## Servicing the Nova G2 chuck. Nick Simpson

The Nova G2 chuck has an open back and is therefore certain to accumulate dust in all moving areas. This will lead to stiffness and potential jamming. It is important to clean the chuck regularly and re-lubricate. This is a simple process, which is illustrated in the accompanying photographs (G2. A-F).

Picture G2. A. shows the rear view of the chuck when removed from the lathe. There is a large amount of accumulated dust which partially obscures the teeth at the rear of the scroll plate which engage with the chuck key.

G2. A

The scroll is held in place by a circlip which must be exposed by removing the accumulated dust and debris. A simple way to do this is by compressed air jet as shown in G2. B.

PPE is essential with eye protection and a dust mask.



The next step is to remove the circlip (G2.C). It is advisable to wear eye protection as the circlip is made of sprung steel and can ping off the pliers unpredictably. Having removed the scroll, the jaw the jaw carriers may be slid out of their corresponding slots in the chuck housing.



. Each carrier is stamped with a numbers 1-4 (see picture G2.E). For the Nova G2 chuck there is no need to record which slot the individual carrier came from.

Now, in a well-ventilated area with nitrile gloves and eye protection, brush off all surfaces with a brass wire brush and then steep the parts in a de-greasing solvent (G2. D). I used paraffin but any solvent will do. Dry the parts on paper towel and leave to fully dry or to speed the process blow with compressed air using the above PPE.

G2.D

Reassembly is the reverse process with certain caveats. Spray each part with lubricant prior to assembly. My preferred lubricant is PTFE spray, because it is a 'dry' lubricant, but any fine oil will do. Do NOT use grease of any grade. With the chuck on its back insert jaw carrier labelled 1 into any slot. (G2.E.).



Now insert all the other carriers in order 2-4 into slots in a **clockwise** sequence. Bring the carriers together so that their inner edges form a square and turn the whole over (G2. F). You can now drop the lubricated scroll onto the jaws and with a little 'jiggling' it will engage with the carriers. Now replace the circlip and the job is complete.

JOB DONE.

