

## Frequently Asked Questions

Date Raised:	Safe practises 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 <a href="mailto:service@teknatool.com">service@teknatool.com</a>
Date Amended:	

### **Question: How do I dismantle my SuperNova 2 chuck for cleaning?**

Answer:

This guide contains information on how to disassemble your chuck for cleaning and maintenance. The guide starts right from the basic position of the chuck on the lathe; you may wish to skip several steps in order to advance to where you are currently at.

### **Tools required**

- 1½" spanner (Teknatool stock code 23014)
- Circlip pliers (and safety)
- Safety glasses
- 3mm Allan key (provided with Supernova 2 chuck)
- Plastic hammer (or block of wood)
- Multipurpose grease for re-greasing of chuck



*The Supernova 2 chuck on a Nova 3000 DVR lathe*

## **1. Removing Supernova2 from insert and lathe**



Removing grub screw to release insert

Using the 3mm Allan key provided with the Supernova release M6 grub screw (turning in the anti-clockwise direction to loosen).

**Caution:** Ensure that the M6 grub screw is completely removed as partial engagement will strip your spindle thread upon removal



Using a 1½” spanner (like accessory 23014 pictured) undo the insert from the lathe. Make sure the spindle lock on the lathe is engaged and hit the spanner with a block of wood or plastic mallet in an anti-clockwise direction

*Using 1½” Spanner to remove chuck from lathe*



With the chuck in your hand and using the ½” spanner again, hit the spanner with a block of wood or plastic mallet to disengage the insert from the chuck. This is to unlock the thread so the insert can be unwound.

*Using 1½” spanner to remove insert from chuck*

## 2. Disassembling the Supernova<sup>2</sup> Chuck



With the 4mm allen key provided release all jaws from the chuck by unscrewing the M6 counter sunk screws



Using circlip pliers remove circlip from bottom of chuck holding in the plastic backing.

**YOU MUST WEAR SAFETY GLASSES WHILE PERFORMING THIS OPERATION AS CIRCLIP MAY FLY UPWARDS OFF PLIERS**

*Using Circlip pliers to remove circlip*



Screw in any Teknatool insert in the chuck thread. Engage the thread partially and tap on the back of insert with a mallet. You will see that the backing plate starts to come off. Remove the backing plate

The pinions will now come out by hand just by pushing them



*The Pinions can now come out by hand, as illustrated in the photo above.*



Turn the chuck upside down to remove scroll ring

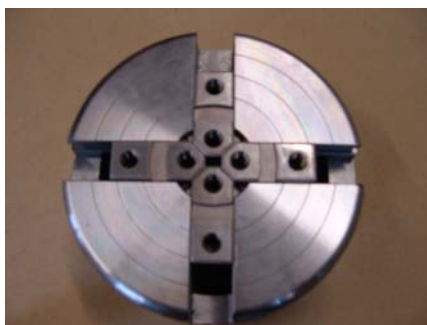


Now just push jaw slides out by hand.

### 3. Cleaning the separate components of the Supernova<sup>2</sup> chuck:

- Clean each jaw slide with rag removing any grit, wood and dust particles etc.
- Clean scroll ring of all grease, grit wood etc
- Clean pinions of all grease, grit, wood etc.
- Regrease the scroll ring and pinions; be very generous with the grease application. (Normal multipurpose grease is sufficient)
- If possible before re-assembling the chuck, blow out all parts with an air compressor.

### 4. Reassembling the Supernova<sup>2</sup> Chuck



Push all jaw slides to meet in center forming a square. Make sure the No. 1 Jawslide is in the slideway with the dimple (a small half moon shape on the inner diameter of the slideway)

Starting with Jawslide 1, insert jaws in clockwise direction in numerical order.



Place scroll ring in chuck and move it back with your fingers as demonstrated in the picture. You will know once it has engaged as it will drop down allowing the pinions to fit in. Make sure the jaws have not moved and still have a square formed in the centre.



Put pinions in each of the two pinion holes. Like the scroll ring you may need to move it back and forward to engage it. Pinions must be all the way in otherwise the plastic backing cover will not go on.





Position backing plate to pinions like in picture and push down so that the plastic backing plate is flat with the chuck. Place circlip back on using circlip pliers. You will see that once the circlip is in its groove the two ends will meet together with a snap.

**YOU MUST WEAR SAFETY GLASSES WHILE PERFORMING THIS OPERATION AS CIRCLIP MAY FLY UPWARDS OFF PLIERS.**



Using 1½" spanner wind the insert back in. Make sure the spigot is in full contact with the back of the chuck. This is important for accuracy. Once inset is fully engaged screw in M6 grub screw with 3mm Allan key provided.

## 5. Removing and attaching jaws to the Supernova<sup>2</sup>



The Supernova<sup>2</sup> chuck comes without jaws attached. With the many jaws available it is very easy to use your single chuck for a very wide range of applications.

All jaws in the Teknatool range for the Supernova<sup>2</sup> are secured and attached the same way.

**Attaching Jaws** - To mount the jaws to the Supernova chuck is another easy process. Firstly wipe clean all jaw slides making sure a clean contact will ensure. Repeat this with all four jaws you wish to attach. Jaw slides are numbered one to four and have a corresponding jaw – of the same number. Place a jaw on its correct jaw slide and position into the groove (location ring out from the jaw into the groove of the jaw slide). The first few times you may need to GENTLY tap the jaws into the locator slot with a block of wood or plastic mallet. Place M6X6 countersunk screws in jaws and screw them on finger tight. When both screws are in, nip them up and back them off half a turn. Repeat this for the remaining three jaws, now using the 8mm T bar Allan key scroll all jaws towards middle until they all come together. Now with all jaws touching and exerting equal pressure on each tighten all screws up. This will ensure a perfect run out. Check to see there are

no gaps between the jaws if this has happened it will probably be due to a jaw being placed on the wrong number (e.g. a #2 jaw on a #3 jaw slide)

**To remove Jaws** - Simply using the 4mm Allan key supplied, unscrew all M6 countersunk screws (there are eight of them). The jaws will come away once their screws are released, however sometimes due to dust particle build up after heavy turning the jaws may need a very light tap with a plastic hammer to dislodge them. It is important to keep them in their set so not to mix them up with other jaws of the same type.