

Teknatool International Limited

7D Dallan Place, Rosedale, Auckland, New Zealand

Tel: +64 09 477 5600 Fax: +64 477 5601

Email: service@teknatool.comWebsite: www.teknatool.com

Frequently Asked Questions

Disassembling the Quill on NOVA Voyager Drill Press

Date Raised: 30 June 2017

Safe practices should always be employed to ensure the Health and Safety of yourself, employees and customers (if applicable) Refer to product manuals, exploded drawings and our website if further assistance is required, or contact us on service@teknatool.com

Date Amended

Note:

This FAQ shows the procedures on how to remove the quill from the drill press. Disassembly of the entire quill will require special tools therefore it is not recommended and should not be attempted.

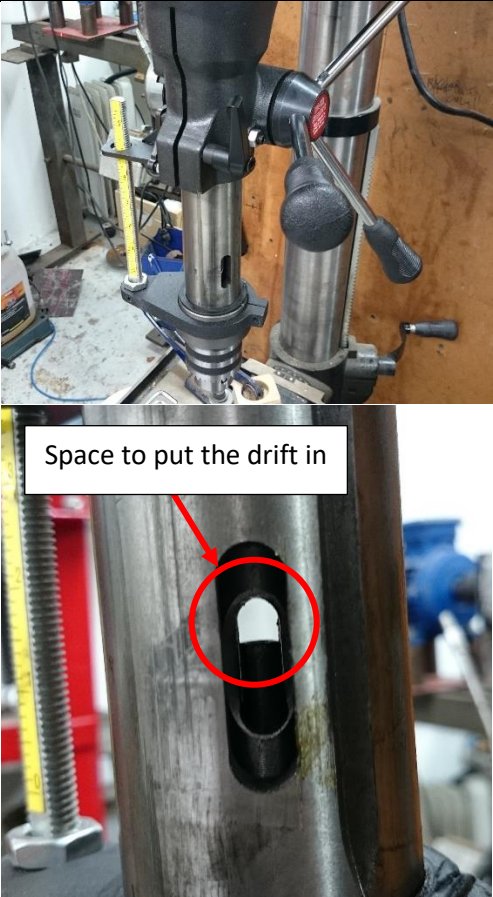
CAUTION:


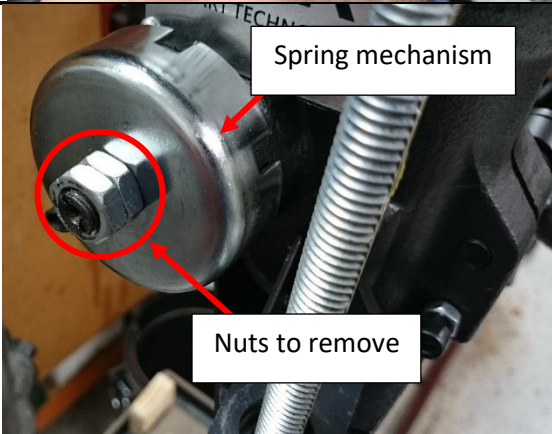

The drill press should be turned off and unplugged before commencing any of these procedures.

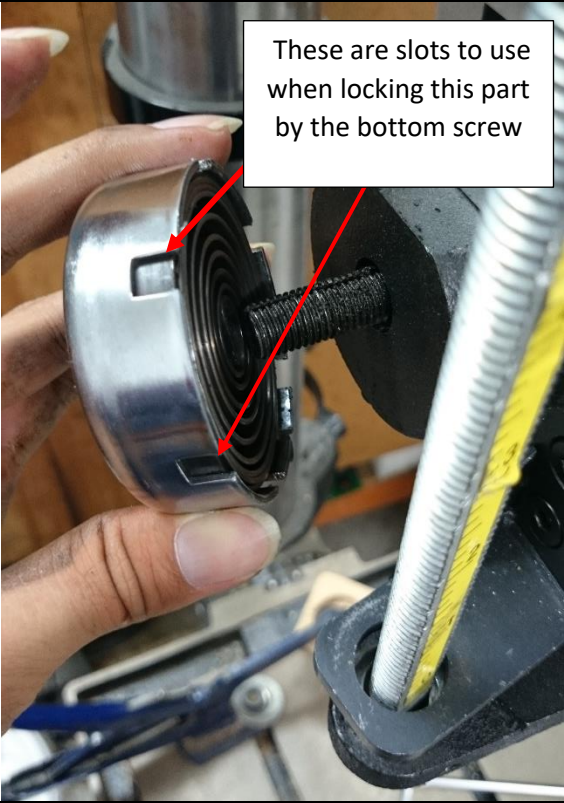

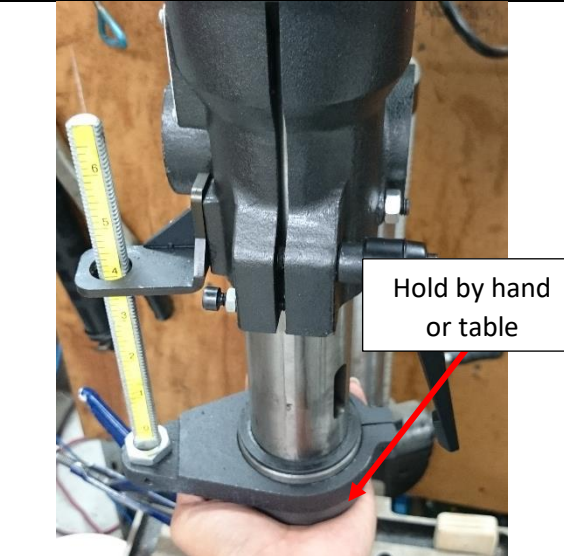
Tools Required:

- 1 x Drill Bit Drift
- 1 x 4mm Allen Wrench
- 1 x 5mm Allen Wrench
- 1 x Philips Screwdriver
- 1 x Adjustable spanner
- 1 x Mallet

Procedure:

Step No.	Description	Images
1.	<p>Lower the quill down so that you can access the hole on the side.</p> <p>Lock the quill using the quill lock.</p> <p>Insert the drill bit drift to the space shown in the image and tap the drift by a mallet. The drill chuck will fall out of the quill.</p> <p>Caution: Remember to unlock the quill lock and return the quill back to its top position after removing the drill chuck.</p> <p>If the disassembly process is continued with the quill in the lowered position, it will put excessive stress onto the spring which may cause it to shatter.</p>	

		
2.	<p>Remove the spring mechanism by removing 2 of the nuts and a loosening the Philips screw that is securing it in place.</p> <p>Caution: Be very careful when removing this part. The spring is very strong therefore if it is not held tightly without caution, it may result in injury.</p> <p>*A safe way to remove this part is to hold it very tightly after removing the nuts and slowly pull it outwards until it does not come into contact with the Philips screw. Once the Philips screw do not come into contact, slowly let the spring release its energy (shown in later section of this article)*</p>	 

		
<p>3.</p>	<p>After the spring mechanism is removed, the handle can be just slid out by hand.</p>	
<p>4.</p>	<p>Release the quill lock and the quill will fall straight out of the drill press.</p> <p>Note: Adjust the drill press table height to minimise the fall of the quill or put your hand underneath the quill to prevent it from free falling onto the table.</p>	

- 5.** After the quill is removed from the drill press, the hex screw which is holding the mechanical lock mount can be removed.

This will expose the full quill assembly.



Note:

If there are any defects on the quill, it should be sent back to our services for replacement.

To take the spring off safely

After removing the nuts and loosening the screw, firmly grasp the spring. Lay your finger onto the tab like part as shown in the image.

Slowly pull out the spring part and dislocate the part from the screw on the bottom.

When the screw is dislocated from the bottom screw, you will feel the spring unravelling. Hold it very firmly so the spring unravels slowly.

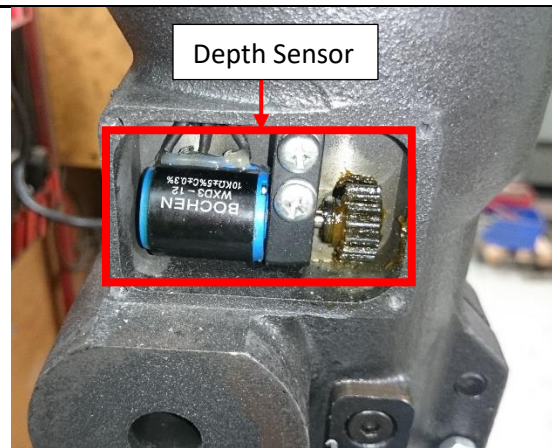
Safety Warning:

If the spring is let go during the process of removal, it will rotate extremely fast in a uncontrolled manner. This is a potential safety hazard which can lead to injury. Take extreme caution, we advise to wear gloves for more grip and protection.



To reassemble the quill back into the drill press:

Step No.	Description	Image
1.	<p>Before inserting the quill back into the drill press check (Or adjust) the depth sensor position.</p> <p>Note: The depth sensor has a limited number of turn it can do therefore if over turned it may lead to damage of the sensor.</p> <p>To access the depth sensor, remove the silver DVR plate by unscrewing the 4 Philips screws. This will expose the depth sensor.</p>	A photograph of a silver metal plate with the text "DVR" in large letters and "SMART TECHNOLOGY" in smaller letters below it. The plate is secured by four screws, which are circled in red. The plate is attached to a dark, metallic component.



- 2.** After exposing the depth sensor, check that it has not reached its maximum number of rotation. This can be felt as the sensor will become extremely hard to turn once it has reached its limit.

Turn the gear on the sensor away from you and check how it feels.

If sensor is hard to turn

- Slightly rotate (about 10 degrees) the sensor gear in the opposite direction.

If sensor is easy to turn

- Return the sensor gear in its approximate original position.

Adjust the position of the sensor and replace the silver DVR plate.

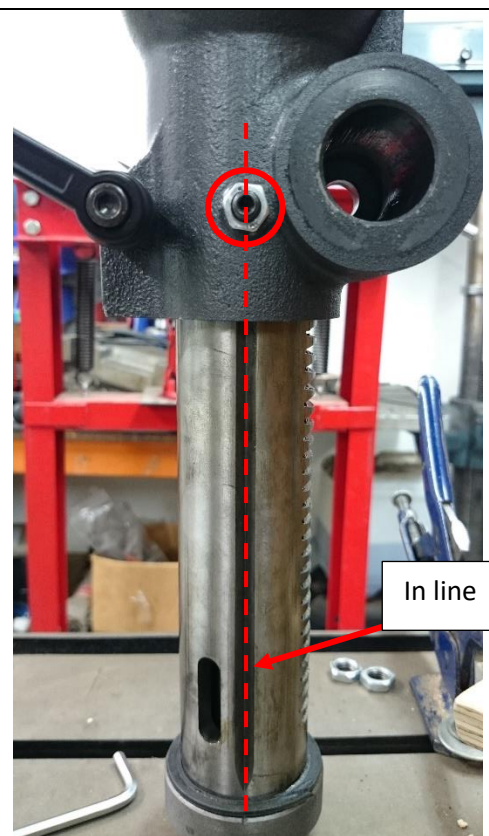


- 3.** Insert the quill assembly all the way back into the drill press.

Note:

Make sure that the groove on the quill is in line with the grub screw on the side shown in the image.

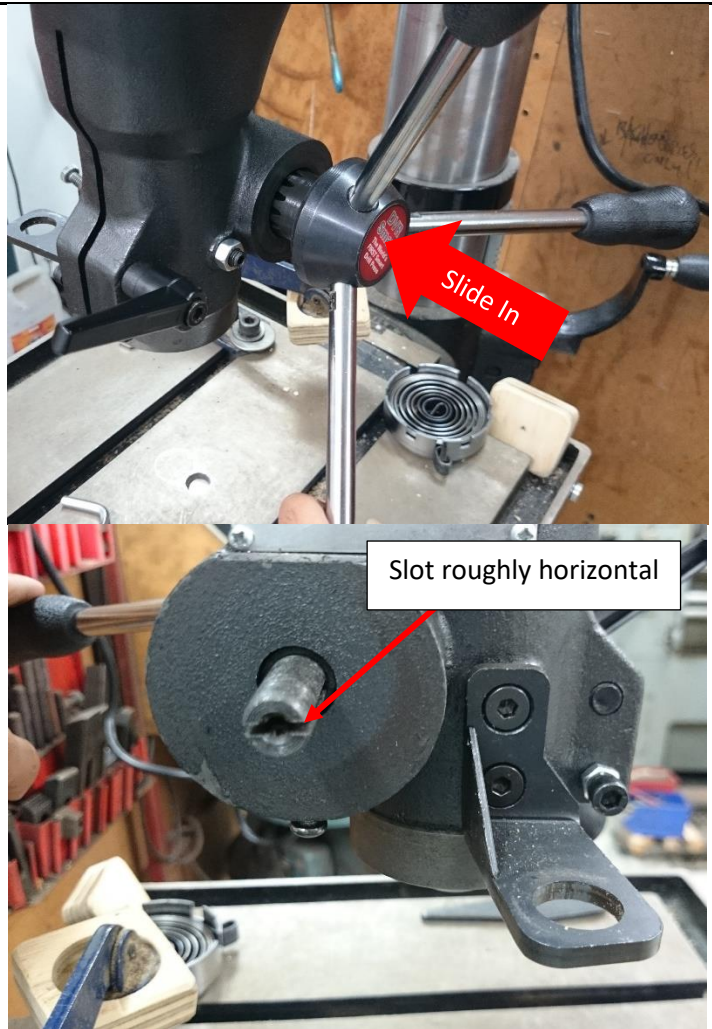
If you feel that the quill is rattling, tighten this grub screw by loosening the nut and using a 4mm Allen wrench. Do not over tighten as it will make the quill harder to move.



4.

Slot the handle in back in.

Put the handle back so that the slot is horizontal when the quill is fully retracted.



5.

Replace the mechanical stop mount.

Lower the quill and reattach the stop mount back onto the quill.

Tighten the hex screw by using the 5mm Allen Wrench.

Note:

This is easier done on the table as shown since the quill does not penetrate through the mechanical mount.



6. Slot the spring into the slot made on the handle screw. Try to have in the orientation shown in figure 1.

Turn the spring tab to the position shown in the second image. (Roughly 270 degrees turn)

Replace the nuts but do not tighten too much as it makes the handle very difficult to turn.

Note:

The drill press will still be useable if the spring is not tightened to this level but it may not retract the quill all the way up.

Safety Warning:

If the spring is let go during the process of installation, it will rotate extremelty fast in a uncontrolled manner. This is a potential safty hazard which can lead to injury. Take extreme caution, we advise to wear gloves for more grip and protection.

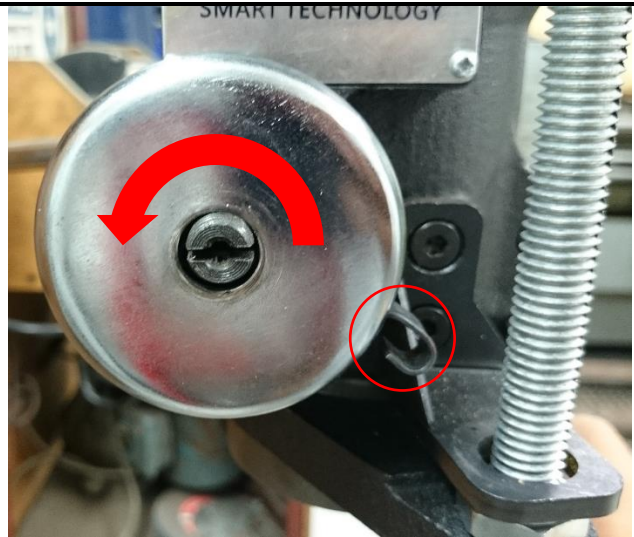


Figure 1: Initial position of spring



Figure 2: Final Positon of Spring

7. Slot the spring into the bottom screw by using the slots made on the spring cover.

Tighten the bottom screw.

