



# NIFTY COPPER PTY LTD

## STRIP AND QUOTE HLX5 ROCKDRILL -

### Sandvik Mining and Construction Pty Ltd Australia

Customer: NIFTY COPPER PTY LTD Date: 09/09/2019 Job number: 7395639

Your STRIP AND QUOTE HLX5 ROCKDRILL: **HLX5 KIT**, S/No **T048312** arrived in Kalgoorlie rebuild centre on the 29/08/2019 with **unknown** hours.

The following parts were missing from the STRIP AND QUOTE HLX5 ROCKDRILL when it arrived; Shank.

#### Strip down Inspection:

80cc motor fitted.

The rockdrill was sent in for service with no information or percussion hours. It appears that the rockdrill was operating with loose tie nuts and flushing head bolts. The rockdrill low pressure port was fitted same as high pressure. Operating the rockdrill with loose fasteners and with incorrect fitting can affect the performance of the rockdrill and damage the internal components.

#### Recommendations:

Check all fasteners periodically and re-tension as required.

#### Machining required:

Gearbox

We recommend the following parts be repaired; the reason for each will be explained in the detail report attached to this Summary.

| Part Number | Description                                       | Reason              |
|-------------|---|---------------------|
|             | Fixed Service Charge                              | \$ 1,803.00         |
|             | Cost of recommended replacement parts             | \$ 13,975.06        |
|             | Cost of recommended machining repairs:            | \$ 1,200.60         |
|             | <b>Total cost of service and recommendations:</b> | <b>\$ 16,978.66</b> |

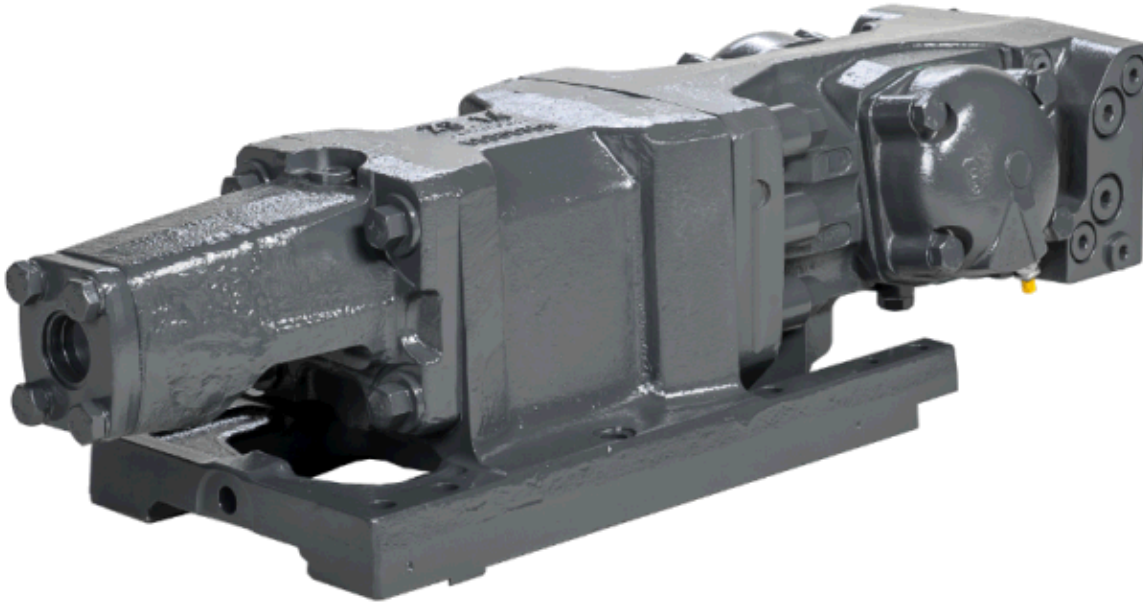
The attached report details the condition of your STRIP AND QUOTE HLX5 ROCKDRILL using the Sandvik Standard Reporting documentation used in our Sandvik repair facility. All images shown in this report will detail components requiring attention.

If you have any queries regarding this report, please contact

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Phone: 0437 436 106  
Email: Ben.rothen@sandvik.com

## Equipment

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### Condition on arrival

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**Comment**

In a steel box.  
Rockdrill with complete flushing head and seal carrier.

**Last rebuilt by**

Sandvik

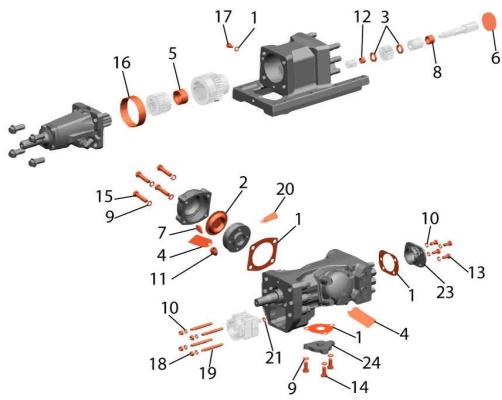
**Picture 1**



**Picture 2**

# ENDURANCE KIT

|       |                             |                         |                        |
|-------|-----------------------------|-------------------------|------------------------|
| Parts | <b>Condition Code Index</b> | 4 - Damaged             | 8 - Contamination      |
|       | 1 - Service Item            | 5 - Misalignment        | 9 - Scored             |
|       | 2 - Missing                 | 6 - Non OEM Parts       | 10 - Reuse             |
|       | 3 - Worn beyond limits      | 7 - Lack of Lubrication | 11 - Refer to Comments |

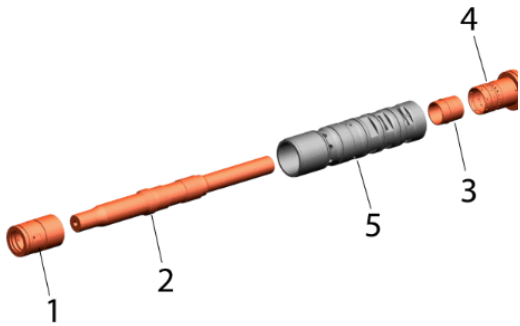


|      |                  |     |            |         |
|------|------------------|-----|------------|---------|
| Ref. | Part Description | Qty | Cond. code | Comment |
| *    | ENDURANCE KIT    | 1   | 1          |         |



**PERCUSSION KIT**

|       |                             |                         |                        |
|-------|-----------------------------|-------------------------|------------------------|
| Parts | <b>Condition Code Index</b> | 4 - Damaged             | 8 - Contamination      |
|       | 1 - Service Item            | 5 - Misalignment        | 9 - Scored             |
|       | 2 - Missing                 | 6 - Non OEM Parts       | 10 - Reuse             |
|       | 3 - Worn beyond limits      | 7 - Lack of Lubrication | 11 - Refer to Comments |



| Ref. | Part Description            | Qty | Cond. code | Comment   |
|------|-----------------------------|-----|------------|---|
| 2    | PISTON - INC PERCUSSION KIT | 1   | 9          | The piston percussion seal area is scored/pitted. |

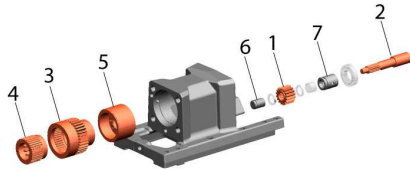
2 The piston percussion seal area is scored/pitted.





**ROTATION KIT**

|       |                             |                         |                        |
|-------|-----------------------------|-------------------------|------------------------|
| Parts | <b>Condition Code Index</b> | 4 - Damaged             | 8 - Contamination      |
|       | 1 - Service Item            | 5 - Misalignment        | 9 - Scored             |
|       | 2 - Missing                 | 6 - Non OEM Parts       | 10 - Reuse             |
|       | 3 - Worn beyond limits      | 7 - Lack of Lubrication | 11 - Refer to Comments |



| Ref. | Part Description                          | Qty | Cond. code | Comment  |
|------|---|-----|------------|--|
| 4    | DRIVER,<br>BRONZE - INC<br>ROTATION KIT   | 1   | 3          | The coupling outer splines are worn thin.        |
| 5    | BUSHING,<br>BEARING - INC<br>ROTATION KIT | 1   | 4          | The gearcase rear bush is cavitated in the bore. |

4 The coupling outer splines are worn thin.

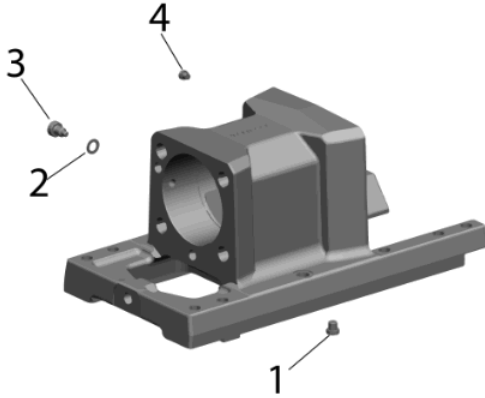


5 The gearcase rear bush is cavitated in the bore.



**GEARBOX**

| Parts | Condition Code Index   | 4 - Damaged             | 8 - Contamination      |
|-------|------------------------|-------------------------|------------------------|
|       | 1 - Service Item       | 5 - Misalignment        | 9 - Scored             |
|       | 2 - Missing            | 6 - Non OEM Parts       | 10 - Reuse             |
|       | 3 - Worn beyond limits | 7 - Lack of Lubrication | 11 - Refer to Comments |

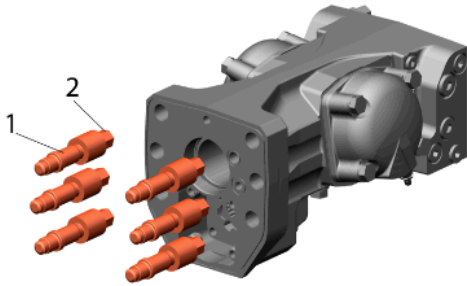


The gear case front face is unevenly worn, most likely caused by flushing housing bolts being loose at some stage. Requires skimming to square up the face and will remain within spec.





**BOLT KIT**

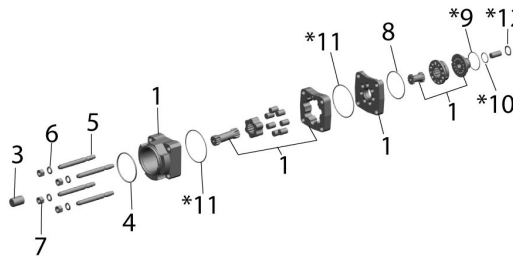


|       |                             |                         |                        |
|-------|-----------------------------|-------------------------|------------------------|
| Parts | <b>Condition Code Index</b> | 4 - Damaged             | 8 - Contamination      |
|       | 1 - Service Item            | 5 - Misalignment        | 9 - Scored             |
|       | 2 - Missing                 | 6 - Non OEM Parts       | 10 - Reuse             |
|       | 3 - Worn beyond limits      | 7 - Lack of Lubrication | 11 - Refer to Comments |

| Ref. | Part Description | Qty | Cond. code | Comment |
|------|------------------|-----|------------|---------|
| 2    | CAP NUT          | 6   | 1          |         |

**ROTATION MOTOR**

|                        |                             |                        |                        |
|------------------------|-----------------------------|------------------------|------------------------|
| <b>Parts</b>           | <b>Condition Code Index</b> | 4 - Damaged            | 8 - Contamination      |
| 1 - Service Item       | 5 - Misalignment            | 9 - Scored             | 9 - Scored             |
| 2 - Missing            | 6 - Non OEM Parts           | 10 - Reuse             | 10 - Reuse             |
| 3 - Worn beyond limits | 7 - Lack of Lubrication     | 11 - Refer to Comments | 11 - Refer to Comments |



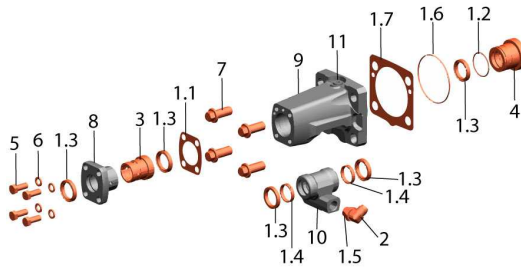
| Ref. | Part Description            | Qty | Cond. code | Comment  |
|------|-----------------------------|-----|------------|--|
| 1    | MOTOR, HYDRAULIC, OMS 80/s3 | 1   | 9          | The motor internal is scored near the top end. |

1 The motor internal is scored near the top end.



**FLUSHING KIT**

|              |                             |                         |                        |
|--------------|-----------------------------|-------------------------|------------------------|
| <b>Parts</b> | <b>Condition Code Index</b> | 4 - Damaged             | 8 - Contamination      |
|              | 1 - Service Item            | 5 - Misalignment        | 9 - Scored             |
|              | 2 - Missing                 | 6 - Non OEM Parts       | 10 - Reuse             |
|              | 3 - Worn beyond limits      | 7 - Lack of Lubrication | 11 - Refer to Comments |



| Ref. | Part Description                               | Qty | Cond. code | Comment  |
|------|--|-----|------------|--|
| *    | FLUSHING HEAD REBUILD KIT - INCLUDES BG0800869 | 1   | 1          |  |
| 10   | HOUSING, SEAL WF D45                           | 1   | 3          | The seal carrier flange bore is worn from general wear |

10 The seal carrier flange bore is worn from general wear



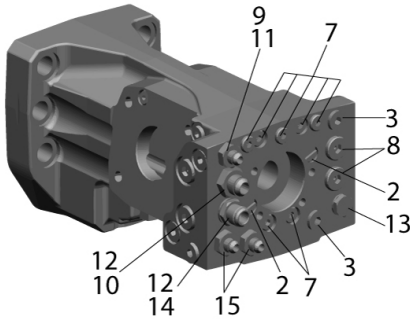
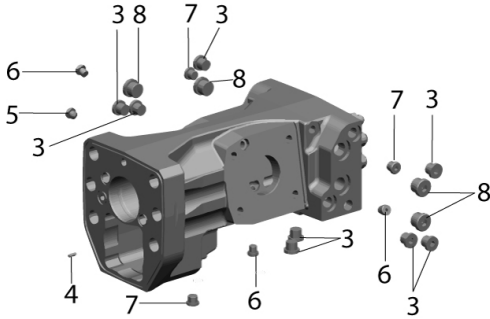
The flushing head requires repairs (build and machine) to the worn seal carrier land to extend its service life.  
 The mounting bolt lands are worn unevenly and need skimming to help prevent the bolts from coming loose.





**FRAME ASSEMBLY**

|              |                             |                         |                        |
|--------------|-----------------------------|-------------------------|------------------------|
| <b>Parts</b> | <b>Condition Code Index</b> | 4 - Damaged             | 8 - Contamination      |
|              | 1 - Service Item            | 5 - Misalignment        | 9 - Scored             |
|              | 2 - Missing                 | 6 - Non OEM Parts       | 10 - Reuse             |
|              | 3 - Worn beyond limits      | 7 - Lack of Lubrication | 11 - Refer to Comments |

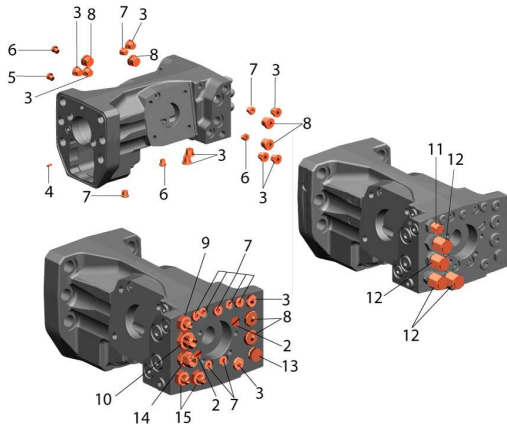


| Ref. | Part Description                | Qty | Cond. code | Comment |
|------|---------------------------------|-----|------------|---------|
| 2    | PLUG                            | 2   | 1          |         |
| 3    | PLUG                            | 10  | 1          |         |
| 5    | PLUG                            | 1   | 1          |         |
| 6    | PLUG                            | 3   | 1          |         |
| 7    | PLUG                            | 10  | 1          |         |
| 8    | PLUG                            | 6   | 1          |         |
| 9    | STRAIGHT<br>THREAD<br>ADAPTER   | 1   | 1          |         |
| 10   | STRAIGHT<br>THREAD<br>ADAPTER   | 1   | 1          |         |
| 11   | PLUG                            | 1   | 1          |         |
| 12   | PLUG                            | 2   | 1          |         |
| 13   | PLUG                            | 1   | 1          |         |
| 14   | ORIFICE<br>ADAPTER              | 1   | 1          |         |
| 15   | STRAIGHT<br>THREAD<br>ADAPTER   | 2   | 1          |         |
| 16   | STRAIGHT<br>THREAD<br>CONNECTOR | 2   | 1          |         |
| 17   | STRAIGHT<br>THREAD<br>ADAPTER   | 2   | 1          |         |



**BODY FITTING KIT**

|       |                             |                         |                        |
|-------|-----------------------------|-------------------------|------------------------|
| Parts | <b>Condition Code Index</b> | 4 - Damaged             | 8 - Contamination      |
|       | 1 - Service Item            | 5 - Misalignment        | 9 - Scored             |
|       | 2 - Missing                 | 6 - Non OEM Parts       | 10 - Reuse             |
|       | 3 - Worn beyond limits      | 7 - Lack of Lubrication | 11 - Refer to Comments |



| Ref. | Part Description              | Qty | Cond. code | Comment |
|------|-------------------------------|-----|------------|---------|
| 3    | PLUG                          | 9   | 1          |         |
| 7    | PLUG                          | 6   | 1          |         |
| 8    | PLUG                          | 6   | 1          |         |
| 9    | STRAIGHT<br>THREAD<br>ADAPTER | 3   | 1          |         |
| 10   | STRAIGHT<br>THREAD<br>ADAPTER | 1   | 1          |         |
| 11   | CAP                           | 3   | 1          |         |
| 12   | CAP                           | 2   | 1          |         |
| 14   | ORIFICE<br>ADAPTER            | 1   | 1          |         |

The percussion body need skimming to the corroded and unevenly worn tie nuts lands, to prevent the nuts from coming loose in the future. This corrosion is generally caused by the salty water in the underground environment that seeps under the nut face.

