



Bulletin HY17-8812-M1/UK

# Spare Parts List

## Series P70, Gen. 2

Effective date: Juli 4, 2017  
Supersedes: August 24, 2016



This list of spare parts is designed to give you a good idea of the components included in the product range for valves. To see precisely which component is used for a specific product, you will need to look at the customer specification for the product in question. The customer specification contains a number of entries, and for each entry, a code pressure or flow is specified with a code or a number. To help you find your way around, this list of spare parts contains references to these entries and codes.

Codes on the image page of the list of spare parts usually appear in bold and enclosed in a border. The table page contains available spare part sets. The ordering code is the product code that appears in the Part column.

The spare part to be used is determined by the first two columns, which contain the entry and the code from the customer specification. If these columns are empty, the spare part set is valid regardless of the selected code, unless indicated otherwise.

The symbols in the frame below are used in this Spare Parts List to help you find the right tools, the right torques, suitable grease etc.

### **Technical index description**

- 1 = Item pos. no. 1.
- 1(2x) = Item pos. no. 1, contains 2 pieces in the kit
- 1[2] = Item pos. no. 2 already mounted on item pos. no. 1 at delivery.
- 1[2](2x) = Item pos. no. 1 (see above) contains 2 pieces in the kit.

### **Conversion factors**

1 kg	= 2.2046 lb
1 N	= 0.22481 lbf
1 Nm	= 0.10197 kpm
1 bar	= 14.504 psi
1 l	= 0.21997 UK gallon
1 l	= 0.26417 US gallon
1 cm <sup>3</sup>	= 0.061024 in <sup>3</sup>
1 m	= 3.2808 feet
1 mm	= 0.03937 in
1°C = (9/5xC°+32)°F	

### **Symbols for servicing**

-  = Phillips screw
-  = Slot screw
-  = Socket head dimensions in mm and/or inch
-  = Hexagon dimensions in mm and/or inch
-  = Sixpoint socket
-  = Wrench size in mm and/or inch or special assembly/disassembly tool needed. No...
-  = Factory preadjusted item, see appendix A
-  = Thread for disassembly type...
-  = Tightening torque in Nm
-  = Use locking/sealing fluid type...
-  = Use corrosion preventative type...
-  = Use hydraulic liquid for lubrication
-  = Use grease type...
-  = Spool classifies by size, see appendix A



## **WARNING – USER RESPONSIBILITY**

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

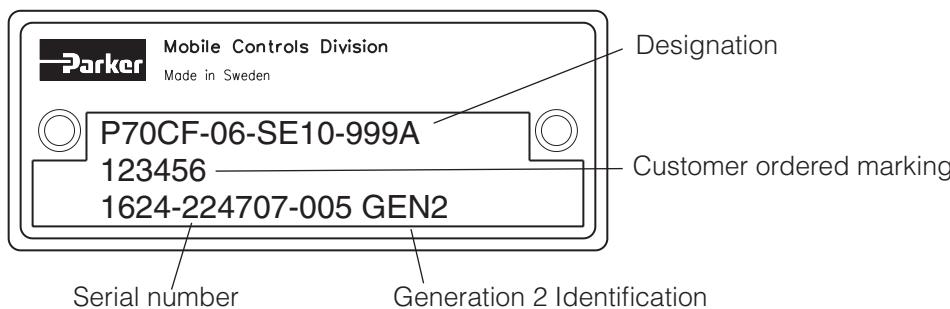
To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

## **Offer of Sale**

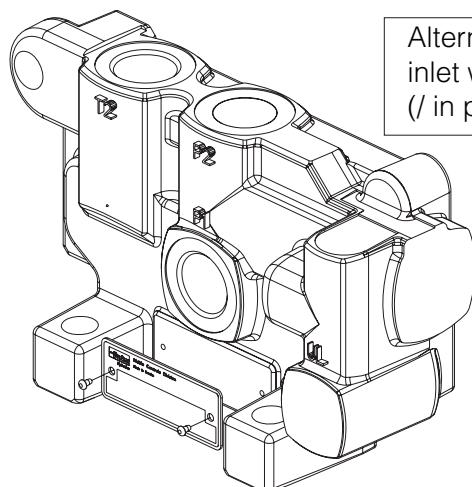
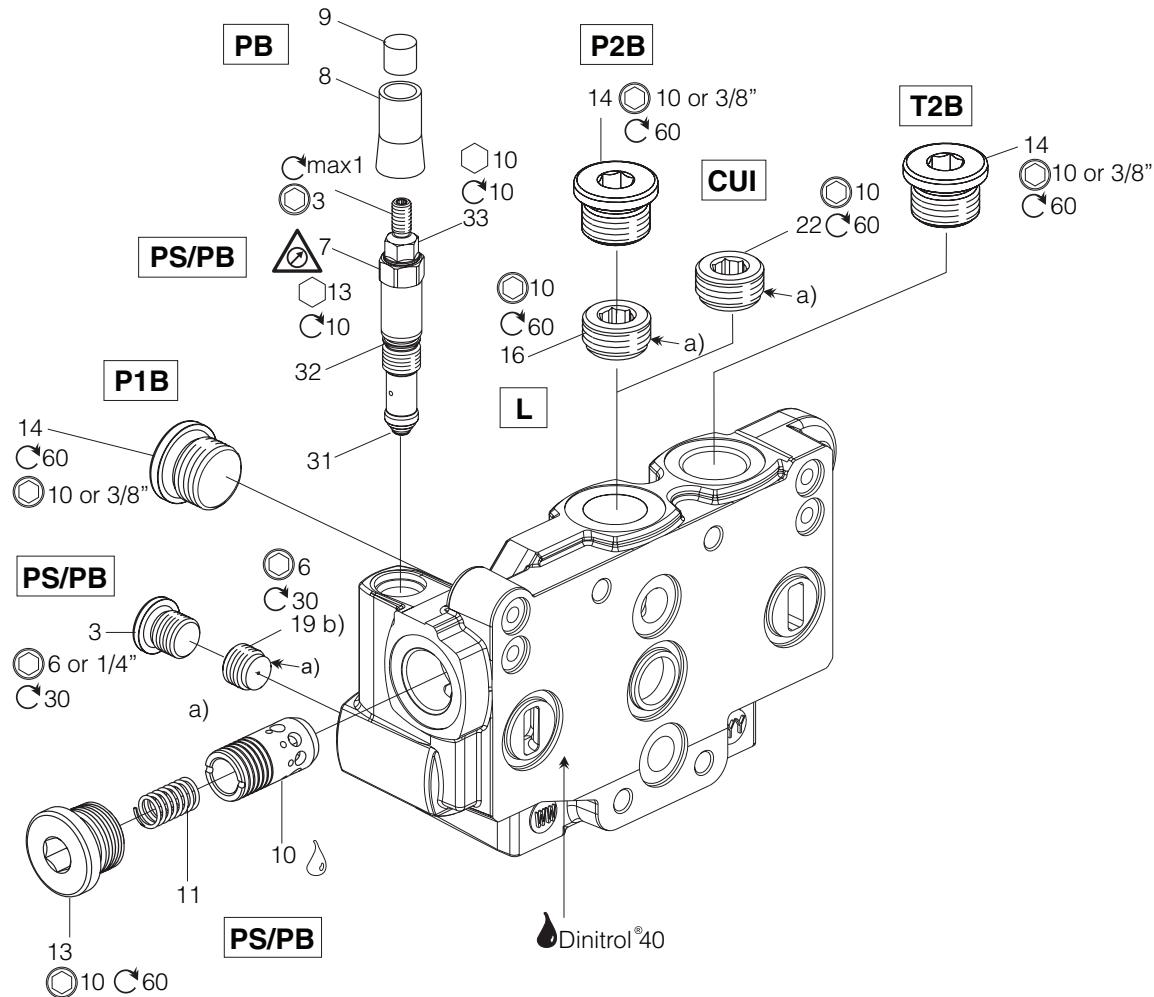
Please contact your Parker representation for a detailed "Offer of Sale".

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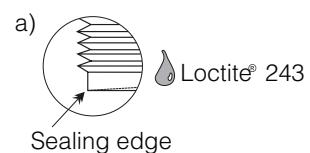
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Valve serial numbers consist of three groups of digits  
 The first group shows year and week of manufacture:  
 In this example, 1624 means week 24 of 2016  
 The remaining digits are for internal use within Parker

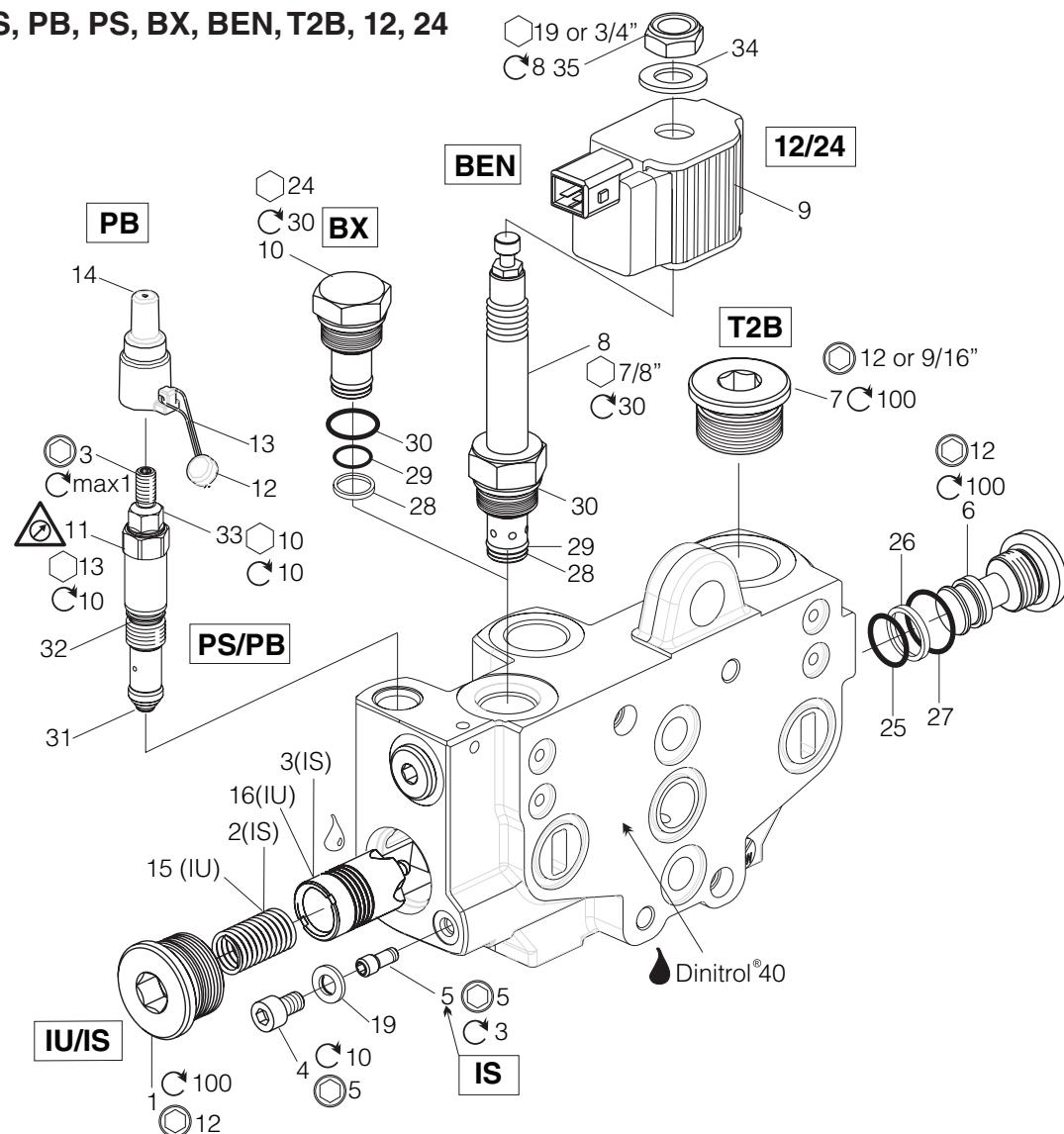
**PB, PS, P1B, P2B, T2B, L, CUI**

Alternative appearance,  
inlet without main relief  
(/ in pos 16)

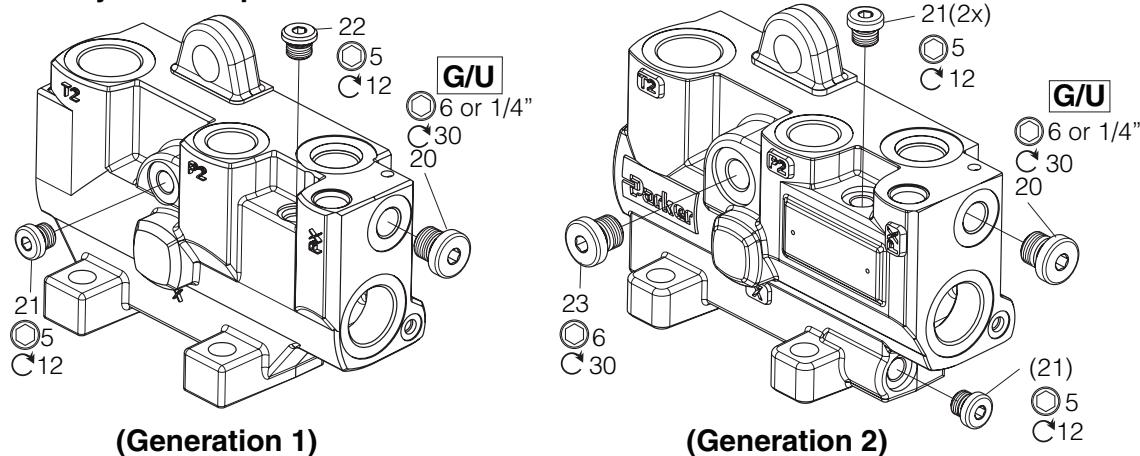


b) Not at "CUI" in pos. 27,  
or "/" in pos. 16.

See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>PS, PB</b>	16	398000K042	Main stage	10, 11, 13
<b>PS, PB</b>	16	398000K069	Pilot part, main relief valve PLD03	7 [31, 32, 33]
<b>PS, PB</b>	16	393000K831	Seal kit pilot part, main relief	31, 32, 33
<b>PS, PB</b>	16	-	Plug VST11/2EDCF	13
<b>PB</b>	16	393000K852	Sealing set	8, 9
<b>PS, PB + G</b>	16 + 04	-	Plug VST11/4EDCF	3
<b>PS, PB + U</b>	16 + 04	-	Plug 6HP5ON-S	3
<b>PS, PB + G</b>	16 + 04	6760004	Orifice kit Ø0.9 mm, BSP	19 (5x)
<b>PS, PB + U</b>	16 + 04	6760005	Orifice kit Ø0.9 mm, UNF	19 (5x)
<b>P1B, P2B, T2B + G</b>	25, 26, 27 + 04	-	Plug VST11/2EDCF	14
<b>P1B, P2B, T2B + U</b>	25, 26, 27 + 04	-	Plug 10HP5ON-S	14
<b>L + G</b>	27 + 04	398000K047	Plug (parallel connection), BSP	16
<b>L + U</b>	27 + 04	398000K185	Plug (parallel connection), UNF	16
<b>CUI + G</b>	27 + 04	398000K226	Orifice Ø1.0 mm (unloaded const. press.), BSP	22
<b>CUI + U</b>	27 + 04	398000K227	Orifice Ø1.0 mm (unloaded const. press.), UNF	22

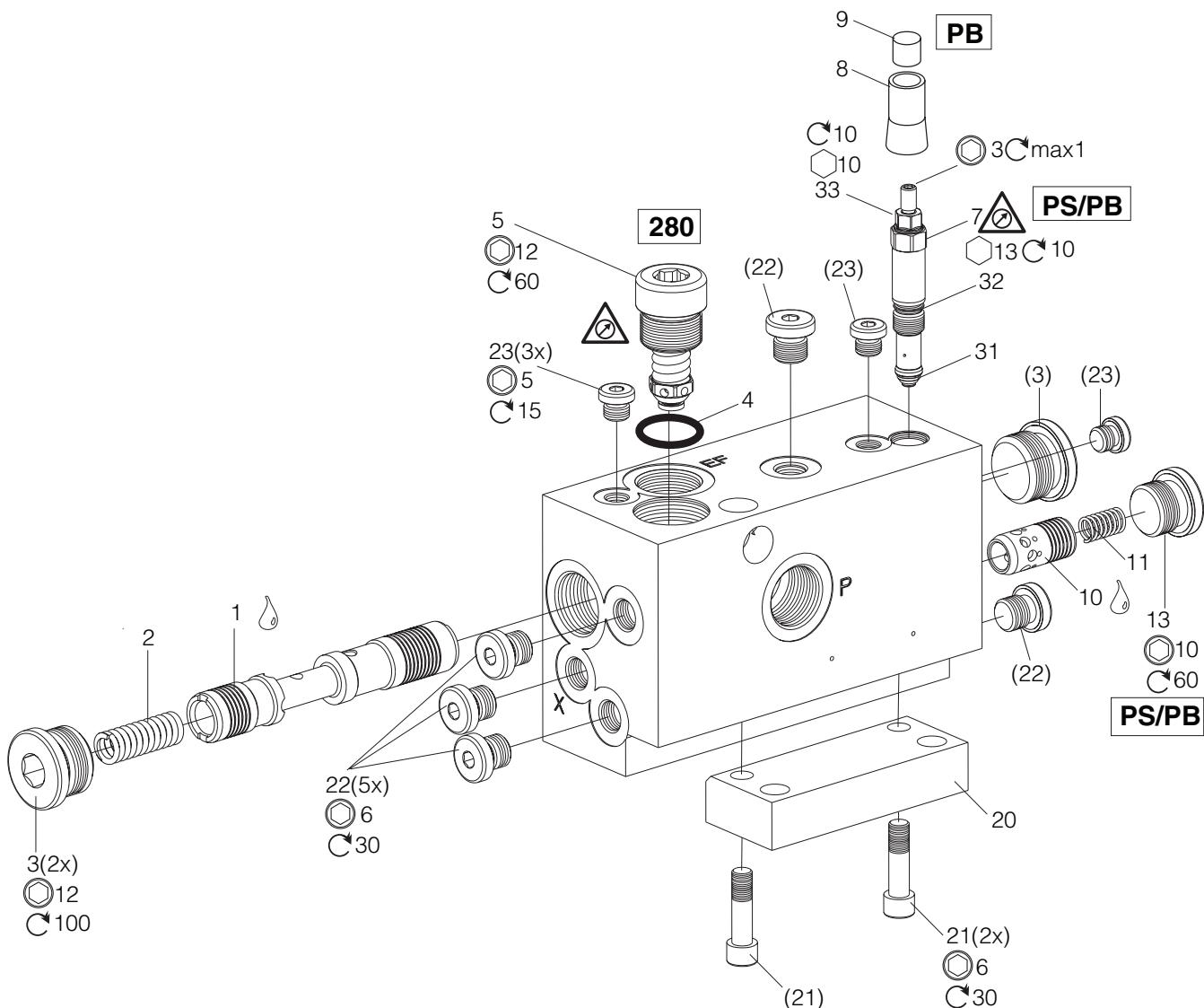
**IU, IS, PB, PS, BX, BEN, T2B, 12, 24**

**Old style used up to serial No. 0704-...**



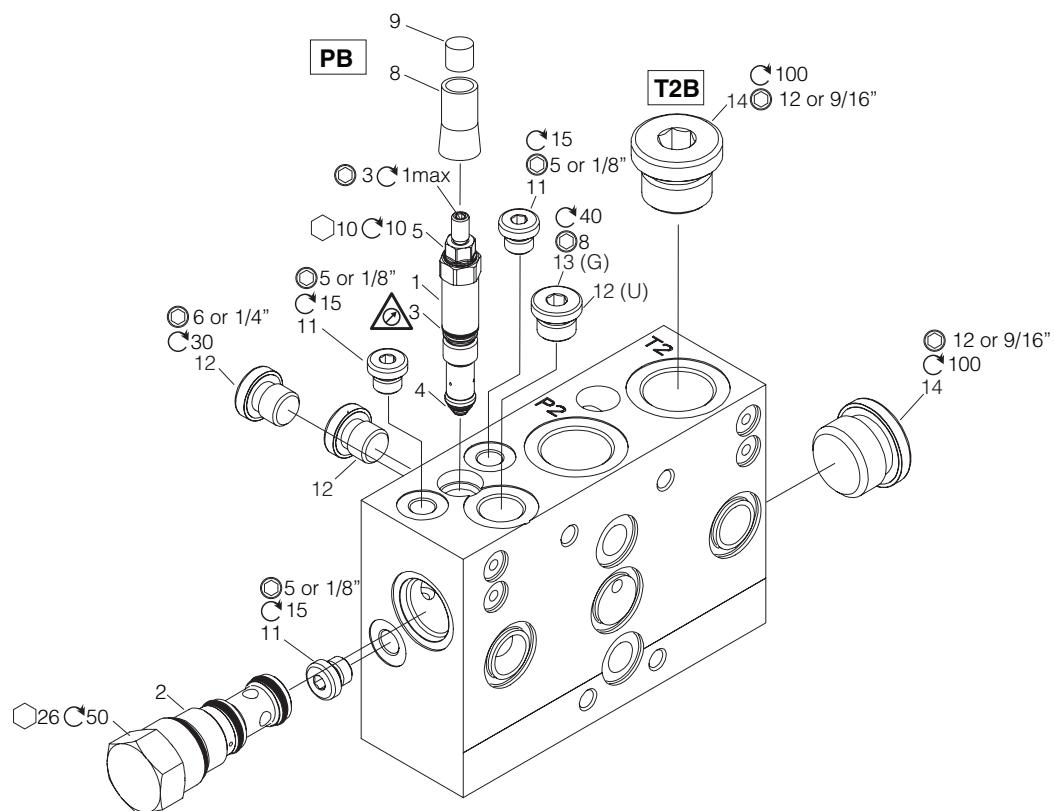
See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>PS, PB</b>	16	398000K069	Pilot part, Main relief valve	11 [31, 32, 33]
<b>PS, PB</b>	16	393000K831	Seal kit, Pilot part relief	31, 32, 33
<b>PB</b>	16	398000K850	Sealing set (for PB)	12, 13, 14
<b>T2B + G</b>	25 + 04	-	Plug VSTI3/4EDCF	7
<b>T2B + U</b>	25 + 04	-	Plug 12HP5ON-S	7
<b>BEN</b>	22	398000K045	Pump unloading valve	8 [28, 29, 30, 35], 34
<b>BEN</b>	22	-	SK08-2, seal kit for item 8	28, 29, 30
<b>12</b>	05	393000K448	Coil 12 VDC	9
<b>24</b>	05	6760652	Coil 24 VDC	9
<b>BX</b>	22	398000K044	Pump unloading blocked	10 [28, 29, 30]
<b>BX</b>	22	-	SK08-2, seal kit for BX	28, 29, 30
<b>IS, IU</b>	15	-	Plug VSTI3/4EDCF	1
<b>IS, IU</b>	15	9120091024	Y- plug	6 [25, 26, 27]
<b>IS, IU</b>	15	9120091030	Seal kit for Y- plug	25, 26, 27
<b>IS</b>	15	6760138	Spool IS	2, 3, 4 [19], 5
<b>IU</b>	15	6760006	Spool IU	4 [19], 15, 16
<b>IS, IU</b>	15	6760017	Plug kit M6x12	4(2x), 19(2x)
<b>G</b>	04	-	Plug VSTI1/4EDCF	20
<b>U</b>	04	-	Plug 6HP5ON-S	20
	-		Plug VSTI1/8EDCF	21
		6760040	Plug (O-ring) 1/8", BSP	22
		-	Plug VSTI1/4EDCF	23

**PS, PB**

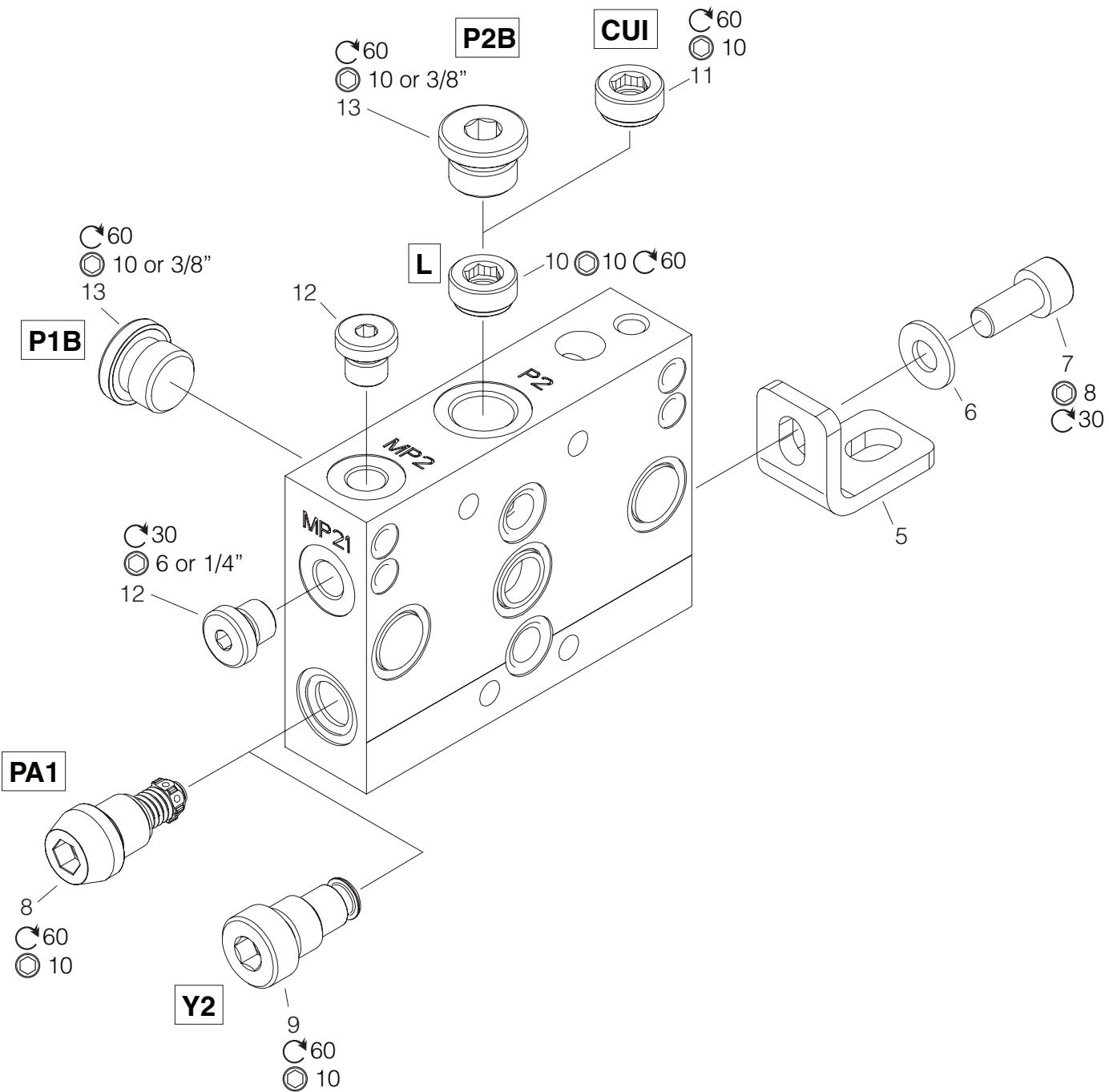


See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>PRI + G</b>	15 + 04	6760580	Pilot spool	1, 2
<b>PRI + G</b>	15 + 04	-	Plug VSTI3/4EDCF	3
<b>PRI + G</b>	15 + 04	-	Plug VSTI1/2EDCF	13
<b>PB</b>	16	393000K852	Sealing kit	8, 9
<b>PS/PB</b>	16	398000K069	Pilot part, main relief valve	7 [31, 32, 33]
<b>PS, PB</b>	16	393000K831	Seal kit PS, PB	31, 32, 33
<b>PS, PB</b>	16	398000K042	Main stage	10, 11, 13
<b>280</b>	29	9120029116	Port relief valve PCL082-280-20	5 [4] 
<b>280</b>	29	6760193	Seal kit PLC082	4 (5x)
<b>PRI</b>	15	6760581	Bracket kit	20, 21(2x)
<b>PRI + G</b>	15 + 04	-	Plug VSTI1/8EDCF	23
<b>PRI + G</b>	15 + 04	-	Plug VSTI1/4EDCF	22

CFC

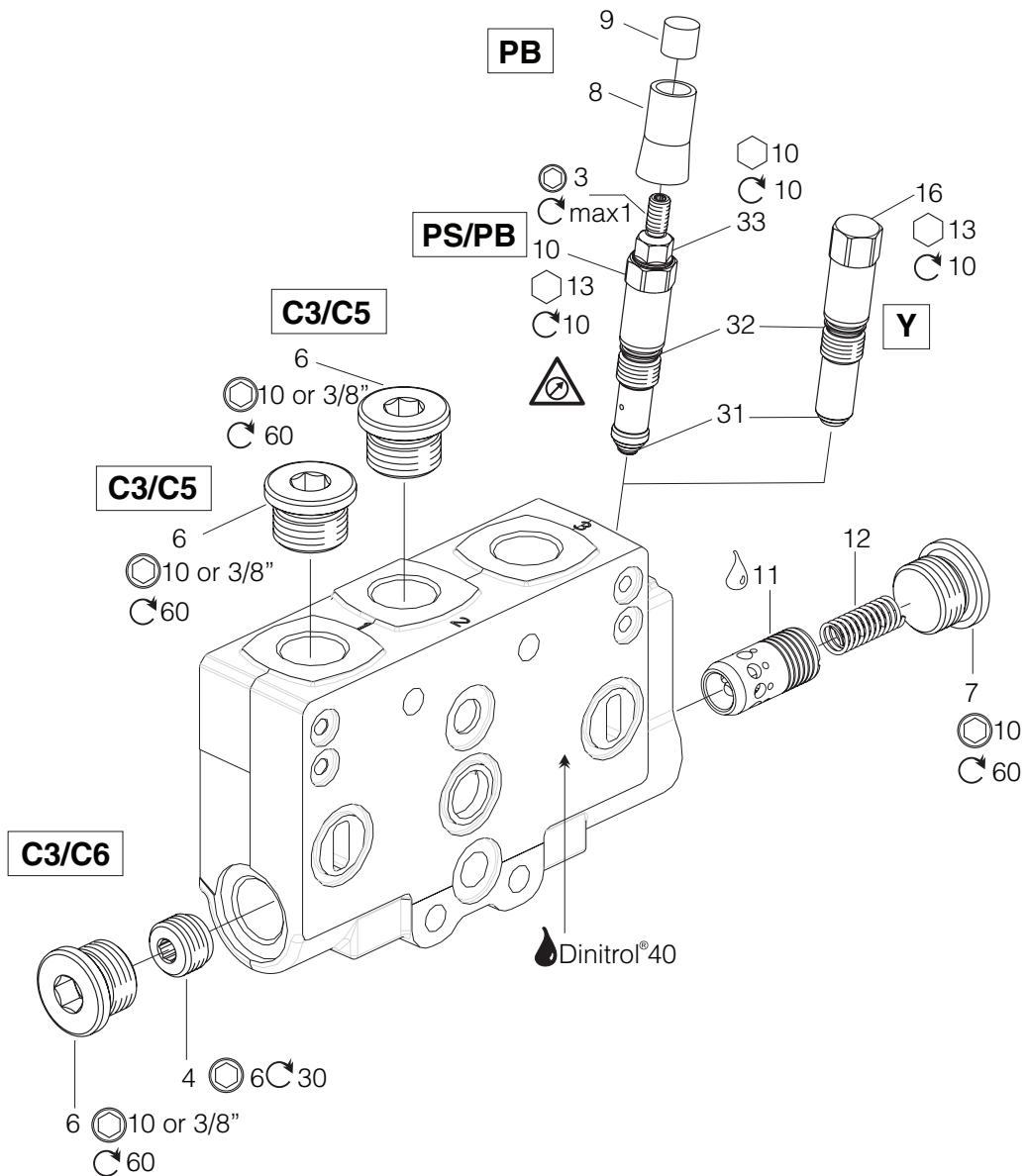


See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>CFC</b>	15	398000K069	Main relief valve pilot, PLD03	1[3,4,5]
<b>CFC</b>	15	393000K831	Seal kit	3,4,5
<b>PB</b>	16	393000K852	Sealing kit	8,9
<b>CFC</b>	15	-	RO4E3-15 ON	2
<b>CFC</b>	15	-	Screw P6SS 6x6	Not shown (locking fluid STD 1262,15)
<b>CFC</b>	15	-	Restrictor screw M6x6 Ø0,8	Not shown (locking fluid STD 1262,15)
<b>CFC + G</b>	15 + 04	-	Plug VSTI1/8EDCF	11
<b>CFC + U</b>	15 + 04	-	Plug 3HP5ON-S	11
<b>CFC + G</b>	15 + 04	-	Plug VSTI1/4EDCF	12
<b>CFC + U</b>	15 + 04	-	Plug 6HP5ON-S	12
<b>CFC + G</b>	15 + 04	-	Plug VSTI3/8EDCF	13
<b>CFC + G</b>	15 + 04	-	Plug VSTI3/4EDCF	14
<b>CFC + U</b>	15 + 04	-	Plug 12HP5ON-S	14

**I2**

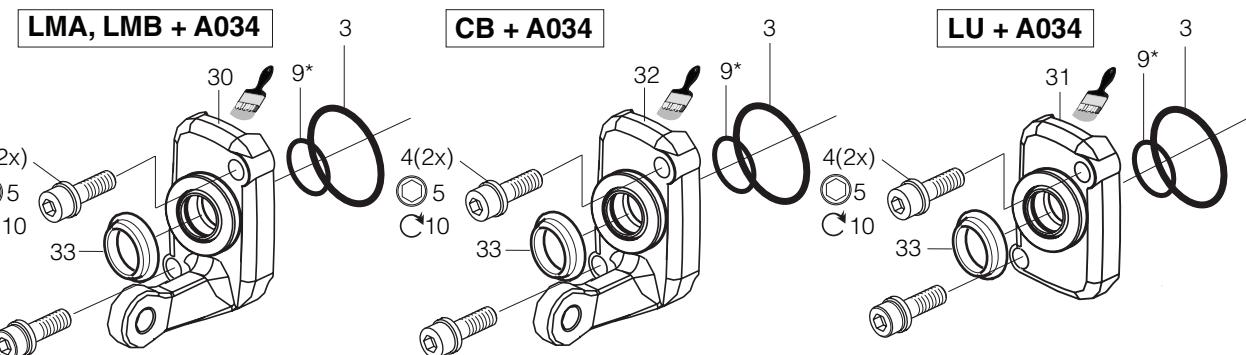
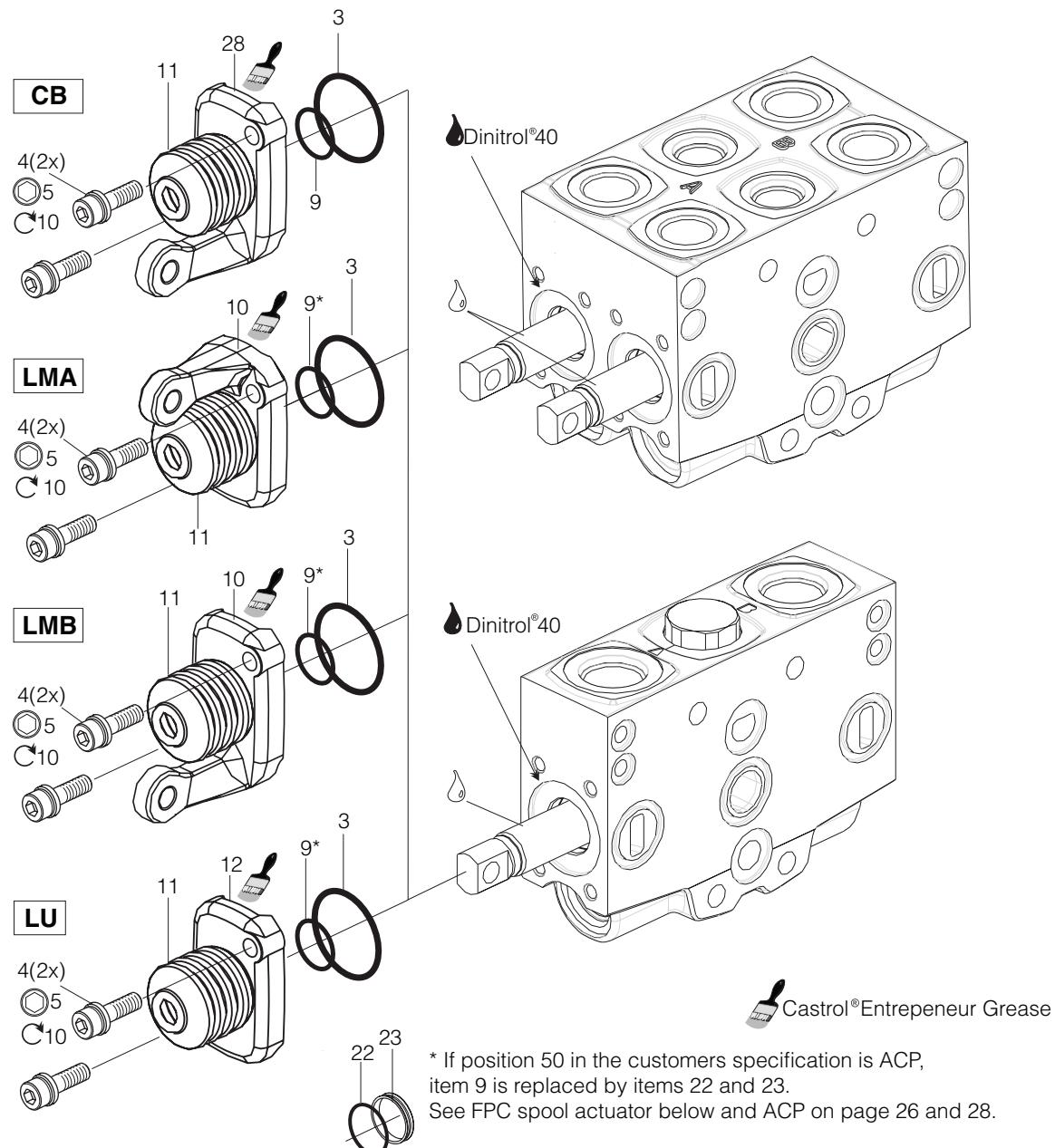
See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>I2</b>	15	6760192	Bracket	5,7
<b>PA</b>	16+17	-	PLC053-* see page 33	8
<b>PA</b>	16	6760445	Seal kit	not shown
<b>Y2</b>	16	393000K195	Cavity plugged, Y2	9
<b>Y2</b>	16	393000K818	Seal kit	not shown
<b>L + G</b>	27 + 04	398000K047	Plug (parallel connection), BSP	10
<b>L + U</b>	27 + 04	398000K185	Plug (parallel connection), UNF	10
<b>CUI + G</b>	27 + 04	398000K226	Orifice Ø1.0 mm (unloaded const. press.), BSP	11
<b>CUI + U</b>	27 + 04	398000K227	Orifice Ø1.0 mm (unloaded const. press.), UNF	11
<b>G</b>	04	-	Plug VSTI1/4EDCF	12
<b>U</b>	04	-	Plug 6HP5ON-S	12
<b>P1B, P2B+G</b>	26,27+04	-	Plug VSTI1/2EDCF	13
<b>P1B, P2B+U</b>	26,27+04	-	Plug 10HP5ON-S	13

**PB, PS, Y, C3, C5, C6**



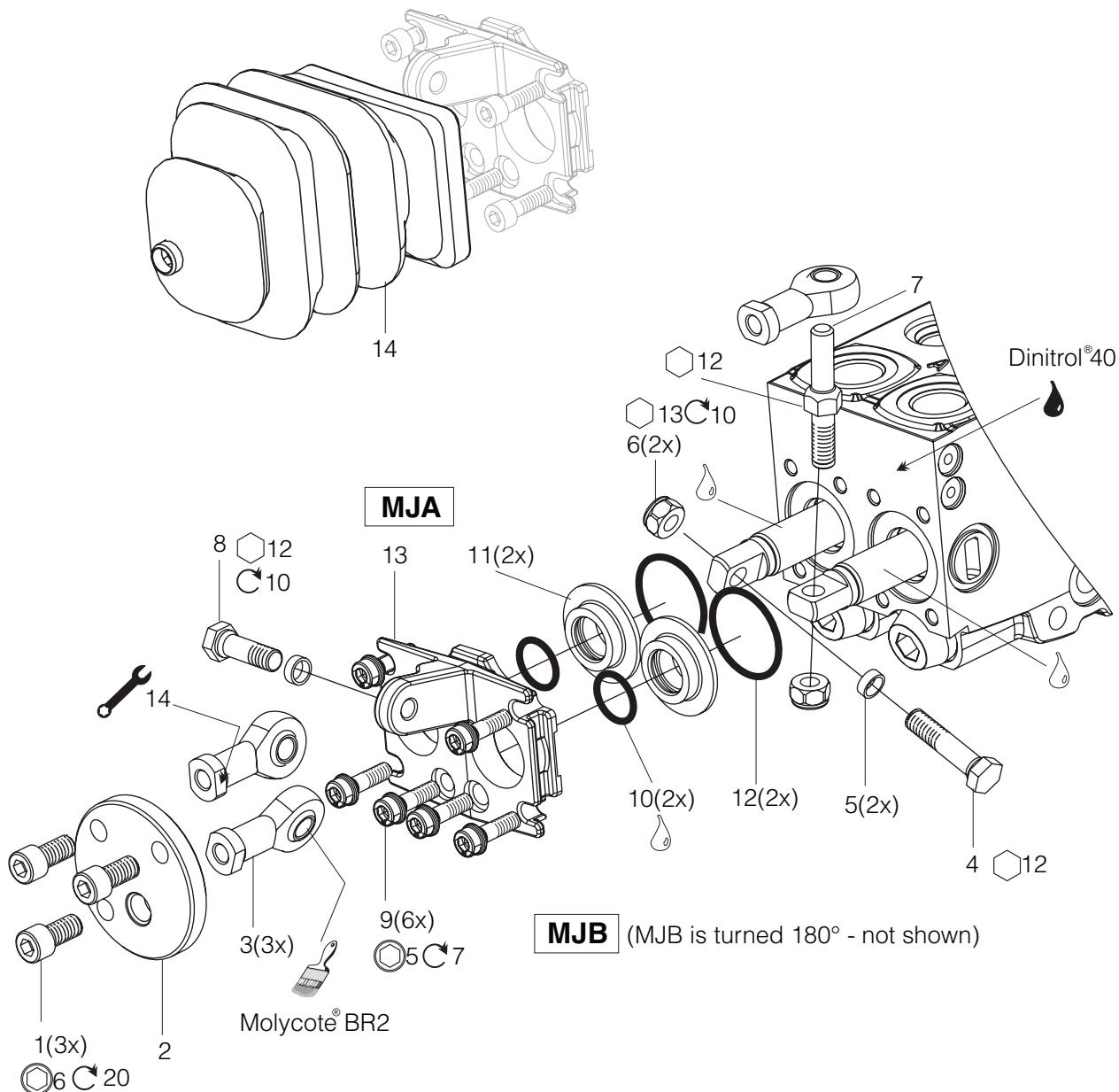
See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>MI</b>	90	398000K042	Main stage	7, 11, 12
<b>PS, PB</b>	94	398000K069	Main relief valve pilot part PLD03	10 [31, 32, 33]
<b>PS, PB, Y</b>	94	393000K831	Seal kit PS, PB, Y	31, 32, 33 (With exception of 33 for Y)
<b>MI</b>	90	-	Plug VSTI1/2EDCF	7
<b>PB</b>	94	393000K852	Sealing set (for PB)	8, 9
<b>Y</b>	94	398000K123	Cavity plug Y	16 [31, 32]
<b>C3, C5, C6 + G</b>	93 + 04	-	Plug VSTI1/2EDCF	6
<b>C3, C5, C6 + U</b>	93 + 04	-	Plug 10HP5ON-S	6
<b>C3, C6</b>	93	398000K405	Plug	4
<b>C3, C6</b>	93	6760405	Plug	4 (50x)

**CB, LMA, LMB, LU, A034**



See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>LMA, LMB</b>	51	398000K009	Lever holder kit	3, 4(2x), 9, 10 [11]
<b>LU</b>	51	398000K010	Cover LU	3, 4(2x), 9, 12 [11]
<b>CB</b>	50	398000K073	Lever holder kit CB	3, 4(2x), 28 [9, 11]
<b>ACP</b>	50	398000K806	Seal kit ACP	3(2x), 22, 23
<b>LMA, LMB, LU; CB</b>	51; 50	398000K805	Boot and seal kit LMA, LMB, LU, CB	3, 9(2x), 11
<b>LMA, LMB, LU; CB</b>	51; 50	398000K807	Boot kit	11(6x)
<b>LMA, LMB, LU; CB</b>	51; 50	6760445	Seal kit O-ring	9 (5x)
<b>LMA, LMB + A034</b>	51 + 59	6760215	Lever holder kit scraper A034, LMA, LMB	3, 4(2x), 9, 30 [33]
<b>LU + A034</b>	51 + 59	6760214	Cover scraper A034	3, 4(2x), 9, 31 [33]
<b>CB + A034</b>	51 + 59	6760216	Lever holder kit CB scraper A034	3, 4(2x), 32 [9, 33]
<b>A034</b>	59	393000K807	Seal kit	9(2x), 33

**MJA, MJB**



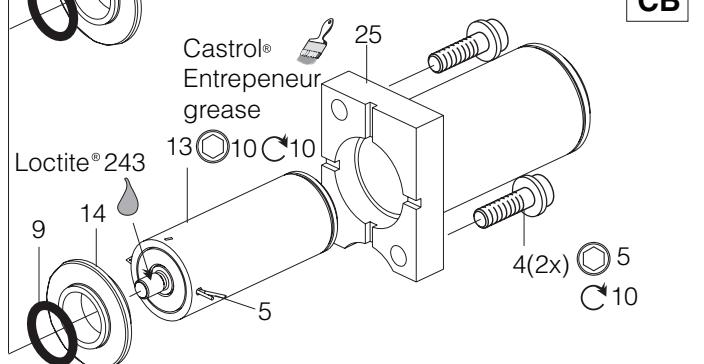
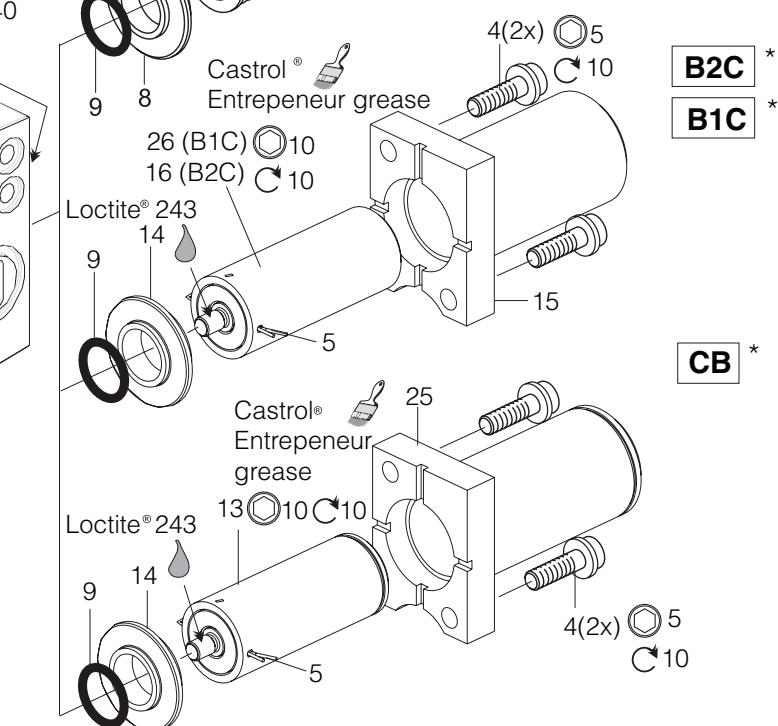
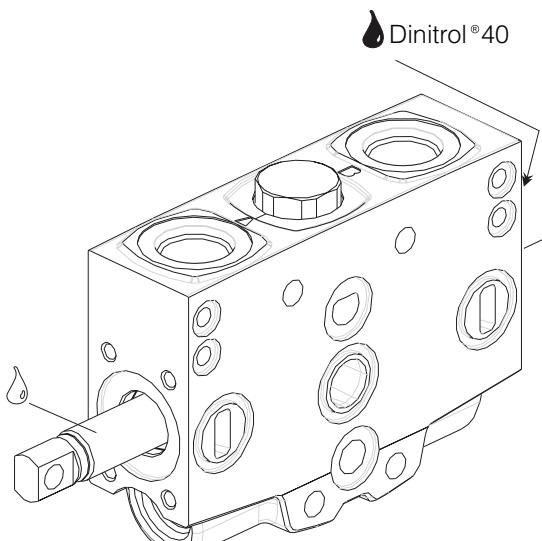
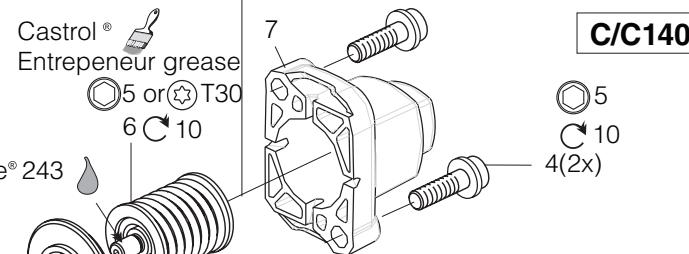
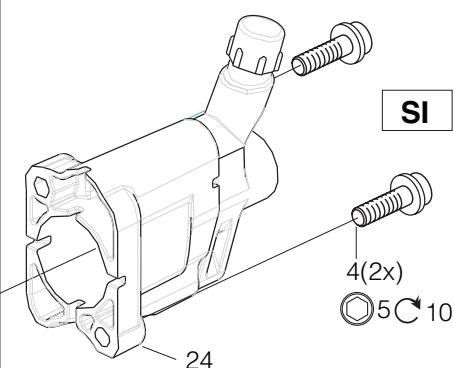
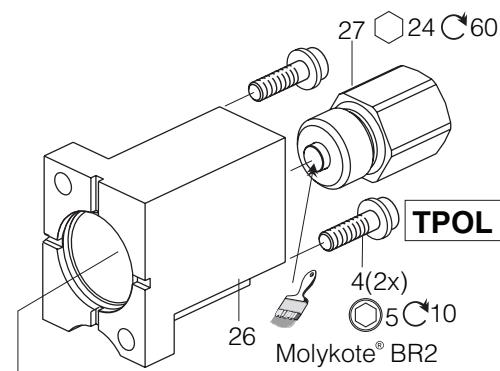
See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>MJA, MJB</b>	51	8234939027	Joystick actuator MP7 (MJA, MJB)	1(3x), 2, 3(3x), 4, 5(2x), 6(2x), 7, 8, 9(6x), 10(2x), 11(2x), 12(2x), 13, 14
<b>MJA, MJB</b>	51	398000K808	Joint kit for MP7	1(3x), 3(3x), 4, 5(2x), 6(2x), 7, 8
<b>MJA, MJB</b>	51	6760531	Kit MJ lever bracket	9(6x), 10(2x), 11(2x), 12(2x), 13
<b>MJA, MJB</b>	51	398000K238	Seal kit MP7	10(4x), 12(2x), 14 (A and B side)

**C, C140, B1C, B2C, CB, SI, TPOL**

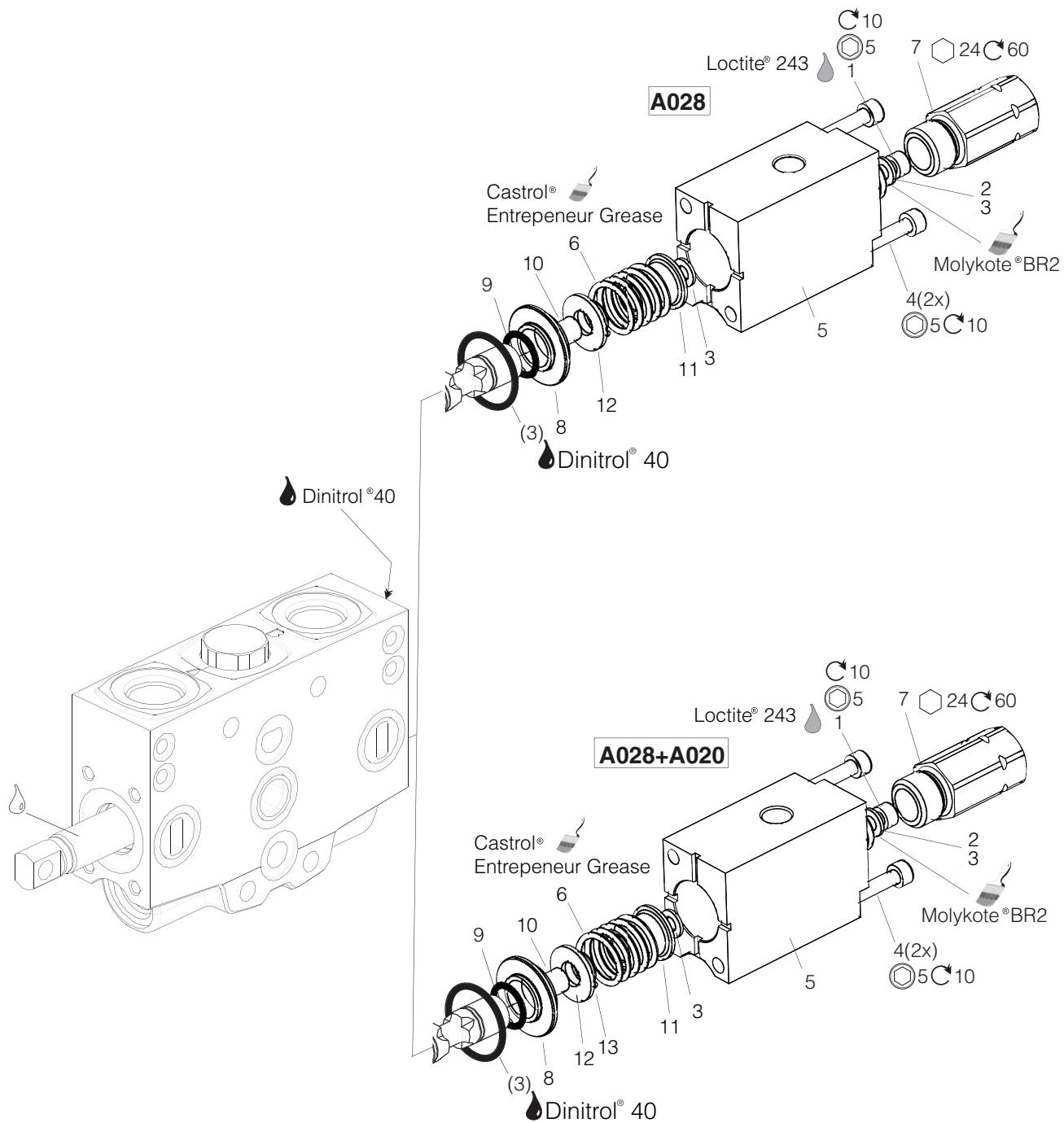
\*

**Assembly instructions B 1C/2C and C B**

1. Fasten the spool, or fix it against rotation.
2. Assemble o-ring (9) and support ring (14) on spool.
3. Install detent assy (13 or 16) into spool, use Allen key, tighten correctly.
4. Pull out split pin (5) from the detent assembly
5. Assemble spool into valve section.
6. Fasten cap (15 or 25) with screws (4).
7. Tighten screws.

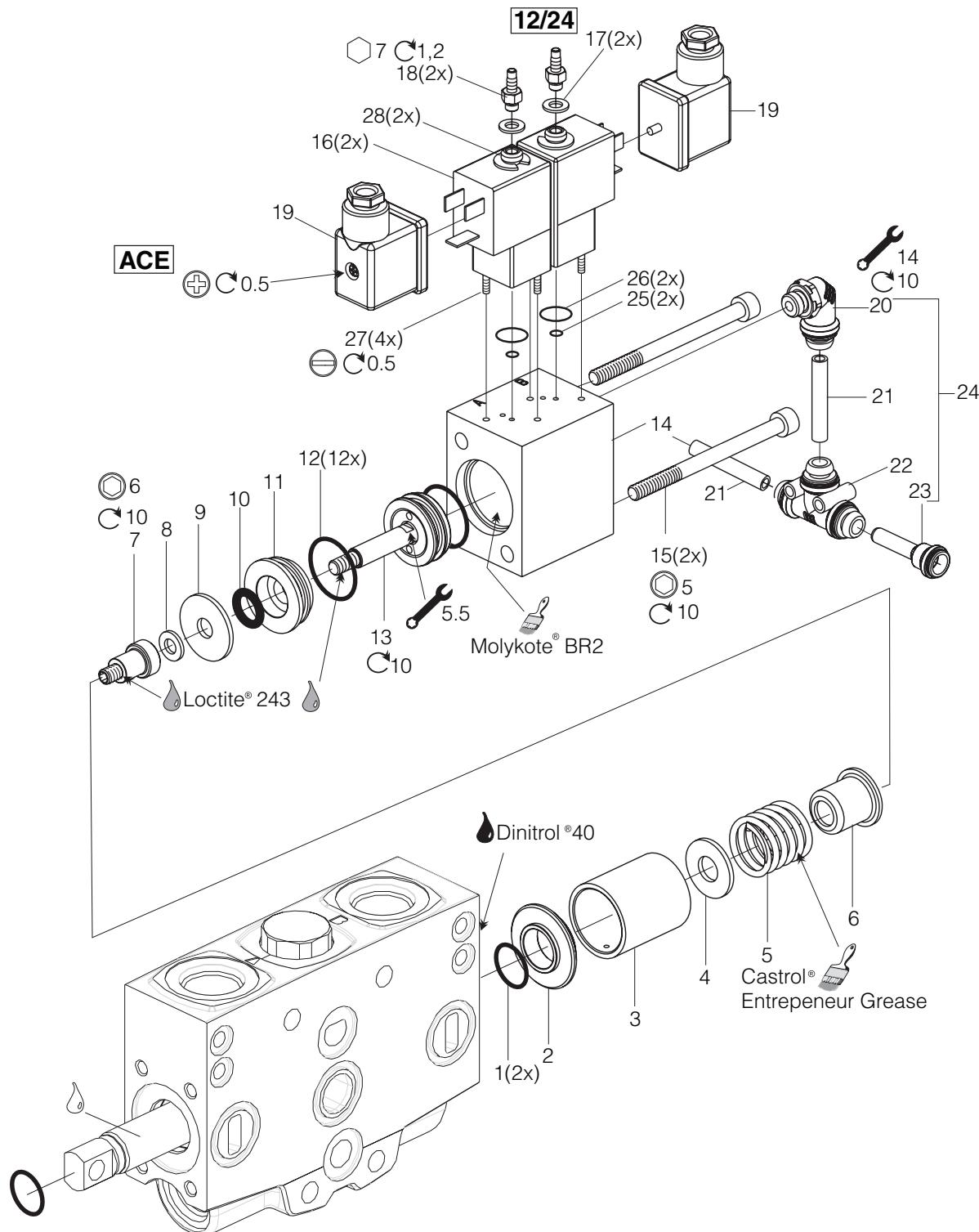


See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>C, C140</b>	50	398000K008	Cap kit C, C140	4(2x), 7, 8, 9
<b>C, C140; TPOL, SI</b>	50; 52	6760041	Spring pack, STD, centering force 80 N	6
<b>C+A020</b>	50 + 59	398000K484	Spring pack, C+A020	6 (Valid also for TPOL and SI in pos. 52)
<b>C140</b>	50	6760042	Spring pack, C140, centering force 140 N	6
<b>C140+A020</b>	50 + 59	6760470	Spring pack, C140+A020	6 (Valid also for TPOL and SI in pos. 52)
<b>C, C140; TPOL, SI</b>	50; 52	6760544	Support washer multipack	8(100x)
<b>B1C</b>	50	6764253	Spool actuator B1C	4(2x), 9, 14, 15, 26 [5]
<b>B1C</b>	50	398000K159	Cap kit B1C/B2C	4(2x), 9, 14, 15
<b>B1C</b>	50	6764254	Spring/detent pack, B1C	26 [5]
<b>B2C</b>	50	398000K059	Spool actuator B2C	4(2x), 9, 14, 15, 16 [5]
<b>B2C</b>	50	398000K159	Cap kit B1C/B2C	4(2x), 9, 14, 15
<b>B2C</b>	50	398000K259	Spring/detent pack	16 [5]
<b>CB</b>	50	398000K060	Spool actuator CB	4(2x), 9, 13 [5], 14, 25
<b>CB</b>	50	398000K160	Cap kit CB	4(2x), 9, 14, 25
<b>CB</b>	50	398000K260	Spring/detent pack	13 [5]
<b>C, C140, B2C, CB</b>	50	398000K805	Seal kit C, C140, B2C, CB (A- and B- side)	3, 9(2x), 11 (See page 12)
<b>TPOL</b>	52	398000K420	Cap kit, TPOL	4(2x), 8, 9, 26
<b>TPOL</b>	52	6760044	Cylinder assembly, TPOL	27
<b>SI</b>	52	398000K404	Spool position sensor kit	4(2x), 8, 9, 24

**Spool Actuators, Side B****A028, A020**

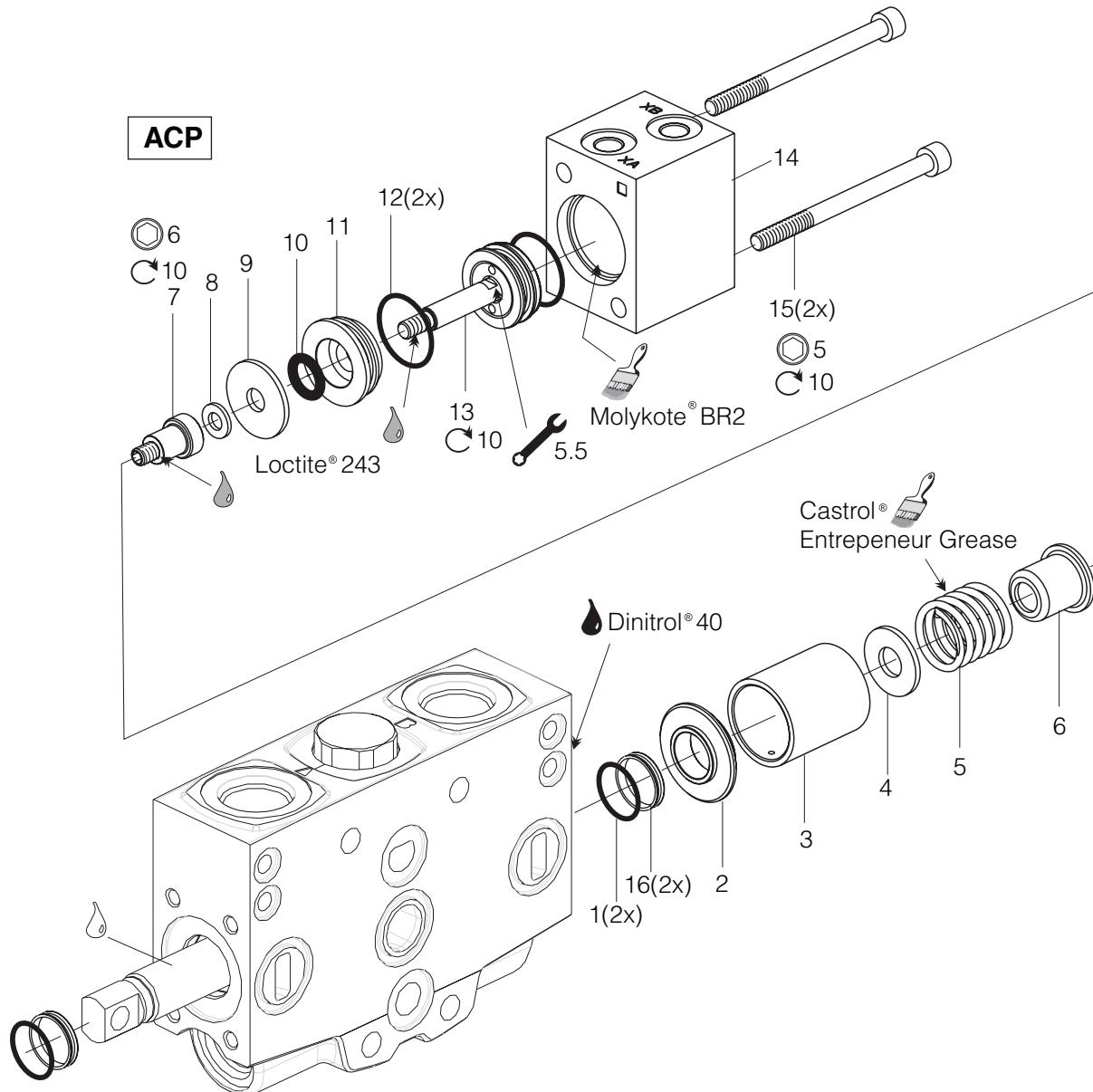
See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>A028</b>	52	6763508	Cap kit, DT-POL	1, 2, 3, 4(2x), 5
<b>A028</b>	52	6763509	Spring pack, A028 DT-POL	3, 6, 8, 9, 10, 11, 12
<b>A028</b>	52	6763510	Cylinder assembly, DT-POL	7
<b>A028+A020</b>	52, 59C	6763511	Spring pack, A028+A020, DT-POL	3, 6, 8, 9, 10, 11, 12,13

**ACE, 12, 24**

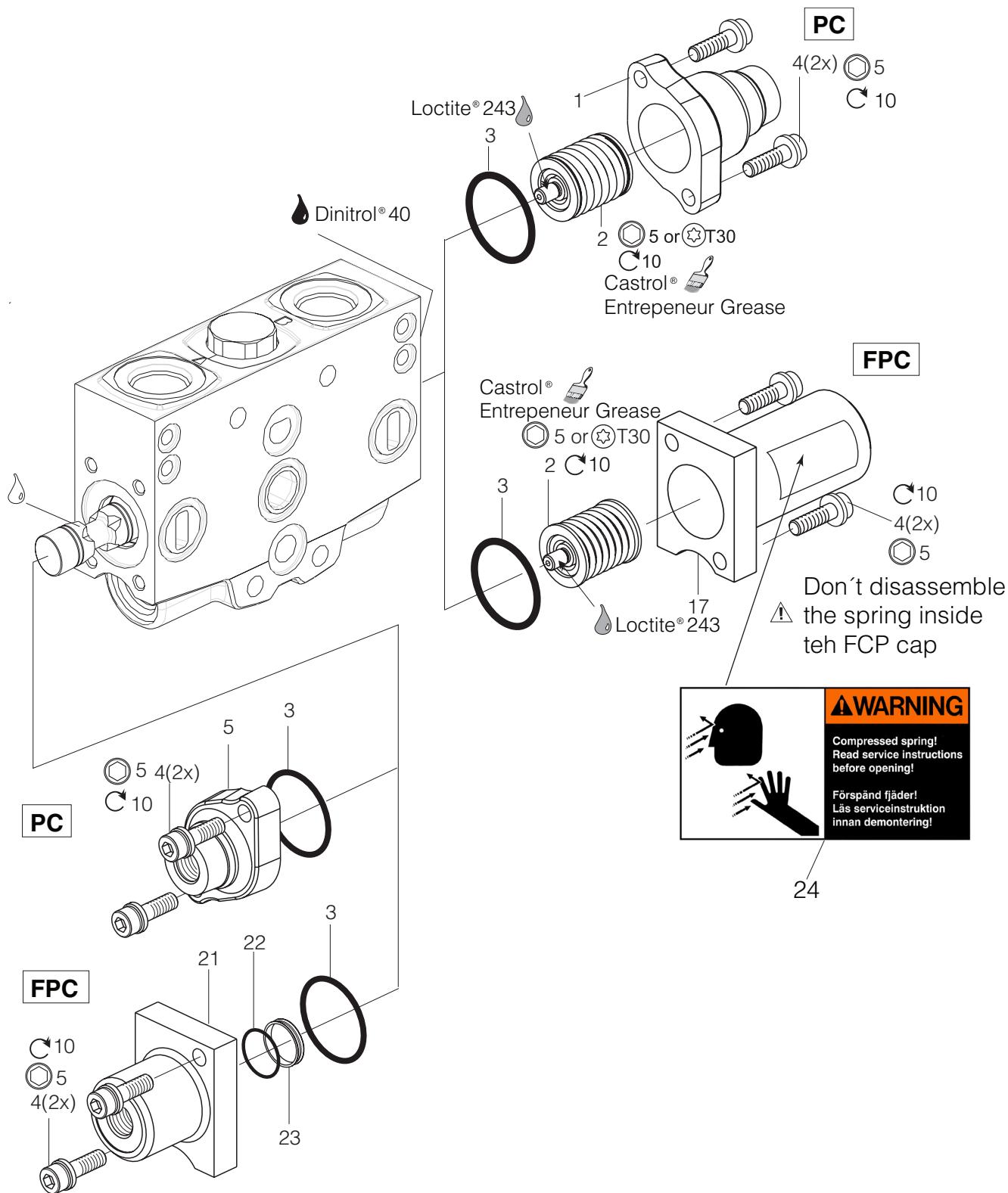


See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
<b>ACE + 12</b>	50 + 05	398000K058	Spool actuator ACE, 12 VDC	1(2x), 2, 3, 4, 5, 6, 7, 8, 9, 13 [10, 11, 12(2x)], 14 [16(2x), 17(2x), 18(2x), 19(2x), 25(2x), 26(2x), 27(4x), 28(2x)], 15(2x)
<b>ACE + 24</b>	50 + 05	398000K958	Spool actuator ACE, 24 VDC	1(2x), 2, 3, 4, 5, 6, 7, 8, 9, 13 [10, 11, 12(2x)], 14 [16(2x), 17(2x), 18(2x), 19(2x), 25(2x), 26(2x), 27(4x), 28(2x)], 15(2x)
<b>ACE</b>	50	398000K062	Spring kit for ACE actuator	1(2x), 2, 4, 5, 6, 7
<b>ACE</b>	50	398000K063	Piston kit for ACE actuator	3, 8, 9, 13[10, 11, 12(2x)]
<b>ACE + 12</b>	50 + 05	398000K064	Cylinder housing ACE, 12 VDC	14 [16(2x), 17(2x), 18(2x), 19(2x), 25(2x), 26(2x), 27(4x), 28(2x)], 15(2x)
<b>ACE + 24</b>	50 + 05	398000K964	Cylinder housing ACE, 24 VDC	14 [16(2x), 17(2x), 18(2x), 19(2x), 25(2x), 26(2x), 27(4x), 28(2x)], 15(2x)
<b>ACE</b>	50	393000K808	Seal kit ACE (A- and B-side)	1(2x), 10, 12(2x)
<b>ACE + 12</b>	50 + 05	9123958812	Solenoid valve ACE, 12 VDC	16, 17, 18, 19, 25, 26, 27(2x), 28
<b>ACE + 24</b>	50 + 05	9123958824	Solenoid valve ACE, 24 VDC	16, 17, 18, 19, 25, 26, 27(2x), 28
<b>ACE</b>	50	6760043	Connector kit for sections	24 [20(4x), 21(7x), 22(4x), 23]
<b>ACE</b>	50	-	Connector, inlet (P6F-BEAA146)	20
<b>ACE</b>	50	-	Tube, ø 6 (L=35 mm) (P6T-PN06100)	21
<b>ACE</b>	50	-	Connector, intermediate (P6F-BTS46)	22
<b>ACE</b>	50	-	End plug (P6F-BVP46)	23

**ACP**

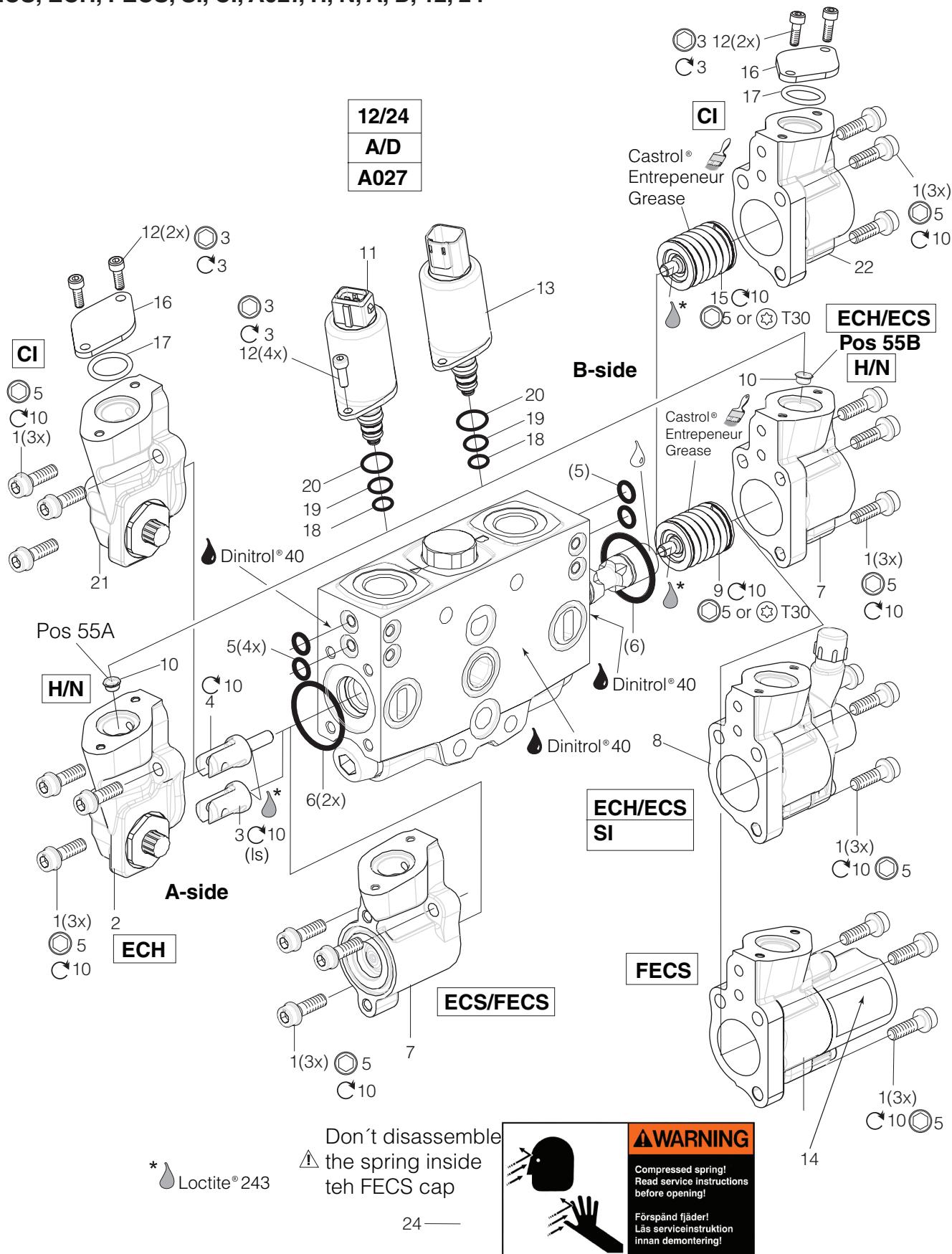


See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>ACP + G</b>	50 + 04	398000K292	Spool actuator ACP, BSP	1(2x), 2, 3, 4, 5, 6, 7, 8, 9, 13 [10, 11, 12(2x)], 14, 15(2x), 16(2x)
<b>ACP + U</b>	50 + 04	398000K296	Spool actuator ACP, NPTF	1(2x), 2, 3, 4, 5, 6, 7, 8, 9, 13 [10, 11, 12(2x)], 14, 15(2x), 16(2x)
<b>ACP</b>	50	398000K293	Spring kit for ACP actuator	1(2x), 2, 4, 5, 6, 7, 16(2x)
<b>ACP + G</b>	50 + 04	398000K294	Cylinder kit for ACP actuator, BSP	3, 8, 9, 13 [10, 11, 12(2x)], 14, 15(2x)
<b>ACP + U</b>	50 + 04	398000K297	Cylinder kit for ACP actuator, NPTF	3, 8, 9, 13 [10, 11, 12(2x)], 14, 15(2x)
<b>ACP + G</b>	50 + 04	398000K295	Cylinder housing ACP, BSP	14, 15(2x)
<b>ACP + U</b>	50 + 04	398000K298	Cylinder housing ACP, NPTF	14, 15(2x)
<b>ACP</b>	50	9120079115	Seal kit ACP (A- and B- side)	1(2x), 10, 12(2x), 16(2x)

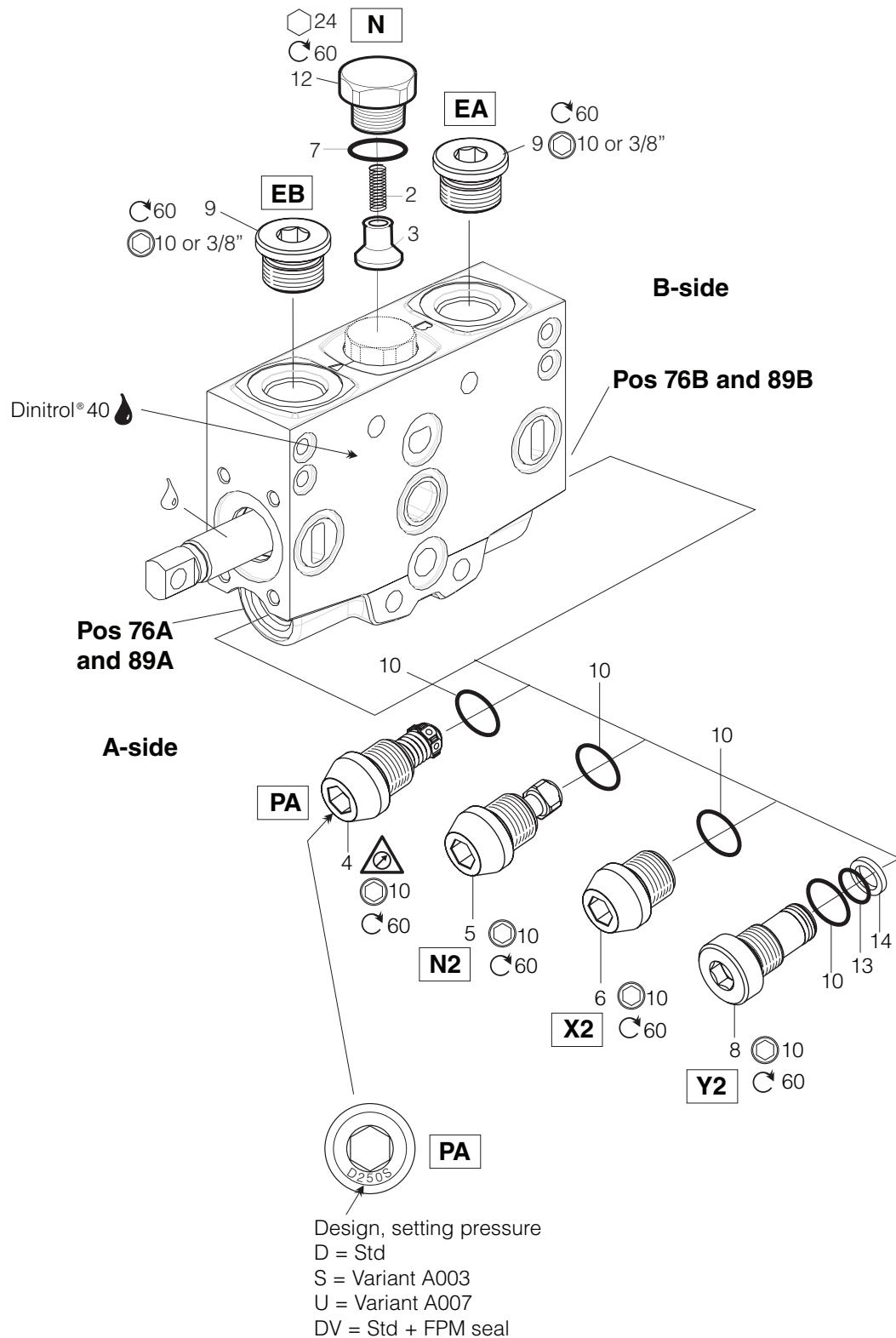
**PC, FPC**

See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>PC + G</b>	50 + 04	398000K001	PC cap kit A-side 'BSP'	3, 4(2x), 5
<b>PC + U</b>	50 + 04	398000K281	PC cap kit A-side 'UNF'	3, 4(2x), 5
<b>PC + G</b>	50 + 04	398000K201	PC cap kit B-side 'BSP'	1, 3, 4(2x)
<b>PC + U</b>	50 + 04	398000K181	PC cap kit B-side 'UNF'	1, 3, 4(2x)
<b>PC, FPC</b>	50	6760048	Spring pack, PC, FPC (5-18) bar	2
<b>PC + A020</b>	50 + 59	398000K023	Spring pack, PC+A020 (5-16) bar	2
<b>FPC + G</b>	50 + 04	398000K067	FPC cap kit A-side 'BSP'	3, 4(2x), 21 [22, 23]
<b>FPC + U</b>	50 + 04	398000K267	FPC cap kit A-side 'UNF'	3, 4(2x), 21 [22, 23]
<b>FPC + G</b>	50 + 04	398000K167	Spool actuator FPC, B-side, 'BSP'	2, 3, 4(2x), 17, 24
<b>FPC + U</b>	50 + 04	398000K367	Spool actuator FPC, B-side, 'UNF'	2, 3, 4(2x), 17, 24
<b>FPC</b>	50	6763170	Sign 'WARNING'	24
<b>PC, FPC</b>	50	398000K806	Seal kit PC, FPC (A- and B- side)	3(2x), 22, 23

ECS, ECH, FECS, SI, CI, A027, H, N, A, D, 12, 24

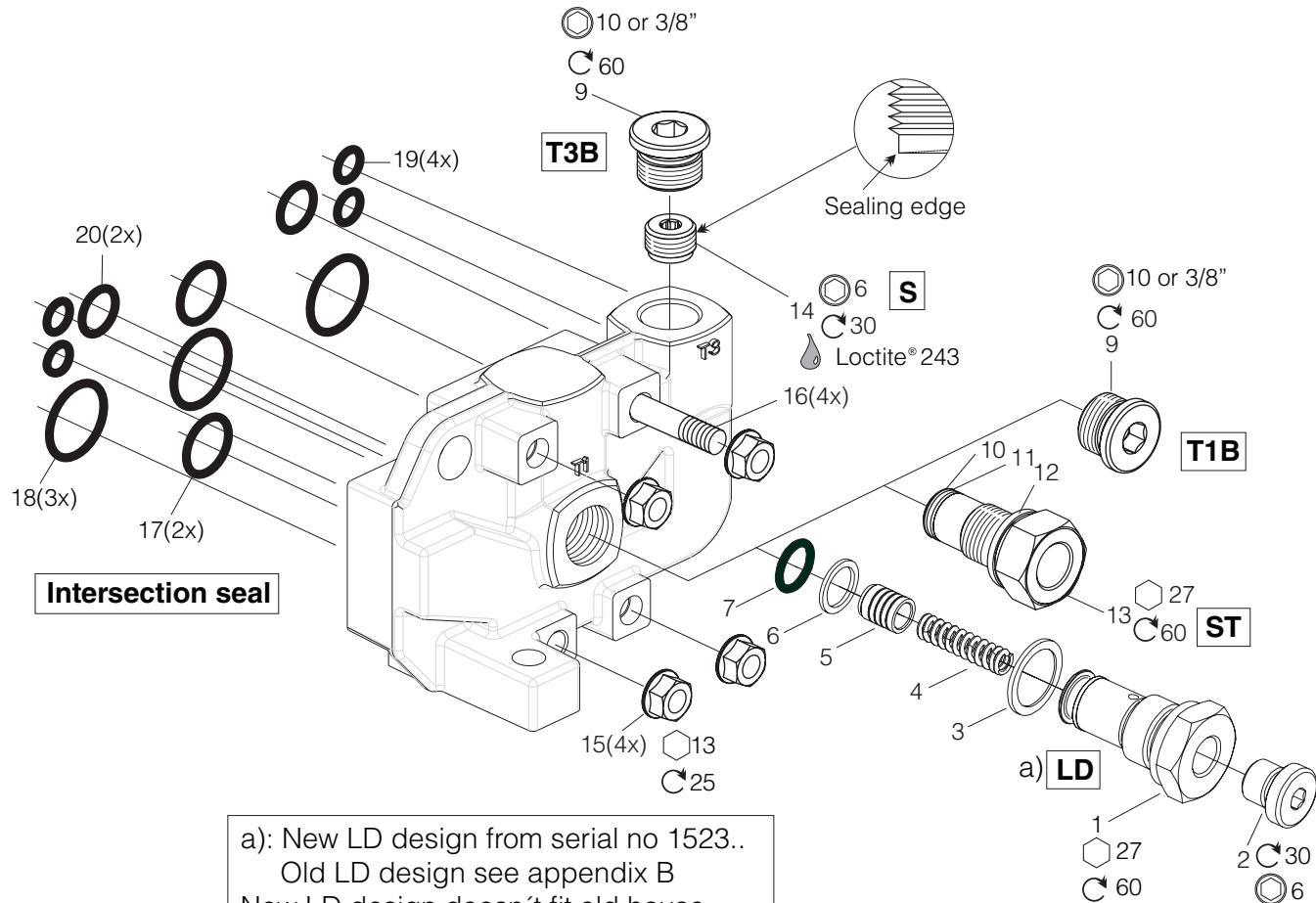


See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>ECH</b>	50	398000ECH2	Actuator ECH, A- side	1(3x), 2
<b>ECH</b>	50	6760046	Spool stud for LS spools	3 (5x) Used if pos 60 are Dls, EAIs or MIs
<b>ECH</b>	50	6760047	Spool stud	4 (5x)
<b>ECS, FECS</b>	50	398000ECS2	Actuator cap, A- side	1(3x), 7
<b>ECS, ECH</b>	50	398000ECS2	Actuator cap, B- side	1(3x), 7
<b>FECS</b>	50	6760179	Spool actuator, B- side	1(3x), 14, 24
<b>FECS</b>	50	6763170	Sign 'WARNING'	24
<b>SI</b>	52	398000ESI2	Actuator cap and position sensor	1(3x), 8
		398000ECSK	Seal kit, CI, ECH, ECS, FECS	5(4x), 6(2x)
<b>ECS, ECH, FECS</b>	50	6760048	Spring Pack ECH, ECS, FECS (5-18) bar	9
<b>ECS, ECH, FECS + A020</b>	50 + 59	398000K023	Spring Pack ECS, ECH, FECS+A020 (5-16) bar	9
<b>CI</b>	50	6760352	Spool actuator CI, A- side	1(3x), 21 [12(2x), 16, 17]
<b>CI</b>	50	6760353	Spool actuator CI, B- side	1(3x), 22 [12(2x), 16, 17]
<b>CI</b>	50	6760042	Spring Pack CI, centering force 140 N	15
<b>CI</b>	50	6760354	Seal kit, CI	17(5x)
<b>A + 12</b>	56 + 05	6763059	Solenoid valve, PS25, 12 VDC	11 [18, 19, 20], 12(2x)
<b>A + 24</b>	56 + 05	6763060	Solenoid valve, PS25, 24 VDC	11 [18, 19, 20], 12(2x)
<b>D + 12</b>	56 + 05	6763061	Solenoid valve, PS25, 12 VDC	13 [18, 19, 20], 12(2x)
<b>D + 24</b>	56 + 05	6763062	Solenoid valve, PS25, 24 VDC	13 [18, 19, 20], 12(2x)
<b>A + 12 + A027</b>	56 + 05 + 59	6763063	Solenoid valve (PS25) w. man. override 12 VDC	11 [18, 19, 20], 12(2x)
<b>A + 24 + A027</b>	56 + 05 + 59	6763064	Solenoid valve (PS25) w. man. override 24 VDC	11 [18, 19, 20], 12(2x)
<b>A + 12</b>	56 + 05	6763328	Solenoid valve, PS25MO, 12 VDC	11[18, 19, 20], 12(2x), 10
<b>A + 24</b>	56 + 05	6763327	Solenoid valve, PS25MO, 24 VDC	11[18, 19, 20], 12(2x), 10
		6760507	Seal kit for PS25	18(5x), 19(5x), 20(5x)
<b>H</b>	55A/55B	398000K601	Pilot orifice Ø0.6 mm, marked 6	10 (5x)
<b>N</b>	55A/55B	398000K602	Pilot orifice Ø0.9 mm, marked 9	10 (5x)

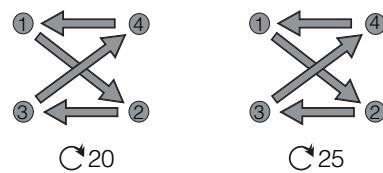
**N, PA, N2, X2, Y2, EA, EB**

See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>N</b>	66	398000K011	Supply check valve	12 [2, 3, 7]
<b>N</b>	66	6760444	Seal kit, N	7 (5x)
<b>EA, EB + G</b>	60 + 04	-	Plug VSTI1/2EDCF	9
<b>EA, EB + U</b>	60 + 04	-	Plug 10HP5ON-S	9
<b>N2</b>	76A, 76B	393000K194	Load hold check valve, N2	5 [10]
<b>X2</b>	76A, 76B	393000K193	Cavity plugged (without check valve), X2	6 [10]
<b>Y2</b>	76A, 76B	393000K195	Cavity plugged, Y2	8 [10, 13, 14]
<b>N2, X2, PA</b>	76A, 76B	6760445	Seal kit N2, X2, PA	10 (5x)
<b>Y2</b>	76A, 76B	393000K818	Seal kit, Y2	10, 13, 14

See Customer Specification						
<b>Code</b>	<b>Pos</b>	<b>Part#std [10 l/min]</b>	<b>Part#A003 [20 l/min]</b>	<b>Part#A007 [10 l/min]</b>	<b>Description</b>	<b>Remarks/Items</b>
<b>25</b>	76A, 76B	393000U052		393000U053	PLC053-025	4 [10]
<b>32</b>	76A, 76B		398000K208		PLC053-032	4 [10]
<b>40</b>	76A, 76B		398000K209		PLC053-040	4 [10]
<b>50</b>	76A, 76B	393000K176	398000K301	393000K558	PLC053-050	4 [10]
<b>63</b>	76A, 76B	393000K177		393000K559	PLC053-063	4 [10]
<b>80</b>	76A, 76B	393000K178	398000K210	393000K560	PLC053-080	4 [10]
<b>100</b>	76A, 76B	393000K179	398000K211	393000K561	PLC053-100	4 [10]
<b>120</b>	76A, 76B		398000K318		PLC053-120	4 [10]
<b>125</b>	76A, 76B	393000K180	398000K271	393000K562	PLC053-125	4 [10]
<b>140</b>	76A, 76B	393000K181		393000K563	PLC053-140	4 [10]
<b>160</b>	76A, 76B	393000K182		393000K564	PLC053-160	4 [10]
<b>170</b>	76A, 76B		398000K319		PLC053-170	4 [10]
<b>175</b>	76A, 76B	393000K183		393000K565	PLC053-175	4 [10]
<b>190</b>	76A, 76B	393000K184		393000K566	PLC053-190	4 [10]
<b>210</b>	76A, 76B	393000K185	398000K212	393000K567	PLC053-210	4 [10]
<b>230</b>	76A, 76B	393000K186		393000K568	PLC053-230	4 [10]
<b>240</b>	76A, 76B	393000K134		398000K249	PLC053-240	4 [10]
<b>250</b>	76A, 76B	393000K187		393000K569	PLC053-250	4 [10]
<b>260</b>	76A, 76B	393000K188		393000K570	PLC053-260	4 [10]
<b>280</b>	76A, 76B	393000K189		393000K571	PLC053-280	4 [10]
<b>300</b>	76A, 76B	393000K190		393000K572	PLC053-300	4 [10]
<b>320</b>	76A, 76B	393000K191		393000K573	PLC053-320	4 [10]
<b>350</b>	76A, 76B	393000K192		393000K574	PLC053-350	4 [10]
<b>A002 + 280</b>	49 + 76A/B	393000U189			PLC053-280	4 [10]  DV design
<b>A002 + 350</b>	49 + 76A/B	6760734			PLC053-350	4 [10]  DV design
<b>A029 + 100</b>	89* + 76*	398000K515			PLC053-100	4 [10]
<b>A029 + 160</b>	89* + 76*	398000K516			PLC053-160	4 [10]
<b>A029 + 250</b>	89* + 76*	6760486			PLC053-250	4 [10]

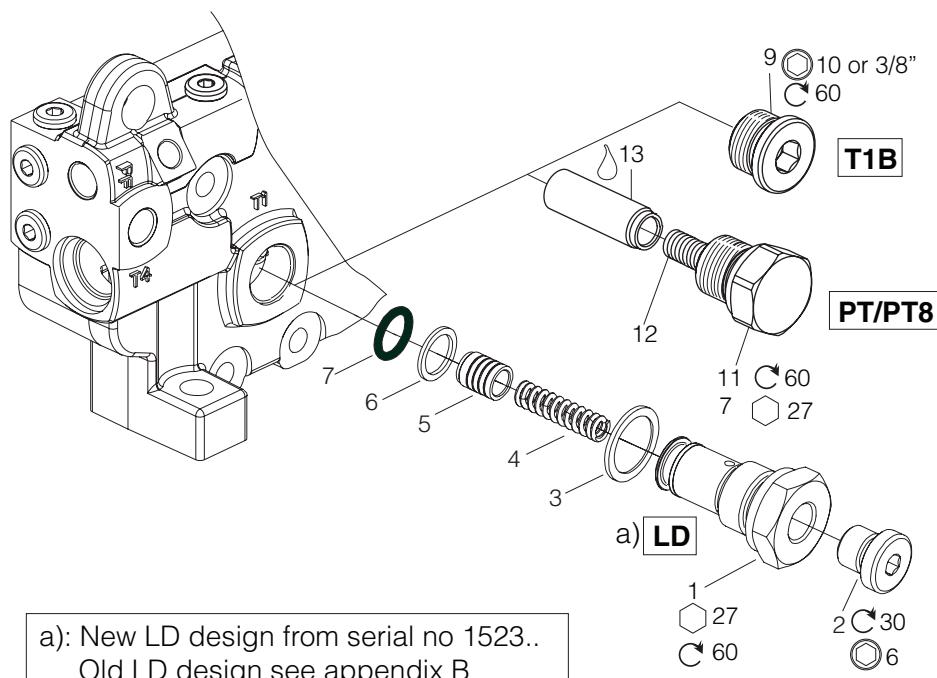
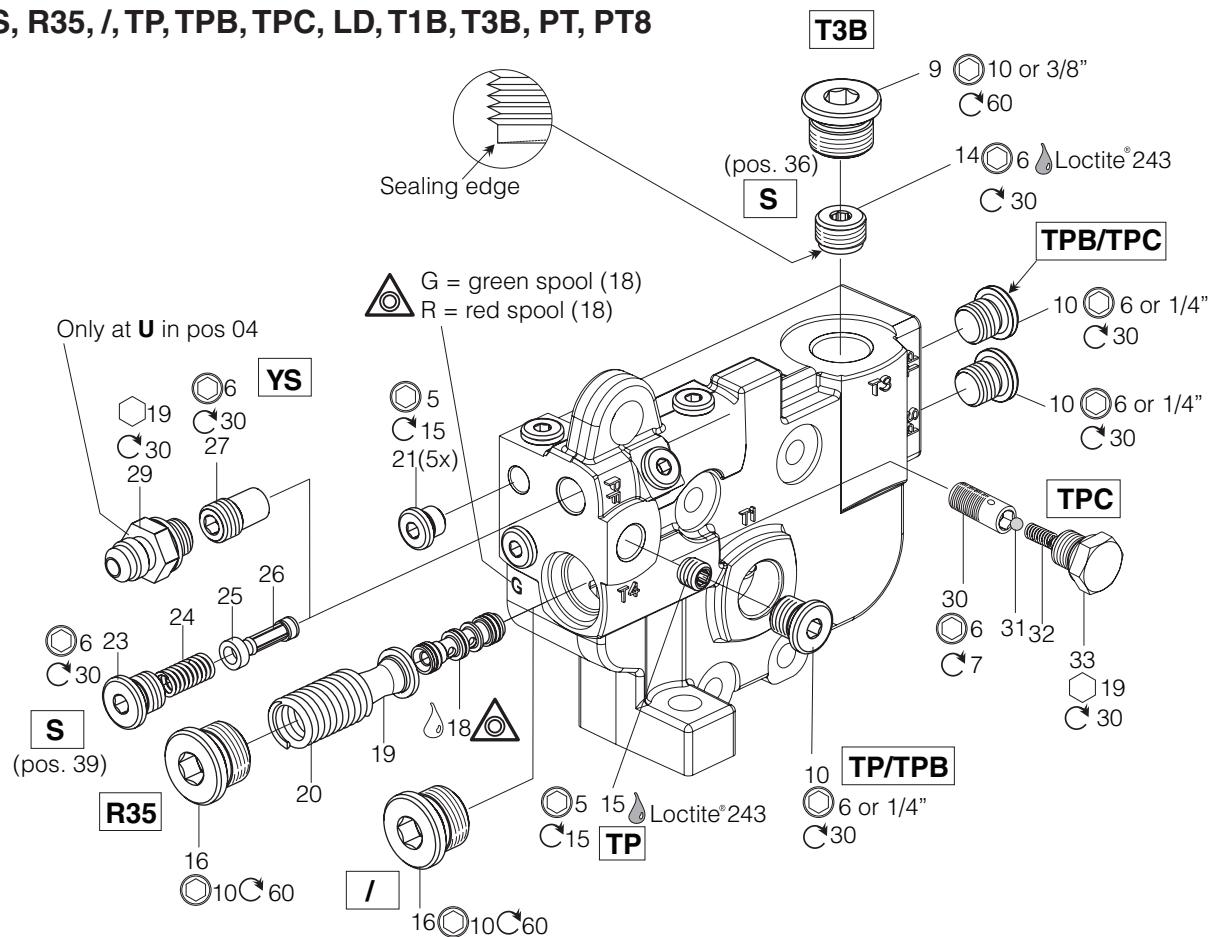
**T1B, T3B, S, ST, LD, Tie rods****Assembly of tie rods**

- 1 Tie rods item 7 to tightened in the inlet section with 15 Nm.
- 2 Tie rod nuts item 5 to be tightened in 2 steps: 20 Nm and 25 Nm according to the figure below.



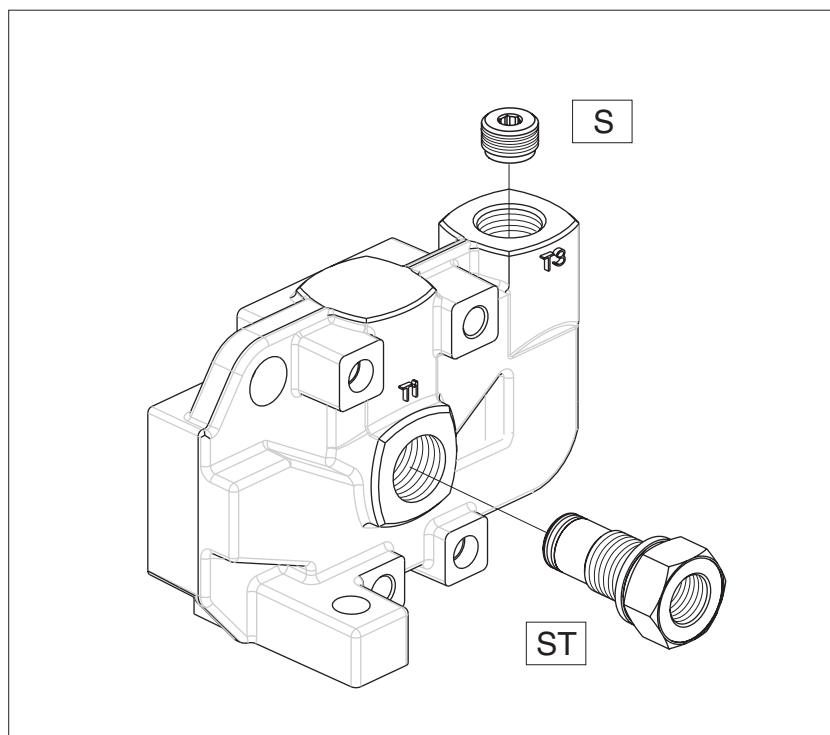
See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>T1B, T3B + G</b>	33, 34 + 04	-	Plug VSTI1/2EDCF	9
<b>T1B, T3B + U</b>	33, 34 + 04	-	Plug 10HP5ON-S	9
<b>S</b>	36	398000K405	Plug 'S'	14 (Please see Appendix B)
<b>S</b>	36	6760405	Plug 'S'	14 (50x) (Please see Appendix B)
<b>ST + G</b>	33 + 04	6760008	ST adaptor 'BSP'	13 [10, 11, 12]
<b>ST + U</b>	33 + 04	6760009	ST adaptor 'UNF'	13 [10, 11, 12]
<b>ST + G</b>	33 + 04	398000K816	Seal kit ST, BSP	10, 11, 12
<b>ST + U</b>	33 + 04	398000K813	Seal kit ST, UNF	10, 11, 12
<b>LD + G</b>	33 + 04	6763572	Load signal drain, BSP	1 [2, 3, 4, 5, 6, 7]
<b>LD + U</b>	33 + 04	6763573	Load signal drain, UNF	1 [2, 3, 4, 5, 6, 7]
		398000K098	Tie rod kit, 1 section, 115 mm	15(4x), 16(4x)
		398000K099	Tie rod kit, 2 sections, 157 mm	15(4x), 16(4x)
		398000K100	Tie rod kit, 3 sections, 200 mm	15(4x), 16(4x)
		398000K101	Tie rod kit, 4 sections, 242 mm	15(4x), 16(4x)
		398000K102	Tie rod kit, 5 sections, 284 mm	15(4x), 16(4x)
		398000K103	Tie rod kit, 6 sections, 327 mm	15(4x), 16(4x)
		398000K104	Tie rod kit, 7 sections, 369 mm	15(4x), 16(4x)
		398000K105	Tie rod kit, 8 sections, 412 mm	15(4x), 16(4x)
		398000K106	Tie rod kit, 9 sections, 455 mm	15(4x), 16(4x)
		398000K107	Tie rod kit, 10 sections, 498 mm	15(4x), 16(4x)
		398000K003	Tie rod kit, 11 sections, 540 mm	15(4x), 16(4x)
		398000K802	Nut kit	15(4x)
		398000K801	Intersection seal, standard	17(2x), 18(3x), 19(4x) (NBR)
<b>M2</b>	85	6763443	Intersection seal for M2	17(2x), 18(3x), 19(4x), 20(2x) (NBR)
<b>A002</b>	29, 49	398000V801	Intersection seal, FPM 80	17(4x)*, 18(3x), 19(4x) (FPM)

\* 2 O-rings comes from item 10, PA, see page 28.

**S, YS, R35, I, TP, TPB, TPC, LD, T1B, T3B, PT, PT8**

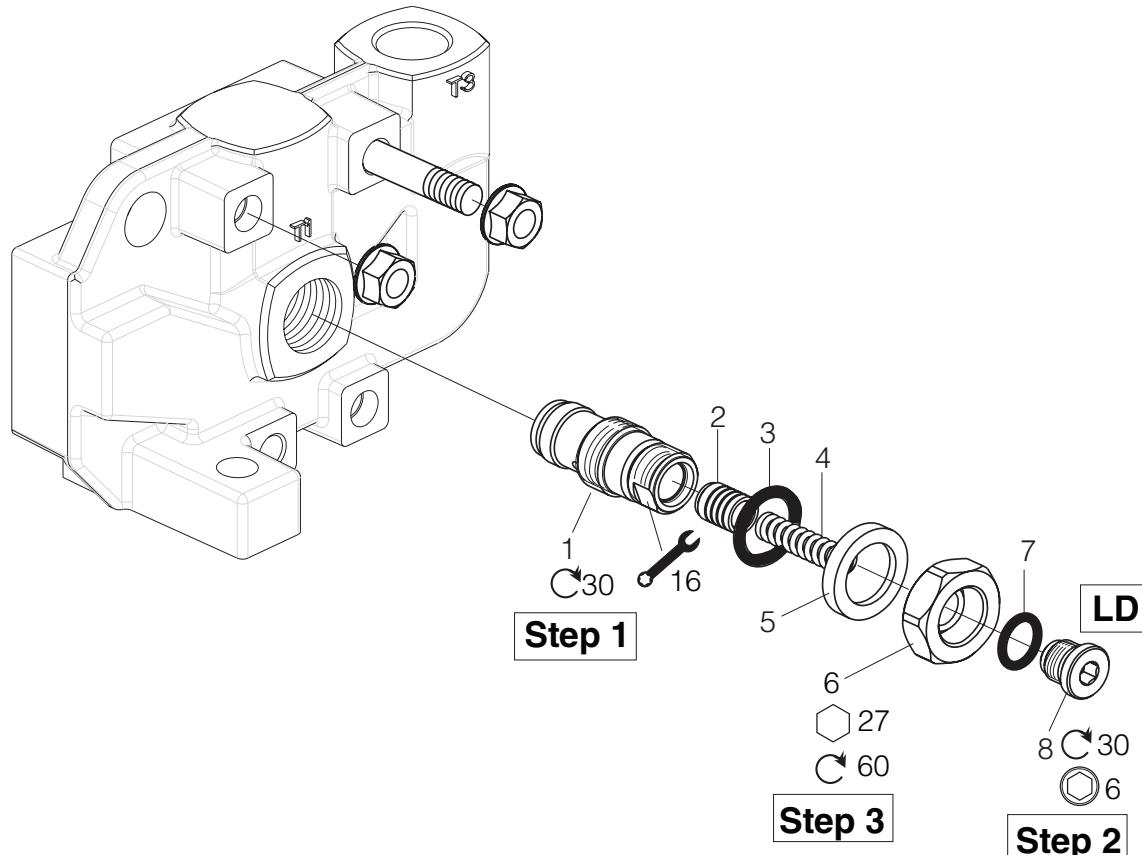
See Customer Specification				
<b>Code</b>	<b>Pos</b>	<b>Part</b>	<b>Description</b>	<b>Remarks / Items</b>
<b>R35</b>	37	6760010	Reducer spool, size marked Green	16, 18, 19, 20 
<b>R35</b>	37	6760011	Reducer spool, size marked Red	16, 18, 19, 20 
<b>R35</b>	37	398000K053	Pilot reducing valve	16, 19
<b>I, R35</b>	37	398000K061	Plug 1/2" (O-ring), BSP	16
<b>S</b>	39	398000K054	Pilot supply strainer	23, 24, 25, 26
<b>S</b>	39	-	Plug VSTI1/4EDCF	23
<b>YS + G</b>	39 + 04	393000K075	Connection for external filter 'BSP'	27
<b>YS + U</b>	39 + 04	393000K076	Connection for external filter 'UNF'	27, 29
<b>YS + U</b>	39 + 04	-	Nipple 6F4OMXS	29
<b>TP + G</b>	40 + 04	398000K075	Conn. for separate pilot tank, 'BSP'	10, 15
<b>TP + U</b>	40 + 04	398000K275	Conn. for separate pilot tank, 'UNF'	10, 15
<b>TPB + G</b>	40 + 04	-	Plug VSTI1/4EDCF	10
<b>TPB + U</b>	40 + 04	-	Plug 6HP5ON-S	10
<b>TPC + G</b>	40 + 04	301000K857	Internal pilot tank check valve, 'BSP'	30, 31, 32, 33
<b>TPC + U</b>	40 + 04	398000K857	Internal pilot tank check valve, 'UNF'	30, 31, 32, 33
<b>PT + G</b>	33 + 04	398000K050	Counter pressure valve 'BSP'	11, 12, 13
<b>PT + U</b>	33 + 04	398000K051	Counter pressure valve 'UNF'	11, 12, 13
<b>PT8 + G</b>	33 + 04	398000K373	Counter pressure valve 'BSP'	11, 12, 13
<b>PT8 + U</b>	33 + 04	398000K374	Counter pressure valve 'UNF'	11, 12, 13
<b>LD + G</b>	33 + 04	6763572	Load signal drain, BSP	1 [2, 3, 4, 5, 6, 7]
<b>LD + U</b>	33 + 04	6763573	Load signal drain, UNF	1 [2, 3, 4, 5, 6, 7]
<b>T1B, T3B + G</b>	33, 34 + 04	-	Plug VSTI1/2EDCF	9
<b>T1B, T3B + U</b>	33, 34 + 04	-	Plug 10HP5ON-S	9
<b>S</b>	36	398000K405	Series connection plug	14
<b>S</b>	36	6760405	Series connection plug	14 (50x)
		-	Plug VSTI1/8EDCF	21

Symbol	Description
	<p>For optimum function, the radial clearance between spool and spool bore must be correct. Spools are therefore colour-coded to identify sizes. We recommend that the whole valve/section is changed if the spool has to be replaced (valve housings cannot be purchased as spares, so if a new one is required a new valve or complete section should be ordered). If the spool has to be changed, it is extremely important that the new spool is the right size.</p> <p>If the spool is too large, it will not work properly even if it appears to function perfectly on assembly, and if the spool is too small, function will also be adversely affected. Spools that are classified by size are marked in the list with .</p> <p>The colour-marking of the spool may disappear after a time, so, unless otherwise stated, the housing is marked with a letter to indicate the respective colour as follows: <b>B</b> for Blue, <b>G</b> for Green, <b>R</b> for Red.</p>
	<p>Changing the settings, replacing the preset pressure relief valve or breaking the seal must only be done in accordance with the manufacturer's instructions. Other settings may seriously damage the machine and other assets, and may cause personal injury. Note that a value contained in the customer specification manual does not apply if the manufacturer changed the settings at installation. Always contact the manufacturer's service organisation before servicing items marked with .</p>

**S - plug in Tank Gallery**

Using S-plug in Tank Gallery in combination with conventional outlet, Option US, and system pressures higher than 250 bar may cause a decrease of the section's lifetime.

Recommendation: use outlet option ST if system pressures go beyond 250 bar.

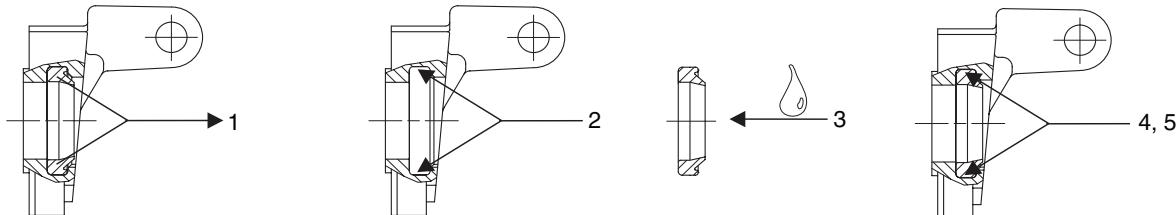


Ref. item 1.

Step 1. Assemble item 1, tighten 30 Nm.  
 Step 2. Assemble items 2, 4, 7 and 8. Tighten item 8: 30 Nm.  
 Step 3. Assemble item 3, 5 and 6. Tighten item 6: 60 Nm.

New LD from serial no 1523....  
 Old LD up to serial no 1522....  
 New LD design doesn't fit old house

See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
<b>LD + G</b>	33 + 04	398000K538	Load signal drain, BSP	1 [2, 3, 4, 5, 6, 7, 8]
<b>LD + U</b>	33 + 04	398000K539	Load signal drain, UNF	1 [2, 3, 4, 5, 6, 7, 8]
<b>LD</b>	33	398000K540	Seal kit LD	3, 7
<b>LD</b>	33	6761089	Spring kit LD	4

**Removal and mounting of scraper ring**

1. Remove carefully the old scraper ring (not spring loaded) to avoid damaging of the lever bracket. Use as tool a screwdriver, a nippers or a small hook.
2. Clear scraper ring groove and make sure there are no color or paint flakes remaining in the track.
- 3 The scraper ring with associated surfaces in the lever bracket must be oiled.
4. Push the new scraper ring in the lever brackets track.

**Appendix Z: Change history**

<b>Page</b>	<b>Code</b>	<b>New kit</b>	<b>Description</b>	<b>Old kit</b>
21	<b>B1C</b>	6764253	Spool actuator B1C	
21	<b>B1C</b>	398000K159	Cap kit B1C/B2C	
21	<b>B1C</b>	6764254	Spring/detent pack, B1C	



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