

12. Replacement and expendable parts

Please note that the manufacturer's declaration or declaration of conformity given by Paul Hettich GmbH & Co. KG as manufacturer will lose its validity if non approved replacement parts are installed.

1101*	Boring block
1102*	Drilling unit cover
1103*	Auxiliary spindle with chuck
1104*	Main spindle with chuck
1105*	Pinion, teeth = 21
1106*	Pinion, teeth = 32
1107	Guide column
1108	Base plate
1109	Connecting bracket
1110	Hexagon nut DIN 936 M 12x1 galvanised
1111	Drill depth stop M 12x1
1112	Guide plate
1113	Work surface 400 mm x 800 mm
1114	Fence 800 mm
1115	Base profile 465 mm
1116	Guide screw M 6x12
1117	Guard
1118	Flat head screw with slot and dog point
1119	Fence bracket assembly
1120	Cap for chuck
1121	Cable grip HM (type 2)
1122	Suction extractor funnel assembly (without mounting)
1124	Extractor metal cover (without mount)
1125	Straight cable grip PM (type 3)
1127	T-slot screw
1128	Hexagon nut, DIN 934 M 8
1130	Self-tapping screw DIN 7500 - M 5x10 - C/ II
1131	Spring washer, DIN 127 - A 5 each
1151	Deep groove ball bearing 6000 - 2RS
1152	Bushes MB 3030 DU
1154	Compression spring HM (type 2)
1155	Compression spring PM (type 3)
1156	Pendulum stop assembly => article number
1161	Knock in sleeve ø 10x12
1162	Cheese head screw DIN 912 - M 6x10
1163	Cheese head screw DIN 912 - M 8x10
1164	Square nut DIN 562 - M 8
1165a	Threaded stud DIN 913 - M 6 x 5
1167	Cheese head screw DIN 912 - M 6x12
1168	Cheese head screw DIN 912 - M 8x20
1169	Cheese head screw DIN 912 - M 10x25
1172*	Dust seal

* These replacement part nos. only apply to the standard 4-spindle 52/5.5 mm drilling unit. A list of parts for configuring other drilling unit is provided at the end of this table.

1173	Threaded stud DIN 914 - M 4x8
1174	Cheese head screw DIN 912 - M 10x35
1175	Spring washer DIN - A 10 each
1179	Cylindrical pin DIN 7 - ø 4 M 6x20
1180	Customised drilling unit block, 4-spindle, 45/9.5
1181	Customised drilling unit cover, 4-spindle, 45/9.5
1182	Customised auxiliary spindle with chuck
1183	Pinion, teeth = 17
1184	Customised deep groove ball bearing 607 - 2RS
1185	Special seal
1186	Customised drilling unit block, 6-spindle
1187	Customised drilling unit cover, 6-spindle
1188	Customised drilling unit block, 4-spindle, 38/8
1189	Customised drilling unit cover, 4-spindle, 38/8
1190	Customised auxiliary spindle with chuck
1191	Customised main spindle with chuck
1192	Pinion, teeth = 16
1193	Pinion, teeth = 25
1194	Pinion, teeth = 39
1221	Swivel unit
1223	Handle rod for swivel unit
1225	Fixing plate for sensor roller
1247	Threaded stud DIN 553 - M 8x40
1248	Washer DIN 9021 - A 8.4
1249	Self locking hexagon nut DIN 982 - M 8
1250	Bush
1251	Spherical knob
1252	Spring washer DIN 2093 B 22.5 size 1
1253	Standard insertion die => article number
1256	Threaded stud DIN 551 - M 5x16
1257	Hexagon nut, DIN 934 - M 5
1258	Hexagon nut, DIN 934 - M 8
1259	Cheese head screw DIN 912 - M 8x25
1260	3/2 way valve with sensor roller
1262	Serrated lock washer DIN 6791 A 5.3 - spring steel
1263	Self-tapping screw DIN 7500 - M 4x10 - C/ II
1264	Elbow union M 5, swivelling, ø 4
1265	Oval cross-recessed head screw, DIN 7985 - M 3x14
1319	Strip for hand level linkage system
1320	Linkage system for cranked hand lever (can be used in left / right)

1321	Handle rod
1322	Pan head screw DIN 923 M 8x6
1353	Direkta II 38 mm
1428	Clamping plate
1429	Bolt for clamping plate
1451	Cheese head screw DIN 912 - M 6x20
1452	Cheese head screw DIN 912 - M 6x25
1453	Cheese head screw DIN 912 - M 6x40
1454	Disc DIN - A 6.4 - steel
1530	Motor mount
1551	Motor complete with switch => following details must be provided: 1.) Machine type HM (type 2), PM (type 3) 2.) Serial number 3.) Voltage, hertz, phases, power in kW,
1552*	BoWex coupler assy, drilling unit ø 10, motor ø 14 for 0.8 kW motor
1553	Feather key for coupling DIN 6885 - A 3x3x16
1554	Cheese head screw DIN 912 - M 6x16
1570	BoWex coupler assy, drilling unit ø 10, motor ø 19 for 1.3 kW motor
1571	BoWex coupler assy, drilling unit ø 7, motor ø 14 for 0.8 kW motor
1572	BoWex coupler assy, drilling unit ø 7, motor ø 19 for 1.3 kW motor
1632	Retaining spring for blow nozzle
1633	Blow nozzle
1637	Coupling for piston rod, including nut
1638	Control console
1651	Pneum. cylinder, double action, 80/125
1654	Cheese head screw DIN 912 - M 10x20
1656	5/2 way pushbutton valve 1/8" black
1659	Elbow union 1/4"
1660	Elbow union 1/8"
1660 a	Elbow union 1/8" (longer legs)
1661	Straight screw connector 1/8" ø 6
1662	Sound absorber 1/8"
1663	Discharge air, throttle type nonreturn valve
1664	Reduction nipple 1/41 x 3/8A
1665	Servicing unit 1/4", assy
1668	Polyurethane hose, 6 mm, clear
1669	Polyurethane hose, 6 mm, black
1670	Polyurethane hose, 6 mm, blue

1671	Plug connector NW 7.2
1672	Switchover valve toggle switch 1/8"
1673	AND valve 1/8"
1676	Cable band T 40 R
1680	Electropneumatic switch with cable => following details must be provided: 1.) Serial number 2.) Voltage, hertz, phases, power in kW
1682	Self-tapping screw DIN 7500 - M 6x16 - C/ II
1684	Plug ø 6
1685	Double plug in connector ø 4 (2 x ø 4, 1 x ø 6)
1686	Plug ø 4
1687	Elbow union R 1/8" internal thread G 1/8"
1688	Rapid bleeder valve G 1/8"
1689	Reduction nipple 1/8" I x 3/8" A
1690	Elbow union, tapered, 2 x 1/8"
1691	Polyurethane hose, 4 mm, clear
1692	Polyurethane hose, 4 mm, black
1693	Polyurethane hose, 4 mm, blue
1738	Pressure plate for hold-down clamp
1739	Stop bracket
1740	Clamping plate for hold-down clamp
1741	Bolt for hold-down clamp
1753	Cheese head screw DIN 912 - M 6x35
1757	Pneum. round cylinder, ø 33 mm
1760	Double plug in connector ø 6
1761	Elbow union M 5
1763	Sound absorber M 5
1764	Y hose connector
1765	Double plug in connector ø 4 (3 x ø 4)
1766	Plug in cross connector ø 4
1778	3/2 way pushbutton valve M 5, yellow, spring resetting
1779	3/2 way valve M 5, spring resetting
1782	Plug in T connector
1783	Plug in reducing connector
1785	Oval cross-recessed head screw, DIN 7985 - M 3x18
1786	Taper groove pin ø 6x30
1787	Hexagon nut, DIN 934 M 12
1788	Hexagon nut, DIN 934 M 3

1800	Bench frame
1801	Stop block
1802	Shaft support with \varnothing 20 shaft
1803	Tape measure
1804	Plate, rear
1805	Plate, front
1806	Vernier scale
1807	Customised control console
1808	Supporting fork
1809	Clamping bracket, front
1810	Clamping bracket, rear
1812	Foot
1813	Aluminium bearing unit
1814	Clamping lever DIN 78 M 8x63
1816	Cheese head screw DIN 912 - M 6x55
1817	Cheese head screw DIN 912 - M 6x16
1818	Spring washer DIN 7980 - 6 - spring steel
1819	Cheese head screw DIN 912 - M 6x45
1820	Spring washer DIN 7980 - 8 - spring steel
1821	Grooved pin DIN 1473 - 8x50
1952	Plug, nickel plated brass, 1/8"
1953	5/2 way valve 1/8"
1954	OR valve M 5
1955	3/2 way foot valve 1/8"
1956	Double nipple M5 - M5
1959	Cheese head screw DIN 912 - M 4x25
1960	Hexagon nut, DIN 934 M 4
1961	Disc DIN 125 - A 4
1964	Elbow union R 1/8" \varnothing 4 MR 14.04.18
1966	Straight screw connector 1/8" \varnothing 4
2097	Motor protection circuit breaker 1 - 1,6A
2098	Motor protection circuit breaker 1,6 - 2,5A
2099	Motor protection circuit breaker 4 - 6,3A
2100	Motor protection circuit breaker 2,5 - 4A
2101	Motor protection circuit breaker 6,3 - 10A
2102	Motor protection circuit breaker 10 - 16A
2103	Insulated enclosure

List of replacement parts by drilling unit type

(The numbers in brackets indicate the quantity contained in the drilling unit assembly)

Standard drilling pattern, 4-spindle, 52/5.5 mm

1101	Boring block
1102	Drilling unit cover
1103	Auxiliary spindle with chuck (3 each)
1104	Main spindle with chuck (1 each)
1105	Pinion, teeth = 21 (2 each)
1106	Pinion, teeth = 32 (2 each)
1151	Deep groove ball bearing 6000 - 2RS (8 each)
1172	Seal, 4-spindle, 52/5.5 mm
1552	BoWex coupler assy, drilling unit \varnothing 10, motor \varnothing 14 for 0.8 kW motor
1570	BoWex coupler assy, drilling unit \varnothing 10, motor \varnothing 19 for 1.3 kW motor

Drilling pattern, 4-spindle 38/8 mm

1188	Special drilling unit block
1189	Special drilling unit cover
1190	Customised auxiliary spindle with chuck (3 each)
1191	Customised main spindle with chuck (1 each)
1192	Pinion, teeth = 16 (2 each)
1193	Pinion, teeth = 25 (1 each)
1194	Pinion, teeth = 39 (1 each)
1184	Customised deep groove ball bearing 607 - 2RS (8 each)
1185	Special seal
1571	BoWex coupler assy, drilling unit \varnothing 7, motor \varnothing 14 for 0.8 kW motor
1572	BoWex coupler assy, drilling unit \varnothing 7, motor \varnothing 19 for 1.3 kW motor

Drilling pattern, 4-spindle 45/9.5 mm

1180	Special drilling unit block
1181	Special drilling unit cover
1182	Customised auxiliary spindle with chuck (2 each)
1103	Auxiliary spindle with chuck (1 each)
1104	Main spindle with chuck (1 each)
1183	Pinion, teeth = 17 (2 each)
1106	Pinion, teeth = 32 (2 each)
1151	Deep groove ball bearing 6000 - 2RS (4 each)
1184	Customised deep groove ball bearing 607 - 2RS (4 each)

1185	Special seal
1552	BoWex coupler assy, drilling unit ø 10, motor ø 14 for 0.8 kW motor
1570	BoWex coupler assy, drilling unit ø 10, motor ø 19 for 1.3 kW motor

Drilling pattern, 6-spindle 52/5.5 mm

1186	Special drilling unit block
1187	Special drilling unit cover
1103	Auxiliary spindle with chuck (5 each)
1104	Main spindle with chuck (1 each)
1105	Pinion, teeth = 21 (4 each)
1106	Pinion, teeth = 32 (2 each)
1151	Deep groove ball bearing 6000 - 2RS (12 each)
1185	Special seal
1552	BoWex coupler assy, drilling unit ø 10, motor ø 14 for 0.8 kW motor
1570	BoWex coupler assy, drilling unit ø 10, motor ø 19 for 1.3 kW motor

Fig 38: Exploded drawing 1

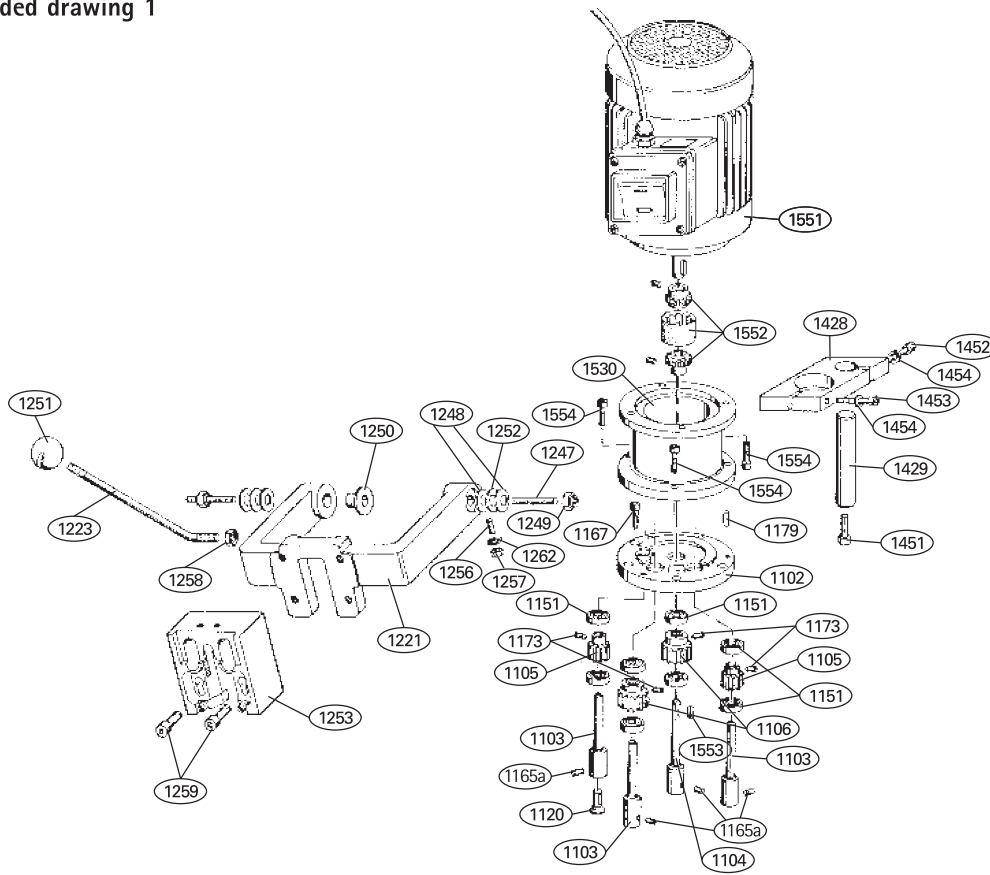


Fig 39: Exploded drawing 2

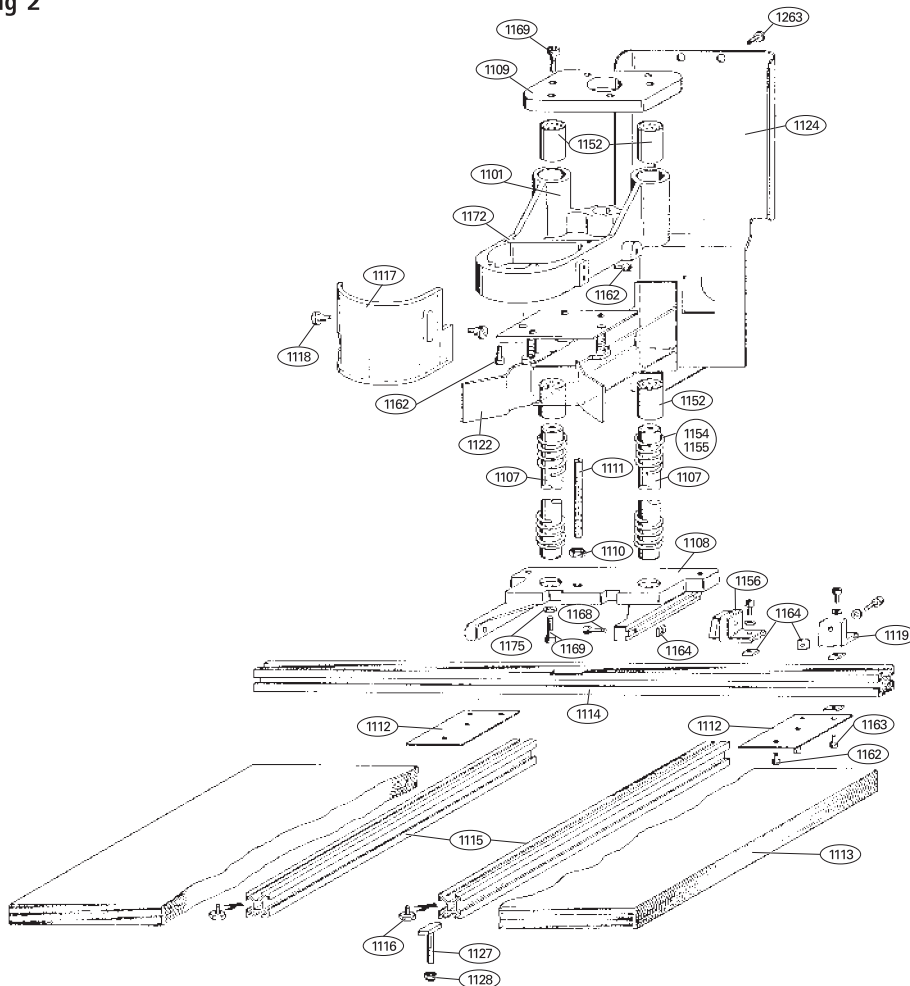


Fig 40: Exploded drawing 3

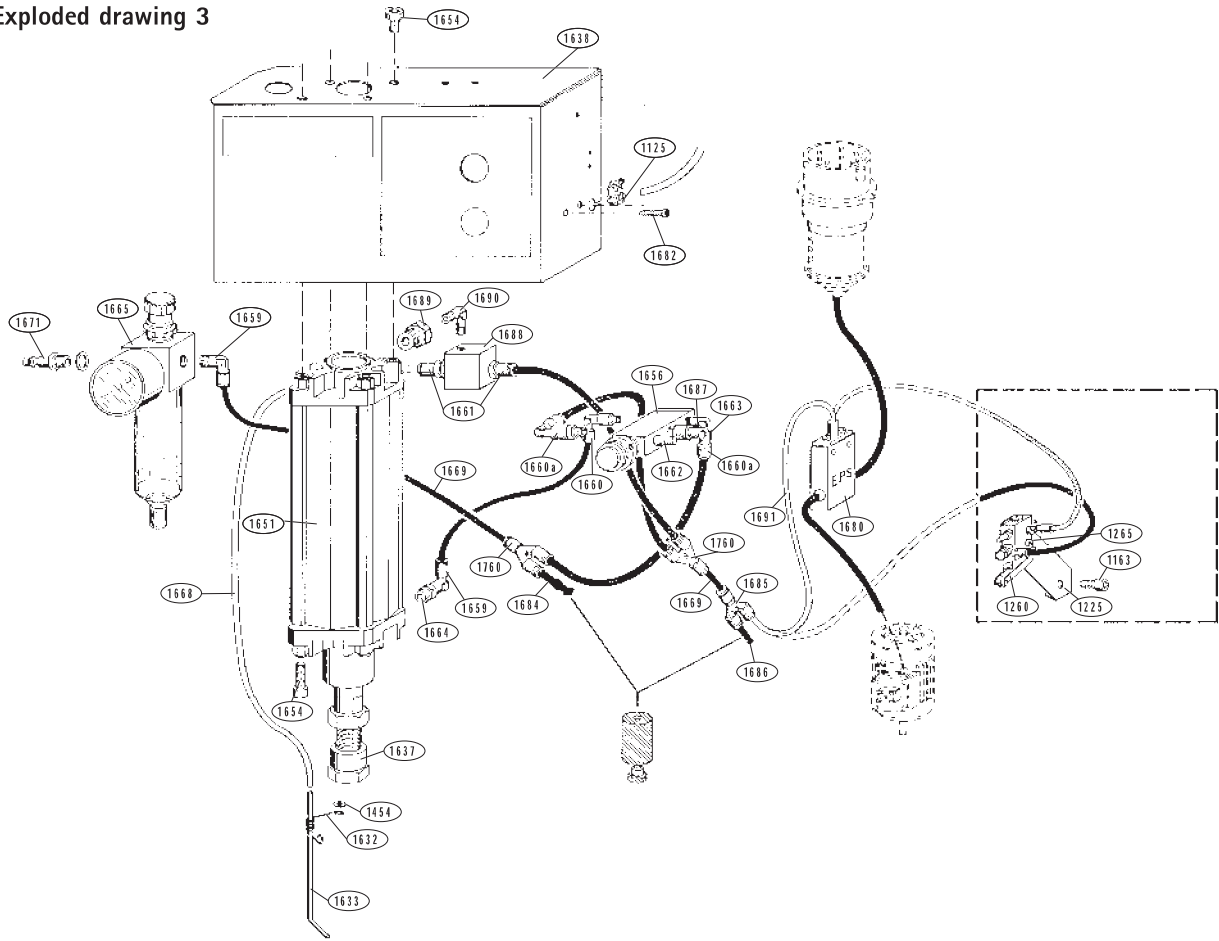


Fig 41: Exploded drawing 4

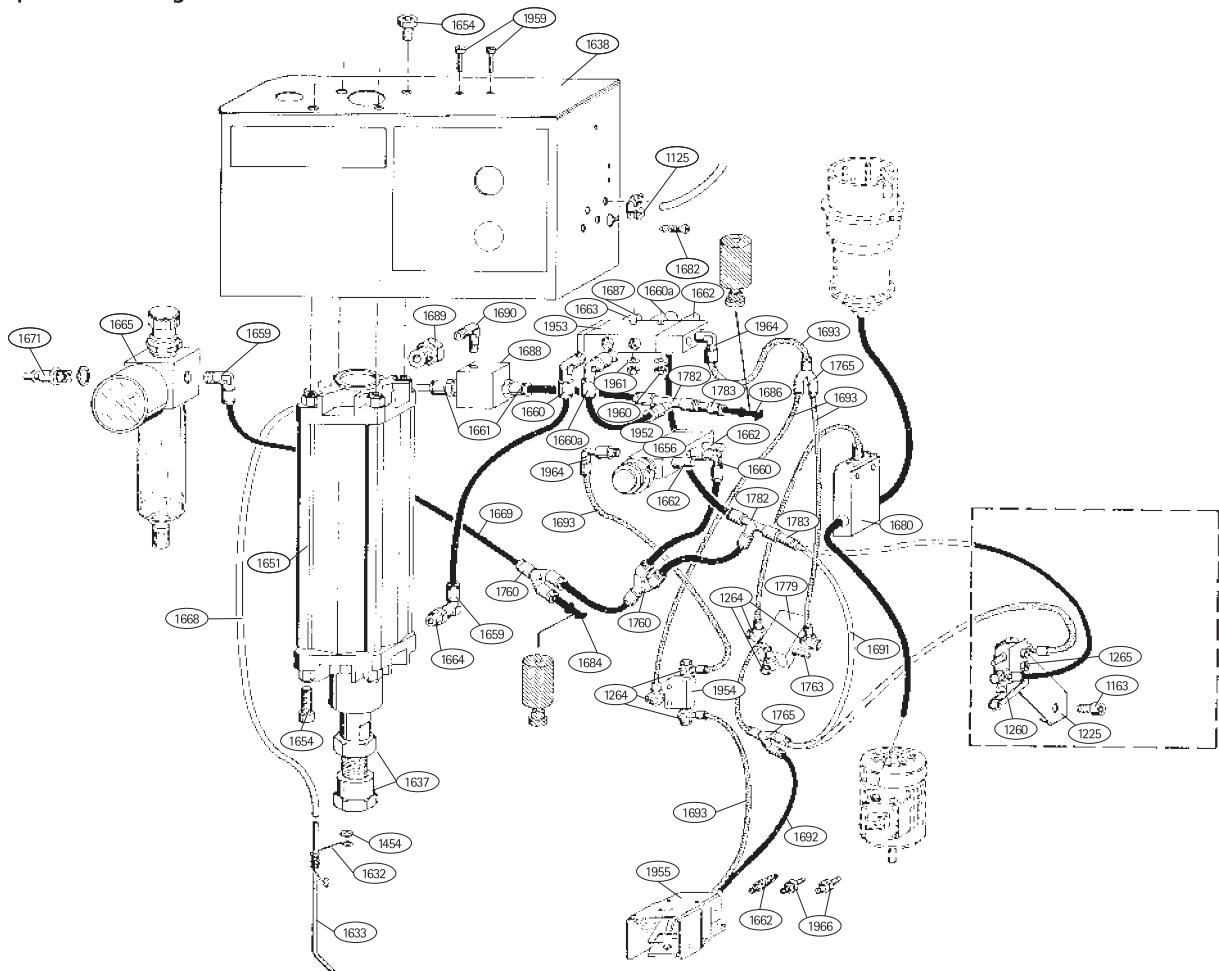
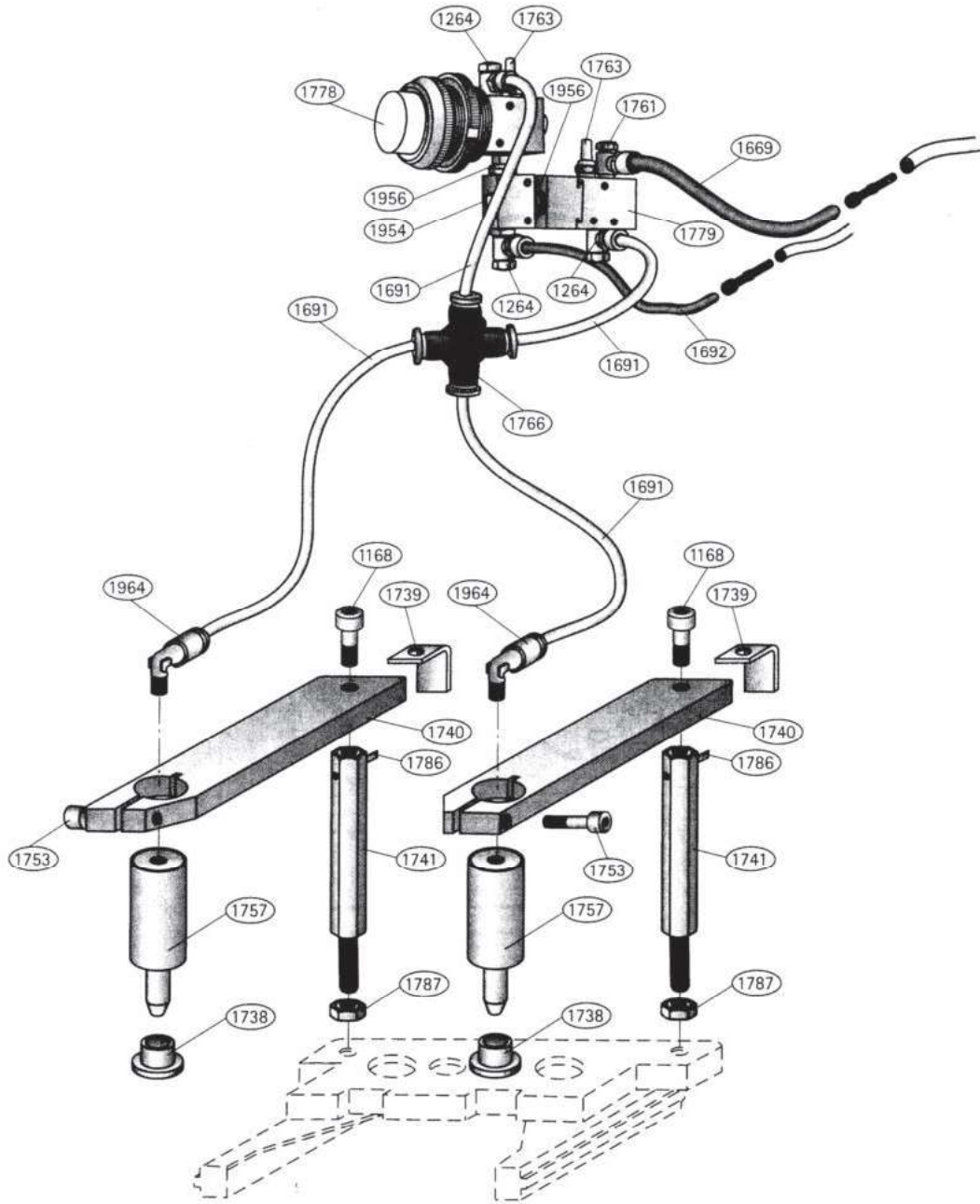


Fig 42: Exploded drawing 5



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