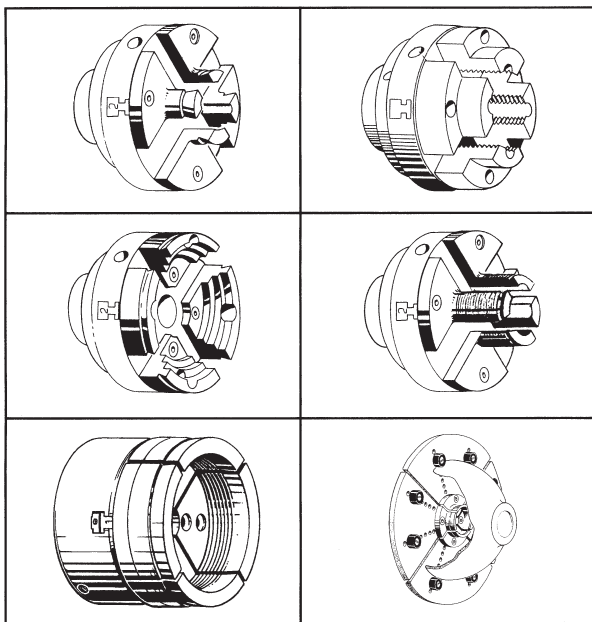




NOVA SCROLL CHUCK SUPERNOVA CHUCK ACCESSORY JAWS MANUAL



Jaws specifications may vary from country to country

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WARRANTY

DATE PURCHASED

(To be completed by Sales Outlet).

This Teknatool Product is backed by a warranty period of twenty four months from the date of purchase. Teknatool International hereby agrees to make repairs or replace components without the charge for any defects due to faulty material or workmanship, provided that –

1. The warranty period has not elapsed. Proof of purchase date (sales slip etc.) would need to be forwarded to Teknatool International.
2. If in our opinion the unit has not been altered repaired or modified in any way that would affect its operation; has not been subjected to misuse, negligence, accident or not used strictly in accordance with instructions.
3. Where necessary transportation is prepaid to Factory Service Centre, or other authorised Teknatool Service Centre.

Warranty does not cover any costs or damages arising directly or indirectly from the operation of this Teknatool Product. No other guarantee, written or verbal is authorised by Teknatool International hereby.

OVERSEAS CUSTOMERS: Our Teknatool agents will issue their own Warranty to cover this product. The terms may vary from those stated above - please check with your dealer.

Our policy is one of continuous improvement. We therefore reserve the right to change specification/design without notice.

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Thank you for purchasing this accessory jaw set for your Nova Chuck/SuperNova Chuck. You will find that the wide range of jaw sets will really enhance the versatility of your Chuck. The jaws all have complementary applications and provide the opportunity to extend your woodturning interests.

Teknatool International specialises in innovative woodturning equipment and in the back of this manual you can learn about some of the many products in the range. For more information enquire with your stockist or contact Teknatool directly. Alternatively visit our website - www.teknatool.com. A video featuring the accessory jaws and their applications is also available.

All sizes listed are in metric with the nearest approximate inch (“) equivalent in

EXPLANATION OF DIFFERENT JAW SETS

25MM JAW SET - Code: JS25N

Designed for small bowl and small unsupported spigot turning work which is below the size that can be handled by the 50mm jaw set.

PIN JAW SET - Code: JSPIN

These special 25mm extended jaws are designed to act like a pin chuck – expanding into a pre-bored hole – a useful technique for free form edge bowls. The advantage of these jaws is that you don't have to bore an exact size as with other pin jaws. The longer jaws allow for a very powerful spigot grip for smaller work such as lace bobbins. There is also a small dovetail to mount small bowls. Twist drills also can be gripped to enable the chuck to be used as a drill chuck.

50MM JAW SET - Code: JS50N

These jaws are standard with all Nova Scroll Chucks and the SuperNova Chuck Standard version. A versatile all round jaw that enables the turner to become fully competent with the Nova Scroll Chuck|SuperNova Chuck before moving on to more specialised jaws.

STEP JAW SET - Code: JS75N

Designed primarily to grip the base (foot) of footed bowls in the contracting mode. The step sizes provide optimum gripping for three foot sizes with minimal crush damaged wood.

SPIGOT JAW 35MM/45MM JAW SET

- Codes: JS-5P35/JS-SP45

Available in two different internal sizes, 35mm and 45mm. These jaws provide a strong grip to unsupported spigot turning applications, e.g vases, goblets. Designed to grip both in the contracting and in the expanding mode.

100MM JAW SET - Code: JS100N

Designed for expanded dovetail, reverse dovetail for gripping footed bowls, with limited spigot facility - not recommended for square spigot work. There is provision to mount false wooden jaws, so customised jaws can be made for special purposes.

130MM JUMBO JAW SET - Code: JS130N

Essentially the big brother to the 100mm jaw set. These are designed to handle large work up to 750mm in diameter. An ideal 'companion jaw' to the SuperNova as the extra power of the SuperNova matches the big capacity of these jaws. These jaws are also ideal for use with centre saving systems.

COLE JAW SET - Code: JSCOLE

A versatile set designed primarily for the re-chucking of bowls to remove chuck marks or to re-shape the bottoms of bowls that have already been turned. Many other Nova jaw sets can be fitted to the Cole Jaws making a combination jaw facility – expanding dovetail facility for mounting bowls/platters and a reverse dovetail for mounting footed bowls/platters.

POWERGRIP JAW SET - Code: PJSN

A multi purpose jaw that should satisfy the needs of bowl turners and hollow form turners. The dovetail sizes fit neatly between the standard 50mm and the Jumbo 130mm jaw sets, while the spigot facility enables larger/longer hollow forms to be undertaken.

VACUUM FACEPLATE - Code: FPV

Designed for use with the 50mm jaw set. Provides a faceplate facility to enable you to vacuum chuck. The faceplate allows you the maximum freedom in designing any size or shape of carrier. MDF or wooden carriers made to suit your particular workpieces are screwed to the faceplate. The seal between the carrier and workpieces needs to be made of sheet closed cell foam (neoprene rubber).

ACCESSORY JAWS RANGE OF APPLICATIONS

This chart is designed to provide a guide to the range of use of the Nova/SuperNova Accessory Jaw Sets.
The chart is a guide only. Allowance must be made for condition of wood and experience of turner.

EXPANDING ACTION (Internal Dovetail)			CONTRACTING ACTION (Spigot Mode)		
JAW SET	RECESS DIAMETERS	SIZE OF WORKPIECE	ROUND SPIGOT DIAMETER	SQUARE SPIGOT DIAMETER	SIZE OF WORKPIECE
25mm JAW SET	23.5mm - 46mm (59/64" - 1 51/64")	Bowls up to 150mm diameter x 50mm depth (6" x 2")	8.5mm - 25mm (11/32" - 1")	12mm - 25mm max. (15/32" - 1")	Up to 125mm length x 25mm diameter (5" x 1")
PIN JAW	25mm - 49.5mm (1" - 2")	Bowls up to 150mm x 50mm (6" x 2")	11mm - 25mm (0.43" - 1")	9mm - 26mm (23/64" - 1")	Up to 150mm length x 25mm diameter (6" x 1")
50mm JAW	50mm - 75mm (2" - 3")	Bowls up to 310mm x 100mm (12" x 4")	45mm - 65mm 1 25/32" - 2 7/16")	40mm - 50mm (1 37/64" - 2")	150mm length x 100mm diameter (6" x 4")
STEP JAW	76mm - 98mm (3" - 3 27/32")	Bowls up to 360mm x 100mm (14 11/64" x 4")	42mm - 61mm (1 25/32" - 2 25/64")	3 FOOT SIZES 50mm - 68mm (2" - 2 43/64")	64mm - 80mm (2 1/2" - 3 5/32")
35mm SPIGOT JAW	SMALL STEP 53mm - 71mm (2 5/64" - 2 51/64") LARGE STEP 77mm - 97mm (3" - 3 13/16")	Hollowed Boxes, Vases 120mm diameter x 150mm long (4 23/32" x 6")	30mm - 50mm (1 11/64" - 2")	30mm - 45mm (1 11/64" - 1 49/64")	150mm diameter x 260mm length (6" x 10")

45mm SPIGOT JAW	SAME AS 35mm SPIGOT	SAME AS 35mm SPIGOT	SAME AS 35mm SPIGOT	38mm - 60mm (1.5" - 2.4")	30mm - 45mm (1.2" - 1.18")	SAME AS 35mm SPIGOT
100m JAW	97mm - 117mm (3 13/16" - 4 39/64")	Bowls up to 360mm x 127mm (14 11/64" x 5")	Foot mounting of Bowls 84mm - 92mm (3 19/64" - 3 5/8") OPTIMUM FOOT SIZE 85mm (3.35")	Not Recommended	Not Recommended	Bowls up to 310mm (12") x 100mm depth (12" x 4") SPIGOT MOUNTING 150mm long x 127mm (6" x 5")
130mm JUMBO JAW	124mm - 149mm (4 55/64" - 4 39/64")	Platters up to 750mm x 75mm (29 1/2" x 3")	107mm 130mm (4 13/64" - 5")	Not Recommended	Not Recommended	Platter up to 750mm x 75mm (29 1/2" x 3")
POWER GRIP JAW	96mm - 120mm (3 49/64" - 4 45/64")	Bowls up to 400mm x 150mm (16" x 6")	Contracting Dovetail for Bowls 84mm - 92mm (3 19/64" - 3 5/8") Rounds 80mm - 100mm (3.15" - 4")	60mm - 800mm (2 23/64" - 3 9/64")	200m diameter x 310mm length 98" x 12"	
COLE JAW				Can use in conjunction with other jaw sets. Re-chucking function. Max 250mm (10") diameter bowl.		
MINI COLE JAW				Can be used in conjunction with other jaw sets. Re-chucking function. Max 200 mm (8") diameter bowl.		
VACUUM FACEPLATE				This plate is used as basis for vacuum holding system to rechuck bowls. Can also be used as a faceplate.		

ACCESSORY JAWS

TURNING SPEED GUIDE

The following guide sets out the recommended maximum speeds for each of the accessory jaws. Remember, excessive speed is a serious lathe hazard – give careful consideration to the speed you use:

1. The bigger the work diameter – the slower the speed used.
2. Out of balance/work being roughed out must always be turned at the slowest speed possible.
3. Speeds may differ from those in your lathe manual. If there is a difference, use the SLOWER of the two recommended speeds.

MAXIMUM RECOMMENDED SPEEDS

JAW TYPE	TURNING METHOD	
	EXPANDING	CONTRACTING
25mm Jaw	684 rpm	1440 rpm
Pin Jaw	684 rpm	1440 rpm
50mm Jaw	684 rpm	1020 rpm
Step Jaw	684 rpm	684 rpm
35mm/45mm Spigot Jaw	684 rpm	684 rpm
100mm Jaw	684 rpm	684 rpm
130mm Jaw	400 rpm	400 rpm
Powergrip Jaw	684 rpm	684 rpm
Cole Jaw	600 rpm	600 rpm
Vacuum Faceplate	684 rpm	N/A

EXPLANATION OF TWO OF THE MORE COMMON CHUCKING TECHNIQUES USED IN THIS MANUAL

EXPANDING DOVETAIL OPERATION

Expansion of the jaws into a recess. This function is for bowl and platter turning where the projection (depth) of the wood blank is not too great. Specific sizes for each jaw type is stated in that area. Please refer to the Nova Chuck/SuperNova Chuck manual for information on how to form a recess.

When making a recess it is important to calculate the depth. The recess depth is an important consideration for maximising the holding power of the jaws, guidelines under each jaw should be followed closely. The depth of a recess can be varied according to the size and mass of the workpiece. Larger bowls and softer woods require a deeper recess. Smaller lids and thin platters generally require a shallower recess. Always use a recess depth in excess of what is required. **IF THERE IS ANY DOUBT INCREASE RECESS DEPTH.**

SPIGOT OPERATION

Contraction of the jaws around a wooden spigot for grip. Mainly used for box, goblet and vase turning, that is, endgrain items with a fair degree of overhang. Generally tailstock support is minimal or cannot be used because of the need to hollow out the inside. This method seems to be preferred by many bowl turners over the internal dovetail recess as the foot can later be re-shaped or removed, if desired, to make a smooth outside bottom of the bowl.

This situation is one of the most difficult to provide secure holding no matter what fixing method is used. **EXTREME CAUTION WITH THIS OPERATION MUST BE EXERCISED.** If used properly however the Nova Chuck provides a very secure grip in this mode.

Check for adequate contact and grip of all four jaws into the wood when using this operation. **MAKE SURE YOU HAVE AN ADEQUATE GRIP BEFORE OPERATION** by vigorously wrenching the work piece mounted in the chuck. If any loosening occurs **DO NOT PROCEED** with operation. Repeat tightening procedure and retest grip. Refer to the Nova Chuck/SuperNova Chuck manual for information on forming a spigot.

FREE END TURNING

Turning where the work is not supported by the tailstock.

SAFETY RULES

PLEASE READ AND UNDERSTAND THESE SAFETY RULES BEFORE OPERATING ANY OF THE ACCESSORY JAWS.

WARNING – THE NOVA ACCESSORY JAWS ARE DESIGNED FOR USE ON THE NOVA CHUCK/SUPERNOVA CHUCK ONLY. THEY ARE NOT DESIGNED TO FIT AND CANNOT BE USED WITH ANY OTHER CHUCK. TO DO SO COULD CAUSE A MALFUNCTION AND RISK OF SERIOUS INJURY. IF YOU ARE UNSURE OF THE USE OR APPLICATION OF ANY OF THESE ACCESSORY JAWS BEFORE USING CONTACT YOUR RESELLER OR TEKNATOOL DIRECTLY.

IMPORTANT – READ VERY CAREFULLY THE SAFETY SECTION IN THE NOVA CHUCK/SUPERNOVA CHUCK MANUAL BEFORE OPERATION AND FOLLOW CLOSELY THE SAFETY RULES OUTLINED IN THIS JAW MANUAL.

CONSULT RELEVANT OPERATIONAL SECTIONS OF THE NOVA CHUCK/SUPERNOVA CHUCK MANUAL BEFORE USING JAWS.

SOME SAFETY DIRECTIONS ARE PERTINENT ONLY TO A CERTAIN JAW SET. ANY ADDITIONAL SAFETY INFORMATION IS LOCATED IN THE TEXT OF THE RELEVANT ACCESSORY JAW IN THE PAGES FOLLOWING.

DANGER – THIS CHUCK IS CAPABLE OF CONTRIBUTING TO SERIOUS INJURY, AS WITH ANY OTHER POWER TOOL ACCESSORY, IF USED IMPROPERLY ON THE LATHE.

Before using the Nova Chuck/SuperNova Chuck and accessory jaws, read and understand the instruction manuals. Read and understand also the lathe manual. If you do not have a manual, contact the supplier of your lathe to obtain one before using the lathe and chuck.

User must be professionally trained to use this chuck and accessory jaws. Vocational school courses are recommended. As with any other chucking method, an extremely cautious and sensible approach is necessary. With the Nova Chuck/SuperNova Chuck it is not possible to give exact directions as to the amount of tightening pressure required for work holding. Follow closely strict guidelines in this manual for different jaw types for wood blank diameters length, and turning speed.

ALWAYS WEAR EYE PROTECTION WHICH COMPLIES WITH CURRENT ANSI STANDARD Z87.1 (USA). WE STRONGLY RECOMMEND THAT A FULL FACE SHIELD IS USED AT ALL TIMES.

BEFORE USING THE NOVA CHUCK/SUPERNOVA CHUCK ACCESSORY JAWS BE SURE THAT –

- **WARNING!!! EXCESSIVE SPEED IS A SERIOUS LATHE HAZARD. ALWAYS TURN AT THE LOWEST SPEED POSSIBLE.**

Speed required will vary with wood blank size. The larger the blank the slower the speed. Consult your lathe manual. DO NOT ATTEMPT TO USE THE CHUCK UNLESS THE LATHE SPEEDS ARE KNOWN. YOU MUST STRICTLY FOLLOW THE MAXIMUM SPEED LIMITS SET OUT IN THE OPERATIONAL SECTIONS OF THIS MANUAL. DO NOT EXCEED THEM UNDER ANY CIRCUMSTANCES.

- EXAMINE WOOD CAREFULLY. ONLY MOUNT SOUND WOOD. If any cracks or weakness is found in the wood - DO NOT MOUNT IN CHUCK OR IN ACCESSORY JAWS. DO NOT MOUNT WOOD THAT IS LIKELY TO BREAK UP DURING TURNING (EG ROTTEN OR SPONGY WOOD). DO NOT USE POORLY LAMINATED WOOD.
- DO NOT EXCEED MAXIMUM GUIDELINES IN THIS MANUAL FOR WOOD BLANK DIAMETER/LENGTH FOR THE DIFFERENT MODES OF OPERATION AND JAW TYPES.
- DO NOT EXTEND JAW SLIDES BEYOND CHUCK BODY UNDER ANY CIRCUMSTANCES. ONLY OPERATE CHUCK WITH JAW SLIDE STOP SCREW IN PLACE. This prevents jaw slides from dislodging from chuck.
- WARNING – MAKE SURE THAT IN EXPANSION MODE THAT THE AMOUNT OF TRAVEL REQUIRED IS LESS THAN THE LIMIT OF THE STOP SCREW.
- ALWAYS TEST WORKPIECE IS GRIPPED SECURELY IN THE JAWS. BEFORE OPERATION TEST BY WRENCHING WORKPIECE IN JAWS. IF ANY LOOSENING OCCURS, RE-EXAMINE HOLDING AREA FOR ADEQUATE GRIP (following mounting guidelines) AND ANY DAMAGE TO GRIPPING AREA.
- MAKE SURE WORKPIECE IS CLEAR OF OBSTRUCTION BY MANUALLY ROTATING WORKPIECE BEFORE SWITCHING POWER ON.

MOUNTING THE ACCESSORY JAWS

THE ACCESSORY JAWS NEED TO BE LOCATED AND SCREWED ON THE JAW SLIDES OF THE CHUCK.

NOTE: THE COLE JAWS, VARI JAWS AND VACUUM FACEPLATE HAVE SPECIAL MOUNTING INSTRUCTIONS. REFER TO SPECIFIC SECTIONS ON THESE JAWS IN THIS MANUAL.

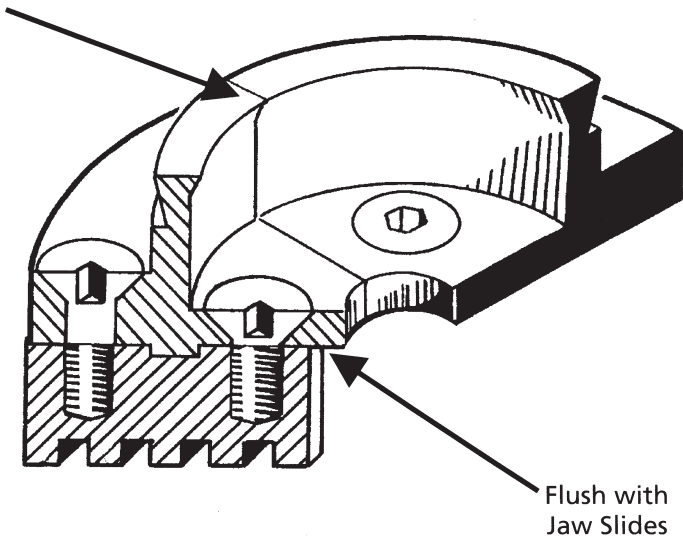
IT IS IMPORTANT TO LOCATE JAWS PROPERLY INTO THE JAW SLIDES FOR THE CHUCK TO FUNCTION ACCURATELY.

Follow the method set out below

1. You will note that the back of the jaws have a stepped location ring. This location ring is designed to fit into the grooved section of the jaw slide for precision location. Ensure that the slide and collet back are clean and free from any burrs or damage that might affect location. Place the jaw segment over the hole positions on the jaw. Press the jaw segment firmly onto the jaw slide. For the first few times you may need to GENTLY tap the jaws into the locater slot with a block of wood.
2. You will notice that each jaw segment is numbered 1-4 on the bottom or top face. Jaws should be mounted clockwise in the same sequence. This ensures the jaws are re-assembled the same way they were cut during manufacture. This will ensure optimum accuracy.
3. The screw can now be screwed in, using the 4mm allen key provided in the chuck kit. Lightly grease or oil screws under heads before use to prevent screws locking onto jaw. Preferably use an anti-locking compound such as ROCOL J166 Anti-seize compound. Do all screws up finger tight and then loosen off one quarter of turn.

4. Wind the mounted jaws into the centre of the chuck until they all butt against the other. Now finally tighten screws, starting with the centre screws and then outside screws. Nip screw up firmly but do not OVERTIGHTEN.
5. Check there is no light between jaw slides and add on jaw segments or that one or more segments is not higher or lower than the others. If this is the case repeat the procedure above.

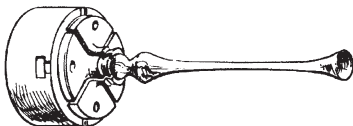
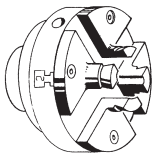
In line with
adjacent Jaws



25mm JAW SET

SAFETY

Consult the safety section on Page 10 of this manual and also read the safety section of your Nova Scroll Chuck/SuperNova Chuck manual and be thoroughly familiar with the safety operation before using these jaws.



MOUNTING THE JAWS

See Mounting the Accessory Jaws on Page 9 of this manual

PARTS PROVIDED – Four jaw segments NOTE: There is only one screw position for each of the 25mm jaw segments. Only one screw is necessary for secure fastening of jaw segments because the jaw is designed for small turning work.

OPERATIONAL MODES

a. Expanding Dovetail Jaws

Using the 25mm jaws, bowls up to 150mm (6") in diameter by 50mm (2") depth can be turned.

THIS METHOD MUST NOT BE USED FOR ANY WORK LONGER THAN 50mm AS THERE WOULD BE GREAT DANGER OF WOOD TEARING OUT OF THE CHUCK. **DO NOT EXCEED 684 RPM IN THIS MODE. OUT OF BALANCE STOCK MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE.**

Recess: Maximum recess depth of 6.5mm can be used. Any recess diameter can be turned between 23.5mm (15/16") and 46mm (1 13/16"). The optimum recess diameter is 25mm (1"). At this diameter, full contact of jaws with recess is achieved. As the recess diameter is increased above 25mm, less jaw contact is made. This needs to be kept in mind when considering the recess depth and the size of the wood blank being mounted. Increase the recess depth to maximum if a recess diameter in excess of 25mm is used.

b. Square Blanks (Contracting Action)

These jaws can grip a square spigot between approximately 12mm (31/64") to a maximum of 25mm (1").

DO NOT EXCEED 1440 RPM IN THIS MODE

MAXIMUM LENGTH Wood blanks up to 125mm (5" length by 25mm (1").

c. Spigot Mounting (Contracting Action)

Use wood blank size up to 125mm (5") length by 25mm (1") diameter.

DO NOT EXCEED 1440 RPM FOR THIS OPERATION

Spigot Size: Minimum spigot size is 8.5mm (23/64") up to a maximum spigot size of 25mm (1"). **Spigot Depth** Always use the maximum spigot depth which is 19mm (3/4").

d. Special Function

For lathes with hollow spindles, the Nova Chuck/SuperNova Chuck with the 25mm jaws mounted, could accept long lengths of round dowel below the 25mm size, which could be fed through the lathe spindle and through the chuck. This means that multiple turnings could be achieved by simply advancing the dowel through the centre of the chuck and securing with the jaws, turning, parting off, and then advancing the next piece through. Do not allow dowel to protrude past spindle on the outboard end.

OPTIONAL ACCESSORIES

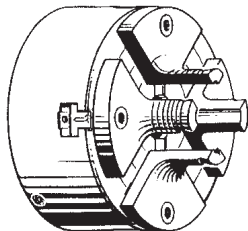
Not applicable for this jaw set.

**The 25mm jaw set is not designed for mounting to the Cole Jaw Set.
DO NOT USE WITH COLE JAW SET.**

PIN JAW SET

SAFETY

Consult the safety section on Page 10 of this jaw manual and also read the safety section of your Nova Scroll Chuck/Super Nova Chuck manual and be thoroughly familiar with the safety operation before using these jaws.



MOUNTING THE JAWS

See “Mounting Accessory Jaws” on page 9 of this manual.

PARTS PROVIDED – Four Jaw Segments. NOTE – There is only one screw position for each of the Pin jaw segments. Only one screw is necessary because the jaw is designed for small turning work.

OPERATIONAL MODES

a. Pin Jaw Function

A 25mm (1”) diameter (approx) hole is needed in the wood blank to accept the jaw. With the jaws fully contracted the bowl blank should slip into place on the jaws. To achieve the best grip it is essential that the jaws are expanded firmly against the sides of the hole.

THIS METHOD MUST NOT BE USED FOR ANY WORK GREATER THAN 300MM (12”) DIAMETER BY 75MM (3”) THICK.

DO NOT EXCEED 684RPM. OUT OF BALANCE WORK MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE.

b. Expanding Dovetail Jaws

Using the dovetail section of Pin jaws, bowls up to 150mm (6”) diameter by 50mm (2”) depth can be turned.

THIS METHOD MUST NOT BE USED FOR ANY WORK WITH DEPTH GREATER THAN 50MM (2”) AS THERE WOULD BE GREAT DANGER OF THE WOOD TEARING OUT OF THE CHUCK. **DO NOT EXCEED 684RPM IN THIS MODE.**

Recess: Maximum recess depth of 4mm.

Any recess diameter can be turned between 25mm (1”) to 49.5mm (2”).

The optimum recess diameter is 25.5mm (1”). At this diameter full.

contact of the jaws with the recess is achieved. As the recess diameter is increased above 25.5mm, less jaw contact is made. This needs to be kept in mind when considering the recess depth and the size of the wood blank being mounted. Increase the recess depth to maximum if a recess diameter in excess of 25.4mm (1") is used.

c. Square Blanks (Contracting Action)

These jaws can grip a square spigot between approx. 9mm (11/32") to a maximum of 26mm (1").

DO NOT EXCEED 1440RPM IN THIS MODE.

Maximum length Wood blanks up to 150mm (6" by 25mm (1").

d. Spigot Mounting (Contraction Action)

Use wood blank size up to 150mm (6") length by 25mm (1") diameter.

DO NOT EXCEED 1440RPM FOR THIS OPERATION.

Spigot size: Minimum spigot size is approx 11 mm (7/16") up to a maximum size of 25mm (1"). Spigot depth: Always use the maximum spigot depth which is 33mm (1 5/16"). This method must not be used in conjunction with any copy turner device.

e. Special Dowel Function

For lathes with hollow spindled, the Chuck with the Pin jaws mounted could accept long lengths of round dowel below the 25mm (1") size, which could be fed through the lathe spindle and chuck. (The limiting factor would normally be the lathe spindle – e.g. Nova 3000 has a 15mm bore). This means that multiple turnings could be achieved by simply advancing the dowel through the centre of the chuck. The dowel is then secured with the jaws, turned, parted off, and the next piece is pulled through. Do not allow dowel to protrude past spindle on outboard end.

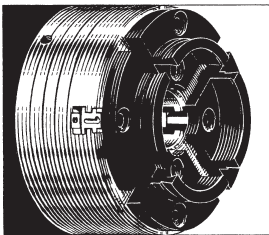
f. Drill Chuck Function

The increased depth (length) of the jaws allows for firm gripping of twist drills to enable the chuck to be used as a drill chuck driven from the headstock spindle. Make sure you use all of the drill section to grip the drill shank. The minimum drill shank diameter: approx: 10mm (13/32").

The pin jaw set is not designed to be used for mounting to the Cole Jaw Set. DO NOT USE WITH COLE JAW SET.

50mm JAW SET

These jaws are supplied standard with the Nova Scroll and the Standard version of the SuperNova Chuck.



SAFETY

Consult the safety section on Page 10 of this jaw manual and also read the safety section of your Nova Scroll Chuck/Super Nova Chuck manual and be thoroughly familiar with the safety operation before using these jaws.

MOUNTING THE JAWS

See “Mounting Accessory Jaws” on page 9 of this manual.

PARTS PROVIDED – Four jaw segments

OPERATIONAL MODES

a. Expanding Dovetail Jaws

Using this method bowls of up to 310mm (12) in diameter by 100mm (4”) in depth can be turned.

THIS METHOD MUST NOT BE USED FOR ANY WORK LONGER THAN 100MM AS THERE WOULD BE GREAT DANGER OF WOOD TEARING OUT OF THE CHUCK. DO NOT EXCEED 684RPM IN THIS MODE. OUT OF BALANCE STOCK MUST BE TURNED AT THE LOWEST SPEED POSSIBLE.

Recess: Maximum recess depth 6mm (1/4). Any recess can be turned between 50mm (2”) and 75mm (3”) diameter. The optimum recess diameter is 50mm (2”). Where ever possible keep your recess between 50mm – 60mm. Extra care must be taken while turning with recesses above 60mm. **YOU MUST USE THE MAXIMUM RECESS DEPTH ON ALL RECESSES OVER 64mm (2.5”) diameter OR ANY WORK WITH A DIAMETER OVER 150MM (6”).**

For smaller lids and thin platters, not exceeding 150mm diameter, only a shallow recess of around 3mm (1/8”) is necessary.

b. Square Blanks (Contracting Action)

These jaws can grip a square spigot between approximately 40mm (1 9/16") to a maximum of 50mm (2").

DO NOT EXCEED 1020RPM IN THIS MODE

Maximum length: Wood blanks up to 150mm (6") length by 100mm (4").

c. Spigot Mounting (Contracting Action)

Use wood blank size up to 150mm (6") length by 100mm (4") diameter.

DO NOT EXCEED 1020RPM IN THIS OPERATION

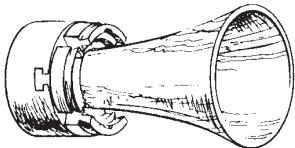
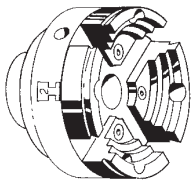
Spigot Size: Minimum spigot size of 45mm (1 49/64") up to a maximum spigot size of 65mm (2 9/16").

Spigot Depth: The length of the spigot area must not be less than 16mm (5/8").

STEP JAW SET

SAFETY

Consult the safety section on Page 10 of this jaw manual and also read the safety section of your Nova Scroll Chuck/Super Nova Chuck manual and be thoroughly familiar with the safety operation before using these jaws.



MOUNTING THE JAWS

See "Mounting Accessory Jaws" on page 9 of this manual.

PARTS PROVIDED – Four jaw segments note – The step jaws are numbered on the underside of each segment.

OPERATIONAL MODES

a. Expanding Dovetail Jaws

Using the expanding dovetail function of the step jaws, bowls up to 360mm (14") diameter by 100mm (4") depth can be turned. Use the dovetail form on the outer part of the jaws. Any recess can be turned in between 76mm (3") to 98mm (3 27/32"). At the 79mm diameter, full contact of jaws with recess is achieved. As the recess diameter is increased above 79mm less jaw contact is made. This needs to be kept in mind when considering the recess depth and size of the wood being mounted. As a rule, increase the recess depth to a maximum if a recess diameter in excess of 79mm is used.

THIS METHOD MUST NOT BE USED FOR ANY WORK LONGER THAN 100mm AS THERE WOULD BE GREAT DANGER OF WOOD TEARING OUT OF THE CHUCK. DO NOT EXCEED 684RPM IN THIS MODE. OUT OF BALANCE STOCK MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE.

Recess – A full recess depth of 6.5mm (1/4") is available. Recess depth can be varied; shallow for smaller/thin wood blanks. Note guidelines above the recess over 79mm diameter.

b. Contracting Mode for Footed Bowls

Three step sizes are provided for gripping footed bowls.

Step one (smallest) – The optimum foot grip size is 42mm (1 21/32"). To ensure there is no crushing of the wood the size of the bowl foot should be made as close as possible to 42mm. Larger diameters up to 61 mm (2 13/32") can be used but above 42mm the edges of the jaws can mark the wood. It is suggested that masking tape be used to help protect the foot from jaw marks.

NOTE: Using this smallest step, consideration needs to be given to the shape of the lower part of the bowl so it does not contact the jaw steps above.

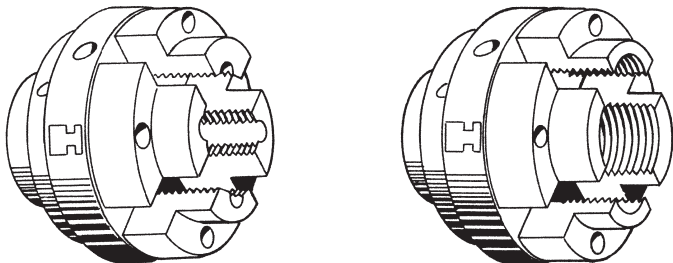
Step Two – The optimum foot size is 50mm (2") to a maximum of 68mm (2.68").

Step Three – The optimum foot size is 64mm (2 1/2") up to a maximum of 80mm (3 9/64").

DO NOT EXCEED 684RPM IN THIS MODE
--

OPTIONAL ACCESSORIES

Not applicable for this jaw set.



SPIGOT JAW 35mm or SPIGOT JAW 45mm

SAFETY

Consult the safety section on Page 10 of this jaw manual and also read the safety section of your Nova Scroll Chuck/Super Nova manual and be thoroughly familiar with the safety operation before using these jaws.

MOUNTING THE JAWS

See “Mounting the Accessory Jaws” on page 12 of this manual

PARTS PROVIDED – Four jaw segments.

OPERATIONAL MODES

a. Expansion Mode

In the expansion mode either the 35mm or 45mm spigot jaws can hold any parallel opening (hollowed boxes, vases, etc...) up to 120mm (4 45/64”) diameter by 150mm (6”) depth.

THIS METHOD MUST NOT BE USED FOR ANY WORK LONGER THAN 150MM AS THERE WOULD BE GREAT DANGER OF WOOD TEARING OUT OF THE CHUCK.

DO NOT EXCEED 684RPM IN THIS MODE. OUT OF BALANCE STOCK MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE.

There are two steps which provide for two different sizes of holding.

SMALL STEP

Any recess diameter can be turned between 53mm (2 3/32") and 71 mm (2 51/64"). The optimum recess diameter is 53mm (2 3/32"). At this diameter, full contact of jaws with recess is achieved. As the recess diameter is increased above 53mm less jaw contact is made. Increase the recess depth to maximum if a recess diameter in excess of 55mm (2 5/32") is used.

LARGE STEP

Any recess diameter can be turned between 77mm (3") and 97mm (3 13/16"). The optimum recess diameter is 77mm (3"). At this diameter, full contact of jaws with recess is achieved. As the recess diameter is increased above 77mm (3"), less jaw contact is made. Increase the recess depth to maximum if a recess diameter in excess of 80mm (3 5/32") is used.

b. Contracting Action Square Blanks

Both the 35mm and 45mm jaws can grip a square spigot between 30mm (1 3/16") to a maximum of 45mm (1 25/32").

DO NOT EXCEED 684RPM IN THIS MODE.

MAXIMUM LENGTH: Wood blanks up to 260mm (10 1/4") length by 150mm (6").

c. Contracting Action Spigot Mounting

DO NOT EXCEED 684RPM FOR THIS OPERATION.

Use wood blank size up to 260mm (10 1/4") length by 150mm (6") in diameter.

Spigot sizes: 35mm Jaws: 30mm (1 3/36") minimum to 50mm (2") maximum.
45mm Jaws: 38mm (1 1/2") minimum to 60mm (2 3/8") maximum. Spigot Depth:
Always use maximum spigot depth of 30mm (1 3/16").

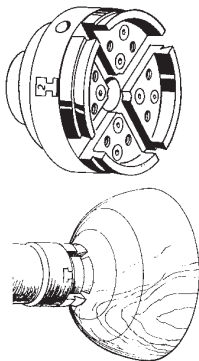
OPTIONAL ACCESSORIES

Not applicable for this jaw set.

100mm JAWS

SAFETY

Consult the safety section on Page 10 of this jaw manual and also read the safety section of your Nova Scroll Chuck! Super Nova Chuck manual and be thoroughly familiar with the safety operation before using these jaws.



MOUNTING THE JAWS

See “Mounting the Accessory Jaws” on page 9 of this manual

PARTS PROVIDED – Four jaw segments

OPERATIONAL MODES

a. Expanding Dovetail Jaws

Using this method with the 100mm jaws, bowls up to 360mm (14”) diameter by 127mm (5”) depth can be turned. Any recess can be turned between 97mm (3 13/16”) to 117mm (4 39/64”). The optimum recess diameter is 97mm (3 13/16”). At this diameter full contact of jaws with recess is achieved. As the recess diameter is increased above 97mm, less jaw contact is made. This needs to be kept in mind when considering the recess depth and the size of the wood blank being mounted. Increase the recess depth to maximum if recess diameter in excess of 100mm is used. **Recess:** A full recess depth of 9mm (11/32”) is available.

THIS METHOD MUST NOT BE USED FOR ANY WORK LONGER THAN 127MM AS THERE WOULD BE GREAT DANGER OF WOOD TEARING OUT OF CHUCK. DO NOT EXCEED 684RPM IN THIS MODE.

b. Reverse Dovetail (Contracting Action)

There is a reverse dovetail to grip bowls with a foot mounting. Bowls/platters up to 310mm (12”) can be turned. The optimum foot diameter is 85mm (3 11/32”). Larger foot diameters can be used up to 92mm (3 5/8”), but above 90mm (3 35/64”) the edges of the jaws can mark the wood. It is suggested that masking tape be used to protect the foot from jaw marks. The maximum available foot depth is 12.5mm (1/2”).

c. Square Blanks (Contracting Action)

These jaws are not recommended for square blanks.

d. Spigot Mounting (with Reverse Dovetail)

A spigot using a reverse dovetail – same foot mounting procedure as in b. Wood should be pre-machined to a cylinder (to optimise balance) with a diameter no greater than 127mm (5"). DO NOT USE ANY EXTENSION ONER 120mm (4 47/64").

DO NOT EXCEED 684RPM IN THIS MODE

Spigot Depth: Always use maximum spigot depth of 12.5mm (1/2")

e. False Wooden Jaws

Custom wooden jaw segment mounted on 100 or 130mm jaws. No responsibility can be accepted for the user's own adaptations of this custom facility. It is the user's responsibility to ensure that work is safely mounted.

Provision is made for the 100mm jaws to take custom false wooden jaws. There are two screw positions in each jaw slide. These are made to accept a M6 by 30 Allen Head Cap Screw. The optional fastening kit for the 100mm jaws F100N can also be used with the 130mm jaws. This pack comes with 8 M6x30 Capscrews and a M5 Allen Key.

METHOD:

Careful consideration is needed as to the type of holding situation that is required for the false wooden jaws. This will influence jaw diameter and design. The following information is simply intended as a guideline. Turn a cylinder between centres to the approximate diameter required for the false wooden jaws. A cylinder of about 88mm (3 15/32") will provide for good expansion of false wooden jaws. However any diameter between 87mm (3 27/64" and 100mm (4") can be used.

SCREW DEPTH:

Use M6x30 screws. When the screws are fully screwed into the jaws there is a height of 24mm of screw under the head. Note: Screws can only be screwed in to a depth FLUSH with the underside of the jaw. IF SCREWS CONTACT FACE OF THE CHUCK THEY WILL PREVENT JAW MOVEMENT. Provision needs to be made for the screw head. Countersunk diameter is 10mm (25/64”).

Countersunk depth depends on the length of the wooden blank. However the holes need to be countersunk to a depth such that the screw is fully home, flush with the underside of the jaw. It is helpful to bore the holes slightly oversize so there is some adjustment.

SCREW POSITION:

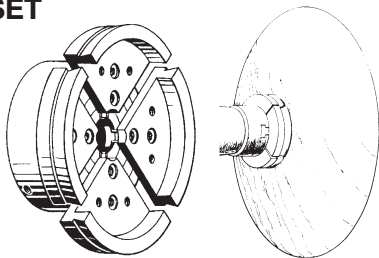
Suggested method – Open jaws up to accept the wooden blank. Remove blank. Use wooden blank to trace a circle on a piece of thin cardboard. Place cardboard on the mounted jaws and trace out the screw position. Use a pin punch or compass point to mark out the centre of the holes. Now place cardboard form over the end of the wooden blank and mark hole position. There are two hole positions on each jaw segment. Use two screws per segment to secure each false wooden jaw.

OPTIONAL ACCESSORIES:

Fastening Kit for False Wooden Jaws Code: F100N

130mm JUMBO JAW SET

NOTE: It is recommended that this is only used on lathes which has a spindle of 1" or more in diameter.



SAFETY

Consult the safety section on Page 10 of this jaw manual. Also read the safety section of the Nova Chuck/Super Nova Chuck manual and be thoroughly familiar with the safety operation before using these jaws. In Addition:

1. **DO NOT EXCEED 400RPM WHEN USING THESE JAWS.** Speeds higher than this could pose a serious hazard with wood blocks 400mm (16") and over. Keep to the slowest speed available on your lathe when first turning the rough wood block to shape.
2. For large or out of balance work the full depth of the jaws should be used i.e. 9mm dovetail or 12.5mm spigot.
3. Tighten the scroll ring action adjustment on your Nova Chuck (refer to page 7 Nova Chuck Manual) so that the action is stiff and harder to turn. This will provide extra security for the larger turnings with this jaw.

MOUNTING THE JAWS

See "Mounting accessory jaws" page 9 of this manual.

PARTS PROVIDED – Four Jaw Segments

OPERATIONAL MODES

a. Expanding Dovetail Jaws

Using this method bowls up to 750mm (29 1/2") diameter by 75mm (3") depth can be turned. Any recess can be turned between 124mm (4 7/8") to 149mm (5 7/8"). The optimum recess diameter is 128.5mm (5"). At this diameter full contact of jaws with recess is achieved. As the recess diameter is increased above 128.5mm, less jaw contact is made. This needs to be kept in mind when considering the recess depth and the size of the wood bland being mounted. As a rule, increase the recess depth to maximum if recess diameter in excess of 128.5mm is used. The full recess depth of 9mm should be used on all recess

Recess: A full depth of 9mm(23/64") is available. Note guidelines above for recess over 128.5mm(5 1/16") diameter.

THIS METHOD MUST NOT BE USED FOR ANY WORK LONGER THAN 75MM AS THERE WOULD BE GREAT DANGER OF WOOD TEARING OUT OF THE CHUCK. DO NOT EXCEED 684RPM IN THIS MODE OUT OF BALANCE STOCK MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE.

b. Reverse Dovetail (Contracting Action)

There is a reverse doveail to grip bowls with a foot mounting. Bowls/platters up to 750mm(29 17/32") can be turned. The optimum foot diameter is 109mm (4 19/64"). Larger foot diameters can be used up to 130mm(5"), but above 109mm the edges of the jaws can mark the wood. It is suggested that masking tape be used to protect the foot from jaw marks. The maximum available foot depth is 12.5mm (4 1/2" 59/64"). The diameter of the dovetail foot(at the narrowest point) can be from 107mm (47/32") to about 130mm (5 1/8"). The internal dovetail angle is a 75° half included angle. This is a much deeper dovetail form than the 100mm jaws to give added security of grip.

DO NOT EXCEED 684 RPM IN THIS MODE

c. Square Blanks (Contracting Action)

These jaws are not recommended for square blanks.

d. Spigot Mounting (with Reverse Dovetail) i.e. grain, parallel with the axis of the lathe. A spigot using a reverse dovetail – same foot mounting procedure as in B. Wood should be pre-machined to a cylinder (to optimise balance) with a diameter no greater than 200mm (8") **DO NOT USE ANY EXTENSION OVER 300MM (12")**.

DO NOT EXCEED 684RPM IN THIS MODE

Spigot Depth Always use maximum spigot depth of 12.5mm (4 1/2 59/64").

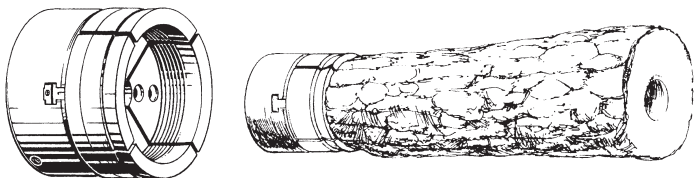
e. False Wooden Jaws

Custom wooden jaw segment mounted on 130mm jaws. No responsibility can be accepted for the user's own adaptations of this custom facility. It is the user's responsibility to ensure that work is safely mounted.

Provision is made for the 130mm jaws to take custom false wooden jaws. Refer to page 25 on the 100mm jaw set instructions.

OPTIONAL ACCESSORIES:

Fastening Kit for False Wooden Jaws Code: F100N



POWERGIPJAW SET

Note: These jaws are provided standard with the Premier version of the SuperNova Chuck.

SAFETY

Consult the safety section on Page 10 of this jaw manual and also read the safety section of the Nova Chuck/SuperNova Chuck manual and be thoroughly familiar with the safety operation before using these jaws.

MOUNTING THE JAWS

See “Mounting Accessory Jaws” on Page 9 of this manual.

PARTS PROVIDED – Four Jaw Segments

OPERATIONAL MODES

a. Expanding Dovetail Jaws

Using the Powergrip jaws, bowls up to 400mm (16”) in diameter by 150mm (6”) depth can be turned.

THIS METHOD MUST NOT BE USED FOR ANY WORK LONGER THAN 150MM AS THERE WOULD BE GREAT DANGER OF WOOD TEARING OUT OF THE CHUCK. DO NOT EXCEED 684RPM IN THIS MODE OUT OF BALANCE STOCK MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE.

Any recess diameter can be turned between 96mm (3 25/32”) and 120mm (4 22/32”). The optimum turning recess diameter (on the outside) is 99mm (3 57/64”). As the recess diameter is increased above 99mm, less jaw contact is made. This needs to be kept in mind when considering the recess depth and size of the wood blank being mounted. Increase the recess depth to maximum if a recess diameter in excess of 99mm is used. The dovetail angle is 15°.

OPERATIONAL MODES

b. Reverse Dovetail (Contracting Action)

This method is used to grip bowls with a foot mounting, The size of the foot being between 80mm (3 5/32") and 100mm (4"). Bowls/platters up to 400mm (16") can be turned. The optimum foot diameter is 80mm (3 5/32"). Larger foot diameters can be used up to 100mm (4") but above 80mm the edges of the jaws can mark the wood. It is suggested that masking tape be used to protect the foot from jaw marks. The maximum available foot depth is 12.5mm (1/2"),

DO NOT EXCEED 684 RPM IN THIS MODE

c. Square Blanks (Contracting Action)

These jaws can grip a square spigot between approx. 60mm (2 3/8") to a maximum of 80mm (3 5/32").

DO NOT EXCEED 684 RPM IN THIS MODE

MAXIMUM LENGTH: Wood blanks up to 310mm (12 7/32") length by 200mm (8") diameter.

d. Spigot Mounting (With Reverse Dovetail)

Wood should be pre-machined to a cylinder (to optimise balance) with a diameter no greater than 100mm. This method can be used to grip pre-machined/pre-turned spigots of 80mm.

DO NOT EXCEED 684 RPM IN THIS MODE

Spigot Size: minimum spigot size is 80mm up to a maximum spigot size of 100mm. Spigot Depth: Always use the maximum spigot depth which is 12.5mm.

TITAN POWERGRIP JAWS

For use on the NOVA TITAN CHUCK ONLY

SAFETY

Consult the safety section on Page 10 and also read the safety section on Page 3 of your Chuck manual and be thoroughly familiar with the safety operation before using these jaws. In addition, please carefully follow the specific safety information regarding the operational use of the Titan Power Jaws outlined in the Operational section.

PARTS PROVIDED

QTY	CODE	DESCRIPTION
4	10037	Titan Power Jaw Segments
12	CM5010180	M6x10 Countersunk Screws
1	13030	4mm Hexagon T-bar Wrench
1	10112	Chuck Accessory Jaw Manual

NOTE Use the M6x10 Countersunk screws provided with your Titan chuck to mount the Power Jaws. Spares can be purchased from the Teknatool Website: [HYPERLINK "http://www.teknatool.com" www.teknatool.com](http://www.teknatool.com)

MOUNTING JAWS

See "Mounting the Accessory Jaws" on page 12 & 13.

WARNING – BEFORE OPERATING YOUR TITAN POWERJAW SET

- DO NOT EXCEED 800 RPM WITH THE JAWS IN ANY OPERATIONAL MODE.
- OUT OF BALANCE WOOD OR LARGE WOOD BLANKS MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE ON OR BELOW 250 RPM.
- DO NOT ATTEMPT TO USE THESE JAWS IF YOUR LATHE DOES NOT HAVE A USABLE SPEED OF 250 RPM OR BELOW.
- MAKE SURE THAT JAW SLIDES DO NOT PROJECT BEYOND CHUCK BODY WHEN JAWS ARE EXPANDED.
- DO NOT STAND IN A POSITION THAT MIGHT PUT YOU IN THE PATH OF A DISLODGED ROTATING BOWL.

OPERATIONAL MODES

a. Expanding Dovetail Mode

Using the Titan Power Jaws, bowls up to 735mm (29") in diameter by 150mm (6") depth can be turned. Recommend that there is 50mm (2") of wood outside of dovetail area.

Any recess diameter can be turned between 128mm (5") and 156mm (6.14"). As the recess diameter is increased less jaw contact is made. This needs to be kept in mind when considering the recess depth and size of the wood blank being mounted. Increase the recess depth to maximum if a recess diameter in excess of 140mm is used. The dovetail angle is 15 degrees.

THIS METHOD MUST NOT BE USED FOR ANY WORK LONGER THAN 150MM (6") AS THERE WOULD BE GREAT DANGER OF WOOD TEARING OUT OF THE CHUCK. DO NOT EXCEED 750RPM IN THIS MODE OUT OF BALANCE WOOD MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE.

b. Reverse Dovetail (Contracting Action)

This method is used to grip bowls with a foot mounting, the size of the foot being between 108mm (4.25") and 136mm (5.35"). Bowls/platters up to 350mm (14") diameter x 100mm (4") depth can be turned. The optimum available foot depth is 7mm (0.627"- 1/4" approx.).

DO NOT EXCEED 750RPM IN THIS MODE

c. Square Blanks (Contracting Action)

These jaws can grip a square spigot between approx. 78mm (3") to a maximum of 108mm (4.25").

DO NOT EXCEED 600 RPM IN THIS MODE
MAXIMUM LENGTH: Wood blanks up to 350mm
(14") length by 108mm (4.25") diameter.

THESE INSTRUCTIONS AND SAFETY REQUIREMENTS CAN BE FOUND IN THIS INSTRUCTION BOOKLET.

d. Spigot Mounting Rounds Recommendations For Endgrain Wood Only

Wood should be pre-machined to a cylinder (to optimise balance) with a diameter no greater than 350mm (14") x 350mm (14") length. This method can be used to grip pre-machine/pre-turned spigots of 108mm (4.25") to 136mm (5.35") diameter. Always use the maximum spigot depth of 40mm (1.57"). For cross grain wood the maximum piece would be 200mm (8") diameter x 200mm (8") length.

DO NOT EXCEED 600 RPM IN THIS MODE

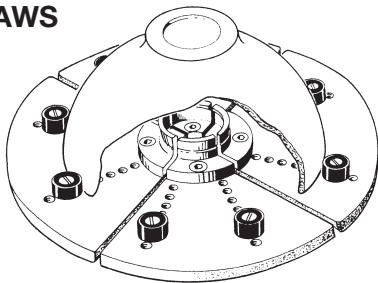
ABOVE 300mm (12") diameter x 300mm (12") length

DO NOT EXCEED 350 RPM

COLE or MINI COLE JAWS

SAFETY

Consult the safety section on Page 10 of this jaw manual and also read the safety section of your Chuck manual and be thoroughly familiar with the safety operation before using these jaws.



PARTS PROVIDED

- 4 Diecast Cole Jaw Segments
- 8 M6x20 Countersunk Screws
- 8 M6x16 Cheese Head (Slotted) Screws
- 8 Cole Jaw Rubbers

IMPORTANT INFORMATION!!!!

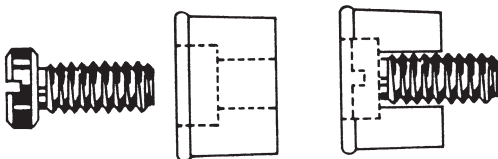
METHOD OF FITTING FOR FIRST TIME OF USE

Extreme care should be taken. The locator ring on the back of the Cole Jaws provides the accuracy of location. Care must be taken that this locator ring is not damaged when the jaws are placed in the jaw slides. With the chuck body flat on a bench, carefully place each Cole Jaw segment in line with the holes. Now put screws in only a little way so that they are loose but engaged with the threaded holes of the jaw slides. Remember to first lightly oil or grease screws under heads before use to prevent screws locking onto jaw. Then gently rock the Cole Jaw segment from side to side until the locator ring on the jaw segment is eased properly in the groove of the jaw slide. See illustration next page. Look under jaw segment to make sure the ring is properly seated in jaw slide groove. Check for the gap between jaw slide and Cole Jaw segment – there should be no light showing.

IT SHOULD NOT BE RIDING UP ON THE EDGE OF THE GROOVE!

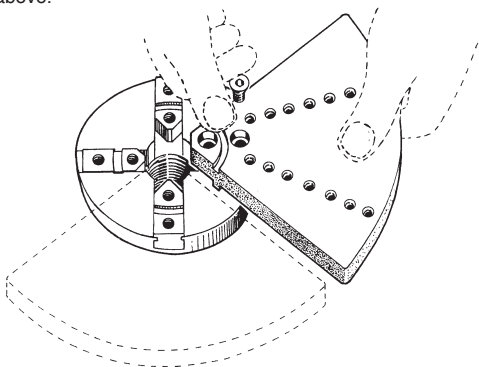
Now the screw can be fully wound in. Use this method both screws should first be wound down until heads just touch the jaws. Then starting with the inside screw – wind it 1/4 to 1/2 a turn. Similarly wind outside screws until screws are fully home. DO NOT OVERTIGHTEN. Repeat procedure on all four segments.

SPECIAL INSTRUCTIONS FOR COLE JAW RUBBERS



MOUNTING JAWS FOR ALL NOVA SCROLL & SUPERNOVA CHUCKS

See “Mounting the Accessory Jaws” on page 12 of this manual. Note: The four Cole Jaw diecast segments provided are all identical and so they can be mounted in any sequence. Hence they are not numbered. You may find it convenient to number them 1 – 4 in clockwise sequence when you have them mounted on the Nova Chuck/SuperNova Chuck so they can be put back in the same sequence each time. The standard mounting screws that come with the Nova Chuck/SuperNova Chuck can be used for this purpose. If you wish, extra screws can be obtained by purchasing the “Nova Fastening Spares Kit.” Check there is no light between jaw slides and add on jaw segments or that one or more segments is not higher or lower than the others. If this is the case, repeat the procedure as above.



WARNING

- DO NOT EXCEED 600 RPM WITH COLE JAWS OR 800 RPM WITH MINI COLE JAWS IN ANY OPERATIONAL MODE.
- OUT OF BALANCE STOCK MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE BELOW 600RPM.
- DO NOT ATTEMPT TO USE THESE JAWS IF YOUR LATHE DOES NOT HAVE A USABLE SPEED OF 600 RPM OR BELOW.
- MAKE SURE THAT JAW SLIDES DO NOT PROJECT BEYOND CHUCK BODY WHEN JAWS ARE EXPANDED.
- DO NOT STAND DIRECTLY OPPOSITE REVOLVING BOWL BUT PLACE YOURSELF TO ONE SIDE.
- USE SPECIAL OPTIONAL WOODWORM SCREW DESIGNED FOR COLE JAWS. THE NORMAL WOODWORM SCREW CAN NOT BE USED WITH THE COLE JAWS.
- THE 25MM AND PIN JAW SET CAN NOT BE MOUNTED ON THE MINI COLE OR COLE JAWS.

OPERATIONAL MODES

a. Contracting And Dovetail Modes

Both the contracting and dovetail modes are available when the other accessory jaw sets (ie 50mm, 75mm, 100mm) are mounted onto the Cole Jaws and used in the normal way. The longer M6x20 screws provided with the Cole Jaws must be used to secure the optional jaws to the Cole Jaws. Follow the usual operational directions and safety requirements for the particular jaw set used (e.g 50mm, 75mm, 100mm). **THESE INSTRUCTIONS AND SAFETY REQUIREMENTS CAN BE FOUND IN THIS INSTRUCTION BOOKLET.**

b. Re-Chucking Using The Cole Jaw Facility

The Cole Jaw segment can be mounted on the Nova Chuck/SuperNova Chuck by themselves without the use of any other jaw sets. Normal M6x10 Countersunk screws provided with your Nova/SuperNova to mount the other accessory jaw sets can be used.

WARNING

DO NOT ATTEMPT TO USE THIS FACILITY TO GRIP BOWL BLANKS WHICH HAVE NOT BEEN FULLY TURNED INSIDE AND OUTSIDE. THE RE-CHUCKING FACILITY CANNOT BE USED AS A GRIPPING METHOD TO DO MAJOR RE-SHAPING WORK OVER THE WHOLE OUTER SURFACE OF THE BOWL. ALWAYS USE A CAUTIOUS AND CONSERVATIVE APPROACH. USE CORRECT CHISEL TECHNIQUES TO AVOID CHISEL DIG-INS WHICH COULD DISLodge THE BOWL. DO NOT USE HEAVY CUTS WHICH COULD ALSO DISLodge BOWLS.

If you want to mount another accessory jaw set (50mm, 35mm, 100mm) onto the Cole Jaws use the four longer M6x20mm screws provided. Note the 25mm jaws and pin jaws are not designed for use with Cole Jaws.

Only when both the inside and outside of the bowl have been turned (these operations can all be performed with the Cole Jaws in conjunction with another optional accessory jaw set) can the bowl be re-chucked to rework the bottom (outside) surface. Bowls up to 250mm (10") in diameter for Cole Jaws, and bowls up to 171mm (6 3/4") in diameter for Mini Cole Jaws, can be re-chucked gripping the rim in the contracting mode. If re-chucking is required to achieve a smooth under surface of the bowl, it is best to have previously held the bowl by foot mounting (contracting mode) as it is much easier turn off a foot, rather than for example, a recessed dovetail. Foot mounting method is best achieved with the Step Jaw or 100m (Cole Jaws only) Jaw Set.

c. Mounting Bowls

There are several radial positions available. The assembled rubber stoppers need to be fastened so that they are screwed in flush against the jaw surface. They need to be equally spaced at the same radial position on each segment to achieve an even gripping of the bowl. The rubber stoppers will grip around the rim of the bowl and contract downward. Refer to the directions in your Nova Scroll Chuck/SuperNova Chuck for the contracting mode. Make sure the whole rim of the bowl is seated flush against the jaw surface so that it is being well supported and evenly gripped.

WARNING

THE RUBBER STOPPERS ARE A CONVENIENT HOLDING METHOD BUT MUST ONLY BE USED TO RE-CHUCK SMALL, LIGHTWEIGHT BOWLS UP TO 250MM (10") IN DIAMETER FOR COLE JAWS; 200MM (8") FOR MINI COLE JAWS. CUSTOM WOODEN JAW SEGMENTS (MOUNTED ON COLE JAWS). NO RESPONSIBILITY CAN BE ACCEPTED FOR USERS OWN ADAPTIONS OF THIS CUSTOM FACILITY. IT IS THE USERS RESPONSIBILITY TO TAKE ALL CARE TO ENSURE THAT A SAFE MOUNTING OF BOWLS IS ACHIEVED.

If larger or heavy bowls need to be re-chucked, then you must make your own wooden jaw segments. These should be fastened onto each jaw segment using two screw positions. Give careful consideration to the type of holding situation that is required before false wooden jaws are made to ensure adequate gripping is achieved.

FACEPLATE RINGS

SAFETY

Consult the safety section on Page 10 and also read the safety section on Page 3 of your Chuck manual and be thoroughly familiar with the safety operation before using these jaws.

See the Teknatool Toolbox project: Faceplate Rings for illustrations (on website)

1. Find Centre of your Bowl Blank. This may already be established when you cut and sized the blank. If you need to find the center there are a number of methods, see Tips n Tricks!

Faceplate Ring Size	Use with Nova Jaws	Equal to Faceplate Size	Speed Range	Recommended Wood Blank size diameter (4 " - 5") thick	Screw Positions	Screw Size
2"(50mm) Faceplate Ring	2" (50mm) Jaws	3"	Rotate at the speed recommended for your lathe – see your lathe manual if unsure	Up to 12"	4	10 Gauge x 1" to 1 1/2"
4 " (100mm) Faceplate Ring	4" (100mm) Jaws	5"		Up to 18"	5	Pozidrive Self Tapper Screw with parallel thread or chisel point screws.
5 " (130mm) Faceplate Ring	5" (130mm) Jaws	6 1/4 "		Up to 29"	12	

2. Place Faceplate ring on Bowl Blank. You can either:
 - a. Use your eyes as a rough guide to centre it around the centre of the bowl blank, or
 - b. Draw a compass circle first around centre of bowl blank (see Fig 1) and then use this as a guide, or
 - c. Use a simple centre finder device you can make yourself – see Teknatool Centre Finder Project.
3. Attach the ring. Use 1"-1 1/2" 10 Gauge Pozidrive screws. Use the largest size with larger bowl blanks. Use all screw positions to secure.
4. Make sure that you locate the chuck jaws positively into the dovetail recess of the Faceplate Ring.
5. You're ready to turn the outside of your bowl.

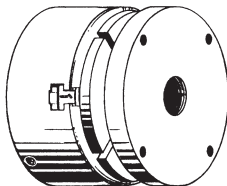
OPTIONAL ACCESSORIES

Cole Jaw Woodworm Screws Lefthand and Righthand. Fastening kit Spare for Cole Jaw Kit.

VACUUM FACEPLATE

SAFETY

Consult the safety section on page 10 of this manual and also read the safety section of your Nova Scroll Chuck/SuperNova Chuck manual and be thoroughly familiar with the safety operation before using these jaws.



Note: This faceplate is only for use with the 50mm jaw set

DO NOT EXCEED 684 RPM WHEN USING THIS ACCESSORY

The Vacuum Faceplate is also designed to be used in conjunction with the Teknatool Handwheel Unit and Vacuum Coupler Unit. Both of these products are designed for use on our Nova 3000 Woodlathe, Nova Comet Mini Lathe and most models (after 1993) of the Nova TL1 500 Woodlathe. You can use the Vacuum Faceplate with any other lathe brand but you have to custom build a vacuum coupler unit to supply the vacuum connection.

PARTS PROVIDED

- 1 Vacuum faceplate
- 1 Connecting hose section

ASSEMBLY

Cut a 18mm MDF disk to required size. Bore an 18mm – 20mm (45/64" - 25/32") hole in the centre of the disk to match the hole in the centre of the vacuum faceplate – this allows the vacuum connection. Stick foam rubber or sheet closed cell foam (neoprene rubber) to the disk (make sure there is a matching hole in the centre of the foam too). Screw faceplate to back of MDF disk. Use short woodscrews in the four screw positions at the back of the vacuum faceplate. Make sure the screws are not too long or they might come through the front of the MDF faceplate. This could interfere with vacuum seal or obstruct the mounting of smaller bowls.

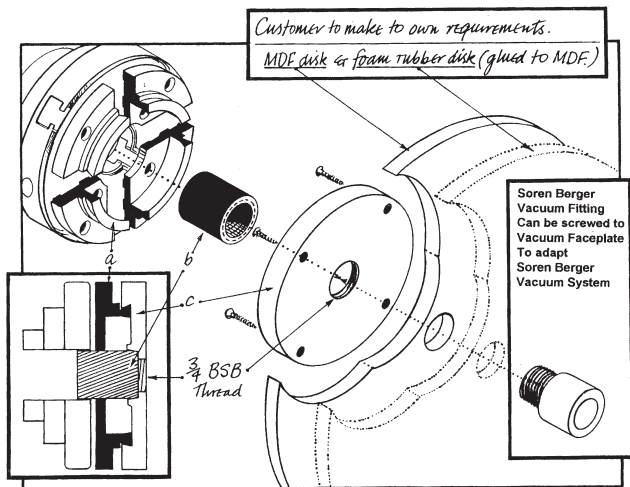
MOUNTING THE JAWS

As the 50mm jaws are designed to expand into the machined recess of the faceplate make sure that the recess and the face of the jaws are free from chips or grit to give perfect seating and register.

Expand the 50mm jaws on your chuck wide enough to insert the connecting hose connection. Push the tube into place through the hole in the centre of the chuck. Close the jaws up.

Mount Vacuum Faceplate with MDF disk etc. Expand the jaws firmly into the dovetail recess at the back of the vacuum faceplate to tighten. Give it a final tighten and the Vacuum Faceplate is now ready for use. You may wish to draw in some circles with a pen on the foam to guide the placement of bowls on the faceplate.

Those of you who own the Soren Berger Vacuum System may wish to attach the tubes to the faceplate by using a short length of 1/2 BSP threaded tube which is available from many of the larger hardware shops.



VACUUM FACEPLATE For SUPERNOVA /NOVA CHUCK
(Fits 50mm Jaws) (Code: FPV)

OPTIONAL ACCESSORIES

For the accessory jaws and the Nova Scroll Chuck/SuperNova Chuck.

- **NOVA CHUCK SPUR CENTRE** – Code: NCSC spindle turning.



Now you don't have to remove the chuck from your lathe to do spindle turning.

- **WOODWORM SCREW LEFTHAND OR RIGHTHAND**

- Code: WWLH / WWRH

For outboard/lefthand screw chucking or inboard/righthand screw chucking.

- **COLE JAW WOODWORM SCREW LEFTHAND OR RIG HTHAND**

- Code: LHWWCJ /WWCJ

For outboard/lefthand or inboard/righthand screw chucking whilst using the Cole Jaws. Has a longer screw which enables the thread to protrude past the Cole Jaw Segments.

- **NOVA CHUCK/SUPERNOVA CHUCK FASTENING KIT** - Code: NSFK

Fastening spares for the chuck and most accessory jaws. Contains screws, wrenches and grubscrews.

COLE JAW FASTENING KIT – Code: CJFK

Fastening spares for the Cole Jaw Set. Contains rubbers and screws.

100mm JAW FASTENING KIT – Code: F100N

Contains screws and wrench which enable the 100mm or 130mm jaws to be modified for false wooden jaws.

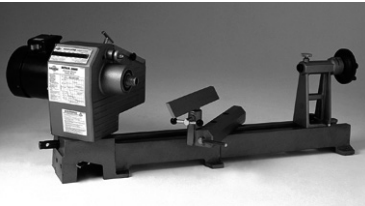
NOVA DVR 3000

The DVR 3000 has truly unique cutting edge, computer controlled motor technology, far ahead of any other woodlathe on the market. The new direct drive motor (no belts or pulleys) provides constant high torque power and electronic variable speed control at the touch of a button. Combine this with the same features that makes the Nova 3000 such a great lathe (swivel head, extension beds, 16" capacity inboard) and you have the best woodlathe value package available.



NOVA 3000

The Nova 3000 Woodlathe is one of the best value for money woodlathes on the market today. The lathe features add on beds, a sophisticated swivel head, a wide speed range, solid cast iron construction and a Five Year Warranty.



NOVA MERCURY

A small, portable lathe, but engineered with the potential to be a full sized machine! It has the ability to expand and grow beyond Mini Lathe work.

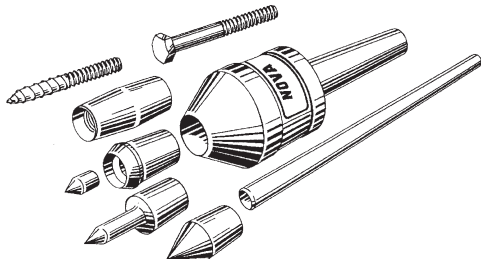


NOVA LIVE CENTRE SYSTEM

A comprehensive tailstock support system that combines the three most essential tailstock centres LIVE, CUP and HOLLOW with other unique functions in one centre.

FEATURES:

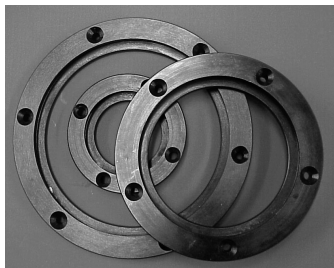
- 2 Morse Taper
- Threaded centre for mandrels
- Miniature extension for small turnings
- 2 Morse Taper
- Hollow Cup Centre (Std)
- Stepped cone. Quick mount for centreless rounds etc. 60 (Centre).



FACEPLATE RINGS

Excellent way to securely mount bowl blanks to your Nova, SuperNova or SuperNova Deluxe chuck. The Faceplate rings come in three handy sizes to fit the most popular chuck accessory jaws:

- 50mm (to fit 50mm jaws)
- 100mm (to fit 100mm jaws)
- 130mm (to fit 130mm jaws)





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