

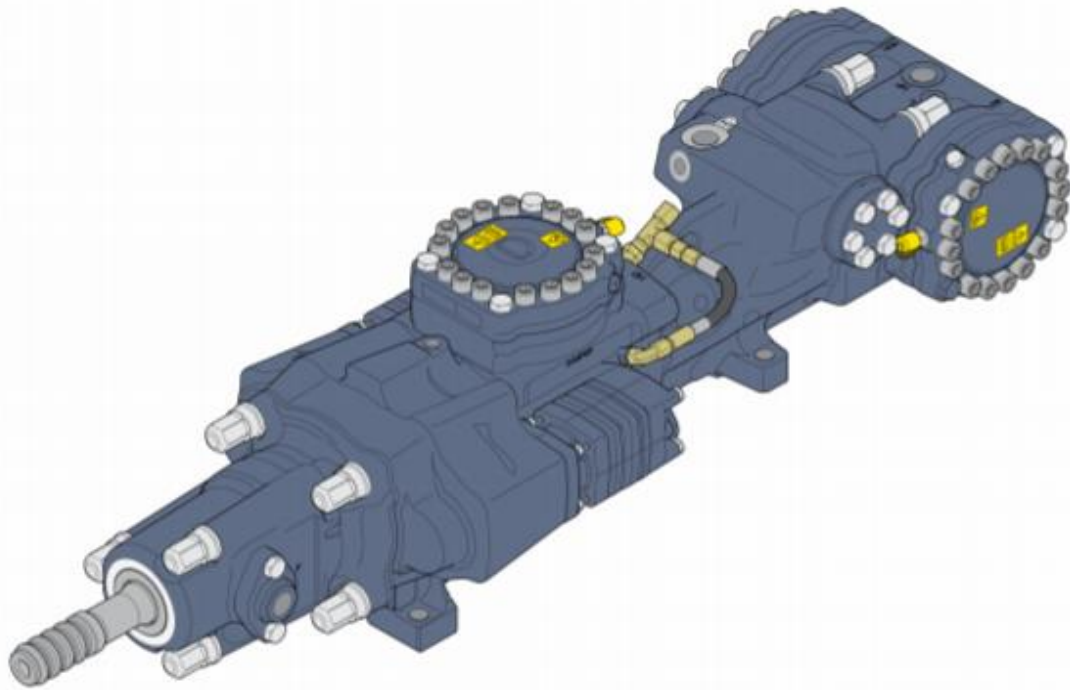
Hydraulic Rock Drill – 4050COP ME

CUSTOMER:

JOB NUMBER: 4-631475

SERIAL NUMBER: AVO11D825P

HOURS ACHIEVED: Unknown



Summary:

Rock drill removed having completed unknown amount of impact hours.

Comments:

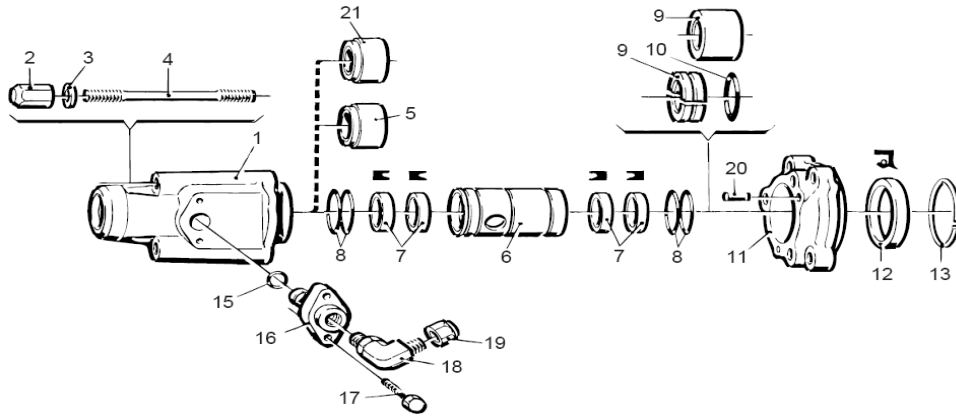
Rock drill stripped for assessment.

Recommendations:

Rebuild rock drill using ME seal kit & related parts as required.

Hydraulic Rock Drill – 4050COP ME

Front Head ME



| REF | PART NUMBER | QTY | DESCRIPTION | SERVICEABLE | COMMENTS |
|-----|----------------|-----|---------------------|----------------|----------|
| 1 | 3115 3554 00 | 1 | Front head | Reuse | |
| 2 | 3115 3050 00 | 3 | Dome nut | Reuse | |
| 3 | 3115 3051 00 | 3 | Washer | Reuse | |
| 4 | 3115 3073 00 | 3 | Stud | Replace | |
| 5 | 3115 2620 00 | 1 | Guide (TC) | Not applicable | |
| 6 | 3115 2297 00 | 1 | Flushing head (T51) | Reuse | |
| 6 | 3115 2296 00 | 1 | Flushing head (TC) | Not applicable | |
| 7 | 3115 2386 00 | 4 | Cup seal (T51) | Replace | |
| 7 | 3115 2372 00 | 4 | Cup seal (TC) | Not applicable | |
| 8 | 0663 2100 54** | 4 | O-ring | Replace | |
| 9 | 3115 3592 00 | 1 | Stop ring (T51) | Reuse | |
| 10 | 0663 2104 94** | 1 | O-ring | Replace | |
| 11 | 3115 3040 80 | 1 | Cover complete | Reuse | |
| 12 | 0666 6000 25 | 1 | Radial lip seal | Replace | |
| 13 | 3115 2051 00 | 1 | Lock ring | Reuse | |
| 15 | 0663 2129 01** | 1 | O-ring | Replace | |
| 16 | 3115 2019 00 | 1 | Connection plate | Reuse | |
| 17 | 0147 1477 03 | 2 | Screw | Reuse | |
| 18 | 3176 6569 00 | 1 | Nipple | Reuse | |
| 20 | 0102 0460 00 | 1 | Cylindrical pin | Reuse | |
| 21 | 3115 3515 00 | 1 | Guide (T51) | Replace | |

** included in O-ring set 3115 9151 90

Comments:

Item 21 worn outside tolerance, replace. Item 4 damaged, replace.
All other components are in serviceable condition.

Recommendations:

Replace item 21 & 4 as a set of 3.
Reuse all other components.

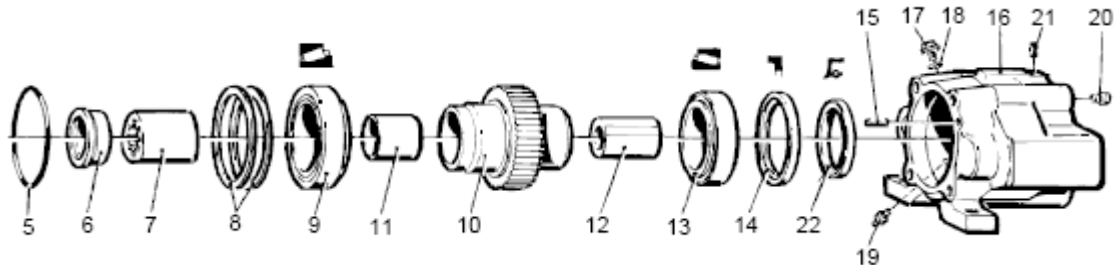
See photos next page

Hydraulic Rock Drill – 4050COP ME

| | | |
|--|--|---|
|  |  |  |
| <p>Front head</p> | <p>Front head face</p> | <p>Front Guide</p> |
|  |  |  |
| <p>Front Guide</p> | <p>Flushing head</p> | <p>Shank stop ring</p> |
|  |  |  |
| <p>Connection plate</p> | <p>Damaged studs</p> | <p>Damaged studs</p> |
|  |  | |
| <p>Front cover face</p> | <p>Front cover rear face</p> | |

Hydraulic Rock Drill – 4050COP ME

Gear Housing



| REF | PART NUMBER | QTY | DESCRIPTION | SERVICEABLE | COMMENT |
|-----|---------------|-----|-------------------------|----------------|---------------------|
| 5 | 06632103 92** | 1 | O-ring | Replace | Kit Item 9754002799 |
| 6 | 3115 2147 00 | 1 | Spacer ring | Reuse | |
| 7 | 3115 2031 0 | 1 | Driver | Reuse | |
| 7 | 3115 2911 00 | 1 | Driver helical | Not applicable | |
| 8 | 3115 2042 01 | - | Shim 0.10 | Replace | Kit Item 9754002799 |
| 8 | 3115 2042 02 | - | Shim 0.15 | Replace | Kit Item 9754002799 |
| 8 | 3115 2042 03 | - | Shim 0.50 | Replace | Kit Item 9754002799 |
| 9 | 0509 0121 07 | 1 | Roller bearing | Replace | Kit Item 9754002799 |
| 10 | 3115 2014 80 | 1 | Rotation chuck complete | Reuse | |
| 11 | 3115 2046 00 | 1 | Bushing | Reuse | |
| 12 | 3115 3550 00 | 1 | Rotation chuck bushing | Reuse | |
| 13 | 0509 0228 00 | 1 | Roller bearing | Replace | Kit Item 9754002799 |
| 14 | 3115 2041 00 | 1 | Ring | Reuse | |
| 15 | 0102 0460 00 | 1 | Cylindrical pin | Reuse | |
| 16 | 3115 3034 80 | 1 | Gear housing complete | Reuse | |
| 17 | 0686 4201 03 | 1 | Plug | Replace | Kit Item 9754002799 |
| 18 | 0653 9038 00 | 1 | Gasket | Replace | Kit Item 9754002799 |
| 19 | 0544 2162 00 | 1 | Lubricating nipple | Replace | |
| 20 | 3115 2153 00 | 1 | Check valve | Reuse | |
| 21 | 0686 9110 00 | 1 | Protection plug | Replace | Kit Item 9754002799 |
| 22 | 0666 6000 25 | 1 | Radial lip seal | Replace | |

**included in O-ring set 3115 9151 90

Comments:

All other components are in serviceable condition.

Recommendations:

Reuse all other components.



Item 7



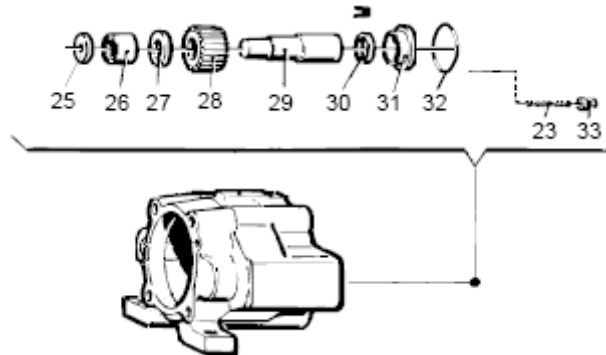
Item 10



Item 12

Hydraulic Rock Drill – 4050COP ME

Gear Housing continued



| REF | PART NUMBER | QTY | DESCRIPTION | SERVICEABLE | COMMENT |
|-----|----------------|-----|----------------|-------------|---------------------|
| 23 | 3115 1165 00 | 8 | Stud | Reuse | |
| 25 | 3115 2633 00 | 2 | Washer | Reuse | |
| 26 | 0515 3100 07 | 2 | Needle bearing | Replace | Kit Item 9754002799 |
| 27 | 3115 2040 00 | 2 | Washer | Reuse | |
| 28 | 3115 2022 00 | 2 | Gear | Reuse | |
| 29 | 3115 3077 00 | 2 | Coupling | Reuse | |
| 30 | 0665 1000 72 | 2 | Cup seal | Replace | |
| 31 | 3115 2052 00 | 2 | Seal housing | Reuse | |
| 32 | 0663 2100 53** | 2 | O-ring | Replace | Kit Item 9754002799 |
| 33 | 3115 3548 00 | 8 | Nut | Reuse | |

** included in O-ring set 3115 9151 90

Comments:

All components are in serviceable condition.

Recommendations:

Reuse all components.



Gearbox Housing



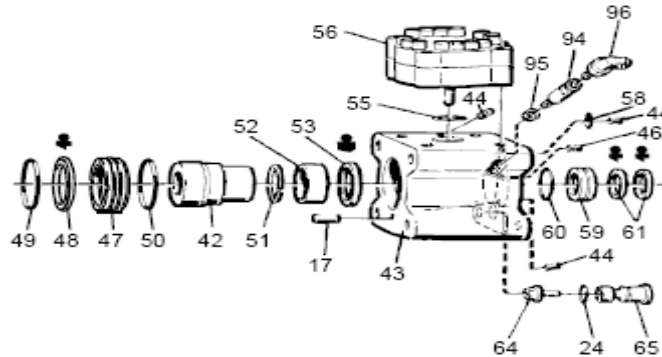
Gearbox Housing



Shaft and Gears

Hydraulic Rock Drill – 4050COP ME

Intermediate Part



| REF | PART NUMBER | QTY | DESCRIPTION | SERVICEABLE | COMMENT |
|-----|----------------|-----|----------------------------|-------------|---------------------|
| 17 | 0102 0460 00 | 1 | Cylindrical pin | Reuse | |
| 24 | 3115 3290 19** | 1 | Seal ring | Replace | Kit item 9754002799 |
| 42 | 3115 2831 00 | 1 | Dampening piston | Reuse | |
| 43 | 3115 3035 81 | 1 | Intermediate part complete | Reuse | |
| 44 | 3115 1746 04 | 2 | Nozzle | Reuse | |
| 46 | 0196 1318 00 | 2 | Set screw | Reuse | |
| 47 | 3115 3501 80 | 1 | Liner complete | Reuse | |
| 48 | 3115 2055 00 | 1 | Set of seals | Replace | Kit item 9754002799 |
| 49 | 0663 6147 01** | 1 | O-ring | Replace | Kit item 9754002799 |
| 50 | 0663 2103 58** | 1 | O-ring | Replace | Kit item 9754002799 |
| 51 | 3115 2745 00 | 1 | Lock ring | Reuse | |
| 52 | 3115 2763 00 | 1 | Bushing | Reuse | |
| 53 | 3115 1880 00 | 1 | Set of seals | Replace | Kit item 9754002799 |
| 55 | 0663 6135 01** | 3 | O-ring | Replace | Kit item 9754002799 |
| 56 | 3115 2708 80 | 1 | Damper accumulator compl | Reuse | |
| 58 | 0663 2100 62** | 1 | O-ring | Replace | Kit item 9754002799 |
| 59 | 3115 2827 80 | 1 | Seal housing complete | Reuse | |
| 60 | 0663 6139 01** | 1 | O-ring | Replace | Kit item 9754002799 |
| 61 | 3115 2813 00 | 2 | Set of seals | Replace | Kit item 9754002799 |
| 64 | 3115 2100 00 | 1 | Valve poppet | Reuse | |
| 65 | 3115 2099 00 | 1 | valve seat | Reuse | |
| 94 | 3115 2360 00 | 1 | Extension nipple | Reuse | |
| 95 | 3115 1695 00 | 1 | Seal washer | Replace | Kit item 9754002799 |
| 96 | 3176 6351 00 | 1 | Nipple | Replace | Kit item 9754002799 |

** included in O-ring set 3115 9151 90

Comments:

All components are in serviceable condition.

Recommendations:

Reuse all components.

See photos next page

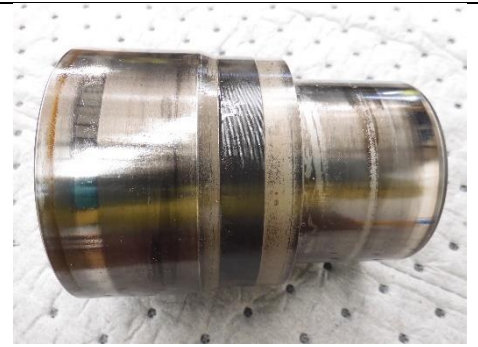
Hydraulic Rock Drill – 4050COP ME



Intermediate Housing



Intermediate Housing



Damping piston



Liner



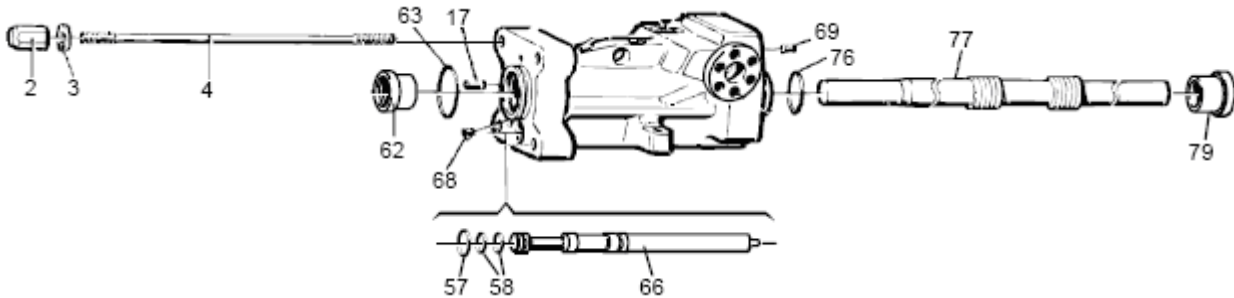
Check Valve



Front piston seal retainer

Hydraulic Rock Drill – 4050COP ME

Cylinder Housing



| REF | PART NUMBER | QTY | DESCRIPTION | SERVICEABLE | COMMENT |
|-----|----------------|-----|----------------|-------------|---------------------|
| 2 | 3115 3050 00 | 4 | Dome nut | Reuse | |
| 3 | 3115 3051 00 | 4 | Washer | Reuse | |
| 4 | 3115 3052 00 | 4 | Side bolt | Reuse | |
| 17 | 0102 0460 00 | 1 | Dowel | Reuse | |
| 57 | 3115 3048 00 | 1 | Seal ring | Replace | Kit item 9754002799 |
| 58 | 3115 3289 05 | 2 | Seal ring | Replace | Kit item 9754002799 |
| 62 | 3115 3598 02 | 1 | Piston guide | Replace | |
| 63 | 0663 6143 01** | 1 | O-ring | Replace | Kit item 9754002799 |
| 66 | 3115 2832 00 | 1 | Regulating pin | Reuse | |
| 68 | 3115 2401 00 | 1 | Plug | Reuse | |
| 69 | 3115 1746 04 | 1 | Nozzle | Reuse | |
| 76 | 0663 6139 01** | 1 | O-ring | Replace | Kit item 9754002799 |
| 77 | 3115 2823 00 | 1 | Piston | Repair | |
| 79 | 3115 3574 00 | 1 | Piston guide | Repair | |

**included in O-ring set 3115 9151 90

Comments:

Item 77 has pitting to strike face, item 79 has cavitation to ID, item 62 worn beyond specifications. All other components are in serviceable condition.

Recommendations:

Repair item 77 strike face & 79. Replace item 62.
Reuse all other components.



Item 77



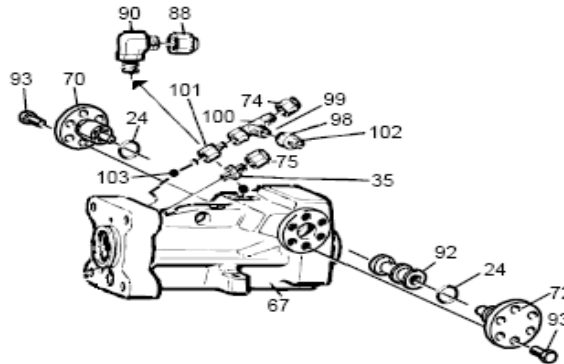
Item 62



Item 79

Hydraulic Rock Drill – 4050COP ME

Cylinder Housing Continued



| REF | PART NUMBER | QTY | DESCRIPTION | SERVICEABLE | COMMENT |
|-----|----------------|-----|-------------------|----------------|---------------------|
| 24 | 0663 2131 01** | 2 | O-ring | Replace | Kit item 9754002799 |
| 35 | 3176 6515 00 | 1 | Nipple | Replace | Kit item 9754002799 |
| 67 | 3115 3036 81 | 1 | Cylinder complete | Reuse | |
| 70 | 3115 3053 00 | 1 | Valve cover | Reuse | |
| 72 | 3115 3054 00 | 1 | Valve cover | Reuse | |
| 74 | 3176 5313 00 | 1 | Cap | Replace | Kit item 9754002799 |
| 75 | 3715 0597 00 | 1 | Cap | Replace | Kit item 9754002799 |
| 88 | 3715 0819 00 | 1 | Cap | Replace | Kit item 9754002799 |
| 90 | 3176 6569 00 | 1 | Nipple | Replace | Kit item 9754002799 |
| 92 | 3115 2828 00 | 1 | Valve piston | Reuse | |
| 93 | 0147 1477 03 | 12 | Screw | Reuse | |
| 98 | 3176 6501 00 | 1 | Nipple | Replace | Kit item 9754002799 |
| 99 | 3176 6615 00 | 1 | Cap nut | Replace | Kit item 9754002799 |
| 100 | 3176 5535 00 | 1 | Nipple | Replace | Kit item 9754002799 |
| 101 | 3115 3151 01 | 1 | Nipple | Replace | |
| 102 | 3176 8505 00 | 1 | Restrictor | Replace | |
| 103 | 0661 1026 00 | 1 | Washer | Replace | |
| | 0661 1049 00 | 1 | Washer | Replace | |

** included in O-ring set 3115 9151 90

Comments:

All other components are in serviceable condition.

Recommendations:

Reuse all other components.



Cylinder Housing



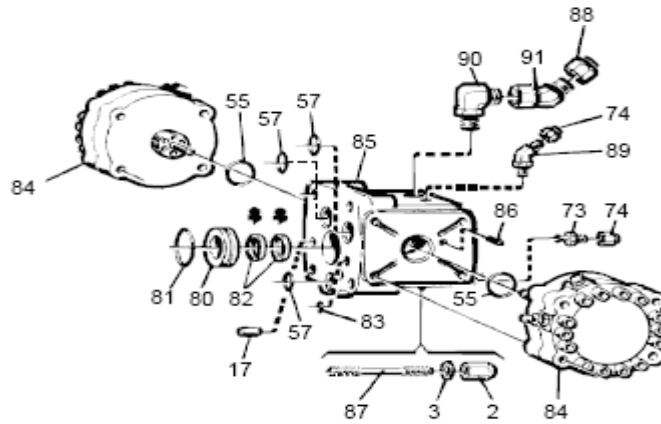
Cylinder Housing



Valve piston & covers

Hydraulic Rock Drill – 4050COP ME

Back Head



| REF | PART NUMBER | QTY | DESCRIPTION | SERVICEABLE | COMMENT |
|-----|----------------|-----|----------------------|-------------|---------------------|
| 2 | 3115 3050 00 | 4 | Dome nut | Reuse | |
| 3 | 3115 3051 00 | 4 | Washer | Reuse | |
| 17 | 0102 0460 00 | 1 | Cylindrical pin | Reuse | |
| 55 | 0663 6135 01** | 2 | O-ring | Replace | Kit item 9754002799 |
| 57 | 3115 3048 00 | 3 | Seal ring | Replace | Kit item 9754002799 |
| 73 | 3176 6512 00 | 1 | Nipple | Replace | Kit item 9754002799 |
| 74 | 3176 5313 00 | 2 | Cap | Replace | Kit item 9754002799 |
| 80 | 3115 2597 80 | 1 | Seal housing | Reuse | |
| 81 | 0663 6139 01** | 1 | O-ring | Replace | Kit item 9754002799 |
| 82 | 3115 2053 00 | 2 | Set of seals | Replace | Kit item 9754002799 |
| 83 | 0663 2118 01 | 1 | O-ring | Replace | Kit item 9754002799 |
| 84 | 3115 2704 80 | 2 | Accumulator complete | Reuse | |
| 85 | 3115 3037 81 | 1 | Back head complete | Reuse | |
| 86 | 3115 1746 04 | 2 | Nozzle | Reuse | |
| 87 | 3115 3049 00 | 4 | Stud | Reuse | |
| 88 | 3715 0819 00 | 1 | Cap | Replace | Kit item 9754002799 |
| 89 | 3176 6553 00 | 1 | Nipple | Replace | Kit item 9754002799 |
| 90 | 3176 6569 00 | 1 | Nipple | Replace | Kit item 9754002799 |
| 91 | 3176 6551 00 | 1 | Nipple | Replace | Kit item 9754002799 |

** included in O-ring set 3115 9151 90

Comments:

All components are in serviceable condition.

Recommendations:

Reuse all components.



Back Head



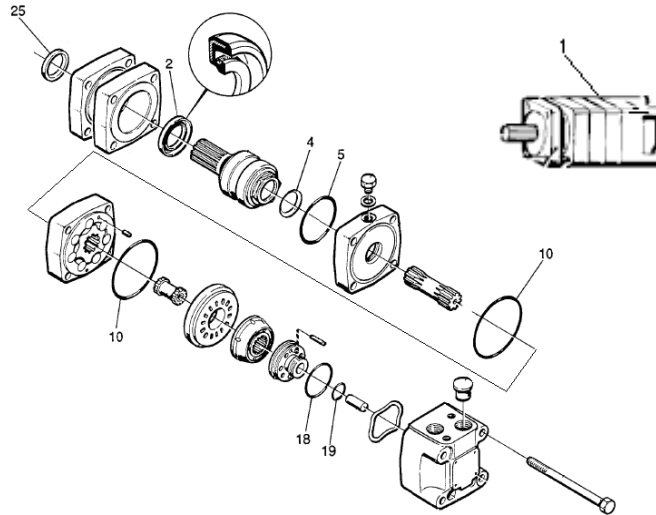
Studs



Rear piston seal retainer

Hydraulic Rock Drill – 4050COP ME

Rotation Motor



| <u>REF</u> | <u>PART NUMBER</u> | <u>QTY</u> | <u>DESCRIPTION</u> | <u>SERVICEABLE</u> | <u>COMMENT</u> |
|------------|--------------------|------------|--------------------|----------------------|----------------|
| 1 | 3115 3529 81 | 2 | (07-160) | Please Select | |
| 1 | 3115 3529 82 | 2 | (10-250) | Repair | |
| 2 | *** | | | | |
| 4 | *** | | | | |
| 5 | *** | | | | |
| 10 | *** | | | | |
| 18 | *** | | | | |
| 19 | *** | | | | |
| 25 | *** | | | | |

*** included in Set of seals 3315 3473 90

Comments:

Motors to be resealed & tested.

Recommendations:

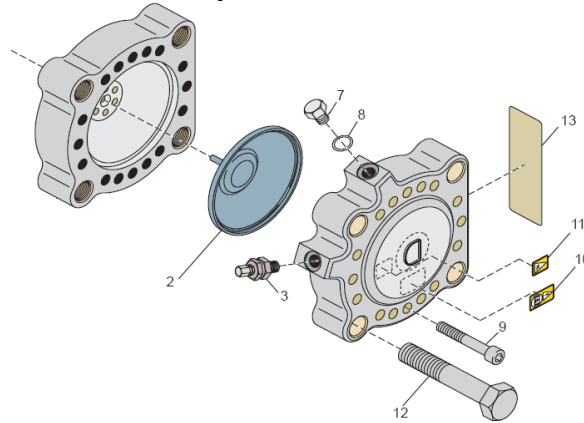
Rebuild motors with seal kit & retest.



Rotation Motors

Hydraulic Rock Drill – 4050COP ME

Damper Accumulator



| REF | PART NUMBER | QTY | DESCRIPTION | SERVICEABLE | COMMENT |
|-----|----------------|-----|--------------|----------------|---------------------|
| 2 | 3115 3572 00 | 1 | Diaphragm | Replace | Kit item 9754002799 |
| 3 | 3115 0262 00 | 1 | Valve | Replace | Kit item 9754002799 |
| 7 | 3115 0263 00 | 1 | Plug | Reuse | |
| 8 | 0663 6121 00** | 1 | O-ring | Replace | Kit item 9754002799 |
| 9 | 3115 2706 00 | 16 | Screw | Reuse | |
| 10 | 3115 2629 00 | 1 | Safety label | Replace | Kit item 9754002799 |
| 11 | 3115 2630 00 | 1 | Safety label | Replace | Kit item 9754002799 |
| 12 | 3115 2703 00 | 4 | Screw | Reuse | |
| 13 | 3115 2716 00 | 1 | Data label | Replace | Kit item 9754002799 |

**included in O-ring set 3115 9151 90

Comments:

All components in serviceable condition.

Recommendations:

Reuse all components.



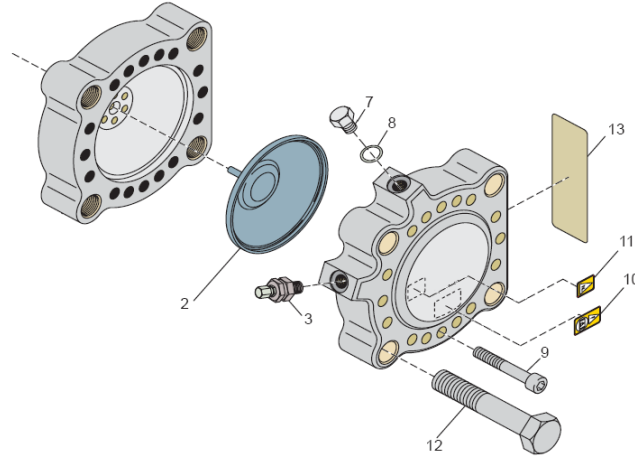
Damper Accumulator



Damper Accumulator

Hydraulic Rock Drill – 4050COP ME

HP / LP Accumulator



| REF | PART NUMBER | QTY | DESCRIPTION | SERVICEABLE | COMMENT |
|-----|----------------|-----|--------------|----------------|---------------------|
| 2 | 3115 3572 00 | 1 | Diaphragm | Replace | Kit item 9754002799 |
| 3 | 3115 0262 00 | 1 | Valve | Replace | Kit item 9754002799 |
| 7 | 3115 0263 00 | 1 | Plug | Reuse | |
| 8 | 0663 6121 00** | 1 | O-ring | Replace | Kit item 9754002799 |
| 9 | 3115 2706 00 | 16 | Screw | Reuse | |
| 10 | 3115 2629 00 | 1 | Safety label | Replace | Kit item 9754002799 |
| 11 | 3115 2630 00 | 1 | Safety label | Replace | Kit item 9754002799 |
| 12 | 3115 2703 00 | 4 | Screw | Reuse | |
| 13 | 3115 2716 00 | 1 | Data label | Replace | Kit item 9754002799 |

** included in O-ring set 3115 9151 90

Comments:

All components are in serviceable condition.

Recommendations:

Reuse all components.



HP / LP Accumulators



HP / LP Accumulators