



D.I.Y/Self Help Sheet

IDENTIFYING YOUR LATHE SPINDLE THREAD SO YOU CAN MATCH WITH THE RIGHT TEKNATOOL CHUCK

Date Raised: May 2000

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 service@teknatool.com

Date Amended: April 2003

Question: *I want to order a Nova Chuck and I was asked what spindle thread was on my lathe. Why do I need to know this and how can I work out what the thread size is?*

Answer:

There are many lathes on the market, and many have different thread sizes on the headstock spindle. In order to ensure that your SuperNova or Nova chuck fits accurately and safely onto your lathe, we need to know what thread the lathe spindle is so that we can make an exact match. Teknatool sales and service staff are generally familiar with most common/popular lathes on the market. If you tell them what your lathe make & model is, chances are that they will immediately be able to match it for you.



This threaded part is the lathe headstock spindle. It is this part the chuck must thread onto.

Where you are not in contact with a Teknatool Sales representative immediately, or in the unlikely event that they have not heard of your lathe and are unable to assist, you might need to use this D.I.Y sheet to determine your lathe's spindle thread. Luckily, determining your lathe spindle thread for most people is a fairly quick and painless exercise, seldom going past Step One in our procedure.

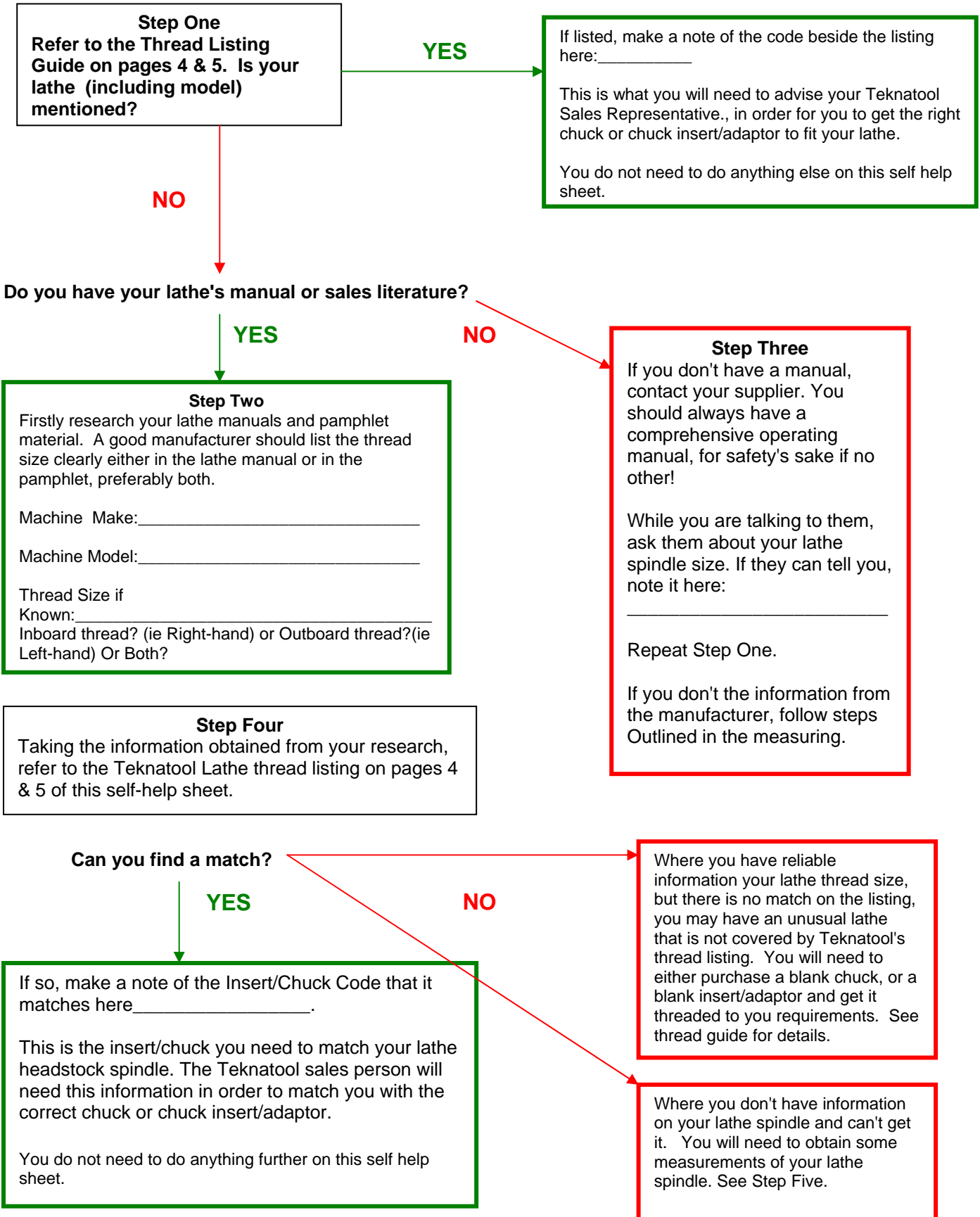
Getting Ready

Parts required :None

Tools Required: 1 x Vernier or measuring tool (for Step Five only), Pen for notes.

Before you start, it can be helpful to gather any information that you may have on your lathe - your sales literature, manual, etc.

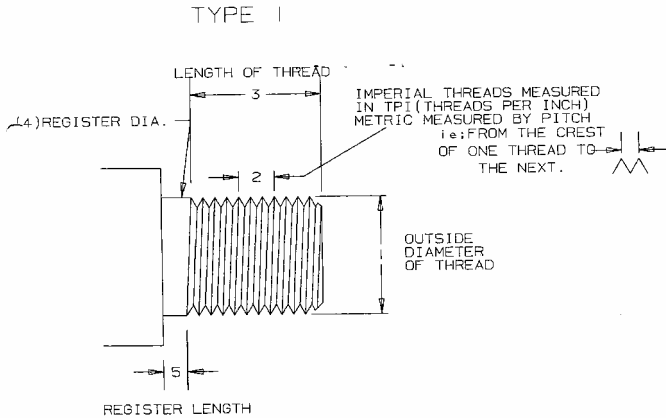
Now, continue with the outlined procedures on the following pages. If at any stage you feel you need more assistance, please don't hesitate to contact us on sales@teknatool.com or service@teknatool.com



Step Five

Do this step only if you have been unable to locate your spindle thread information in the thread listing guide, your lathe manual, or by asking the manufacturer!

Refer to the Diagram to Assist with the measurements required.



Measuring accurately is important. It is important to establish whether it is a metric or imperial thread ie 25.4mm corresponds to 1", but 25mm is a metric thread size.

Step	Area/Quality to be Measured	Record Measurement Here
1.	Outside diameter of thread	
2.	Pitch of thread	
3.	Length of thread	
4.	Register diameter	
5.	Register Length	

Determine thread form angle
 UNC, UNF and Metric Threads are a 60° angle
 Whitworth, BSW, BSF are a 55° angle

Have you been able to measure and determine your lathe thread size?

YES

Congratulations! You have determined your lathe thread size..

Record the code of the insert/chuck on the listing Here: _____

You will now need to match that against the thread listing on pages 4&5. Repeat Step One.

NO

Ok, don't worry! There are a number of things you can do:

1. Contact your lathe manufacturer and obtain the information
2. Take a faceplate or some other threaded fitting along to your local engineering company. They should be able to quickly measure it for you and assist in matching the correct chuck adaptor/insert or chuck on the thread guide.

Yes, but when checking against the thread guide on pgs 4&5, it doesn't match anything on the list.

It could be that you have an unusual lathe that is not available as a standard thread. You might need to get either a blank chuck or a blank insert/adaptor and get a local engineering company to thread it out to your exact requirements. Or, try getting your local engineering company to measure it for you, and re-check the list.

TEKNATOOL CHUCK INSERT AND DIRECT THREAD SYSTEM

The Teknatool SuperNova, SuperNova Deluxe and Nova Chucks have the widest range of lathe compatibility on the market.

If you have a known lathe model, it is highly likely that we have a chuck or insert/adaptor to fit it. If we don't, then we have either a blank body chuck or a blank insert, which you can have threaded out to your requirements. To check if we can match your lathe, refer to the tables below.

The first refers to the list of insert/adaptors that we manufacture. Check with us if your lathe is not listed, we update our inserts all the time. The second table refers to the thread sizes which we direct thread into the chuck body - as such, these do not require insert/adaptors. A directly threaded chuck body cannot be altered to a insert type body or another thread size once threaded, so it pays to be sure that your lathe thread size is not covered by the insert/adaptors first!

Note that all insert/adaptors are fully compatible between the SuperNova, SuperNova Deluxe and Nova Chucks, and that all thread sizes listed here are available for both chucks.



Picture of a Teknatool Chuck Insert.

Insert/Adaptor Listing for SuperNova, SuperNova Deluxe & Nova Chucks

For threads under 28mm - if you change your lathe, you don't have to change your chuck! All you have to do is unwind your insert/adaptor, and put in a new insert/adaptor.



Above Left: Fitting the insert/adaptor to the chuck.
Above Right : The Insert/Adaptor fitted.

Code	Description	Thread Size	Lathe Match (where known)
12NS	INSERT 2	M20x2 RH (Metric)	<ul style="list-style-type: none"> Tyme Cub
I3NS	INSERT 3	M20x1.5 RH (Metric)	<ul style="list-style-type: none"> Electra Beckum / Multico Sumaro
I6NS	INSERT 6	3/4" Plain Bore	
I7NS	INSERT 7	1 1/8" 8 TPI UN	(NOT UNC)
I8NS	INSERT 8	7/8" 12 NS LH	
I9NS	INSERT 9	3/4" 16 TPI RH with 6mm register	
IANS	INSERT A	3/4" 14TPI BSP RH	<ul style="list-style-type: none"> Teknatool TL1000 (Pre 1986)
IBNS	INSERT B	3/4" 14TPI BSP LH	<ul style="list-style-type: none"> Teknatool TL1000 (Pre 1986)
ICNS	INSERT C	1" 10TPI BSF RH	<ul style="list-style-type: none"> Teknatool TL1000 Woodfast Durden
IDNS	INSERT D	1" 8TPI UNC RH	<ul style="list-style-type: none"> Delta Rockwell Golding General Teknatool Comet (North America) & Mercury Lathes
IENS	INSERT E	1" 12TPI RH	<ul style="list-style-type: none"> Myford ML8, Turnstyler

IFNS	INSERT F	5/8" Plain Bore RH	<ul style="list-style-type: none"> • Shopsmith
IHNS	INSERT H	3/4"10TPI BSW RH	<ul style="list-style-type: none"> • Rockwell / Homecraft
IINS	INSERT I	M24x3 RH (Metric)	<ul style="list-style-type: none"> • B Line • Arundel K600/K450
IJNS	INSERT J	1 1/8"12 TPI RH	<ul style="list-style-type: none"> • Myford Mystro, Masterlathe (NZ)
IKNS	INSERT K	M18x2.5 RH (Metric)	<ul style="list-style-type: none"> • Elu DB 180
ILNS	INSERT L	1 1/4"8 TPI RH	<ul style="list-style-type: none"> • FOR NOVA DVR 3000 LATHES ONLY
IMNS	INSERT M	1"10TPI BSF LH	<ul style="list-style-type: none"> • Teknatool TL1000 • Woodfast / Durden
INNS	INSERT N	Blank. Can be threaded up to 28mm (1 1/8") to match your lathe size	<i>Once threaded, this blank adaptor cannot be re-threaded.</i>
IONS	INSERT O	1 1/8" 7 TPI BSW RH	<ul style="list-style-type: none"> • Morton
IQNS	INSERT Q	M30x3.5 RH (Metric)	<ul style="list-style-type: none"> • Teknatool TL1500/3000/Comet (European & Southern Hemisphere) • Woodfast
ITNS	INSERT T	1"8 TPI Dual Threaded LH and RH	<ul style="list-style-type: none"> • Teknatool Nova Mercury Mini Lathe • Jet
IUNS	INSERT U	1 1/8" 12 TPI UNF RH	<ul style="list-style-type: none"> • Taiwanese
IVNS	INSERT V	7/8"14 TPI NF RH	
IYNS	INSERT Y	1 1/4" UNS 8 TPI RH	<ul style="list-style-type: none"> • Teknatool TL1500/3000/Comet (North America)
IWNS	INSERT W	M25x2 RH (Metric)	<ul style="list-style-type: none"> • Tyme Avon

Thread Sizes Available directly threaded into chuck body (for SuperNova, SuperNova Deluxe & Nova Chucks)

For thread sizes over 28mm - note that as these are threaded straight into the chuck body, these cannot be altered to another thread size or to take an adaptor/insert once purchased. Not all Teknatool Chucks are available in all direct thread options. Check with your reseller or with us for the most up to date information.



SuperNova Chuck thread direct into the body (no adaptor/insert)

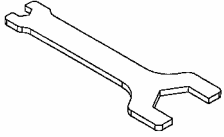
Code	Description	Thread Size	Lathe Match (where known)
NSB4	Chuck 4	M33x3.5 RH (Metric)	<ul style="list-style-type: none"> • Scheppach DMV200 & DMT180; Sorby (some markets); OneWay 2036/2436/2016/2416; Wivamac (DB & ADB - all models); Kity; Konig; Hager; Hegner; Flott BD180; Emco DB5, VicMarc VL200 & 300 (not US), APTC Woodfast
NSB5	Chuck 5	3/4"16 TPI UNF 1/8" Spigot	<ul style="list-style-type: none"> • Carba Tec
NSBD	Chuck D	1"8 TPI UNC RH	<ul style="list-style-type: none"> • Delta
NSBP	Chuck P	1 1/2" 6 BSW RH/LH COMBINATION THREAD	<ul style="list-style-type: none"> • Union Graduate • Wadkin Burgsreen • Tanner
NSBR	Chuck R	Blank. Can be threaded up to 38mm (1 1/2") in diameter and 35mm in depth.	<i>Once threaded, this blank chuck cannot be re-threaded</i>
NSBX	Chuck X	1 1/2"8 TPI NF	<ul style="list-style-type: none"> • Conover

Hints from removing insert/adaptors from lathe

After some time, the direct metal on metal contact between the lathe spindle face and the insert/adaptor can mean the insert/adaptors are hard to remove easily with the hand.

To counter this direct friction effect, there are a number of ways to assist in removing the insert/adaptors:

1. Use a fibre washer (similar to those used on taps/washing machines etc) between the chuck insert and the face of the lathe spindle. This breaks the metal to metal contact.
2. Use a 1 1/2" AF Hex Spanner on the hexagonal boss of the insert/adaptor.
3. Purchase a Teknatool Accessory Spanner. This is a double-ended spanner, which can be used on one end to remove inserts, and the other end is sized to fit our Comet lathe and Ornamental Turner fittings.



This spanner is available from where ever the Teknatool Nova and SuperNova chucks are sold, or through our website.



Glossary of Terms

UNC - Unified National Coarse Standard - USA Imperial

UNF - Unified National Fine Standard - USA Imperial

BSW - British Standard Whitworth

A Whitworth Spindle can fit a UNC threaded insert, but a UNC threaded Spindle cannot fit a Whitworth Threaded Insert.