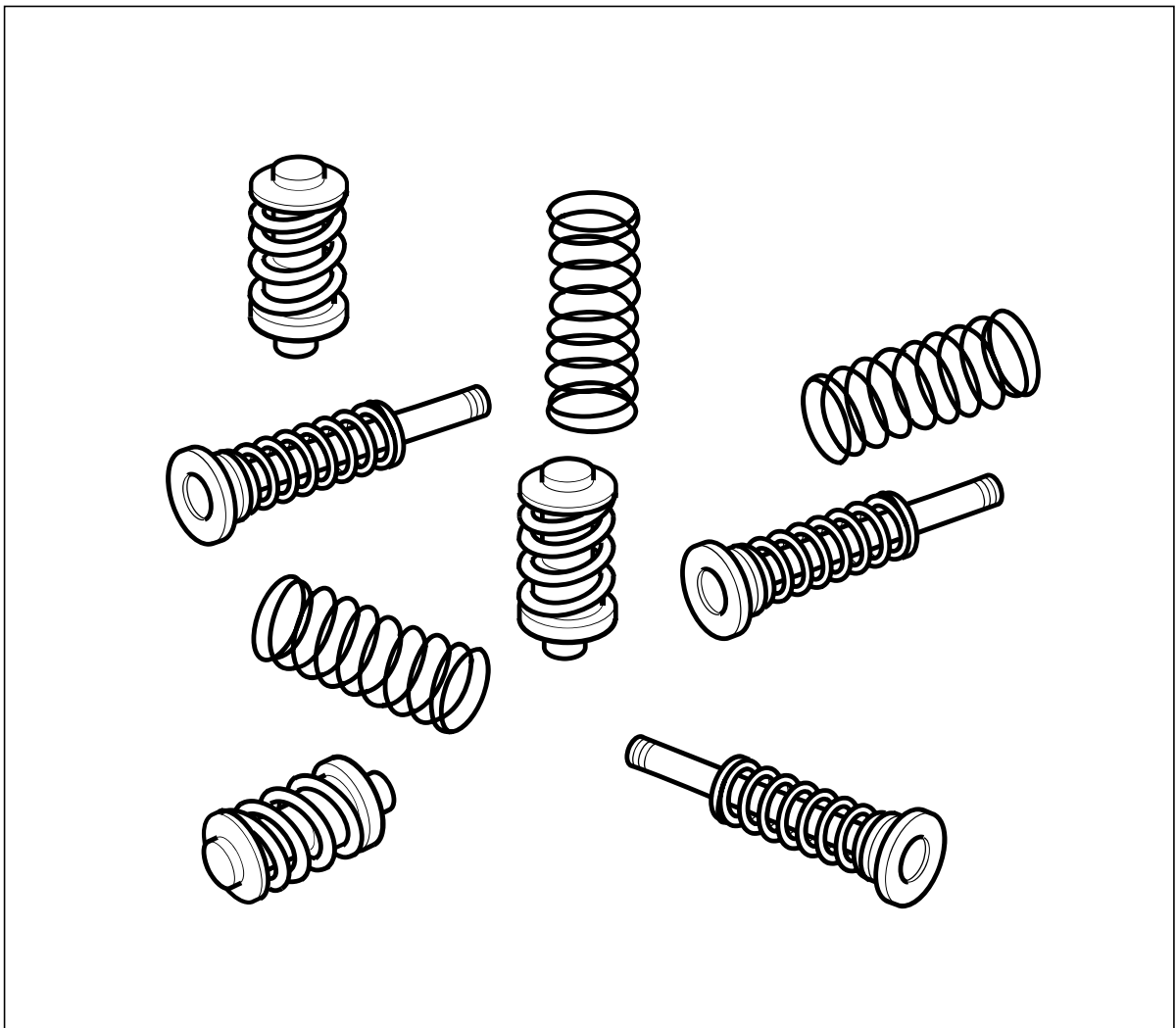




Bulletin HY17-8815-M1/UK

Spare Parts List Spring Packs, Push Pins PCL4

Effective date: December 7, 2018
Supersedes: February 26, 2018



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

Symboles 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...
 = Factory preadjusted item, see appendix A	 = 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.

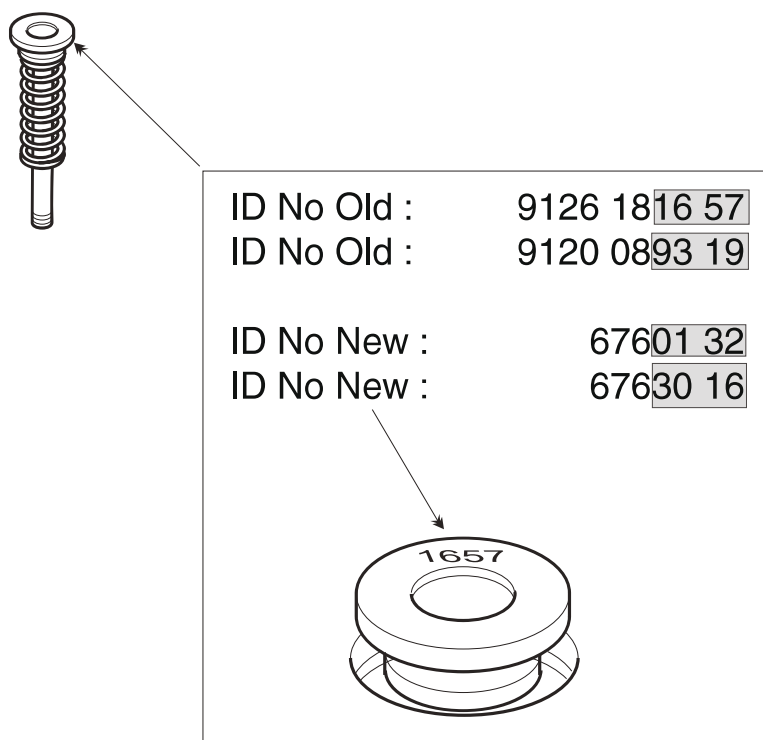
The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, 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

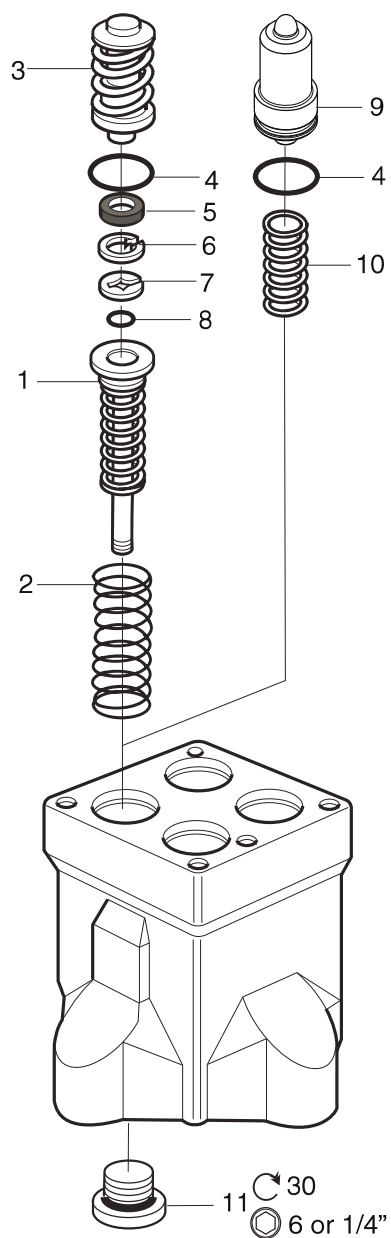
Please contact your Parker representation for a detailed "Offer of Sale".

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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	9126181838	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
3181	6763181	SPRING PACK 5.2-17.9 ST/T=0.0	1
3184	6763184	SPRING PACK 5.2-19.0 ST/T=0.7	1
3185	6763185	SPRING PACK 5.2-19.8 ST/T=0.0	1
1780	9126181780	SPRING PACK 5.2-23.4 ST/T=0.0	1
3180	6763180	SPRING PACK 5.2-26.4 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

ID No	Part#	Description	Items/Remarks
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)
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
3759	6763759	SPRING PACK 5.5-16.1 BR/T=0.0, A04	1 (4553+4575)
1849	9126181849	SPRING PACK 5.5-16.4 ST/T=0.0, A04	1
3194	6763194	SPRING PACK 5.5-16.9 BR/T=0.0	1 (4549+4575)
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
3182	6763182	SPRING PACK 5.8-19.6 ST/T=0.7	1
3183	6763183	SPRING PACK 5.8-20.4 ST/T=0.0	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

ID No	Part#	Description	Items/Remarks
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
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
3320	6763320	SPRING PACK 6.0-31.4 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)
3660	6763660	SPRING PACK 6.5-19.2 ST/T=0.0	1
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

ID No	Part#	Description	Items/Remarks
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)
4226	6764226	SPRING PACK 6.8-16.8 ST/T=0.0	1
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
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
3168	6763168	SPRING PACK 6.9-20.1 ST/T=0.5	1
3732	6763732	SPRING PACK 6.9-20.4 ST/T=0.0	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
3375	6763375	SPRING PACK 7.5-14.9 ST/T=0.0, A04	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

ID No	Part#	Description	Items/Remarks
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)
4179	6764179	SPRING PACK 9.1-23.6 ST/T=0.0, A04	1
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
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

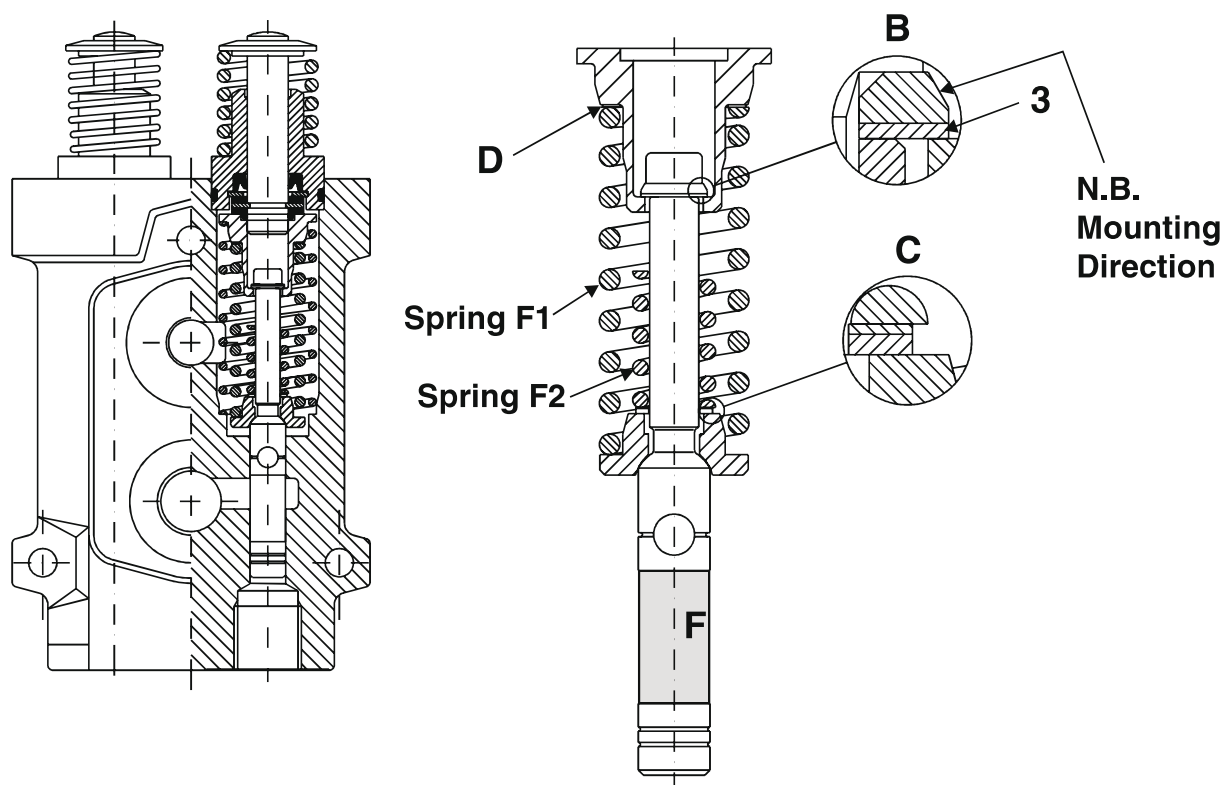
Code	Part#	Description	Items/Remarks
C7	9120089529	PUSH PIN C7	3
C7	9120089528	PUSH PIN C7, PCL405	3
C7	9120089577	PUSH PIN C7, A04	3
C7	9763022	PUSH PIN C7, A61	3
C7	9120089567	PUSH PIN C7, A85	3
C8	9120089516	PUSH PIN C8	3
C8	9120089515	PUSH PIN C8, PCL405	3
C8	9120089578	PUSH PIN C8, A04	3
C8	9120089568	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

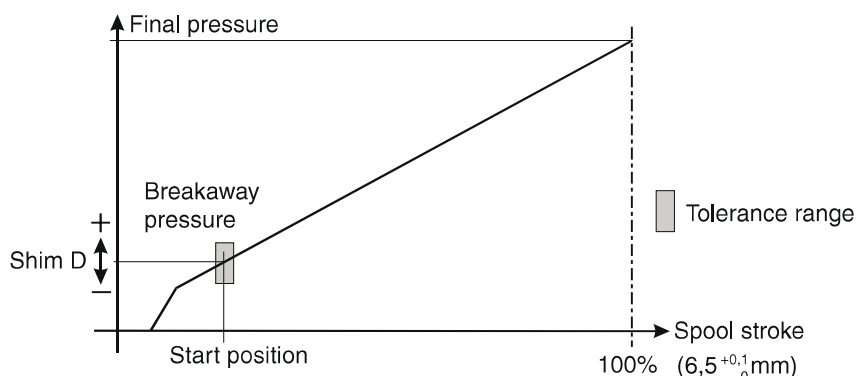
Adjustments by means of shims of the remote control valve PCL4.

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**

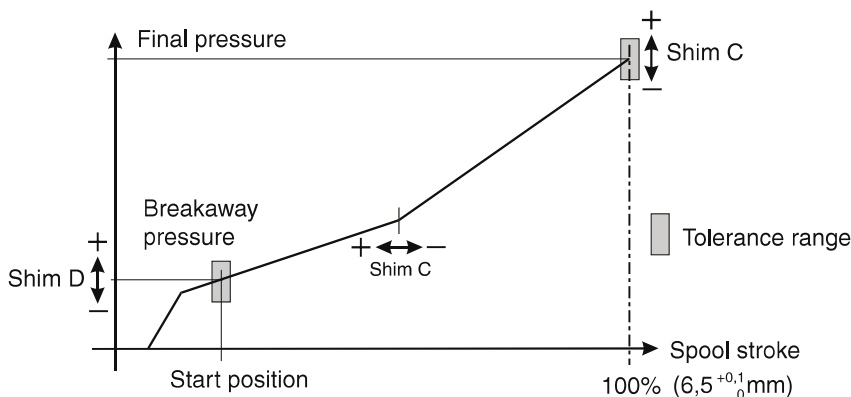
The start pressure shall be adjusted by means of shims to required level with the tolerance $+0 -0,5$ bar. See diagram in spring pack straight characteristics. The shims are placed in D, according to fig 1.

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 $1,3 \pm 0,1$ Nm.

If the spring pack is adjusted by mean 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 exceed or 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 to 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.

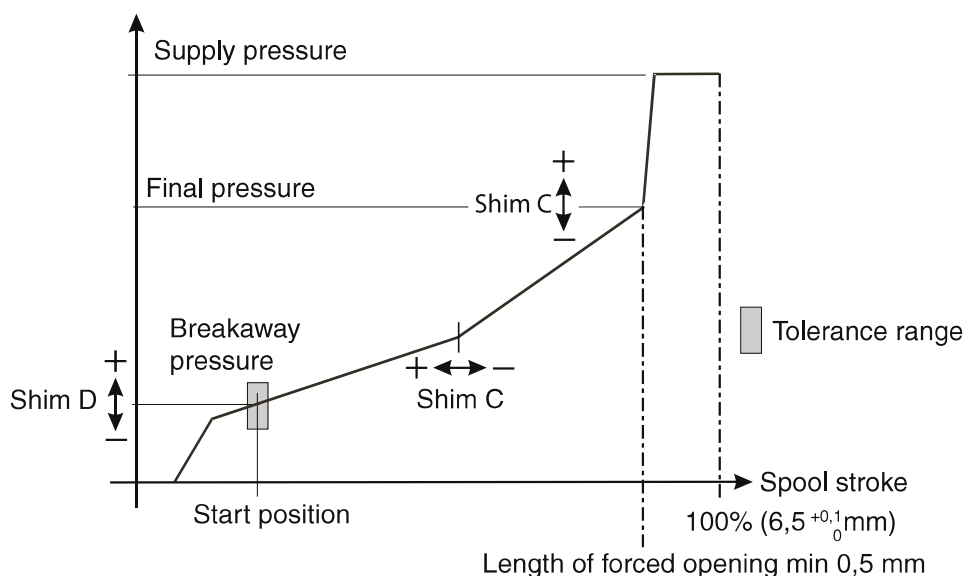
The work routine is the same as when using shims for the starting pressure. By taking away shims in C the final pressure decreases and the breaking point is moved to the right in the diagram, see diagram in spring pack with broken

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

If the spring is adjusted by mean 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.

Pilot pressure Spring pack with broken characteristic with forced opening (over travel stroke)



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]

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