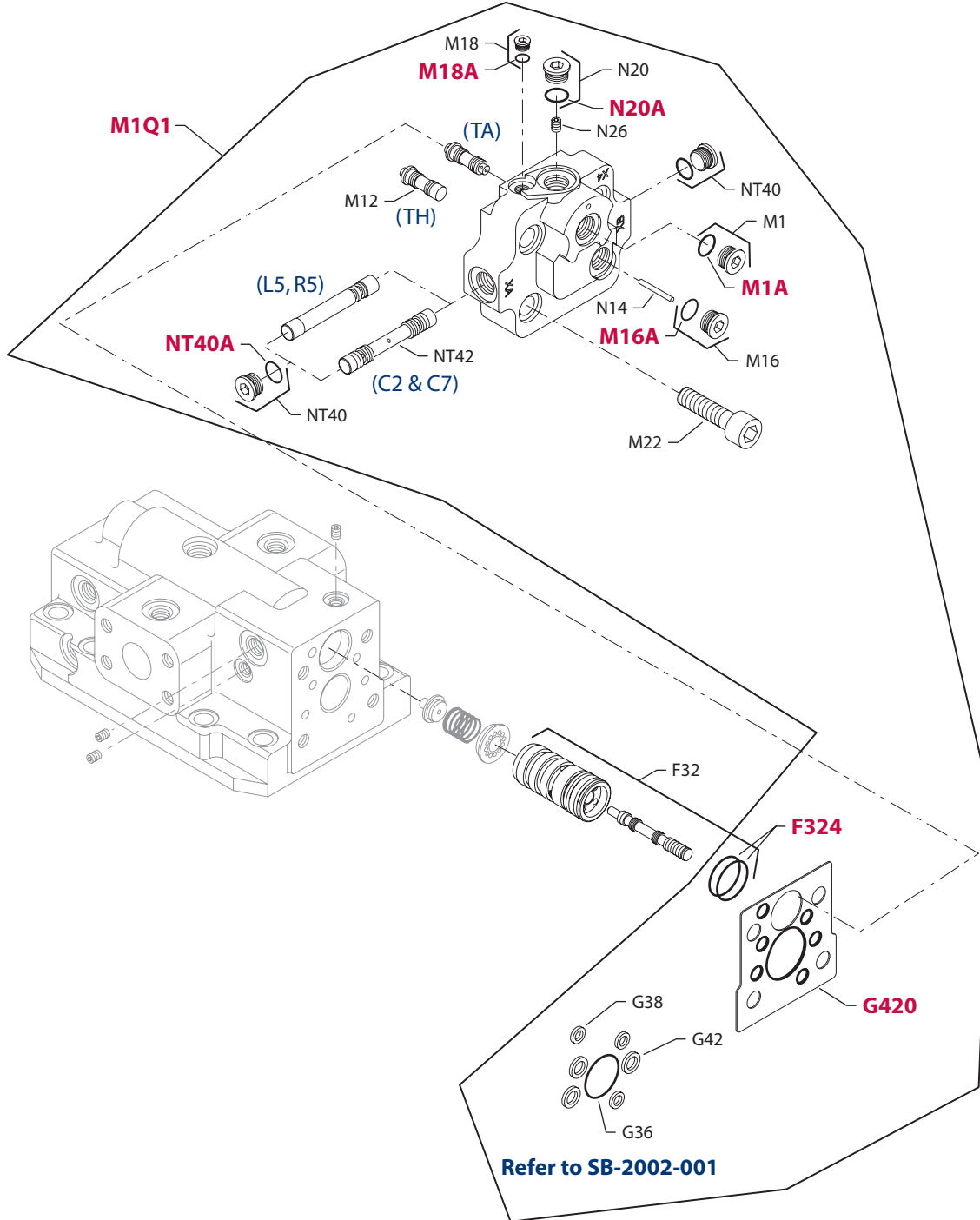
Enlarged **bold** type item numbers are recommended part to stock for servicing.

HYDRAULIC 2-POSITION

N2	G36	92-07	03-07	364968	O-ring (SB-2002-001)	1
	G38	92-07	03-07	792739	O-ring (SB-2002-001)	3
	G42	92-07	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	M1Q1	92-07		503807	Control kit	1
	M12	92-07		730036	O-ring	1
	M400	92-07		510415	Sleeve assembly	1
	M14	92-07		727586	Screw	4
	M16	92-07		084673	Sealing ring	2
	M18	92-07		745331	Plug	1

PRESSURE COMPENSATOR

PC	F32	92-07		510416	4-way valve assembly	1
	F324	92-07		730036	O-ring	2
	G36	92-07	03-07	364968	O-ring (SB-2002-001)	1
	G38	92-07	03-07	792739	O-ring (SB-2002-001)	3
	G42	92-07	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	M14	92-07		342709 (9003575-0101)	Nut	1
	M16	92-07		001149 (9004201-6200)	O-ring	1
	M18	92-07		509152	Spring	1
	M20	92-07		746016	Relief valve	1
	M23	92-07		315325 (9005110-8700)	Plug	1
	M23A	92-07		001149 (9004201-6200)	O-ring	1
	M24	92-07		732479 (9004105-0100)	O-ring	4
	M26	92-07		515965 (9005110-5600)	Plug	2
	M26A	92-07		085043 (9004201-3700)	O-ring	2
	M27	92-07		504519	Plug	16
	M27A	92-07		039297 (9004201-1200)	O-ring	16
	M29	92-07		713719 (9007314-0610)	Screw	4
	M30	92-07		718833	Shuttle valve assembly	1
	M36	92-07		092114 (9007712-0604)	Set screw	4
	M58	92-07		732982 (9007314-1009)	Screw	4
	M82	92-07		732479 (9004105-0100)	O-ring	1
	M96	92-07		084673	Sealing ring	1
	M98	92-07		745331	Plug	1
	N87	92-07		503887	PCOR housing assembly	1
	Z*	92-07		745661	Adjuster, 100-260 bar	1
	"	92-07		745649	Adjuster, 270-370 bar	1



E100 334E

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

PRESSURE COMPENSATOR AND HYDRAULIC 2-POSITION WITH PRESSURE COMPENSATOR

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	F32	97-02		503380	4-way valve assembly	1
	F324	97-02		730036	O-ring	2
	G36	97-02	03-07	364968	O-ring (SB-2002-001)	1
	G38	97-02	03-07	792739	O-ring (SB-2002-001)	3
	G42	97-02	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
TA	M1	97-02		515965 (9005110-5600)	Plug	1
TA	M1A	97-02		085043 (9004201-3700)	O-ring	1
TA	M12	97-02		503192	Piston	1
TH	M12	97-02		503194	Piston	1
	M16	97-02		515965 (9005110-5600)	Plug	1
	M16A	97-02		085043 (9004201-3700)	O-ring	1
	M18	97-02		504519	Plug	1
	M18A	97-02		039297 (9004201-1200)	O-ring	1
	M22	97-02		732982	Screw	4

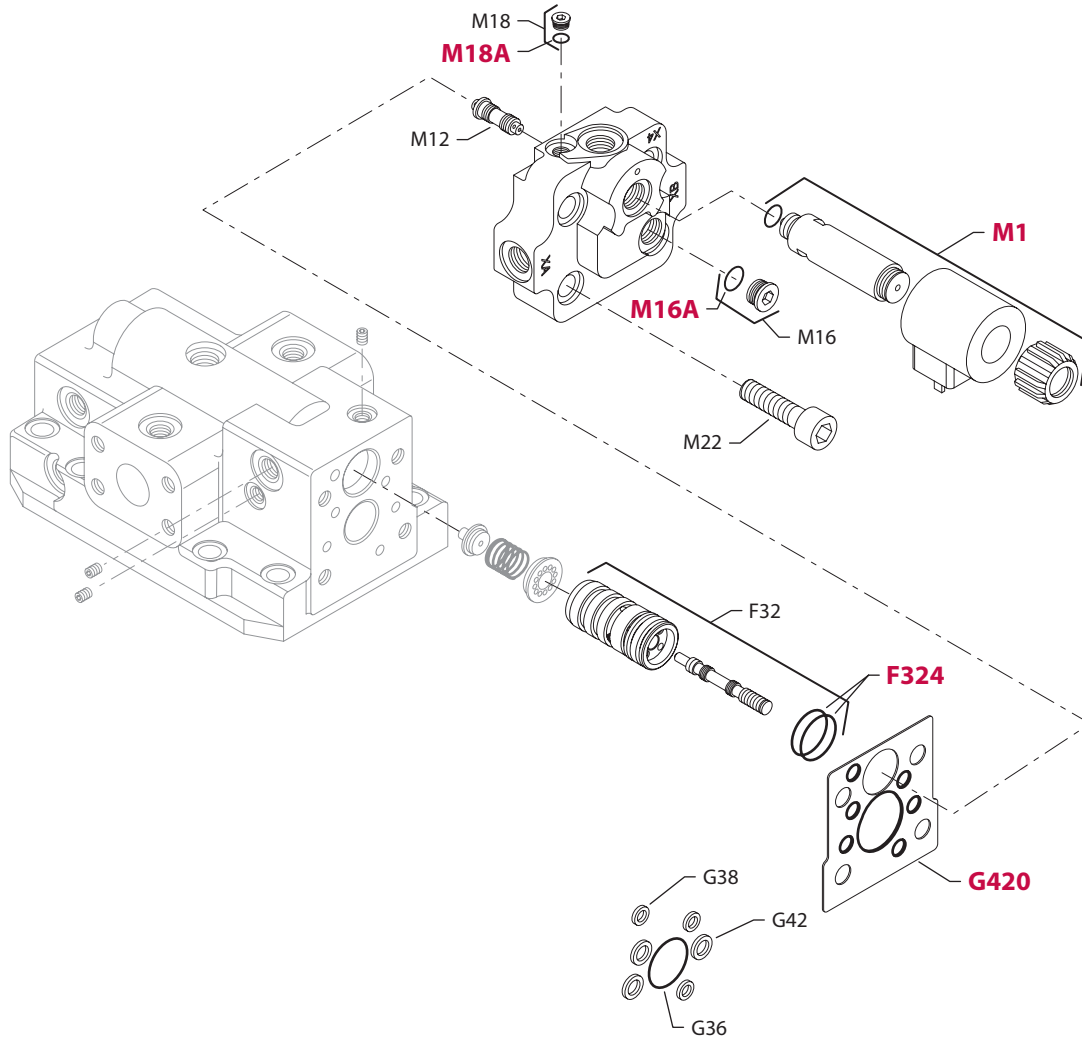
TA AND TH CONTROL KITS USED WITH VARIOUS SERVO PRESSURE SUPPLY OPTIONS

TA/C1	M1Q1	97-02		506883	Control kit,TA/C1	1
	N14	97-02		503503	Pin	1
	N20	97-02		515965 (9005110-5600)	Plug	1
	N20A	97-02		085043 (9004201-3700)	O-ring	1
	NT40	97-02		515965 (9005110-5600)	Plug	2
	NT40A	97-02		085043 (9004201-3700)	O-ring	2
	NT42	97-02		503491	Spool	1

TA/C2	M1Q1	97-02		506884	Control kit,TA/C2	1
TH/C2	M1Q1	97-02		503801	Control kit,TH/C2	1
	N20	97-02		515965 (9005110-5600)	Plug	1
	N20A	97-02		085043 (9004201-3700)	O-ring	1
	NT40	97-02		515965 (9005110-5600)	Plug	2
	NT40A	97-02		085043 (9004201-3700)	O-ring	2
	NT42	97-02		508156	Spool	1

TA/L5, R5	M1Q1	97-02		506909	Control kit,TA/L5 or TA/R5	1
TH/L5, R5	M1Q1	97-02		506910	Control kit,TH/L5 or TH/R5	1
	N14	97-02		503503	Pin	1
	N20	97-02		515965 (9005110-5600)	Plug	1
	N20A	97-02		085043 (9004201-3700)	O-ring	1
	NT40	97-02		515965 (9005110-5600)	Plug	2
	NT40A	97-02		085043 (9004201-3700)	O-ring	2
	NT42	97-02		507782	Spool	1

TH/C7	M1Q1	97-02		508272	Control kit,TH/C7	1
	N26	97-02		913897 (9007712-0605)	Set screw	1
	NT40	97-02		515965 (9005110-5600)	Plug	2
	NT40A	97-02		085043 (9004201-3700)	O-ring	2
	NT42	97-02		508156	Spool	1



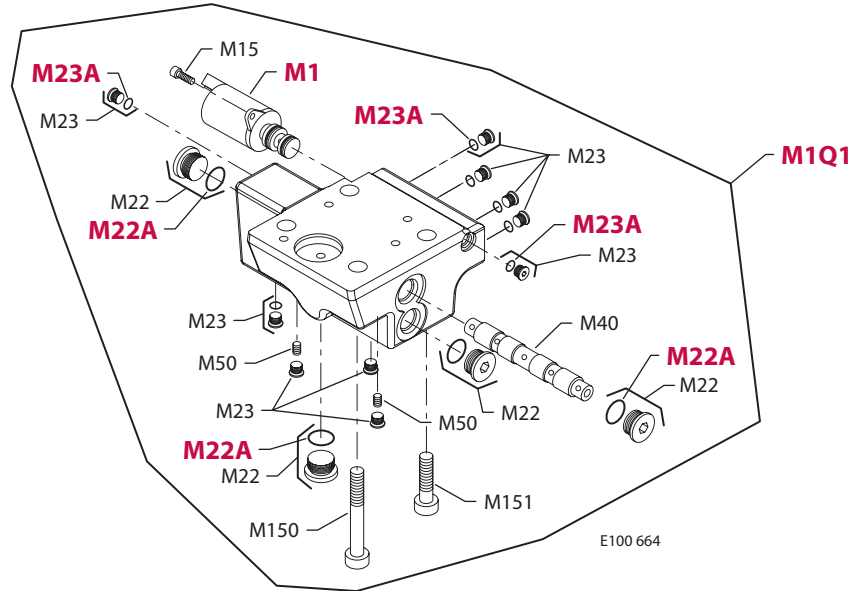
Refer to SB-2002-001

E100 271E

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

ELECTRIC-HYDRAULIC 2-POSITION WITHOUT PRESSURE COMPENSATOR

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
U1	F32	99-30		503925	4-way valve assembly	1
	F324	99-30		730036	O-ring	2
	G36	99-30	03-07	364968	O-ring (SB-2002-001)	1
	G38	99-30	03-07	792739	O-ring (SB-2002-001)	3
	G42	99-30	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	M1	99-30		509534	Solenoid valve, 12 volt, DIN connector	1
	M12	99-30		507292	Piston	1
	M16	99-30		515965 (9005110-5600)	Plug	1
	M16A	99-30		085043 (9004201-3700)	O-ring	1
	M18	99-30		504519	Plug	1
	M18A	99-30		039297 (9004201-1200)	O-ring	1
	M22	99-30		732982 (9007314-1009)	Screw	4
	U2	F32	99-30		503925	4-way valve assembly
F324		99-30		730036	O-ring	2
G36		99-30	03-07	364968	O-ring (SB-2002-001)	1
G38		99-30	03-07	792739	O-ring (SB-2002-001)	3
G42		99-30	03-07	754580	O-ring (SB-2002-001)	3
G420		03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
M1		99-30		509537	Solenoid valve, 24 volt, DIN connector	1
M12		99-30		507292	Piston	1
M16		99-30		515965 (9005110-5600)	Plug	1
M16A		99-30		085043 (9004201-3700)	O-ring	1
M18		99-30		504519	Plug	1
M18A		99-30		039297 (9004201-1200)	O-ring	1
M22		99-30		732982 (9007314-1009)	Screw	4



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

ELECTRIC-HYDRAULIC PROPORTIONAL

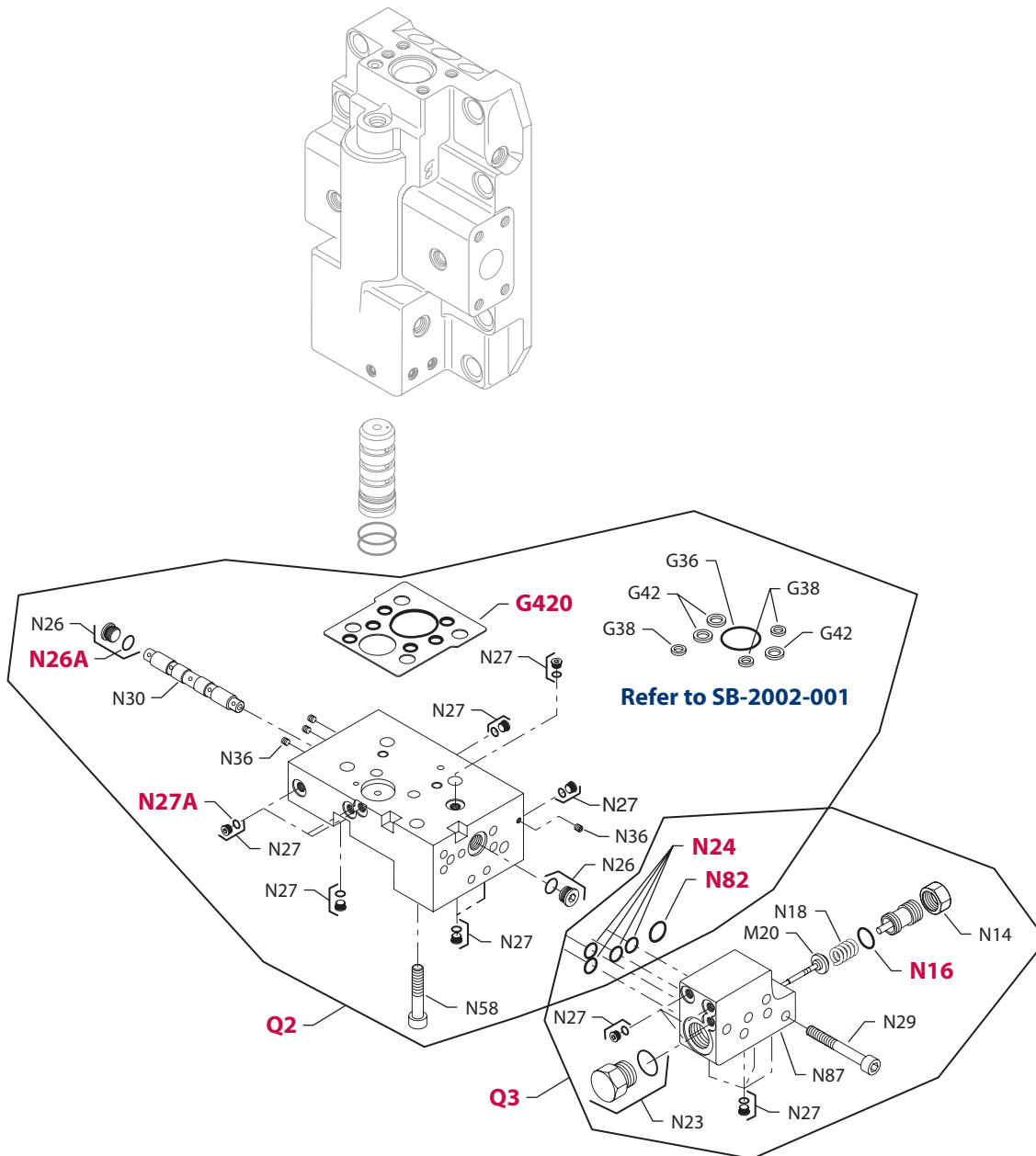
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
Y7	F32	01-01		727115	4-way valve assembly	1
	F324	01-01		730036	O-ring	2
	G36	01-01	03-07	364968	O-ring (SB-2002-001)	1
	G38	01-01	03-07	792739	O-ring (SB-2002-001)	3
	G42	01-01	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	M1	01-01		518080	Solenoid valve, 12 volt, Jet connector	1
	M1Q1	01-01		519577	Control kit	1
	M15	01-01		067694	Screw	2
	M22	01-01		515965 (9005110-5600)	Plug	4
	M22A	01-01		085043 (9004201-3700)	O-ring	4
	M23	01-01		504519	Plug	10
	M23A	01-01		039297 (9004201-1200)	O-ring	10
	M40	01-01		718833	Spool	1
	M50	0101		578542	Orifice, 0.8, M6 x 8	2
	M150	01-01		672295	Screw	2
	M151	01-01		502580	Screw	2

SERVO PRESSURE SUPPLY

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A1 & A3	G36	92-07	03-07	364968	O-ring (SB-2002-001)	1
	G38	92-07	03-07	792739	O-ring (SB-2002-001)	3
	G42	92-07	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	N14	92-07		342709 (9003575-0101)	Nut	1
	N16	92-07		001149 (9004201-6200)	O-ring	1
	N18	92-07		509152	Spring	1
	N20	92-07		746016	Relief valve	1
	N23	92-07		315325 (9005110-8700)	Plug	1
	N23A	92-07		001149 (9004201-6200)	O-ring	1
	N24	92-07		732479 (9004105-0100)	O-ring	4
	N26	92-07		515965 (9005110-5600)	Plug	3
	N26A	92-07		085043 (9004201-3700)	O-ring	3
	N27	92-07		504519	Plug	18
	N27A	92-07		039297 (9004201-1200)	O-ring	18
	N29	92-07		713719 (9007314-0610)	Screw	4
	N30	92-07		718833	Shuttle valve assembly	1
	N32	92-07		346080	Spool	1
	N36	92-07		092114 (9007712-0604)	Set screw	4
	N58	92-07		732982	Screw	4
	N82	92-07		732479 (9004105-0100)	O-ring	1
	N84	92-07		735266	Stop assembly	2
	N84A	92-07		039297 (9004201-1200)	O-ring	2
	N87	92-07		503887	PCOR housing assembly	1
	Q3	92-07		503610	PCOR kit, 100-260 bar	1
	Q3	92-07		503612	PCOR kit, 270-370 bar	1

A1 AND A3 SERVO PRESSURE SUPPLY KITS USED WITH VARIOUS CONTROL OPTIONS

Control code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
E1	Q2	92-07		503594	Multi-function block kit	1
E2	Q2	92-07		503594	Multi-function block kit	1
E5	Q2	92-07		503594	Multi-function block kit	1
EP	Q2	92-07		506924	Multi-function block kit	1
EQ	Q2	92-07		506924	Multi-function block kit	1
ER	Q2	92-07		503594	Multi-function block kit	1
F1	Q2	92-07		503594	Multi-function block kit	1
F2	Q2	92-07		503594	Multi-function block kit	1
H1	Q2	92-07		506924	Multi-function block kit	1
H2	Q2	92-07		506924	Multi-function block kit	1
HP	Q2	92-07		503570	Multi-function block kit	1
HS	Q2	92-07		503570	Multi-function block kit	1
K1	Q2	92-07		506924	Multi-function block kit	1
K2	Q2	92-07		506924	Multi-function block kit	1



E100 310E

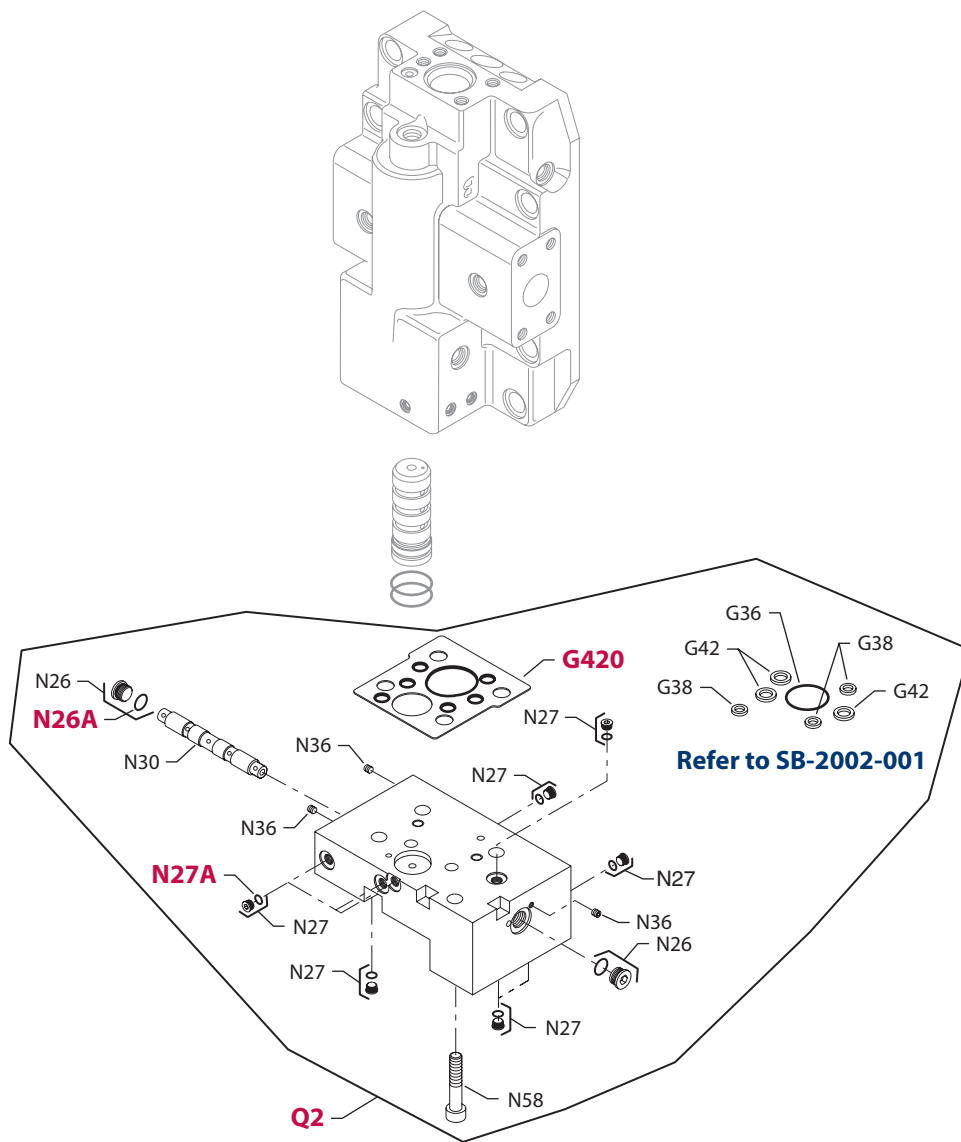
Enlarged **bold** type item numbers are recommended part to stock for servicing.

SERVO PRESSURE SUPPLY

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A2 & A4	G36	92-07	03-07	364968	O-ring (SB-2002-001)	1
	G38	92-07	03-07	792739	O-ring (SB-2002-001)	3
	G42	92-07	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	N14	92-07		342709 (9003575-0101)	Nut	1
	N16	92-07		001149 (9004201-6200)	O-ring	1
	N18	92-07		509152	Spring	1
	N20	92-07		746016	Relief valve	1
	N23	92-07		315325 (9005110-8700)	Plug	1
	N23A	92-07		001149 (9004201-6200)	O-ring	1
	N24	92-07		732479 (9004105-0100)	O-ring	4
	N26	92-07		515965 (9005110-5600)	Plug	2
	N26A	92-07		085043 (9004201-3700)	O-ring	2
	N27	92-07		504519	Plug	16
	N27A	92-07		039297 (9004201-1200)	O-ring	16
	N29	92-07		713719 (9007314-0610)	Screw	4
	N30	92-07		718833	Shuttle valve assembly	1
	N36	92-07		092114 (9007712-0604)	Set screw	4
	N58	92-07		732982	Screw	4
	N82	92-07		732479 (9004105-0100)	O-ring	1
	N87	92-07		503887	PCOR housing assembly	1
	Q3	92-07		503610	PCOR kit, 100-260 bar	1
	Q3	92-07		503612	PCOR kit, 270-370 bar	1

A2 AND A4 SERVO PRESSURE SUPPLY KITS USED WITH VARIOUS CONTROL OPTIONS

Control code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
E1	Q2	92-07		503577	Multi-function block kit	1
E2	Q2	92-07		503577	Multi-function block kit	1
E5	Q2	92-07		503577	Multi-function block kit	1
EP	Q2	92-07		506921	Multi-function block kit	1
EQ	Q2	92-07		506921	Multi-function block kit	1
ER	Q2	92-07		503577	Multi-function block kit	1
F1	Q2	92-07		503577	Multi-function block kit	1
F2	Q2	92-07		503577	Multi-function block kit	1
H1	Q2	92-07		506921	Multi-function block kit	1
H2	Q2	92-07		506921	Multi-function block kit	1
HP	Q2	92-07		503568	Multi-function block kit	1
HS	Q2	92-07		503568	Multi-function block kit	1
K1	Q2	92-07		506921	Multi-function block kit	1
K2	Q2	92-07		506921	Multi-function block kit	1



E100 312E

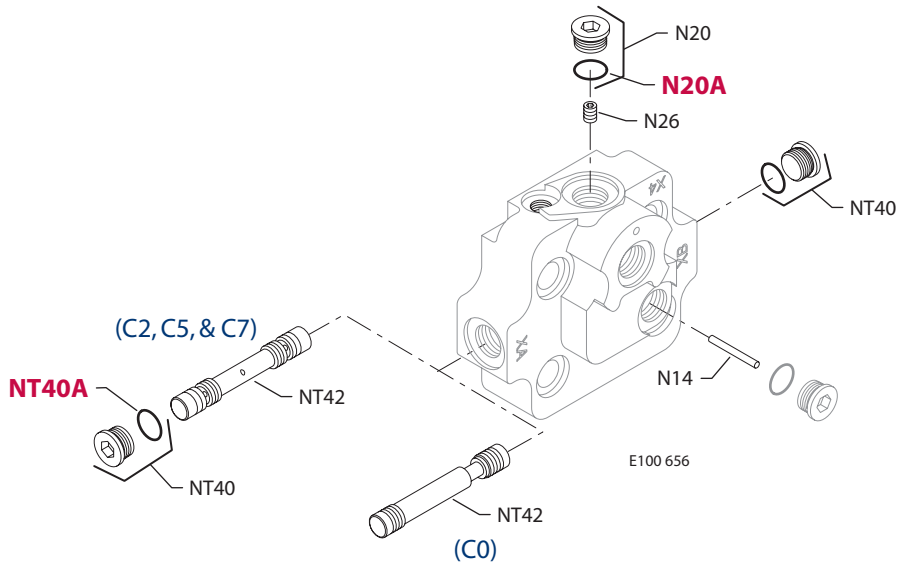
Enlarged **bold** type item numbers are recommended part to stock for servicing.

SERVO PRESSURE SUPPLY

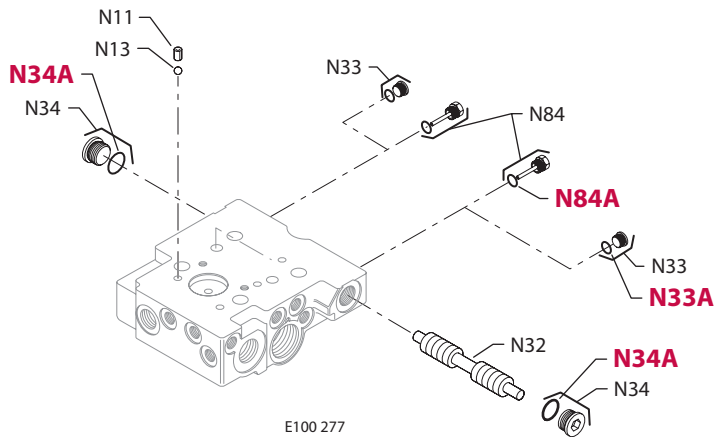
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A5 & A6	G36	92-07	03-07	364968	O-ring (SB-2002-001)	1
	G38	92-07	03-07	792739	O-ring (SB-2002-001)	3
	G42	92-07	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	N26	92-07		515965 (9005110-5600)	Plug	2
	N26A	92-07		085043 (9004201-3700)	O-ring	2
	N27	92-07		504519	Plug	4
	N27A	92-07		039297 (9004201-1200)	O-ring	4
	N30	92-07		718833	Shuttle valve assembly	1
	N36	92-07		092114 (9007712-0604)	Set screw	3
	N58	92-07		732982	Screw	4

A5 AND A6 SERVO PRESSURE SUPPLY KITS USED WITH VARIOUS CONTROL OPTIONS

Control code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
E1	Q2	92-07		503590	Multi-function block kit	1
E2	Q2	92-07		503590	Multi-function block kit	1
E5	Q2	92-07		503590	Multi-function block kit	1
EP	Q2	92-07		503586	Multi-function block kit	1
EQ	Q2	92-07		503586	Multi-function block kit	1
ER	Q2	92-07		503590	Multi-function block kit	1
F1	Q2	92-07		503590	Multi-function block kit	1
F2	Q2	92-07		503590	Multi-function block kit	1
H1	Q2	92-07		503586	Multi-function block kit	1
H2	Q2	92-07		503586	Multi-function block kit	1
HP	Q2	92-07		503582	Multi-function block kit	1
HS	Q2	92-07		503582	Multi-function block kit	1
K1	Q2	92-07		503586	Multi-function block kit	1
K2	Q2	92-07		503586	Multi-function block kit	1



C0, C2, and C5

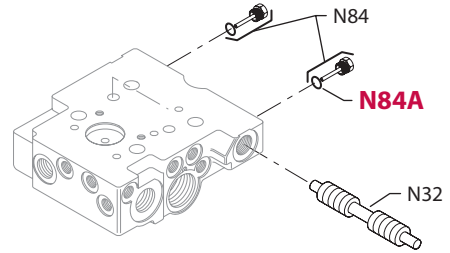


K1 and K2

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

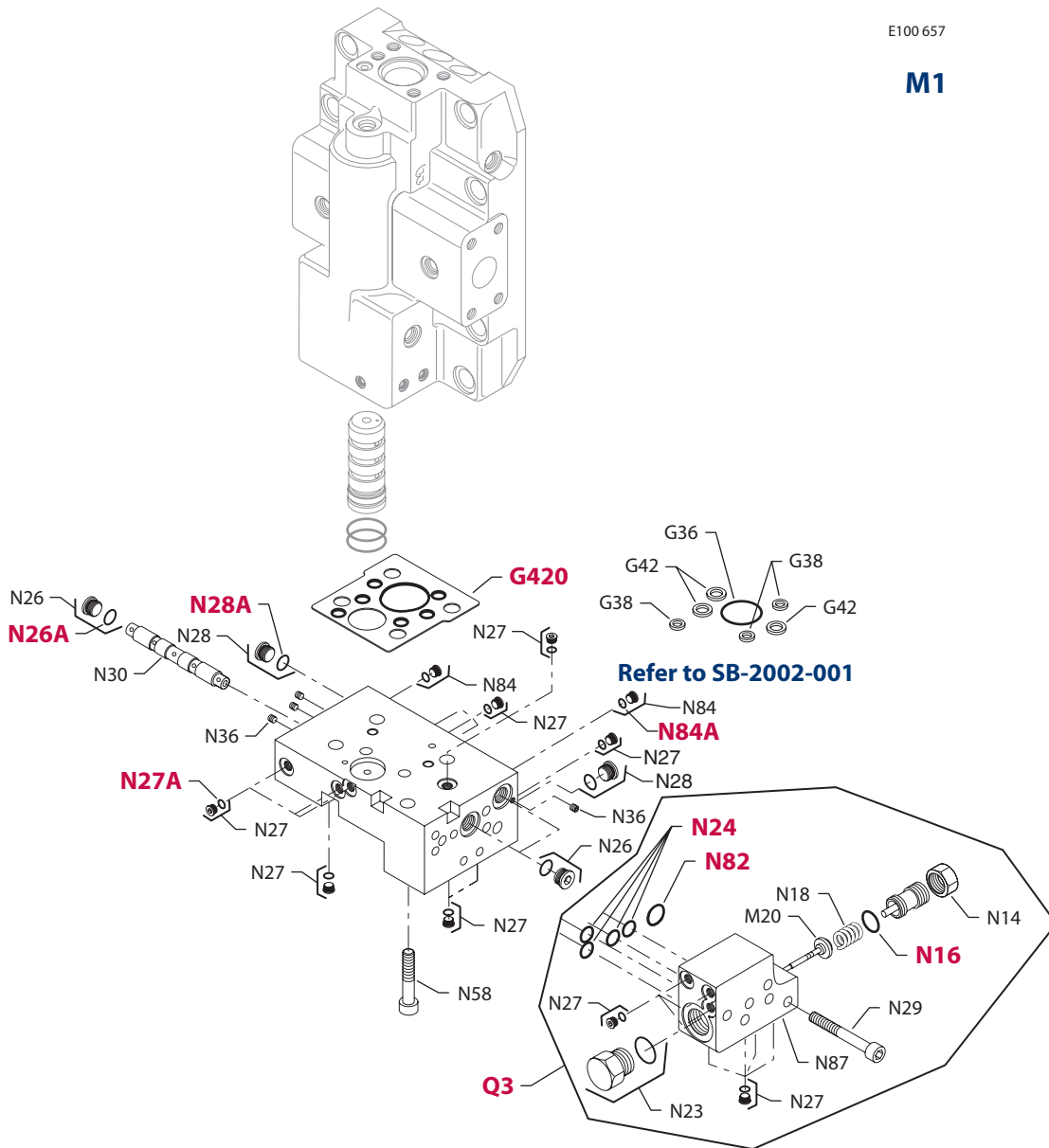
SERVO PRESSURE SUPPLY

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
B1 & B2				No parts		
C0	N14	96-10		503503	Pin	1
	N20	96-10		515965 (9005110-5600)	Plug	1
	N20A	96-10		085043 (9004201-3700)	O-ring	1
	NT42	96-10		508175	Spool	1
C2	N20	95-15		515965 (9005110-5600)	Plug	1
	N20A	95-15		085043 (9004201-3700)	O-ring	1
	NT40	95-15		515965 (9005110-5600)	Plug	2
	NT40A	95-15		085043 (9004201-3700)	O-ring	2
	NT42	95-15		508156	Spool	1
C5	N20	95-15		515965 (9005110-5600)	Plug	1
	N20A	95-15		085043 (9004201-3700)	O-ring	1
	N26	96-31		913897 (9007712-0605)	Set screw	1
	NT40	95-15		515965 (9005110-5600)	Plug	2
	NT40A	95-15		085043 (9004201-3700)	O-ring	2
	NT42	95-15		508156	Spool	1
K1	N11	95-24		505522	Slotted pin	1
	N13	95-24		915967	Ball	1
	N32	95-24		346080	Spool	1
	N84	95-24		735266	Stop assembly	2
	N84A	95-24		039297 (9004201-1200)	O-ring	2
K2	N11	95-24		505522	Slotted pin	1
	N13	95-24		915967	Ball	1
	N32	95-24		505462	Spool	1
	N33	95-24		504519	Plug	2
	N33A	95-24		039297 (9004201-1200)	O-ring	2
	N34	95-15		515965 (9005110-5600)	Plug	2
	N34A	95-15		085043 (9004201-3700)	O-ring	2



E100 657

M1

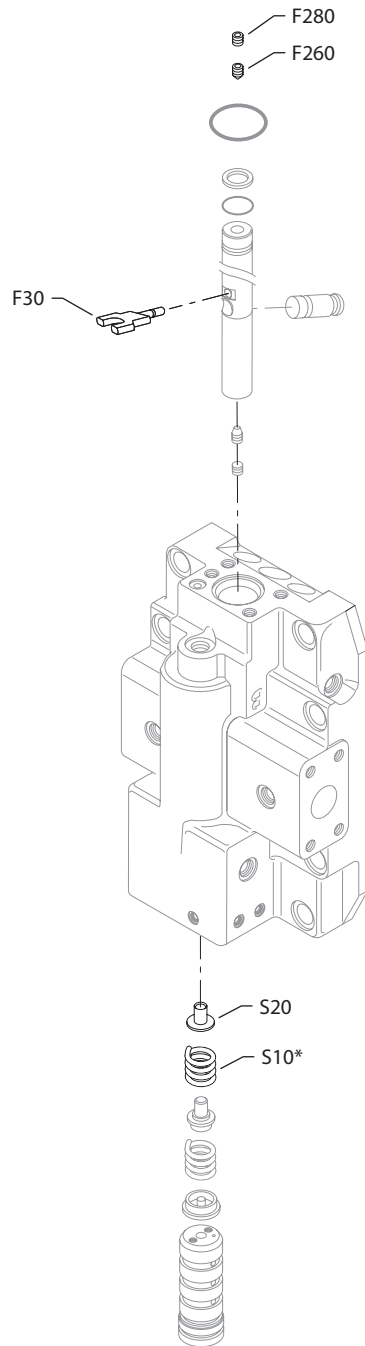


E100 313E

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

SERVO PRESSURE SUPPLY

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
L2, L4, R2	G36	92-07	03-07	364968	O-ring (SB-2002-001)	1
& R4	G38	92-07	03-07	792739	O-ring (SB-2002-001)	3
	G42	92-07	03-07	754580	O-ring (SB-2002-001)	3
	G420	03-08		511810	Gasket/O-ring seal (SB-2002-001)	1
	N14	92-07		342709 (9003575-0101)	Nut	1
	N16	92-07		001149 (9004201-6200)	O-ring	1
	N18	92-07		509152	Spring	1
	N20	92-07		746016	Relief valve	1
	N23	92-07		315325 (9005110-8700)	Plug	1
	N23A	92-07		001149 (9004201-6200)	O-ring	1
	N24	92-07		732479 (9004105-0100)	O-ring	4
	N26	92-07		515965 (9005110-5600)	Plug	3
	N26A	92-07		085043 (9004201-3700)	O-ring	3
	N27	92-07		504519	Plug	18
	N27A	92-07		039297 (9004201-1200)	O-ring	18
	N28	92-07		515965 (9005110-5600)	Plug	2
	N28A	92-07		085043 (9004201-3700)	O-ring	2
	N29	92-07		713719 (9007314-0610)	Screw	4
	N30	92-07		718833	Shuttle valve assembly	1
	N36	92-07		092114 (9007712-0604)	Set screw	4
	N58	92-07		732982	Screw	4
	N82	92-07		732479 (9004105-0100)	O-ring	1
	N84	92-07		504519	Plug	2
	N84A	92-07		039297 (9004201-1200)	O-ring	2
	N87	92-07		503887	PCOR housing assembly	1
	Q3	92-07		503610	PCOR kit, 100-260 bar	1
	Q3	92-07		503612	PCOR kit, 270-370 bar	1
M1	N32	92-07		346080	Spool	1
	N84	92-07		735266	Stop assembly	2
	N84A	92-07		039297 (9004201-1200)	O-ring	2
NN				No parts		

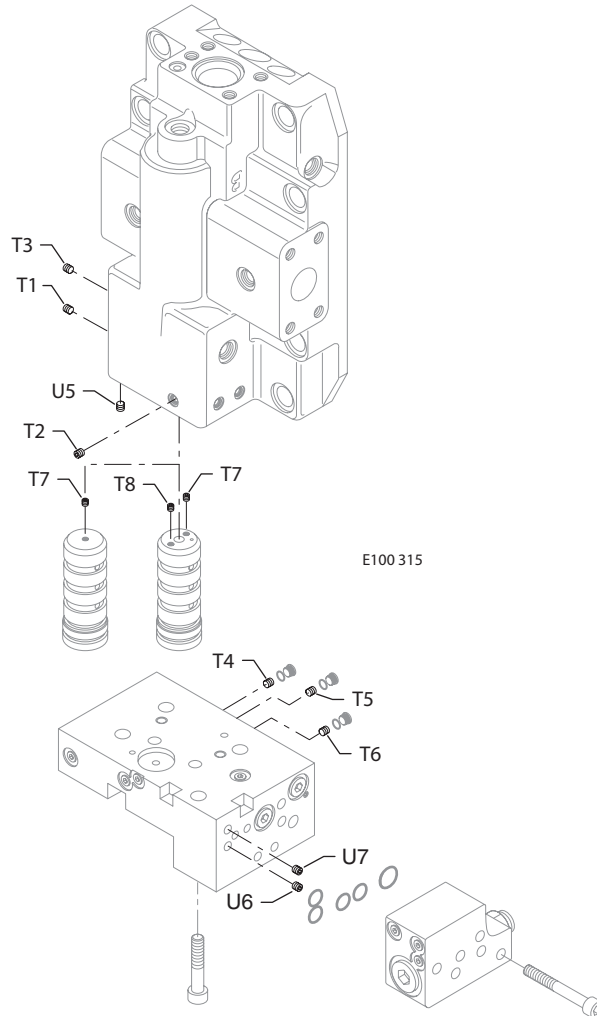


E100 325

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

CONTROL RAMP COMMON PARTS

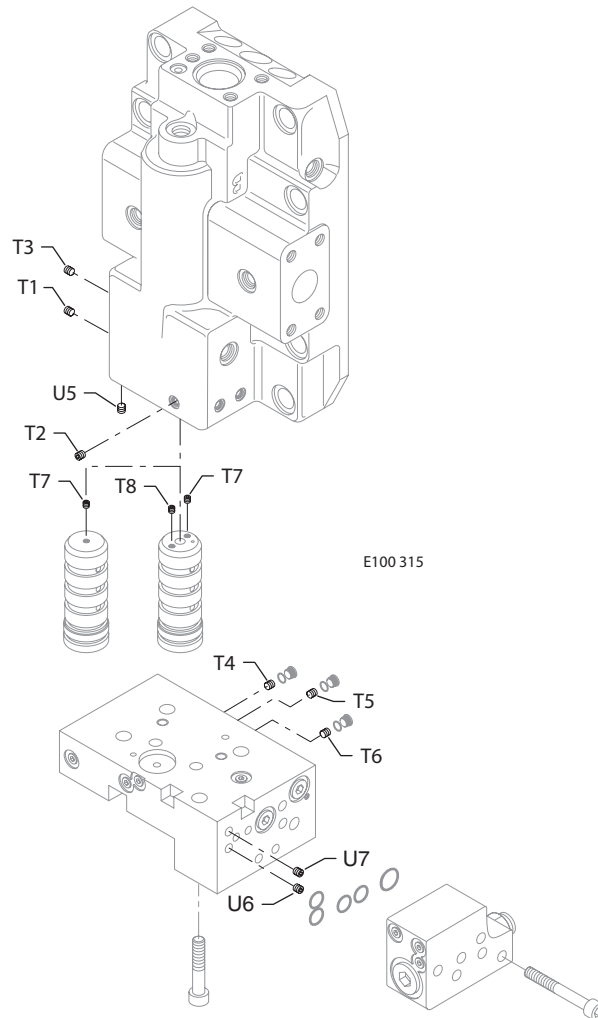
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
	F30	92-07		733105	Servo piston link	1
	F260	92-07		733089	Set screw	1
	F280	92-07		010397 (9007712-0606)	Set screw	1
A & B	S10E	95-36		729145	Spring	1
	S20	95-36		722256	Spring guide	1
D	S10D	92-07		729160	Spring	1
	S20	92-07		722256	Spring guide	1
E	S10E	92-07		729152	Spring	1
	S20	92-07		722256	Spring guide	1
G	S10G	92-07		721241	Spring	1
	S20	92-07		722256	Spring guide	1
H	S10Y	92-07		729186	Spring	1
	S20	92-07		722256	Spring guide	1
J	S10Y	99-35		729186	Spring	1
	S20	99-35		722256	Spring guide	1
K	S10Y	99-35		729186	Spring	1
	S20	99-35		722256	Spring guide	1
L	S10L	92-07		729145	Spring	1
	S20	92-07		724500	Spring guide	1
N				No parts		
U	S10U	92-07		729178	Spring	1
	S20	92-07		722256	Spring guide	1
Y	S10Y	92-07		729186	Spring	1
	S20	92-07		722256	Spring guide	1
Z	S10Z	92-07		729194	Spring	1
	S20	92-07		722256	Spring guide	1



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

ORIFICE

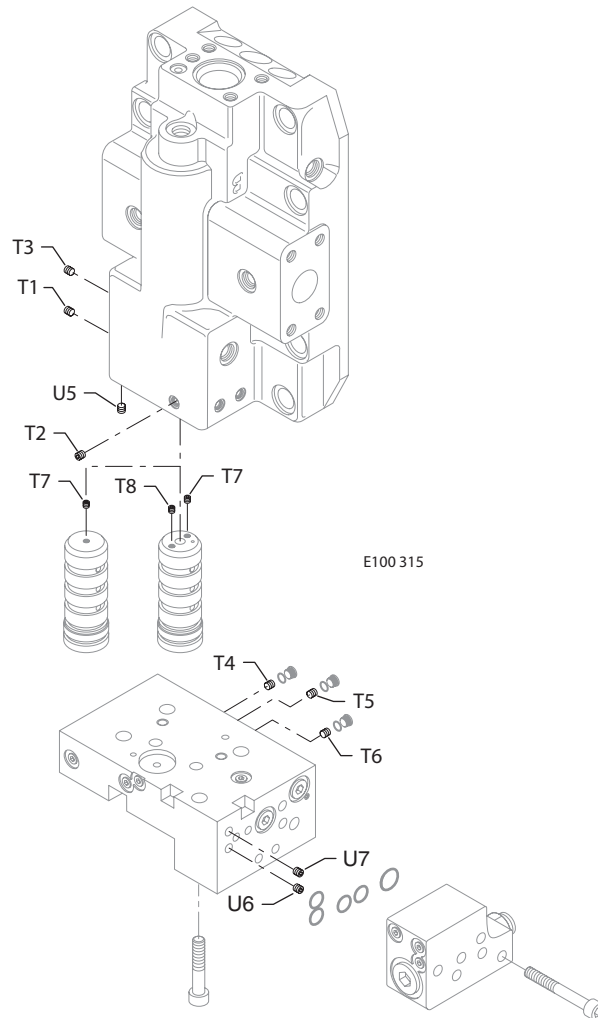
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A0	T1	92.38		913897 (9007712-0605)	Set screw	1
	T2	92.38		913897 (9007712-0605)	Set screw	1
	T3	92.38		913897 (9007712-0605)	Set screw	1
A1	T1	92-07		739128	Orifice. 0.5, M6 x 6	1
	T2	92-07		739144	Orifice. 0.8, M6 x 6	1
	T3	92-07		739144	Orifice. 0.8, M6 x 6	1
	T4	92-07		092114 (9007712-0604)	Set screw	1
	T5	92-07		578542	Orifice. 0.8, M6 x 8	1
	T6	92-07		092114 (9007712-0604)	Set screw	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
A2	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T4	92-07		578542	Orifice. 0.8, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
A3	T1	92-07		739128	Orifice. 0.5, M6 x 6	1
	T2	92-07		739144	Orifice. 0.8, M6 x 6	1
	T3	92-07		739144	Orifice. 0.8, M6 x 6	1
	T4	92-07		578542	Orifice. 0.8, M6 x 8	1
	T5	92-07		092114 (9007712-0604)	Set screw	1
	T6	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
A4	T1	92-07		739128	Orifice. 0.5, M6 x 6	1
	T2	92-07		739144	Orifice. 0.8, M6 x 6	1
	T3	92-07		739144	Orifice. 0.8, M6 x 6	1
	T4	92-07		092114 (9007712-0604)	Set screw	1
	T5	92-07		092114 (9007712-0604)	Set screw	1
	T6	92-07		092114 (9007712-0604)	Set screw	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
A6	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1



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

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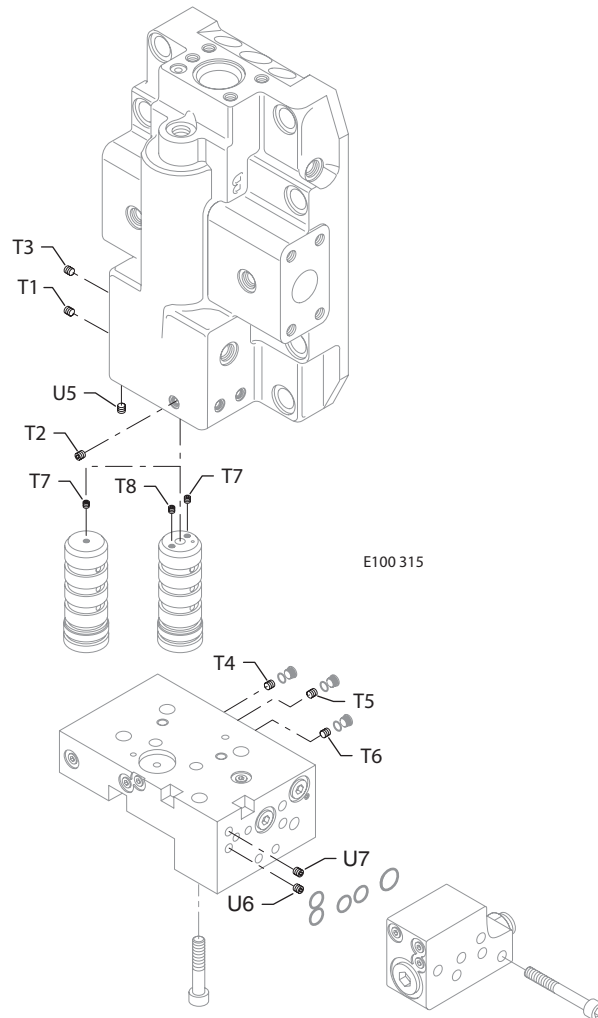
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
A7	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T5	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
	A8	T1	92-07		679316	Orifice. 0.5, M6 x 8
T2		92-07		578542	Orifice. 0.8, M6 x 8	1
T3		92-07		578542	Orifice. 0.8, M6 x 8	1
T4		92-07		913897 (9007712-0605)	Set screw	1
T5		92-07		913897 (9007712-0605)	Set screw	1
T6		92-07		578542	Orifice. 0.8, M6 x 8	1
T7		92-07		639096	Orifice. 0.6, M5 x 6	1
T8		92-07		639096	Orifice. 0.6, M5 x 6	1
A9	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
B1	T1	92-07		044081	Orifice. 0.7, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
B4	T1	92-07		739128	Orifice. 0.5, M6 x 6	1
	T2	92-07		739144	Orifice. 0.8, M6 x 6	1
	T3	92-07		739144	Orifice. 0.8, M6 x 6	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
B6	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T4	92-07		578542	Orifice. 0.8, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		913897 (9007712-0605)	Set screw	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1



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

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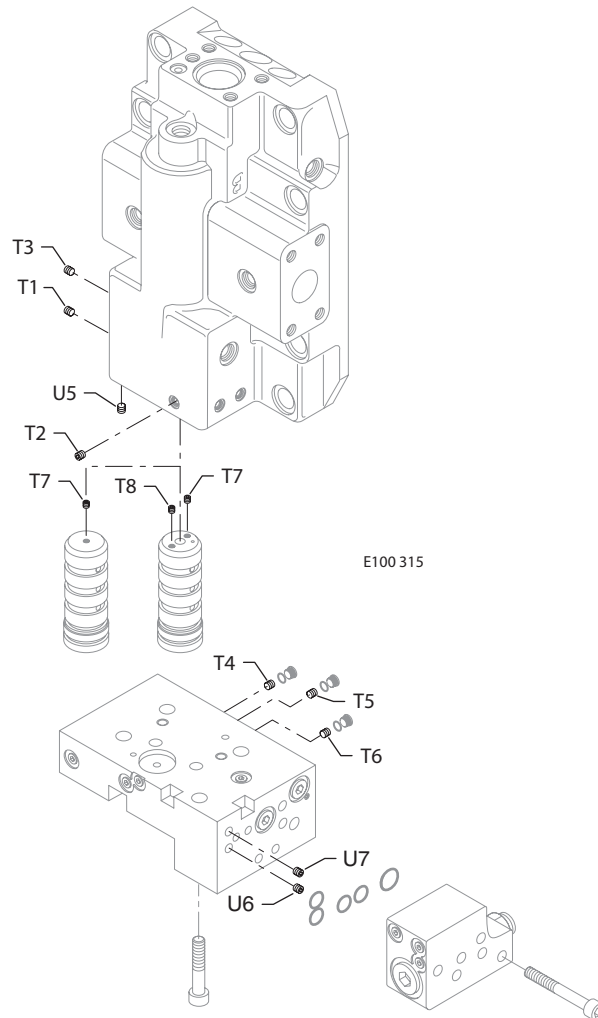
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
B9	T1	92-07		679316	Orifice.0.5, M6 x 8	1
	T2	92-07		679316	Orifice.0.5, M6 x 8	1
	T3	92-07		679316	Orifice.0.5, M6 x 8	1
	T4	92-07		578542	Orifice.0.8, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		578542	Orifice.0.8, M6 x 8	1
	T7	92-07		639096	Orifice.0.6, M5 x 6	1
	T8	92-07		639096	Orifice.0.6, M5 x 6	1
U5	U5	92-07		913897 (9007712-0605)	Set screw	1
	U6	92-07		511825	Orifice.0.6, M6 x 8	1
	U7	92-07		511825	Orifice.0.6, M6 x 8	1
C0			No parts			
C1	T1	92-07		679316	Orifice.0.5, M6 x 8	1
	T2	92-07		578542	Orifice.0.8, M6 x 8	1
	T3	92-07		578542	Orifice.0.8, M6 x 8	1
	T4	92-07		913897 (9007712-0605)	Set screw	1
	T5	92-07		578542	Orifice.0.8, M6 x 8	1
	T6	92-07		913897 (9007712-0605)	Set screw	1
	T7	92-07		639096	Orifice.0.6, M5 x 6	1
	T8	92-07		639096	Orifice.0.6, M5 x 6	1
C2	T1	92-07		679316	Orifice.0.5, M6 x 8	1
	T2	92-07		578542	Orifice.0.8, M6 x 8	1
	T3	92-07		578542	Orifice.0.8, M6 x 8	1
	T7	92-07		639096	Orifice.0.6, M5 x 6	1
	T8	92-07		639096	Orifice.0.6, M5 x 6	1
C5	T1	92-07		679316	Orifice.0.5, M6 x 8	1
	T2	92-07		578542	Orifice.0.8, M6 x 8	1
	T3	92-07		578542	Orifice.0.8, M6 x 8	1
	T5	92-07		578542	Orifice.0.8, M6 x 8	1
	T7	92-07		639096	Orifice.0.6, M5 x 6	1
	T8	92-07		639096	Orifice.0.6, M5 x 6	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
	U6	92-07		511825	Orifice.0.6, M6 x 8	1
U7	92-07		511825	Orifice.0.6, M6 x 8	1	
C7	T1	92-07		679316	Orifice.0.5, M6 x 8	1
	T2	92-07		578542	Orifice.0.8, M6 x 8	1
	T3	92-07		578542	Orifice.0.8, M6 x 8	1
	T4	92-07		578542	Orifice.0.8, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		913897 (9007712-0605)	Set screw	1
	T7	92-07		639096	Orifice.0.6, M5 x 6	1
	T8	92-07		639096	Orifice.0.6, M5 x 6	1
	U5	92-07		913897 (9007712-0605)	Set screw	1



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

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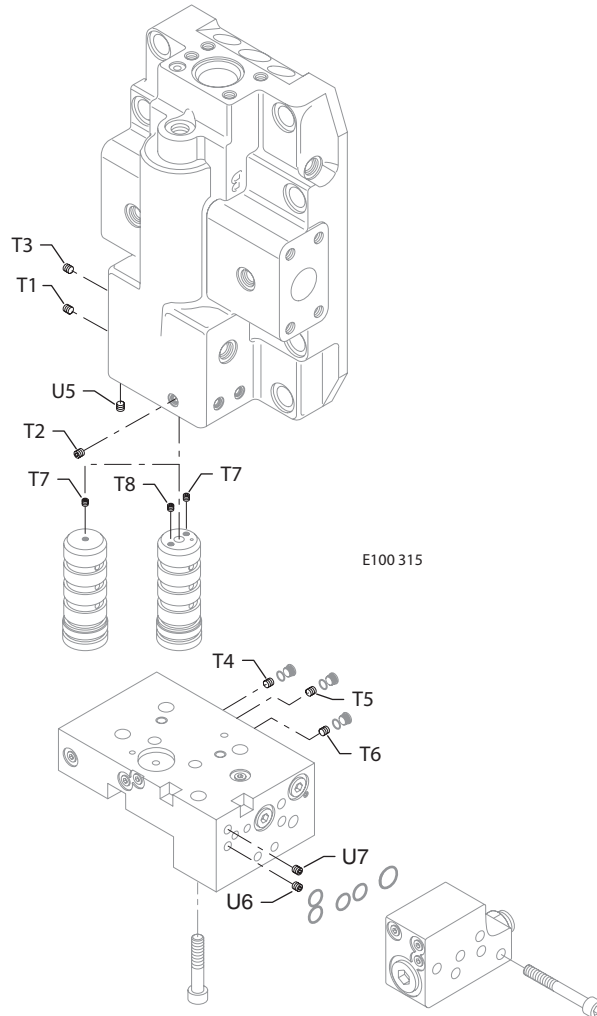
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
C8	T1	92-07		679316	Orifice, 0.5, M6 x 8	1
	T2	92-07		578542	Orifice, 0.8, M6 x 8	1
	T3	92-07		578542	Orifice, 0.8, M6 x 8	1
	T4	92-07		913897 (9007712-0605)	Set screw	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		578542	Orifice, 0.8, M6 x 8	1
	T7	92-07		639096	Orifice, 0.6, M5 x 6	1
	T8	92-07		639096	Orifice, 0.6, M5 x 6	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
D3	T1	92-07		578542	Orifice, 0.8, M6 x 8	1
	T2	92-07		511825	Orifice, 0.6, M6 x 8	1
	T3	92-07		511825	Orifice, 0.6, M6 x 8	1
	T4	92-07		913897 (9007712-0605)	Set screw	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		578542	Orifice, 0.8, M6 x 8	1
	T7	92-07		639096	Orifice, 0.6, M5 x 6	1
	T8	92-07		639096	Orifice, 0.6, M5 x 6	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
	U6	92-07		511825	Orifice, 0.6, M6 x 8	1
	U7	92-07		511825	Orifice, 0.6, M6 x 8	1
D5	T1	92-07		578542	Orifice, 0.8, M6 x 8	1
	T2	92-07		511825	Orifice, 0.6, M6 x 8	1
	T3	92-07		511825	Orifice, 0.6, M6 x 8	1
	T4	92-07		578542	Orifice, 0.8, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		913897 (9007712-0605)	Set screw	1
	T7	92-07		639096	Orifice, 0.6, M5 x 6	1
	T8	92-07		639096	Orifice, 0.6, M5 x 6	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
	U6	92-07		511825	Orifice, 0.6, M6 x 8	1
	U7	92-07		511825	Orifice, 0.6, M6 x 8	1
D7	T1	92-07		578542	Orifice, 0.8, M6 x 8	1
	T2	92-07		578542	Orifice, 0.8, M6 x 8	1
	T3	92-07		578542	Orifice, 0.8, M6 x 8	1
	T7	92-07		511825	Orifice, 0.6, M6 x 8	1
	T8	92-07		511825	Orifice, 0.6, M6 x 8	1
	U7	92-07		044081	Orifice, 0.7, M6 x 8	1
	E1	T1	92-07		679316	Orifice, 0.5, M6 x 8
T2		92-07		578542	Orifice, 0.8, M6 x 8	1
T3		92-07		578542	Orifice, 0.8, M6 x 8	1
T5		92-07		578542	Orifice, 0.8, M6 x 8	1
T7		92-07		639096	Orifice, 0.6, M5 x 6	1
T8		92-07		639096	Orifice, 0.6, M5 x 6	1
U6		92-07		044081	Orifice, 0.7, M6 x 8	1
U7		92-07		044081	Orifice, 0.7, M6 x 8	1



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

ORIFICE

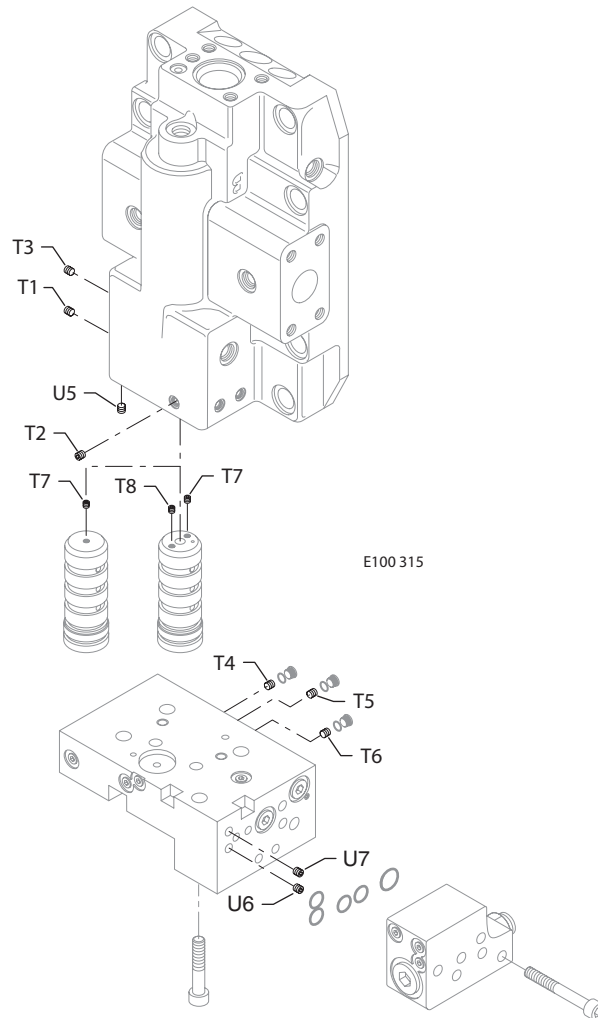
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
E2	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T4	92-07		578542	Orifice. 0.8, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
	U6	92-07		044081	Orifice. 0.7, M6 x 8	1
	U7	92-07		044081	Orifice. 0.7, M6 x 8	1
E3	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T4	92-07		578542	Orifice. 0.8, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		913897 (9007712-0605)	Set screw	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
	U6	92-07		044081	Orifice. 0.7, M6 x 8	1
	U7	92-07		044081	Orifice. 0.7, M6 x 8	1
E4	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T4	92-07		913897 (9007712-0605)	Set screw	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
	U6	92-07		044081	Orifice. 0.7, M6 x 8	1
	U7	92-07		044081	Orifice. 0.7, M6 x 8	1
E5	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	T4	92-07		578542	Orifice. 0.8, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
	U6	92-07		511825	Orifice. 0.6, M6 x 8	1



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

ORIFICE

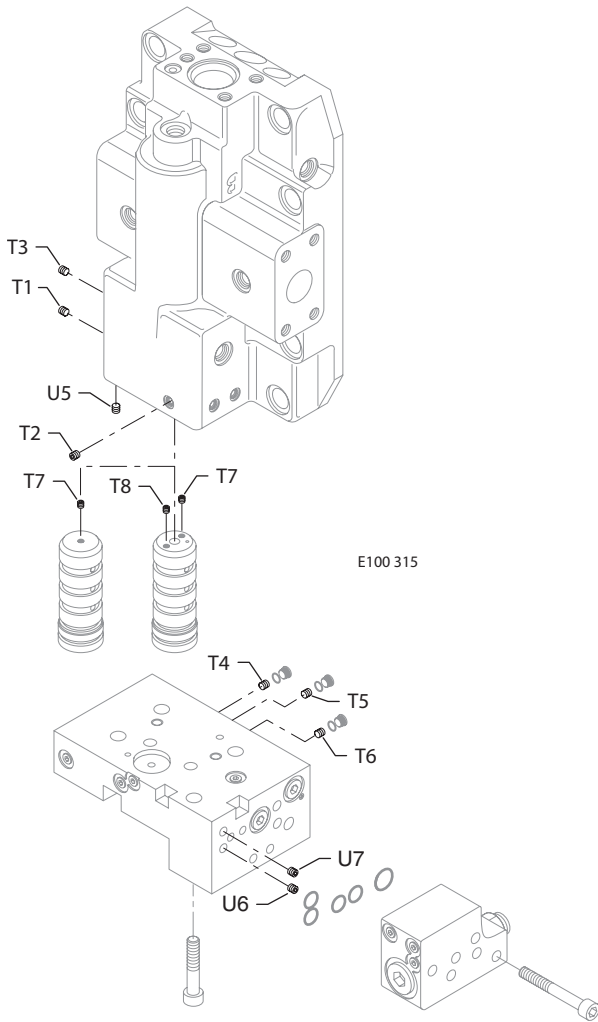
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit	
E6	T1	92-07		679316	Orifice. 0.5, M6 x 8	1	
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1	
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1	
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1	
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1	
	U5	92-07		913897 (9007712-0605)	Set screw	1	
E8	T1	92-07		679316	Orifice. 0.5, M6 x 8	1	
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1	
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1	
	T4	92-07		913897 (9007712-0605)	Set screw	1	
	T5	92-07		913897 (9007712-0605)	Set screw	1	
	T6	92-07		578542	Orifice. 0.8, M6 x 8	1	
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1	
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1	
	U5	92-07		913897 (9007712-0605)	Set screw	1	
	U6	92-07		511825	Orifice. 0.6, M6 x 8	1	
	U7	92-07		511825	Orifice. 0.6, M6 x 8	1	
	F1	T1	92-07		679316	Orifice. 0.5, M6 x 8	1
		T2	92-07		578542	Orifice. 0.8, M6 x 8	1
T3		92-07		578542	Orifice. 0.8, M6 x 8	1	
T5		92-07		578542	Orifice. 0.8, M6 x 8	1	
T7		92-07		639096	Orifice. 0.6, M5 x 6	1	
T8		92-07		639096	Orifice. 0.6, M5 x 6	1	
U6		92-07		578542	Orifice. 0.8, M6 x 8	1	
U7		92-07		578542	Orifice. 0.8, M6 x 8	1	
F5	T7	92-07		639096	Orifice. 0.6, M5 x 6	1	
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1	
	U6	92-07		913897 (9007712-0605)	Set screw	1	
	U7	92-07		044081	Orifice. 0.7, M6 x 8	1	
F7	T2	92-07		578542	Orifice. 0.8, M6 x 8	1	
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1	
	T4	92-07		578542	Orifice. 0.8, M6 x 8	1	
	T5	92-07		913897 (9007712-0605)	Set screw	1	
	T6	92-07		578542	Orifice. 0.8, M6 x 8	1	
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1	
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1	
	U5	92-07		913897 (9007712-0605)	Set screw	1	



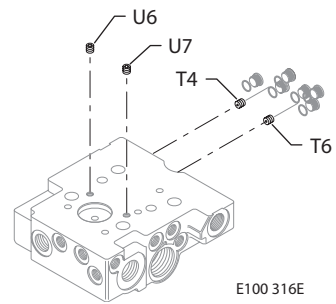
Enlarged **bold** type item numbers are recommended part to stock for servicing.

ORIFICE

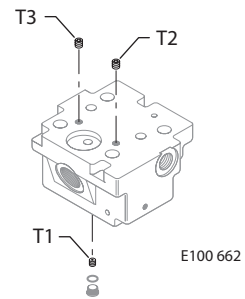
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
F8	T1	92-07		578542	Orifice, 0.8, M6 x 8	1
	T2	92-07		578542	Orifice, 0.8, M6 x 8	1
	T3	92-07		578542	Orifice, 0.8, M6 x 8	1
	T4	92-07		913897 (9007712-0605)	Set screw	1
	T5	92-07		578542	Orifice, 0.8, M6 x 8	1
	T6	92-07		913897 (9007712-0605)	Set screw	1
	T7	92-07		639096	Orifice, 0.6, M5 x 6	1
	T8	92-07		639096	Orifice, 0.6, M5 x 6	1
G0	T1	92-07		578542	Orifice, 0.8, M6 x 8	1
	T2	92-07		679316	Orifice, 0.5, M6 x 8	1
	T3	92-07		679316	Orifice, 0.5, M6 x 8	1
G1	T1	92-07		578542	Orifice, 0.8, M6 x 8	1
	T2	92-07		679316	Orifice, 0.5, M6 x 8	1
	T3	92-07		679316	Orifice, 0.5, M6 x 8	1
	U6	92-07		578542	Orifice, 0.8, M6 x 8	1
	U7	92-07		578542	Orifice, 0.8, M6 x 8	1
G2	T1	92-07		578542	Orifice, 0.8, M6 x 8	1
	T2	92-07		679316	Orifice, 0.5, M6 x 8	1
	T3	92-07		679316	Orifice, 0.5, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	U6	92-07		578542	Orifice, 0.8, M6 x 8	1
	U7	92-07		578542	Orifice, 0.8, M6 x 8	1
G5	T1	92-07		679316	Orifice, 0.5, M6 x 8	1
	T2	92-07		679316	Orifice, 0.5, M6 x 8	1
	T3	92-07		679316	Orifice, 0.5, M6 x 8	1
G6	T1	92-07		679316	Orifice, 0.5, M6 x 8	1
	T2	92-07		679316	Orifice, 0.5, M6 x 8	1
	T3	92-07		679316	Orifice, 0.5, M6 x 8	1
	U6	92-07		578542	Orifice, 0.8, M6 x 8	1
	U7	92-07		578542	Orifice, 0.8, M6 x 8	1
G7	T1	92-07		679316	Orifice, 0.5, M6 x 8	1
	T2	92-07		679316	Orifice, 0.5, M6 x 8	1
	T3	92-07		679316	Orifice, 0.5, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	U6	92-07		578542	Orifice, 0.8, M6 x 8	1
	U7	92-07		578542	Orifice, 0.8, M6 x 8	1



E100 315



E100 316E

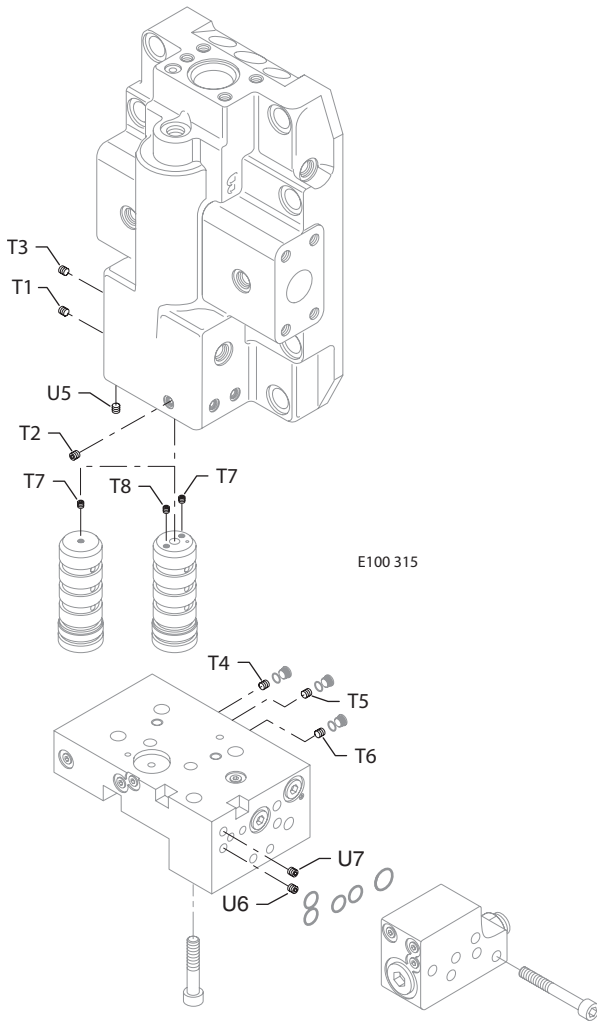


E100 662

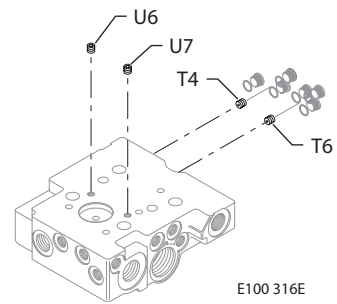
Enlarged **bold** type item numbers are recommended part to stock for servicing.

ORIFICE

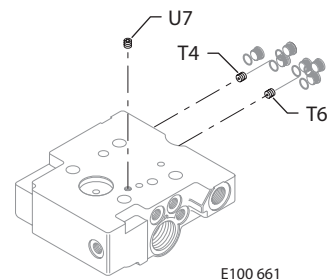
Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
G8	T1	92-07		679316	Orifice.0.5, M6 x 8	1
	T2	92-07		679316	Orifice.0.5, M6 x 8	1
	T3	92-07		679316	Orifice.0.5, M6 x 8	1
	T5	92-07		913897 (9007712-0605)	Set screw	1
	T6	92-07		913897 (9007712-0605)	Set screw	1
	U6	92-07		578542	Orifice.0.8, M6 x 8	1
	U7	92-07		578542	Orifice.0.8, M6 x 8	1
H4	T4	92-07		578542	Orifice.0.8, M6 x 8	1
	T6	92-07		578542	Orifice.0.8, M6 x 8	1
	T7	92-07		639096	Orifice.0.6, M5 x 6	1
	T8	92-07		639096	Orifice.0.6, M5 x 6	1
	U6	92-07		044081	Orifice.0.7, M6 x 8	1
	U7	92-07		044081	Orifice.0.7, M6 x 8	1
H6	T1	92-07		679316	Orifice.0.5, M6 x 8	1
	T2	92-07		578542	Orifice.0.8, M6 x 8	1
	T3	92-07		578542	Orifice.0.8, M6 x 8	1
H7	T1	92-07		578542	Orifice.0.8, M6 x 8	1
	T2	92-07		578542	Orifice.0.8, M6 x 8	1
	T3	92-07		578542	Orifice.0.8, M6 x 8	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
H9	T1	92-07		578542	Orifice.0.8, M6 x 8	1
	T2	92-07		578542	Orifice.0.8, M6 x 8	1
	T3	92-07		578542	Orifice.0.8, M6 x 8	1
J1	T1	92-07		578542	Orifice.0.8, M6 x 8	1
	T2	92-07		578542	Orifice.0.8, M6 x 8	1
	T3	92-07		578542	Orifice.0.8, M6 x 8	1
J2	T1	92-07		511825	Orifice.0.6, M6 x 8	1
	T2	92-07		511825	Orifice.0.6, M6 x 8	1
	T3	92-07		511825	Orifice.0.6, M6 x 8	1
J5	T4	92-07		578542	Orifice.0.8, M6 x 8	1
	T6	92-07		913897 (9007712-0605)	Set screw	1
	T7	92-07		639096	Orifice.0.6, M5 x 6	1
	T8	92-07		639096	Orifice.0.6, M5 x 6	1
	U6	92-07		578542	Orifice.0.8, M6 x 8	1
	U7	92-07		578542	Orifice.0.8, M6 x 8	1
	K1	T1	92-07		679316	Orifice.0.5, M6 x 8
T2		92-07		679316	Orifice.0.5, M6 x 8	1
T3		92-07		679316	Orifice.0.5, M6 x 8	1
U5		92-07		913897 (9007712-0605)	Set screw	1



E100 315



E100 316E

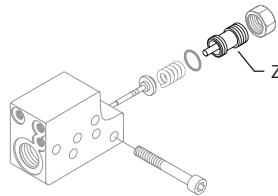
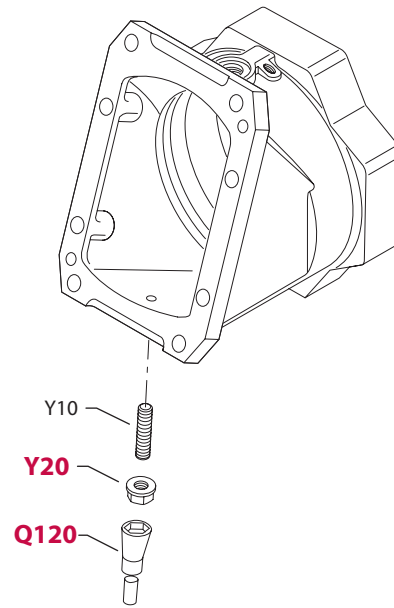
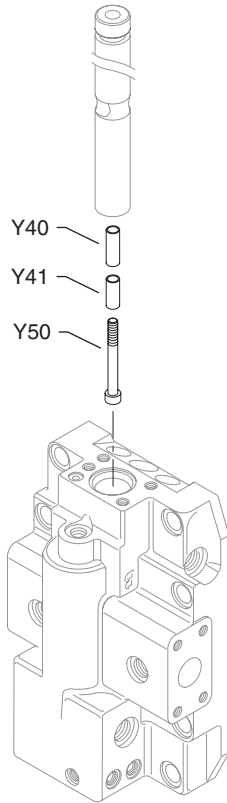


E100 661

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

ORIFICE

Order code	Item	Date begin	Date end	Part number	Part name	Qty. per model/kit
K3	T2	92-07		511825	Orifice. 0.6, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
	U7	92-07		511825	Orifice. 0.6, M6 x 8	1
K4	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
K7	T1	92-07		578542	Orifice. 0.8, M6 x 8	1
	T2	92-07		679316	Orifice. 0.5, M6 x 8	1
	T3	92-07		679316	Orifice. 0.5, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
L1	T4	92-07		578542	Orifice. 0.8, M6 x 8	1
	T6	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
	U6	92-07		044081	Orifice. 0.7, M6 x 8	1
	U7	92-07		044081	Orifice. 0.7, M6 x 8	1
M1	T4	92-07		578542	Orifice. 0.8, M6 x 8	1
	T6	92-07		578542	Orifice. 0.8, M6 x 8	1
	T7	92-07		639096	Orifice. 0.6, M5 x 6	1
	T8	92-07		639096	Orifice. 0.6, M5 x 6	1
	U7	92-07		044081	Orifice. 0.7, M6 x 8	1
M8	T2	92-07		511825	Orifice. 0.6, M6 x 8	1
	T3	92-07		511825	Orifice. 0.6, M6 x 8	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
N2	T2	92-07		511825	Orifice. 0.6, M6 x 8	1
	T3	92-07		511825	Orifice. 0.6, M6 x 8	1
	U7	92-07		511825	Orifice. 0.6, M6 x 8	1
N6	T1	92-07		511825	Orifice. 0.6, M6 x 8	1
	T2	92-07		578542	Orifice. 0.8, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	U5	92-07		913897 (9007712-0605)	Set screw	1
N8	T1	92-07		578542	Orifice. 0.8, M6 x 8	1
	T2	92-07		679316	Orifice. 0.5, M6 x 8	1
	T3	92-07		578542	Orifice. 0.8, M6 x 8	1
	U6	92-07		578542	Orifice. 0.8, M6 x 8	1
	U7	92-07		578542	Orifice. 0.8, M6 x 8	1



E100 317E

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

MINIMUM DISPLACEMENT

012-029	Q120	92-07		770834	Safety cap	1
	Y10	92-07		750638	Set screw, M10 x 65	1
	Y20	92-07		042432	Seal nut, M10	1
030-040	Q120	92-07		770834	Safety cap	1
	Y10	92-07		749556	Set screw, M10 x 80	1
	Y20	92-07		042432	Seal nut, M10	1
042	Q120	92-07		770834	Safety cap	1
	Y10	92-07		041103	Set screw, M10 x 40	1
	Y20	92-07		042432	Seal nut, M10	1
	Y40	92-07		503653	Spacer, 20.5 mm	1
	Y50	92-07		393629	Screw, M8 x 35	1

PCOR ADJUSTER

00				No parts		
11-26	Z	92-07		745661	Adjuster, 70-260 bar	1
27-37	Z	92-07		745679	Adjuster, 270-420 bar	1
A1-C7				No parts		

PRODUCTS AFFECTED

All Series 51 motors

SUBJECT

End cap gasket change.

DESCRIPTION

Effective immediately, a new end cap gasket has been incorporated on all Series 51 motors. It is a direct replacement for the current gasket. The visible differences between the two gaskets are:

1. The new gasket is thicker. It measures .040" versus .030".
2. The new gasket has a red tint to the surface.

The new gasket is a stand alone gasket which should not be used with any sealing aid. The current torque values stay the same.

The new gaskets are now available and **MUST** be used in any repair or conversion.

MODELS AFFECTED

All series 51 motors

SERIAL NUMBERS

N/A

PART NUMBERS AFFECTED

Frame size	Old part number	New part number
60cc	729228	501198
80cc	734368	501199
110cc	734376	501200
160cc	734384	501201
250cc	734392	501202

PARTS DISPOSITION

- Interchangeable
- Scrap used parts
- Order replacement parts
- Revise existing part orders

PRODUCTS AFFECTED Series 51: 60cc-250cc motors

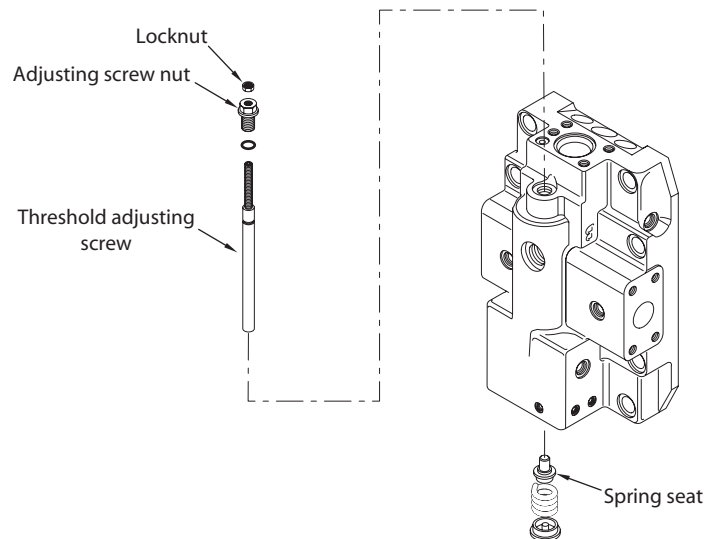
SUBJECT Threshold adjustment screw.

DESCRIPTION To improve the sensitivity of the threshold adjustment on Series 51 motors, the threads on the adjusting screw are being changed from standard pitch thread to fine pitch thread. The adjusting screw nut and lock nut will also change. At the same time, the bore diameter in the end of the adjusting screw and the pin diameter on the end of the spring seat will decrease.

The old style parts will be obsolete and no longer available as service parts. A service kit containing the adjusting assembly and the spring seat has been created.

Piece parts are not interchangeable.

All noted parts must be replaced.



MODELS AFFECTED All series 51: 60cc - 250cc motors

SERIAL NUMBERS This change became effective at serial number N-96-07-xxxxx.

PART NUMBERS AFFECTED

Frame size	Old hardware				New kits
	Spring seat	Adjusting screw nut	Lock nut	Theshold adjusting screw	Threshold adjusting kit
60cc	722264	732487	69393	729251	507691
80cc	722264	732487	69393	732503	507692
80cc	722264	732487	69393	737353	507672
110cc	722264	732487	69393	732511	507693
110cc	722264	732487	69393	732503	507677
160cc	722264	732487	69393	792051	507694
250cc	722264	732487	69393	792069	507695

PARTS DISPOSITION

■ Interchangeable - Piece part are not interchangeable

PRODUCTS AFFECTED

Series 51: 60cc - 250cc motors

SUBJECT

Change to balanced areas between end cap and valve segment.

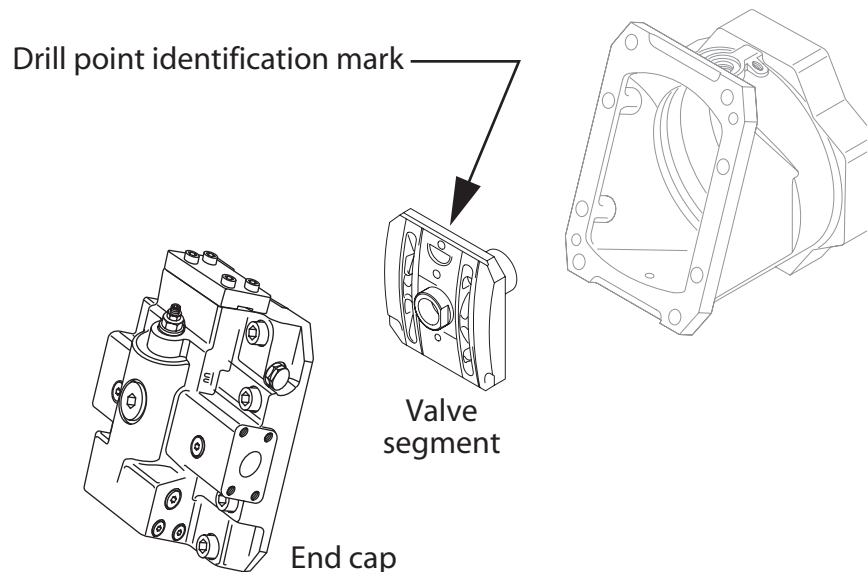
DESCRIPTION

As part of the continuing Series 51 product improvement program, the balance lands on the end cap and valve segment have been changed. The valve segment now defines the balance. The contact surface of the end cap has been made larger while the contact surface of the valve segment has been reduced. The change was implemented in three steps:

1. Change the valve segment so it defines the balance between the valve segment and the end cap. This change was implemented May 1994.
2. Change the end cap to allow a larger contact surface to keep the load area constant. This change was implemented January 1995
3. Change the valve segment to allow a smaller contact surface and reduce the balance. This change was implemented February 1996.

Do not use a new end cap with an old valve segment. However a new valve segment will work with an old end cap. The new valve segment (3rd step) is marked with a drill point on the cylinder block interface side next to the outer drain hole.

The old end cap and valve segment part numbers are obsolete. They are no longer available as genuine service parts.



MODELS AFFECTED

All Series 51 motors

SERIAL NUMBERS

N-96-12-xxxxx and later

PART NUMBERS AFFECTED

End caps	Radial ports		Radial ports		Axial ports		Axial ports	
	w/LF		w/o LF		w/LF		w/o LF	
	Old	New	Old	New	Old	New	Old	New
60cc	729210	504226	779793	504227	-	-	-	-
80cc	731794	504230	731794	504231	739615	504232	739615	504234
110cc	731802	504236	731802	504236	739631	504237	739631	504238
160cc	731810	504239	731810	504240	731828	504242	731828	504243
250cc	731836	504244	783282	504245	731844	504246	731844	504247

Valve segment	Standard spindle		Retained spindle	
	Old	New	Old	New
60cc	732701	504718	-	-
80cc	360354	503939	-	-
110cc	349076	504715	501349	507758
160cc	356139	507242	500341	507759
250cc	367896	508202	502561	508202

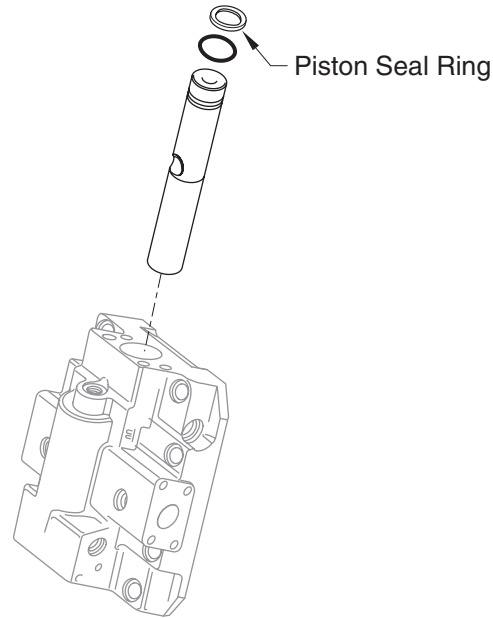
PARTS DISPOSITION

■ Interchangeable - except where noted

PRODUCTS AFFECTED Series 51: 60 thru 250cc variable motors

SUBJECT Servo piston seal ring change

DESCRIPTION As a product improvement, Sauer-Danfoss is changing the vendor for the servo piston seal ring used in the Series 51 variable motors. As a result, the old piston seal ring will become obsolete and no longer available as a service part.



MODELS AFFECTED All Series 51 motors

SERIAL NUMBERS N-96-08-xxxxx and after

PART NUMBERS AFFECTED

Frame size	Old part number	New part number
60cc	504202	508131
80cc	504203	508132
110cc	504204	508133
160cc	504205	508134
250cc	687277	504136

PARTS DISPOSITION ■ Interchangeable

PRODUCTS AFFECTED

Series 51: 60 thru 250cc variable motors

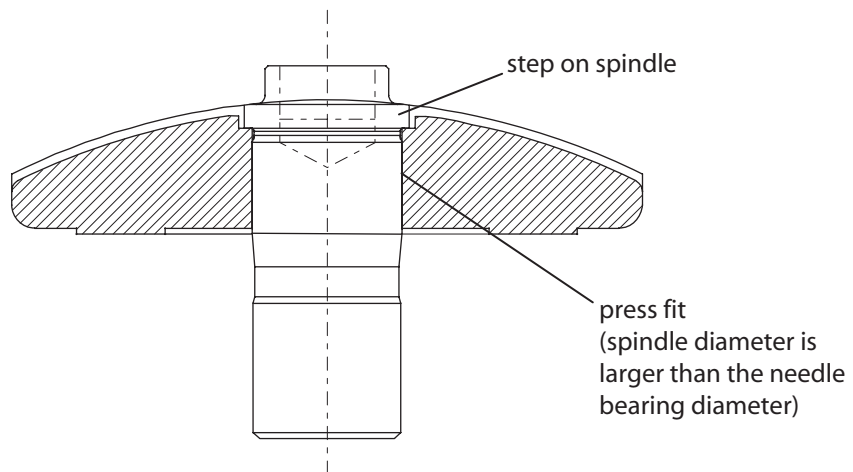
SUBJECT

Change to stepped spindle in valve segment

DESCRIPTION

As part of the continuing Series 51 product improvement, the valve segment spindle design has been changed. The new design spindle has a step that stops against a recess in the valve segment. The new stepped spindle valve segment assembly replaces the valve segment assemblies with the straight spindle and the retained spindle.

The old segment valve assemblies will become obsolete. The stepped spindle valve segment assembly will be the standard for all models.



MODELS AFFECTED

All Series 51 motors

SERIAL NUMBERS

N-96-08-xxxxx and after

PART NUMBERS AFFECTED

Frame size	Obsolete Straight spindle valve segment	Obsolete Retained spindle valve segment	New Stepped spindle valve segment
60cc	504718	-	508197
80cc	503939	-	508198
110cc	504715	507758	508199
160cc	507252	507759	508201
250cc	507757	507760	508202

PARTS DISPOSITION

■ Interchangeable - except where noted

PRODUCTS AFFECTED

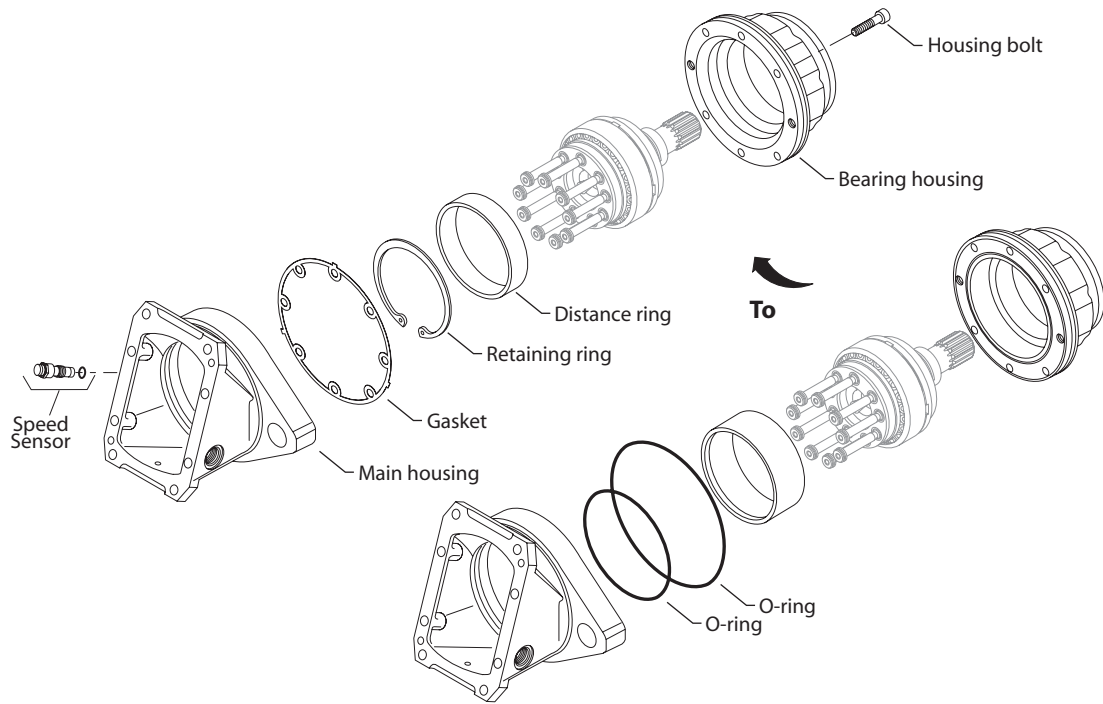
Series 51 cartridge motors

SUBJECT

Incorporation of speed sensor into cartridge motors.

DESCRIPTION

In order to incorporate a speed sensor into the Series 51 cartridge motors, some changes have been made to the main housing and bearing housing. These changes included: adding a boss to the side of the main housing for the speed sensor, changing from O-ring seals between housings to a gasket seal, shortening the distance ring to allow clearance for the speed sensor, and adding a retaining ring to locate the distance ring. These parts are non-interchangeable as both housings have changed. The old housings and distance ring are obsolete and no longer available as service parts. Refer to Service Bulletin SB-1998-021 for housing bolt torque and sequence.



MODELS AFFECTED

51C060, 51C080, and 51C110 cartridge motors

SERIAL NUMBERS

51C060 motors = N-94-42-xxxxx and after
 51C080 motors = N-94-42-xxxxx thru N-98-32-xxxxx. After N98-32-xxxxx see SB-1998-086
 51C110 motors = N-96-24-xxxxx and after

PART NUMBERS AFFECTED

	From	To	From	To	From	To
Description	60cc	60cc	80cc	80cc	110cc	110cc
Main housing	741652	501103	734855	501104	738997	501105
Bearing housing	763756	501108	734632	501109	738971	501110
Retaining ring	--	501120	--	371625	--	504732
Gasket	--	501019	--	507259	--	501113
O-ring	792319	--	916759	--	502206	--
O-ring	502204	--	279570	--	502207	--
Distance ring	741702	501116	734913	501117	739045	501118

PARTS DISPOSITION

■ Non-interchangeable

PRODUCTS AFFECTED

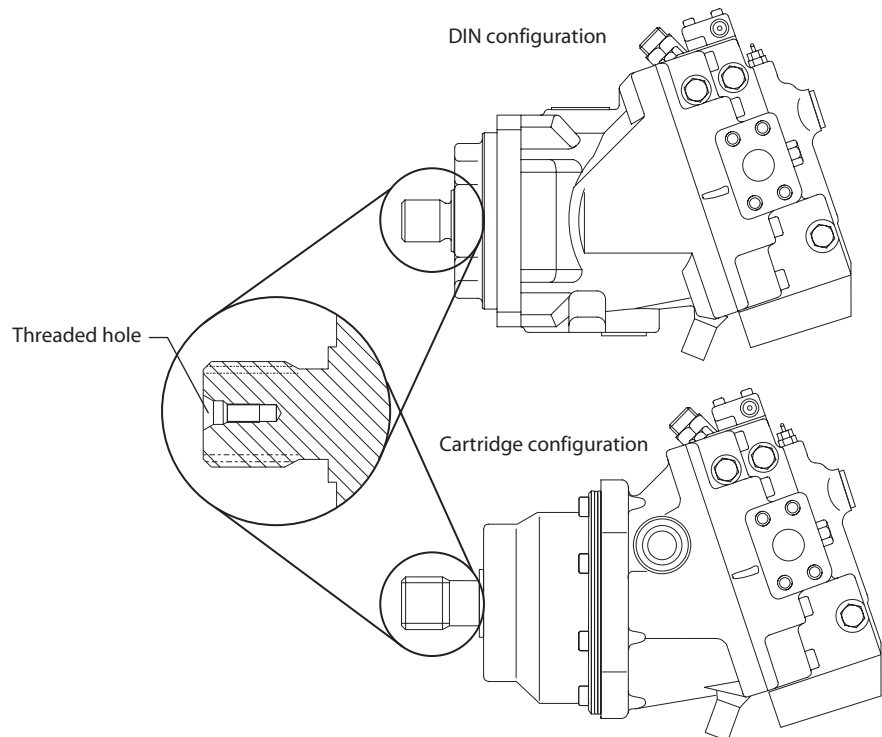
Series 51: 60cc, 80cc, 110cc, and 160cc motors

SUBJECT

Thread change at customer end of DIN shaft assemblies.

DESCRIPTION

As a product improvement, Sauer-Danfoss has changed the threaded hole at the customer end of DIN shaft assemblies to metric threads. Metric shaft assemblies will now have a metric threaded hole. To aid in identifying this change, new shaft assembly part numbers have been released. The new shaft assemblies are interchangeable with the previous shaft assemblies. The previous shaft assembly part numbers will become obsolete.



MODELS AFFECTED

All 60, 80, 110, and 160cc motors (Series 51 and 51-1) with DIN shaft assemblies

SERIAL NUMBERS

See table below

PART NUMBERS AFFECTED

Frame size	Shaft code	Previous p/n	New p/n	Bolt size FROM	Bolt size TO	Effective after serial number
60cc	D1	747931	513034	7/16 - 14	M10 x 1.5	N-99-17-xxxxx
60cc	D2	787622	513033	7/16 - 14	M10 x 1.5	N-99-52-xxxxx
80cc	D2	742213	513037	7/16 - 14	M10 x 1.5	N-99-13-xxxxx
80cc	D3	783399	513035	7/16 - 14	M10 x 1.5	N-99-12-xxxxx
110cc	D3	787663	513039	5/8 - 11	M12 x 1.75	N-99-16-xxxxx
110cc	D4	749192	513038	5/8 - 11	M12 x 1.75	N-99-17-xxxxx
160cc	D4	787689	513041	5/8 - 11	M12 x 1.75	N-99-16-xxxxx
160cc	D5	749226	513040	5/8 - 11	M12 x 1.75	N-99-39-xxxxx

PARTS DISPOSITION

■ Interchangeable

PRODUCTS AFFECTED

All Series 51 & 51-1 motors

SUBJECT

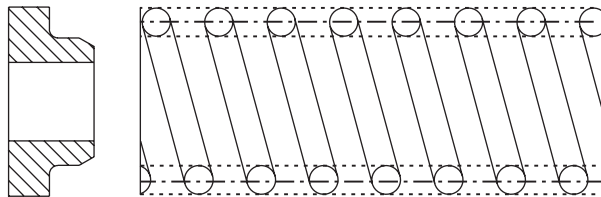
Change to spring and spring seat at ends of loop flushing shuttle spool.

DESCRIPTION

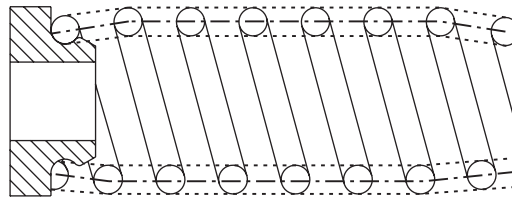
As a product improvement, and to ease assembly, the spring and spring seat at the ends of the loop flushing shuttle spool have been changed. The new spring and spring seat clip together. The old spring and spring seat are interchangeable with the new spring and spring seat as an assembly only.

The old spring seat will become obsolete and no longer available as a service part. The old spring will remain available as a service part.

From:



To:



MODELS AFFECTED

All Series 51 and 51-1 variable motors

SERIAL NUMBERS

This change became effective at serial number N-00-50-xxxxx

PART NUMBERS AFFECTED

From: Spring part number 4350286 and spring seat part number 4800353

To: Spring seat assembly part number 513596

PARTS DISPOSITION

■ Interchangeable - as an assembly only

PRODUCTS AFFECTED

All Series 51 & 51-1 motors

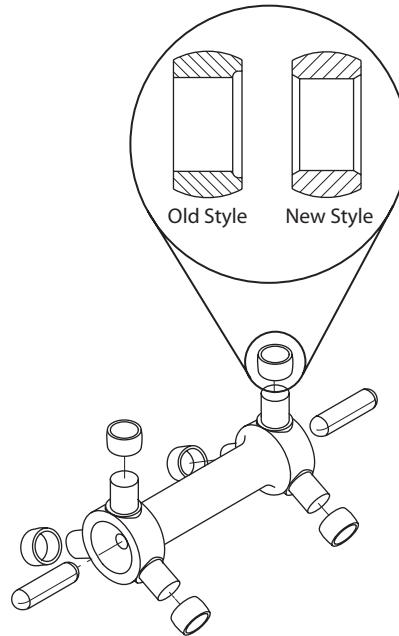
SUBJECT

Incorporation of symmetrical rollers on the synchronizing shaft

DESCRIPTION

As a product improvement and to improve ease of assembly, Sauer-Danfoss has changed the design of the rollers used on the synchronizing shaft in Series 51 and 51-1 motors. The new rollers are symmetrical, in that they can be assembled either direction on the synchronizing shaft. The old rollers were asymmetrical and had to be assembled only one way. The synchronizing shaft has also been changed to accept the symmetrical rollers. The legs for the rollers are now longer in length.

A service kit is available to replace the old design synchronizing shaft and rollers, which are obsolete and no longer available as service parts. The pins at each end of the synchronizing shaft are still the same parts.



MODELS AFFECTED

All Series 51 and 51-1 motors

SERIAL NUMBERS

Effective after N-01-39-xxxxx

PART NUMBERS AFFECTED

Frame size	Old kit part number	New kit part number
60cc	771675	517308
80cc	771121	517309
110cc	773267	516485
160cc	776823	517310
250cc	776831	517311

PARTS DISPOSITION

- Interchangeable; as an assembly only
- Use parts in stock

PRODUCTS AFFECTED

All Series 51 & 51-1 motors

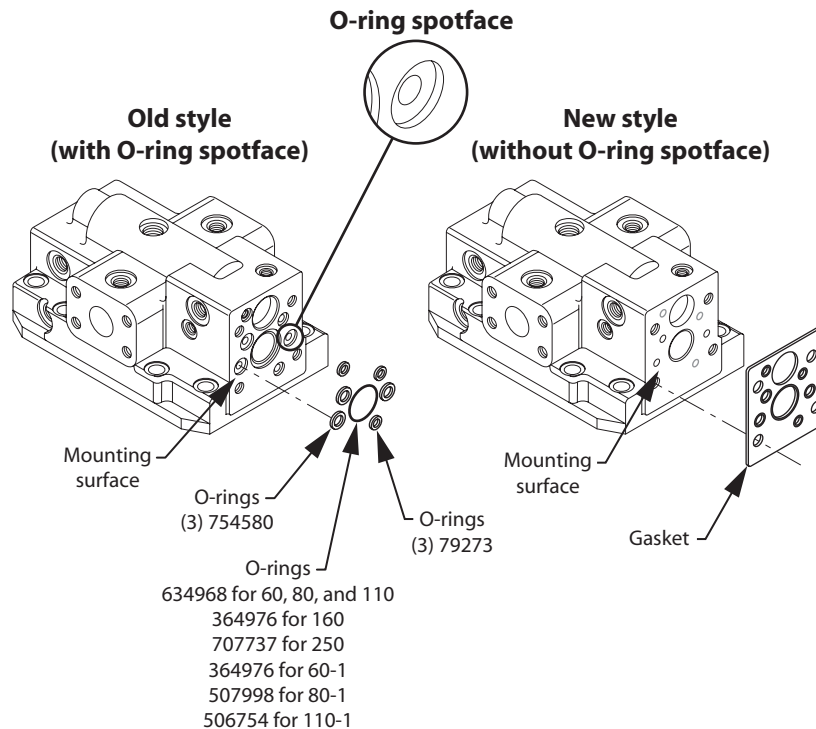
SUBJECT

Sealing change to end cap/control interface

DESCRIPTION

The sealing is improved between the end cap and controls or multi-function blocks on all Series 51 and 51-1 motors. This change replaces individual O-rings with a gasket that incorporates imbedded rubber seal rings. The O-ring spot faces are removed from the end cap mounting face. There is no change to controls' and multi-function blocks' sealing surface.

New end cap part numbers allow better control of this change. Old end cap part numbers are obsolete. You cannot use the new gasket with old end caps and you cannot use the O-rings with new end caps. Control and multi-function block kit now include the O-rings and the new gasket.



MODELS AFFECTED

All Series 51 and 51-1 motors

SERIAL NUMBERS

See table below

PART NUMBERS AFFECTED

End cap code	Frame size	Old part number	New part number	Manufacture date code	Gasket part number
R and T	60	504226	516057	N-03-14-xxxxx	511810
A	60	504228	515695	N-03-12-xxxxx	511810
R	60-1	506563	516902	N-03-39-xxxxx	512411
A	60-1	506564	516905	N-03-28-xxxxx	512411
H	60-1	510643	516920	N-03-28-xxxxx	512411
R and T	80	504230	515056	N-03-14-xxxxx	511810
A	80	504232	515696	N-03-27-xxxxx	511810
R	80-1	507976	516903	N-03-39-xxxxx	512411
A	80-1	507977	516907	N-03-39-xxxxx	512411
H	80-1	507978	516921	N-03-39-xxxxx	512411
R and T	110	504235	516058	N-03-14-xxxxx	511810
A	110	504237	513592	N-03-01-xxxxx	511810
R	110-1	506601	516904	N-03-39-xxxxx	512411
A	110-1	506602	515697	N-03-39-xxxxx	512411
H	110-1	510634	516923	N-03-39-xxxxx	512411
R	160	504239	516059	N-03-07-xxxxx	511851
A	160	504242	513543	N-03-01-xxxxx	511851
R	250	504244	516060	N-03-07-xxxxx	511851
A	250	504246	513544	N-03-08-xxxxx	511851

PARTS DISPOSITION

- Non-interchangeable;
- Order replacement parts



Series 51: 60 cc Variable Displacement Motors
Service Parts Manual

Notes



Series 51: 60 cc Variable Displacement Motors
Service Parts Manual
Notes



OUR PRODUCTS

Hydrostatic transmissions
Hydraulic power steering
Electric power steering
Electrohydraulic power steering
Closed and open circuit axial piston pumps and motors
Gear pumps and motors
Bent axis motors
Orbital motors
Transit mixer drives
Planetary compact gears
Proportional valves
Directional spool valves
Cartridge valves
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Displays
Sensors

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