

Original instructions



ENG 9/18

PARTS MANUAL

PM1655HENG.918

HYDRAULIC HAMMER

RAMMER 1655

Heavy Duty

Serial No.

1655A0146-UP

R A M M E R H I T S H A R D E R

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GENUINE RAMMER SPARE PARTS

Rammer genuine spare parts are designed and manufactured by using the latest technological knowledge and engineering skills. Rammer spare parts are made of the best available materials with the most advanced manufacturing techniques.

It is important that you use only genuine Rammer spare parts, to ensure an easy operation, maintenance and repair of the product. Please note that warranty claims will be handled only if you have used genuine Rammer parts.

LOCATION OF THE SERIAL NUMBER

It is important to refer to the serial number of the product when ordering spare parts. The identification of serial number is the only proper means of maintaining and identifying parts for a specific product. The location of the equipment serial number is pointed in “Operation and maintenance” manual.

SPARE PART ORDERS

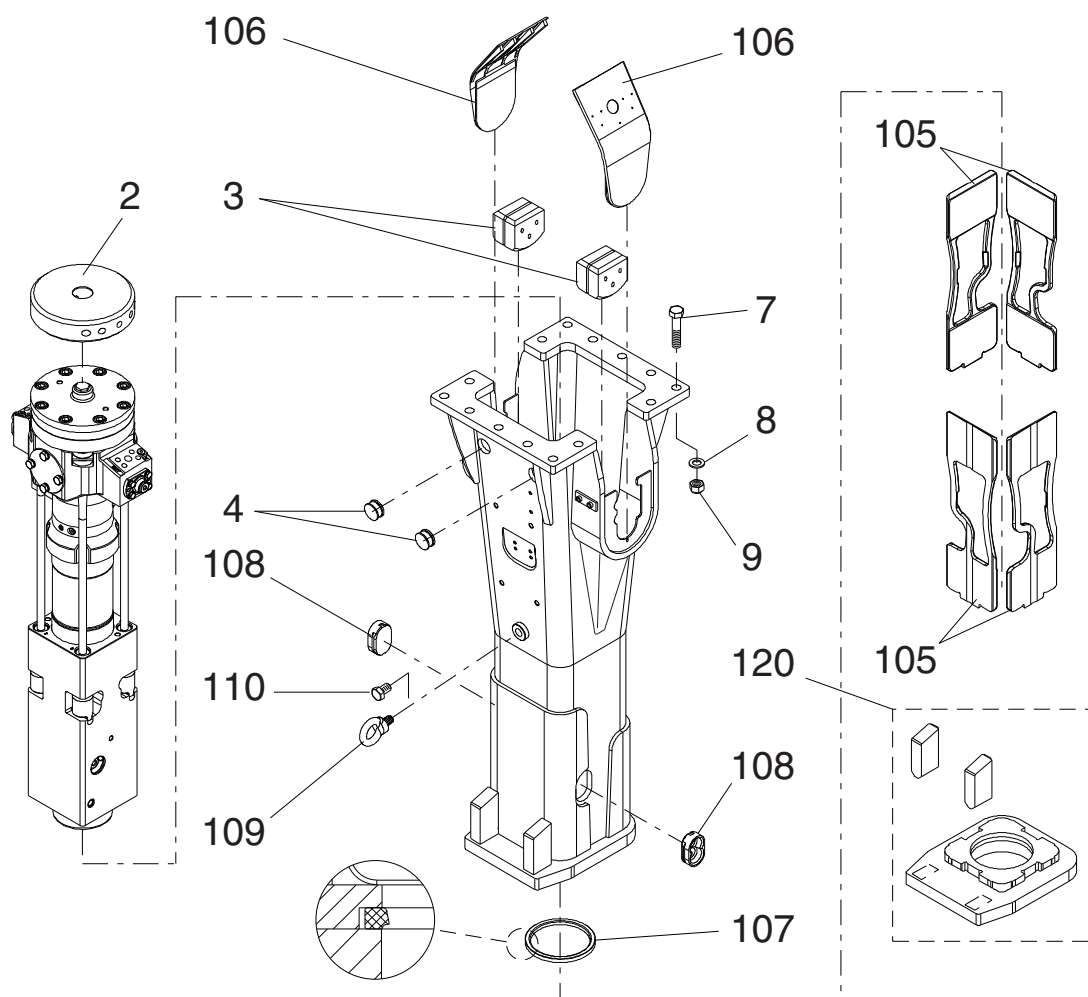
Quick spare part deliveries are ensured by exact orders.

Required information:

- Name of customer and contact person
 - Order number (when available)
 - Delivery address
 - Mode of delivery (air mail, etc.)
 - Required delivery date
 - Invoicing address
 - Model and serial number of the product
 - Name, number and required amount of spare parts
-

PARTS

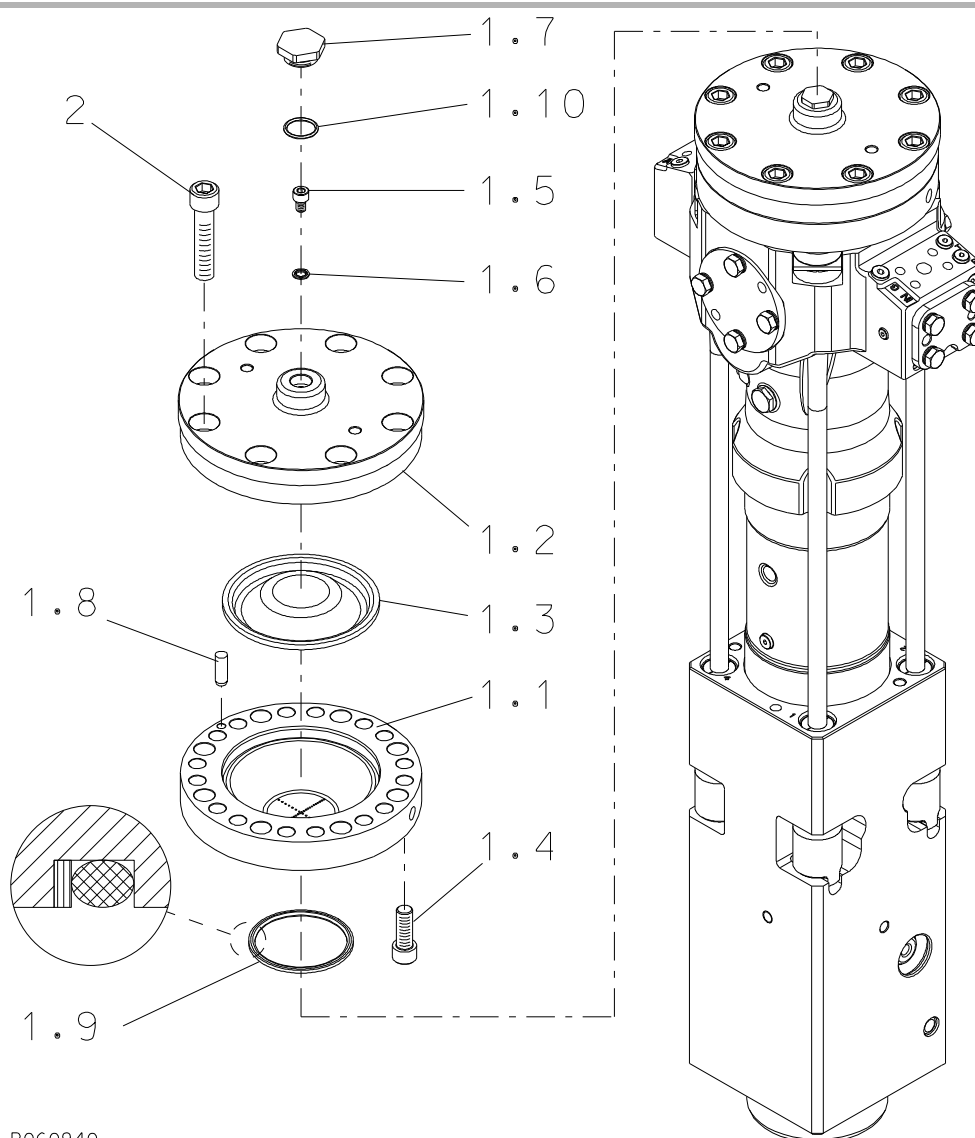
1. HOUSING UNIT



R061262

Item	Description	Part no.	Specification	Note	Qty
1	Housing (incl. parts 105-110)	172873			1
2	Buffer	300767			1
3	Pad	300768			2
4	Rubber plug	165434			2
7	Hex. screw	90589	M24x110-12.9 ISO 4014		14
8	Washer	90511	25 ISO 7416		14
9	Lock nut	90507	M24-12 DIN 985		14
105	Wear plate	162827			4
106	Shield plate	162840			2
107	Seal	102142			1
108	Rubber plug	162657			2
109	Lifting eye	90605	M24 DIN 580		1
110	Hex. screw	900025	M24x35-8.8 ISO 4017		1
120	Wear parts	165566			1
200	Label set (incl. part 200.1)	177588			1
200.1	Safety label set	169400	English		1

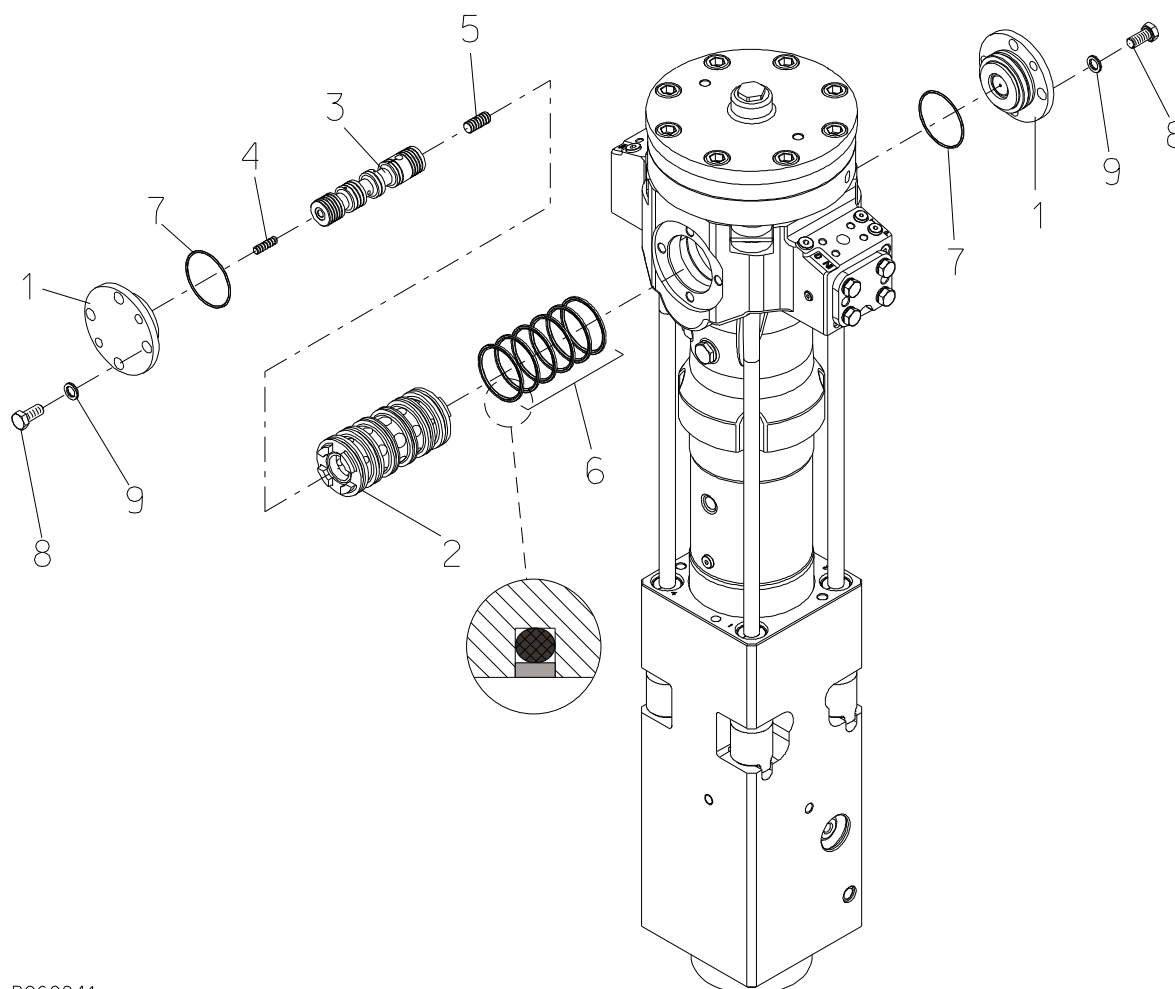
2. ACCUMULATOR



R060940

Item	Description	Part no.	Specification	Note	Qty
1	Accumulator (incl. parts 1.1-1.10)	162184			1
1.1	Accumulator bottom	162103			1
1.2	Accumulator cover	162104			1
1.3	Membrane	20604			1
1.4	Accumulator screw	950125	M20x55-8.8 ISO 4762		16
1.5	Filling plug	40368			1
1.6	Usit-ring	90056	8-13.9-1	*	1
1.7	Shield plug	154015			1
1.8	Parallel pin	90342	10m6x30 ISO 8734		1
1.9	Seal	40104	D114	*	1
1.10	O-ring	910006	D23	*	1
2	Accumulator screw	952627	M24x110-8.8 ISO 4762		8
*) Are included in seal set					

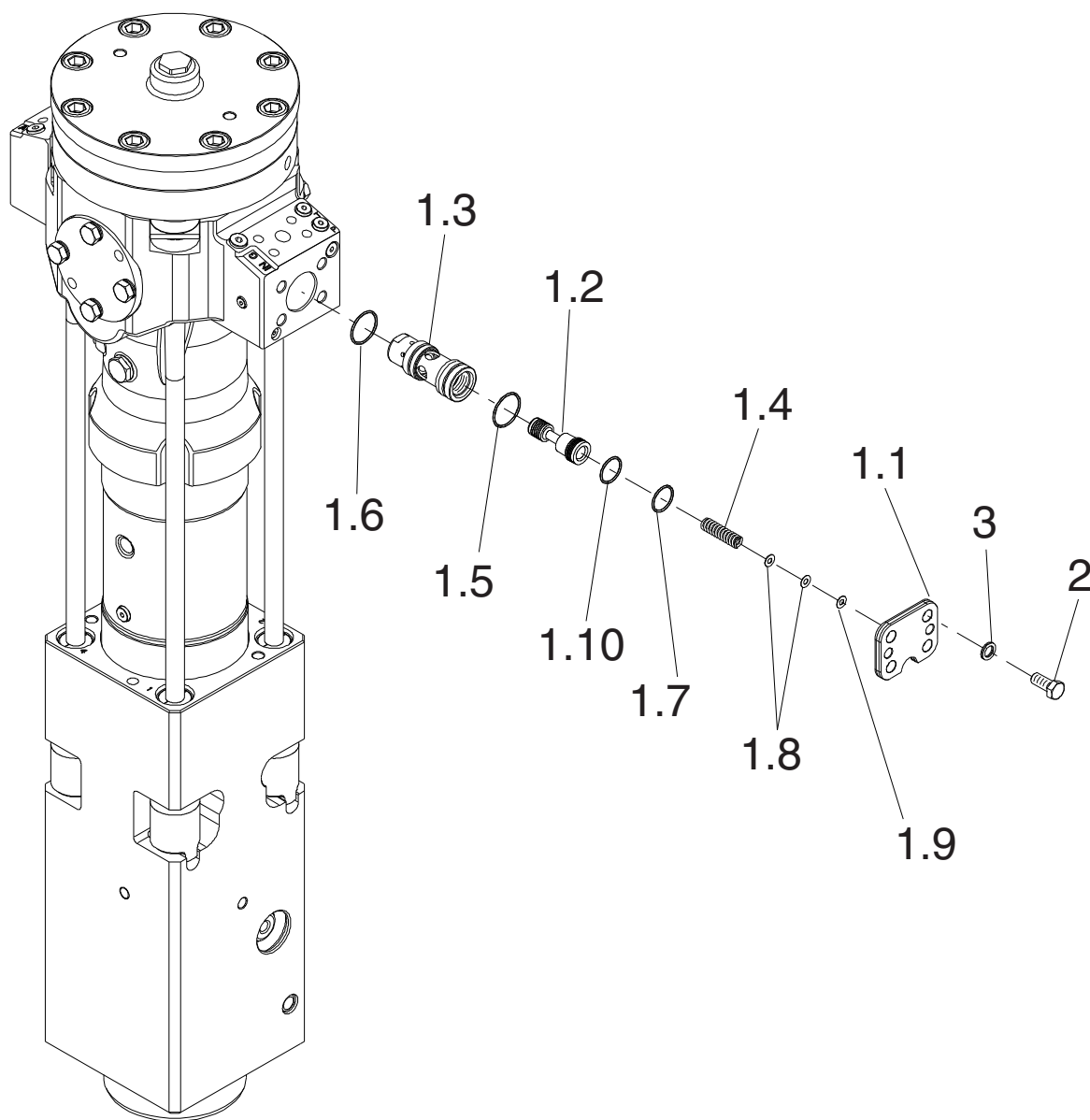
3. MAIN VALVE



R060941

Item	Description	Part no.	Specification	Note	Qty
1	Cover	40418			2
2	Main valve bushing	162131			1
3	Main spool	162328			1
4	Spool	162333			1
5	Spool	162335			1
6	Seal	162178		*	6
7	O-ring	90025	D85	*	2
8	Hex. screw	90517	M16x35-8.8 ISO 4017		8
9	Lock washer	90597	M16 NORD-LOCK		8
	*) Are included in seal set				

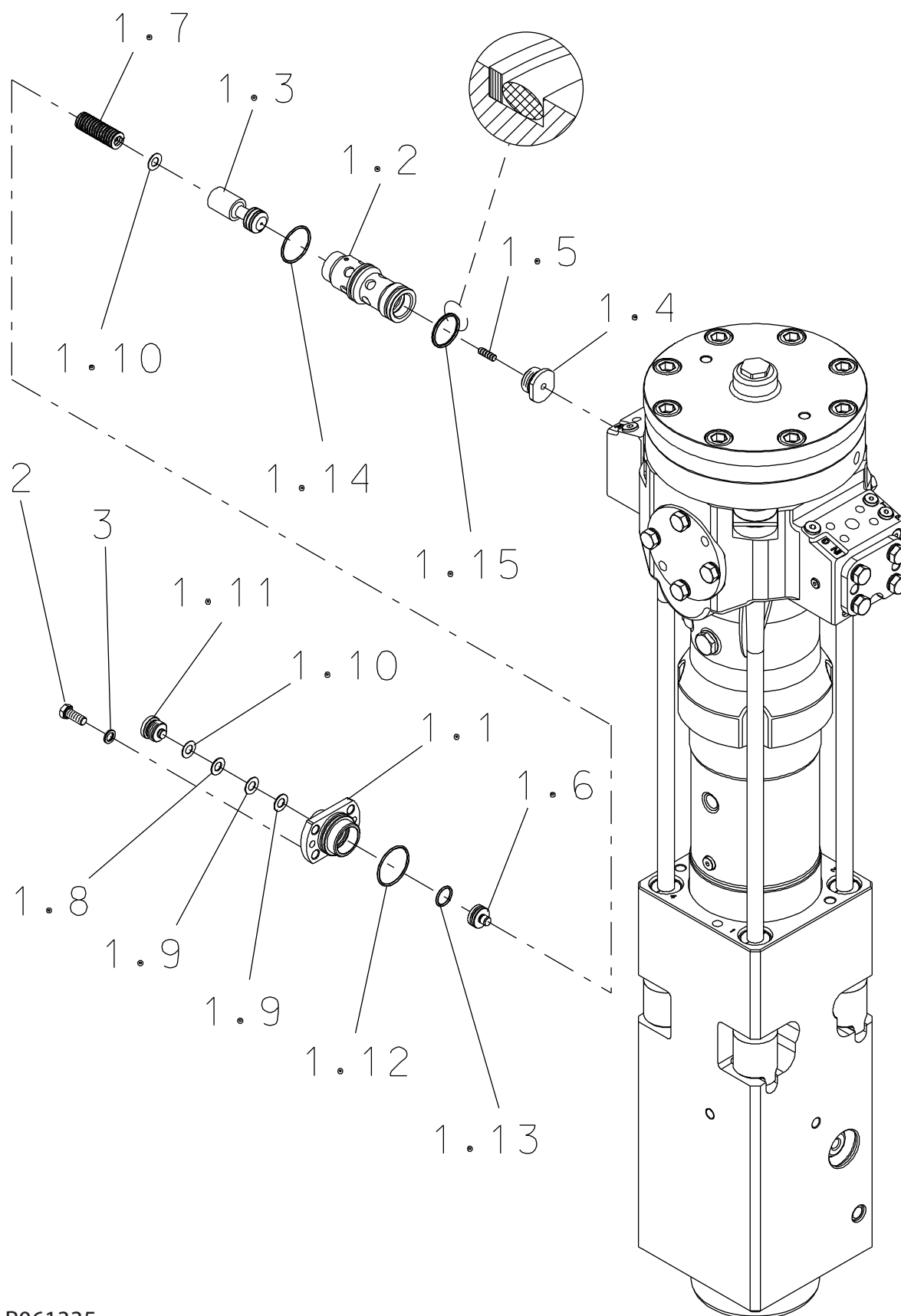
4. RAMVALVE



R061374

Item	Description	Part no.	Specification	Note	Qty
1	Ramvalve (incl. parts 1.1-1.10)	162233			1
1.1	Cover	158952			1
1.2	Spool	174665			1
1.3	Valve housing	174668			1
1.4	Spring	952162			1
1.5	O-ring	90031	D46	*	1
1.6	O-ring	90007	D44	*	1
1.7	O-ring	90017	D34	*	1
1.8	Shim plate	41639	S=0.5		X
1.9	Shim plate	41640	S=1		X
1.10	Seal	954341		*	1
2	Hex. screw	90517	M16x35-8.8 ISO 4017		4
3	Lock washer	90597	M16 NORD-LOCK		4
	*) Are included in seal set				

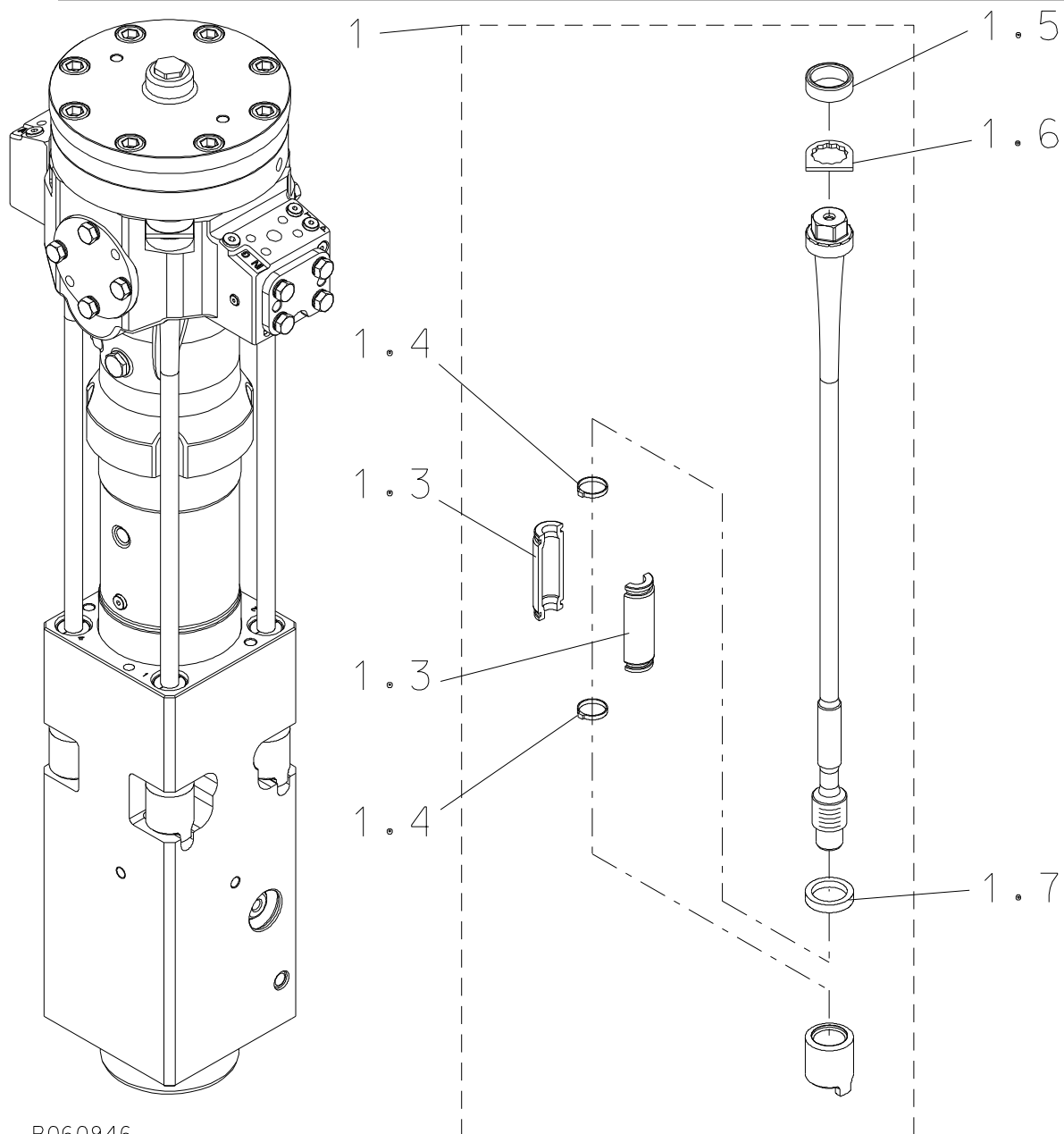
5. PRESSURE CONTROL VALVE



R061335

Item	Description	Part no.	Specification	Note	Qty
1	Pressure control valve (incl. parts 1.1-1.15)	162167			1
1.1	Cover	162166			1
1.2	Valve housing	162692			1
1.3	Spool	162693			1
1.4	Guide	40364			1
1.5	Spool	40365			1
1.6	Spring guide	162171			1
1.7	Spring	90104			1
1.8	Shim plate	41794	S=0.5		x
1.9	Shim plate	41793	S=1		x
1.10	Shim plate	174182	S=0.75		x
1.11	Plug	162518			1
1.12	O-ring	90018	D54	*	1
1.13	O-ring	90000	D24	*	1
1.14	O-ring	90019	D49	*	1
1.15	Seal	40391		*	1
2	Hex. screw	90513	M12x30-8.8 ISO 4017		4
3	Lock washer	91012	M12 NORD-LOCK		4
	*) Are included in seal set				

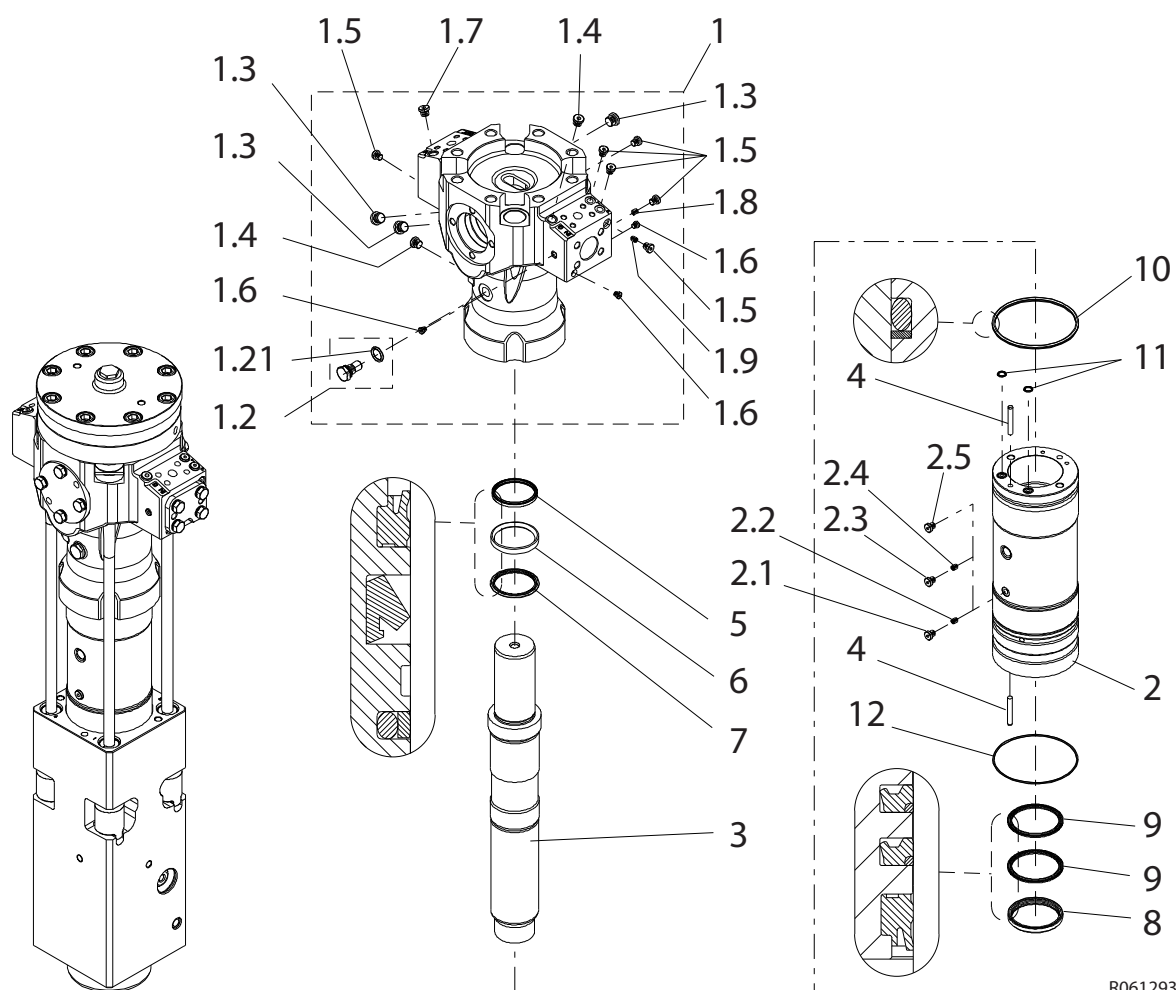
6. TIE RODS



R060946

Item	Description	Part no.	Specification	Note	Qty
1	Tie rod set (incl. parts 1.3-1.7)	165572			4
1.3	Vibration dampening element	162222			2
1.4	Cable tie	952009			2
1.5	Rubber ring	40396			1
1.6	Lock plate	40367			1
1.7	Spacer	162212			1

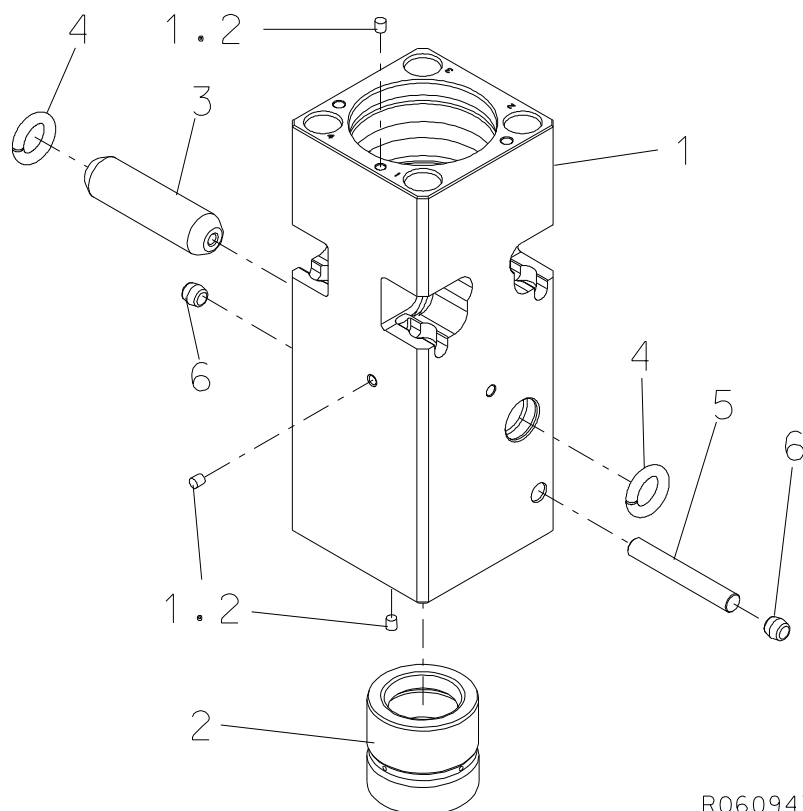
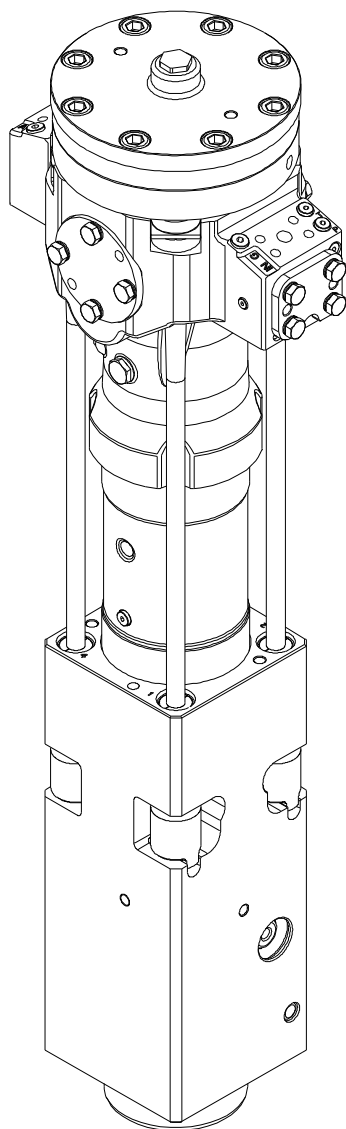
7. BODY PARTS



R061293

Item	Description	Part no.	Specification	Note	Qty
1	Valve body (incl. parts 1.2-1.9)	162032			1
1.2	Breather (incl. part 1.21)	162258			1
1.21	O-ring	902122	D24	*	1
1.3	Flange plug	90424	R1/2		3
1.4	Flange plug	90444	R3/8		2
1.5	Flange plug	90403	R1/4		6
1.6	Flange plug	93203	R1/8		3
1.7	Breather	400662	R3/8		1
1.8	Nozzle	161922			1
1.9	Nozzle	161465			1
2	Cylinder (incl. parts 2.1-2.5)	165564			1
2.1	Flange plug	90403	R1/4, softened stroke		1
2.2	Nozzle	167862	softened stroke		1
2.3	Flange plug	90403	R1/4, normal stroke		1
2.4	Screw	952544	M10x12 ISO 4026, normal stroke		1
2.5	Flange plug	90403	R1/4, idle stroke prevention		1
3	Piston	162089			1
4	Parallel pin	901101	10x70 ISO 8734		2
5	Wiper	952629		*	1
6	Seal	950149		*	1
7	Seal	151217		*	1
8	Wiper	951544		*	1
9	Seal	952630		*	2
10	Seal	162360		*	1
11	O-ring	953787	D14	*	2
12	O-ring	910016	D172	*	1
	*) Are included in seal set				

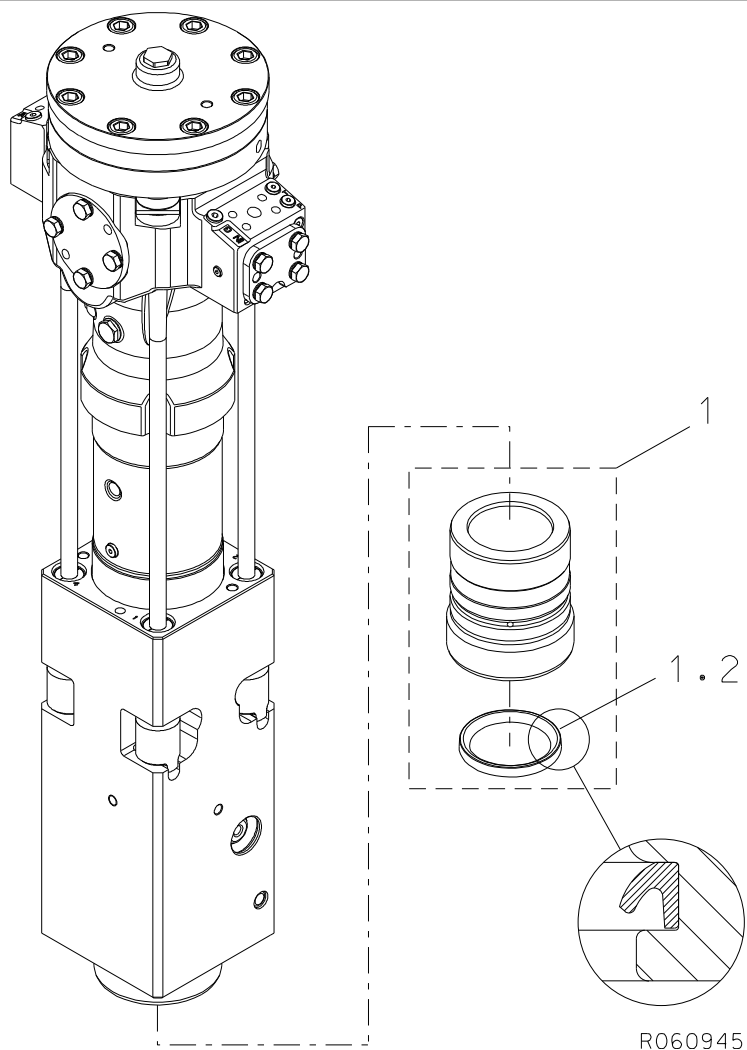
8. FRONT HEAD



R060947

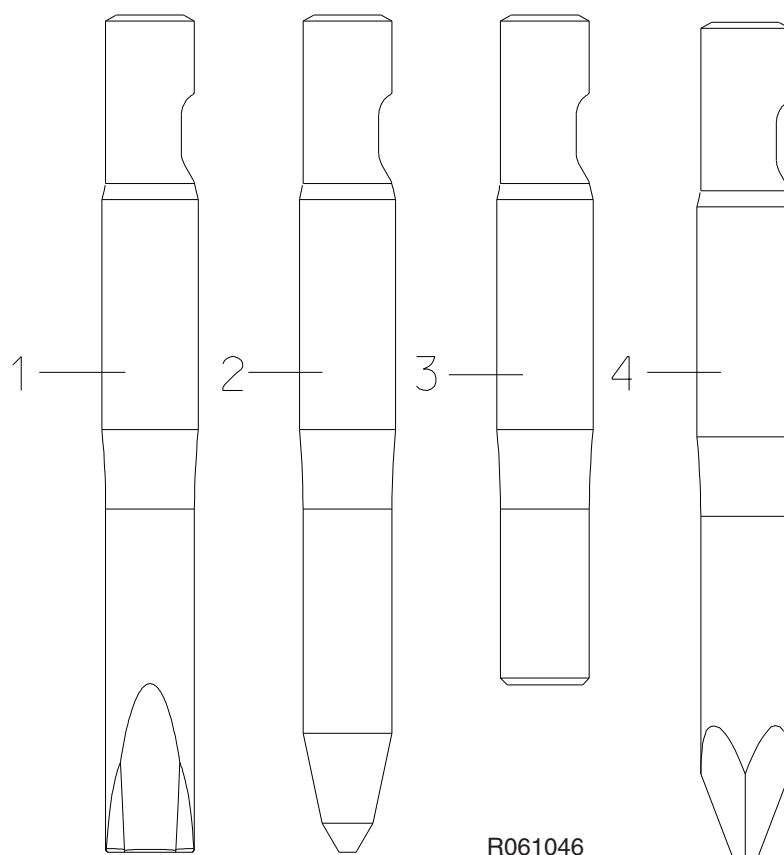
Item	Description	Part no.	Specification	Note	Qty
1	Front head (incl. part 1.2)	162877			1
1.2	Plug	111399			3
2	Upper tool bushing	162229			1
3	Tool retaining pin	153538			1
4	Ring	153539			2
5	Retaining pin	400323			1
6	Rubber plug	104876			2

9. LOWER TOOL BUSHING



Item	Description	Part no.	Specification	Note	Qty
1	Lower tool bushing (incl. part 1.2)	163244			1
1.2	Seal	162368			1

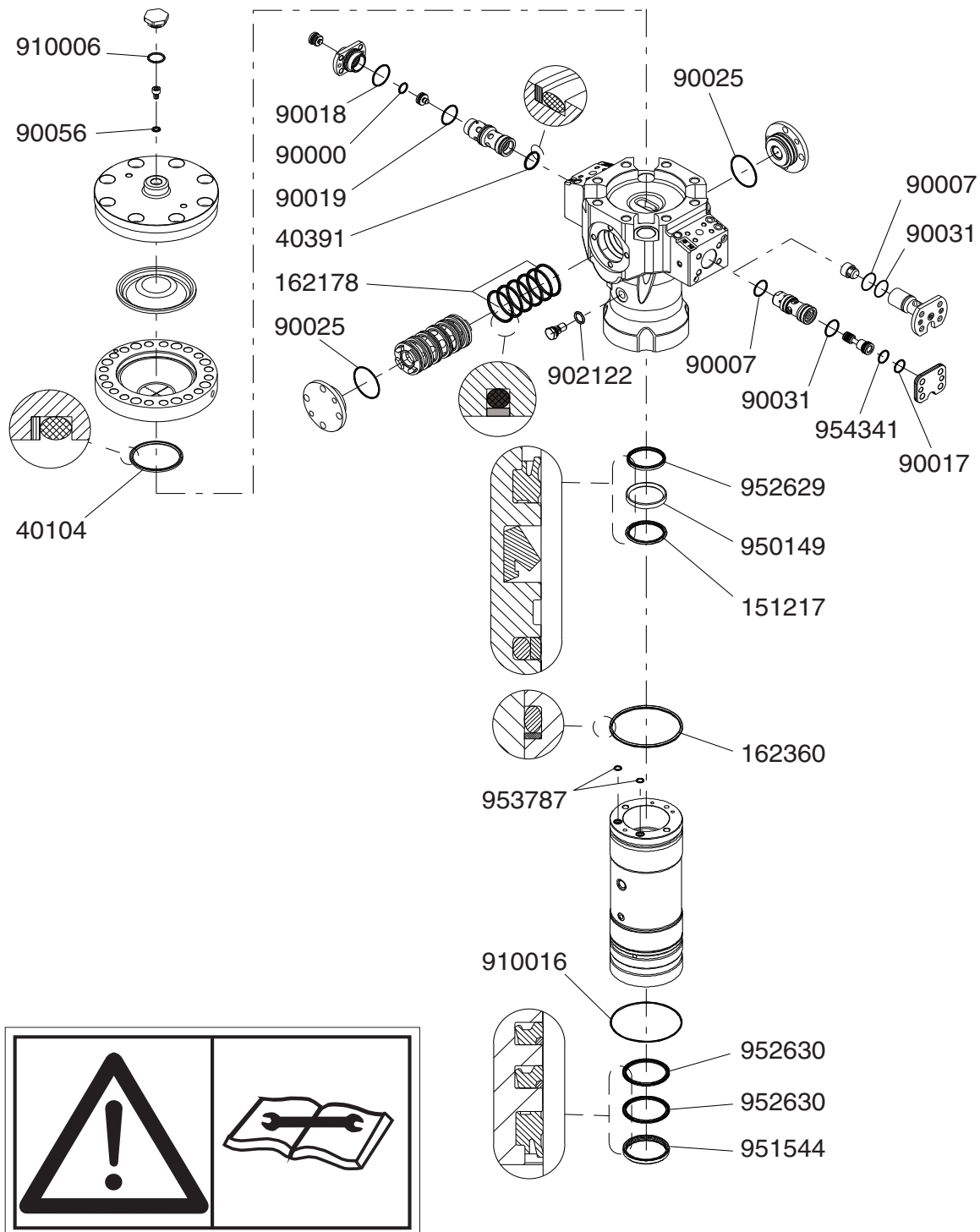
10. TOOL



Item	Description	Part no.	Specification	Note	Qty
1	Chisel	BB491	L = 1000 mm, W = 67 kg, D = 115 mm		1
2	Moil point	BB493	L = 1000 mm, W = 67 kg, D = 115 mm		1
3	Blunt	BB494	L = 800 mm, W = 58 kg, D = 115 mm		1
4	Pyramid	BB493K3	L = 1000 mm, W = 66 kg, D = 115 mm		1

11. SEAL SET

Seal set 162382

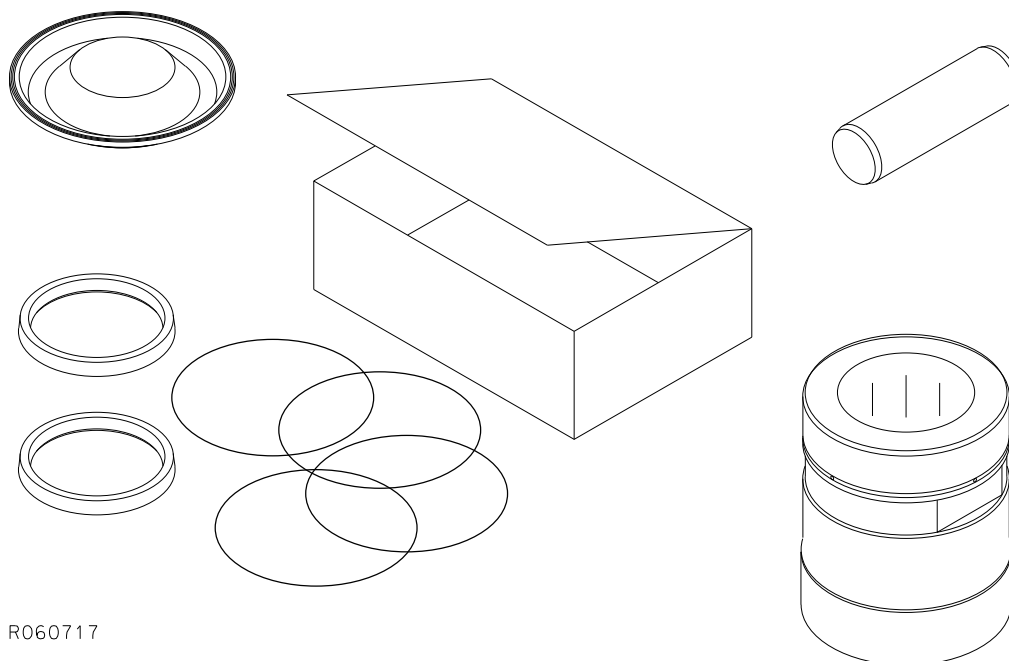


This summary only indicates the position of the seals. It must NOT be used as assembly instruction. Read the service manual. Notice! Assembly must be performed by qualified service personnel only.

R060952

Item	Description	Part no.	Specification	Note	Qty
Kit	Seal set (incl. parts 1-22)	162382			1
1	Usit-ring	90056	8-13.9-1		1
2	Seal	40104	D114		1
3	O-ring	910006	D23		1
4	O-ring	90018	D54		1
5	O-ring	90000	D24		1
6	O-ring	90019	D49		1
7	Seal	40391			1
8	Seal	162178			6
9	O-ring	90025	D85		2
10	O-ring	90031	D46		1
11	O-ring	90007	D44		1
12	O-ring	90017	D34		1
13	O-ring	902122	D24		1
14	Wiper	952629			1
15	Seal	950149			1
16	Seal	151217			1
17	Wiper	951544			1
18	Seal	952630			2
19	Seal	162360			1
20	O-ring	953787	D14		2
21	O-ring	910016	D172		1
22	Seal	954341			1
	The seals for greasing device are not included in this seal set. They are included in the service kit for greasing device.				

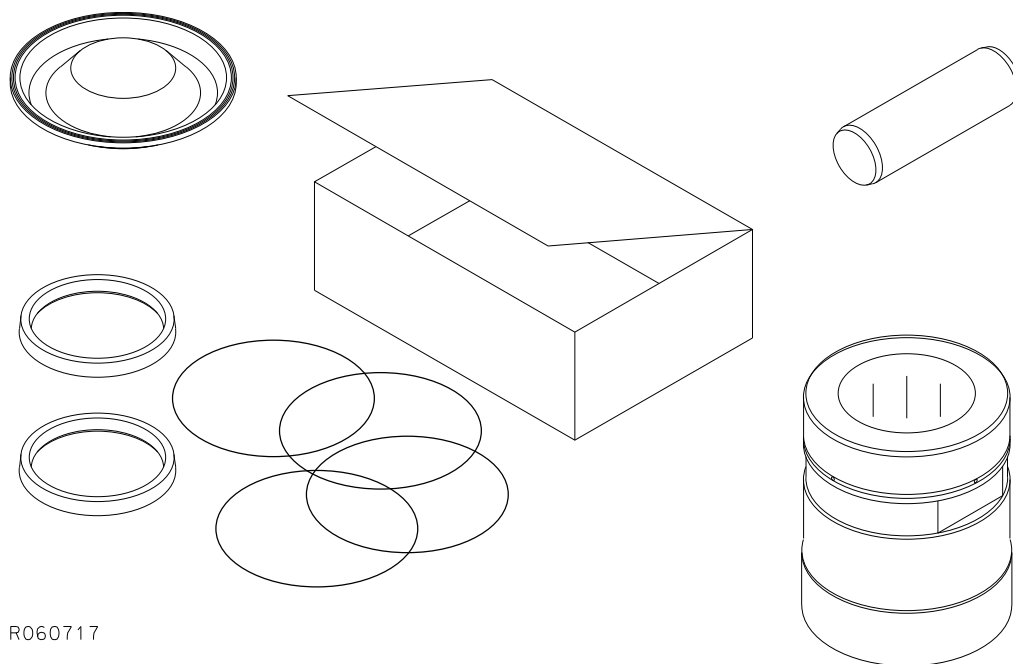
12. SERVICE KIT



R060717

Item	Description	Part no.	Specification	Note	Qty
Kit	Service kit (incl. parts 1 - 4)	165607			1
1	Membrane	20604			1
2	Tool retaining pin	153538			1
3	Lower tool bushing	163244			1
4	Seal set	162382			1

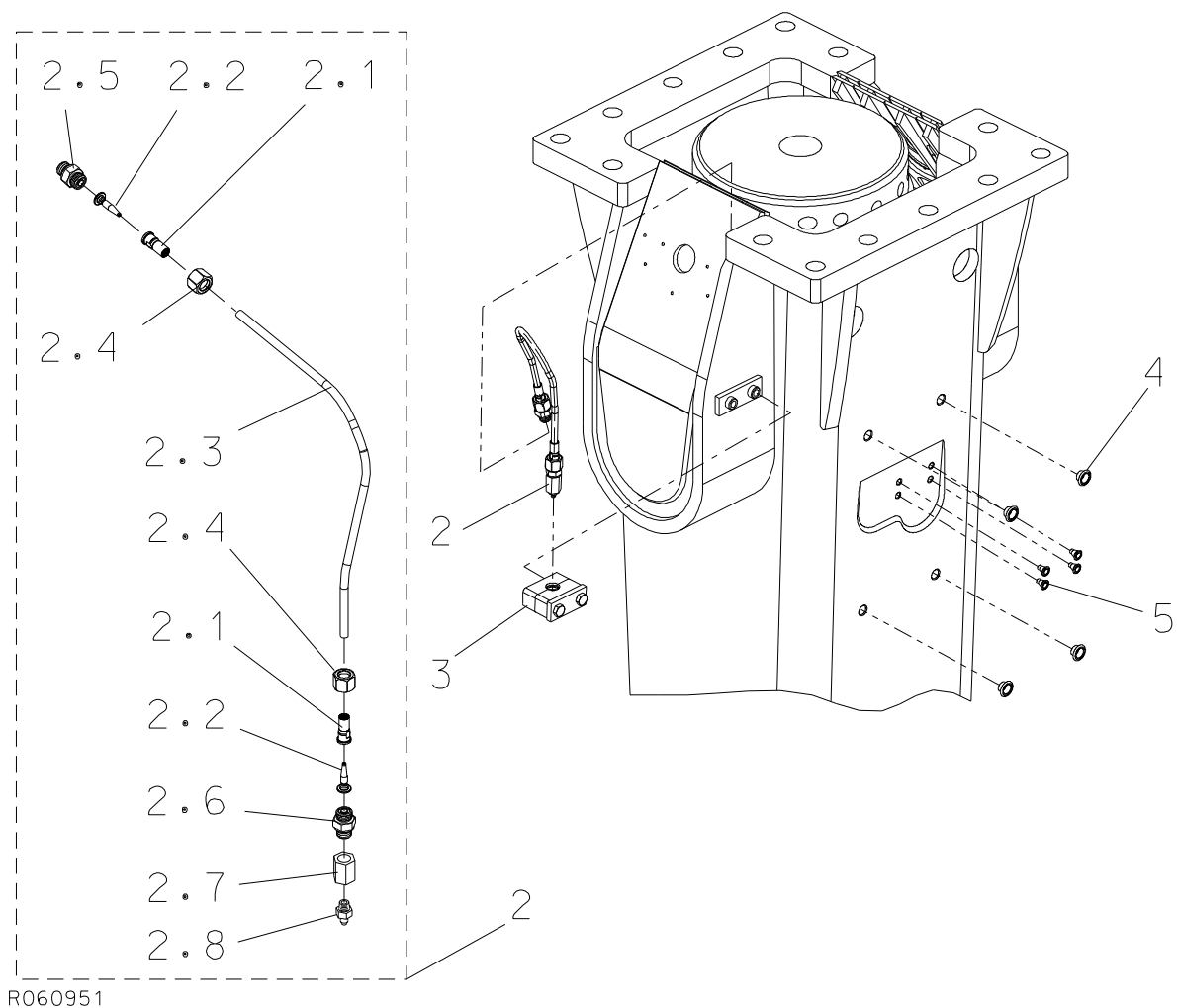
13. SERVICE KIT 2



R060717

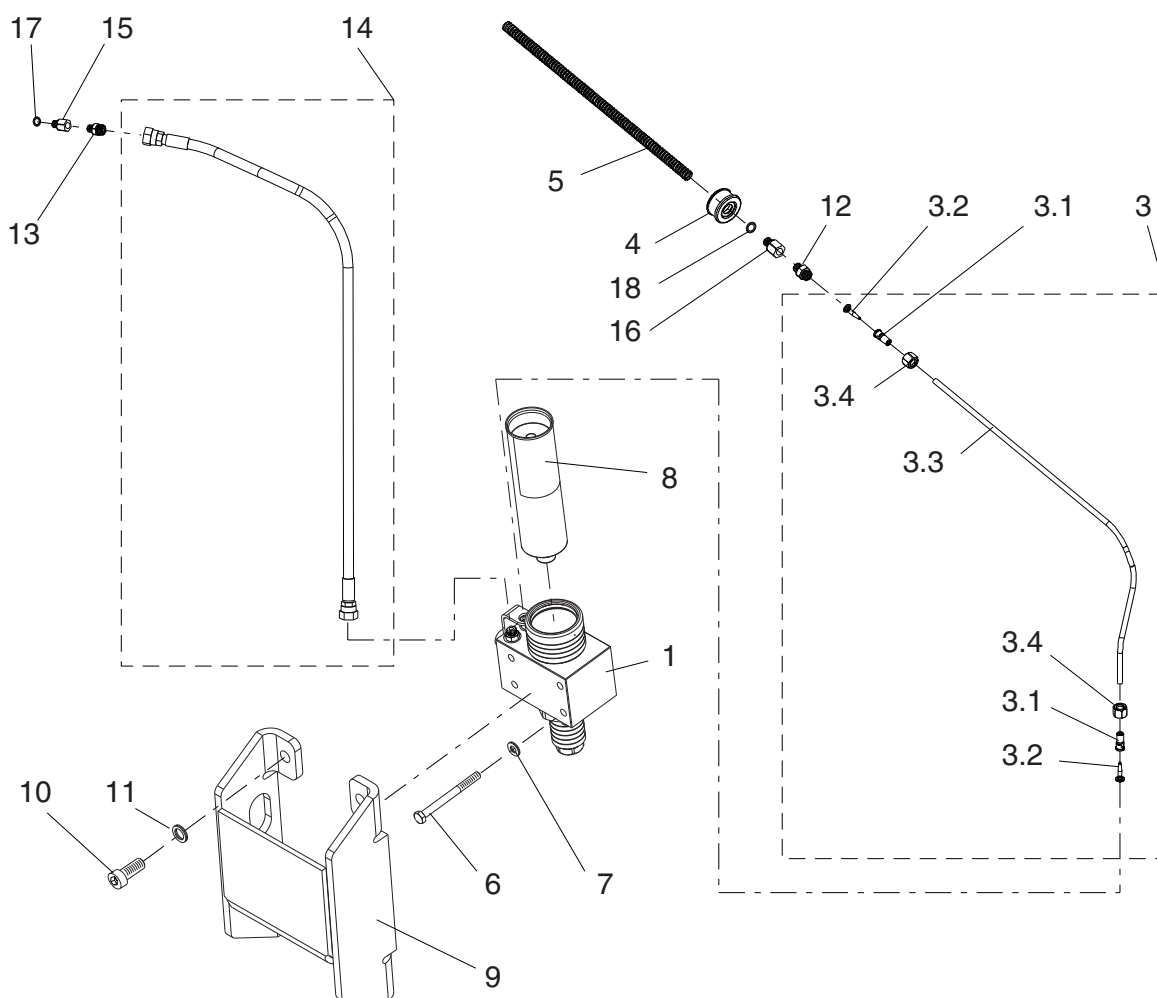
Item	Description	Part no.	Specification	Note	Qty
Kit	Service kit (incl. parts 1 - 4)	165608			1
1	Buffer	300767			1
2	Pad	300768			2
3	Wear plate	162827			4
4	Upper tool bushing	162229			1

14. MANUAL GREASING



Item	Description	Part no.	Specification	Note	Qty
2	Hose assembly (incl. parts 2.1-2.8)	162531			1
2.1	Sleeve	153035			2
2.2	Insert	153036			2
2.3	Hose	952642	L=480		1
2.4	Nut	951296			2
2.5	Connector	951295	BSPP 3/8		1
2.6	Connector	951294	BSPP 1/4		1
2.7	Adapter	952621			1
2.8	Grease nipple	90200			1
3	Pipe clamp	952664			1
4	Plug	953291			4
5	Plug	953332			4

15. GREASING DEVICE KIT

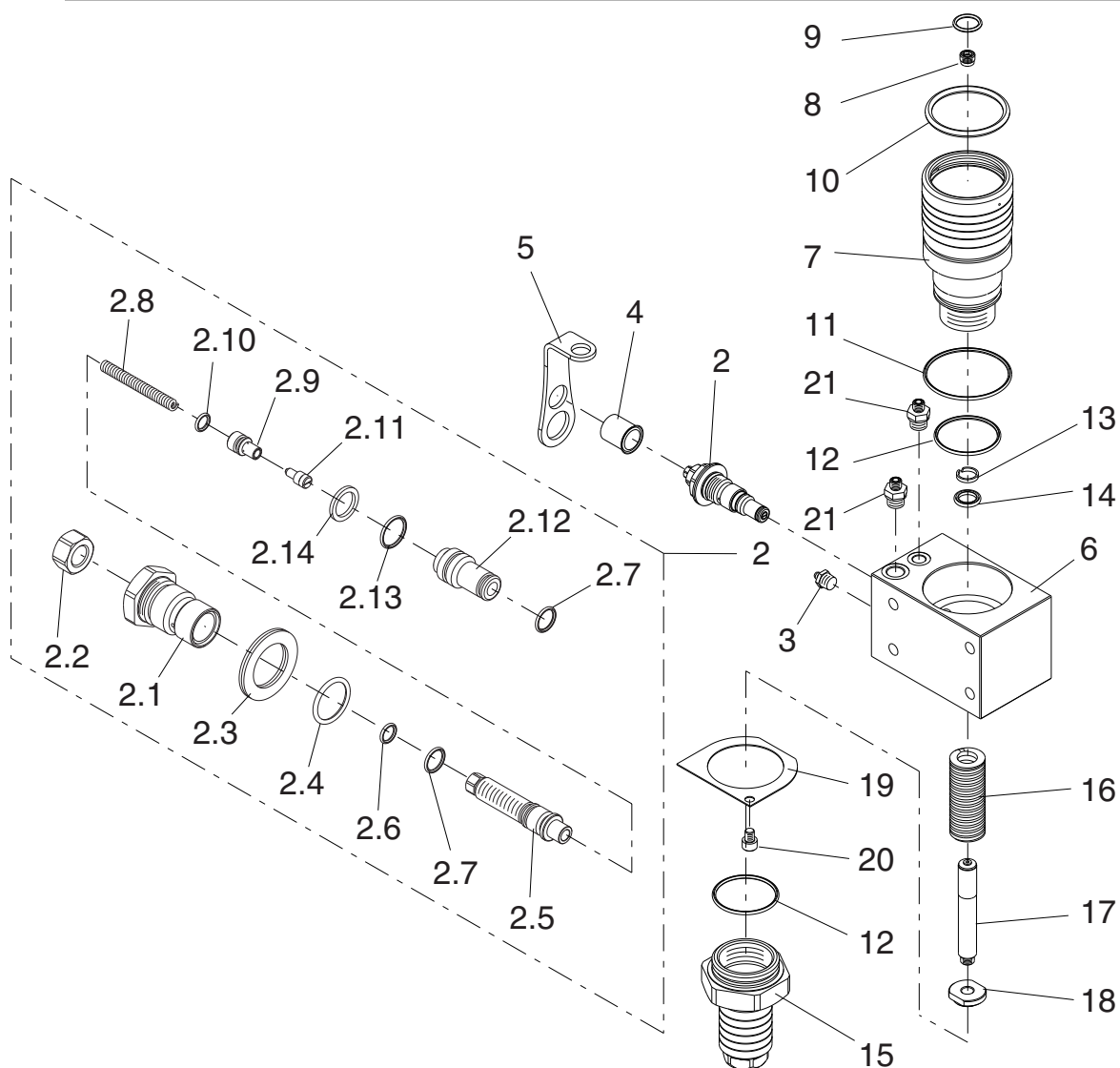


R061441

Item	Description	Part no.	Specification	Note	Qty
kit	Greasing device retrofit kit (incl. parts 1-13)	K60077			1
1	Greasing device RG541	953344			1
3	Hose assembly (incl. parts 3.1-3.4)	168872			1
3.1	Sleeve	153035			2
3.2	Insert	153036			2
3.3	Hose	951632			1
3.4	Nut	951296			2
4	Rubber bushing	158147			1
5	Shield	952093			1
6	Hex. screw	953794	M10x110-8.8 ISO 4014		4
7	Lock washer	953503	M10 NL10sp NORD-LOCK		4
8	Grease cartridge	951370	Special tool grease, Greasing device cartridge. Greasing device cartridges are also sold in boxes of 24.		1
9	Shield	168029			1
10	Hex. socket screw	902895	M16x35-8.8 ISO 4762		4

Item	Description	Part no.	Specification	Note	Qty
11	Lock washer	90597	M16 NORD-LOCK		4
12	Connector	951295	BSPP 3/8		1
13	Connector	951294	BSPP 1/4		1
14	Hose assembly	954817			1
15	Adapter	955137	BSPP 1/4 Female-BSPP 1/4 Male		1
16	Adapter	955136	BSPP 3/8 Female-BSPP 3/8 Male		1
17	Usit-ring	951711	13.7-20-1.5		1
18	Usit-ring	94092	17.4-24-1.5		1

16. GREASING DEVICE



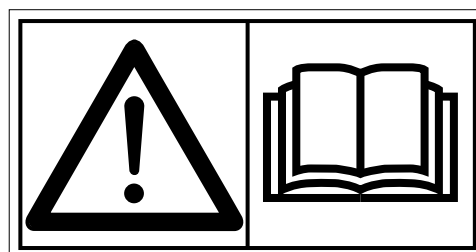
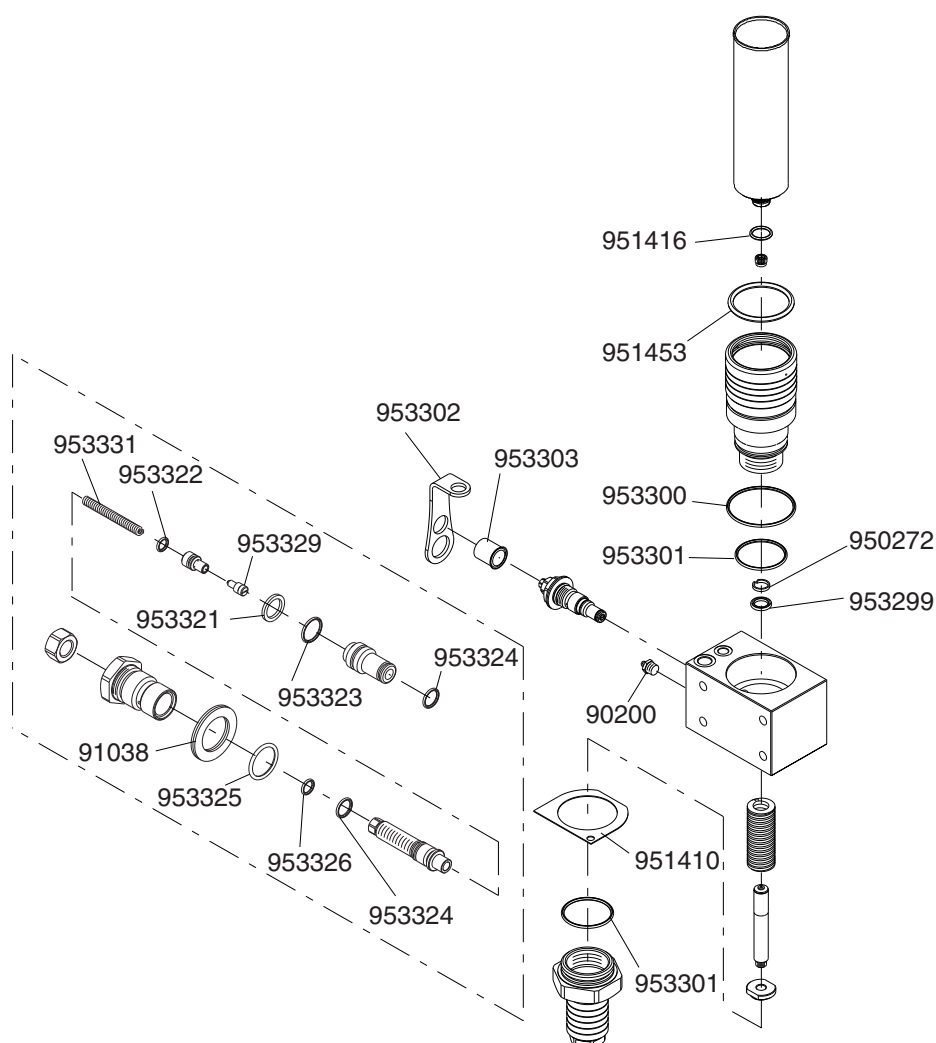
R061070

Item	Description	Part no.	Specification	Note	Qty
1	Greasing device RG541 (incl. parts 2-21)	953344			1
2	Doser (incl. parts 2.1-2.14)	173573			1
2.1	Plug	173574			1
2.2	Nut	953330	M12x1 DIN 934		1
2.3	Lock washer	91038	M24 NORD-LOCK	*	1
2.4	O-ring	953325	D21	*	1
2.5	Adjusting screw	953317			1
2.6	O-ring	953326	D8	*	1
2.7	O-ring	953324	D11	*	2
2.8	Spring	953331		*	1
2.9	Piston	173576			1
2.10	O-ring	953322	D7	*	1
2.11	Piston	953329		*	1

Item	Description	Part no.	Specification	Note	Qty
2.12	Body	173575			1
2.13	O-ring	953323	D15	*	1
2.14	Shim plate	953321		*	1
3	Grease nipple	90200	BSP 1/4	*	1
4	Plug	953303		*	1
5	Locking plate	953302			1
6	Body	953310			1
7	Cartridge holder	953309			1
8	Check valve	951767			1
9	O-ring	951416	D19	*	1
10	O-ring	951453	D62	*	1
11	O-ring	953300	D71	*	1
12	O-ring	953301	D52	*	2
13	Guide ring	950272		*	1
14	Seal	953299		*	1
15	Spring housing	953308			1
16	Spring	950257			1
17	Piston	953307			1
18	Nut	953306			1
19	Lock plate	951410		*	1
20	Hex. socket screw	951421	M8x10-8.8 ISO 4762	*	1
21	Connector	951294	BSPP 1/4		3
kit	Seal set for greasing device	953385			1
	*) Are included in seal set for greasing device				

17. SERVICE KIT FOR GREASING DEVICE RG540 SERIES

Service kit 953385

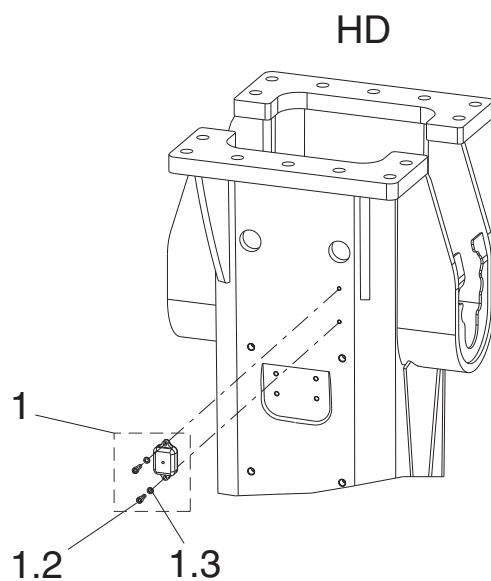


This summary only indicates the position of the seals. It must NOT be used as assembly instruction. Read the manual.

R061071

Item	Description	Part no.	Specification	Note	Qty
Kit	Service kit for greasing device (incl. parts 1-19)	953385			1
1	Lock plate	951410			1
2	Plug	953303			2
3	Guide ring	950272			1
4	Seal	953299			1
5	O-ring	953300	D71		1
6	O-ring	951453	D62		1
7	O-ring	953301	D52		2
8	O-ring	951416	D19		1
9	O-ring	953326	D8		2
10	O-ring	953325	D21		2
11	O-ring	953324	D11		4
12	O-ring	953323	D15		2
13	O-ring	953322	D7		2
14	Shim plate	953321			2
15	Spring	953331			2
16	Piston	953329			2
17	Lock washer	91038	M24 NORD-LOCK		2
18	Grease nipple	90200	R1/4		2
19	Locking plate	953302			2
	Service kit for greasing device is not included in the hammers seal set.				

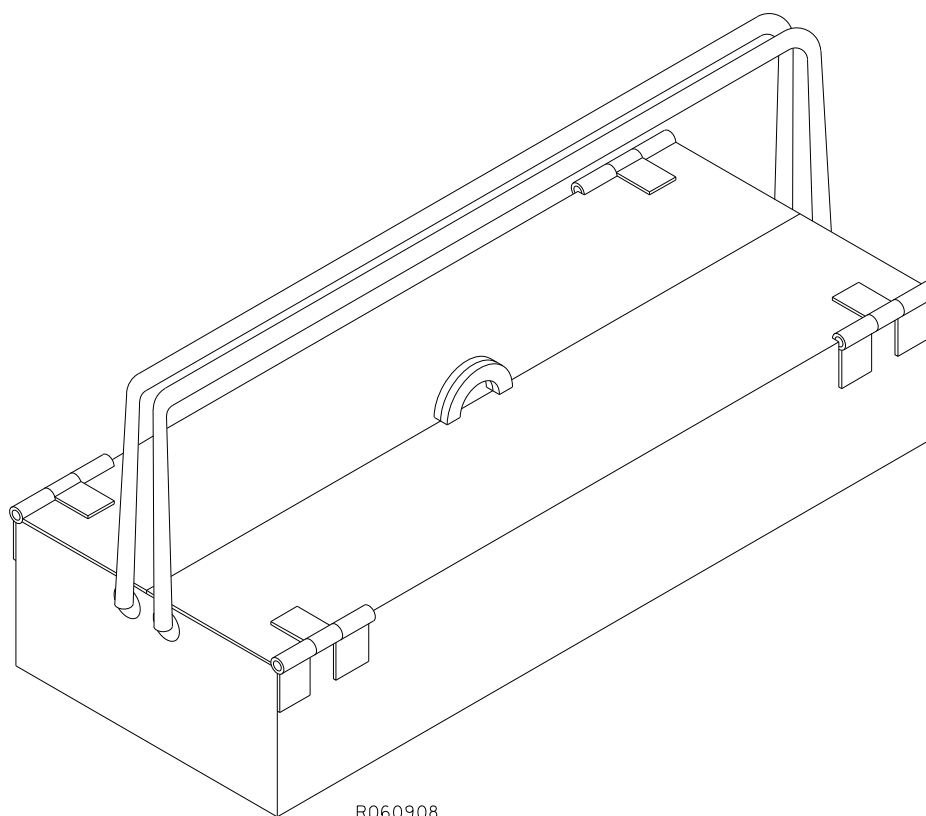
18. RAMDATA II SERVICE INDICATOR



R061263

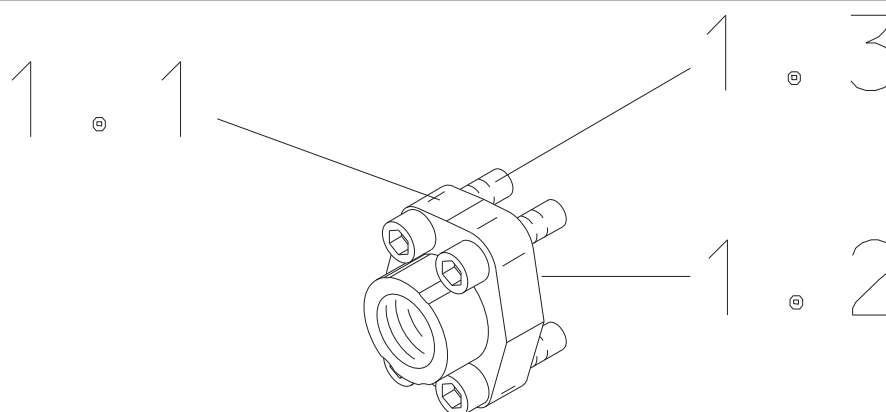
Item	Description	Part no.	Specification	Note	Qty
1	Ramdata II service indicator (incl. parts 1.2-1.3)	159143			1
1.2	Hex. socket screw	91020	M8x25- 8.8 ISO 4762		2
1.3	Lock washer	91011	M8 NORD-LOCK		2

19. TOOL BOX R1



Item	Description	Part no.	Specification	Note	Qty
Kit	Tool box R1 (incl. parts 1-13)	173747			1
1	Tool box	N/A			1
2	Grease gun	90202			1
3	Tool grease	902045			1
4	Grease cartridge	951370			1
5	Puller	150020			1
6	Combination spanner	N/A	12		1
7	Screwdriver	N/A	6x150		1
8	Flange plug	90444	R3/8		1
9	Flange plug	90403	R1/4		2
10	Grease nipple	90200	R1/4		1
11	Grease nipple	953767	R3/8		1
12	Safety glasses	N/A			1
13	Assembling screw	954194	M12x150-8.8 ISO 8677		1

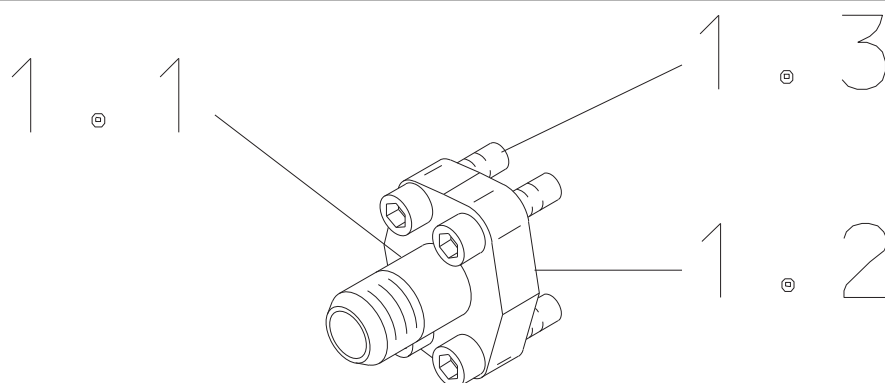
20. COUPLING SET



R061423

Item	Description	Part no.	Specification	Note	Qty
1	Coupling set (incl. parts 1.1-1.3)	400516			1
1.1	Flange	90530	SAE 1 6000 psi - BSP 1 FEMALE		2
1.2	O-ring	90010			2
1.3	Hexagon socket screw	90564	M12x40-8.8 ISO 4762		8

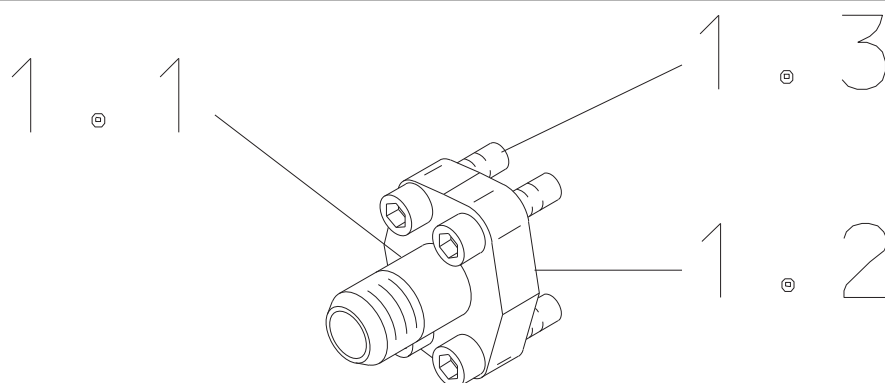
21. COUPLING SET



R061424

Item	Description	Part no.	Specification	Note	Qty
1	Coupling set (incl. parts 1.1-1.3)	400510			1
1.1	Flange	915066	SAE 1 6000 psi - JIC 16, UNF 1 5/16-12 MALE		2
1.2	O-ring	90010			2
1.3	Hexagon socket screw	90564	M12x40-8.8 ISO 4762		8

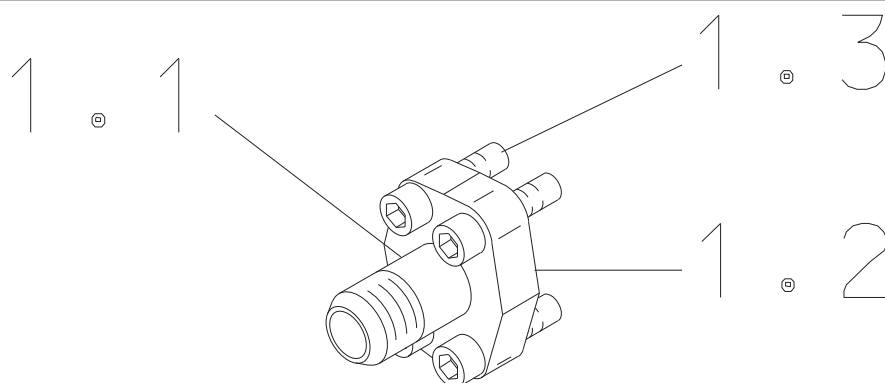
22. COUPLING SET



R061425

Item	Description	Part no.	Specification	Note	Qty
1	Coupling set (incl. parts 1.1-1.3)	400520			1
1.1	Flange	915054	SAE 1 6000 psi - JIS 30° BSP 1 MALE		2
1.2	O-ring	90010			2
1.3	Hexagon socket screw	90564	M12x40-8.8 ISO 4762		8

23. COUPLING SET



R061426

Item	Description	Part no.	Specification	Note	Qty
1	Coupling set (incl. parts 1.1-1.3)	400513			1
1.1	Flange	915070	SAE 1 6000 psi - M42x2 MALE		2
1.2	O-ring	90010			2
1.3	Hexagon socket screw	90564	M12x40-8.8 ISO 4762		8

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