

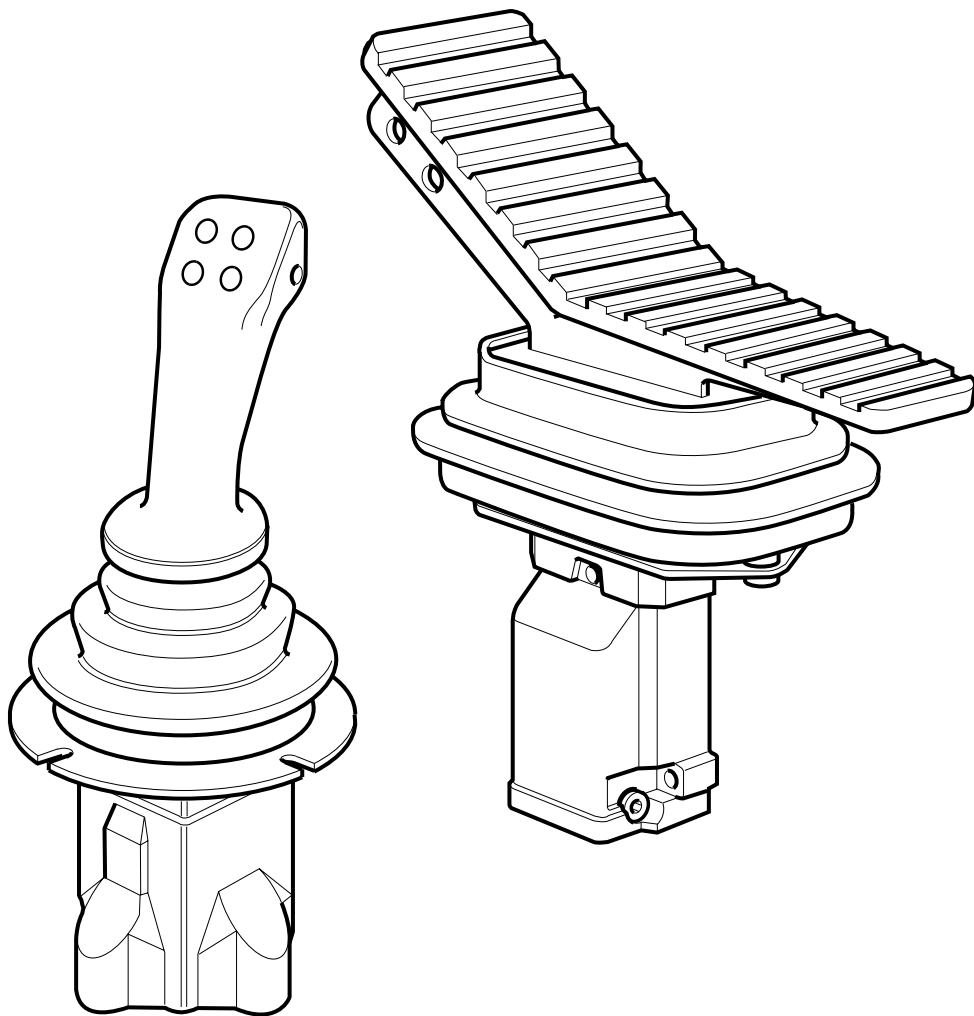


Bulletin HY17-8813M1/UK

Spare Parts List

Series PCL4 01/02/04/05

Effective: October 17, 2007
Supersedes: August 14, 2007



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.

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 ³	= 0.061024 in ³
1 m	= 3.2808 feet
1 mm	= 0.03937 in
9/5 °C + 32	= °F

Symbols for servicing

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

WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS 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 and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure, and review the information concerning the product or system in the current product catalogue. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

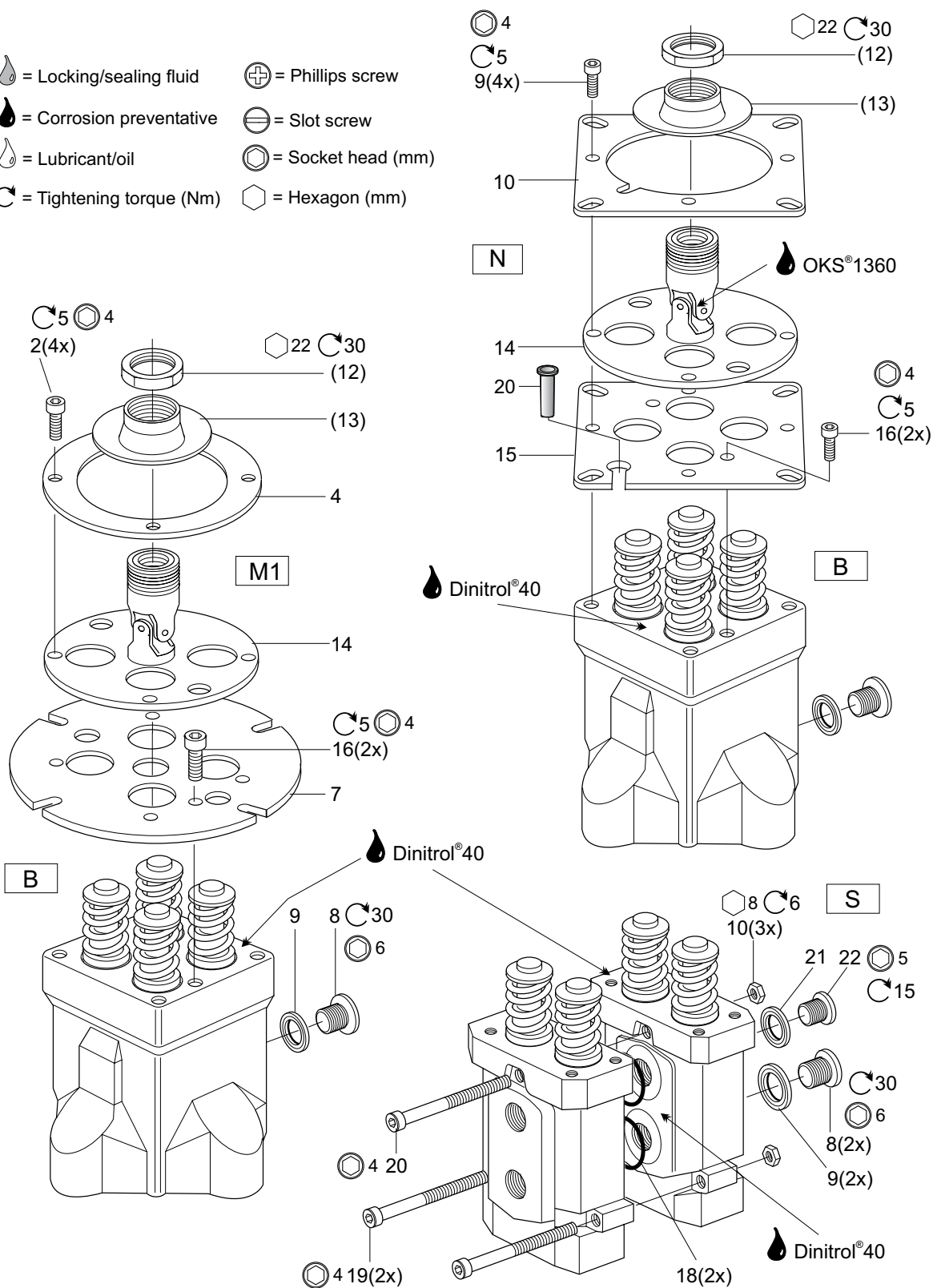
Offer of Sale

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

List of contents	Page
PCL401	
Basic Valve, mounting plate M1, N, plugs, bolts etc.....	4-5
Lever handels, H1, E0 - E4	6-7
Lever handels, N0, N2, N4 etc.	8-9
Lever handels, N0, N2, N4 etc.	10-11
PCL402 (PCL404)	
Basic Valve, PCL402.....	12-13
Basic Valve, Mounting plates M2 - M6, Lever link, PCL402	14-15
Detents MD2, ED2, PCL402	16-17
Friction ratchet S2, PCL402	18-19
Marine design A86, A87, A88	20-21
Handles, H3 - H7, E0 - E4, PCL402	22-23
Foot pedal PCL404	24-25
Foot pedal PCL402 + A95.....	26
PCL405	
Foot pedal PCL405X, 405F	28-29
Appendix A Warnings.....	30
Spring Packs, Push Pin Sets have been moved to a separate document.	

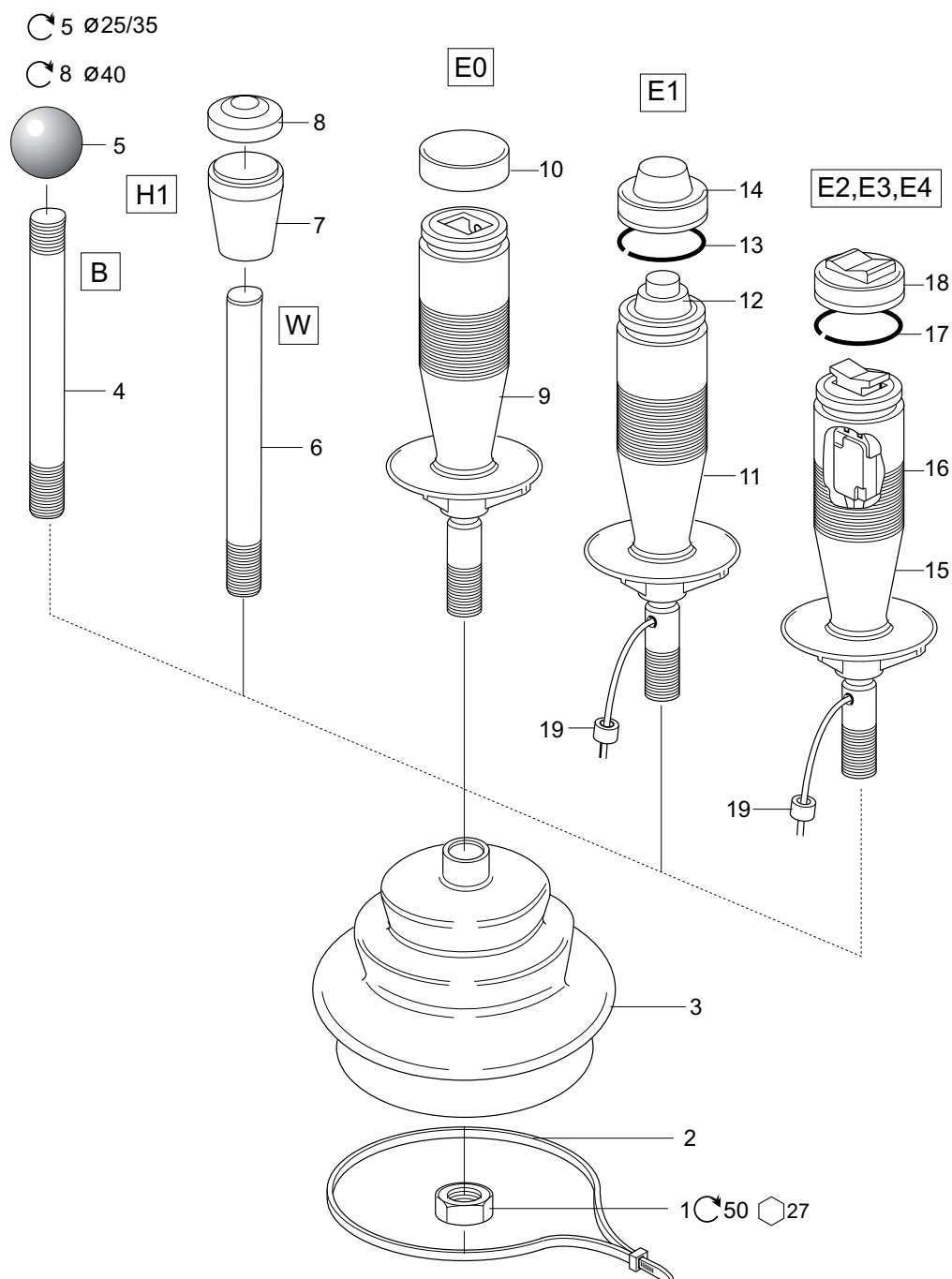
PCL401

-  = Locking/sealing fluid  = Phillips screw
 = Corrosion preventative  = Slot screw
 = Lubricant/oil  = Socket head (mm)
 = Tightening torque (Nm)  = Hexagon (mm)



[illegible]

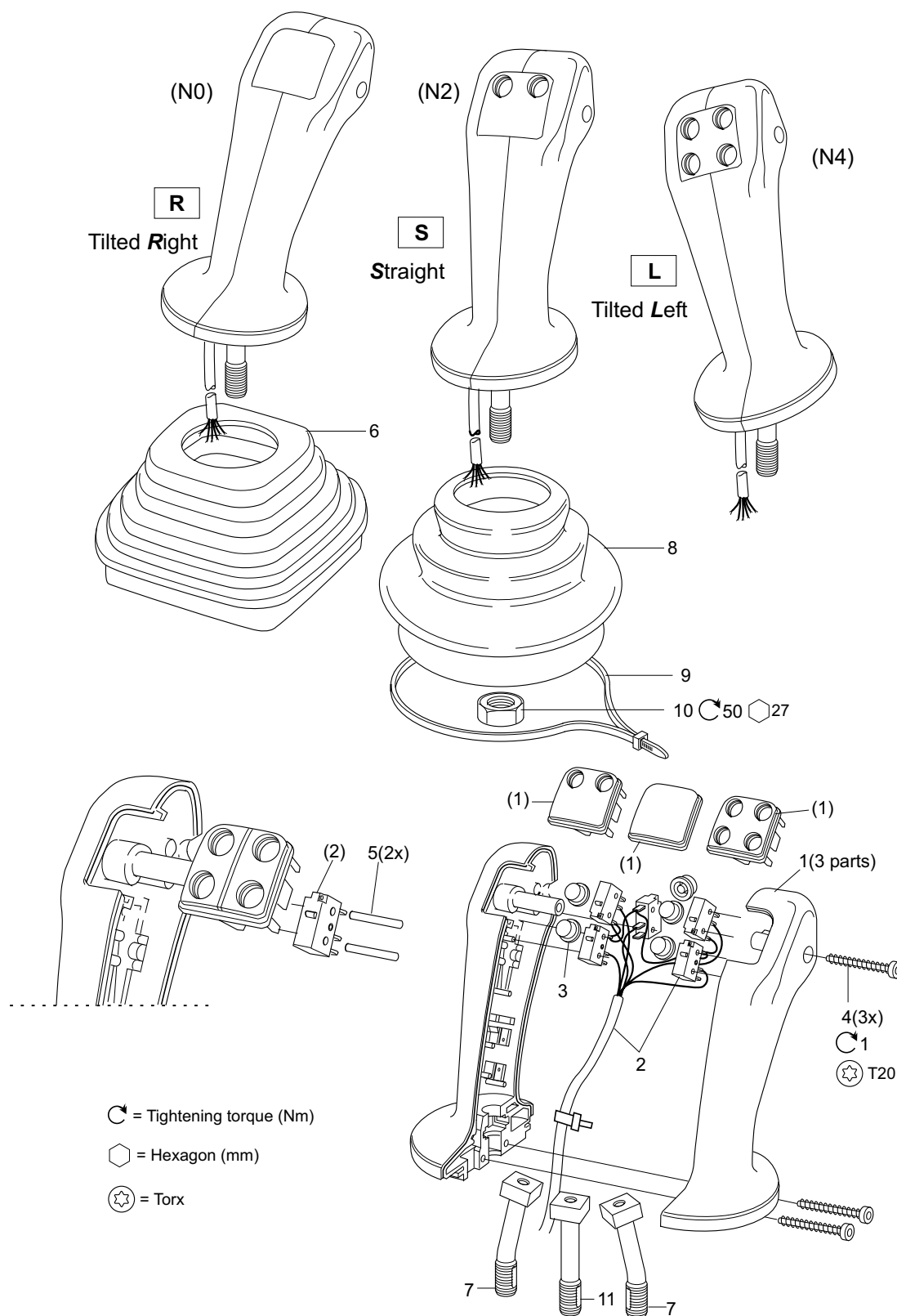
PCL401



- ☉ = Locking/sealing fluid
- ☹ = Corrosion preventative
- ☹ = Lubricant/oil
- ⌚ = Tightening torque (Nm)
- ⊕ = Phillips screw
- ⊖ = Slot screw
- ⊖ = Socket head (mm)
- ⬡ = Hexagon (mm)

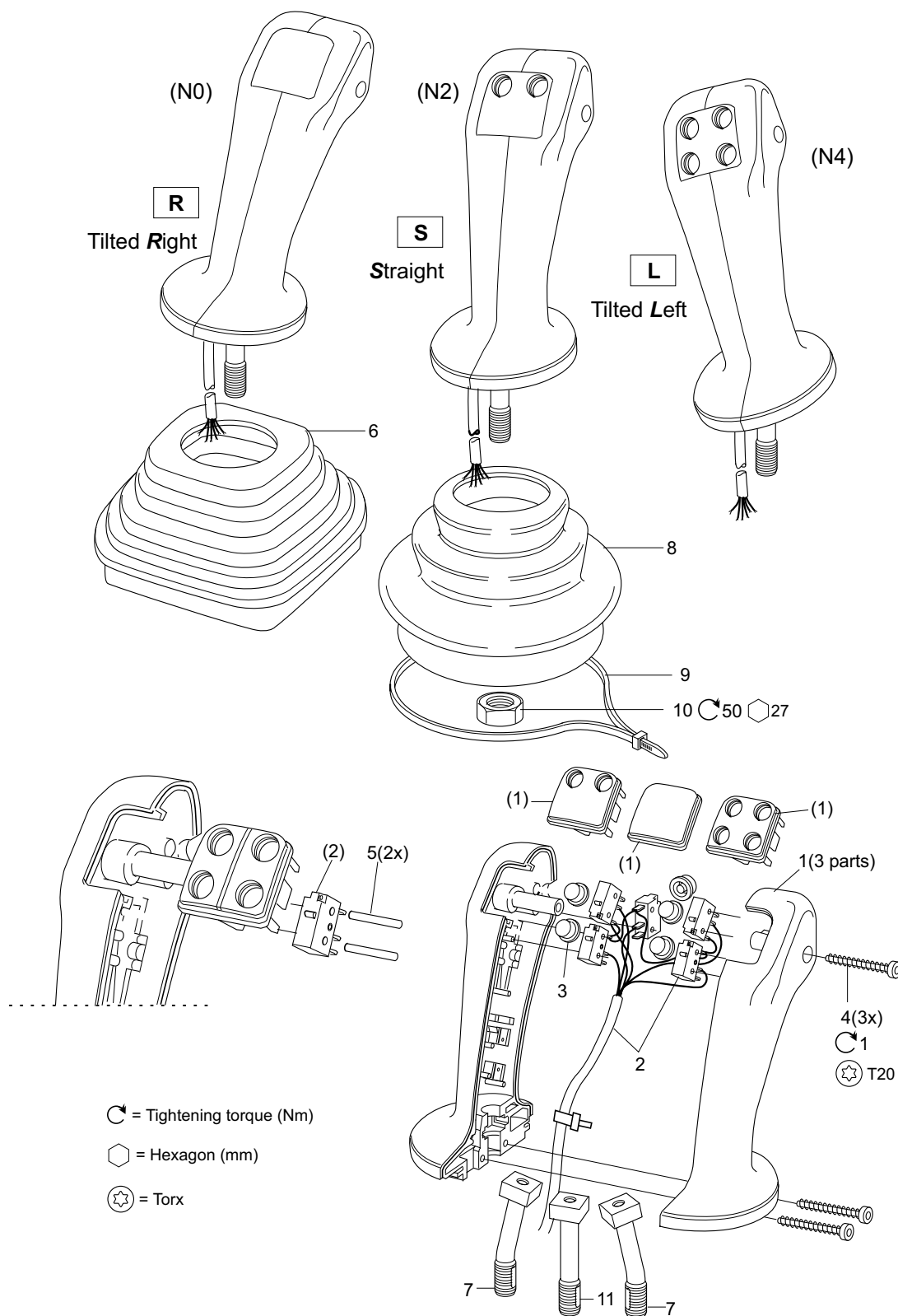
See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
		91259463	Locking strap	2
		91249746	Bellows	3
		91259054	Handle ball	5
		9126900002	Window	8
		91272645	Cap	10
		91259620	Switch	12
		91259601	Lock ring	13
		91239149	Rubber hood	14
		91259557	Microswitch	16
		91259556	Rubber hood	18
H1		9120059052	Handle H1 - B	1, 2, 3, 4, 5
H1		9120089358	Handle H1 - W	1, 2, 3, 6, 7, 8
E0		9120089507	Handle E0	1, 2, 3, 9, 10
E1		9120059053	Handle E1	11(1, 2, 3, 12, 13, 14, 19)
E2		9120059054	Handle E2	15(1, 2, 3, 16, 17, 18, 19)
E3		9120059055	Handle E3	15(1, 2, 3, 16, 17, 18, 19)
E4		9120059056	Handle E4	15(1, 2, 3, 16, 17, 18, 19)
E2+A28		9120089384	Handle E2 + A 28	Separate spare parts sheet on request.

PCL401



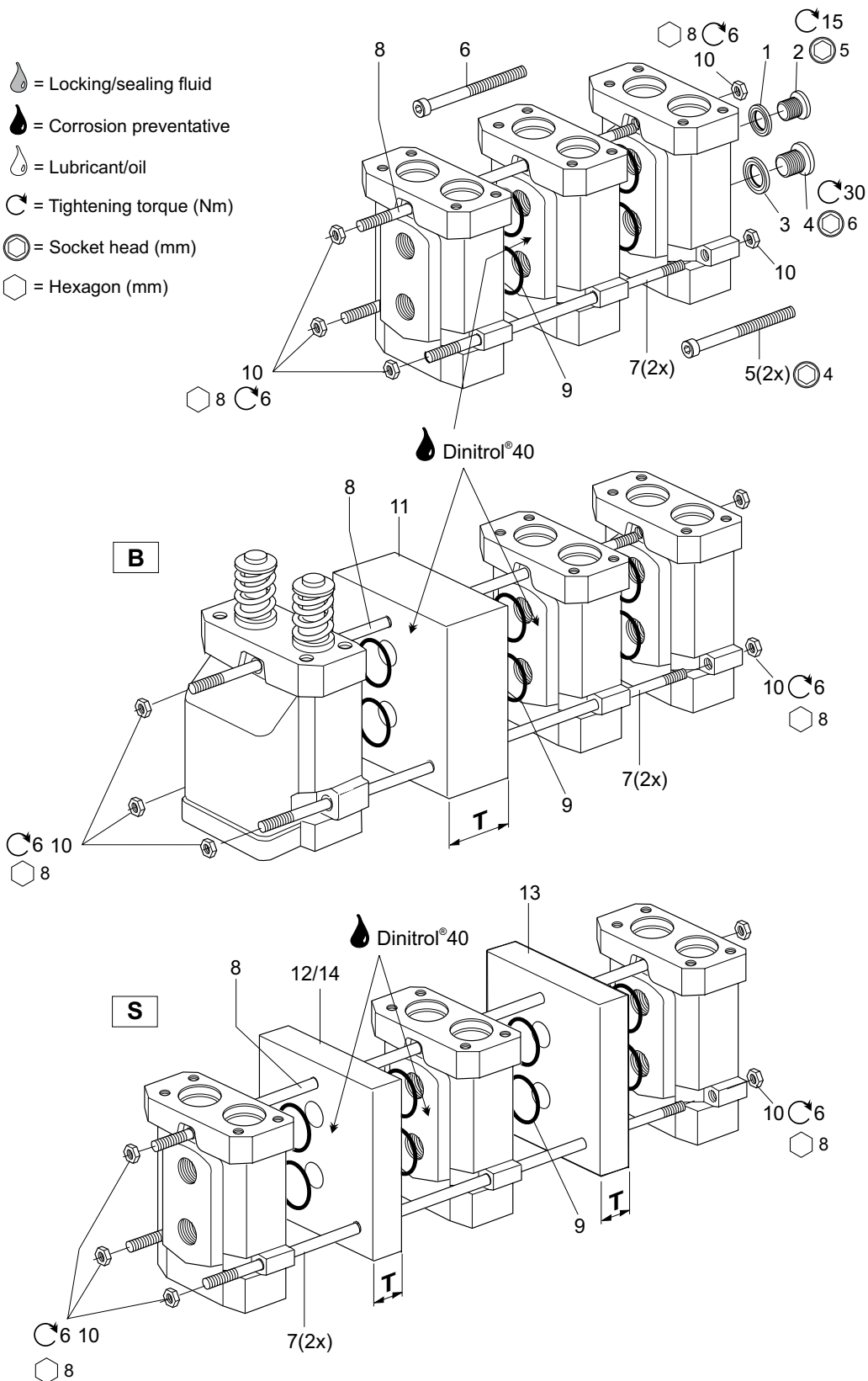
[illegible]

PCL401



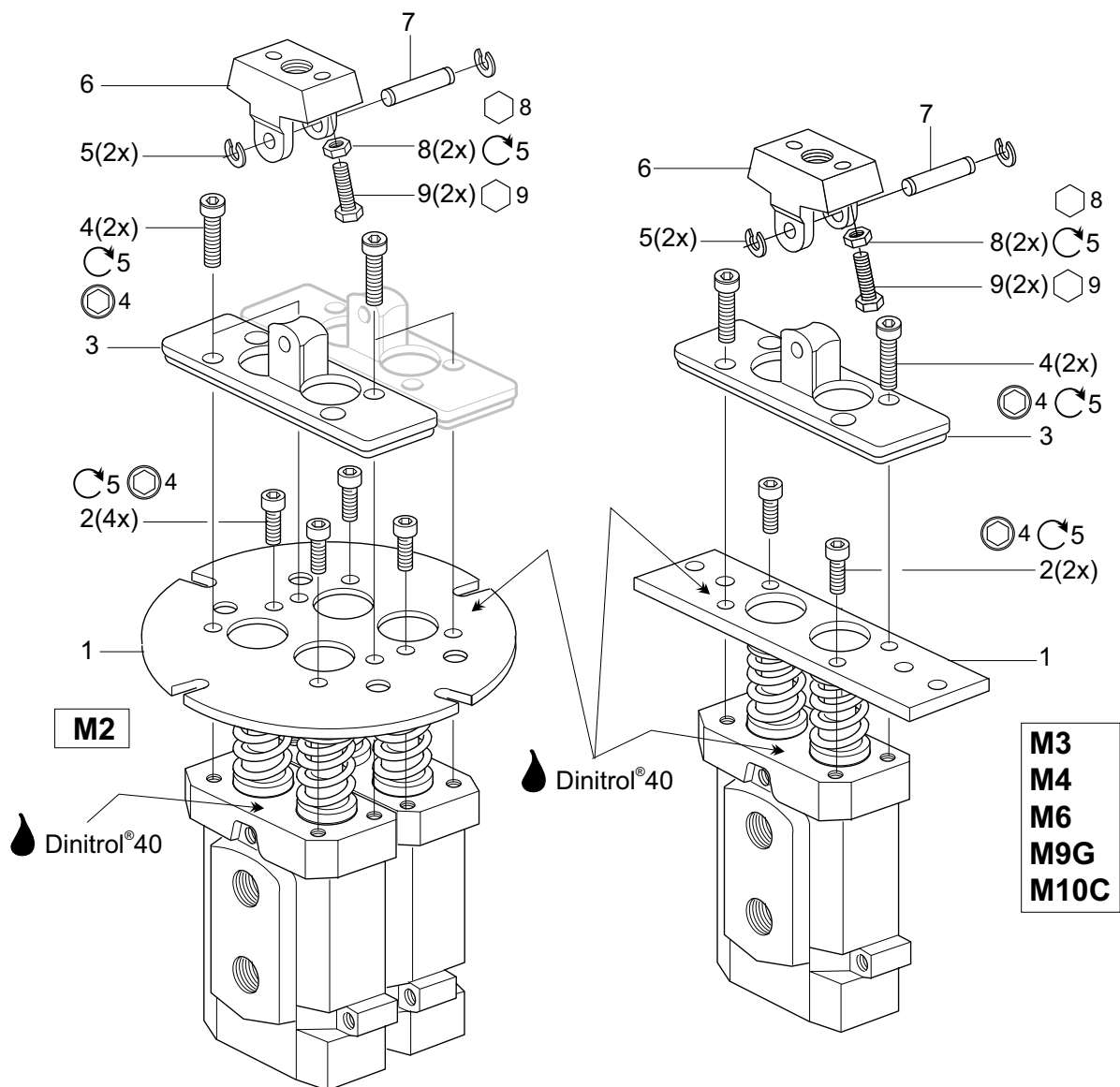
See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
N0		9120089597	Handle <i>tilted</i> Left, N0 assy	A102 Boot (For right hand operation)
N0		9120089598	Handle <i>tilted</i> Right, N0 assy	A102 Boot (For left hand operation)
N0		9120089599	Handle Straight, N0 assy	A102 Boot
N0		9120089604	Handle <i>tilted</i> Left, N0 assy	M1 Boot (For right hand operation)
N0		9120089605	Handle <i>tilted</i> Right, N0 assy	M1 Boot (For left hand operation)
N0		9120089606	Handle Straight, N0 assy	M1 Boot
N2		9120089582	Handle <i>tilted</i> Left, N2 assy	M1 Boot (For right hand operation)
N2		9120089583	Handle <i>tilted</i> Right, N2 assy	M1 Boot (For left hand operation)
N2		9120089622	Handle Straight, N2 assy	M1 Boot
N2		9120089611	Handle <i>tilted</i> Left, N2 assy	A102 Boot (For right hand operation)
N2		9120089612	Handle <i>tilted</i> Right, N2 assy	A102 Boot (For left hand operation)
N2		9120089625	Handle Straight, N2 assy	A102 Boot
N2T		9120089593	Handle <i>tilted</i> Left, N2T assy	A102 Boot (For right hand operation)
N2T		9120089592	Handle <i>tilted</i> Right, N2T assy	A102 Boot (For left hand operation)
N2T		9120089601	Handle <i>tilted</i> Left, N2T assy	A102 Boot, A113 cable end
N2T		9120089602	Handle <i>tilted</i> Right, N2T assy	A102 Boot, A113 cable end
N2T		9120089667	Handle Straight, N2T assy	M1 Boot
N4		9120089585	Handle <i>tilted</i> Left, N4 assy	M1 Boot (For right hand operation)
N4		9120089584	Handle <i>tilted</i> Right, N4 assy	M1 Boot (For left hand operation)
N4		9120089594	Handle Straight, N4 assy	M1 Boot
N4		9120089720	Handle Straight, N4 assy	A102 Boot
N4T		9120089587	Handle <i>tilted</i> Left, N4T assy	M1 Boot (For right hand operation)
N4T		9120089586	Handle <i>tilted</i> Right, N4T assy	M1 Boot (For left hand operation)
N4T		9120089613	Handle Straight, N4T assy	M1 Boot
N4T		9120089580	Handle <i>tilted</i> Left, N4T assy	A102 Boot, A105 cable end
N4T		9120089581	Handle <i>tilted</i> Right, N4T assy	A102 Boot, A105 cable end
N4T		9120089710	Handle Straight, N4T assy, A145	A102 Boot
N4T		9120089655	Handle Straight, N4T assy	A102 Boot
N4T		9120089620	Handle <i>tilted</i> Left,, N4T assy	A102 Boot, A115 cable end

PCL402



See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
		9120089609	Plug kit M	1, 2, 3, 4
		9120089328	Plug kit BSP	1, 2, 3, 4
		9120089329	Plug kit UNF	1, 2, 3, 4
		06636127	O - ring	9
		02662107	Nut	10
PCL402-4		9120089359	Tie-rod kit for 2 PCL402 sections	5(2x), 6, 9(2x), 10(3x)
PCL402-6		9120089303	Tie-rod kit for 3 PCL402 sections	7(2x), 8, 9(4x), 10(6x)
PCL402-8		9120089304	Tie-rod kit for 4 PCL402 sections	7(2x), 8, 9(6x), 10(6x)
PCL402-10		9120089305	Tie-rod kit for 5 PCL402 sections	7(2x), 8, 9(8x), 10(6x)
PCL402-12		9120089306	Tie-rod kit for 6 PCL402 sections	7(2x), 8, 9(10x), 10(6x)
IB2		91262411	Spaceblock IB2	13 (T = 35 mm)
IB2		9120089303	Tie-rod kit for totally 3 sections	7(2x), 8, 9(4x), 10(6x)
IB2		9120089304	Tie-rod kit for totally 4 sections	7(2x), 8, 9(6x), 10(6x)
IB2		9120089305	Tie-rod kit for totally 5 sections	7(2x), 8, 9(8x), 10(6x)
IB2		9120089306	Tie-rod kit for totally 6 sections	7(2x), 8, 9(10x), 10(6x)
IB2		9120089509	Tie-rod kit for totally 7 sections	7(2x), 8, 9(12x), 10(6x)
IB2		9120089510	Tie-rod kit for totally 8 sections	7(2x), 8, 9(14x), 10(6x)
IB2		9120089511	Tie-rod kit for totally 9 sections	7(2x), 8, 9(16x), 10(6x)
IB22		3767740	Spaceblock IB22	12 (T = 22 mm)
IB22		9120089696	Tie-rod kit for 2 PCL402 sections a)	7(2x), 8, 9(4x), 10(6x)
IB22		9120089697	Tie-rod kit for 3 PCL402 sections a)	7(2x), 8, 9(8x), 10(6x)
IB22		9120089698	Tie-rod kit for 4 PCL402 sections a)	7(2x), 8, 9(12x), 10(6x)
IB22		9120089699	Tie-rod kit for 5 PCL402 sections a)	7(2x), 8, 9(16x), 10(6x)
IB19		9126348501	Spaceblock IB19	14 (T = 19 mm)
IB19		9120089530	Tie-rod kit for 2 PCL402 sections a)	7(2x), 8, 9(4x), 10(6x)
IB19		9120089531	Tie-rod kit for 3 PCL402 sections a)	7(2x), 8, 9(8x), 10(6x)
IB19		9120089532	Tie-rod kit for 4 PCL402 sections a)	7(2x), 8, 9(12x), 10(6x)
IB19		9120089533	Tie-rod kit for 5 PCL402 sections a)	7(2x), 8, 9(16x), 10(6x)
IB67		9126348502	Spaceblock IB67	11 (T = 67 mm)
IB67		9120089534	Tie-rod kit for 2 PCL402 sections a)	7(2x), 8, 9(4x), 10(6x)
IB67		9120089535	Tie-rod kit for 3 PCL402 sections a)	7(2x), 8, 9(8x), 10(6x)
			Other combinations as above, on request	
			a) With one IB-plate between all PCL sections.	

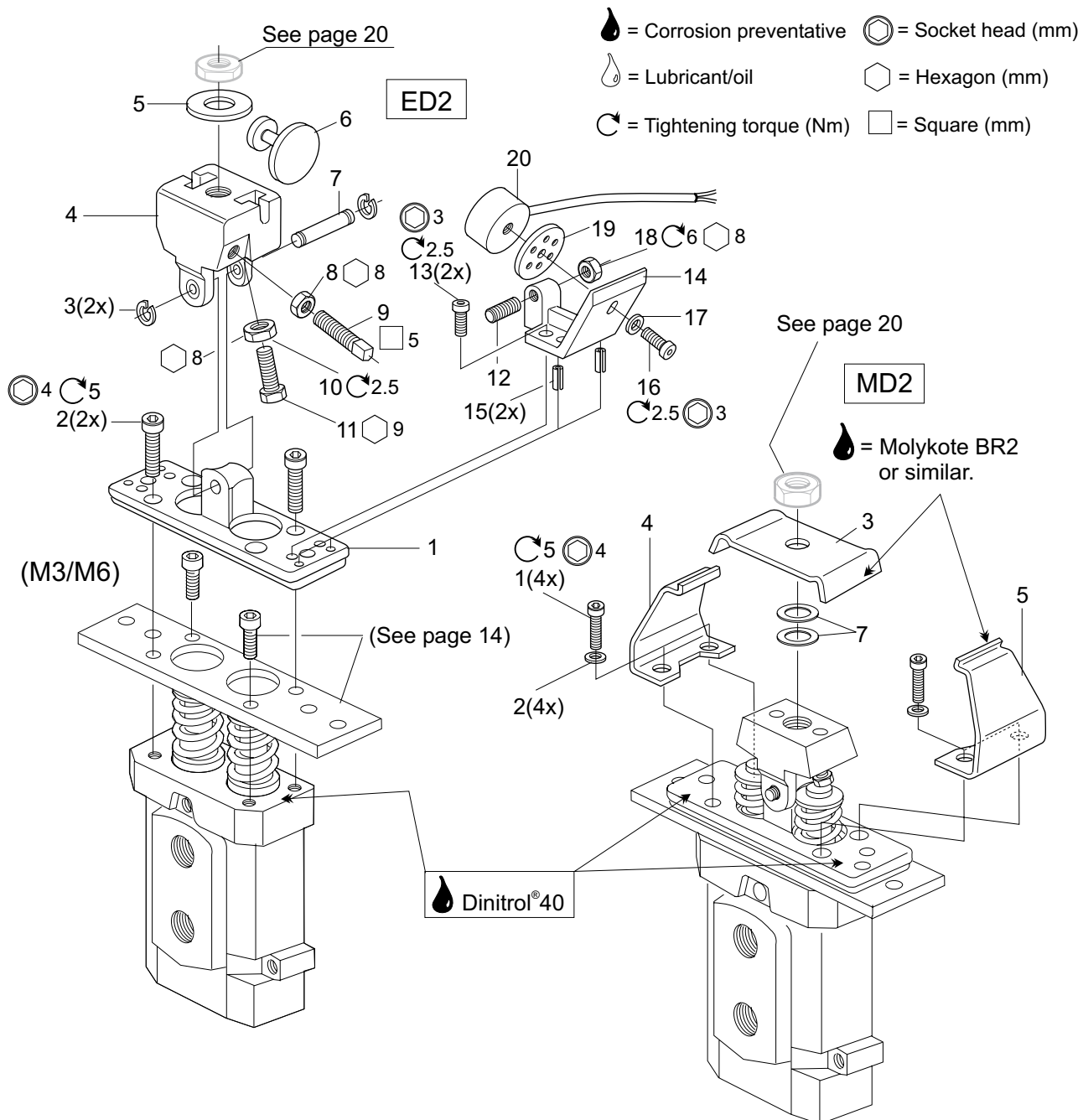
PCL402



- = Corrosion preventative = Socket head (mm)
 = Lubricant/oil = Hexagon (mm)
 = Tightening torque (Nm)

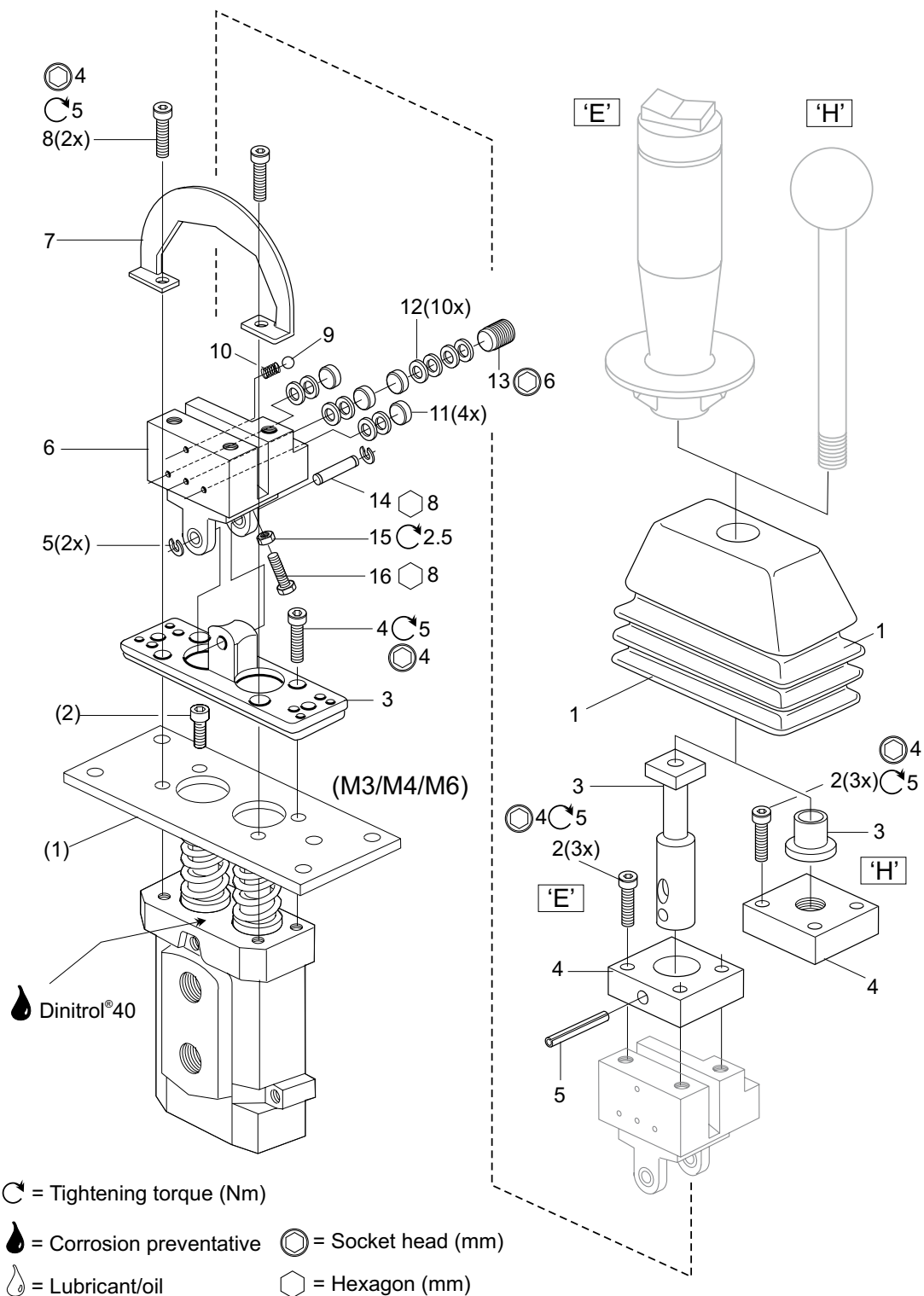
[illegible]

PCL402



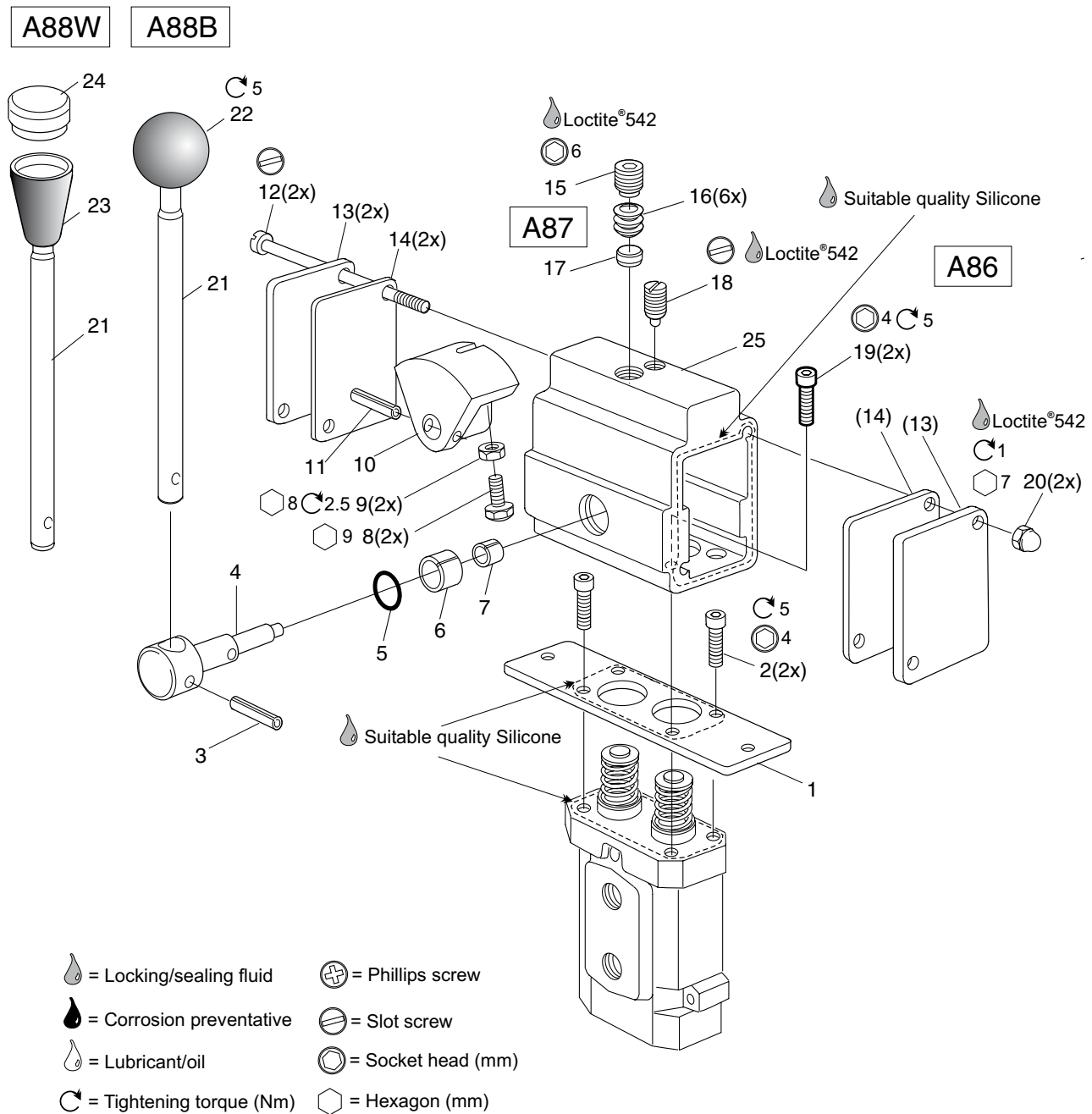
[illegible]

PCL402



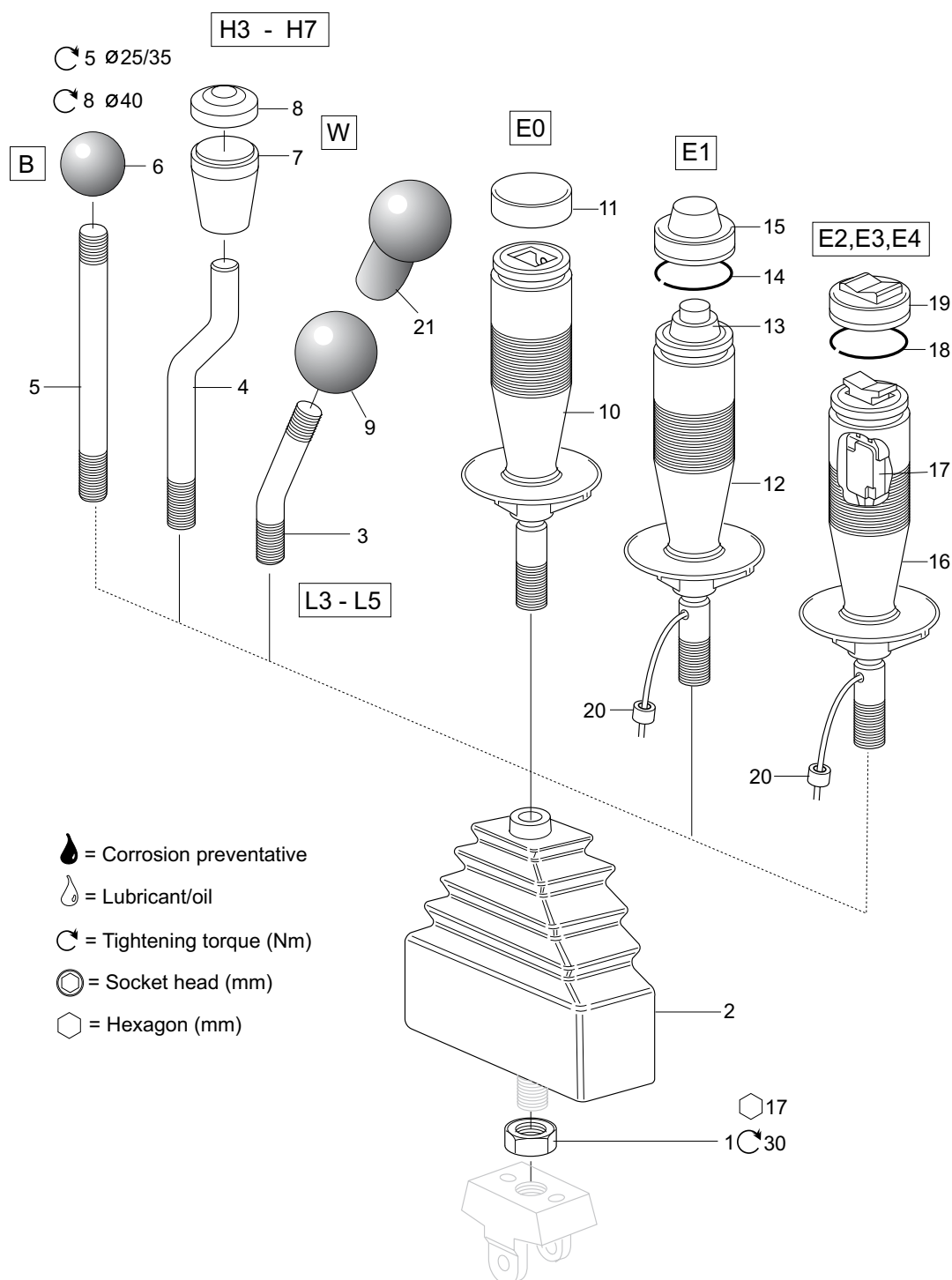
[illegible]

PCL402



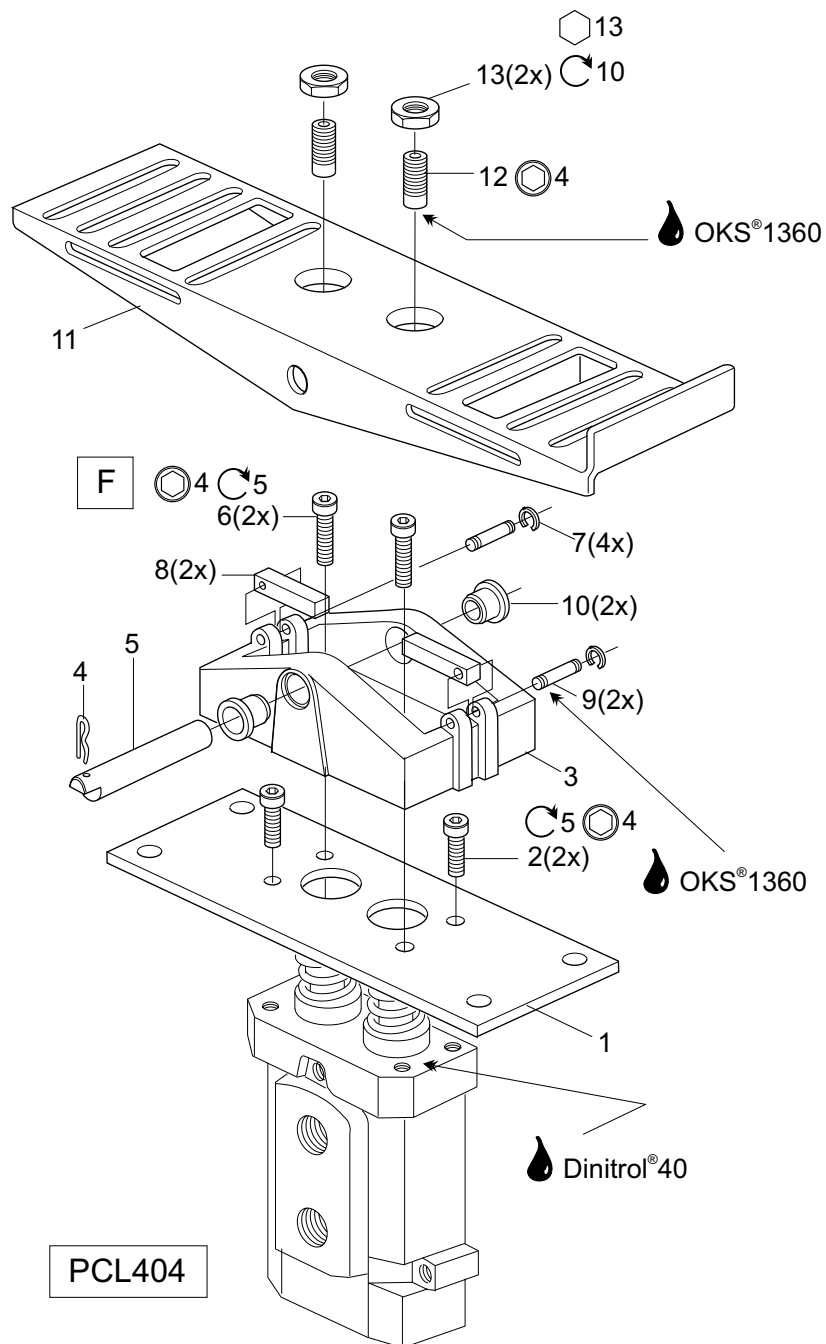
[illegible]

PCL402



See Customer Specification				
Code	Pos	Part	Description	Remarks / Items
		9126900002	Window	8
		03621116	Handle ball, Ø 25	6
		02662111	Nut	1
		91236609	Bellows	2
		91272645	Cap, E0	11
		91239149	Rubber cap, E1	15
		91259620	Switch, E1	13
		91259556	Rubber cap	19
		91259557	Switch, E2/E3/E4	17
H3-B		9120089362	Lever handle H3 - B	1, 2, 5, 6
H3-BS		9120089713	Lever handle H3 - B	1, 2, 5, 6 Stainless steel lever stem
H4-B		9120089363	Lever handle H4 - B	1, 2, 5, 6
H5-B		9120089364	Lever handle H5 - B	1, 2, 5, 6
H6-B		9120089365	Lever handle H6 - B	1, 2, 5, 6
H7-B		9120089366	Lever handle H7 - B	1, 2, 5, 6
H3-W		9120089367	Lever handle H3 - W	1, 2, 4, 7, 8
H4-W		9120089368	Lever handle H4 - W	1, 2, 4, 7, 8
H5-W		9120089369	Lever handle H5 - W	1, 2, 4, 7, 8
H6-W		9120089370	Lever handle H6 - W	1, 2, 4, 7, 8
H7-W		9120089371	Lever handle H7 - W	1, 2, 4, 7, 8
L3		9 1271123	Stem, lever handle L3	3
L4		91271126	Stem, lever handle L4	3
L5		3764827	Stem, lever handle L5	3
L3 - L5		91259049	Handle ball, L3 - L5	9
E0		9120089538	Lever handle E0	10(1, 2, 11)
E1		9120089372	Lever handle E1	12(1, 2, 13, 14, 15, 20)
E2		9120089373	Lever handle E2	16(1, 2, 17, 18, 19, 20)
E3		9120089374	Lever handle E3	16(1, 2, 17, 18, 19, 20)
E4		9120089375	Lever handle E4	16(1, 2, 17, 18, 19, 20)
		9120089694	Knob (A108, A109, A112)	21 (4 pcs/kit)

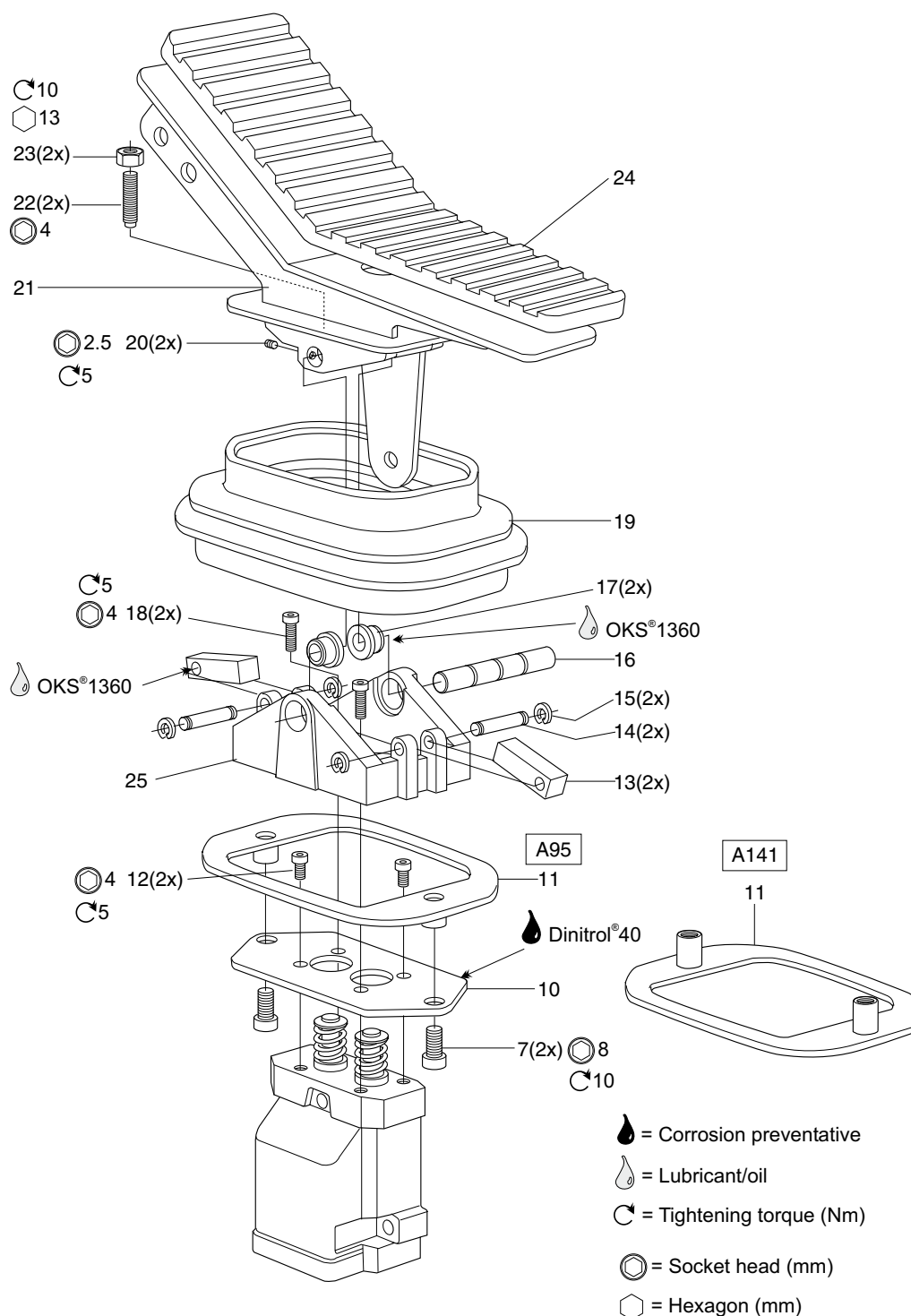
PCL404



= Corrosion preventative = Socket head (mm)
 = Tightening torque (Nm) = Hexagon (mm)

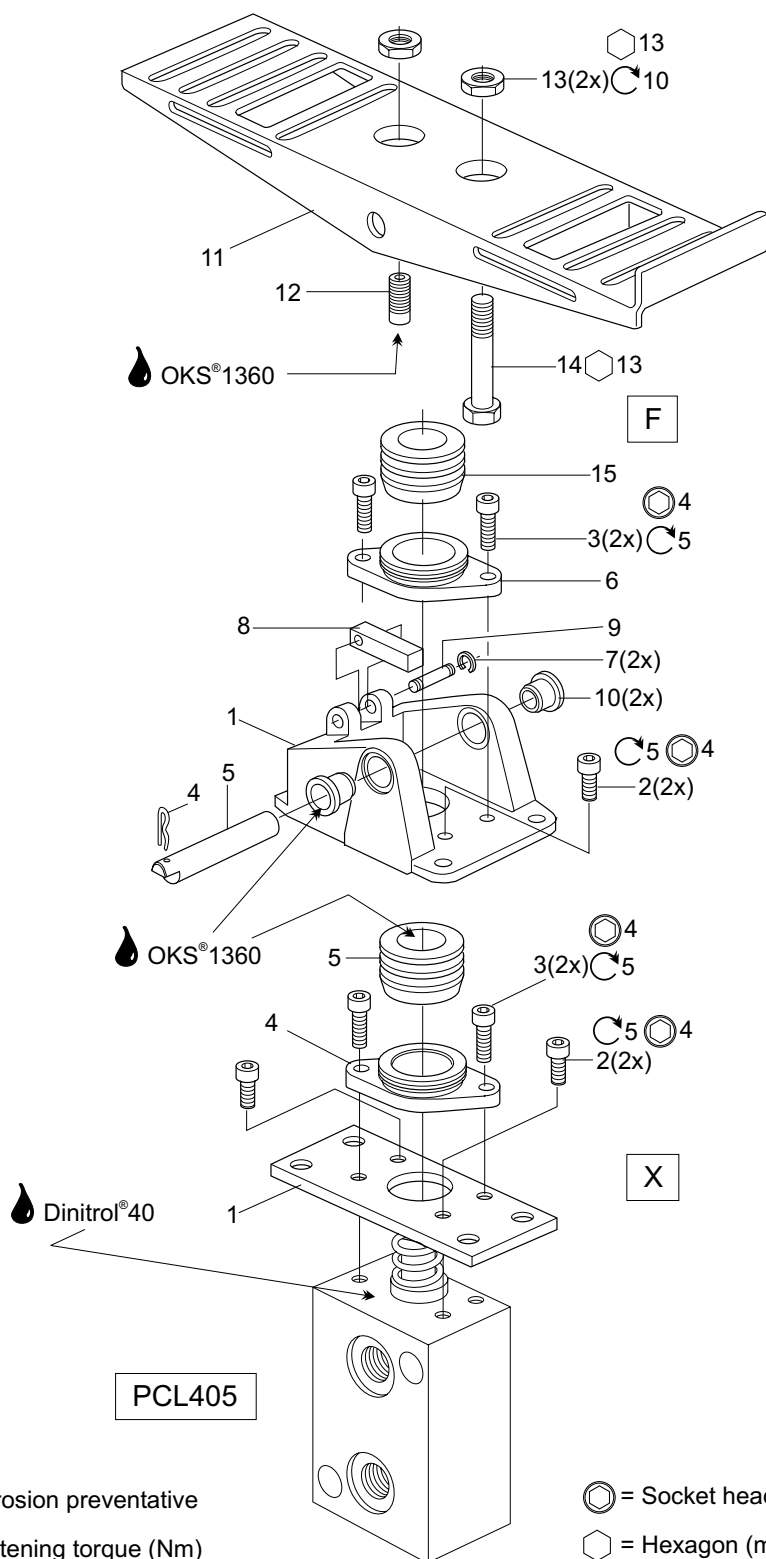
[illegible]

PCL404



[illegible]

PCL405



[illegible]

Symbol	Description
	For optimum function, the radial play 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. 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 . 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 for Blue, G for Green, R for Red.
	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 .

Sales Offices

AE – United Arab Emirates,
Abu Dhabi
Tel: +971 2 67 88 587

AR – Argentina, Buenos Aires
Tel: +54 3327 44 4129

AT – Austria, Wiener Neustadt
Tel: +43 (0)2622 23501-0

AT – Austria, Wiener Neustadt
(Eastern Europe)
Tel: +43 (0)2622 23501 970

AU – Australia, Castle Hill
Tel: +61 (0)2-9634 7777

AZ – Azerbaijan, Baku
Tel: +994 50 2233 458

BE – Belgium, Nivelles
Tel: +32 (0)67 280 900

BR – Brazil, Cachoeirinha RS
Tel: +55 51 3470 9144

BY – Belarus, Minsk
Tel: +375 17 209 9399

CA – Canada, Milton, Ontario
Tel: +1 905 693 3000

CH – Switzerland
See Germany

CN – China, Shanghai
Tel: +86 21 5031 2525

CN – China, Beijing
Tel: +86 10 6561 0520

CZ – Czech Republic, Klecany
Tel: +420 284 083 111

DE – Germany, Kaarst
Tel: +49 (0)2131 4016 0

DK – Denmark, Ballerup
Tel: +45 43 56 04 00

ES – Spain, Madrid
Tel: +34 902 33 00 01

FI – Finland, Vantaa
Tel: +358 (0)20 753 2500

FR – France,
Contamine-sur-Arve
Tel: +33 (0)4 50 25 80 25

GR – Greece, Athens
Tel: +30 210 933 6450

HK – Hong Kong
Tel: +852 2428 8008

HU – Hungary, Budapest
Tel: +36 1 220 4155

IE – Ireland, Dublin
Tel: +353 (0)1 466 6370

IN – India, Mumbai
Tel: +91 22 6513 7081-85

IT – Italy, Corsico (MI)
Tel: +39 02 45 19 21

JP – Japan, Fujisawa
Tel: +(81) 4 6635 3050

KR – South Korea, Seoul
Tel: +82 2 559 0400

KZ – Kazakhstan, Almaty
Tel: +7 3272 505 800

LV – Latvia, Riga
Tel: +371 74 52601

MX – Mexico, Apodaca
Tel: +52 81 8156 6000

MY – Malaysia, Subang Jaya
Tel: +60 3 5638 1476

NL – The Netherlands,
Oldenzaal
Tel: +31 (0)541 585 000

NO – Norway, Ski
Tel: +47 64 91 10 00

NZ – New Zealand, Mt Wellington
Tel: +64 9 574 1744

PL – Poland, Warsaw
Tel: +48 (0)22 573 24 00

PT – Portugal, Leca
da Palmeira
Tel: +351 22 999 7360

RO – Romania, Bucharest
Tel: +40 21 252 1382

RU – Russia, Moscow
Tel: +7 495 645-2156

SE – Sweden, Spånga
Tel: +46 (0)8 59 79 50 00

SG – Singapore
Tel: +65 6887 6300

SL – Slovenia, Novo Mesto
Tel: +386 7 337 6650

SK – Slovakia
See Czech Republic

TH – Thailand, Bangkok
Tel: +662 717 8140

TR – Turkey, Merter/Istanbul
Tel: +90 212 482 91 06 or 07

TW – Taiwan, Taipei
Tel: +886 2 2298 8987

UA – Ukraine, Kyiv
Tel: +380 44 494 2731

UK – United Kingdom,
Warwick
Tel: +44 (0)1926 317 878

US – USA, Cleveland
(Industrial)
Tel: +1 216 896 3000

US – USA, Lincolnshire
(Mobile)
Tel: +1 847 821 1500

US – USA, Miami
(Pan American Division)
Tel: +1 305 470 8800

VE – Venezuela, Caracas
Tel: +58 212 238 5422

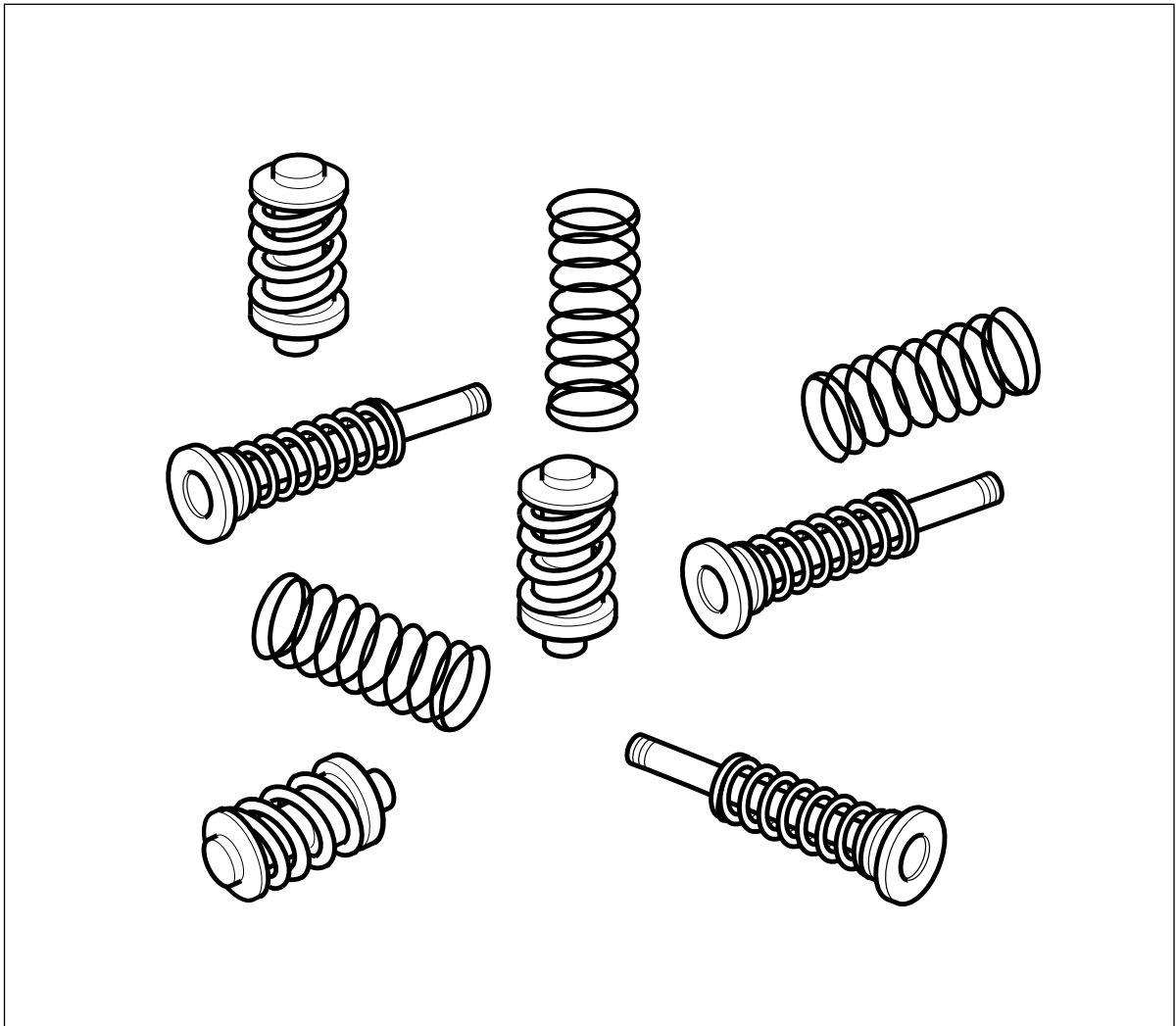
ZA – South Africa,
Kempton Park
Tel: +27 (0)11 961 0700



Bulletin HY17-8815-M1/UK

Spare Parts List Spring Packs, Push Pins PCL4

Effective date: September 02, 2011
Supersedes: November 27, 2008



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.

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 ³	= 0.061024 in ³
1 m	= 3.2808 feet
1 mm	= 0.03937 in
9/5 °C + 32	= °F

Symbols for servicing

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

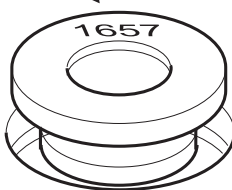
Offer of Sale

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

List of contents	Page
Spring Packs	4
Push Pin	12
Appendix C: Assembly Instructions	14

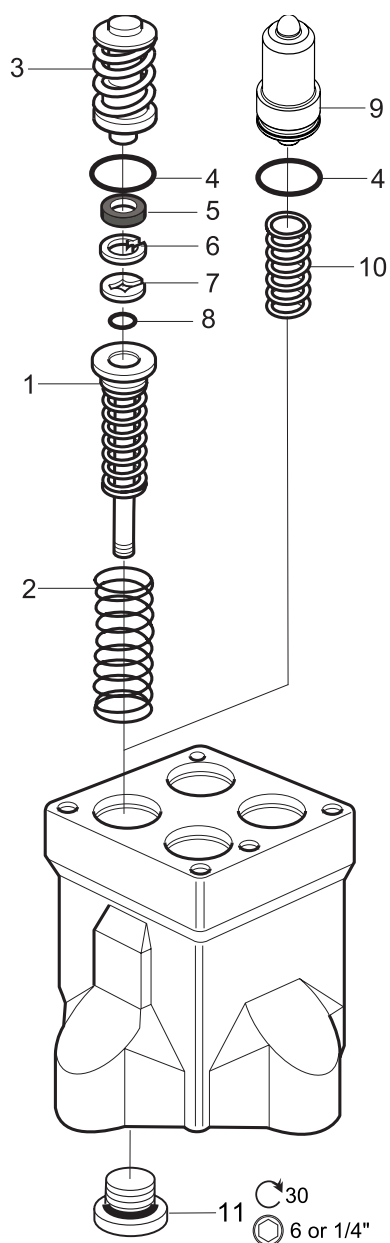


ID No Old : 9126 1816 57
 ID No Old : 9120 0893 19
 ID No New : 67601 32
 ID No New : 67630 16



Spring pack, part #			Start pressure, bar		Final pressure, bar		Straight/Broken curve		Forced opening, mm		A - design	
9126181	657	1.0	-	11.1	ST	/	T = 0.0	A**				

NB. The spool is included in the SPRING PACK assembly.



ID No	Part#	Description	Items/Remarks
1706	9126181706	SPRING PACK 1.0-10.1 ST/T=0.5	1
1657	9126181657	SPRING PACK 1.0-11.1 ST/T=0.0	1
1804	9126181804	SPRING PACK 1.0-14.0 BR/T=0.0	1 (2913+4407)
1675	9126181675	SPRING PACK 1.0-25.0 BR/T=0.0	1 (2913+4576)
0572	6760572	SPRING PACK 1.0-28.0 BR/T=0.0	1 (2913+4576)
1819	9126181819	SPRING PACK 1.3-13.0 BR/T=0.0	1 (2913+4575)
1794	9126181794	SPRING PACK 1.5-16.0 BR/T=0.0	1 (2913+4407)
1810	9126181810	SPRING PACK 2.0-7.1 BR/T=0.0	1 (4408+4575)
1627	9126181627	SPRING PACK 2.0-7.3 ST/T=0.5	1
1860	9126181860	SPRING PACK 2.0-8.5 BR/T=0.0	1 (4408+4575)
1722	9126181722	SPRING PACK 2.0-10.0 BR/T=0.0	1 (4549+4575)
1652	9126181652	SPRING PACK 2.0-10.5 ST/T=0.0	1
1673	9126181673	SPRING PACK 2.0-10.9 BR/T=0.0	1 (4408+4575)
1799	9126181799	SPRING PACK 2.0-10.9 BR/T=0.5	1 (4408+4575)
1749	9126181749	SPRING PACK 2.0-14.0 BR/T=0.0	1 (4554+4575)
1715	9126181715	SPRING PACK 2.0-14.1 BR/T=0.0	1 (4408+4576)
1817	9126181817	SPRING PACK 2.0-32.0 BR/T=0.0	1 (4554+2631)
1732	9126181732	SPRING PACK 2.3-12.2 BR/T=0.5	1 (4549+4575)
1729	9126181729	SPRING PACK 2.5-7.8 ST/T=0.5	1
1730	9126181730	SPRING PACK 2.5-11.6 ST/T=0.5	1
1816	9126181816	SPRING PACK 2.5-13.5 BR/T=0.0	1 (4549+4576)
1766	9126181766	SPRING PACK 2.5-16.3 BR/T=0.0	1 (4549+4407)
1602	9126181602	SPRING PACK 2.6-6.0 ST/T=0.0	1
1629	9126181629	SPRING PACK 3.0-10.7 ST/T=0.5	1
1811	9126181811	SPRING PACK 3.0-11.5 ST/T=0.0	1
1659	9126181659	SPRING PACK 3.0-12.1 ST/T=0.5	1
1734	9126181734	SPRING PACK 3.0-13.1 ST/T=0.0	1
1607	9126181607	SPRING PACK 3.0-14.0 ST/T=0.7	1
1622	9126181622	SPRING PACK 3.0-14.5 ST/T=0.5	1
1616	9126181616	SPRING PACK 3.0-15.7 ST/T=0.0	1
1649	9126181649	SPRING PACK 3.0-17.6 ST/T=0.0	1
1682	9126181682	SPRING PACK 3.0-19.3 ST/T=0.7	1
1635	9126181635	SPRING PACK 3.0-19.7 ST/T=0.6	1
1631	9126181631	SPRING PACK 3.0-20.0 ST/T=0.5	1
1648	9126181648	SPRING PACK 3.0-21.8 ST/T=0.0	1
1762	9126181762	SPRING PACK 3.0-22.0 BR/T=0.5	1 (4555+4576)
1690	9126181690	SPRING PACK 3.0-22.2 ST/T=0.5	1
1707	9126181707	SPRING PACK 3.0-28.4 ST/T=0.0	1
1833	9126181833	SPRING PACK 3.0-30.4 BR/T=0.0	1 (4549+2631)
1845	9126181845	SPRING PACK 3.0-48.0 BR/T=0.0	1 (2229+4576)
1851	9126181851	SPRING PACK 3.0-48.0 BR/T=0.0	1 (4557+2631)
1634	9126181634	SPRING PACK 3.0-58.1 ST/T=0.0	1
1737	9126181737	SPRING PACK 3.0-60.0 BR/T=0.0	1 (4572+2631)

ID No	Part#	Description	Items/Remarks
1727	9126181727	SPRING PACK 3.3-16.0 ST/T=0.0	1
1728	9126181728	SPRING PACK 3.4-13.5 ST/T=0.0	1
1710	9126181710	SPRING PACK 3.4-22.3 ST/T=0.0	1
1744	9126181744	SPRING PACK 3.5-10.4 ST/T=0.0	1
1712	9126181712	SPRING PACK 3.5-14.0 ST/T=0.0	1
1830	9126181830	SPRING PACK 3.5-15.0 ST/T=0.5	1
1838	9126781838	SPRING PACK 3.5-18.1 ST/T=0.0	1
1842	9126181842	SPRING PACK 3.5-20.9 BR/T=0.5	1 (4572+4576)
1716	9126181716	SPRING PACK 3.5-22.3, ST/T=0.6	1
1626	9126181626	SPRING PACK 3.5-22.7 ST/T=0.5	1
1723	9126181723	SPRING PACK 3.5-24.7 ST/T=0.0	1
0169	6760169	SPRING PACK 3.7-15.7 ST/T=0.7, A04	1
1785	9126181785	SPRING PACK 3.7-16.4 ST/T=0.0	1
0168	6760168	SPRING PACK 3.7-17.4 ST/T=0.0, A04	1
0327	6760327	SPRING PACK 3.8-14.8 ST/T=0.7	1
0469	6760469	SPRING PACK 3.8-15.3 ST/T=0.5	1
1801	9126181801	SPRING PACK 3.8-17.6 ST/T=0.7, A04	1
1823	9126181823	SPRING PACK 3.8-18.4 ST/T=0.0	1
1859	9126181859	SPRING PACK 3.8-22.6 ST/T=0.0	1
1802	9126181802	SPRING PACK 3.8-41.9 BR/T=0.0, A04	1 (2265+4576)
1726	9126181726	SPRING PACK 3.9-14.5 ST/T=0.0	1
1791	9126181791	SPRING PACK 3.9-15.2 BR/T=0.7	1 (4554+4575)
1724	9126181724	SPRING PACK 3.9-18.5 ST/T=0.0	1
1628	9126181628	SPRING PACK 4.0-9.3 ST/T=0.5	1
1852	9126181852	SPRING PACK 4.0-9.8 ST/T=0.0	1
1646	9126181646	SPRING PACK 4.0-17.2 ST/T=0.5	1
1773	9126181773	SPRING PACK 4.0-18.6 ST/T=0.0	1
1839	9126181839	SPRING PACK 4.0-21.0 ST/T=0.5	1
1771	9126181771	SPRING PACK 4.0-22.2 ST/T=1.5	1
1683	9126181683	SPRING PACK 4.0-22.6 BR/T=0.0	1 (2916+4407)
1840	9126181840	SPRING PACK 4.0-22.8 ST/T=0.0	1
1772	9126181772	SPRING PACK 4.0-25.2 ST/T=0.0	1
1691	9126181691	SPRING PACK 4.0-26.1 ST/T=0.5	1
1758	9126181758	SPRING PACK 4.0-27.0 ST/T=0.5	1
1818	9126181818	SPRING PACK 4.0-29.4 ST/T=0.0	1
1803	9126181803	SPRING PACK 4.0-32.0 BR/T=0.0	1 (2916+4576)
1725	9126181725	SPRING PACK 4.1-20.3 ST/T=0.0	1
1760	9126181760	SPRING PACK 4.2-23.0 ST/T=0.0	1
1685	9126181685	SPRING PACK 4.5-10.3 ST/T=0.0	1
1847	9126181847	SPRING PACK 4.5-16.5 ST/T=0.7, A04	1
1805	9126181805	SPRING PACK 4.6-8.0 ST/T=0.0	1
1645	9126181645	SPRING PACK 4.8-16.3 BR/T=0.0	1 (4554+4575)
0132	6760132	SPRING PACK 4.8-19.2 ST/T=0.5	1

ID No	Part#	Description	Items/Remarks
1829	9126181829	SPRING PACK 4.8-28.7 BR/T=0.5	1 (4556+2631)
1713	9126181713	SPRING PACK 4.9-15.0 ST/T=0.0	1
1643	9126181643	SPRING PACK 5.0-8.1 ST/T=0.5	1
1636	9126181636	SPRING PACK 5.0-12.0 BR/T=0.0	1 (4408+4407)
1619	9126181619	SPRING PACK 5.0-14.1 ST/T=0.5	1
1624	9126181624	SPRING PACK 5.0-14.4 ST/T=0.6	1
1741	9126181741	SPRING PACK 5.0-14.6 ST/T=0.5	1
1637	9126181637	SPRING PACK 5.0-15.0 BR/T=0.0	1 (4549+4407)
1604	9126181604	SPRING PACK 5.0-15.0 BR/T=0.0	1 (4549+4575)
1618	9126181618	SPRING PACK 5.0-15.1 ST/T=0.0	1
1642	9126181642	SPRING PACK 5.0-15.6 ST/T=0.0	1
1688	9126181688	SPRING PACK 5.0-16.5 ST/T=0.5	1
1692	9126181692	SPRING PACK 5.0-17.7 ST/T=0.0	1
1658	9126181658	SPRING PACK 5.0-18.2 ST/T=0.5, A76	1
1763	9126181763	SPRING PACK 5.0-18.8 ST/T=0.5	1
1795	9126181795	SPRING PACK 5.0-19.0 BR/T=0.0	1 (2916+4407)
1641	9126181641	SPRING PACK 5.0-19.6 ST/T=0.0	1
1633	9126181633	SPRING PACK 5.0-20.9 ST/T=0.0	1
3016	6763016	SPRING PACK 5.0-20.9 BR/T=0.0	1 (2719+4407)
1843	9126181843	SPRING PACK 5.0-20.9 BR/T=0.0	1 (2719+4575)
1844	9126181844	SPRING PACK 5.0-23.8 ST/T=0.0	1
0971	6760971	SPRING PACK 5.0-23.8 ST/T=0.6	1
1668	9126181668	SPRING PACK 5.0-24.2 ST/T=0.5	1
1653	9126181653	SPRING PACK 5.0-24.9 ST/T=0.0	1
1806	9126181806	SPRING PACK 5.0-24.9 ST/T=0.0, A25	1
1718	9126181718	SPRING PACK 5.0-26.2 ST/T=0.0	1
1701	9126181701	SPRING PACK 5.0-27.0 BR/T=0.0	1 (4557+4575)
1750	9126181750	SPRING PACK 5.0-27.6 BR/T=0.0	1 (4556+4407)
1651	9126181651	SPRING PACK 5.0-28.0 ST/T=0.5	1
1610	9126181610	SPRING PACK 5.0-29.4 ST/T=0.0	1
1656	9126181656	SPRING PACK 5.0-30.0 BR/T=0.0	1 (2916+4576)
1832	9126181832	SPRING PACK 5.0-30.4 ST/T=0.0	1
1765	9126181765	SPRING PACK 5.0-34.5 BR/T=0.0	1 (2229+4407)
1694	9126181694	SPRING PACK 5.0-54.9 ST/T=0.5	1
1826	9126181826	SPRING PACK 5.1-17.8 ST/T=0.0	1
1780	9126181780	SPRING PACK 5.2-23.4 ST/T=0.0	1
1630	9126181630	SPRING PACK 5.3-23.0 BR/T=0.0, A25	1 (4556+4575)
1695	9126181695	SPRING PACK 5.4-19.8 ST/T=0.5	1
0534	6760534	SPRING PACK 5.5-11.3 ST/T=0.0	1
0535	6760535	SPRING PACK 5.5-12.4 ST/T=0.0	1
1665	9126181665	SPRING PACK 5.5-15.6 ST/T=0.0	1 (2719)
1807	9126181807	SPRING PACK 5.5-15.6 ST/T=0.0	1 (2913)

ID No	Part#	Description	Items/Remarks
1609	9126181609	SPRING PACK 5.5-16.0 BR/T=0.0	1 (4553+4575)
1738	9126181738	SPRING PACK 5.5-16.1 ST/T=0.0	1
1849	9126181849	SPRING PACK 5.5-16.4 ST/T=0.0, A04	1
1788	9126181788	SPRING PACK 5.5-18.2 ST/T=0.0	1
1855	9126181855	SPRING PACK 5.5-19.0 ST/T=0.0	1
1784	9126181784	SPRING PACK 5.5-19.9 ST/T=0.5	1
1858	9126181858	SPRING PACK 5.5-21.0 BR/T=0.0	1 (2916+2631)
1828	9126181828	SPRING PACK 5.5-21.4 ST/T=0.0	1
1759	9126181759	SPRING PACK 5.5-22.3 BR/T=0.5	1 (4554+4407)
1647	9126181647	SPRING PACK 5.5-22.5 ST/T=0.5	1
1836	9126181836	SPRING PACK 5.5-22.6 ST/T=0.0, A04	1
1779	9126181779	SPRING PACK 5.5-25.3 ST/T=0.0, A61	1
1697	9126181697	SPRING PACK 5.5-29.9 ST/T=0.0	1
1781	9126181781	SPRING PACK 5.5-55.0 ST/T=0.5	1
1808	9126181808	SPRING PACK 5.6-17.9 BR/T=0.5	1 (4553+4575)
1809	9126181809	SPRING PACK 5.6-19.9 BR/T=0.5	1 (2913+4407)
1689	9126181689	SPRING PACK 5.6-20.2 ST/T=0.0	1
1786	9126181786	SPRING PACK 5.6-20.6 ST/T=0.7, A04	1
1698	9126181698	SPRING PACK 5.6-21.5 ST/T=0.0	1
1789	9126181789	SPRING PACK 5.6-22.0 BR/T=0.0	1 (4554+4407)
1777	9126181777	SPRING PACK 5.6-22.4 ST/T=0.0, A61	1
1612	9126181612	SPRING PACK 5.6-24.3 ST/T=0.0	1
1856	9126181856	SPRING PACK 5.6-24.4 ST/T=0.7	1
1736	9126181736	SPRING PACK 5.6-25.5 ST/T=0.0	1
1693	9126181693	SPRING PACK 5.6-26.8 ST/T=0.0	1
1857	9126181857	SPRING PACK 5.6-33.2 ST/T=0.0	1
1793	9126181793	SPRING PACK 5.6-46.8 BR/T=0.0, A04	1 (4557+4576)
0815	6760815	SPRING PACK 5.8-16.4 ST/T=0.0	1
1676	9126181676	SPRING PACK 5.8-16.6 BR/T=0.5	1 (4553+4575)
1820	9126181820	SPRING PACK 5.8-16.8 BR/T=0.0	1 (4553+4407)
0313	6760313	SPRING PACK 5.8-17.1 ST/T=0.6	1
1678	9126181678	SPRING PACK 5.8-19.0 ST/T=0.5	1
0166	6760166	SPRING PACK 5.8-19.5 ST/T=0.7, A04	1
1764	9126181764	SPRING PACK 5.8-23.0 BR/T=0.0, A25	1 (4556+4575)
0167	6760167	SPRING PACK 5.8-23.5 ST/T=0.7, A04	1
1681	9126181681	SPRING PACK 5.8-34.5 BR/T=0.0	1 (4572+4576)
1748	9126181748	SPRING PACK 5.9-19.1 ST/T=0.5	1
1705	9126181705	SPRING PACK 5.9-22.9 ST/T=0.5	1
1735	9126181735	SPRING PACK 6.0-12.9 ST/T=0.0	1 (4553)
1733	9126181733	SPRING PACK 6.0-12.9 ST/T=0.0	1 (4557)
1638	9126181638	SPRING PACK 6.0-13.7 ST/T=0.5	1
1680	9126181680	SPRING PACK 6.0-15.6 ST/T=0.5	1
1620	9126181620	SPRING PACK 6.0-15.9 ST/T=0.5, A04	1

ID No	Part#	Description	Items/Remarks
1813	9126181813	SPRING PACK 6.0-16.1 ST/T=0.0	1
1756	9126181756	SPRING PACK 6.0-16.8 ST/T=0.0, A04	1
1757	9126181757	SPRING PACK 6.0-17.4 ST/T=0.0, A04	1
1783	9126181783	SPRING PACK 6.0-18.7 ST/T=0.0	1 (2265)
1625	9126181625	SPRING PACK 6.0-18.7 ST/T=0.0	1 (4555)
1606	9126181606	SPRING PACK 6.0-20.4 ST/T=0.5	1
1684	9126181684	SPRING PACK 6.0-20.4 ST/T=0.0	1
0078	6760078	SPRING PACK 6.0-21.7 ST/T=0.0, A04	1
1787	9126181787	SPRING PACK 6.0-21.9 ST/T=0.0	1
1841	9126181841	SPRING PACK 6.0-22.8 ST/T=0.0	1
0639	6760639	SPRING PACK 6.0-23.0 ST/T=0.5	1
1614	9126181614	SPRING PACK 6.0-23.3 ST/T=0.7	1
1775	9126181775	SPRING PACK 6.0-24.8 ST/T=0.0	1
1853	9126181853	SPRING PACK 6.0-25.0 BR/T=0.0	1 (4555+4407)
1654	9126181654	SPRING PACK 6.0-25.9 ST/T=0.0	1
1666	9126181666	SPRING PACK 6.0-27.2 ST/T=0.0	1
1790	9126181790	SPRING PACK 6.0-27.4 ST/T=0.0, A04	1
1671	9126181671	SPRING PACK 6.0-27.5 BR/T=0.0	1 (4556+4407)
1679	9126181679	SPRING PACK 6.0-28.2 BR/T=0.0	1 (4556+4407)
1831	9126181831	SPRING PACK 6.0-29.0 ST/T=0.5	1
1812	9126181812	SPRING PACK 6.0-30.4 ST/T=0.0	1
9319	9120089319	SPRING PACK 6.0-35.0 BR/T=0.0, A60	1, 2 (4555+4576)
1605	9126181605	SPRING PACK 6.0-35.0 BR/T=0.0, A60	1 (4555+4576)
1601	9126181601	SPRING PACK 6.0-35.0 BR/T=0.0, A61	1 (2265+2631)
1798	9126181798	SPRING PACK 6.0-35.0 BR/T=0.0	1 (4555+4576)
1827	9126181827	SPRING PACK 6.2-27.4 ST/T=0.0	1
0798	6760798	SPRING PACK 6.3-20.8 ST/T=0.0, A04	1
0846	6760846	SPRING PACK 6.3-22.0 ST/T=0.0, A04	1
1747	9126181747	SPRING PACK 6.3-23.4 BR/T=0.0	1 (2916+4575)
1687	9126181687	SPRING PACK 6.5-9.9 ST/T=0.0	1
1711	9126181711	SPRING PACK 6.5-11.8 ST/T=0.6	1
1731	9126181731	SPRING PACK 6.5-15.9 ST/T=0.6	1
1752	9126181752	SPRING PACK 6.5-17.0 BR/T=0.0	1 (4553+4575)
1740	9126181740	SPRING PACK 6.5-19.2 ST/T=0.7	1
1753	9126181753	SPRING PACK 6.5-20.0 BR/T=0.0	1 (2719+4575)
1742	9126181742	SPRING PACK 6.5-20.3 ST/T=0.7	1
1848	9126181848	SPRING PACK 6.5-20.3 ST/T=0.7, A04	1
0558	6760558	SPRING PACK 6.5-26.5 ST/T=0.7, A04	1
1721	9126181721	SPRING PACK 6.5-29.0 BR/T=0.0	1 (4557+4407)
1720	9126181720	SPRING PACK 6.8-21.1 ST/T=0.5	1
1861	9126181861	SPRING PACK 6.8-23.8 ST/T=0.5	1
1719	9126181719	SPRING PACK 6.8-25.1 BR/T=0.5	1 (4556+4575)
1663	9126181663	SPRING PACK 6.8-28.0 ST/T=0.0	1

ID No	Part#	Description	Items/Remarks
1846	9126181846	SPRING PACK 6.8-41.0 BR/T=0.0	1 (2719+2631)
1850	9126181850	SPRING PACK 6.8-42.0 BR/T=0.0	1 (4574+4576)
1778	9126181778	SPRING PACK 6.9-20.1 ST/T=0.0, A61	1
1776	9126181776	SPRING PACK 6.9-20.6 ST/T=0.0, A04	1
0439	6760439	SPRING PACK 6.9-20.7 ST/T=0.7	1
1815	9126181815	SPRING PACK 6.9-21.3 ST/T=0.5	1
1821	9126181821	SPRING PACK 6.9-21.5 ST/T=0.0	1
1797	9126181797	SPRING PACK 6.9-22.1 BR/T=0.0, A04	1 (4555+4575)
1824	9126181824	SPRING PACK 6.9-22.8 ST/T=0.0	1
1825	9126181825	SPRING PACK 6.9-28.1 ST/T=0.0	1
1686	9126181686	SPRING PACK 7.0-12.8 ST/T=0.0	1
1696	9126181696	SPRING PACK 7.0-16.6 ST/T=0.5	1
1792	9126181792	SPRING PACK 7.0-17.1 ST/T=0.0	1
1660	9126181660	SPRING PACK 7.0-18.8 ST/T=1.0	1
1613	9126181613	SPRING PACK 7.0-23.3 ST/T=0.7	1
1751	9126181751	SPRING PACK 7.0-26.2 ST/T=0.0	1
1755	9126181755	SPRING PACK 7.0-28.2 ST/T=0.0	1
1677	9126181677	SPRING PACK 7.0-29.0 BR/T=0.0	1 (4557+4575)
1639	9126181639	SPRING PACK 7.0-29.1 ST/T=0.7	1
1796	9126181796	SPRING PACK 7.0-32.4 ST/T=0.0	1
1702	9126181702	SPRING PACK 7.0-50.0 BR/T=0.0	1 (4574+4576)
1623	9126181623	SPRING PACK 7.1-18.6 ST/T=0.5	1
1644	9126181644	SPRING PACK 7.5-20.7 ST/T=0.5	1
1714	9126181714	SPRING PACK 7.5-21.0 BR/T=0.0	1 (2719+4575)
1664	9126181664	SPRING PACK 7.5-27.4 ST/T=0.0	1
1708	9126181708	SPRING PACK 7.8-18.4 ST/T=0.0	1
9547	9120089547	SPRING PACK 7.8-18.4 ST/T=0.0, A04	1, 3
1834	9126181834	SPRING PACK 8.0-21.5 ST/T=0.0	1
1814	9126181814	SPRING PACK 8.0-22.4 ST/T=0.5	1
1674	9126181674	SPRING PACK 8.0-23.9 ST/T=0.0	1
1640	9126181640	SPRING PACK 8.0-24.5 ST/T=0.7, A39	1
1672	9126181672	SPRING PACK 8.0-27.5 BR/T=0.0	1 (4556+4407)
1617	9126181617	SPRING PACK 8.0-29.2 ST/T=0.0	1
1611	9126181611	SPRING PACK 8.0-30.1 ST/T=0.5	1
1743	9126181743	SPRING PACK 8.0-34.9 BR/T=0.5	1 (2265+2631)
1650	9126181650	SPRING PACK 8.5-50.0 BR/T=0.0	1 (4572+4576)
1603	9126181603	SPRING PACK 9.0-15.9 ST/T=0.0	1
1615	9126181615	SPRING PACK 9.0-21.9 ST/T=0.6	1
1770	9126181770	SPRING PACK 9.0-24.2 ST/T=1.5	1
1774	9126181774	SPRING PACK 9.0-35.0 BR/T=0.0	1 (1140+4575)
1621	9126181621	SPRING PACK 9.2-18.3 ST/T=0.5	1
1608	9126181608	SPRING PACK 9.5-19.6 ST/T=0.0	1
1754	9126181754	SPRING PACK 9.5-23.3 ST/T=0.7	1

ID No	Part#	Description	Items/Remarks
1739	9126181739	SPRING PACK 9.6-21.0 ST/T=0.0, A04	1
1655	9126181655	SPRING PACK 10.0-16.2 ST/T=0.5	1
1667	9126181667	SPRING PACK 10.0-27.3 ST/T=0.7	1
1704	9126181704	SPRING PACK 10.0-27.6 ST/T=0.6	1
1709	9126181709	SPRING PACK 10.0-29.0 ST/T=0.0	1
1699	9126181699	SPRING PACK 10.0-31.2 ST/T=0.0	1
1835	9126181835	SPRING PACK 10.0-39.2 BR/T=0.0	1 (4573+4407)
1703	9126181703	SPRING PACK 10.0-50.0 BR/T=0.0	1 (4574+4576)
1717	9126181717	SPRING PACK 10.2-29.3 ST/T=0.6	1
1661	9126181661	SPRING PACK 10.3-16.4 ST/T=0.6	1
1670	9126181670	SPRING PACK 10.5-27.5 BR/T=0.0	1 (2719+4407)
1662	9126181662	SPRING PACK 12.0-33.2 ST/T=0.0	1
1632	9126181632	SPRING PACK 13.0-19.2 ST/T=0.5	1
1745	9126181745	SPRING PACK 13.0-73.0 BR/T=0.0	1 (2063+2631)
1768	9126181768	SPRING PACK 13.5-18.4 ST/T=1.5	1
1769	9126181769	SPRING PACK 13.5-19.7 ST/T=0.5	1
1669	9126181669	SPRING PACK 13.5-27.5 BR/T=0.0	1 (4550+4407)
1767	9126181767	SPRING PACK 14.0-35.2 ST/T=0.0	1
1822	9126181822	SPRING PACK 15.0-34.2 ST/T=0.5	1
-	6760638	RETURN SPRING, (STD)	2
-	6760642	RETURN SPRING, A71	2

Code	Part#	Description	Items/Remarks
C0	9120089392	PUSH PIN C0	3
C0	9120089521	PUSH PIN C0, PCL405	3
C0	9120089570	PUSH PIN C0, A04	3
C0	6763020	PUSH PIN C0, A61	3
C0	9120089560	PUSH PIN C0, A85	3
C1	9120089393	PUSH PIN C1	3
C1	9120089522	PUSH PIN C1, PCL405	3
C1	9120089571	PUSH PIN C1, A04	3
C1	9120089321	PUSH PIN C1, A61	3
C1	9120089561	PUSH PIN C1, A85	3
C2	9120089394	PUSH PIN C2	3
C2	9120089523	PUSH PIN C2, PCL405	3
C2	9120089572	PUSH PIN C2, A04	3
C2	9120089322	PUSH PIN C2, A61	3
C2	9120089562	PUSH PIN C2, A85	3
C3	9120089395	PUSH PIN C3	3
C3	9120089524	PUSH PIN C3, PCL405	3
C3	9120089573	PUSH PIN C3, A04	3
C3	9120089323	PUSH PIN C3, A61	3
C3	9120089563	PUSH PIN C3, A85	3
C4	9120089396	PUSH PIN C4	3
C4	9120089525	PUSH PIN C4, PCL405	3
C4	9120089574	PUSH PIN C4, A04	3
C4	9120089324	PUSH PIN C4, A61	3
C4	9120089564	PUSH PIN C4, A85	3
C5	9120089397	PUSH PIN C5	3
C5	9120089526	PUSH PIN C5, PCL405	3
C5	9120089575	PUSH PIN C5, A04	3
C5	9120089325	PUSH PIN C5, A61	3
C5	9120089565	PUSH PIN C5, A85	3
C6	9120089398	PUSH PIN C6	3
C6	9120089527	PUSH PIN C6, PCL405	3
C6	9120089576	PUSH PIN C6, A04	3
C6	6763021	PUSH PIN C6, A61	3
C6	9120089566	PUSH PIN C6, A85	3

Code	Part#	Description	Items/Remarks
C7	9120089529	PUSH PIN C7	3
C7	9120089528	PUSH PIN C7, PCL405	3
C7	9120089577	PUSH PIN C7, A04	3
C7	9763022	PUSH PIN C7, A61	3
C7	9120089567	PUSH PIN C7, A85	3
C8	9120089516	PUSH PIN C8	3
C8	9120089515	PUSH PIN C8, PCL405	3
C8	9120089578	PUSH PIN C8, A04	3
C8	9120089568	PUSH PIN C8, A85	3
X	9120089391	PUSH PIN X	3
X	9120089520	PUSH PIN X, PCL405	3
X	9120089631	PUSH PIN X, A04	3
X	9120089399	PUSH PIN X, A18	3
X	9120089320	PUSH PIN X, A39, A61	3
X	9120089559	PUSH PIN X, A85	3
Y	9120089715	PUSH PIN CY, BSP	4, 9, 10, 11
Y	9120089716	PUSH PIN CY, UNF	4, 9, 10, 11
Y	9120089717	PUSH PIN CY, metric	4, 9, 10, 11
C0-C8, X	9120089332	Seal kit, PUSH PIN	4, 5, 6, 7, 8
Y	-	Plug VSTI1/4EDCF, (BSP)	11
Y	-	Plug 6HP5ON-S, (UNF)	11
Y	-	Plug VSTIM14X1.5EDCF, (metric)	11

Adjustments by means of shims of the remote control valve PCL4.

This instruction intends to explain the placing of shims and their function in the remote control valve PCL4. Each spool function can get tuned in individually to require start and final pressure on condition that the spring with correct stiffness and correct (starting) starting pressure is available.

By using shims the following can be affected:

- start pressure
- break point (at broken curve)
- forced opening

Suitable working routine.

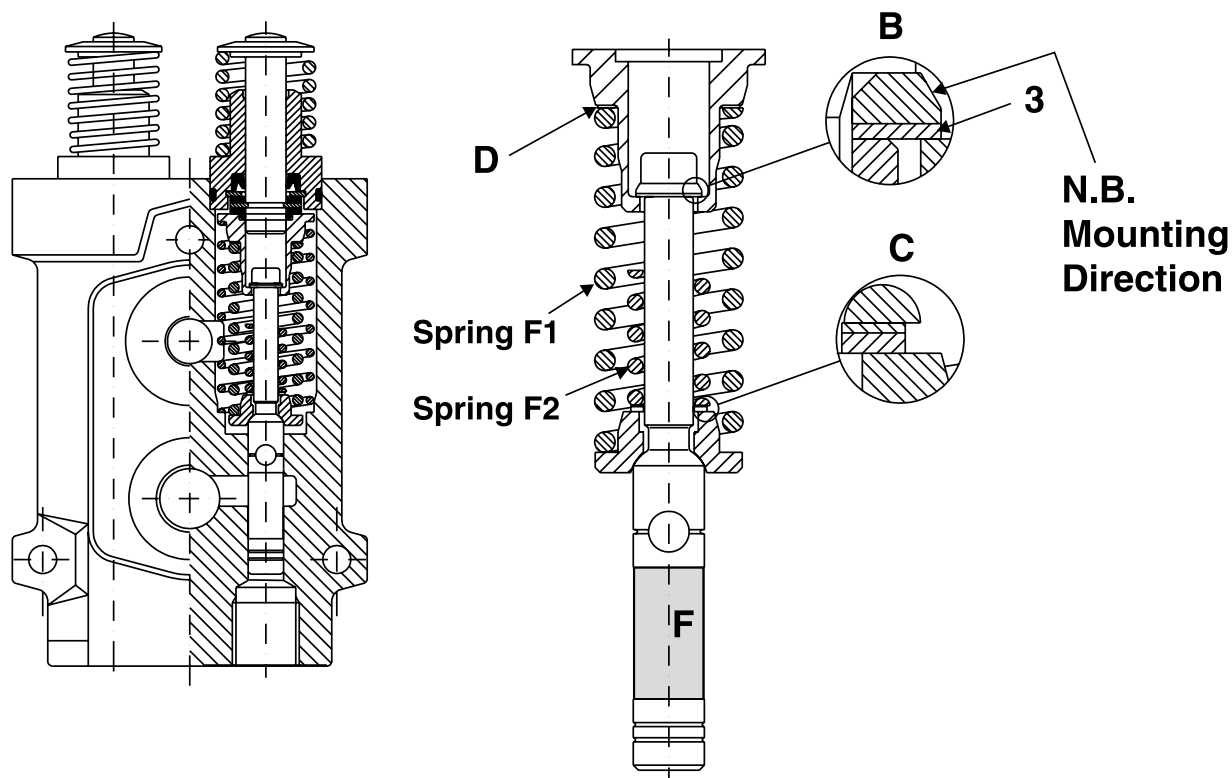
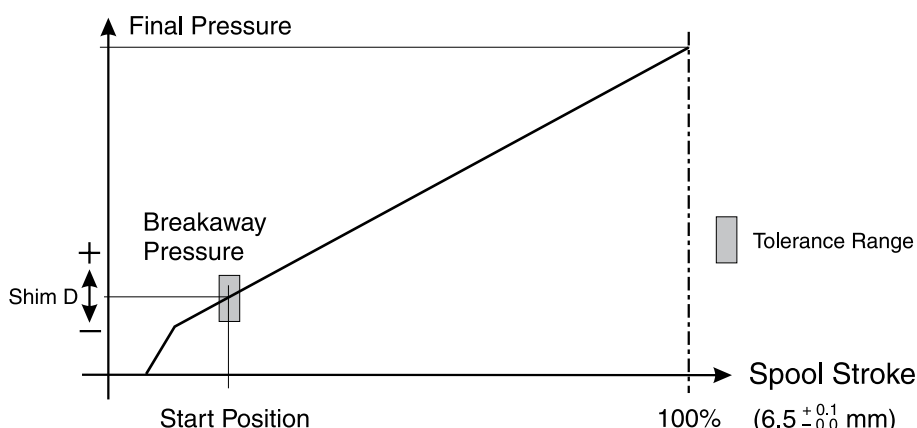


Fig.1

Pilot Pressure **Spring Pack with Straight Characteristic****Adjusting the start pressure**

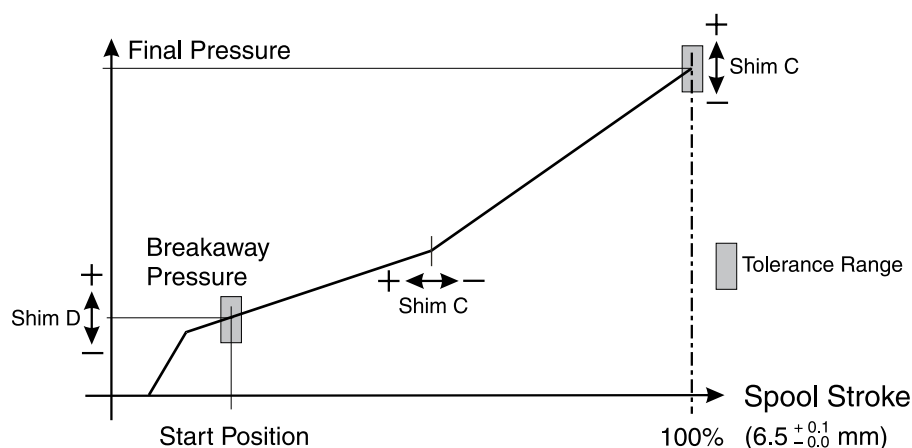
The start pressure shall be adjusted by means of shims to required level with the tolerance $+0 -0.5$ bar. See diagram in spring pack straight characteristics. The shims are placed in D according to Fig. 1.

Carefully lift up the spring pack and spool from the valve housing. The spool may be fixed over the turned waist F in Fig. 1. Unscrew the screw and add or take away shims in D according to Fig. 1. By taking away shims in D the start pressure decreases and by adding shims it will increase. The adjustment by means of shims also affects the final pressure. The pressure change from 1-mm shims can be seen from stiffness of the spring in spring key table. Washer is mounted

with the internal groove upward against the screw top. The torque of the screw is 1.3 ± 0.1 Nm.

If the spring pack is adjusted by means of shims to a starting pressure which exceeds the mentioned in the spring key table for the present spring the spring will be compressed before full stroke, and the pressure increase momentary to the supply pressure level. The spring F1 maximum and minimum start pressure can under no circumstances be exceeded or be below, check the spring key table.

Be careful when the spool enters the spool hole to prevent any damage of the housing.

Pilot Pressure **Spring Pack with Broken Characteristic****Adjusting the breaking point at broken curve**

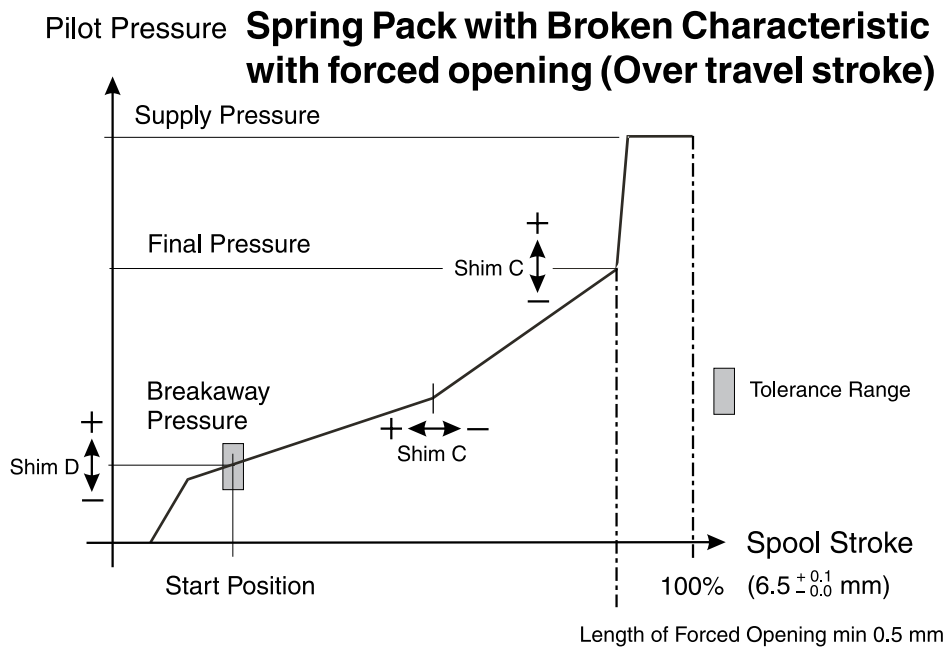
The breaking point shall be adjusted by means of shims so that the final pressure at full stroke will be as required. See diagram in spring pack with broken characteristics. The shims are placed in C according to Fig. 1.

The work routine is the same as when using shims for the starting pressure. By taking away shims in C the final pressure decreases and the breaking point is moved to the right in the See diagram in spring pack with broken

characteristics. By adding shims the final pressure increases and the breaking point is moved to the left.

If the spring is adjusted by means of shims more than is mentioned in the spring key table for the present spring, the spring will be fully compressed before full stroke with forced opening as a consequence, and risk for damage.

Be careful when the spool enters the spool hole to prevent any damage of the housing.



Forced opening

A forced opening shall be adjusted by means of shims so that the final pressure just before full stroke momentarily increases to the supply pressure level. See diagram in spring pack with broken characteristics with forced opening. The shims (3) are placed in B according to Fig. 1.

The work routine is the same as when using shims for the starting pressure. By adding shims between the screw top and the washer the pressure pin will, via the screw top, force open the spool when the spring is depressed in the end stroke.

PCL4 shims

Breakaway Pressure Shim (D)

Service kit	Part description	No
6763017	Shim, 0.1 mm	3
	Shim, 0.2 mm	2
	Shim, 0.5 mm	1

Break Point Shim (C)

Service kit	Part description	No
6763018	Shim, 0.1 mm	4
	Shim, 0.5 mm	1

Forced Opening Shim (B)

Service kit	Part description	No
6763019	Shim, 0.1 mm	3
	Shim, 0.3 mm	2
	Shim, 0.5 mm	1

Shim kit

Shim kit covering all above shims.
Part number 20016558 (4000 shims in total)

[illegible]

[illegible]

[illegible]

Parker Worldwide

Europe, Middle East, Africa

AE – United Arab Emirates, Dubai

Tel: +971 4 8127100
parker.me@parker.com

AT – Austria, Wiener Neustadt

Tel: +43 (0)2622 23501-0
parker.austria@parker.com

AT – Eastern Europe, Wiener Neustadt

Tel: +43 (0)2622 23501 900
parker.easteurope@parker.com

AZ – Azerbaijan, Baku

Tel: +994 50 2233 458
parker.azerbaijan@parker.com

BE/LU – Belgium, Nivelles

Tel: +32 (0)67 280 900
parker.belgium@parker.com

BY – Belarus, Minsk

Tel: +375 17 209 9399
parker.belarus@parker.com

CH – Switzerland, Etoy

Tel: +41 (0)21 821 87 00
parker.switzerland@parker.com

CZ – Czech Republic, Klecany

Tel: +420 284 083 111
parker.czechrepublic@parker.com

DE – Germany, Kaarst

Tel: +49 (0)2131 4016 0
parker.germany@parker.com

DK – Denmark, Ballerup

Tel: +45 43 56 04 00
parker.denmark@parker.com

ES – Spain, Madrid

Tel: +34 902 330 001
parker.spain@parker.com

FI – Finland, Vantaa

Tel: +358 (0)20 753 2500
parker.finland@parker.com

FR – France, Contamine s/Arve

Tel: +33 (0)4 50 25 80 25
parker.france@parker.com

GR – Greece, Athens

Tel: +30 210 933 6450
parker.greece@parker.com

HU – Hungary, Budapest

Tel: +36 1 220 4155
parker.hungary@parker.com

IE – Ireland, Dublin

Tel: +353 (0)1 466 6370
parker.ireland@parker.com

IT – Italy, Corsico (MI)

Tel: +39 02 45 19 21
parker.italy@parker.com

KZ – Kazakhstan, Almaty

Tel: +7 7272 505 800
parker.easteurope@parker.com

NL – The Netherlands, Oldenzaal

Tel: +31 (0)541 585 000
parker.nl@parker.com

NO – Norway, Asker

Tel: +47 66 75 34 00
parker.norway@parker.com

PL – Poland, Warsaw

Tel: +48 (0)22 573 24 00
parker.poland@parker.com

PT – Portugal, Leca da Palmeira

Tel: +351 22 999 7360
parker.portugal@parker.com

RO – Romania, Bucharest

Tel: +40 21 252 1382
parker.romania@parker.com

RU – Russia, Moscow

Tel: +7 495 645-2156
parker.russia@parker.com

SE – Sweden, Spånga

Tel: +46 (0)8 59 79 50 00
parker.sweden@parker.com

SK – Slovakia, Banská Bystrica

Tel: +421 484 162 252
parker.slovakia@parker.com

SL – Slovenia, Novo Mesto

Tel: +386 7 337 6650
parker.slovenia@parker.com

TR – Turkey, Istanbul

Tel: +90 216 4997081
parker.turkey@parker.com

UA – Ukraine, Kiev

Tel: +380 44 494 2731
parker.ukraine@parker.com

UK – United Kingdom, Warwick

Tel: +44 (0)1926 317 878
parker.uk@parker.com

ZA – South Africa, Kempton Park

Tel: +27 (0)11 961 0700
parker.southafrica@parker.com

North America

CA – Canada, Milton, Ontario

Tel: +1 905 693 3000

US – USA, Cleveland

(industrial)
Tel: +1 216 896 3000

US – USA, Elk Grove Village

(mobile)
Tel: +1 847 258 6200

Asia Pacific

AU – Australia, Castle Hill

Tel: +61 (0)2-9634 7777

CN – China, Shanghai

Tel: +86 21 2899 5000

HK – Hong Kong

Tel: +852 2428 8008

IN – India, Mumbai

Tel: +91 22 6513 7081-85

JP – Japan, Fujisawa

Tel: +81 (0)4 6635 3050

KR – South Korea, Seoul

Tel: +82 2 559 0400

MY – Malaysia, Shah Alam

Tel: +60 3 7849 0800

NZ – New Zealand, Mt Wellington

Tel: +64 9 574 1744

SG – Singapore

Tel: +65 6887 6300

TH – Thailand, Bangkok

Tel: +662 717 8140

TW – Taiwan, Taipei

Tel: +886 2 2298 8987

South America

AR – Argentina, Buenos Aires

Tel: +54 3327 44 4129

BR – Brazil, Sao Jose dos

Campos
Tel: +55 12 4009 3500

CL – Chile, Santiago

Tel: +56 2 623 1216

MX – Mexico, Apodaca

Tel: +52 81 8156 6000

VE – Venezuela, Caracas

Tel: +58 212 238 5422

© 2010 Parker Hannifin Corporation. All rights reserved.



EMEA Product Information Centre

Free phone: 00 800 27 27 5374

(from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL,
IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA)

US Product Information Centre

Toll-free number: 1-800-27 27 537

www.parker.com

Your local authorized Parker distributor