



Basic Line Maintenance Manual

Maintenance

With normal use, the portal milling machine should be lubricated every six months, but at the latest after twelve months. To do this, proceed as follows:

All greasing points

After lubricating, remove excess grease with a rag.

Note:

As a grease gun, we recommend the HIWIN grease gun set from the Sorotec online shop (item no. SM.0014).

Common multi-purpose grease is sufficient for lubricating the spindle nuts and carriages.

Guide carriages X-axis

- Drive the portal to the front stop of the X-axis. The lubricating nipples of the carriages are now easily accessible from the front.
- Lubricate on the left and right as shown in Fig. 44.
- On a machine with a performance kit, repeat the process from the rear for the rear guide carriages.

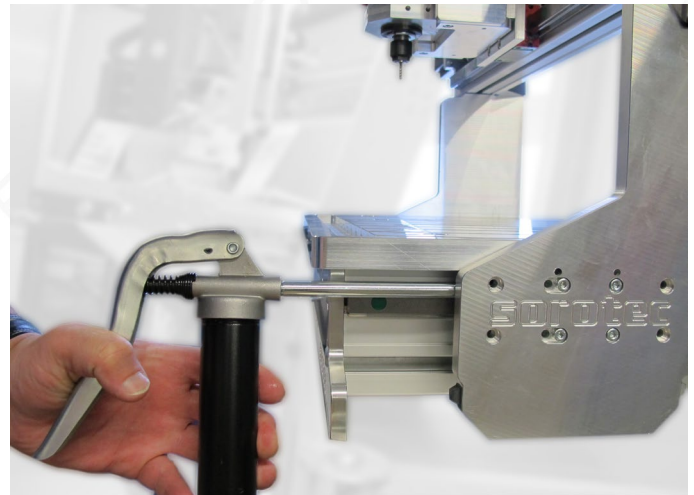


Fig. 44: Lubricating front carriages X-axis

Spindle nut X axis

- Carry out the lubrication as shown in Fig. 45.

Note:

The lubricating nipple of the X spindle nut can only be reached from below. You can simplify the greasing process with a maintenance opening in the base of the machine.

Otherwise, the portal milling machine must be laid on its side or lifted at the rear to lubricate the X-spindle nut.



Fig. 45: Lubricating the X-spindle nut with the machine tilted forward

Guide carriages Y-axis

- Drive the Y-axis to the right stop. The grease nipples of the upper and lower carriage are now easily accessible from the left side.
- Lubricate the Y-axis carriages as shown in Fig. 46.



Fig. 46: Lubricating guide carriages Y-axis

Spindle nut Y-axis

- Center the Y axis. The lubricating nipple of the Y-spindle nut is now easily accessible through the opening in the middle of the portal beam.
- Lubricate the Y-spindle nut as shown in Fig. 47.



Fig. 47: Lubricating the Y spindle nut

Guide carriage Z-axis

- Drive the Y-axis to the right stop.
- Remove the left Z-axis bracing plate. It is not necessary to remove the reference switch beforehand. The lubricating nipples of the guide carriage are now easily accessible from the left side.
- Carry out the lubrication of the lower guide carriage as shown in Fig. 48.
- For machines with the Performance Kit, repeat the process for the upper carriage.



Fig. 48: Lubricating guide carriages Z-axis

Spindle nut Z axis

The grease nipple on the Z-axis spindle nut is easily accessible from behind and above.

- Lubricate the Z-spindle nut as shown in Fig. 49.

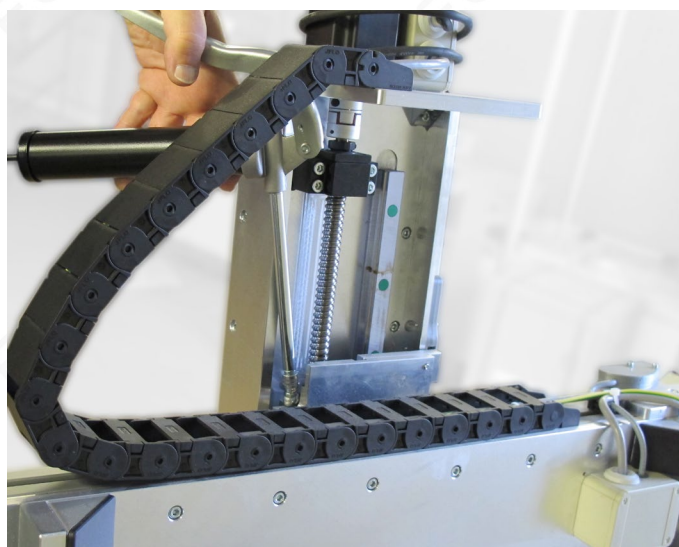


Fig. 49: Lubricating the Z-axis spindle nut