

SAFETY RULES

PLEASE READ AND UNDERSTAND THESE SAFETY RULES BEFORE OPERATING THIS WOODLATHE.

All machinery, including the woodlathe, has certain hazards involved with their operation and use. Using the woodlathe with respect and caution, as with any machinery, will considerably lessen the risk of personal injury. However, if normal safety precautions, including those listed here, are overlooked or ignored, personal injury to the operator may result.

This woodlathe was designed for certain applications only. It **MUST NOT** be modified and/or used for any application other than for which it was designed. If you have any questions about its application **DO NOT** use the machine until you have written to Teknatool (Latalex Ltd) and we have advised you.

TEKNATOOL INTERNATIONAL (LATALEX LIMITED)

Manager Technical Services
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Waitakere City
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New Zealand

WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

SAFETY RULES FOR ALL POWER TOOLS/POWER MACHINERY — THESE ALL APPLY TO THIS WOODLATHE:

1. **FOR YOUR OWN SAFETY, READ INSTRUCTION
MANUAL BEFORE OPERATING THE MACHINE/TOOL.**
Learn the machine's application and limitations plus
the specific hazards peculiar to it.
2. **GROUND ALL TOOLS.** If machine is equipped with a
three-prong plug, it should be plugged into a three-
hole electrical receptacle. If an adaptor is used to
accommodate a two-prong receptacle, the adaptor
lug must be attached to a known ground. Never
remove the third prong.
3. **ALWAYS WEAR EYE PROTECTION AND HEAD
PROTECTION.** Always wear eye protection which
complies with current ANSI STANDARD Z87.1 (USA).
4. **KEEP GUARDS IN PLACE** and in working order.
5. **REMOVE ADJUSTING KEYS AND WRENCHES.**
Form habit of checking to see that keys and adjusting
wrenches are removed from tool before turning it 'on'.
6. **KEEP WORK AREA CLEAN.** Cluttered areas and
benches invite accidents. Built up of sawdust is also a
fire hazard.
7. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't
use power tools in damp or wet locations, or expose
them to rain. Keep work area well lighted.
8. **KEEP CHILDREN AND VISITORS AWAY.** All children
and visitors should be kept a safe distance from work
area.
9. **MAKE WORKSHOP CHILDPROOF** — with padlocks,
master switches, or by removing starter keys.
10. **DON'T FORCE TOOL.** Don't force tool or attachment
to do a job for which it was not designed.
11. **WEAR PROPER APPAREL.** No loose clothing, gloves,
neckties, rings, bracelets, or other jewellery to get
caught in moving parts. Nonslip footwear is
recommended. Wear protective hair covering to
contain long hair.
12. **ALWAYS USE SAFETY GLASSES.** Wear safety
glasses (must comply with ANSI Z87.1). Everyday
eye-glasses only have impact resistant lenses; they
are not safety glasses. Also use face or dust mask if
cutting operation is dusty.
13. **USE EAR PROTECTORS.** Use ear muffs for
extended periods of operation. Use muffs rated to 103
dBA LEQ (8 hour).
14. **SECURE WORK.** Use clamps or a vise to hold work
when practical. It's safer than using your hand and
frees both hands to operate tool.
15. **DON'T OVERREACH.** Keep proper footing and
balance at all times.
16. **ATTENTION TO WORK:** Concentrate on your work. If
you become tired or frustrated, leave it for awhile and
rest.
17. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools
sharp and clean for best and safest performance.
Follow instructions for lubricating and changing
accessories.
18. **DISCONNECT TOOLS** before servicing and when
changing accessories such as blades, bits, cutters,
etc.
19. **USE RECOMMENDED ACCESSORIES.** The use of
improper accessories may cause hazards.
20. **AVOID ACCIDENTAL STARTING.** Make sure
switch is in 'OFF' position before plugging in power
cord.
21. **NEVER STAND ON TOOL.** Serious injury could occur
if the tool is tipped or if the cutting tool is accidentally
contacted.
22. **CHECK DAMAGED PARTS.** Before further use of the
tool, a guard or other part that is damaged should be
carefully checked to ensure that it will operate
properly and perform its intended function — check
for alignment of moving parts, binding of moving
parts, breakage of parts, mounting, and any other
conditions that may affect its operation. A guard or
other part that is damaged should be properly
repaired or replaced.
23. **DIRECTION OF FEED.** Feed work into a blade or
cutter against the direction of rotation of the blade or
cutter only.
24. **NEVER LEAVE MACHINE RUNNING UNATTENDED.**
TURN POWER OFF. Don't leave machine until it
comes to a complete stop.
25. **DRUGS, ALCOHOL, MEDICATION.** Do not operate
tool while under the influence of drugs, alcohol or any
medication.
26. **MAKE SURE TOOL IS DISCONNECTED FROM
POWER SUPPLY** while motor is being mounted
connected or reconnected.
27. **WARNING:** The dust generated by certain woods and
wood products can be injurious to your health.
Always operate machinery in well ventilated areas
and provide for proper dust removal. Use wood dust
collection systems whenever possible.

ADDITIONAL SAFETY RULES FOR WOODLATHES

1. **WARNING: DO NOT** operate your lathe until it is completely assembled and installed **according** to the instructions.
2. IF YOU ARE NOT thoroughly **familiar** with the operation of wood lathes, obtain advice from your supervisor, instructor or other qualified person. Instruction from a professional woodturning instructor is strongly recommended.
3. **MAKE SURE** wiring codes and recommended electrical connections are followed and that the machine is properly grounded.
4. **NEVER** turn the lathe 'ON' before clearing the lathe of all objects (tools, scraps of wood, etc).
5. **ALWAYS** stand to one side of revolving wood where possible.
6. **EXAMINE** set-up carefully before **turning** on the power.
7. **MAKE SURE** tool rest height is adjusted properly.
8. **MAKE SURE** tool rest is adjusted as close to the workpiece as possible.
9. **ROTATE** workpiece by hand to check clearance before **engaging** power.
10. **NEVER** adjust the tool rest while workpiece is turning.
11. **REMOVE** the tool rest before sanding or polishing.
12. **WHEN TURNING** between centres **MAKE SURE** the tailstock centre is snug against the workpiece and locked. The tailstock centre **should** be lubricated if it is not a revolving/live/bail bearing centre. Suitable lubricants are beeswax or parafin wax.
13. **NEVER** drive workpiece into **drive** centre when drive centre is in headstock. Set drivecentre into workpiece with a soft mallet **prior to** installing it into the headstock.
14. **NEVER** attempt to drive centre pieces into wood using the tailstock quill action, Impaction of centre- into wood must be done with a mallet prior to installation between centres in the lathe. Secure **work** between centres with light pressure from tailstock quill action. See operation section.
15. **NEVER** loosen tailstock spindle or tailstock while workpiece is turning.
16. **WHEN** faceplate turning, **MAKE SURE** workpiece is securely fastened to the **faceplate** and that appropriate size **faceplate** is used to properly support workpiece.
17. **WHEN** faceplate turning, **MAKE SURE** the screw fasteners do not interfere with the turning tool at the finished dimension of the workpiece.
18. **ROUGH CUT** workpiece as close as possible to finished shape before installing on faceplate.
19. **TIGHTEN** all clamp handles before operating.
20. **EXAMINE** workpiece for flaws and test glue joints before placing workpiece in lathe.
21. **NEVER** use spindle turning chisels for faceplate/ headstock only mounted- work. Using them for faceplate turning could result in spindle chisel grabbing the workpiece pulling the chisel from your contra! and being flung in any direction.
22. **WHEN roughing off**, **DO NOT** jam tool (chisel) into workpiece or **take too big** a cut.
23. **USE** lowest speed when starting a new workpiece.
24. **ALWAYS** operate the lathe at the recommended speeds. **Consult owner's** manual for- suggested speeds.
25. **MAKE** all adjustments with the power '**OFF**'.
26. **DISCONNECT** lathe from power source when making repairs.
27. **DISCONNECT** lathe from power source and clean the machine before leaving it.
28. **MAKE SURE** the workarea is cleaned before leaving the machine.
29. **SHOULD** any part of your lathe be missing, damaged or fail in any way, or any electrical component fail to perform properly, shut off switch and remove plug from the power supply outlet. Replace **missing**, damaged or failed parts before resuming operation.
30. **CAUTION: To reduce the risk** of injury, **ALWAYS** wear safety **glasses** and face and head protection when operating woodlathe.
31. **ADDITIONAL INFORMATION** regarding the safe and proper operation of **this product is** available from the National Safety Council, 444 N. Michigan Avenue, Chicago, **IL60611** in the Accident Prevention Manual of Industrial Operations and also in the Safety Data Sheets provided by the NSC. Please also refer to the American National Standards Institute ANSI O1 .1 Safety Requirements for Woodworking Machines and the **U.S.** Department of Labour OSHA 1910.213 Regulations.



Teknatool Publication No: 9 1-94 12-O 11

TL 1500 WOODLATHE

Thank you for buying one of the latest machines from our range - the Nova TL 1500 Woodlathe. The TL 1500 is a very versatile lathe, designed for all turning applications; from very small to large turning diameters of up to 1 metre diameter.

This machine is designed for larger turning work than our previous TL1000, with an inboard capacity of 400mm (16 inches). When the headstock is indexed 90 deg. to bed the capacity is increased up to 740mm (29 inches) x 100mm depth (4 inches) for larger turning (with outrigger rest system).

The following pages will provide you with basic set up instructions to enable you to begin turning. If you have any queries please don't hesitate to contact the manufacturers.

At Teknatool we value contact with customers who are using our products. If you have suggestions or comments about our products we would greatly appreciate hearing from you.

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WARNING: FOR YOUR OWN SAFETY, DO NOT CONNECT THE LATHE TO THE POWER SOURCE UNTIL THE LATHE IS COMPLETELY ASSEMBLED AND... YOU HAVE READ, AND UNDERSTAND, THIS ENTIRE OWNERS MANUAL.

SPECIAL WARNING:

USA/CANADA CUSTOMERS PLEASE NOTE: SPEEDS ARE RATED AT 20% HIGHER RPM
See speed ratings on page 6.

STANDARD EQUIPMENT

150mm (6") Faceplate, 2MT Spur Centre, 2MT Live (& evolving Centre),
300mm (12") Toolrest, Polyvee Drive Belt, Motor Pulley,
Adjustment wrenches and locks, Manual.

OPTIONAL ACCESSORIES

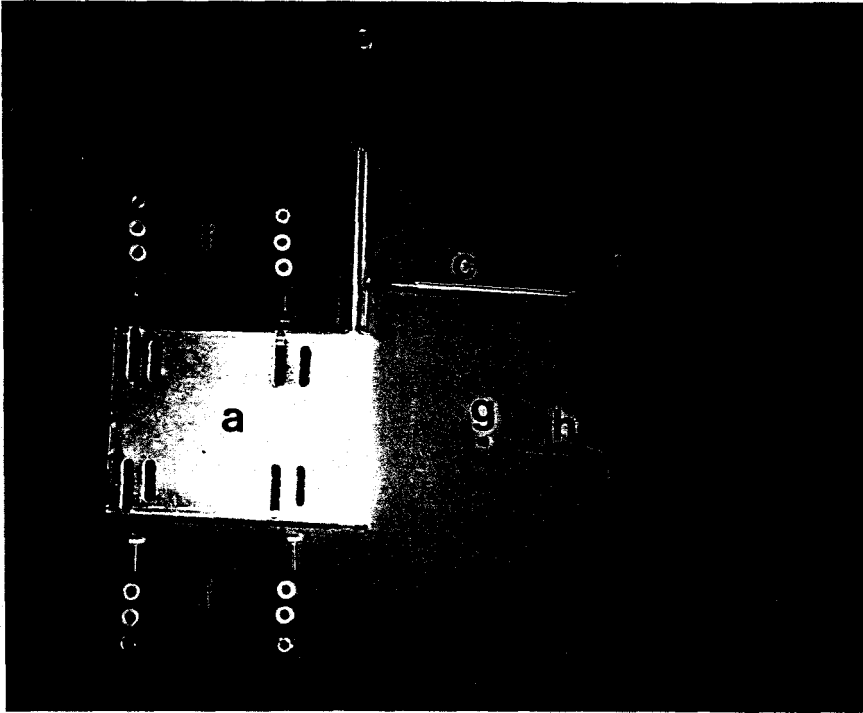
Outrigger System

Faceplate 80mm (3")

Teknatool Accessories are now available for the Nova TL1500 including the Nova Chucking System and Nova Live Centre System.

Other Special accessories will be developed for the Nova TL1500 and other new generation woodlathes from Teknatool.

ASSEMBLY & SET UP INSTRUCTIONS FOR TL1500 WOODLATHE



The photograph above is of the Motor Mount assembly which is designed for **B56** (Imperial) and **D80** (Metric) frame motors.

It consists of

- a. The motor mount plate with circlip attached to the shaft.
- b. 12mm **Nyloc** nut & washer. (Attached or in B. below)
- c. Motor mount release bar which is threaded to the motor mount shaft.
- d. Threaded adjustment lockpiece which slides on the motor mount release bar. **(B)**
- e. The external handle which screws onto the threaded adjustment lockpiece. **(B)**
- f. Fastenings and washers to fix motor to plate. **(A)**
- g. MS x **8mm** grubscrew to secure motor pulley to shaft. **(A)**
- h. 4mm Allen Key to adjust **8mm** grubscrew. **(A)**

Other Parts:

- i. 8 speed Motor Pulley with **5/8"** bore. **(C)**
- j. Handle threaded one end which screws into the headstock index lock (underneath headstock base at rear of lathe). **(B)**
- k. 2MT Live Centre. **(C)**
- l. 2MT Spur Centre. **(C)**
- m. **150mm** (6") Faceplate. **(C)**

Location of Parts:

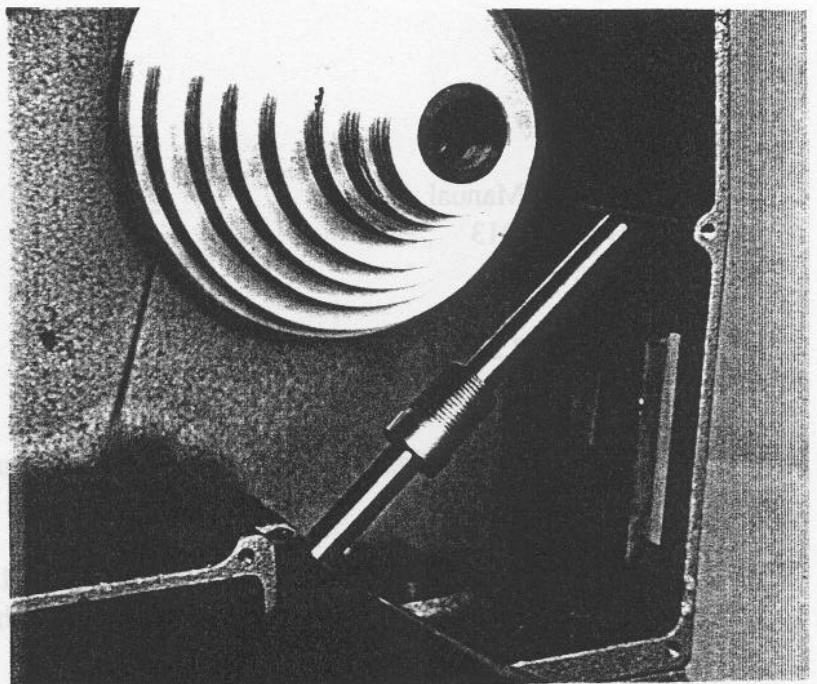
(A) = Part of Motor Mount Fastening Kit (in accessory box).

(B) = Part of Motor Mount Arm & Swivel Lock Arm Kit (in accessory box).

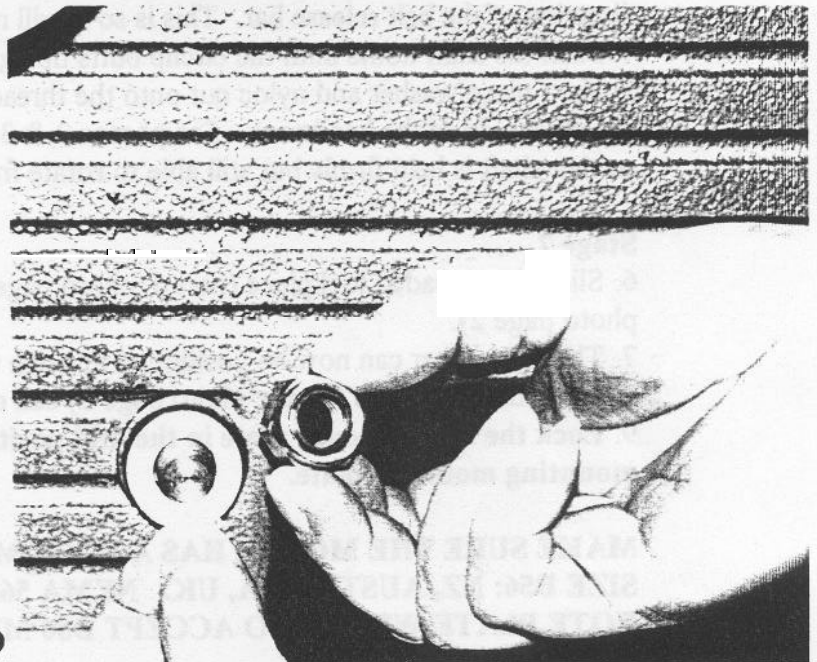
(C) = Included in accessory box.

All these parts are in the motor mount plate placed between lathe beds or in the accessory box.

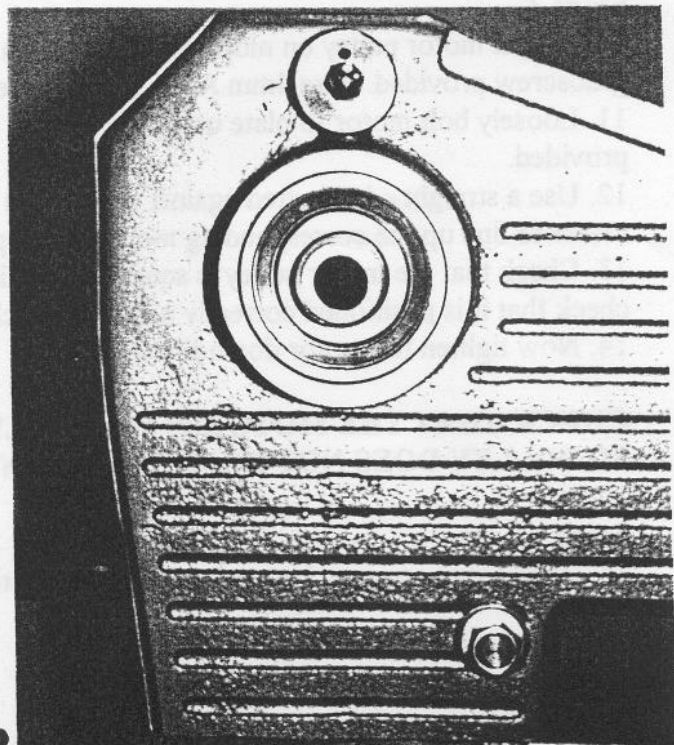
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MOTOR MOUNT PLATE

Please also refer to pages 2 & 3.

The **first stage of** assembly is to fix the motor mount **plate** to the lathe.

Stage 1

1. Remove red back cover by **unscrewing** the **9 M5x10mm** screws.
2. Slide **shaft** of the motor mount **plate** into bore hole at the base of headstock casting (see photo page 3).
3. Ensure that the **circlip** on the shaft is aligned so the open part faces along the direction of the belt release bar. This is so it will not catch on headstock casting.
4. Push the shaft home until the **circlip** butts up against the rim of the bored hole.
5. Next place washer and **nyloc** nut onto the threaded end of **shaft** protruding through the other side of the headstock. See photos 2 & 3, page 3. Tighten the nyloc nut up so that shaft is held firmly but still able to rotate **freely**.

Stage 2

6. **Slide** the threaded lockpiece (part **d**, photo page 2) over the belt release bar (part c, photo page 2).
7. The release bar can **now** be positioned through the front of the headstock.
8. The **external** handle (part e, photo page 2) can now be screwed onto part d above.
9. **Lock the motor mount plate in the mid position of the front slot before mounting motor on plate.**

MAKE SURE THE MOTOR HAS A FOOT MOUNTING AND A FRAME SIZE B56: NZ, AUSTRALIA, UK. NEMA 56: USA/CANADA
NOTE PLATE WILL ALSO ACCEPT D80 METRIC FRAME MOTORS.

Stage 3

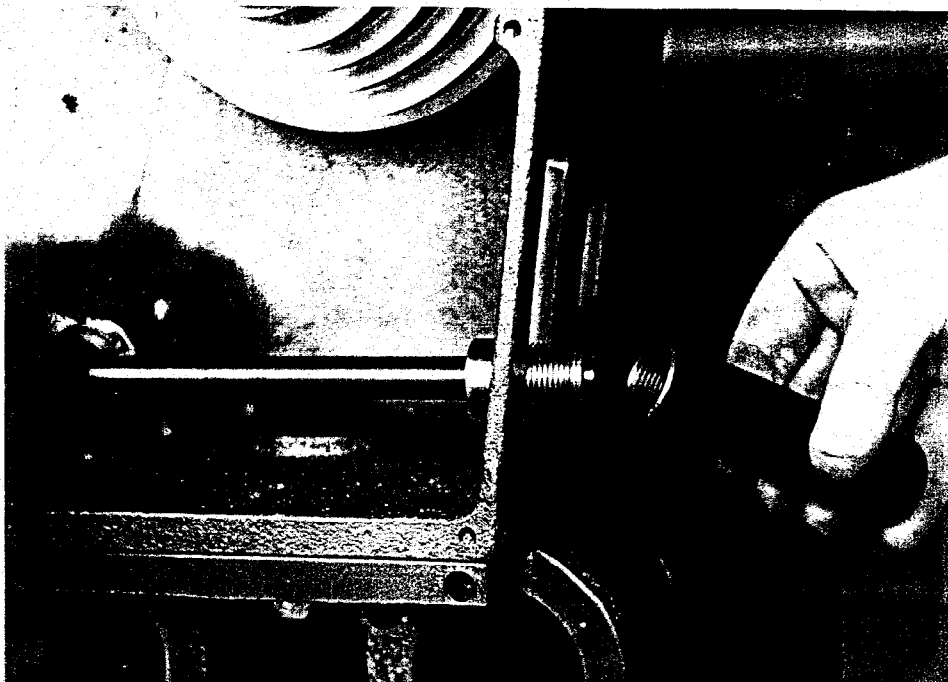
10. Mount motor pulley on motor **shaft** and **fix** in place by means of the **8mm** grubscrew provided. Use 4mm **Allen** key provide to secure **grubscrew**.
11. Loosely bolt motor to plate using the **M8x25** bolts, M8 nuts and **M8** washers provided.
12. **Use** a straight edge butted against one of the headstock pulley steps and move the motor to line up the corresponding motor **pulley** position by line of sight.
13. Check that the **motor** pulley is square to **the line** of the **headstock** pulley and a **final** check that it is positioned **correctly** with the matching steps of the headstock pulley.
14. Now tighten the motor down firmly to **plate**.

CHECK TEAT THE MOTOR IS PROPERLY POSITIONED
SO PULLEY DOES NOT COME INTO CONTACT WITH COVER.

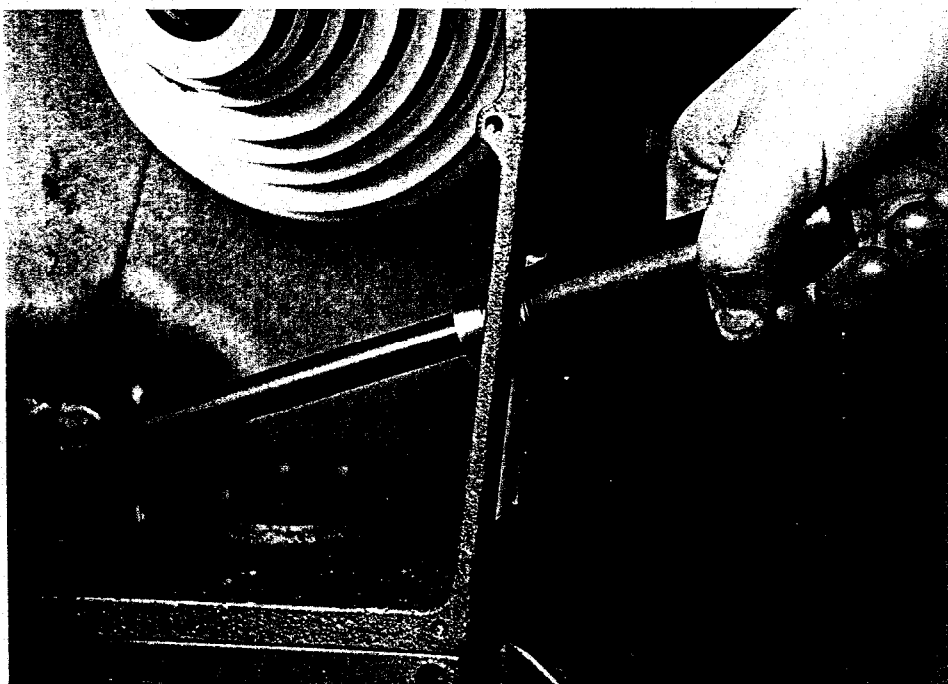
Stage 4

15. Back cover can now be **screwed** back in position

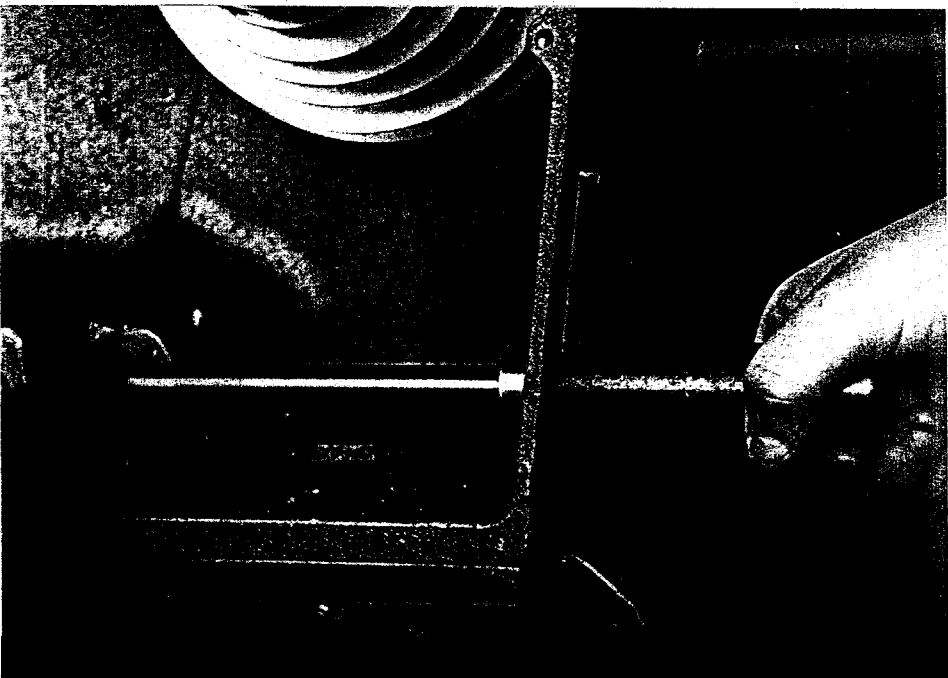
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SPEED ADJUSTMENT

Please refer to page 5.

The TL1500 woodlathe has an 8 speedrange:

NEW ZEALAND/AUSTRALIA:

178, 300, 570, 850, 1200, 1800, 2400, 3000 FOR MOTOR RATED AT 1425 RPM.

CANADA/USA:

214, 360, 684, 1020, 1440, 2160, 2880, 3600 FOR MOTOR RATED AT 1710 RPM.

Speeds can be changed by moving the belt to the required position on the 8 step pulleys. Speed position can be checked by viewing the belt position through the window at the front of the headstock.

CHANGING SPEEDS

The Motor Mount/Speed change lever is located to the left of the switch on the front of the headstock. The assembly of this unit is described on page 4 of this manual.

Please refer to photos page 5.

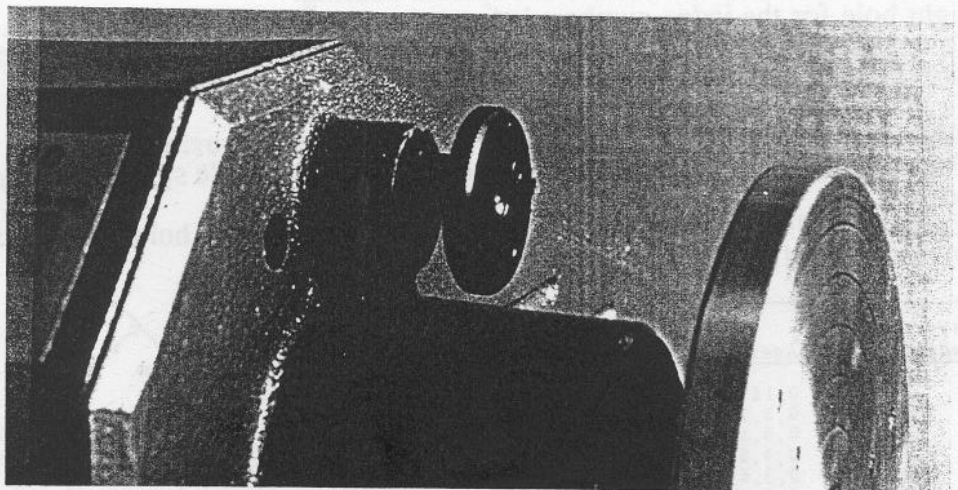
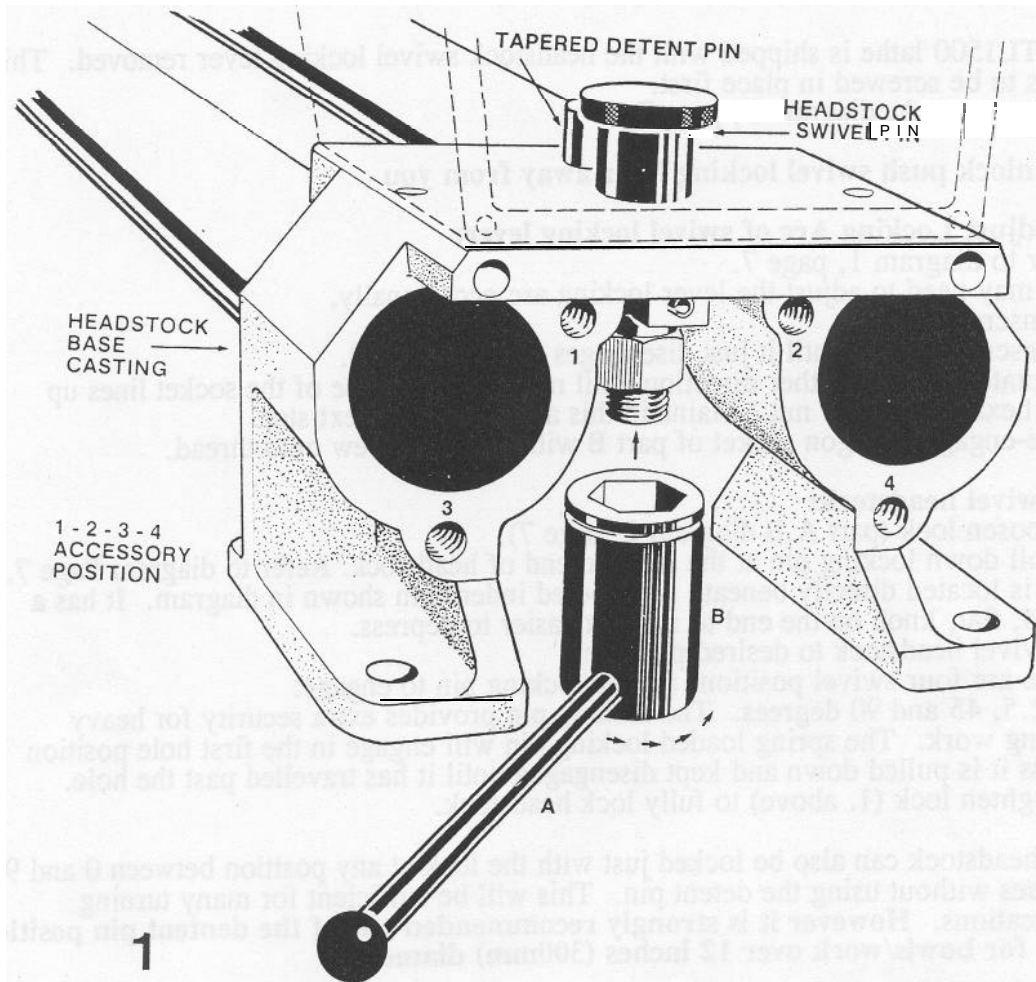
The Motor is locked in position and the belt tensioned, when the handle is locked in the up position. (see photo 2, page 5).

1. To change speed unscrew the handle about 5 turns and then knock the handle inwards to push the lockpiece (part d photo, page 2) back. The handle can now be pushed down to the horizontal position. This swings the motor up. (see photo 3, page 5).

2. Open top cover. While holding motor in the up position (can be locked in this position if needed) move the belt to the required position.

3. Move handle again to the top position. Check that the handle is fully home in the top position. This will ensure that the belt is fully tensioned. If in doubt push down on the motor while screwing the handle home.

4. Close top cover.



HEADSTOCK SWIVEL OPERATION

The TL1500 lathe is shipped with the headstock swivel locking lever removed. This needs to be screwed in place first.
Refer to part A, diagram 1, page 7.

To unlock push swivel locking lever away from you

To adjust Locking Arc of swivel locking lever:

Refer to diagram 1, page 7.

You may need to adjust the lever locking arc occasionally.

1. Unscrew lever A.
2. Unscrew **part B** until it just disengages with the thread.
3. Rotate **part B** in either direction until next **hexagon face** of the socket lines up with **hexagon face** of nut. Maintain this alignment for next step.
4. Re-engage **hexagon** socket of part B with nut and screw onto thread.

To swivel headstock:

1. Loosen lock (**part A, B** diagram 1, page 7).
2. Pull down **locking pin** at the **inboard end** of headstock. Refer to diagram Page 7. This is located **directly** beneath the tapered indent pin shown in diagram. It has a round, flat, knob on the end to make it easier to depress.
3. Swivel headstock to desired **position**.

There are four swivel positions for the **locking pin** to engage:
0, 22.5, 45 and 90 degrees. The **locking pin** provides extra security for heavy turning work. The **spring** loaded locking pin will engage in the first hole position unless it is pulled down and kept disengaged until it has travelled past the hole.

4. Tighten lock (1. above) to fully lock headstock.

The headstock can also be locked just with the **lock** at any position between 0 and 90 degrees without using the detent pin. This will be sufficient for many turning applications. However it is strongly recommended one of the **detent pin** positions is used for bowls/work over 12 inches (300mm) diameter.

SPINDLE INDEX

The TL1500 is equipped with a 24 division spindle index.

The index unit is located above the **spindle housing**.

Sight hole for the index numbers is located to the left of the **spindle index**.

To engage spindle index simply twist wheel until the larger central index pin drops into the hole positions in headstock pulley.

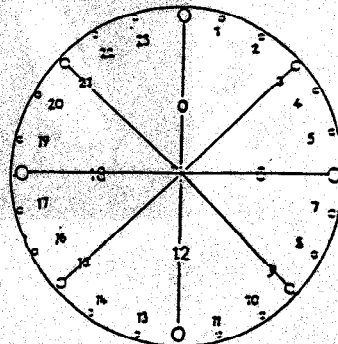
To disengage pull wheel forward and twist to one side.

Make sure the guide pin drops into the indentation provided.

This will prevent index pin accidentally re-engaging while spindle is turning under power.

If you have difficulty reading the number through the sight hole with larger diameter work mounted, use a small hand mirror.

Divisions Required:	Index Positions (sight hole)	Angular Index Degrees:
2	0, 12	180
3	0, 8, 16	120
4	0, 6, 12, 18	90
6	0, 4, 8, 12, 16, 20	60
8	0, 3, 6, 9, 12, 15, 18, 21	45
12	0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22	30
24	Every position	15



CONNECTING TL1500 WOODLATHE TO POWER SOURCE

NEW ZEALAND/AUSTRALIA

The TL1500 lathe is not supplied with a switch, wiring or motor. A remote switch and wiring lead or a switch mounted on motor can be supplied as optional extras - please enquire with your Teknatool **Stockist**.

CANADA/USA

The TL1500 woodlathe is supplied to the USA and Canada without a motor, switch or wiring. The motor, switch and wiring leads are supplied as kits separately from suppliers in Canada and the USA.

Canada: The motor with switch mounted on it ~~can be supplied~~.
**PLEASE FOLLOW MOTOR/SWITCH MANUFACTURERS
SAFETY AND INSTALLATION INSTRUCTIONS**

GROUNDING INSTRUCTIONS

**WARNING: THE MOTOR, SWITCH & WIRING MUST BE GROUNDED
WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK**

If there is a malfunction or breakdown, grounding in the electrical circuit **provides a path** of least resistance for the electric current to reduce the risk of electric shock.

Check that the leads and wiring used with the motor and switch **wiring** have a **grounding** conductor and have a grounding plug. The plug must be **plugged into a matching outlet** that is properly installed **and grounded** in accordance with all local codes and ordinances.

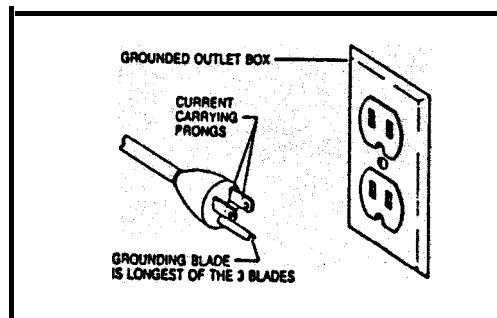
Have a certified electrician check the electrical circuit and plugs if the **grounding instructions are not completely understood or if in doubt as to whether the machine or motor/switch is properly grounded,**

with or without yellow stripes is the equipment grounding conductor. If **repair or replacement of the electric cord is necessary, DO NOT** connect the equipment grounding conductor to a live terminal.

**DO NOT MODIFY THE PLUG PROVIDED WITH MOTOR & SWITCH -
IF IT WILL NOT FIT THE OUTLET HAVE THE PROPER OUTLET
INSTALLED BY A QUALIFIED ELECTRICIAN.**

USA/CANADA

**THIS TYPE OF PLUG & OUTLET
MUST BE USED**



MOTOR REQUIREMENTS

New Zealand/Australia/UK

A single phase, capacitor start or split phase, continuous duty, 50 Hertz electric motor with a speed of 1425 rpm is recommended. A totally enclosed fan cooled type (TEFC) is also recommended as it provides extra dust protection for the motor. Foot mounted B56 frame.

Canada/USA

A single phase, capacitor start or split phase, continuous duty, 60 Hertz electric motor with a speed of 1710 rpm is recommended. A totally enclosed fan cooled type (TEFC) is also recommended as it provides extra dust protection for the motor. Footed mounted NEMA 56 frame size.

REMEMBER THAT THE MOTOR IS RATED AT 1710 RPM. THIS IS APPROX. 20% FASTER THAN THE STANDARD 2425 RPM FOR NEW ZEALAND/AUSTRALIA MOTORS. THIS MEANS THAT THE SPEED RANGE IS RATED APPROX. 20% FASTER ALSO- SEE SPEEDRANGE P5.

POWER: A motor with a power rating of not less than 560W (3/4 HP) should be used. A motor with less power will not be sufficient for the large diameter work that the TL1500 is capable of turning. A 750W (1HP) motor is probably the best option (good power/reasonable cost). Larger or heavy motor options are not recommended.

ROTATION OF MOTOR: Motor needs to rotate under power in an **ANTI-CLOCKWISE direction** (looking at motor from shaft side) to ensure lathe spindle turns in an anti-clockwise direction (looking face on to lathe spindle).

To change to correct rotation: Refer Motor instructions and have wiring changed by qualified electrician.

MOUNTING PULLEY ON MOTOR SHAFT

First check the motor shaft size carefully. There is only 2-3 thousandths of an inch between imperial and metric sizes - BUT the difference is enough to make the pulley either too tight to mount or loose when mounted. Standard shaft sizes for motors:

1. Diameter 5/8" 0.625"
2. Diameter 16mm 0.6299"
3. Diameter 3/4" 0.750"
4. Diameter 19mm 0.748"

An eight step motor pulley is included with your accessory kit. It has a standard 5/8" bore as this is the motor shaft size most commonly available. If your motor has a different shaft diameter then the 5/8" pulley will need to be reamed/bored to the correct size. This could be done by a local engineering company.

FITTING PROCEDURE:

1. Check for any burrs or dents in shaft with raised ridges. File these off if necessary.

2. Fit key way. Check that the key size on the motor shaft will fit pulley. The key should be a neat fit. Check keyway is free of burrs and dents that will prevent the key seating.

3. Push on by hand until the pulley just clears the boss on motor. If necessary GENTLY tap on with block of wood. Spin to check pulley is clear of boss.

4. Use the 8mm rubscrew in placing the 4mm Allen Wrench (both provided), DO NOT USE & DUE FORCE.

BENCH/STAND REQUIREMENTS

A sturdy and rigid bench/stand is important so that the TL1500 can give optimum performance. It needs to be adequately braced for the stresses of larger turning work. A very common fault with many woodlathe installations is that inadequate attention is given to bench/stand requirements which can result in poor lathe performance.

STAND DESIGN: Plans for a stand design that can be easily constructed from wood are at the back of this manual.

LOCATION IN WORKSHOP

Your space requirements are dependent on the sort of turning you want to do. If you wish to do outboard turning or deephole drilling, for example, space must be left around the lathe to give you room for these operations.

Other points to consider:

- location in relation to windows, lights and power source.
- handy storage of chisels and other lathe tools.
- location of lathe so that it does not restrict the use of other machines in the workshop.

LATHE HEIGHT FROM FLOOR

The height of the lathe from floor is determined by the height of turners that use the lathe. Ideally the lathe should be positioned such that the centre line through the lathe spindle to centre of tailstock spindle, is at the same height as the turner's forearm bent so that it is at a relaxed position parallel to the floor.

If there are several persons which may be using the lathe, it might be better to position it at a good average height.

Alternatively make the stand for the tallest turner and use duckboards for others to stand on, to adjust their height.

SECURING LATHE TO BENCH/STAND

1. Make sure that the surface to bolt lathe to is level and flat.

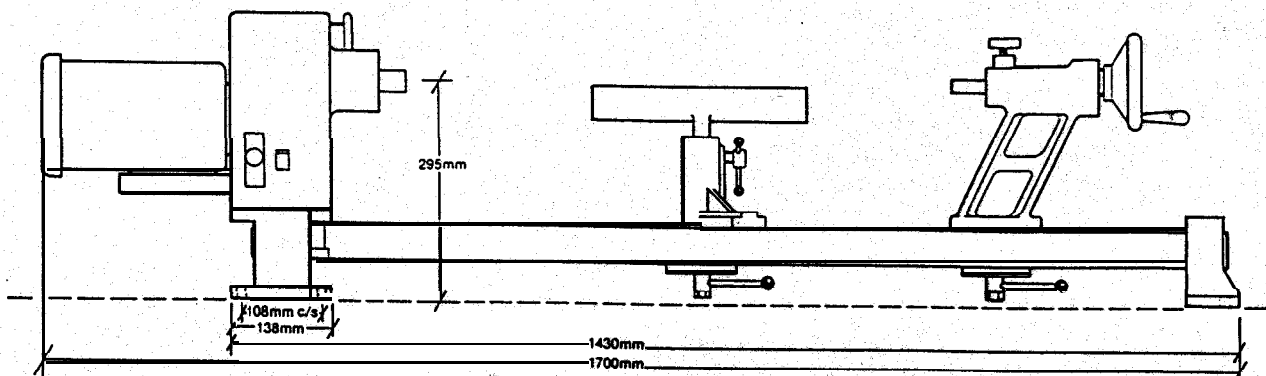
If surface is not level and flat this could result in twisting of the lathe bed which will affect lathe centering.

2. 6 x M12 bolts, nuts of suitable length for your bench/stand top plus washers.

These fastenings are not provided.

3. Check bench surface is clean so no rubbish will get trapped under lathe before bolting down.

4. Tighten down the 4 headstock bolts - tightening down positions in a diagonal sequence. Then tighten down 2 bolts on lathe foot.



TAILSTOCK LOCKING MECHANISM

Refer to diagram below.

Your lathe comes with these levers already adjusted but they may need to be re-adjusted in service. To adjust:

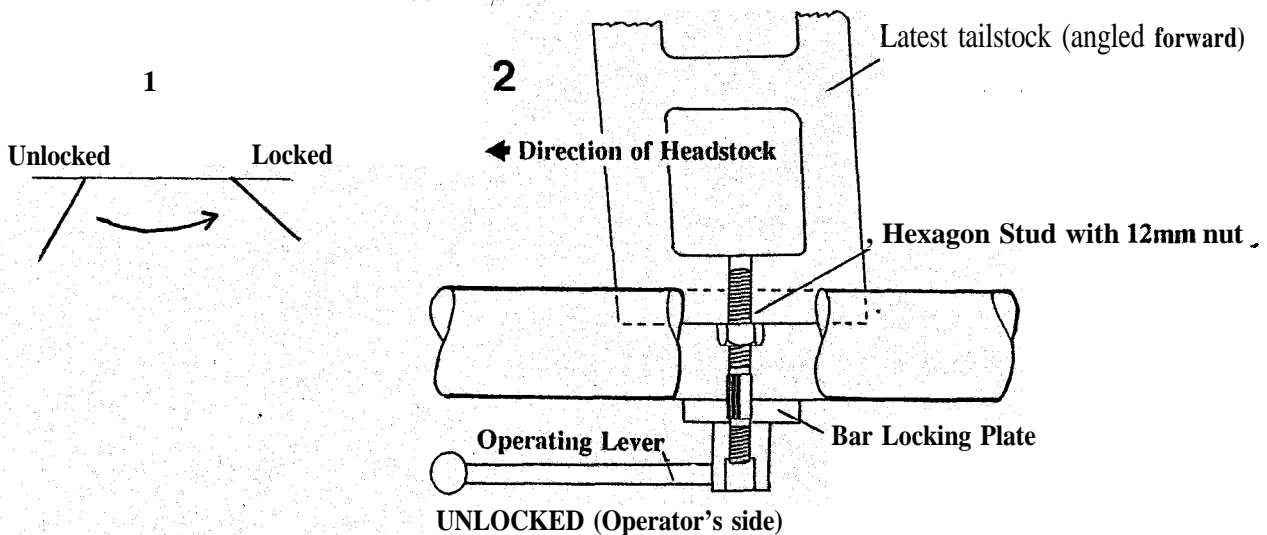
The hexagon stud has a two start thread so that the locking lever can be wound on either of two positions which are effectively at 180 degrees to each other. This means that the lever will clamp up on either side of the bed bars. First establish where the arc of the lever locks up - it needs to lock up on the operators side.

The arc to conveniently lock up needs to start tightening when the lever is about right angles to the bed and **fully** tightens when the lever is close to the bed bar. See diagram one below.

To make final adjustments, unwind operating lever so the bar locking plate can be disengaged **from** the hexagon stud. Twist the stud round in the desired direction to adjust locking arc. Re-engage plate and tighten operating lever. Repeat until desired locking arc is achieved.

Finally tighten 12mm nut against the base of the tailstock. Use **18mm** spanner.

Maintenance: keep the **hexagon stud** thread greased.



TOOLSLIDE LOCKING MECHANISM

Same principle as the tailstock described as above except the adjustment of the locking arc. -This comes already adjusted but you may need to re-adjust in service.

To adjust locking arc of the **toolrest** slide:

When the handle is tightened on thread the locking arc may lock in any one of four positions: Two of these positions the arc tightens under the bed. The stud will then need to be turned and relocated into a new position in the hexagon hole in the steel locking plate. If the arm tightens **on** the other side **of the** lathe just wind it into the alternate thread start position on the opposite side of the stud.

LATHE STAND

Designed by Trevor Cole — ©1993 TEKNATOOL

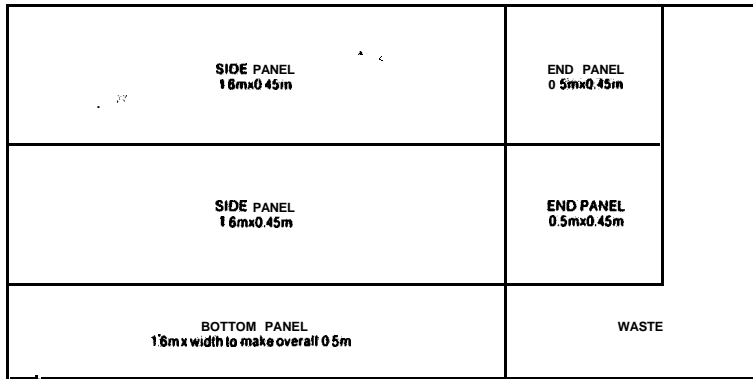
Vibration in a woodlathe is the woodturner's worst enemy and a good stand can go a long way towards eliminating this. Any lathe deserves the best stand you can afford or build and the NOVA TL1500/TL1200 woodlathes are no exception. A lathe stand should be strong, rigid, the correct height and fastened to the floor. If you do not wish to fasten your lathe stand to the floor then consider increasing the weight by loading it with bags of sand, bricks, rocks or any weighty material you have available. Strength is achieved by using suitable sizes of materials. Rigidity is achieved by sound construction methods. The height is different for each individual. A spindle height approximately 50mm above the elbow eases the lower back by allowing a more upright stance during turning. This simple design for a lathe stand is very strong. Rigidity is achieved by the use of panels as sheet braces and it has provision for the maker to increase its weight by loading the boxed interior. Construction is simple, using only one Woodworking joint and helping to keep costs to a minimum. Use of recycled materials could further reduce the cost.

MATERIALS LIST —

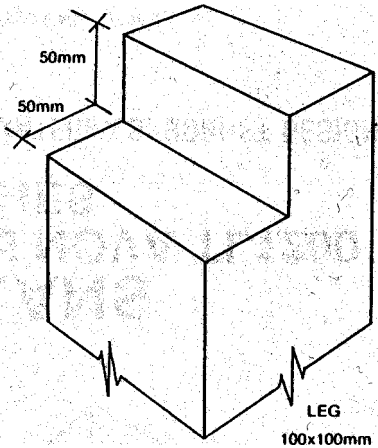
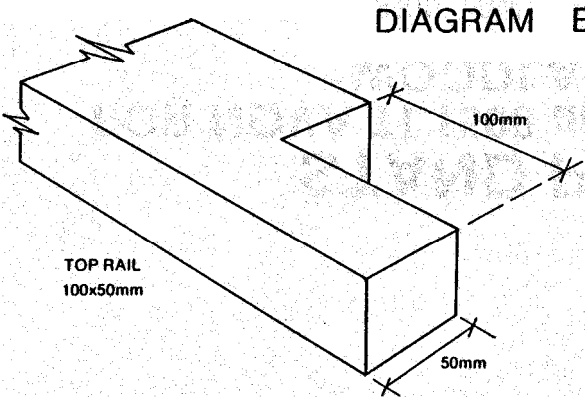
- 1 Sheet of 2.4mx1.2mx18mm medium density fibreboard (MDF or Customwood). This is for the side panels and the base of the box.
 - 4 Pieces of 1.6mx100mmx50mm Radiata pine or similar. These make the top and bottom rails.
 - 4 Pieces of 100x100mm Radiata pine or similar. These make the legs — the length will vary depending on what height you make your stand but you will need approximately 750mm for each leg.
 - 1 Piece of 1.636mx500mmx50mm of any suitable solid material to make the top.
 - Hardware — Glue and screws to fasten panels.
 - Bolts, length to suit for bolting lathe to top and bolting top to top rails.
- Having assembled all your materials, construction can be started by following the steps as set out.

Step 1. — Mark and cut your sheet of M.D.F. to the sizes shown in Diagram A.

DIAGRAM A

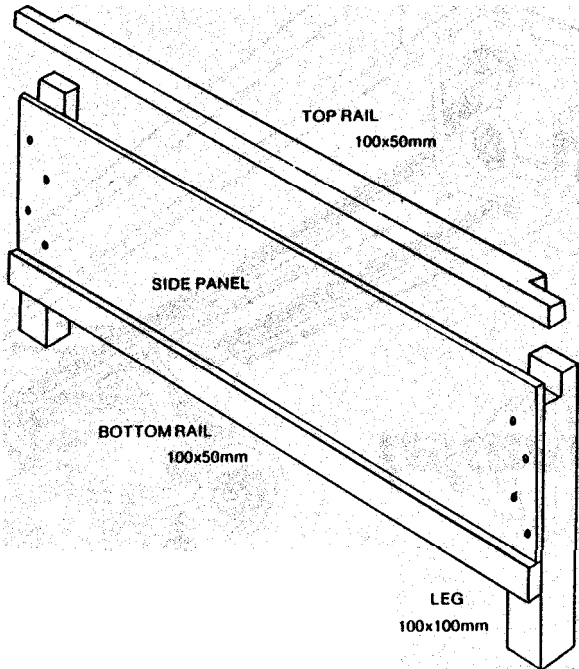


Step 2. — To join the top rails to the legs we need to mark and cut the angle halving joint as shown in diagram B.



Step 3. — Fasten the top rails and legs. Glue and screw the side panel to the legs and top rail. Finally fasten the bottom rail to the legs and hard up against the bottom of the side panel. Your assembly should look like Diagram C, Repeat the same procedure which gives you the two sides of the bench.

DIAGRAM C



Step 4. — Glue and screw the end panels into place flush with the top of the legs as shown in Diagram D.

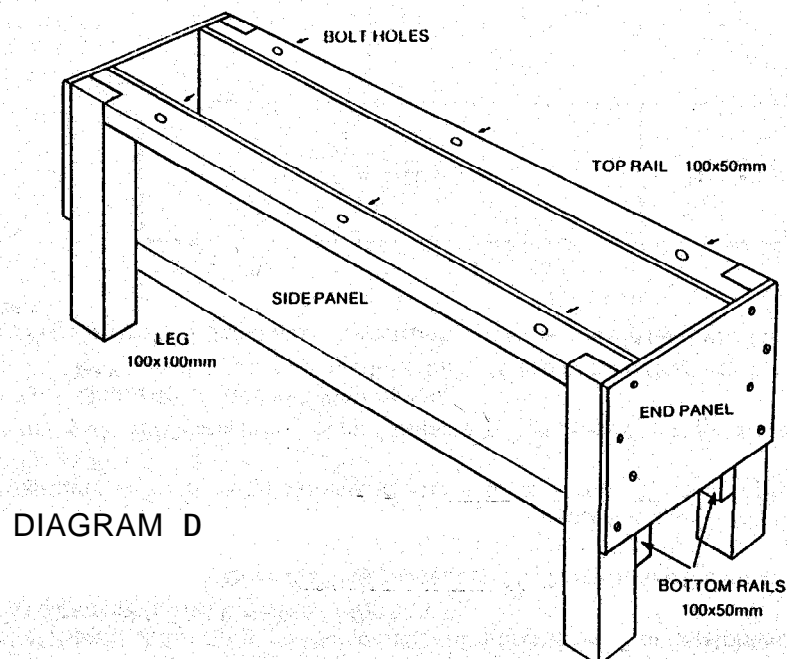
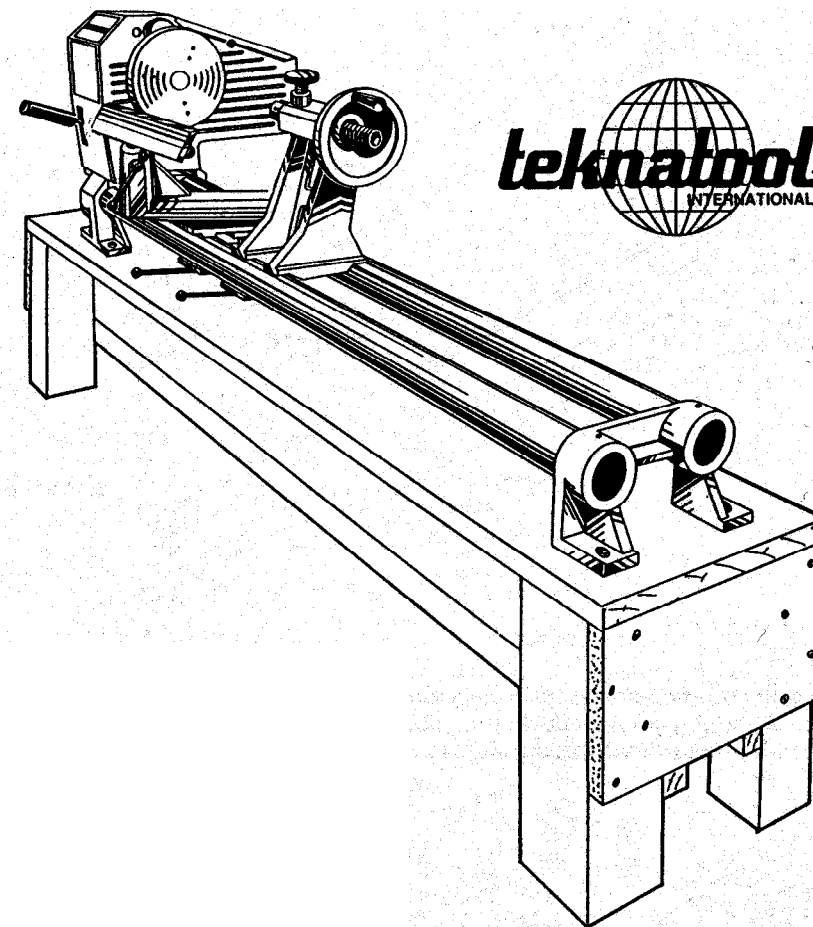


DIAGRAM D



STAND PLANS FOR NOVA TL1500 and NOVA TL1200. WOODLATHES

SIMPLE 'DIY' CONSTRUCTION, LOW COST MATERIALS, ROBUST DESIGN.



LATALEX LIMITED
65 The Concourse, Henderson
Auckland, New Zealand

Designed by Trevor Cole — ©1993 TEKNATOOL

TEKNATOOL INTERNATIONAL LATHE TWO YEAR **LIMITED** WARRANTY

Date Purchased (to be completed by sales outlet) _____

This Teknatool Product is backed by a warranty period of 24 months (two years) from the date of purchase. **Latalex Ltd** hereby agrees to make repairs or replace components without charge for any defects due to faulty material or workmanship provided that •

1. The warranty period has not elapsed Proof of purchase date (i.e. sales slip etc) would need to be sighted, by either the Factory Service Centre, **or** authorised Teknatool Service Centre.
2. The customer provides Latalex Ltd (or the authorised Teknatool Service Centre) with reasonable opportunity to verify the alleged defect by **inspection**. Where necessary, the customer is to return the product prepaid to the Factory Service Centre, or to an authorised Teknatool Service Centre.
3. If in the opinion of Latalex Ltd or the authorised Teknatool Service Centre, 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.
4. Latalex Ltd will not be responsible for any asserted defect which has resulted from nominal wear.

Under no circumstances will Latalex Ltd be liable for incidental, special, indirect and consequential damages or expenses, including loss of profits or loss of operations.

This warranty is Latalex Ltd's sole warranty - no other guarantee, written or **verbal** is authorised by Latalex Ltd. There are no other Warranties whether expressed or implied by law, trade, custom, or otherwise, except for remedies available to customers under the Consumer Guarantees Act or other legislation.

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Our Teknatool Distributors and agents will issue their own **Warranty** to cover this product. 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 specifications/design without notice.

TROUBLE SHOOTING:

This section is to assist you in dealing with those minor but annoying faults which may **occasionally develop** with the lathe during installation or in service. In the main they are simple problems which have easy remedies once you have the right information. Here is a guide to the most common possible faults and their remedies.

The problem: Excessive Vibration

Vibration can result from many causes. It is important to assess the most likely cause(s) and remedy the cause.

Possible Cause	The Cure
Out of balance, or large work.	<ul style="list-style-type: none">- Reduce Spindle speed to lowest speed possible and prepare wood in a true circle.- Point of holding may not be centralised. Holding method may not be sufficiently tight or secure.
Drive Belt is running badly, been over tensioned or damaged.	<ul style="list-style-type: none">- Apply a little 'brake fluid' or CRC to the belt grooves. This should improve performance.- Swap belt.
Motor Pulley is not in correct alignment with the headstock pulley .	<ul style="list-style-type: none">- Refer to the set up guide in the manual.
Headstock or Motor Pulley Loose.	<ul style="list-style-type: none">- Check grubscrews are positioned over holes and are tightened down.
Rattle or looseness in Guard Cover	<ul style="list-style-type: none">- Check all fastening screws are tight.
Movement in Motor Mount Arm	<ul style="list-style-type: none">- Check nylock nut is secured with a firm tightening (it should be hard to move the motor up and down by hand)
Motor	<ul style="list-style-type: none">- Many single phase motors due to their design produce minor noise or vibrations which usually cannot be altered.
Lathe incorrectly bolted to stand or bench.	<ul style="list-style-type: none">- Refer to installation instructions in manual.
Stand or bench not well constructed or too light for the lathe, or standing incorrectly on the floor.	<ul style="list-style-type: none">- Make sure the stand is solidly constructed and bolted to the floor.

Other Possible Problems:

The Trouble	The Possible Cause	The Cure
Faceplate or chuck running out of true	Dirt Build up on the rear of the faceplates or chuck	<ul style="list-style-type: none">- Clean off all build up and dirt- Faceplate/chuck must locate against bearing inner ring plate.
Tailstock handwheel becoming hard to turn or the wheel is locked and will not turn.	<ul style="list-style-type: none">• Build up of dust and wood resin on quill or inside of handwheel thread.• If the quill is completely extracted the handwheel can lock against end of quill.	<ul style="list-style-type: none">• Remove quill and handwheel from the tailstock body. (first remove 6mm grubscrew and keeper plate) Wipe clean all areas including inside of tailstock body. Lightly oil quill and grease handwheel.Reassemble.• To unlock handwheel turn handwheel towards back of lathe . A gentle with a block of wood may assist.
Tailstock not locking correctly onto bed, or Tailstock not sliding smoothly on bed ways.	<ul style="list-style-type: none">• Incorrect clamp plate adjustment.• Dirty Bed ways and underside of tailstock body.	<ul style="list-style-type: none">• Adjust damp plate (refer manual)• Clean bed ways and underside of tailstock body with kerosene or similar solvent.
Chisels or turning tools not sliding smoothly across toolrest.	<ul style="list-style-type: none">• Damaged surface on toolrest face caused by sharp edged tools	<ul style="list-style-type: none">• Smooth surface on top of toolrest using a fine file.• Polish with sandpaper.• Remove sharp edges from corners of turning tools.
Spur Drive Centre or Live Tailstock centre not holding onto tapers when turning.	<ul style="list-style-type: none">• Small end of taper been damaged due to dropping or hitting .• Grease or oil inside of tapers• Insufficient pressure when loading.	<ul style="list-style-type: none">• File or polish away any damage. Check. inside of tapers have not been scored.• Wipe clean inside of tapers.• Quick, firm action by hand is required. Do not knock in using any solid object.
Tailstock and Headstock Centre not lining up correctly.	<ul style="list-style-type: none">• Bed incorrectly bolted to stand causing a twist.• Headstock not returned to detent position when swivelled away.• Headstock Index Pin not fully home.	<ul style="list-style-type: none">• Ensure stand and lathe is correctly installed.• Ensure that the headstock is locked into the aligned position.• Dirt or wood dust accumulated in index hole. Remove headstock and clean out hole.

The Trouble	The Possible Cause,	The Cure
Clicking noise in Headstock when lathe is operating.	<ul style="list-style-type: none">- Spindle index pin is not fully retracted.- Headstock or Motor Pulley loose.	<ul style="list-style-type: none">- When in locked position, with a suitable pin punch, tap the bissel support pin down more.- Check grubscrews are positioned over holes and tightened down.