

**AE030 – ActiveEdge Tool Maintenance**

The critical maintenance procedures for AE tools mostly relate to ActiveEdge cartridges and these are described in detail in this document.

In all other respects, maintenance is the same as for any standard boring tool.

|      |                                   |
|------|-----------------------------------|
| Page |                                   |
| 2    | Tool components                   |
| 3    | Essential WEEKLY maintenance      |
| 4    | Essential SIX MONTHLY maintenance |
| 5    | Tool storage                      |
| 5    | Tool re-commissioning             |

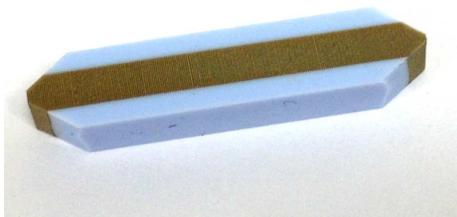
Tool components



ActiveEdge cartridges are supplied in several styles depending on bore size and insert type



The cartridges are fitted to dedicated pockets with integral electrical contacts



The Zebra strip is a flexible component that connects the cartridge electrically to the tool

Rigibore p/n AE-PCN01



The Zebra strip is placed into the contact pocket before fitting the cartridge

## Essential WEEKLY maintenance

ActiveEdge cartridges are precision electro-mechanical assemblies and regular greasing is essential to protect internal components and to flush out coolant and machining dust that may build up inside.

Regular greasing will ensure optimum performance and durability.

| MATERIAL \ USAGE                        | Heavy   | Light   |
|---|---------|---------|
| <b>Ferrous - cast iron (no coolant)</b> | 1/week  | 1/week  |
| <b>Ferrous - cast iron</b>              | 1/week  | 1/week  |
| <b>Ferrous – steel</b>                  | 1/week  | 1/month |
| <b>Non-ferrous</b>                      | 2/month | 1/month |

Pump grease into the cartridge until it emerges clean from the back and front of the insert holder, as shown.



Castrol Longtime PD2™ grease should be used. A recommended grease gun and refills can be purchased from Rigibore.

| Part number | Description           |
|-------------|-----------------------|
| UFPG-00     | Grease gun and refill |
| UFPG-RFL    | Refill                |

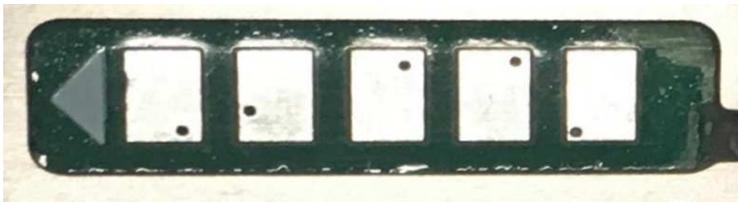
## Essential SIX MONTHLY maintenance

Undo the M4 or M5 securing screw(s) and remove the cartridge from the tool. Rigibore document AE014 provides a full description of the cartridge removal and replacement procedure if required.

Discard the Zebra strip.

Inspect the electrical contacts in the tool pocket and on the cartridge to ensure they are undamaged.

Clean and polish the electrical contacts on both tool and cartridge. Use an ultra-fine non-abrasive cleaner for this. Use the examples below as a guide.



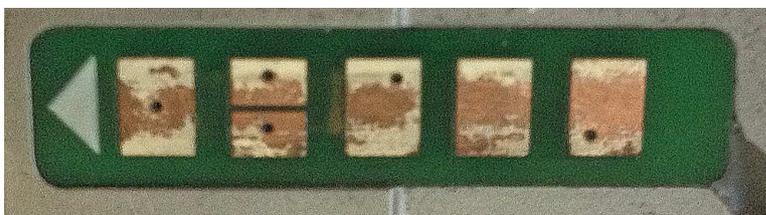
**Condition: GOOD**  
Silver/reflective appearance. Good electrical connection assured



**Condition: POOR**  
Grey/matt colour. Contacts must be polished with an ultra-fine polishing compound



**Condition: POOR**  
Coolant residue/contamination. Contacts must be cleaned and polished



**Condition: BAD**  
Silver coating badly worn. Return to Rigibore for contact refurbishment



**Condition: BAD**  
Copper badly exposed. Return to Rigibore for contact refurbishment

Fit a new Zebra strip (p/n AE-PCN01) and re-assemble the cartridge to the tool.

Grease the cartridge as described on page 3.

Switch on the tool and use ActiveNet to perform a -10 micron adjustment. Then perform a +10 micron adjustment.

The tool is now ready for use.

### **Tool storage**

If the tools are not going to be used for more than 30 days, it is strongly recommended that the ActiveEdge cartridges are greased as described on page 3.

This process forces out any coolant from the precision slide and internal components, which may otherwise dry out and adversely affect the tool's performance.

AE tools should be stored horizontally. If this is not possible then just the cartridges should be stored horizontally after being removed from the tool.

Switch off the tool using ActiveNet to save battery life.

### **Tool re-commissioning**

After prolonged storage, carry out the tasks as described in the essential six monthly maintenance section on page 4.

If the battery power is less than 30%, it would be advisable to fit new batteries.