MOUNTING CHUCK ON LATHE

There are two versions of the SuperNova^{2}Chuck: an insert version for all threads up to 27mm (1 1/8") and threaded versions for dedicated threads up to 38mm (1 1/2").

CORRECT MOUNTING OF CHUCK TO INSERT (WITH INSERT VERSION) AND LATHE SPINDLE IS VERY IMPORTANT TO ACHIEVE ACCURACY.

INSERT VERSION: Check that the correct insert has been supplied to match your lathe spindle thread. The code of the insert is on a label on the plastic insert cover and stamped on one of the flats of the hexagon section of the insert.

A list of thread sizes that can be fitted with an insert plus the larger dedicated threads is provided below. If you find your lathe thread is not listed, check with your supplier (or www.teknatool.com) to see if there have been more recent additions to the thread range. Failing that, you may have a blank insert or blank chuck machined to your requirements at an engineering shop in your area.

WE STRONGLY RECOMMEND THAT THE CHUCK IS NOT USED ON LATHE SPINDLES UNDER 16mm (5/8").

Threads covered by the Insert System (Threads up to 28mm (1 1/8")

Insert 2 (12NS) : M20 X 2 Tyme Cub
Insert 3 (13NS) : M20 x 1.5 Electra Beckum Multico Sumaro
Insert 5 (15NS) : 3/4" 16TPI UNF RH 1/8" spigot
Insert 6 (I6NS) : 3/4" Plain Bore
Insert 7 (I7NS) : 1 1/8" UN RH
Insert 8 (18NS) : 7/8" 12 UN Left-hand
Insert 9 (19NS) : 3/4" 16TPI UNF RH 6mm register
Insert A (IANS) : 3/4" 14TPI BSP RH Teknatool (Pre 1986)
Insert B (IBNS) : 3/4" 14TPI BSP LH Teknatool (Pre 1986)
Insert C (ICNS) : 1" 10 TPI BSF PH Teknatool Woodfast Durden
Insert D (IDNS) : 1 8TPI UNC RH General Rockwell Delta Golding
Insert E (IENS) : 1 1/4" 12TPI RH Myford MLS
Insert G (IGNS) : 3/4" 16TPI UNF RH Sears Coronet Minor/Minor
Insert H (IHNS) : 3/4" IOTPI BSW PH Rockwell Homecraft
Insert I (HNS) : M24 x 3 RH B Line Arundel K600 K450
Insert J (IJNS) : 1 1/8" 12TPI RH Myford Mystro
Insert K (IKNS) : M18 x 2.5 ELU DB180
Insert L (ILNS) : 1 1/4" 8TPI UNS RH (for DVR lathes with this thread only)
Insert M (IMNS) : 1" 10 TPI BSF LH Teknatool Woodfast Durden
Insert N (INNS) : Blank. Can be threaded up to 28mm (1 1/8")
Insert O (IONS) : 1 1/U" BSW PH Morton
Insert Q (IONS) : M30 x 3.5 RH Teknatool Nova 3000 / Cornet / TL 1500 Woodfast, Vicmarc
Insert S (ISNS) 5/5" Plain Bore for Shopsmith Machines
Insert T (ITNS) : 1" 8 TPI LH/RH Dual Threaded, Nova Mercury
Insert U (1UNS) : 1 1/8" UNF RH Taiwanese
Insert V (IVNS) : 7/8" 14TPI NF RH
Insert W (IWNS) : M25x2 RH Tyme Avon
Insert Y (IYNS) : 1 1/4" 8TPI UNS Teknatool Nova 3000/Comet (USA), Woodfast USA

Threads Direct to Chuck Body (cannot be changed once cut)

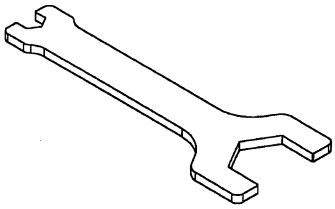
M33x3.5 RH
Blank. For threads up to 38mm

FITTING TO CHUCK:

Check that the internal spigot of chuck body plus insert threads are clean and that the spigot end of the insert is free from damage. Any dents or nicks must be carefully filed off so the insert can be fully screwed home in chuck body. Refer to FIGURE 2. The tolerances of the chuck body and insert are a tight fit to ensure accuracy. This means that the insert may be difficult at first to engage with the chuck body thread. One way is to grip the chuck body in a vice (pad against

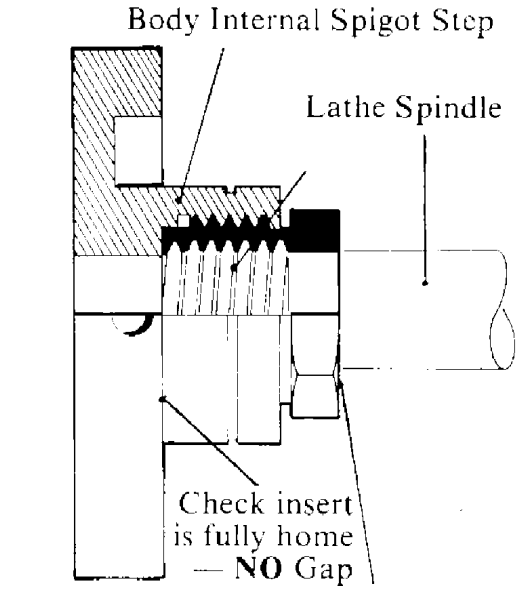
damage) and screw in insert using the optional accessory spanner or a 1 1/2” AF spanner. Care needs to be taken that the outer male insert thread is engaged properly at the start with the female body thread. Screw insert fully into body recess. This is important to ensure running. Refer to FIGURE 2.

CHUCK INSERT SPANNER:
An optional, accessory insert spanner can be purchased to help wind the inserts into the chuck to remove from the lathe spindle. (Code 23014). See back of manual for further information.



The Insert can now be locked to chuck body by means of the M6 x 6 grubscrew provided. Make sure that the fibre washer is inserted first to act as a buffer between the grubscrew and insert thread.
DO NOT SCREW IN GRUBSCREW BEFORE INSERT IS SCREWED HOME IN CHUCK.

IMPORTANT: LH THREAD INSERTS MUST BE LOCKED TO CHUCK BODY OR CHUCK BODY COULD UNWIND FROM INSERT.



FITTING CHUCK TO LATHE

Correct fitting of chuck to lathe spindle is important to ensure accuracy. The chuck body must contact an accurate shoulder on the lathe spindle or bearings (as on Teknatool Nova 3000) to ensure chuck will run true.

There can be a wide variety of lathe spindle thread and spigot dimensions even within the same thread size. The internal thread size is kept to standard tolerances. The internal thread length and spigots of Nova inserts are manufactured to cover as wide a range of variations as possible. This will mean that in most situations you should be able to get a satisfactory match.

CHECK THE FOLLOWING:
Although the insert may screw on part way it may not contact properly with spindle spigot - a spacer or some further modification of the insert may be necessary. This would be the responsibility of the chuck user. Make sure the chuck is screwed to lathe thread properly -a good check is to see whether it screws home on the spindle the same as another lathe fixture such as a faceplate.

POOR FIT OF CHUCK TO LATHE SPINDLE CREATES A SERIOUS HAZARD WHERE CHUCK COULD DISLODGE FROM LATHE. DO NOT ATTEMPT TO USE CHUCK UNLESS THE CHUCK US CORRECTLY FITTED TO LATHE SPINDLE.