



# **HYDRAULIC HAMMER**

## **RAMMER 4510**

**CITY**

**TUNNEL**

**Serial No.**

**10ADB0234-UP**

**10TEB0100-UP**

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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.

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### SPARE PART ORDERS

Quick spare part deliveries are ensured by exact orders.

#### Required information:

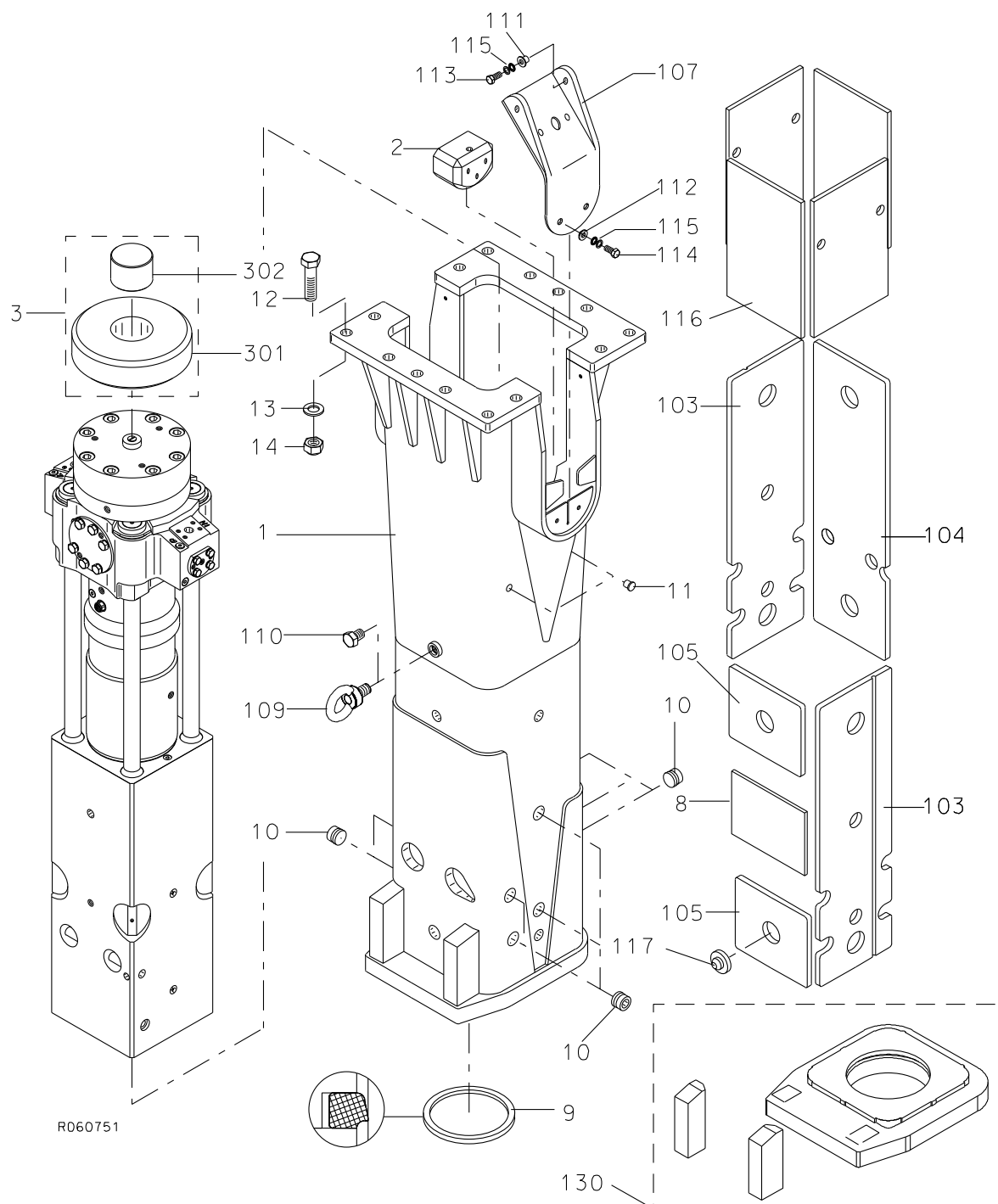
- Name of customer and contact person
  - Order number (when available)
  - Delivery address
  - Mode of delivery (air mail, etc.)
  - Required delivery date
  - Invoicing address
  - Model and serial number of the product
  - Name, number and required amount of spare parts
-

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# PARTS

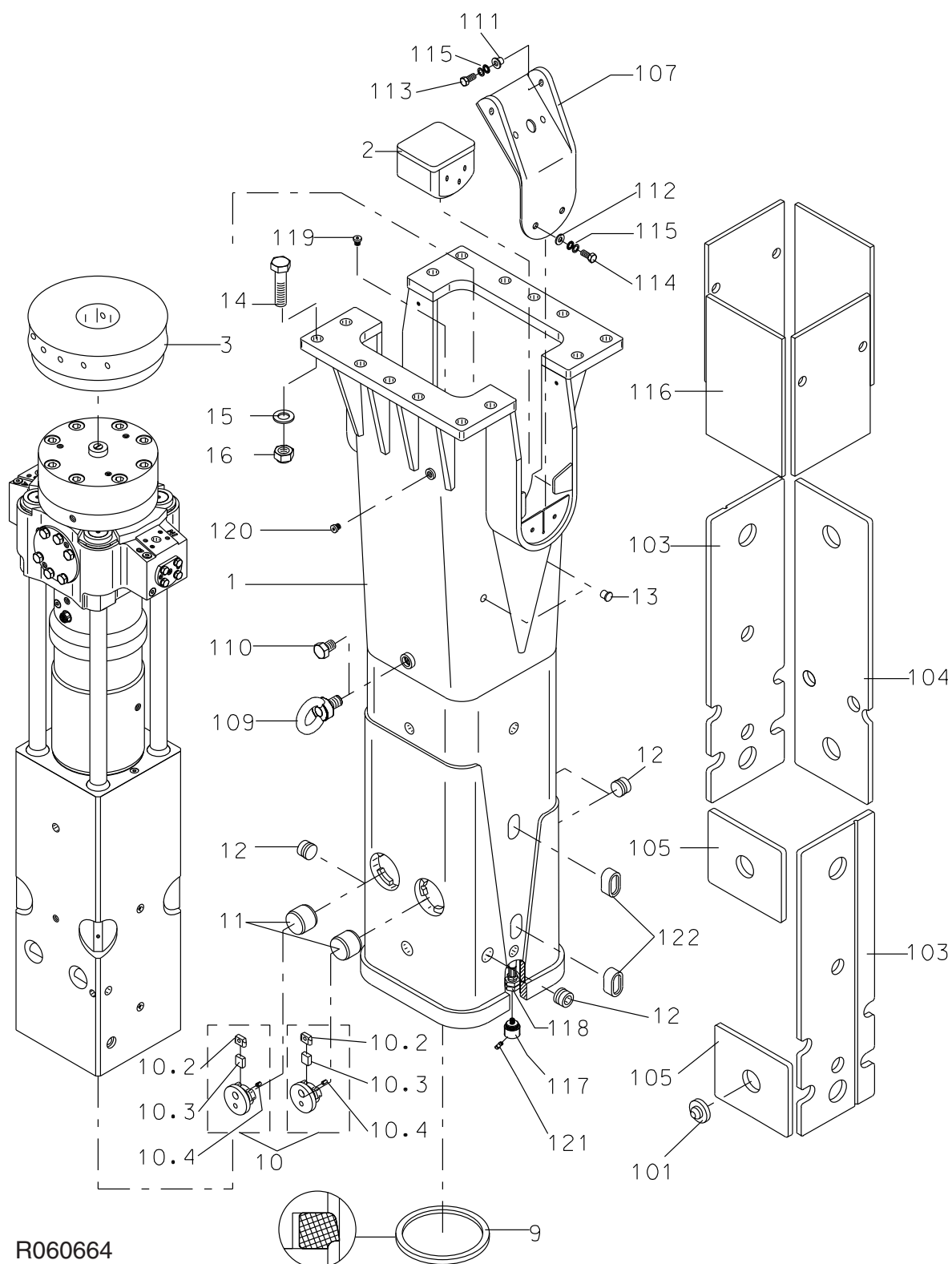
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## 1. HOUSING UNIT CITY



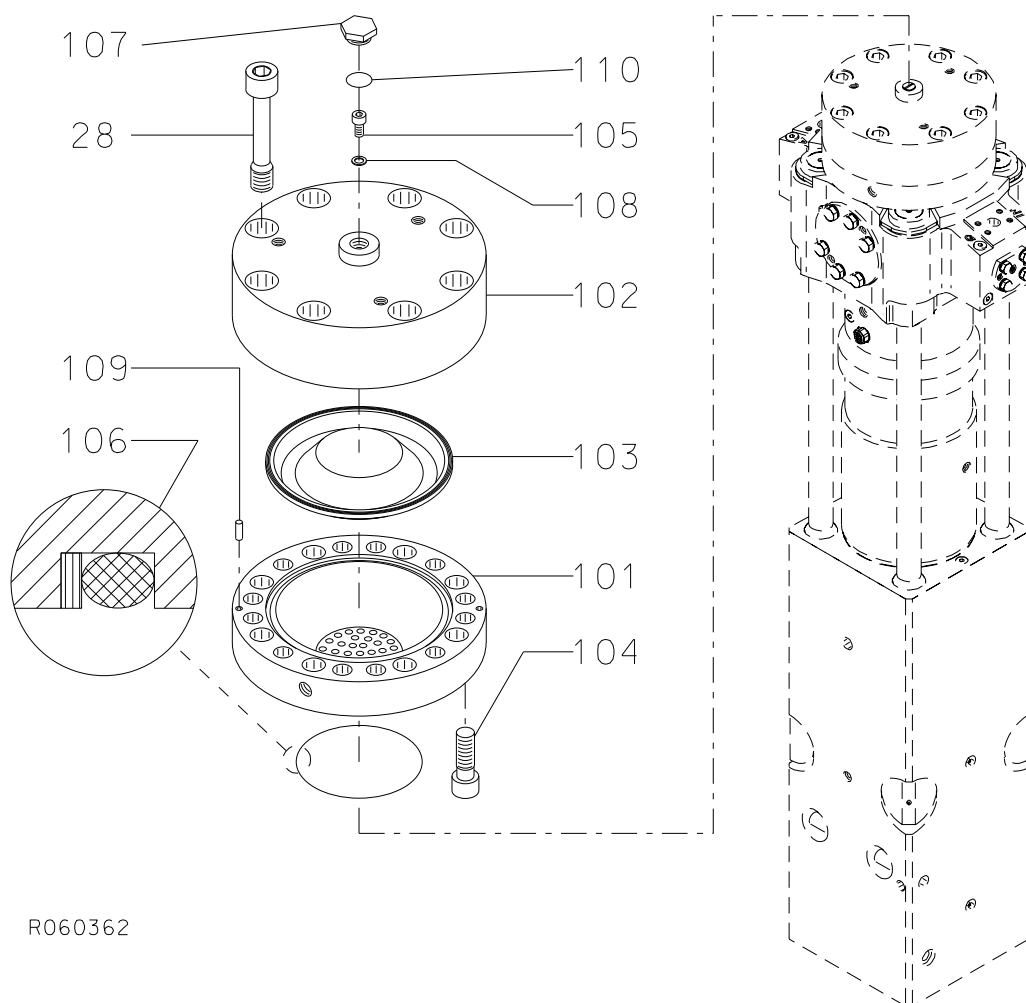
| Item  | Description                      | Part no. | Specification       | Note | Qty |
|-------|----------------------------------|----------|---------------------|------|-----|
| 1     | Housing (incl. parts 103-117)    | 104067   |                     |      | 1   |
| 2     | Pad                              | 300641   |                     |      | 2   |
| 3     | Buffer (incl. parts 301 and 302) | 300642   |                     |      | 1   |
| 8     | Shield plate                     | 103117   |                     |      | 1   |
| 9     | Seal                             | 102144   |                     |      | 1   |
| 10    | Rubber plug                      | 400676   | D50                 |      | 9   |
| 11    | Rubber plug                      | 400566   | D25                 |      | 4   |
| 12    | Hex. screw                       | 90520    | M36x140-8.8 DIN 931 |      | 14  |
| 13    | Washer                           | 90521    | 39 DIN 126          |      | 14  |
| 14    | Lock nut                         | 90519    | M36-8 DIN 985       |      | 14  |
| 103   | Wear plate                       | 104126   |                     |      | 2   |
| 104   | Wear plate                       | 104125   |                     |      | 1   |
| 105   | Wear plate                       | 104124   |                     |      | 2   |
| 107   | Shield plate                     | 102945   |                     |      | 2   |
| 109   | Lifting eye                      | 901464   | M36 DIN 580         |      | 1   |
| 110   | Hex. screw                       | 901465   | M36x40-8.8 DIN 933  |      | 1   |
| 111   | Middle bushing                   | 102944   |                     |      | 4   |
| 112   | Middle bushing                   | 102939   |                     |      | 4   |
| 113   | Hex. screw                       | 91050    | M12x40-8.8 DIN 933  |      | 4   |
| 114   | Hex. screw                       | 90513    | M12x30-8.8 DIN 933  |      | 4   |
| 115   | Lock washer                      | 91012    | M12 NORD-LOCK       |      | 8   |
| 116   | Damper plate                     | 102564   |                     |      | 4   |
| 117   | Pin                              | 102389   |                     |      | 2   |
| 130   | Wear parts                       | 160429   |                     |      | 1   |
| 301   | Buffer                           | 101689   |                     |      | 1   |
| 302   | Pin                              | 101342   |                     |      | 1   |
|       |                                  |          |                     |      |     |
| 200   | Label set (incl. part 201.1)     | 170457   |                     |      | 1   |
| 201.1 | Safety label set                 | 161564   |                     |      | 1   |

## 2. HOUSING UNIT TUNNEL



| Item  | Description                   | Part no. | Specification       | Note | Qty |
|-------|-------------------------------|----------|---------------------|------|-----|
| 1     | Housing (incl. parts 101-122) | 104187   |                     |      | 1   |
| 2     | Pad                           | 103409   |                     |      | 2   |
| 3     | Buffer                        | 104137   |                     |      | 1   |
| 9     | Seal                          | 102144   |                     |      | 1   |
| 10    | Cover (incl. parts 10.2-10.4) | 106081   |                     |      | 2   |
| 10.2  | Bar                           | 106083   |                     |      | 1   |
| 10.3  | Buffer                        | 106082   |                     |      | 1   |
| 10.4  | Split pin                     | 90327    |                     |      | 1   |
| 11    | Tool retaining pin            | 103394   |                     |      | 2   |
| 12    | Rubber plug                   | 400676   | D50                 |      | 4   |
| 13    | Rubber plug                   | 400566   | D25                 |      | 4   |
| 14    | Hex. screw                    | 90520    | M36x140-8.8 DIN 931 |      | 14  |
| 15    | Washer                        | 903003   | 37 DIN 6916         |      | 14  |
| 16    | Lock nut                      | 90519    | M36-8 DIN 985       |      | 14  |
| 101   | Pin                           | 102389   |                     |      | 8   |
| 103   | Wear plate                    | 104126   |                     |      | 2   |
| 104   | Wear plate                    | 104125   |                     |      | 1   |
| 105   | Wear plate                    | 104124   |                     |      | 2   |
| 107   | Shield plate                  | 102945   |                     |      | 2   |
| 109   | Lifting eye bolt              | 901464   | M36 DIN 580         |      | 1   |
| 110   | Hex. screw                    | 901465   | M36x40-8.8 DIN933   |      | 1   |
| 111   | Middle bushing                | 102944   |                     |      | 4   |
| 112   | Washer                        | 902815   | D13                 |      | 4   |
| 113   | Hex. screw                    | 91050    | M12x40-8.8 DIN 933  |      | 4   |
| 114   | Hex. screw                    | 91088    | M12x20-8.8 DIN 933  |      | 4   |
| 115   | Lock washer                   | 91012    | M12 NORD-LOCK       |      | 8   |
| 116   | Damper plate                  | 102564   |                     |      | 4   |
| 117   | Guide                         | 103047   |                     |      | 2   |
| 118   | Hose assembly                 | 104122   |                     |      | 1   |
| 119   | Flange plug                   | 90403    | BSP 1/4             |      | 1   |
| 120   | Flange plug                   | 90424    | BSP 1/2             |      | 1   |
| 121   | Nozzle                        | 102783   | SSCO B1/8-GG-SS5    |      | 2   |
| 122   | Rubber plug                   | 300950   |                     |      | 2   |
|       |                               |          |                     |      |     |
| 200   | Label set (incl.part 201.1)   | 170457   |                     |      | 1   |
| 201.1 | Safety label set              | 161564   |                     |      | 1   |

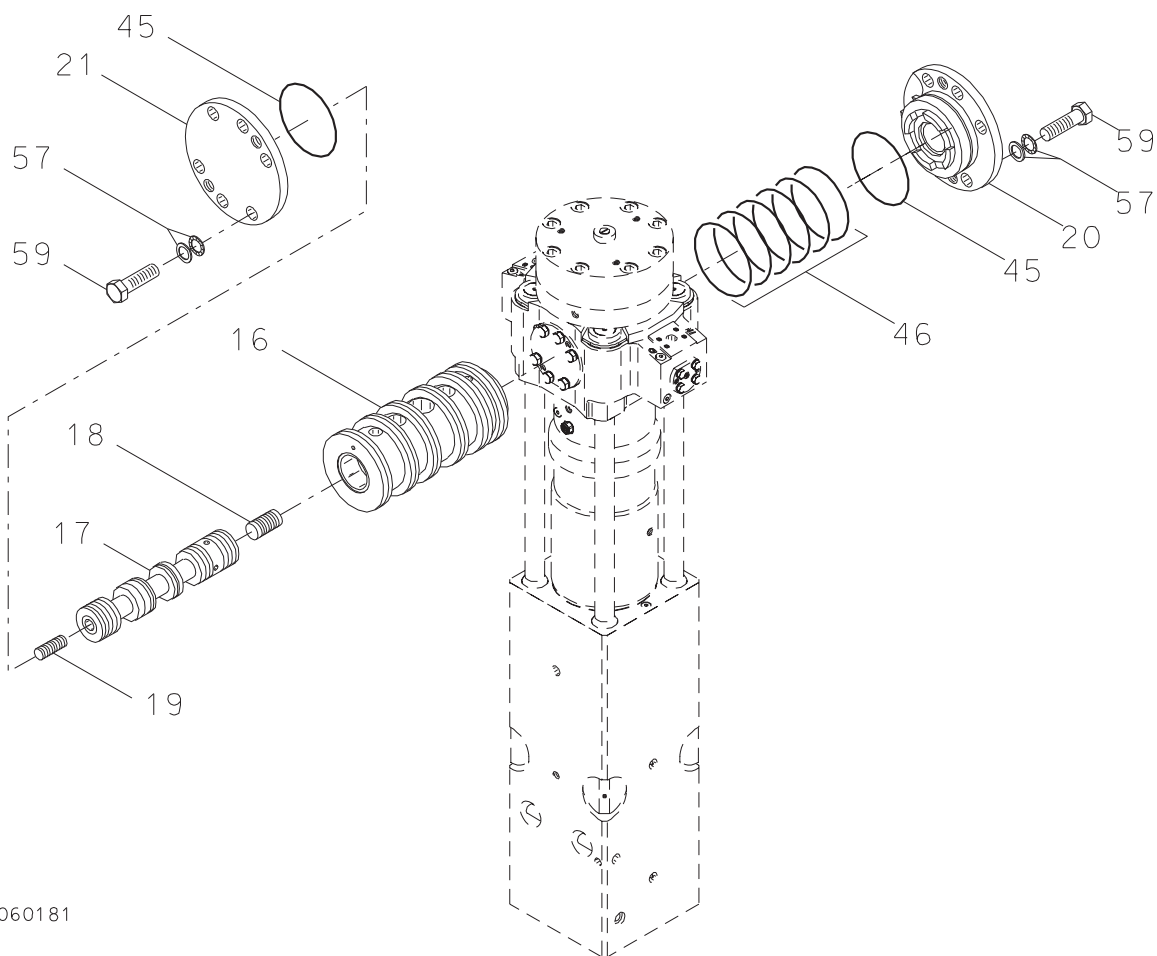
### 3. ACCUMULATOR



R060362

| Item | Description                       | Part no. | Specification    | Note | Qty |
|------|-----------------------------------|----------|------------------|------|-----|
| 1    | Accumulator (incl. parts 101-110) | 110561   |                  |      | 1   |
| 101  | Accumulator bottom                | 110560   |                  |      | 1   |
| 102  | Accumulator cover                 | 100491   |                  |      | 1   |
| 103  | Membrane                          | 172307   |                  |      | 1   |
| 104  | Accumulator screw                 | 40528    |                  |      | 12  |
| 105  | Filling plug                      | 40368    |                  |      | 1   |
| 106  | Seal                              | 40536    | D144             | *    | 1   |
| 107  | Shield plug                       | 154015   |                  |      | 1   |
| 108  | Usit-ring                         | 90056    | 8-13.9-1         | *    | 1   |
| 109  | Parallel pin                      | 90304    | 10m6x24 DIN 6325 |      | 2   |
| 110  | O-ring                            | 910006   | D23              | *    | 1   |
| 28   | Accumulator screw                 | 300711   |                  |      | 8   |
|      | *) Are included in seal set       |          |                  |      |     |

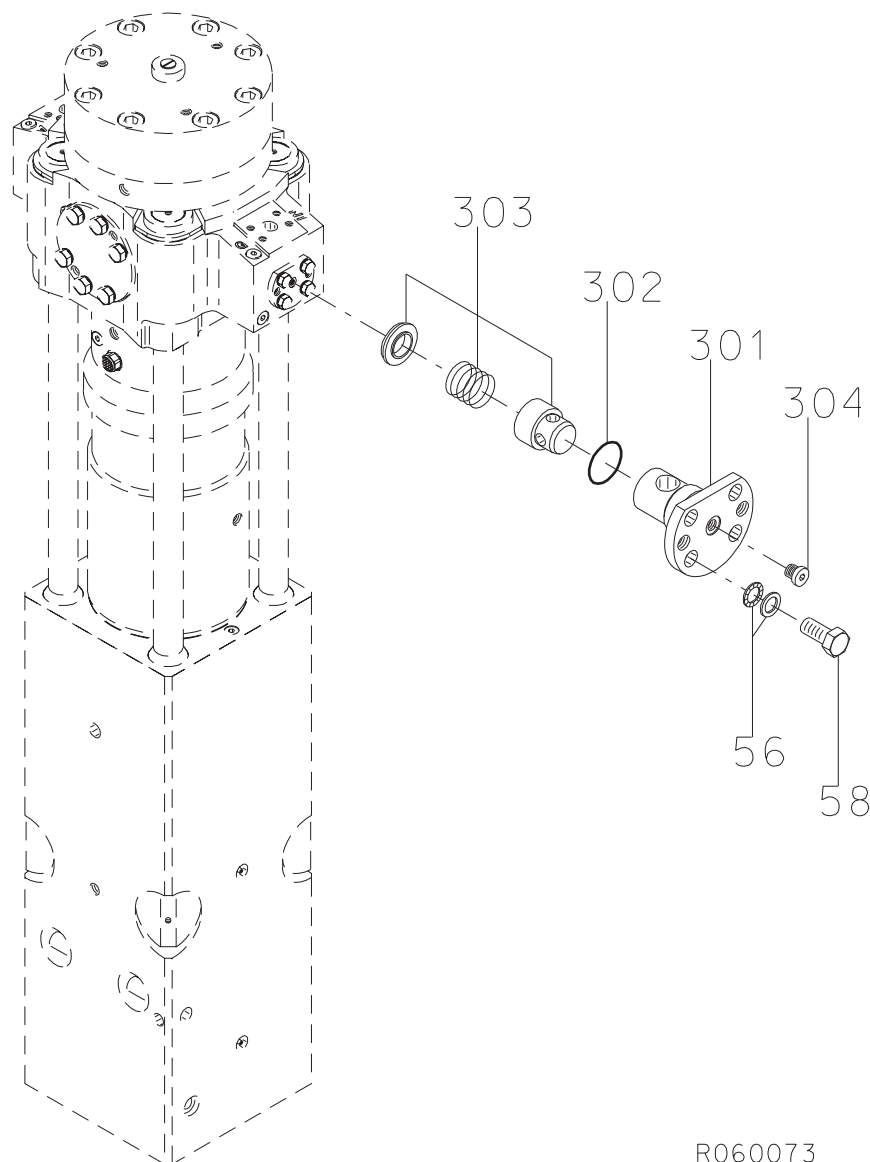
## 4. MAIN VALVE



R060181

| Item | Description                 | Part no. | Specification       | Note | Qty |
|------|-----------------------------|----------|---------------------|------|-----|
| 16   | Main valve bushing          | 104186   |                     |      | 1   |
| 17   | Main spool                  | 300921   |                     |      | 1   |
| 18   | Spool                       | 400649   |                     |      | 1   |
| 19   | Spool                       | 40523    |                     |      | 1   |
| 20   | Cover                       | 30260    |                     |      | 1   |
| 21   | Cover                       | 30295    |                     |      | 1   |
| 45   | O-ring                      | 90032    | D120                | *    | 2   |
| 46   | Seal                        | 902644   |                     | *    | 6   |
| 57   | Lock washer                 | 91010    | M20 NORD-LOCK       |      | 12  |
| 59   | Hex. screw                  | 900036   | M20x70-10.9 DIN 931 |      | 12  |
|      | *) Are included in seal set |          |                     |      |     |

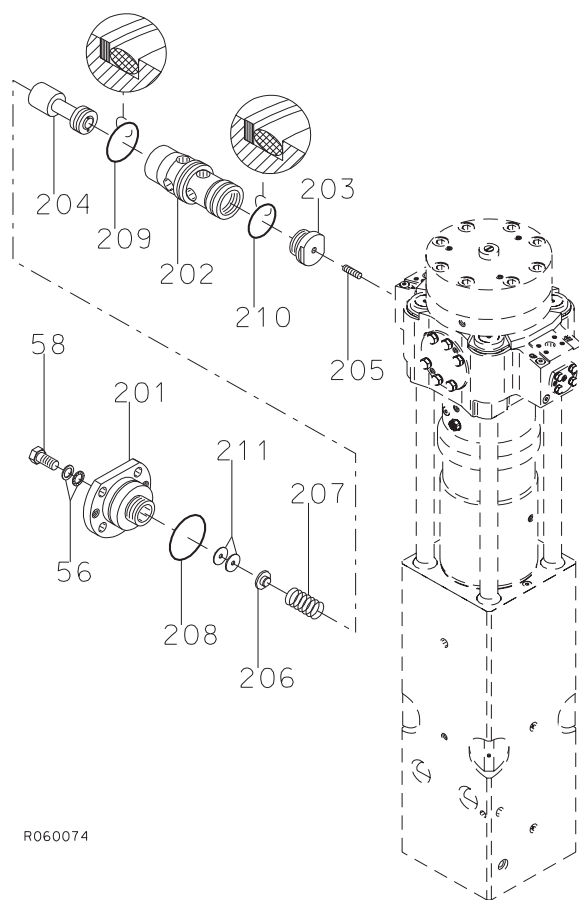
## 5. CHECK VALVE



R060073

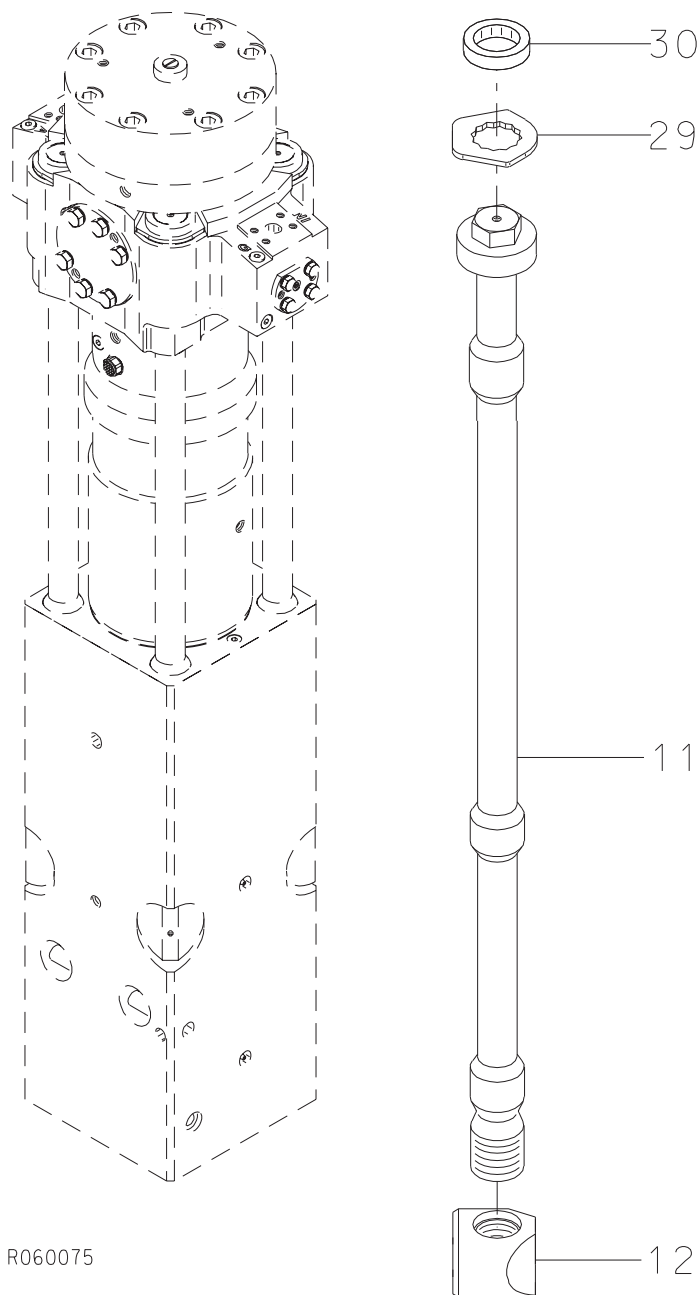
| Item | Description                       | Part no. | Specification      | Note | Qty |
|------|-----------------------------------|----------|--------------------|------|-----|
| 3    | Check valve (incl. parts 301-304) | 300725   |                    |      | 1   |
| 301  | Cover                             | 300696   |                    |      | 1   |
| 302  | O-ring                            | 90007    | D44                | *    | 1   |
| 303  | Check valve                       | 915077   |                    |      | 1   |
| 304  | Flange plug                       | 90403    | BSP 1/4            |      | 1   |
| 56   | Lock washer                       | 90597    | M16 NORD-LOCK      |      | 4   |
| 58   | Hex. screw                        | 90517    | M16x35-8.8 DIN 933 |      | 4   |
|      | *) Are included in seal set       |          |                    |      |     |

## 6. PRESSURE CONTROL VALVE



| Item | Description                                  | Part no. | Specification      | Note | Qty |
|------|----------------------------------------------|----------|--------------------|------|-----|
| 2    | Pressure control valve (incl. parts 201-211) | 300723   |                    |      | 1   |
| 201  | Cover                                        | 300871   |                    |      | 1   |
| 202  | Valve housing                                | 300814   |                    |      | 1   |
| 203  | Guide                                        | 400581   |                    |      | 1   |
| 204  | Spool                                        | 300866   |                    |      | 1   |
| 205  | Spool                                        | 400582   |                    |      | 1   |
| 206  | Spring guide                                 | 42174    |                    |      | 1   |
| 207  | Spring                                       | 90118    |                    |      | 1   |
| 208  | O-ring                                       | 90030    | D75                | *    | 1   |
| 209  | Seal                                         | 40533    | D65                | *    | 1   |
| 210  | Seal                                         | 41374    | D55                | *    | 1   |
| 211  | Shim plate                                   | 42363    | S=1                |      | X   |
| 211  | Shim plate                                   | 42362    | S=0.5              |      | X   |
| 211  | Shim plate                                   | 42361    | S=1.5              |      | X   |
| 56   | Lock washer                                  | 90597    | M16 NORD-LOCK      |      | 4   |
| 58   | Hex. screw                                   | 90517    | M16x35-8.8 DIN 933 |      | 4   |
|      | *) Are included in seal set                  |          |                    |      |     |

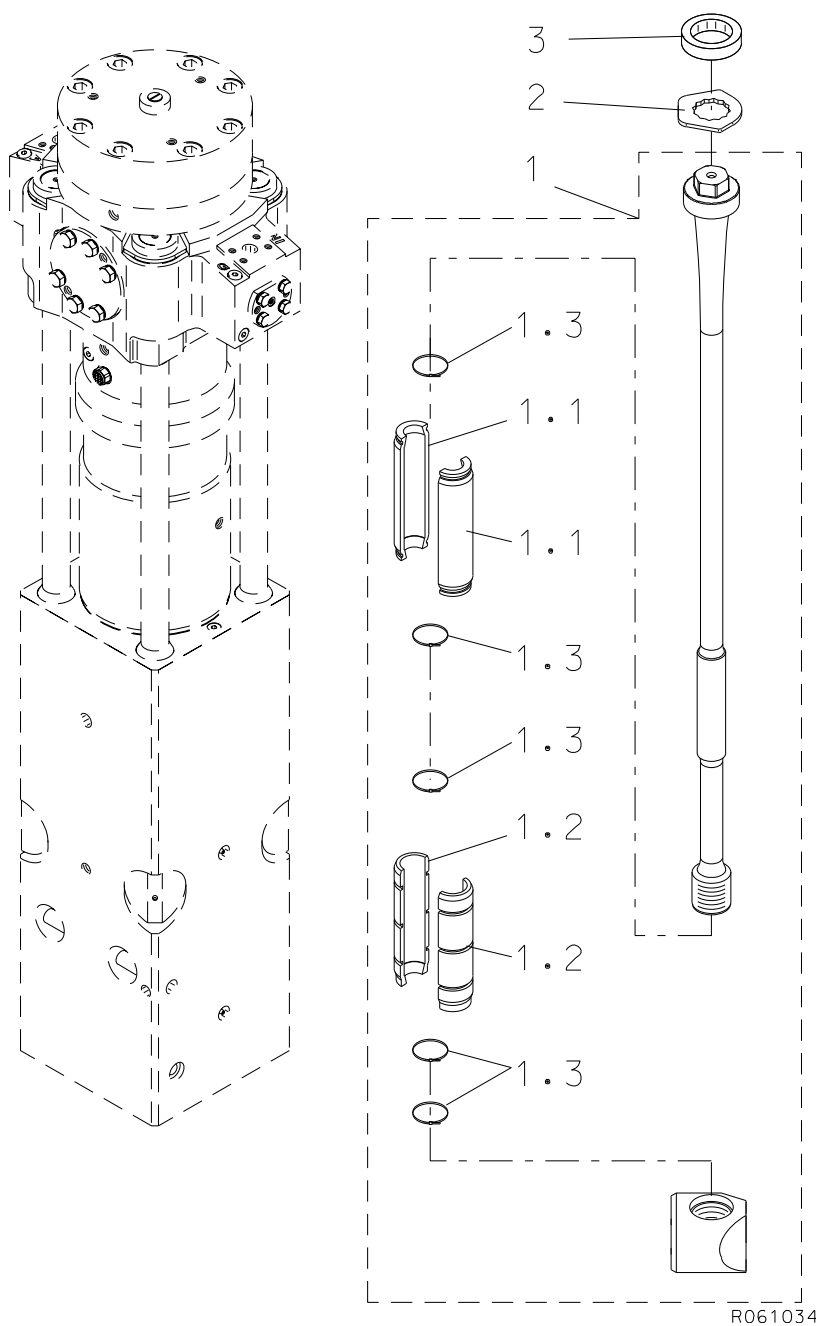
## 7. TIE RODS CLASSIC



R060075

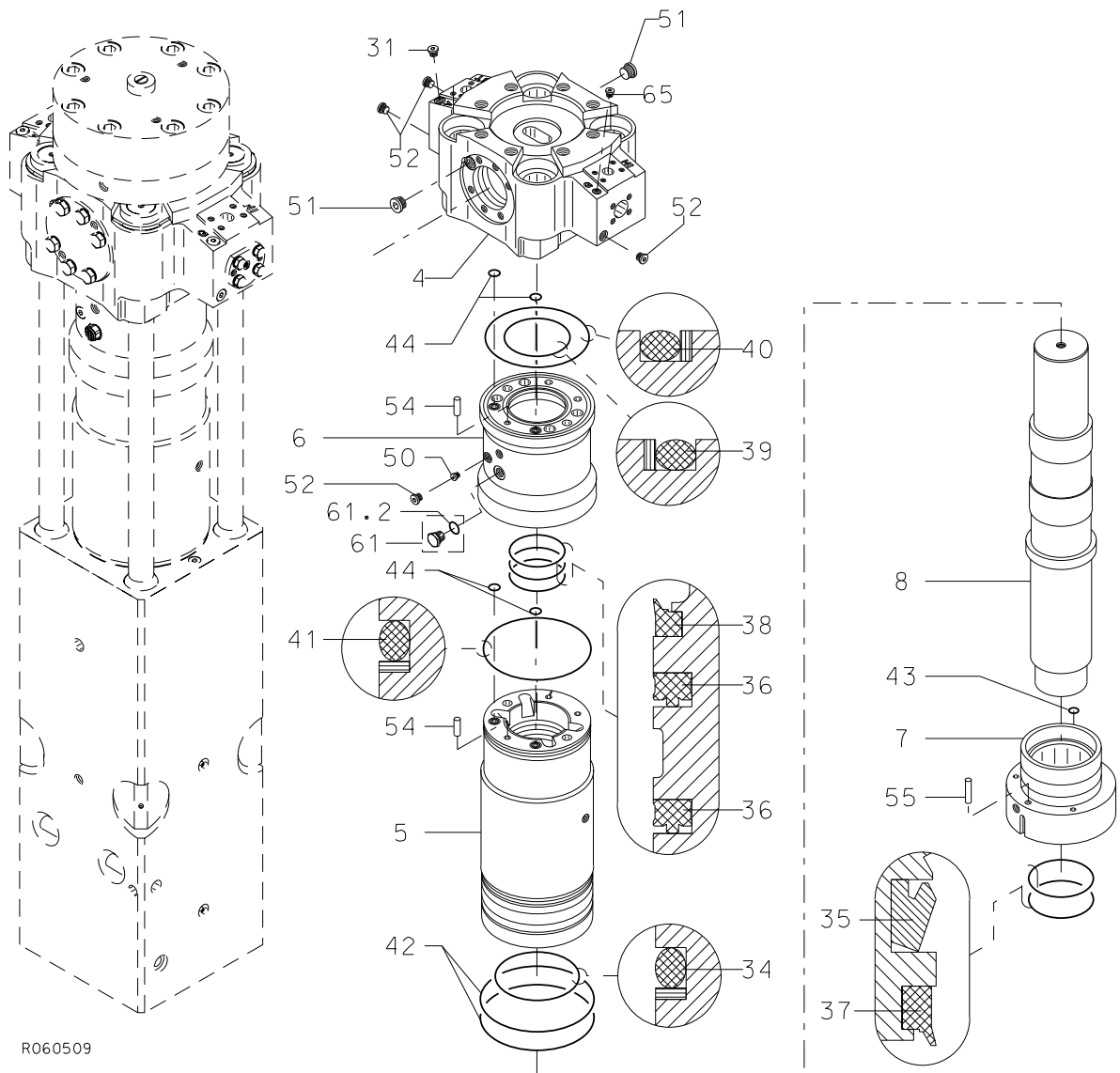
| Item | Description | Part no. | Specification | Note | Qty |
|------|-------------|----------|---------------|------|-----|
| 11   | Tie rod     | 103777   |               |      | 4   |
| 12   | Tie rod nut | 112491   |               |      | 4   |
| 29   | Lock plate  | 400478   |               |      | 4   |
| 30   | Rubber ring | 40586    |               |      | 4   |

## 8. TIE RODS VIDAT



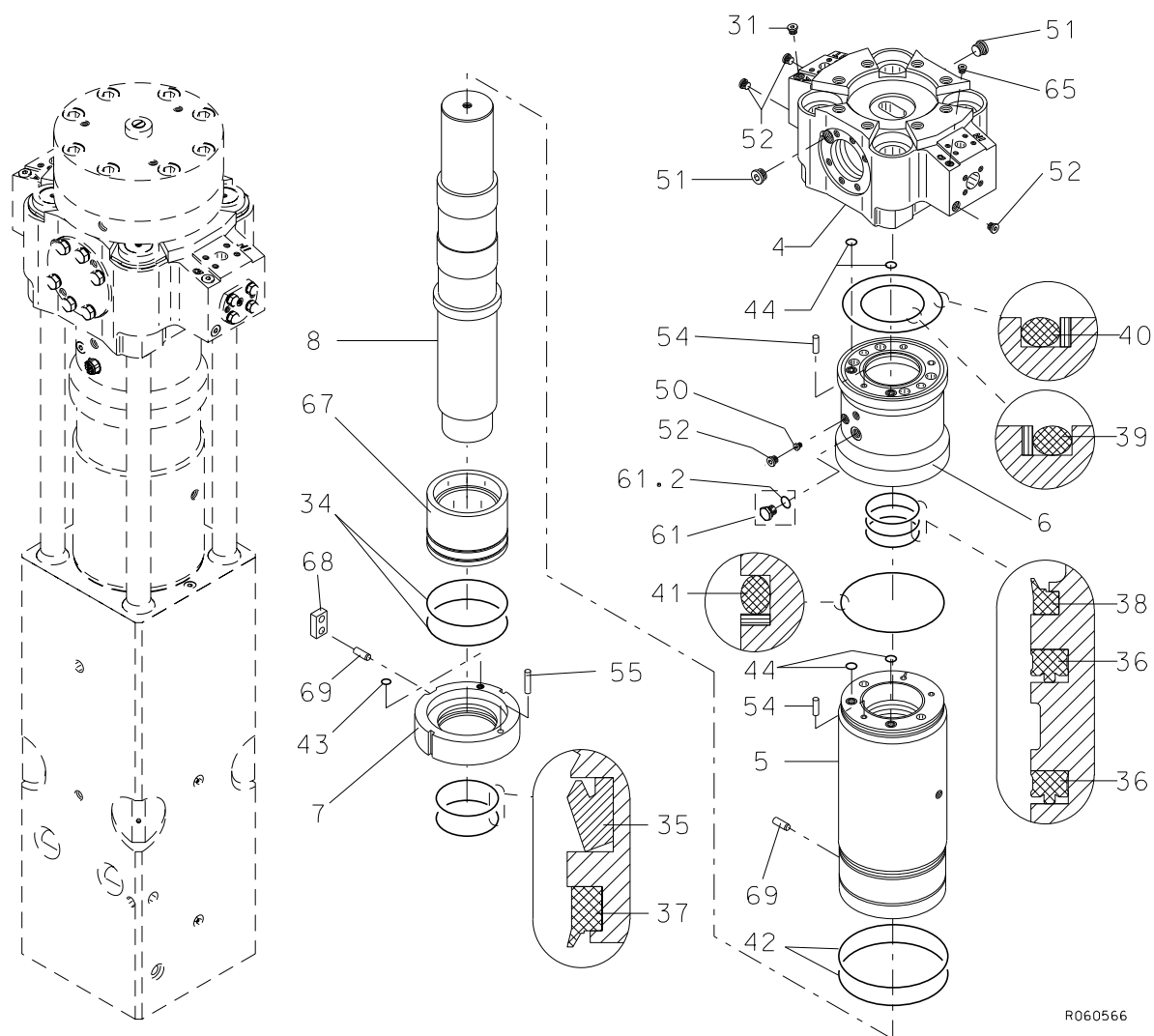
| Item | Description             | Part no. | Specification      | Note | Qty |
|------|-------------------------|----------|--------------------|------|-----|
| 1    | Tie rod (incl. 1.1-1.3) | 165699   |                    |      | 4   |
| 1.1  | Bushing                 | 159596   |                    |      | 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             | K40010   | incl. 4 pcs 165699 |      | 1   |

## 9. BODY PARTS CITY



| Item | Description                 | Part no. | Specification    | Note | Qty |
|------|-----------------------------|----------|------------------|------|-----|
| 4    | Valve body                  | 100394   |                  |      | 1   |
| 5    | Cylinder                    | 100418   |                  |      | 1   |
| 6    | Seal carrier                | 100415   |                  |      | 1   |
| 7    | Lower seal carrier          | 100416   |                  |      | 1   |
| 8    | Piston                      | 100417   |                  |      | 1   |
| 31   | Breather                    | 400562   |                  |      | 1   |
| 34   | Seal                        | 40588    | D210             | *    | 1   |
| 35   | Seal                        | 903066   | D160             | *    | 1   |
| 36   | Seal                        | 911023   | D142             | *    | 2   |
| 37   | Wiper                       | 90065    | D160             | *    | 1   |
| 38   | Wiper                       | 90064    | D142             | *    | 1   |
| 39   | Seal                        | 400474   | D160             | *    | 1   |
| 40   | Seal                        | 400476   | D260             | *    | 1   |
| 41   | Seal                        | 400481   | D280             | *    | 1   |
| 42   | O-ring                      | 910015   | D269             | *    | 2   |
| 43   | O-ring                      | 90012    | D19              | *    | 1   |
| 44   | O-ring                      | 910018   | D21              | *    | 4   |
| 50   | Flange plug                 | 90403    | BSP 1/4          |      | 1   |
| 51   | Flange plug                 | 90410    | BSP 1            |      | 2   |
| 52   | Flange plug                 | 90424    | BSP 1/2          |      | 4   |
| 54   | Parallel pin                | 90317    | 16m6x50 DIN 6325 |      | 2   |
| 55   | Parallel pin                | 904017   | 16m6x70 DIN 6325 |      | 1   |
| 61   | Breather (incl. part 61.2)  | 101700   |                  |      | 1   |
| 61.2 | O-ring                      | 901173   | D27              | *    | 1   |
| 65   | Flange plug                 | 90444    | BSP 3/8          |      | 1   |
|      |                             |          |                  |      |     |
|      | *) Are included in seal set |          |                  |      |     |

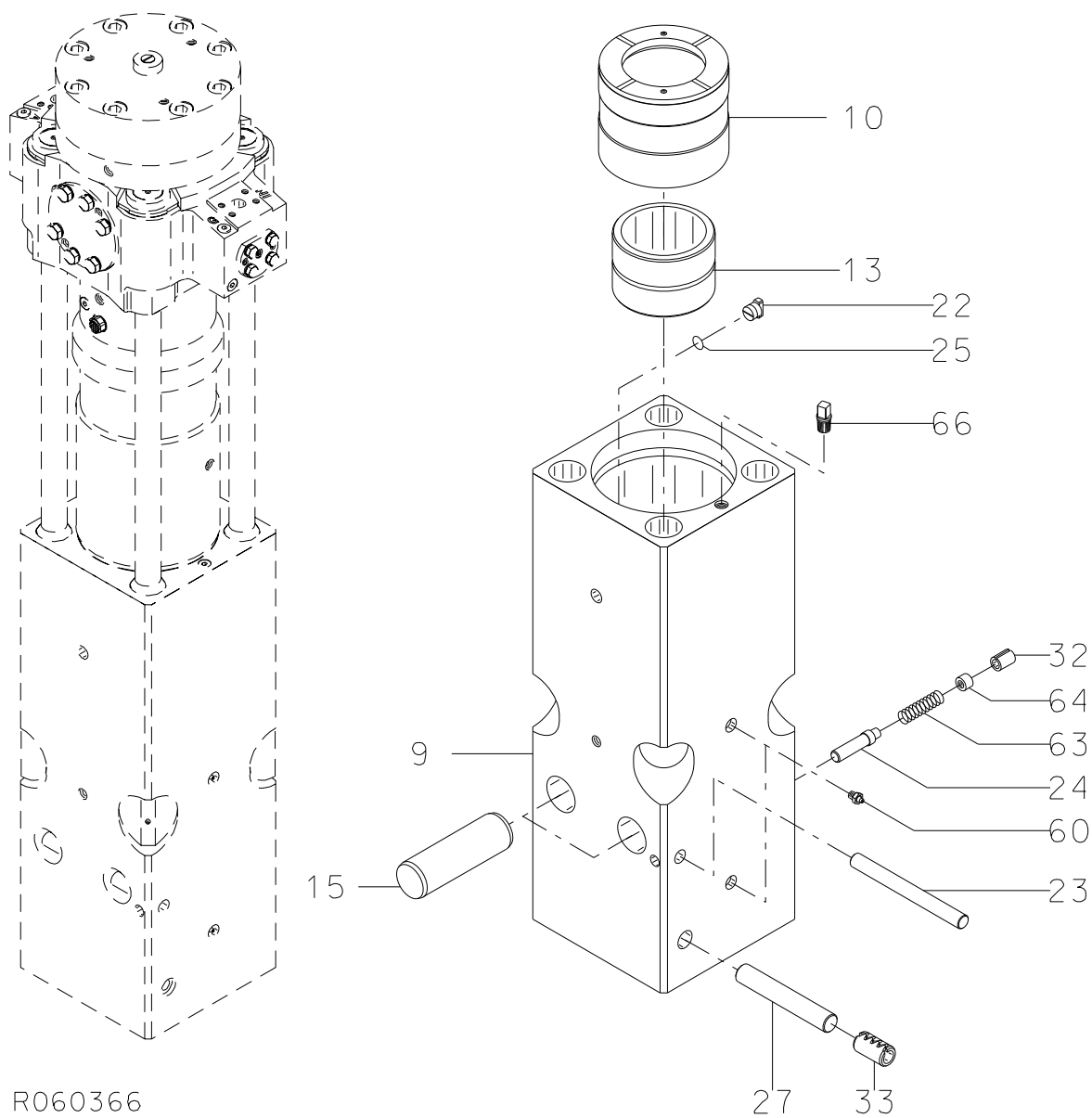
## 10. BODY PARTS TUNNEL



R060566

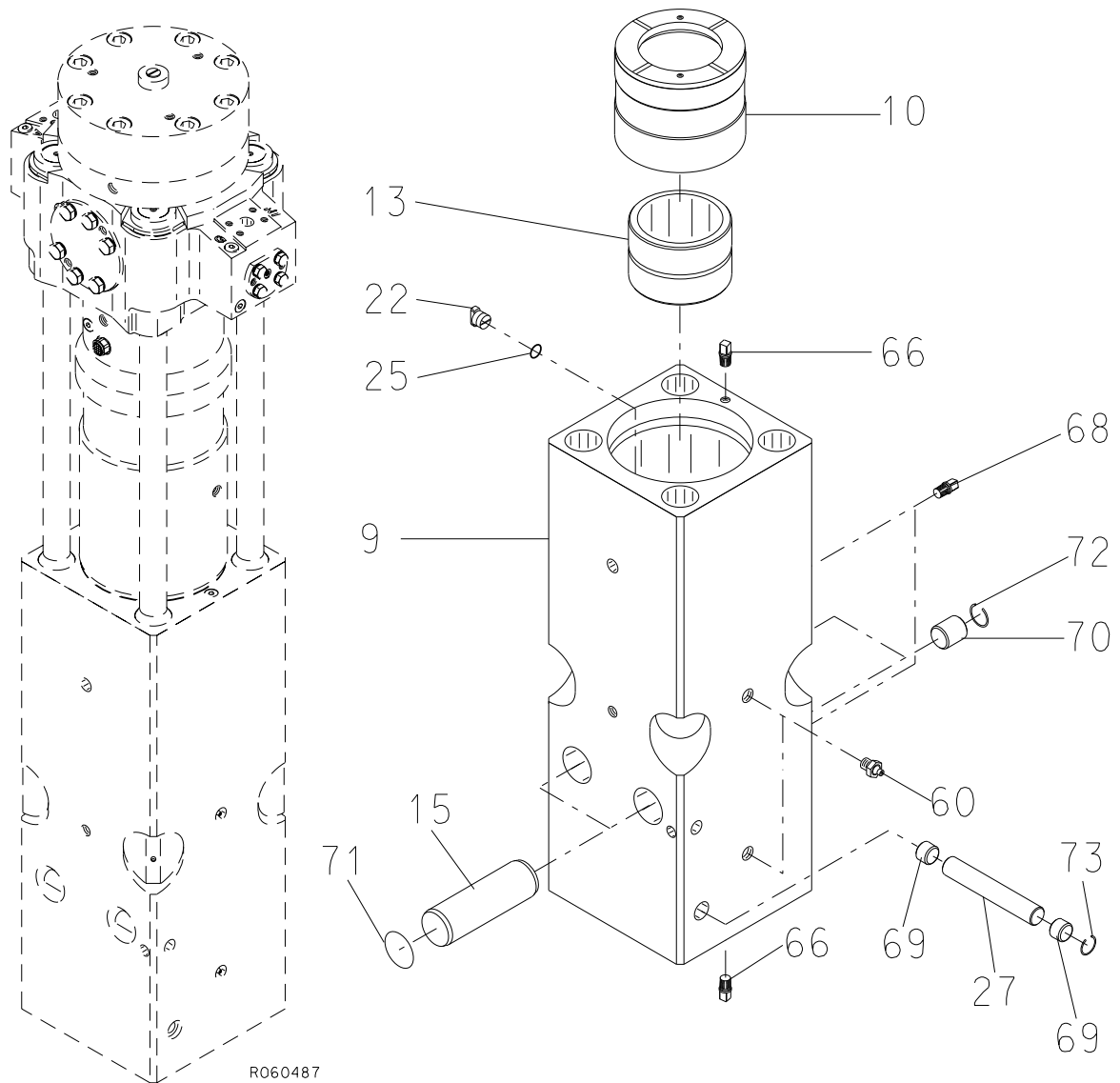
| Item | Description                 | Part no. | Specification    | Note | Qty |
|------|-----------------------------|----------|------------------|------|-----|
| 4    | Valve body                  | 100394   |                  |      | 1   |
| 5    | Cylinder                    | 102999   |                  |      | 1   |
| 6    | Seal carrier                | 100415   |                  |      | 1   |
| 7    | Seal carrier                | 103000   |                  |      | 1   |
| 8    | Piston                      | 100417   |                  |      | 1   |
| 31   | Breather                    | 400562   |                  |      | 1   |
| 34   | O-ring                      | 90036    | D209             | *    | 2   |
| 35   | Seal                        | 903066   | D160             | *    | 1   |
| 36   | Seal                        | 911023   | D142             | *    | 2   |
| 37   | Wiper                       | 90065    | D160             | *    | 1   |
| 38   | Wiper                       | 90064    | D142             | *    | 1   |
| 39   | Seal                        | 400474   | D160             | *    | 1   |
| 40   | Seal                        | 400476   | D260             | *    | 1   |
| 41   | Seal                        | 400481   | D280             | *    | 1   |
| 42   | O-ring                      | 910015   | D269             | *    | 2   |
| 43   | O-ring                      | 90011    | D14              | *    | 1   |
| 44   | O-ring                      | 910018   | D21              | *    | 4   |
| 50   | Flange plug                 | 90403    | BSP 1/4          |      | 1   |
| 51   | Flange plug                 | 90410    | BSP 1            |      | 2   |
| 52   | Flange plug                 | 90424    | BSP 1/2          |      | 4   |
| 54   | Parallel pin                | 90317    | 16m6x50 DIN 6325 |      | 2   |
| 55   | Parallel pin                | 904017   | 16m6x70 DIN 6325 |      | 1   |
| 61   | Breather (incl. part 61.2)  | 915050   |                  |      | 1   |
| 61.2 | O-ring                      | 901173   |                  | *    | 1   |
| 65   | Flange plug                 | 90444    | BSP 3/8          |      | 1   |
| 67   | Bearing bushing             | 103003   |                  |      | 1   |
| 68   | Stopper                     | 156223   |                  |      | 1   |
| 69   | Pin                         | 156257   |                  |      | 2   |
|      |                             |          |                  |      |     |
|      | *) Are included in seal set |          |                  |      |     |

## 11. FRONT HEAD CITY



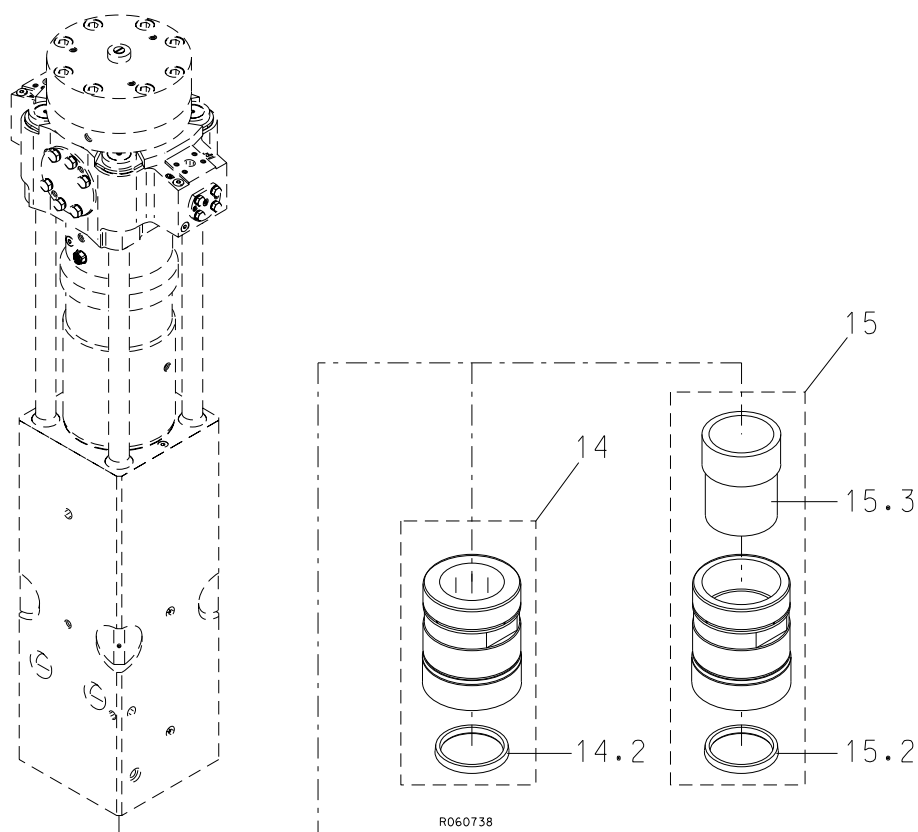
| Item | Description                            | Part no. | Specification  | Note | Qty |
|------|----------------------------------------|----------|----------------|------|-----|
| 9    | Front head (incl. parts 60, 66 and 68) | 100395   |                |      | 1   |
| 10   | Thrust ring                            | 200359   |                |      | 1   |
| 13   | Upper tool bushing                     | 300619   |                |      | 1   |
| 15   | Tool retaining pin                     | 400470   | D80            |      | 2   |
| 22   | Wedge                                  | 40110    |                |      | 1   |
| 23   | Retaining pin                          | 400468   | D30            |      | 1   |
| 24   | Retaining pin                          | 400415   | D28            |      | 1   |
| 25   | O-ring                                 | 90000    | D24            | *    | 1   |
| 27   | Retaining pin                          | 400469   | D40            |      | 1   |
| 32   | Split pin                              | 904006   | 30x40 DIN 1481 |      | 1   |
| 33   | Split pin                              | 901134   | D40x70         |      | 1   |
| 60   | Grease nipple                          | 90200    | BSP 1/4        |      | 2   |
| 63   | Spring                                 | 42428    |                |      | 1   |
| 64   | Spring guide                           | 400419   |                |      | 1   |
| 66   | Plug                                   | 111404   |                |      | 1   |
|      |                                        |          |                |      |     |
|      | *) Are included in seal set            |          |                |      |     |

## 12. FRONT HEAD TUNNEL



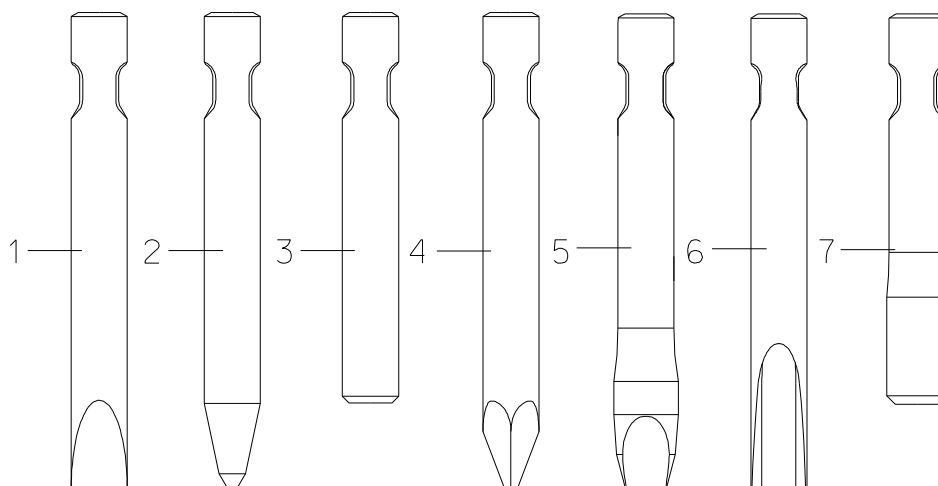
| Item | Description                        | Part no. | Specification | Note | Qty |
|------|------------------------------------|----------|---------------|------|-----|
| 9    | Front head (incl. parts 66 and 68) | 104178   |               |      | 1   |
| 10   | Thrust ring                        | 200359   |               |      | 1   |
| 13   | Upper tool bushing                 | 300619   |               |      | 1   |
| 15   | Tool retaining pin                 | 400470   | D80           |      | 2   |
| 22   | Wedge                              | 40110    |               |      | 1   |
| 25   | O-ring                             | 90000    | D24           | *    | 1   |
| 27   | Retaining pin                      | 400469   | D40           |      | 1   |
| 60   | Grease nipple                      | 90200    | BSP 1/4       |      | 2   |
| 66   | Plug                               | 111404   |               |      | 2   |
| 68   | Plug                               | 111399   |               |      | 2   |
| 69   | Plug                               | 104235   |               |      | 2   |
| 70   | Plug                               | 104236   |               |      | 2   |
| 71   | O-ring                             | 902808   | D79           |      | 2   |
| 72   | Spring ring                        | 902807   | B50 DIN 7993  |      | 2   |
| 73   | Spring ring                        | 902262   | B40 DIN 7993  |      | 1   |
|      |                                    |          |               |      |     |
|      | *) Are included in seal set        |          |               |      |     |

### 13. LOWER TOOL BUSHING



| Item | Description                                              | Part no. | Specification | Note | Qty |
|------|----------------------------------------------------------|----------|---------------|------|-----|
| 14   | Lower tool bushing, standard (incl. part 14.2)           | 102159   |               |      | 1   |
| 14.2 | Seal                                                     | 102149   |               |      | 1   |
| 15   | Lower tool bushing, extreme duty (incl. parts 15.2-15.3) | 154516   |               |      | 1   |
| 15.2 | Seal                                                     | 102149   |               |      | 1   |
| 15.3 | Insert                                                   | 154515   |               |      | 1   |

## 14. TOOL

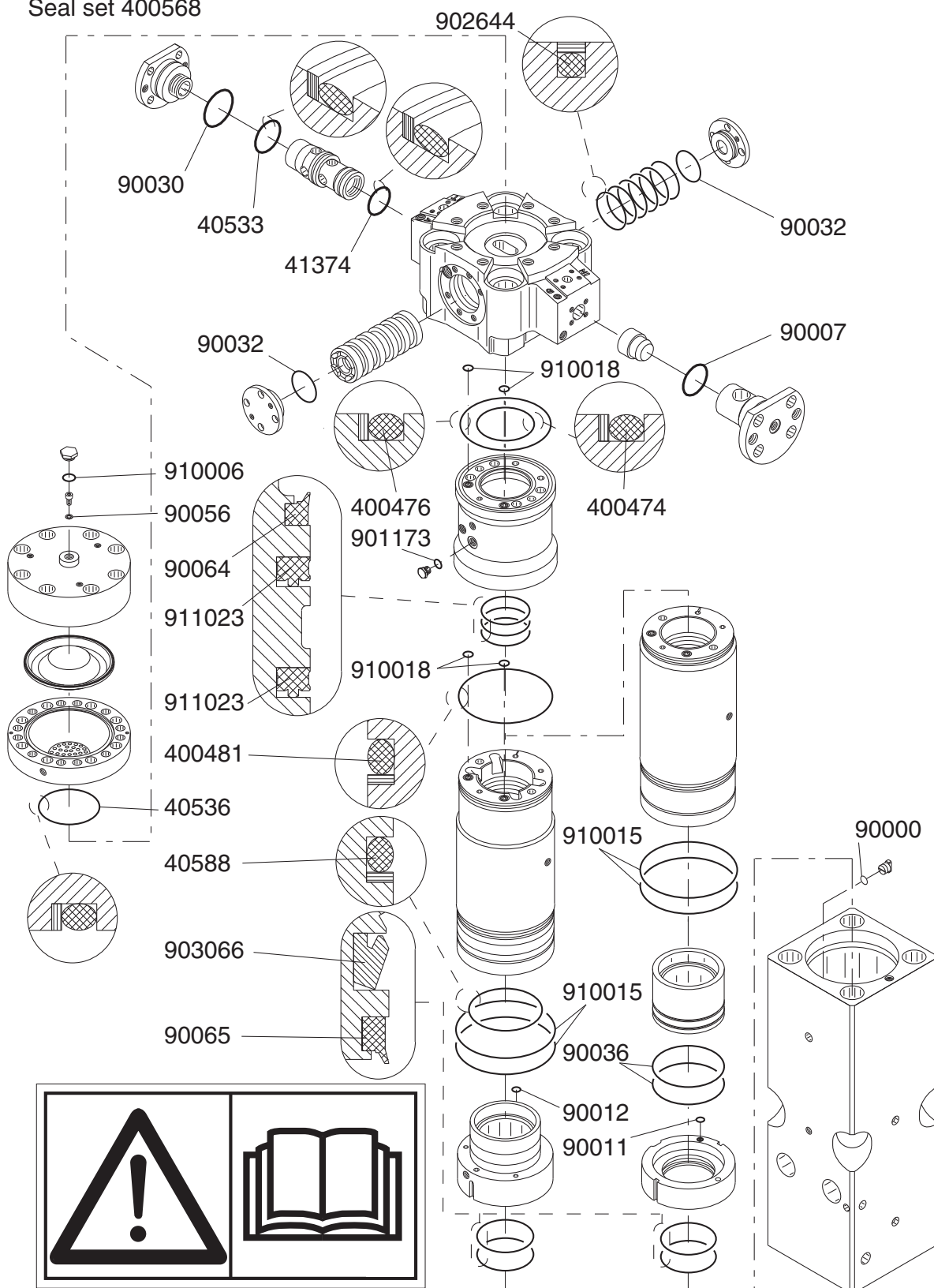


R060731

| Item | Description      | Part no. | Specification                       | Note | Qty |
|------|------------------|----------|-------------------------------------|------|-----|
| 1    | Chisel           | 101      | L = 1450 mm, W = 230 kg, D = 170 mm |      | 1   |
| 2    | Moil point       | 103      | L = 1450 mm, W = 225 kg, D = 170 mm |      | 1   |
| 3    | Blunt            | 104      | L = 1300 mm, W = 225 kg, D = 170 mm |      | 1   |
| 4    | Pyramid          | 103K3    | L = 1450 mm, W = 215 kg, D = 170 mm |      | 1   |
| 5    | Limestone Chisel | 101F3    | L = 1450 mm, W = 240 kg, D = 170 mm |      | 1   |
| 6    | Hard Rock Chisel | 101A2    | L = 1450 mm, W = 245 kg, D = 170 mm |      | 1   |
| 7    | Super Blunt      | 104T2    | L = 1350 mm, W = 248 kg, D = 203 mm |      | 1   |

## 15. SEAL SET

Seal set 400568

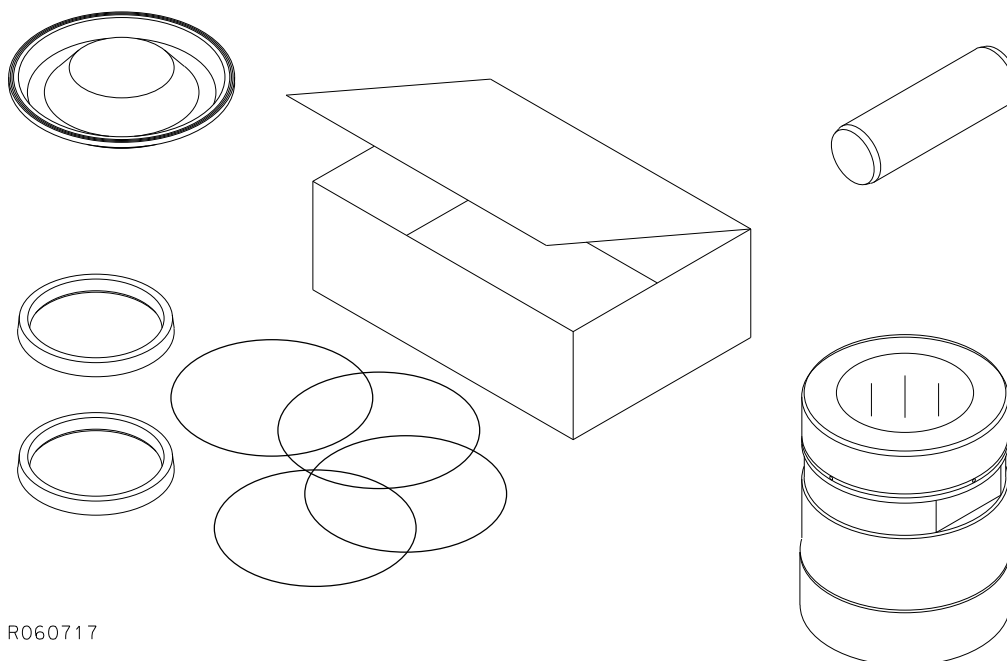


This summary only indicates the position of the seals. It must NOT be used as assembly instruction. Read the manual.

R061299

| Item | Name                        | Part no. | Specification        | Note | Qty |
|------|-----------------------------|----------|----------------------|------|-----|
| Kit  | Seal set (incl. parts 1-28) | 400568   |                      |      | 1   |
| 1    | O-ring                      | 90000    | D24                  |      | 1   |
| 2    | Seal                        | 40588    | D210                 |      | 1   |
| 3    | O-ring                      | 90036    | D209                 |      | 2   |
| 4    | Seal                        | 903066   | D160                 |      | 1   |
| 5    | Seal                        | 911023   | D142                 |      | 2   |
| 6    | Wiper                       | 90065    | D160                 |      | 1   |
| 7    | Wiper                       | 90064    | D142                 |      | 1   |
| 8    | Seal                        | 400474   | D160                 |      | 1   |
| 9    | Seal                        | 400476   | D260                 |      | 1   |
| 10   | Seal                        | 400481   | D280                 |      | 1   |
| 11   | O-ring                      | 910015   | D269                 |      | 2   |
| 12   | O-ring                      | 90012    | D19                  |      | 1   |
| 13   | O-ring                      | 90011    | D14                  |      | 1   |
| 14   | O-ring                      | 910018   | D21                  |      | 4   |
| 15   | O-ring                      | 90032    | D120                 |      | 2   |
| 17   | Seal                        | 902644   |                      |      | 6   |
| 18   | O-ring                      | 90017    | D34                  |      | 2   |
| 20   | O-ring                      | 910014   | D64                  |      | 4   |
| 21   | O-ring                      | 901173   |                      |      | 1   |
| 22   | Seal                        | 40536    | D144                 |      | 1   |
| 23   | Usit-ring                   | 90056    | 8-13.9-1             |      | 1   |
| 24   | O-ring                      | 90030    | D75                  |      | 1   |
| 25   | Seal                        | 040533   | D65                  |      | 1   |
| 26   | Seal                        | 41374    | D55                  |      | 1   |
| 27   | O-ring                      | 90007    | D44                  |      | 1   |
| 28   | O-ring                      | 910006   | D23                  |      | 1   |
| 29   | O-ring                      | 910013   | D117 Sold separately |      | 6   |

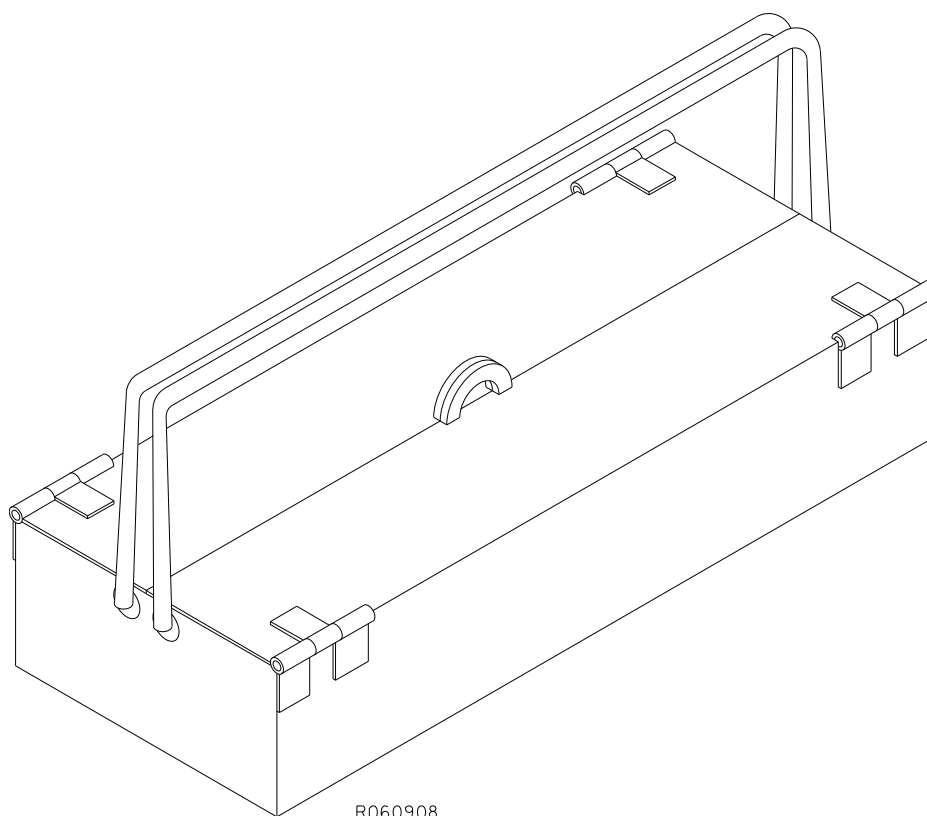
## 16. SERVICE KIT



R060717

| Item | Description                     | Part no. | Specification          | Note | Qty |
|------|---------------------------------|----------|------------------------|------|-----|
| Kit  | Service kit (incl. parts 1 - 4) | K10010   | Excluding TUNNEL, HARD |      | 1   |
| 1    | Membrane                        | 172307   |                        |      | 1   |
| 2    | Tool retaining pin              | 400470   | D80                    |      | 2   |
| 3    | Lower tool bushing, standard    | 102159   |                        |      | 1   |
| 4    | Seal set                        | 400568   |                        |      | 1   |

## 17. 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   |

[illegible]



[illegible]





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