

Original instructions

Rammer[®]

ENG 3/15

PARTS MANUAL
PM4511CENG.315

HYDRAULIC HAMMER
RAMMER 4511

CITY

Serial No.

11ADB5190-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 eventual 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

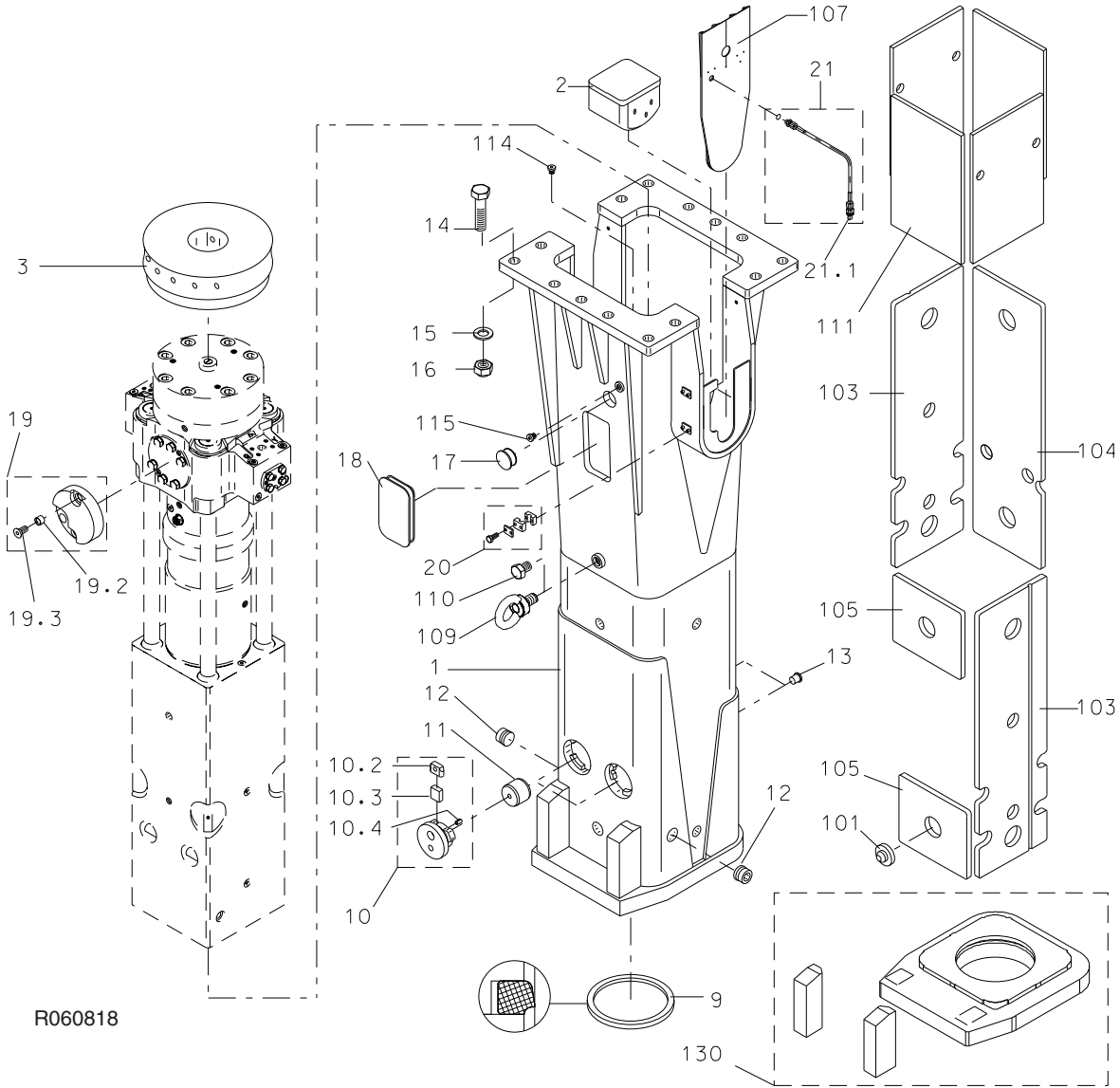
Quick spare part deliveries are ensured by exact orders.

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

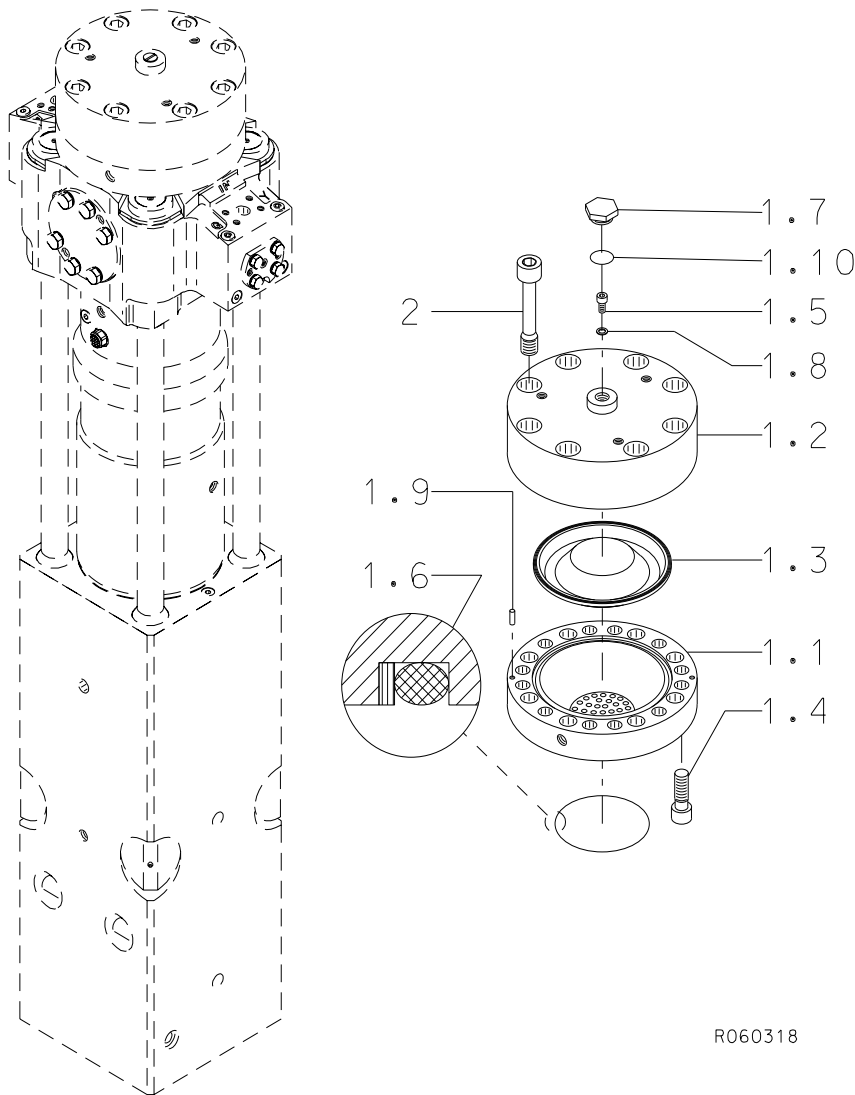
1. HOUSING UNIT



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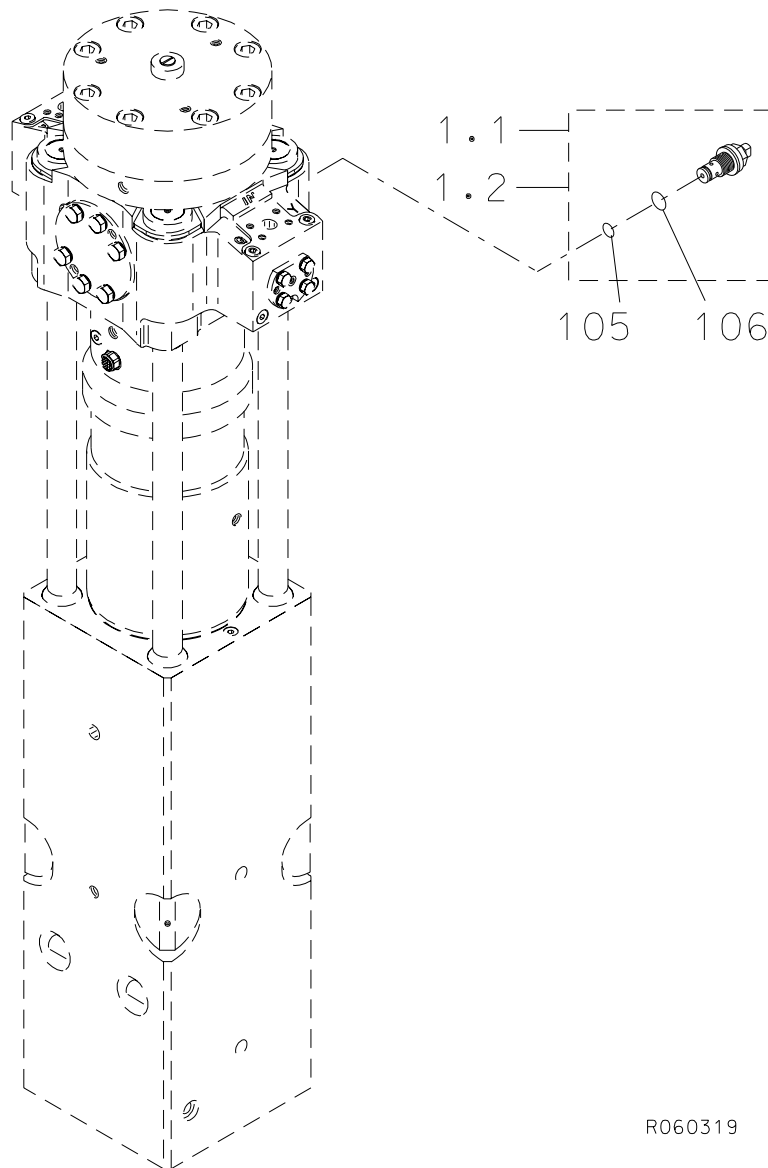
Item	Description	Part no.	Specification	Note	Qty
1	Housing (incl. parts 101-115)	106882			1
2	Pad	104068			2
3	Buffer	104137			1
9	Seal	102144	D264		1
10	Cover (incl. parts 10.2-10.4)	106081			2
10.2	Bar	106083			1
10.3	Flexible element	106082			1
10.4	Split pin	90327	6x16 DIN 7343		1
11	Pin	105760			2
12	Rubber plug	400676			2
13	Rubber plug	400566			2
14	Hex. screw	90520	M36x140-8.8 DIN 931		14
15	Washer	90521	37 DIN 6916		14
16	Lock nut	90519	M36-8 DIN 985		14
17	Rubber plug	101724			2
18	Rubber plug	105782			2
19	Damper parts (incl. parts 19.2-19.3)	105785			2
19.2	Bushing	105787			2
19.3	Hex. socket screw	901287	M20x40-8.8 DIN 7991		2
20	Pipe clamping	106251			2
21	Hose assembly (incl. part 21.1)	110499			1
21.1	Grease nipple	90200			1
101	Pin	102389			8
103	Wear plate	104126			2
104	Wear plate	104125			1
105	Wear plate	104124			2
107	Shield plate	105780			2
109	Lifting eye bolt	901464	M36 DIN 580		1
110	Hex. screw	901465	M36x40-8.8 DIN933		1
111	Damper plate	102564			4
114	Flange plug	90403	BSP 1/4		1
115	Flange plug	90424	BSP 1/2		1
130	Wear parts	160429			1
200	Label set (incl. part 201.1)	170458			1
201.1	Safety label set	161564			1

2. ACCUMULATOR



Item	Description	Part no.	Specification	Note	Qty
1	Accumulator (incl. parts 1.1-1.10)	110561			1
1.1	Accumulator bottom	110560			1
1.2	Accumulator cover	100491			1
1.3	Membrane	172307			1
1.4	Accumulator screw	40528			12
1.5	Filling plug	40368			1
1.6	Seal	40536	D145	*	1
1.7	Shield plug	154015			1
1.8	Usit-ring	90056	8-13.9-1	*	1
1.9	Parallel pin	90304	10m6x24 DIN 6325		2
1.10	O-ring	910006	D23	*	1
2	Accumulator screw	300711			8
	*) Are included in seal set				

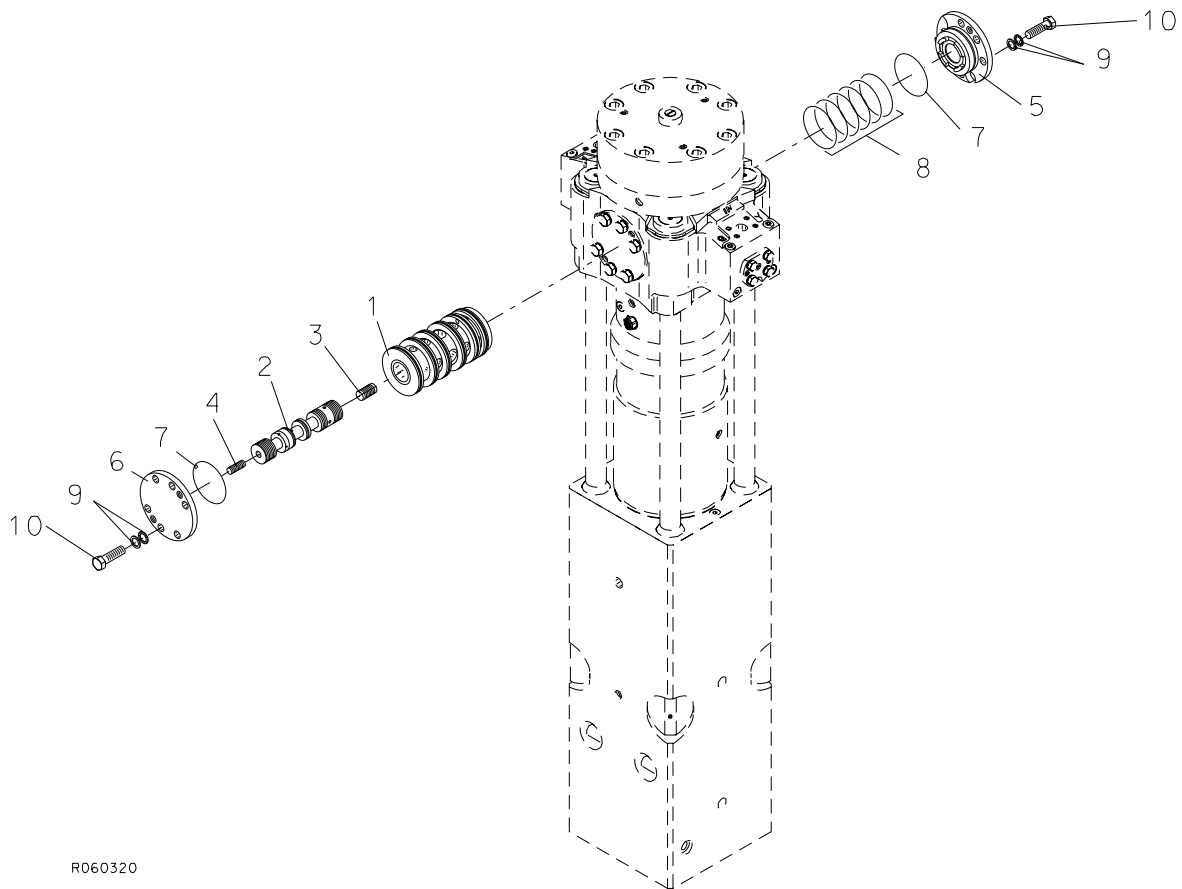
3. PILOT VALVE



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Item	Description	Part no.	Specification	Note	Qty
1.2	Pilot valve (incl. parts 105-106)	102670	Pressure level 5 (S/N 11ADB5)		1
105	O-ring	901186	D10	*	1
106	Usit-ring	901187	D18	*	1
	*) Are included in seal set				

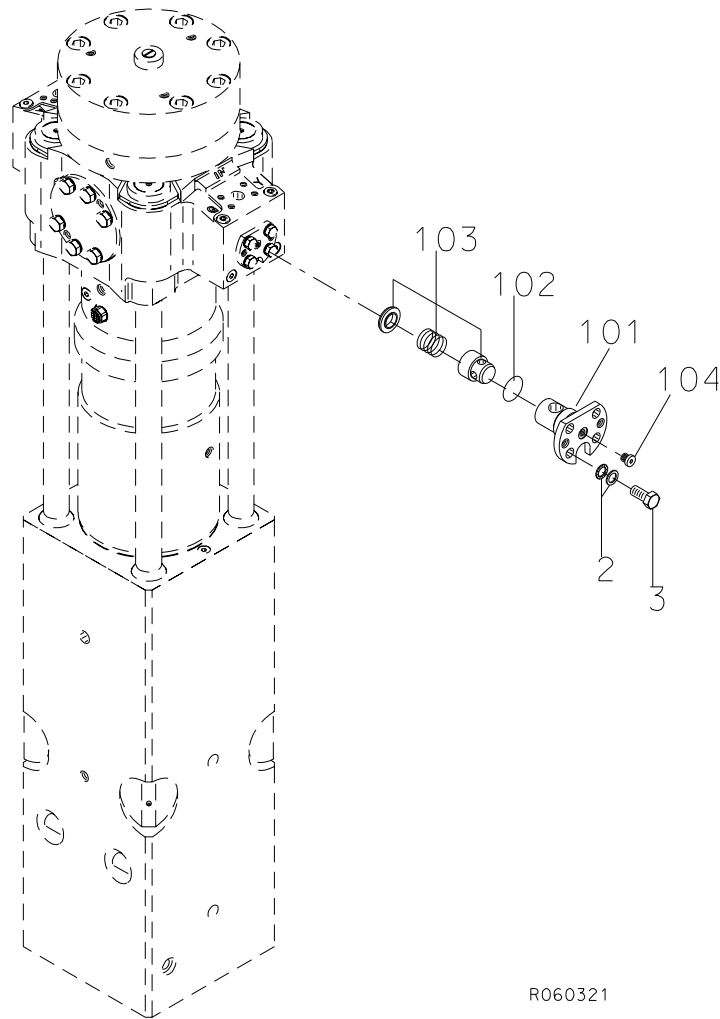
4. MAIN VALVE



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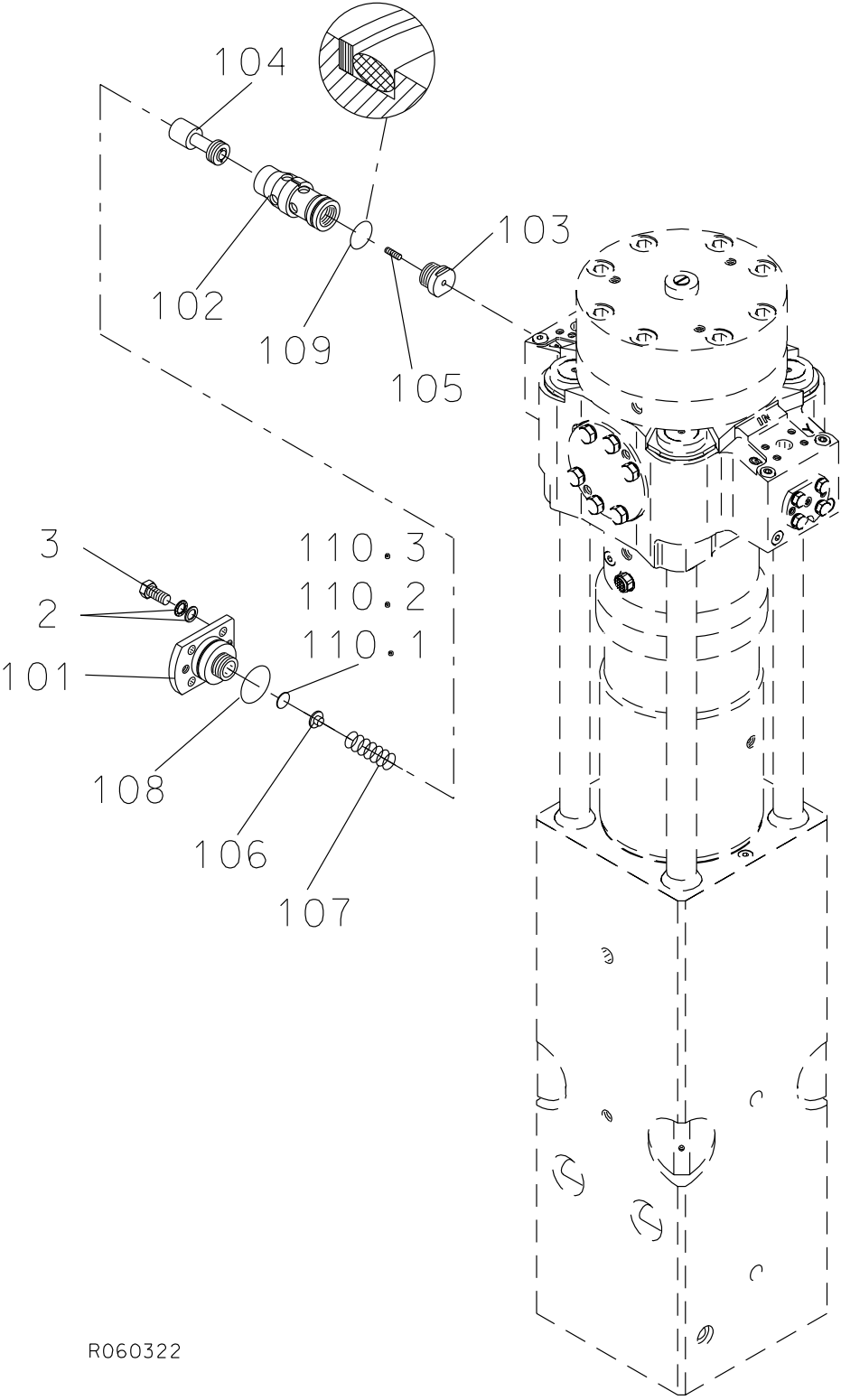
Item	Description	Part no.	Specification	Note	Qty
1	Main valve bushing	103882			1
2	Main spool	153261			1
3	Spool	102795			1
4	Spool	102796			1
5	Cover	101826			1
6	Cover	30295			1
7	O-ring	90032	D120	*	2
8	Seal	902644		*	6
9	Lock washer	91010	M20 NORD-LOCK		12
10	Hex. screw	900036	M20x70-10.9 DIN 931		12
	*) Are included in seal set				

5. CHECK VALVE



Item	Description	Part no.	Specification	Note	Qty
1	Check valve (incl. parts 101-104)	105800			1
101	Cover	105763			1
102	O-ring	90007	D44	*	1
103	Check valve	915077			1
104	Flange plug	90403	BSP 1/4		1
2	Lock washer	90597	M16 NORD-LOCK		4
3	Hex. screw	90517	M16x35-8.8 DIN 933		4
	*) Are included in seal set				

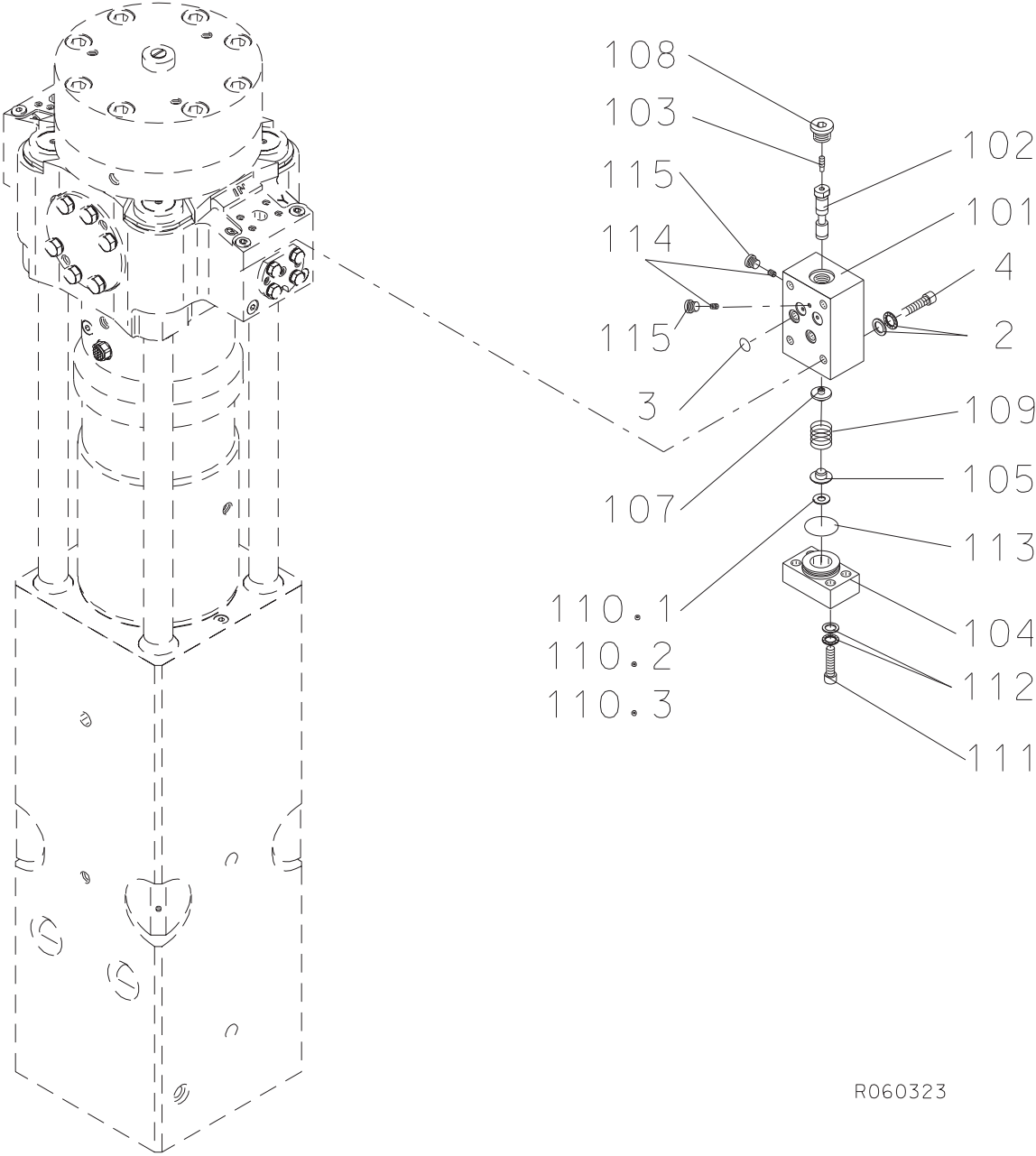
6. PRESSURE CONTROL VALVE



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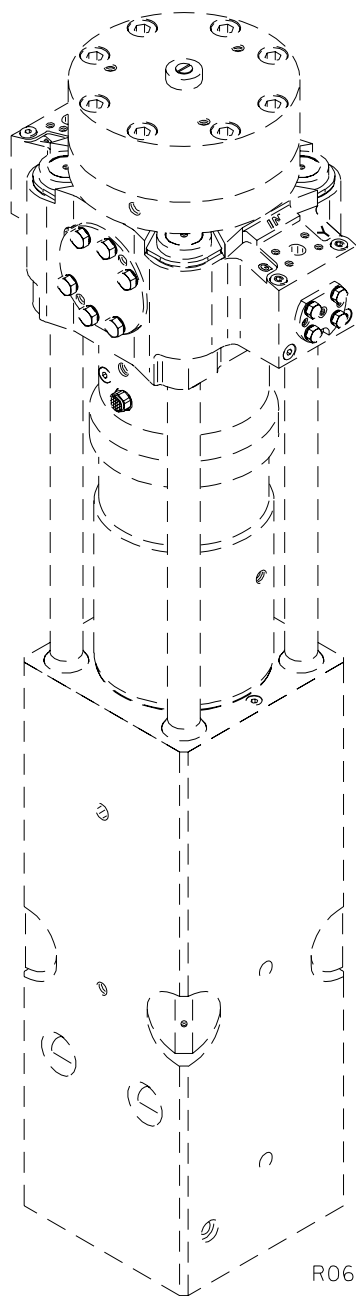
Item	Description	Part no.	Specification	Note	Qty
1	Pressure control valve (incl. parts 101-110, 2 and 3)	153616			1
101	Cover	103311			1
102	Valve housing	104010			1
103	Guide	400581			1
104	Spool	300866			1
105	Spool	400582			1
106	Spring guide	42174			1
107	Spring	90118			1
108	O-ring	90030	D75	*	1
109	Seal	41374	D55	*	1
110.1	Shim plate	42363	S=1		1
110.2	Shim plate	42362	S=0.5		1
110.3	Shim plate	42361	S=1.5		1
2	Lock washer	90597	M16 NORD-LOCK		4
3	Hex. screw	90517	M16x35-8.8 DIN 933		4
	*) Are included in seal set				

7. PRESSURE SEQUENCE VALVE

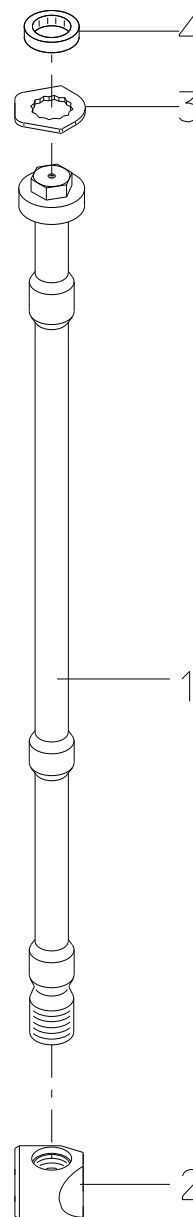


Item	Description	Part no.	Specification	Note	Qty
1	Pressure sequence valve (incl. parts 101-115, 2, 3 and 4)	102797			1
101	Valve housing	102798			1
102	Spool	102130			1
103	Spool	101579			1
104	Spring housing	103310			1
105	Spring guide	40275			1
107	Spring guide	101580			1
108	Flange plug	90424	BSP 1/2		1
109	Spring	90110			1
110.1	Shim plate	42364	S=1.5		1
110.2	Shim plate	41794	S=0.5		1
110.3	Shim plate	41793	S=1		1
111	Hex. socket screw	90522	M12x40-12.9 DIN 912		4
112	Lock washer	91012	M12 NORD-LOCK		4
113	O-ring	94091	D39	*	1
114	Nozzle	101466			2
115	Flange plug	93203	BSP 1/8		2
2	Lock washer	91012	M12 NORD-LOCK		4
3	O-ring	901942	D16	*	4
4	Hex. socket screw	902954	M12x50-12.9 DIN 912		4
	*) Are included in seal set				

8. TIE RODS CLASSIC

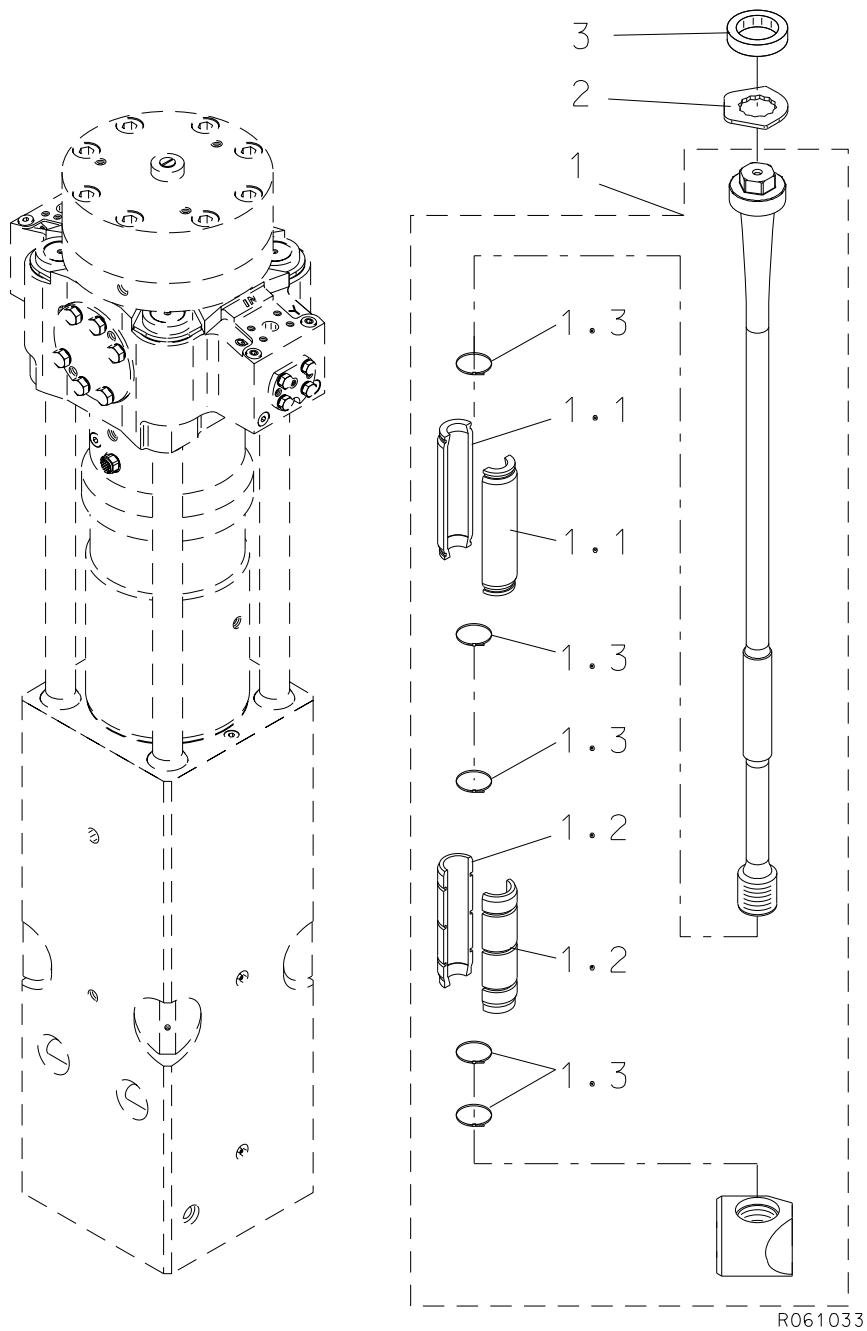


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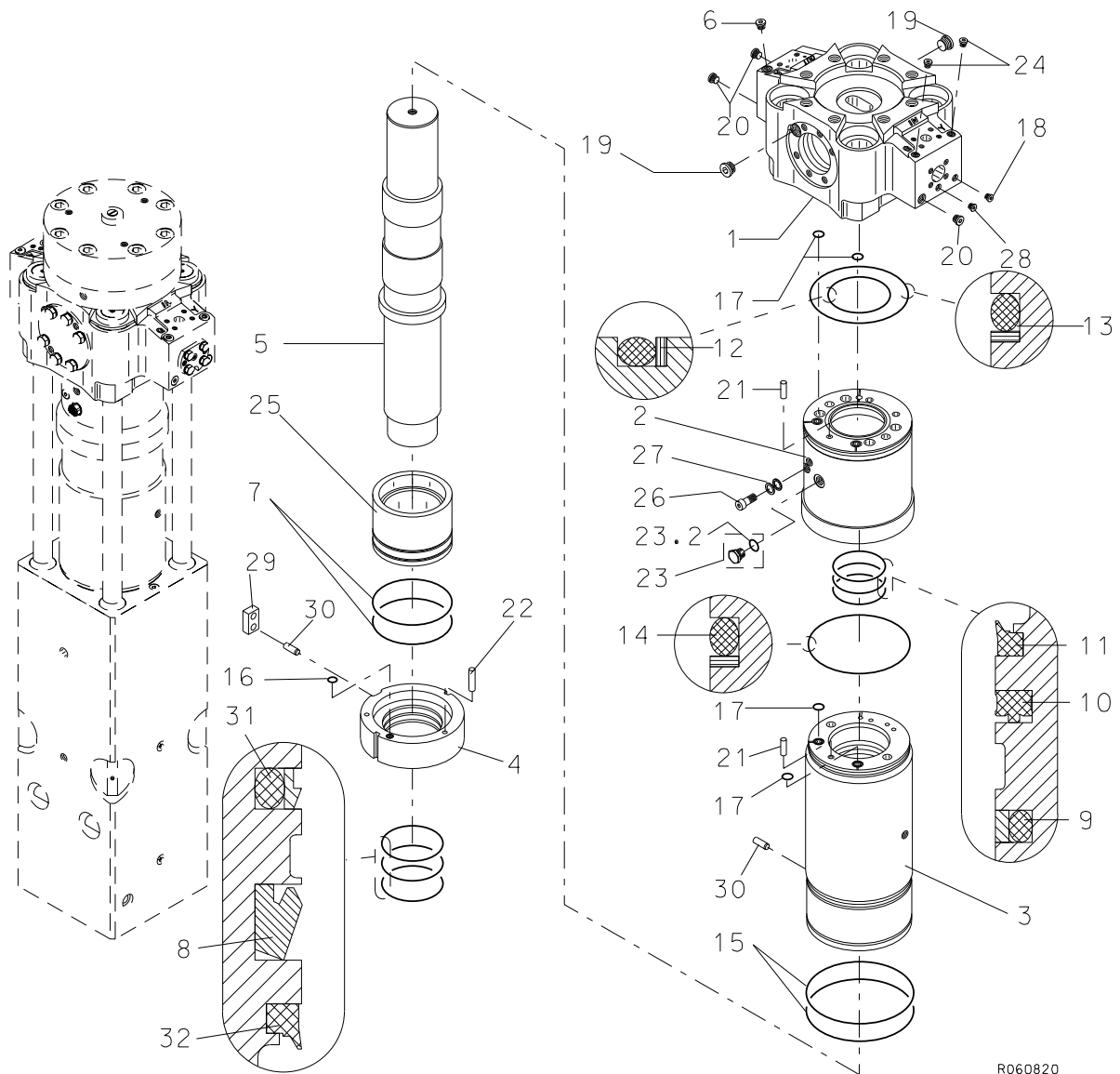
Item	Description	Part no.	Specification	Note	Qty
1	Tie rod	103777			4
2	Tie rod nut	105618			4
3	Lock plate	400478			4
4	Rubber ring	40586			4

9. TIE RODS VIDAT



Item	Description	Part no.	Specification	Note	Qty
1	Tie rod (incl. 1.1-1.3)	165628			4
1.1	Bushing	159596			2
1.2	Bushing	159607			2
1.3	Cable tie	952009			5
2	Lock plate	400478			4
3	Rubber ring	40586			4
Kit	Tie rod set	K40011	incl. 4 pcs 165628		1

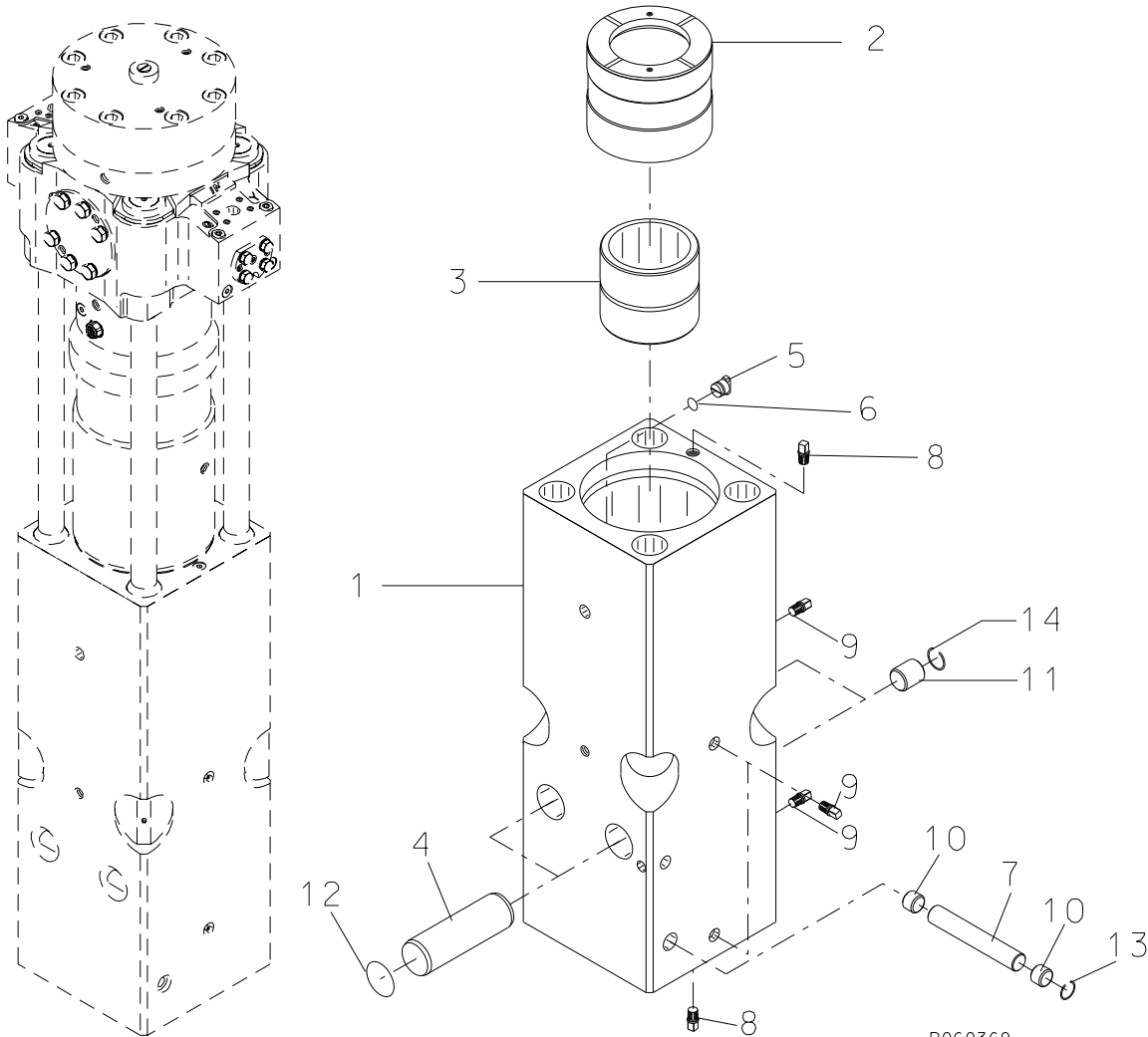
10. BODY PARTS



R060820

Item	Description	Part no.	Specification	Note	Qty
1	Valve body	105181			1
2	Seal carrier	105765			1
3	Cylinder	110374			1
4	Seal carrier	161709			1
5	Piston	153397			1
6	Breather	400562	BSP 1/2		1
7	O-ring	90036	D209	*	2
8	Seal	903066	D160	*	1
9	Seal	111871	D141	*	1
10	Seal	911023	D142	*	1
11	Wiper	90064	D142	*	1
12	Seal	400474	D160	*	1
13	Seal	110509	D300	*	1
14	Seal	400481	D280	*	1
15	O-ring	910015	D269	*	2
16	O-ring	90011	D14	*	1
17	O-ring	910018	D21	*	4
18	Flange plug	90403	BSP 1/4		2
19	Flange plug	90410	BSP 1		2
20	Flange plug	90424	BSP 1/2		3
21	Parallel pin	90317	16m6x50 DIN 6325		2
22	Parallel pin	904017	16m6x70 DIN 6325		1
23	Breather (incl. part 23.2)	101700			1
23.2	O-ring	901173	D27	*	1
24	Flange plug	90444	BSP 3/8		2
25	Bearing bushing	103003			1
26	Hex. socket screw	91041	M12x60-8.8 DIN 912		1
27	Lock washer	91012	M12 NORD-LOCK		1
28	Plug	41658	BSP 1/4		1
29	Stopper	156223			1
30	Pin	156257			2
31	Seal	952372		*	1
32	Wiper	952370		*	1
	*) Are included in seal set				

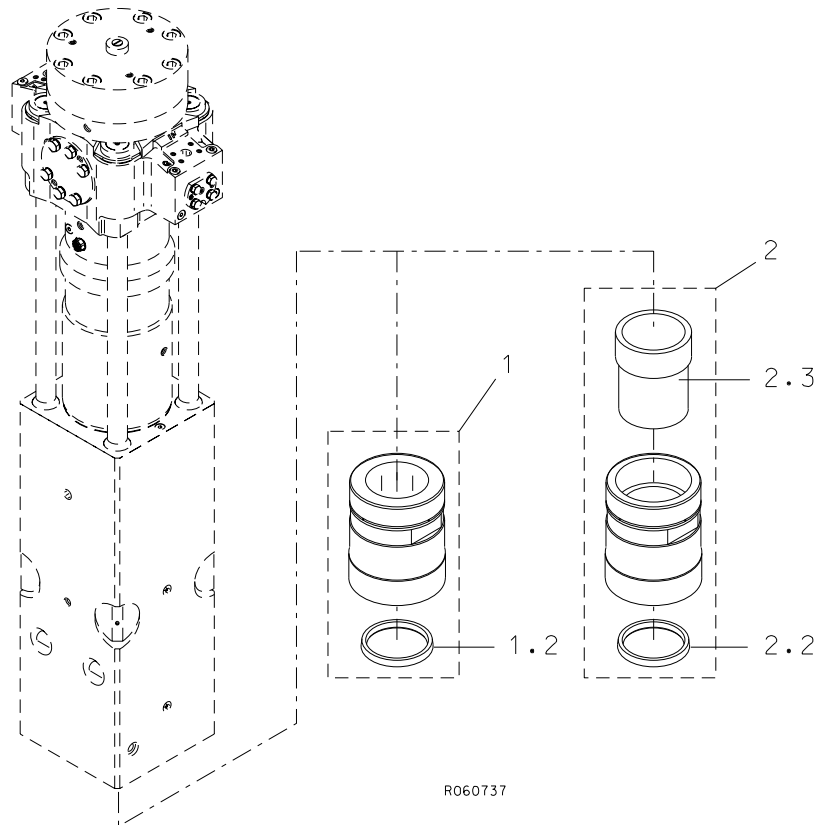
11. FRONT HEAD



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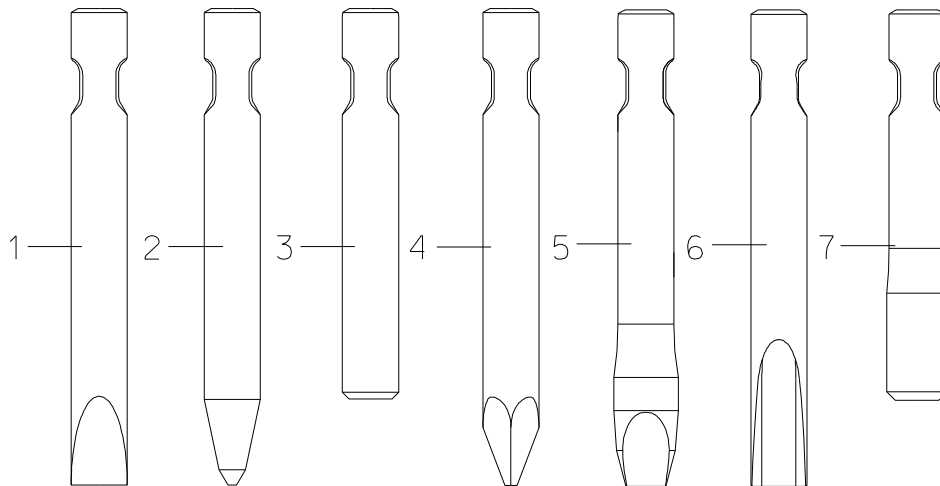
Item	Description	Part no.	Specification	Note	Qty
1	Front head (incl. parts 8-9)	105205			1
2	Thrust ring	105604			1
3	Upper tool bushing	105697			1
4	Tool retaining pin	105723	D85		2
5	Wedge	40110			1
6	O-ring	90000	D24	*	1
7	Retaining pin	400469			1
8	Plug	111404	BSP 1/2		2
9	Plug	111399	BSP 1/4		4
10	Plug	104235			2
11	Plug	104236			2
12	O-ring	90043	D84	*	2
13	Spring ring	902262	B40 DIN 7993		1
14	Spring ring	902807	B50 DIN 7993		2
	*) Are included in seal set				

12. LOWER TOOL BUSHING



Item	Description	Part no.	Specification	Note	Qty
1	Lower tool bushing, standard (incl. part 1.2)	105427			1
1.2	Seal	105426	D174		1
2	Lower tool bushing, extreme duty (incl. parts 2.2-2.3)	158132			1
2.2	Seal	105426	D174		1
2.3	Insert	158134			1

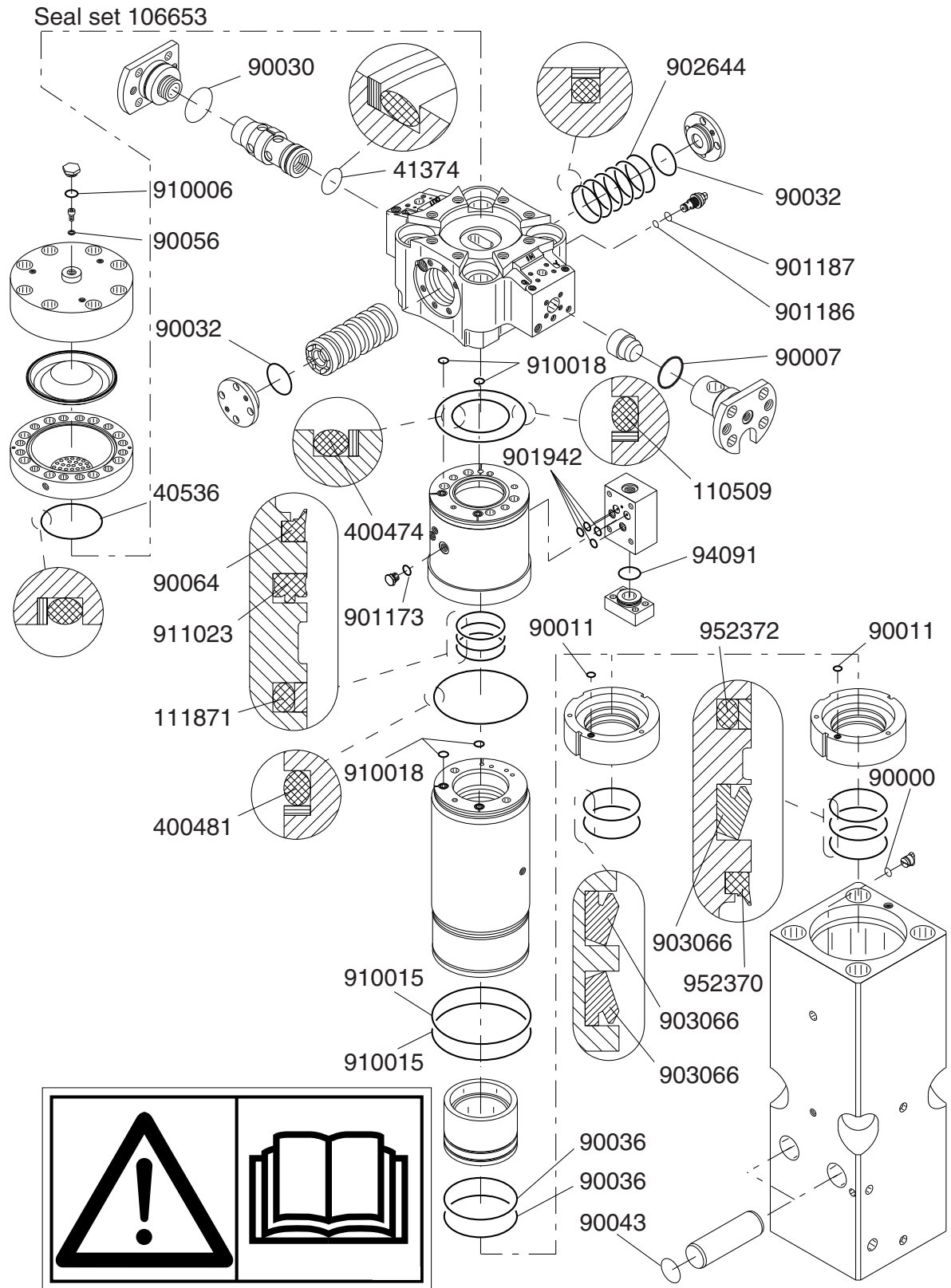
13. TOOL



R060731

Item	Description	Part no.	Specification	Note	Qty
1	Chisel	111	L = 1450 mm, W = 241 kg, D = 175 mm		1
2	Moil point	113	L = 1450 mm, W = 236 kg, D = 175 mm		1
3	Blunt	114	L = 1300 mm, W = 232 kg, D = 175 mm		1
4	Pyramid	113K3	L = 1450 mm, W = 226 kg, D = 175 mm		1
5	Limestone Chisel	111F3	L = 1450 mm, W = 250 kg, D = 175 mm		1
6	Hard Rock Chisel	111A2	L = 1450 mm, W = 257 kg, D = 175 mm		1
7	Super Blunt	114T2	L = 1350 mm, W = 255 kg, D = 203 mm		1

14. SEAL SET

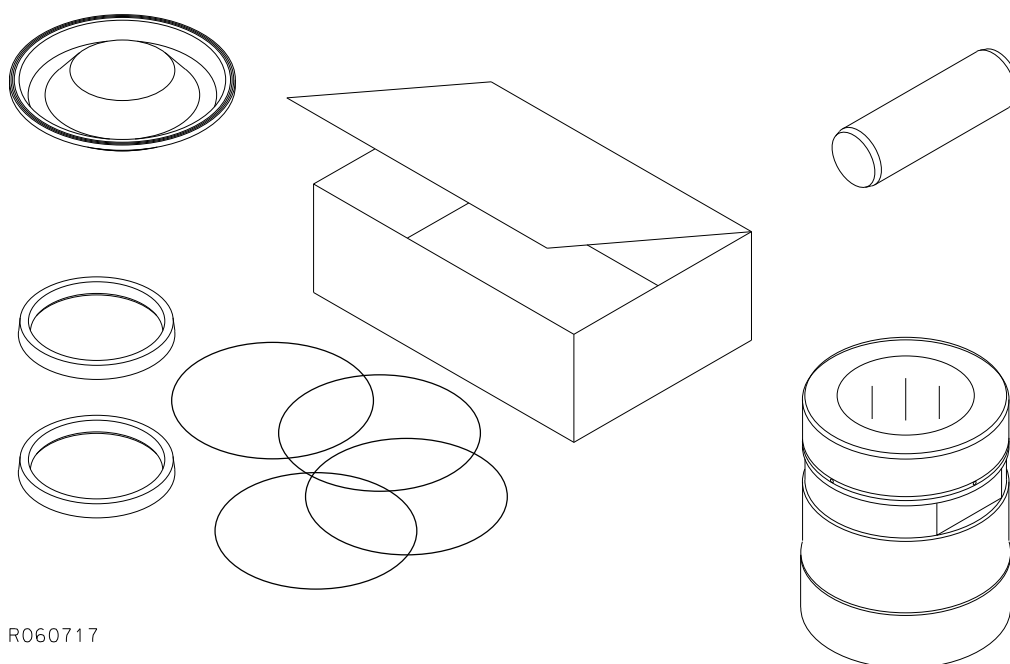


This summary only indicates the position of the seals. It must NOT be used as assembly instruction. Read the manual.

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Item	Description	Part no.	Specification	Note	Qty
Kit	Seal set (incl. parts 1-29)	106653			1
1	Seal	40536	D145		1
2	Usit-ring	90056	8-13.9-1		1
3	O-ring	90030	D75		1
4	Seal	41374	D55		1
5	O-ring	90007	D44		1
6	O-ring	94091	D39		1
7	O-ring	901186	D10		1
8	Usit-ring	901187	D18		1
10	O-ring	90000	D24		1
11	O-ring	90036	D209		2
12	Seal	903066	D160		2
13	Seal	111871	D141		1
14	Seal	911023	D142		1
15	Wiper	90064	D142		1
16	Seal	400474	D160		1
17	Seal	110509	D300		1
18	Seal	400481	D280		1
19	O-ring	910015	D269		2
20	O-ring	90011	D14		1
21	O-ring	910018	D21		4
22	O-ring	90032	D120		2
23	Seal	902644			6
24	O-ring	901173	D27		1
25	O-ring	90043	D84		2
26	O-ring	901942	D16		4
27	O-ring	910006	D23		1
28	Seal	952372			1
29	Wiper	952370			1

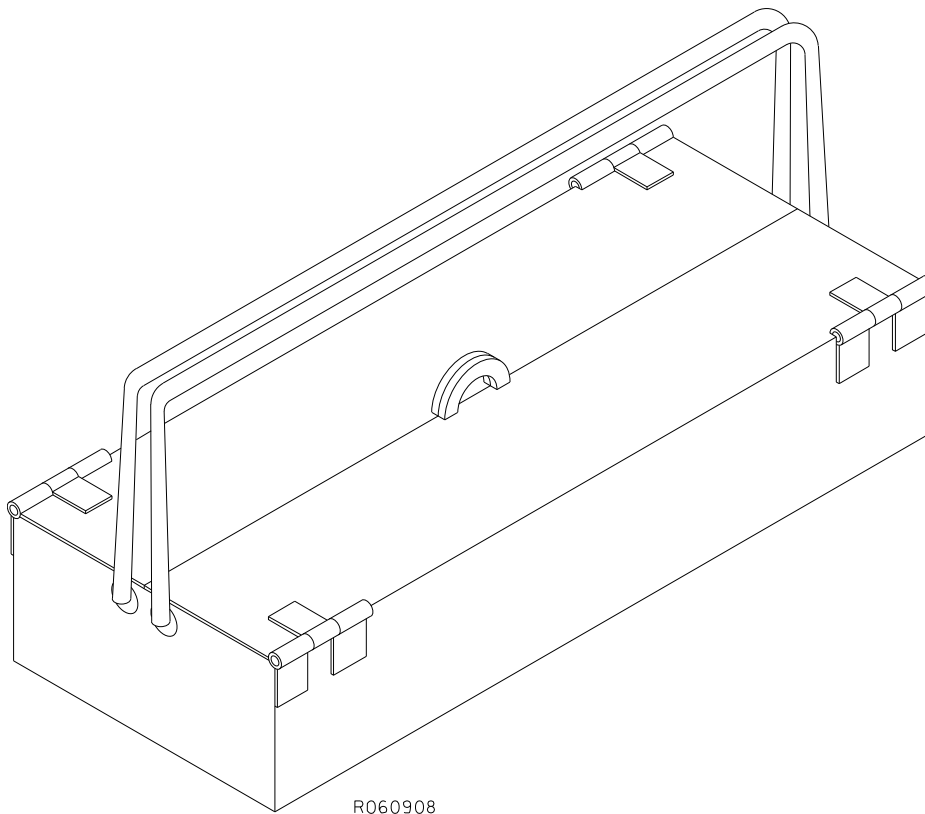
15. SERVICE KIT



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Item	Description	Part no.	Specification	Note	Qty
Kit	Service kit (incl. parts 1 - 4)	K10011			1
1	Membrane	172307			1
2	Tool retaining pin	105723	D85		2
3	Lower tool bushing, standard	105427			1
4	Seal set	106653			1

16. TOOL BOX



Item	Description	Part no.	Specification	Note	Qty
Kit3	Tool box kit 3 (incl. parts 1-22)	902044			1
6	Tool grease	902045			3
8	Screwdriver		6x150		1
9	Hammer		2 kg		1
17	Drift pin	400594	D22/D38/D40x200		1
19	Drift pin	400369	D15.5x360		1
21	Drift pin	400595	D20x400		1
22	Drift pin	400596	D16/D28/D30x250		1
41	Hook spanner	111275	Special tool for TUNNEL-housing, BR 4511 and BR 7013		1



Sandvik Mining and Construction Oy, Breakers Lahti
Taivalkatu 8, P.O. Box 165, FI-15101 Lahti, Finland
Phone Int. +358 205 44 151, Telefax Int. +358 205 44 150
www.rammer.com