

Woodturning Lathe Neptune DVR 15"



EU Model: 55703

Neptune Max DVR 15"



EU Model: 55713



WELCOME

Thank you for choosing the NOVA Neptune 15" DVR lathe and welcome to the NOVA product family. You have made an excellent choice, because your NOVA DVR lathe offers unique features and is equipped with the outstanding STRIATECH drive system.

We strive to achieve the best value for your money, providing quality, innovative features, a wide range of accessories plus ongoing support. Please feel free to contact us if you have any technical questions about your lathe or woodturning in general. We are well aware that our customers are our best development and improvement team.

We hope you enjoy using our products

Best regards,

Brian Latimer

Marketing director Teknatool International Ltd

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Alternatively, you can contact the retailer from whom you purchased your NOVA Neptune DVR 15" lathe.

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Explanation of symbols

	Wear eye protection		Damage and/or danger to persons, machine, material, or environment		Important notes
	Wear ear protection		Environmentally hazardous substance		Do not dispose together with domestic waste
	Wear protective footwear		Imminent danger to health and risk of serious injuries		
	Wear respiratory protection		Notes on using the operating instructions		

Introduction

This manual contains instructions on safety, assembly, operation and maintenance, and spare parts lists.

If you take into account the recommendations given in these instructions, the **NOVA Neptune DVR** will give you years of failure-free service.

1 | Warranty

This product is subject to the statutory warranty according to Austrian law from the time the product is handed over. There is no basic claim to replacement or rescission. In case of a complaint, please contact your local dealer. He will coordinate the further procedure with you.

2 | Basic health and safety instructions for power tools



Please note:

Failure to read and observe these operating instructions may result in serious injury. As with all machinery, operating a woodturning lathe can lead to dangerous situations. Careful use and handling can significantly reduce the risk of injury. Neglecting basic precautions can lead to user injuries. The machine is designed exclusively for the recommended use. Therefore, do not carry out any work on the machine that is not intended by the manufacturer and do not make any changes whatsoever. If you have any questions regarding the use of the machine you cannot find an answer to in these operating instructions, please contact your dealer.



Workplace safety

- Keep your workplace clean and well lit.** Messy or unlit workplaces can lead to accidents.
- Do not use power tools in potentially explosive environments where flammable liquids, gases or dusts are present.** Power tools may produce sparks which can ignite the dust or vapours.
- Keep children and other people away while using the power tool.** Distraction can cause you to lose control of the power tool.

Electrical safety

- The plug of the power tool must fit into the socket. The plug must not be changed in any way. Do not use adapter plugs together with earthed power tools.** Unmodified plugs and matching sockets reduce the risk of an electric shock.
- Avoid physical contact with earthed surfaces such as pipes, heaters, stoves and refrigerators.** There is an increased risk of an electric shock if your body is earthed.
- Keep your power tool away from rain or moisture.** Water entering a power tool increases the risk of an electric shock.
- Do not misuse the power cord to carry the power tool, hang it up or pull the plug out of the socket. Keep the power cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled power cords increase the risk of an electric shock.
- If operating the power tool in a damp environment cannot be avoided, use a residual-current circuit breaker.** Using a residual-current circuit breaker reduces the risk of an electric shock.

Personal safety

- a. **Be attentive, pay attention to what you are doing and take the utmost care when operating a power tool. Do not use a power tool when you are tired or under the influence of drugs, alcohol or medication.** One moment of carelessness when using a power tool can cause serious injury.
- b. **Wear personal protective equipment and safety glasses.** Wearing personal protective equipment such as dust mask, non-skid safety shoes, hard hat or ear protection, depending on the type and use of the power tool, reduces the risk of personal injury.
- c. **Avoid unintentional starting. Ensure the power tool is switched off before connecting it to the power supply and/or battery pack, picking it up or carrying it.** Carrying power tools with your finger on the switch or connecting activated power tools to the power supply can cause accidents.
- d. **Remove any adjusting tool or spanner before turning the power tool on.** A tool or spanner that gets caught in a rotating part of the power tool can cause injuries.
- e. **Avoid an abnormal posture. Ensure secure footing and maintain balance at all times.** This enables better control of the power tool in unexpected situations.
- f. **Wear suitable clothing. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g. **If dust extractors and collectors can be installed, ensure these are connected and used properly.** Using a dust extractor can reduce dust-related hazards.
- h. **Do not let familiarity gained from frequent use of the power tool allow you to become careless and ignore tool safety principles.** Within a fraction of a second, careless behaviour can lead to serious injuries.

Use and care of the power tool

- a. **Do not overload the power tool. Use the appropriate power tool for your work.** Using the right power tool will enable you to work better and safer within the indicated power range.
- b. **Do not use a power tool if its switch is defective.** A power tool that cannot be turned on or off is dangerous and must be repaired.
- c. **Disconnect the plug from the socket and/or remove the battery pack before making any adjustments to the device, changing inserts or putting the power tool away.** This precaution prevents the unintentional start of the power tool.
- d. **Store idle power tools out of the reach of children. Do not allow persons unfamiliar with the power tool or its instructions to operate the power tool.** Power tools are dangerous when used by inexperienced people.
- e. **Maintain power tools and accessories with care. Check whether moving parts are working properly and are not jammed, and whether parts are broken or damaged to the extent that the function of the power tool is impaired. Have damaged parts repaired before using the power tool.** Many accidents are caused by poorly maintained power tools.
- f. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to jam and easier to control.
- g. **Use the power tool, accessories, etc., according to the present instructions. Take into account the working conditions and the work to be performed.** The use of power tools for other than its intended applications can lead to dangerous situations.
- h. **Keep handles and gripping surfaces dry, clean and free from oil and grease.** Slippery handles and gripping surfaces do not allow for safe handling and control of the power tool in unexpected situations.
- i. **Only connect the type F plug of the machine to an earthed socket. Do not turn on the machine if it is not earthed.**

Service

- a. **Only have your power tool repaired by qualified personnel and only with original spare parts.** This ensures that the safety of the power tool is maintained.

3 | General health and safety instructions for woodturning lathes

a. Wear **personal protective equipment (PPE)**.



Ear protection: Wear ear protection for longer work. Certain materials can produce an increased noise level during wood turning.



Safety glasses / face shield: Always wear at least safety glasses when working on the machine. If necessary, use a full eye protection or face shield, since normal eyeglasses are usually only shock-resistant and safety glasses only protect the eyes. A face shield protects eyes and face.



Respiratory protection: When processing different types of wood, exotic wood-based and other materials, and when performing certain tasks like sanding, sawing or drilling, dusts are produced that are harmful to health. Therefore, operate the machines only in well-ventilated areas and wear respiratory protection. Use also a suitable dust extractor and/or a filtering system of the circulating air.

If you are using the woodturning lathe commercially, an automatic chip and dust extractor approved by the professional association must be installed.

b. **Inform yourself about the lathe before using it for the first time.** If you are unfamiliar with the function of a lathe, get professional support. An instruction by an experienced and trained woodturner is strongly recommended. Do not operate the lathe until it is fully assembled.

c. **Minimum age.** The minimum age to use a lathe is 16 years.

d. **Wear suitable clothing.**



Rotating parts can be dangerous. Clothing, jewellery and long hair can get caught in the rotating parts. Therefore, do not wear loose clothing or jewellery and use a headgear or hairnet. Avoid wearing gloves that can get caught during turning. Wear protective footwear and make sure the floor is non-slip.

e. **Do not work in damp, dark and dangerous environment.** The lathe is designed exclusively for indoor use. Protect the lathe from hazy or damp locations and do not expose it to wet conditions. Ensure adequate lighting and ventilation of the workplace. Avoid areas with explosive atmospheres. Failure to comply with these rules may result in warranty loss.

f. **Keep your workplace neat and clean.** Untidy workplaces and tables cause accidents. Do not switch on the lathe until all objects (tools, pieces of wood, etc.) have been removed from it. Keep the immediate work area and floor free from dirt and leftover pieces. Accumulated sawdust is a fire and accident risk.

g. In case of a **power failure**, the workpiece is no longer slowed down. The run-down time may be longer.

h. **Avoid unintentional starting.** Make sure that the main switch (if present) is in the “OFF” position when connecting the lathe to a type F socket.

i. **Do not leave the lathe running unattended.** Do not leave the lathe until the power is turned off and the machine has come to a complete stop.

j. **Use the right tool.** Use only suitable tools or accessories for wood turning. Avoid unnecessary force of the tools. Keep the woodturning tools in good condition. Sharp and clean tools guarantee best results and minimise the risk of injury. Ensure that the tool is in the correct position to the workpiece. Do not use tools designed for spindle turning for faceplate turning and vice versa. Choosing the wrong tool can cause injuries or damage the workpiece.

- k. **Working on the lathe.** Make sure the electrical voltage is switched off and then check the spindle by turning it with your hand to see whether the workpiece can move freely.

Check the workpiece to prevent parts of it from chipping during turning.

When using adhesives (even cyanoacrylate superglues), bear in mind that they can still be liquid in voids or wide cracks even after hours of drying. During turning, they can leak due to the centrifugal forces and fly in the direction of the chip flight, i.e. in the direction of the woodturner, posing a health or injury risk.

Always check that the correct speed is set before switching on the machine. Use the lowest speed for new or out-of-balance workpieces.

Always turn at the recommended speed. For more information see page 37.

Do not try to slow down workpieces by hand.

Place the tool rest as close as possible (about 5-10 mm) to the workpiece. Before each start, rotate the workpiece by hand to make sure that it runs freely. Turn off the lathe from time to time and readjust the tool rest. Make sure that the tool rests firmly on the tool rest. Remove the tool rest when sanding or polishing to avoid pinching your fingers.

When roughing, do not ram the tool into the workpiece and do not cut too deep.

Do not strike the workpiece on a drive centre which is mounted on the spindle.

When spindle turning, do not use the tailstock to press the workpiece into the mounted drive centre.

Mount the workpiece securely for spindle turning. Make sure the tailstock is locked before switching on the power. Never loosen the headstock or tailstock while the workpiece is rotating. Make sure that all lock handles are locked before starting the lathe.

Use the faceplate correctly. Be sure to use a suitable faceplate, prepare the workpiece as best as possible before mounting it on the faceplate and fasten the workpiece securely. Make sure that the mounting screws do not obstruct the woodturning tool during turning.

Do not use the lathe if it is damaged or malfunctioning. In this case, switch off the lathe and disconnect it from the power supply. Ensure that the damaged parts are repaired.

- l. **Pay attention to secure footing** (foot position, balance). Do not climb onto the machine. There is a risk of injury if the machine tips over.
- m. **Make sure there is enough work space around the machine.** Untidy work surfaces and floors can lead to injuries.
- n. **Use only original accessories** and follow the steps described in the operating instructions. Using accessories from other manufacturers may result in injuries.
- o. **Handle the spindle threads with the utmost care.** The spindle threads are very sharp. Do not use them to lift the lathe or to stop or manually turn the spindle.

4 | Features

Feature	Description
DVR DRIVE	Smart motor technology, providing a smooth and powerful direct drive. Constant monitoring of the spindle position, ensuring the optimal spindle speed. Automatic power increase when sensing extra load.
POWER	220~240V / 10A 1.1kW (1.5 HP)
SLIDING HEADSTOCK 360° SWIVELLING	Lock at any position, plus detent positions at 0°, 22.5°, 45° and 90°. High accuracy, easy swivel.
SOLID BED	Special webbing for absorbing vibrations throughout the bed length, guaranteeing exceptional structural strength.
FOUR PROGRAMMABLE FAVOURITE SPEEDS	For fast and efficient project set ups.
FLEXIBLE CAPACITY TO MATCH YOUR PROJECT	- 15" / 381 mm over bed - 20" / 508 mm when outboard turning (with optional outboard turning attachment) - 18" / 457 mm between centres (Neptune) - 28" / 711 mm between centres (Neptune Max)
SAFETY SENSING	Automatic sensing of setup faults and safety issues (e.g. tool dig in, spindle lock) and intelligent shut-off of the spindle.
ENERGY EFFICIENCY	Intelligent (computer controlled) motor only draws as much power as it needs.
INCREDIBLE VARIABLE SPEED RANGE	50 – 4,000 rpm. * 50 rpm not suitable for turning, only for drying

5 | Technical data

Neptune	
Max. turning diameter	381 mm
Distance between centres	457 mm
Dimensions (LxWxH)	840 mm x 425 mm x 380 mm
Package size (LxWxH)	900 mm x 485 mm x 440 mm
Net weight	approx. 60 kg
Headstock	
Spindle thread	M33 x 3.5 RH ASR EUROLOCK*
Spindle taper	Morse taper No. 2 (MT2)
Swivel	360° with detent positions at: -45°, -22.5°, 0°, 22.5°, 45°, 90°, 180°
Slidability	Sliding headstock
Indexing	24 positions (15°-increments)
Weight	approx. 24 kg
Tailstock	
Quill taper	Morse taper No. 2 (MT2)
Quill travel	100 mm
Through hole	10 mm
Weight	approx. 9.3 kg
Tool rest	
Length	229 mm
Post diameter	25.4 mm
Weight (incl. banjo)	approx. 4.8 kg
Bed	
Weight	approx. 22 kg
Motor specifications	
Motor type	DVR Direct Drive Smart Motor
Speed range	~50-4,000 rpm
Input frequency	50 Hz
Motor power output	1.1 kW (1.5 HP)
Input voltage	220~240 V
Input current	10 A (max)

* ASR EUROLOCK locking ring not included

Neptune Max	
Max. turning diameter	381 mm
Distance between centres	711 mm
Dimensions (LxWxH)	1475 mm x 517 mm x 1182 mm
Package size (LxWxH)	Package 1: 930 mm x 420 mm x 450 mm Package 2: 895 mm x 321 mm x 260 mm
Net weight	approx. 94 kg (package 1: approx. 65.5 kg, package 2: approx. 28.5 kg)
Headstock	
Spindle thread	M33 x 3.5 RH ASR EUROLOCK*
Spindle taper	Morse taper No. 2 (MT2)
Swivel	360° with detent positions at: -45°, -22.5°, 0°, 22.5°, 45°, 90°, 180°
Slidability	Sliding headstock
Indexing	24 positions (15°-increments)
Weight	approx. 24 kg
Tailstock	
Quill taper	Morse taper No. 2 (MT2)
Quill travel	100 mm
Through hole	10 mm
Weight	ca. 9.3 kg
Tool rest	
Length	229 mm
Post diameter	25.4 mm
Weight (incl. banjo)	approx. 4.8 kg
Bed	
Weight	approx. 22 kg
Stand	
Weight	approx. 28.5 kg
Motor specifications	
Motor type	DVR Direct Drive Smart Motor
Speed range	~50 – 4.000 rpm
Input frequency	50 Hz
Motor power output	1.1 kW (1.5 HP)
Input voltage	220~240 V
Input current	10 A (max)

* ASR EUROLOCK locking ring not included

Colour specifications

Jet Black
RAL 9005



Black Grey
RAL 7021



Light Grey
RAL 7035



Signal white
RAL 9003

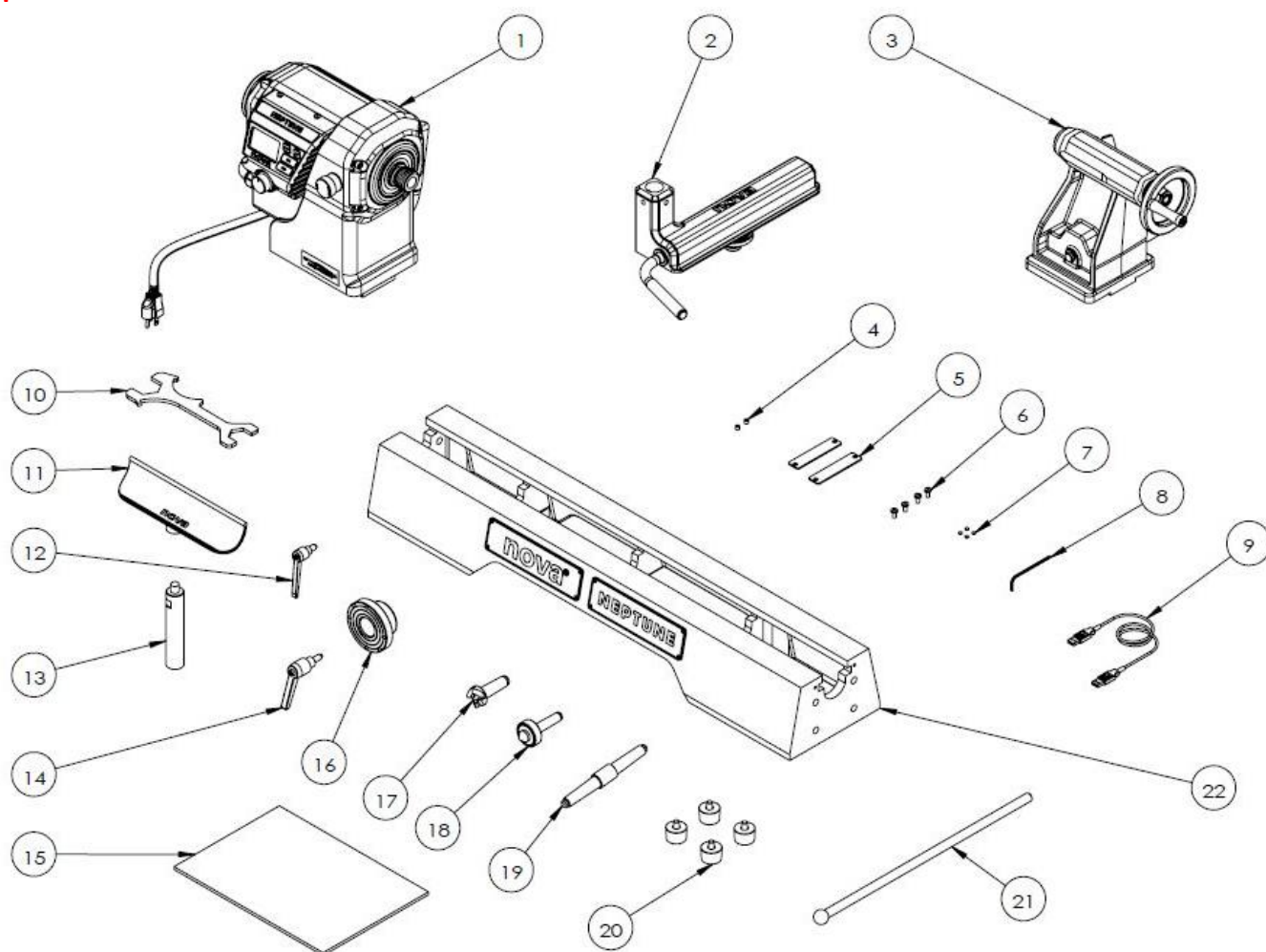


Luminous red
RAL 3024



6 | Scope of delivery

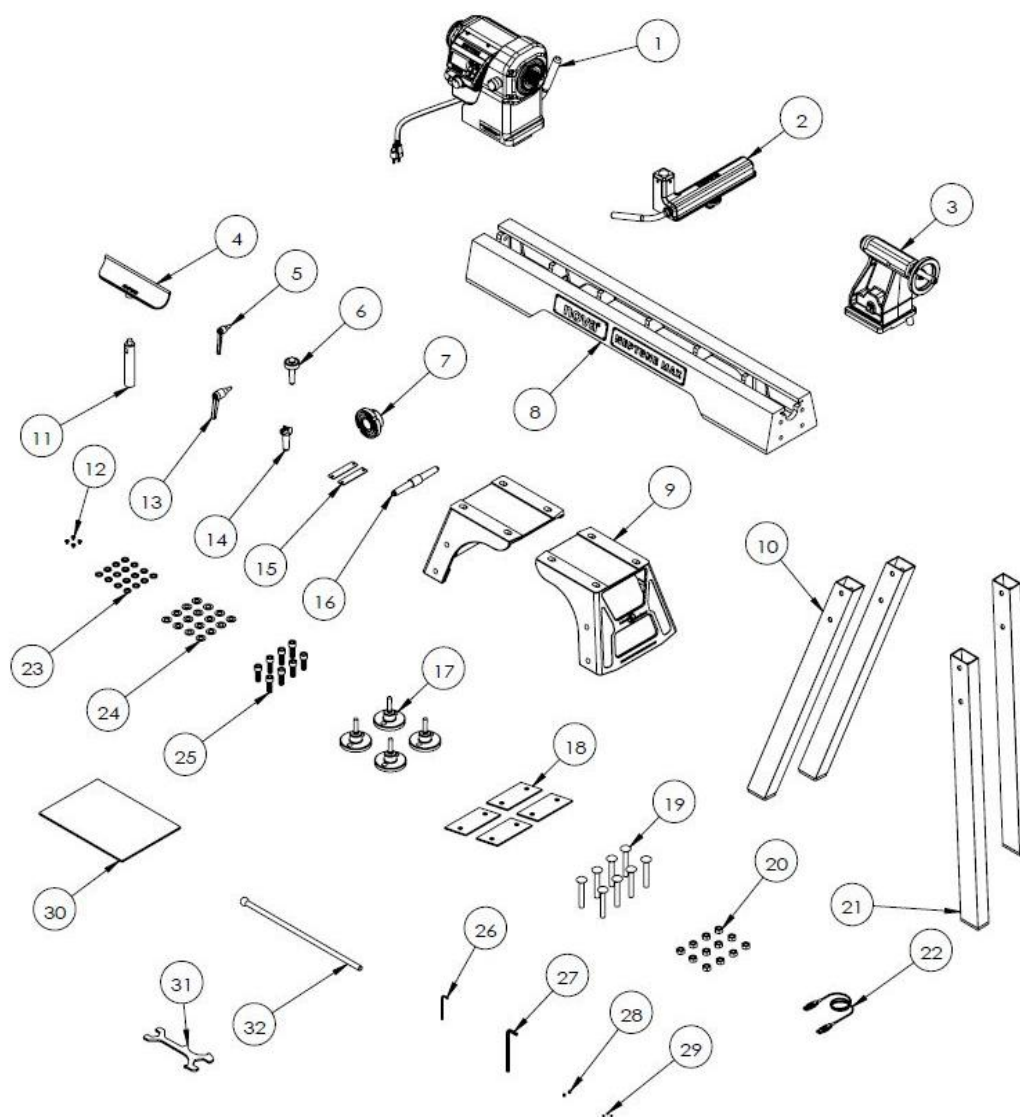
Neptune



Ref.	Description
1	Headstock assembly (+ control panel)
2	Tool rest assembly
3	Tailstock assembly
4	Set screw M6 x 6 mm
5	Stop plate
6	Stop plate screw M5 x 6 mm
7	Soft washer
8	3 mm hex key
9	USB cable
10	Universal spanner
11	Nova 9" modular tool rest

Ref.	Description
12	Lock handle M8 x 20 mm
13	1" tool rest post
14	Lock handle M10 x 20 mm
15	Operating instructions
16	80 mm faceplate M33 ASR*
17	MT2 live centre
18	MT2 drive centre
19	Double taper
20	Machine feet
21	Knockout bar
22	Bed

* ASR EUROLOCK locking ring not included



Ref.	Description
1	Headstock assembly (+ control panel)
2	Tool rest assembly
3	Tailstock assembly
4	Nova 9" modular tool rest
5	Lock handle M10 x 20 mm
6	MT2 live centre
7	80 mm faceplate M33 ASR*
8	Bed
9	Cast iron frame stand
10	Legs stand left-hand side
11	Tool rest post 1"
12	Stop plate screw M5 x 6 mm
13	Lock handle M8 x 20 mm
14	MT2 drive centre
15	Stop plate
16	Double taper

Ref.	Description
17	Machine feet
18	Bolster plate
19	Coach bolt M12 x 90 mm
20	Hex nut ZP M12
21	Legs stand right-hand side
22	USB cable
23	Spring washer M12
24	Washer M12
25	Cap screw M12 x 35 mm
26	3 mm hex key
27	10 mm hex key
28	Set screw M6 x 6 mm
29	Soft washer
30	Operating instructions
31	Universal spanner
32	Knockout bar

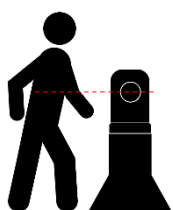
* ASR EUROLOCK locking ring not included

7 | Workshop environment

Installation site requirements

Requirement	Recommendation
Installation site 	Place the lathe near a power source in a well-lit area. Make sure the ground is level, firm and has a sufficient load capacity. Leave enough space around the machine. Make sure there is sufficient space for turning the headstock and optional accessories. Other machines installed in the workshop must not affect the operation of the lathe.
Lighting 	Pay attention to good lighting. In addition, use adjustable lighting for your work area on the lathe so that no shadows are cast on the workpiece. If possible, place the machine near a window.
Electrical environment 	In order to operate the lathe, a suitable type F socket is required nearby. Electrical cables and sockets must comply with local electrical codes. In case of doubt, ask your electrician. Avoid using an extension cord. If this is not possible, make sure the extension cord is as short as possible and meets the requirements.
Ventilation 	Ventilate your workplace adequately. The degree of ventilation depends on the size of the workshop and the number of manufactured workpieces. Depending on the type of wood and the residual moisture content, dust may be produced during turning. The use of dust extractors, masks and filters reduces your health risk.

Work ergonomics



Installing the lathe correctly facilitates fatigue-free and safe working. It helps to handle the tools safely and to more easily achieve the desired shape of the workpiece.

Place the lathe in such a way that the tips (of drive centre and live centre) are level with your elbows when you stand upright.

If possible, place the lathe near a source of natural light. Artificial light should come from above, but not fall directly into the eyes.

8 | Lathe assembly



WARNING! Seek help when moving the lathe and its heavier components to avoid injuries. Use straps in good condition. Straps/lifting mechanisms must be properly rated for the weight of the lathe. Read this manual carefully before attempting to assemble or operate the lathe.

DO NOT CONNECT POWER ON THE LATHE UNTIL IT IS FULLY ASSEMBLED.



CAUTION!

Pay attention to the weight of the components and handle them carefully to avoid injuries. Make sure that all screw connections are tightened firmly, but not over-tightened. Check all screw connections for tightness after eight operating hours.



CAUTION! Handle the spindle threads with the utmost care. The spindle threads are very sharp. Do not use them to lift the lathe or to stop or manually turn the spindle.

8.1 Unpacking and preparing the lathe

1. Remove all smaller items from the main carton. Do not discard the carton or the packing material until the lathe is assembled and running satisfactorily.
2. Inspect the contents for shipping damage and, if you find any, report it to your distributor.
3. Compare the contents of the carton with the contents list in this manual. Report shortages, if any, to your distributor. Some parts may have been pre-installed and can be found on the lathe.
4. Exposed metal areas of the lathe, such as bed and spindles, have been factory coated with a protectant. Remove this coating with a soft cloth and a cleaner degreaser. Clean the bed areas under headstock, tailstock and banjo. Do not use an abrasive pad, and do not allow solvents to contact painted or plastic areas.
5. Remove all the protective films (specifically on the control panel) before using the machine.

8.2 Installing the lathe

Once the Neptune lathe has been unpacked, determine which mounting option is best suited for you. Remove the stop plates at both ends of the bed. Slide the headstock, the banjo and the tailstock off the bed and place them on a clean, flat surface. This will allow you to configure the bed appropriately. Choose one of the following mounting options:

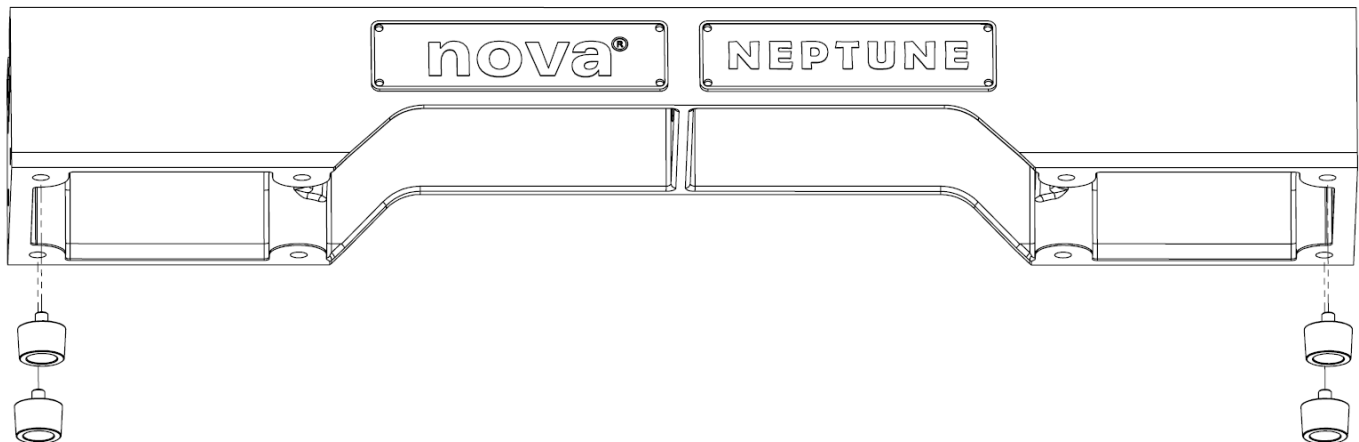
8.2.1 Mounting options

1. Free standing on rubber feet

This mounting option is for spindle turning and for turning small, well-balanced bowls (150-200 mm). This option is not suitable if you want to swivel the headstock. It is primarily suitable for applications where the machine needs to be easy to move. If you want to process larger workpieces or swivel the headstock, screw the machine onto the workbench.

Assembly:

Place the bed upside down on a clean, flat surface (ideally on a cardboard to prevent damage to the surface). Screw the machine feet into the bottom of the bed. Flip the bed back onto its feet and move on to section 8.2.3.

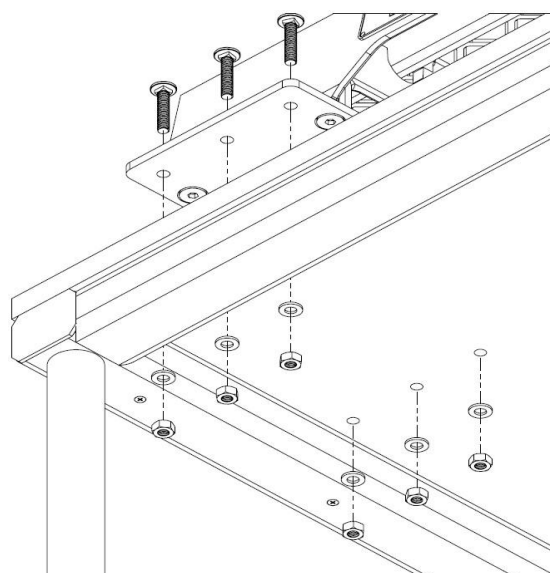
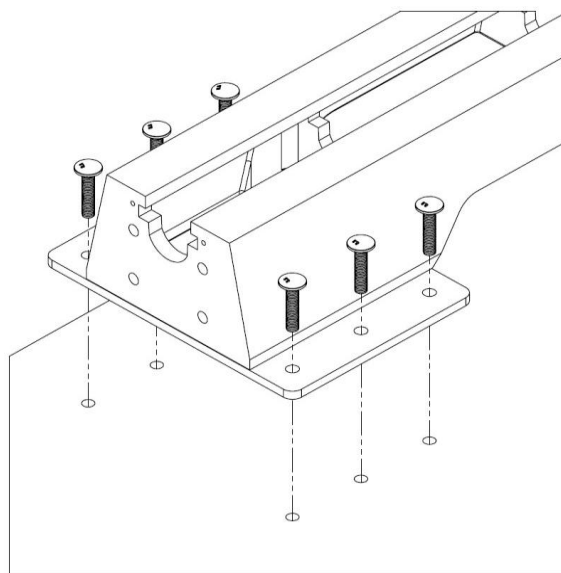
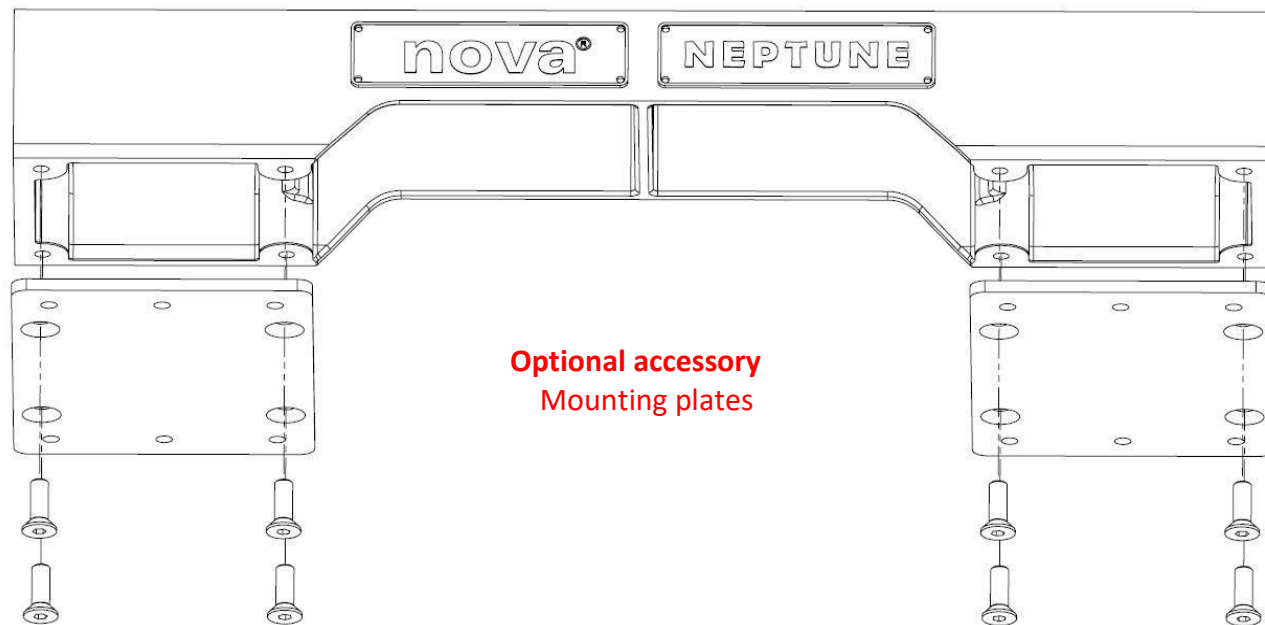


2. Free standing on bench with optional mounting plates (article number 55267)

This mounting option is for turning larger, well-balanced workpieces (up to 305 mm) and for swivelling the headstock. It is recommended for any turning work to secure the mounting plates to the workbench with screws. The mounting plates have corresponding holes.

Assembly:

Place the bed upside down on a clean, flat surface (ideally on a cardboard to prevent damage to the surface). Fasten the mounting plates to the bed using four M12 countersunk screws. Flip the bed onto the mounting surface. Screw the mounting plates to the mounting surface. Use M10 coach bolts for this. Move on to section 8.2.3.



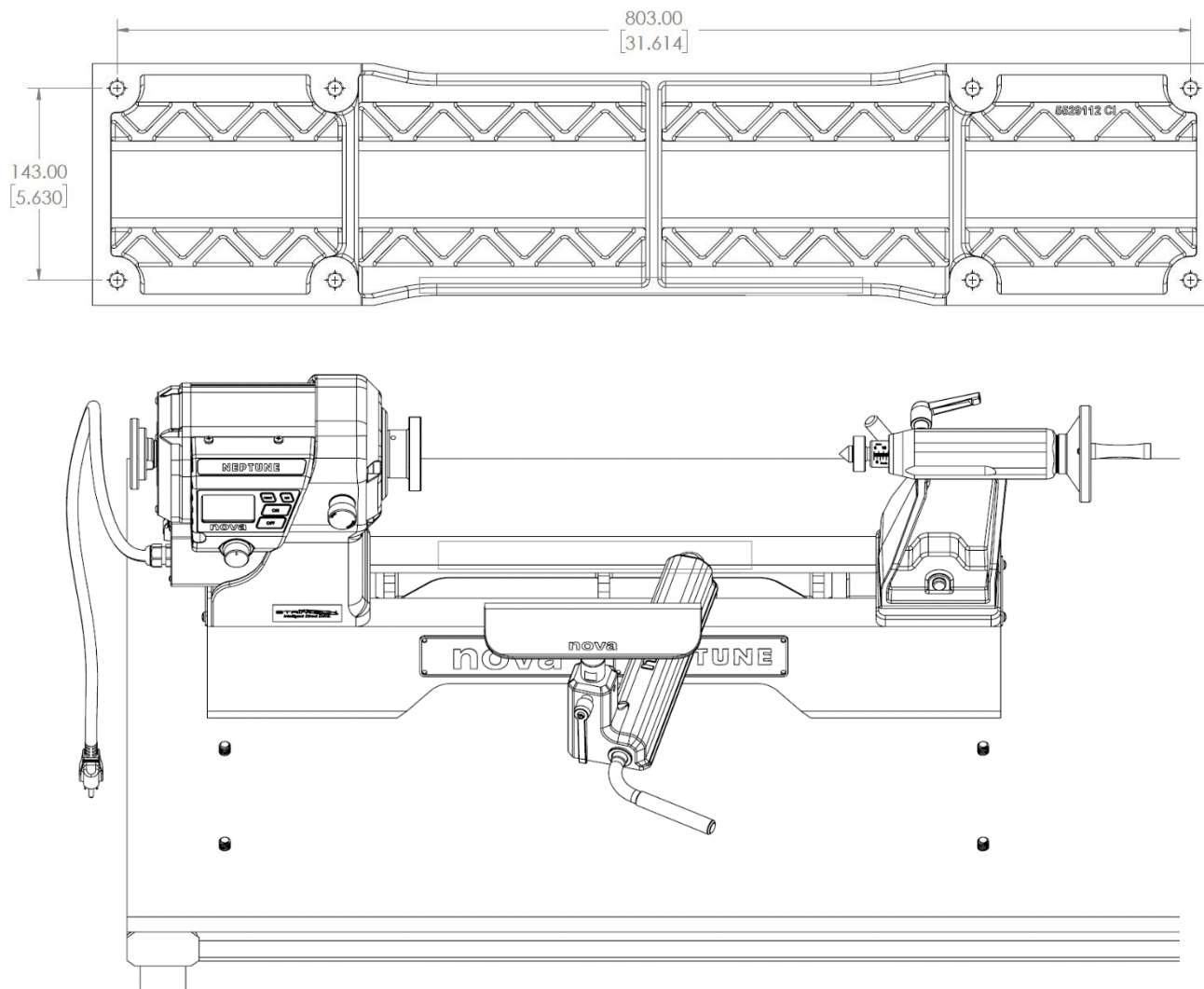
3. Screwing directly to workbench

This mounting option is for all turning work including outboard turning.

The size of workpiece best suited for this mode is up to the limits of the maximum turning diameter with swivelled headstock or in outboard turning mode. Avoid mounting unbalanced workpieces. Turn at the slowest speed to avoid out-of-balance forces and increase the speed as long as the workpiece is in balance.

Assembly:

If you wish to screw your bed directly to the workbench, follow the bed profile shown below. Screw the bed in place from below using four M12 screws. Move on to section 8.2.3.



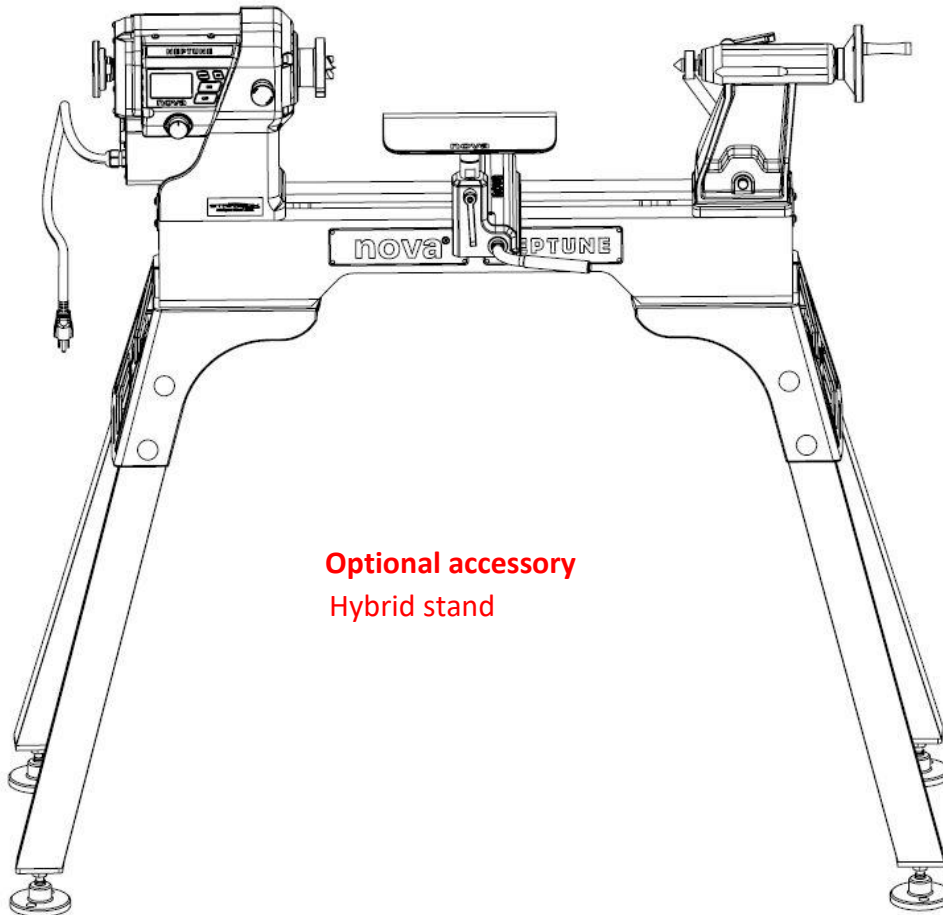
4. Mounting as floor model with stand

This mounting option is for all turning work including outboard turning.

The size of workpiece best suited for this mode is up to the limits of the maximum turning diameter with swivelled headstock or in outboard turning mode. Avoid mounting unbalanced workpieces. Turn at the slowest speed to avoid out-of-balance forces and increase the speed as long as the workpiece is in balance.

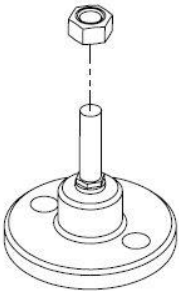
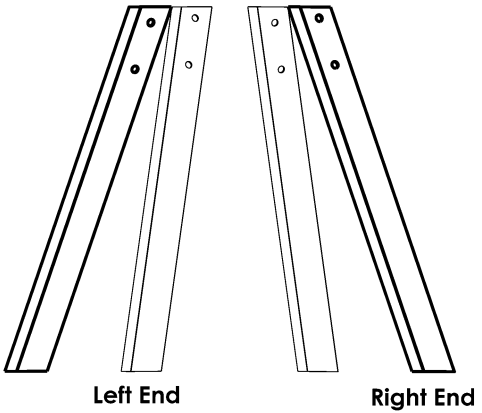
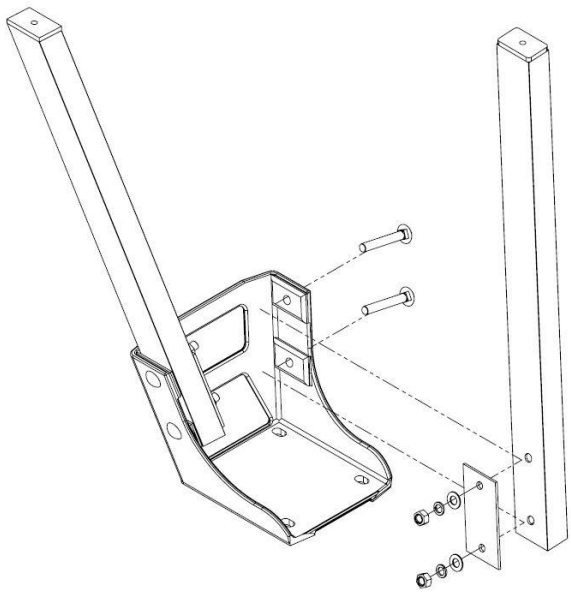
Assembly:

The bed is compatible with the optionally available Hybrid Stand Accessory. Refer to the assembly instructions included with the stand or the instructions regarding the Neptune Max assembly in section 8.2.2 of this manual. Move on to section 8.2.3.



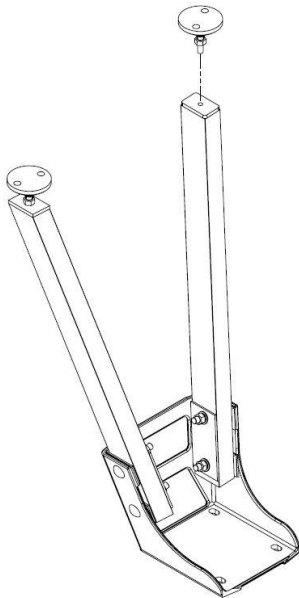
Optional accessory
Hybrid stand

8.2.2 Mounting the bed on the stand (Neptune Max)

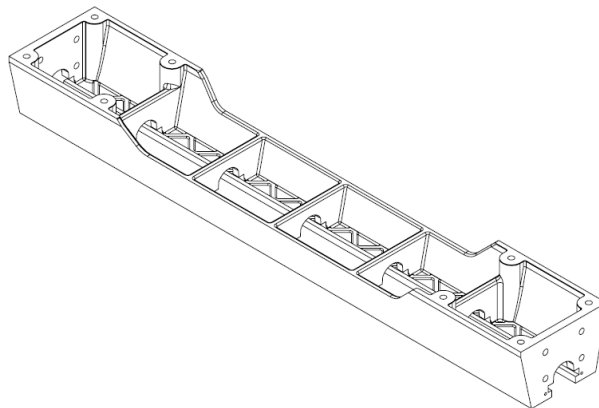
Step 1: Open the cardboard box and check the content for completeness.	Step 2: Screw an M12 hex nut onto each pre-assembled machine foot.
	
Step 3: Place the cast legs flat on the floor to determine whether they are to be mounted on the left-hand or right-hand side. Legs with the angle on the right-hand side are to be mounted on the left, legs with the angle on the left-hand side are to be mounted on the right.	Step 4: Place the cast iron frame upside down on a clean surface. Place the legs in the appropriate corners and fix them using the bolster plates, coach bolts, washers and nuts. Repeat the procedure on the other cast iron frame.
	

Step 5:

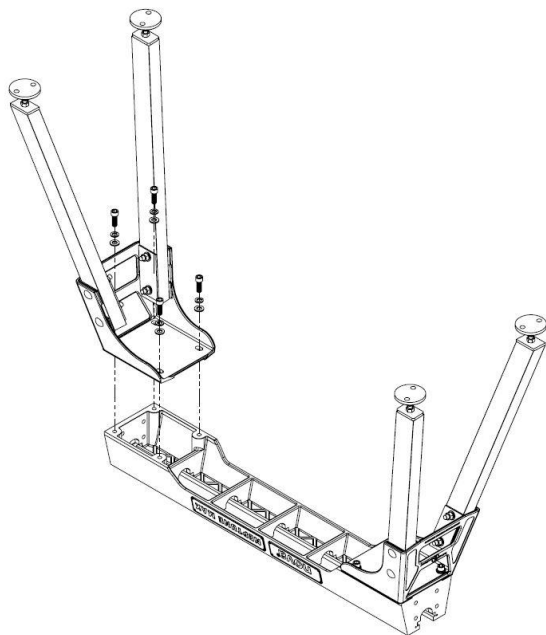
Screw the machine feet into the legs. You will now have a leg set for each end of the machine.

**Step 6:**

Place the bed upside down on a flat, clean surface. Ideally place a cardboard underneath to prevent damage to the surface.

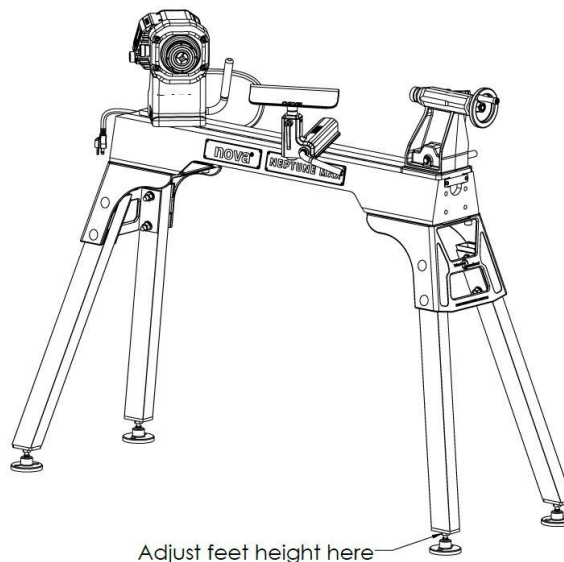
**Step 7:**

Mount each of the leg sets to the bed using the cap screws and washers.

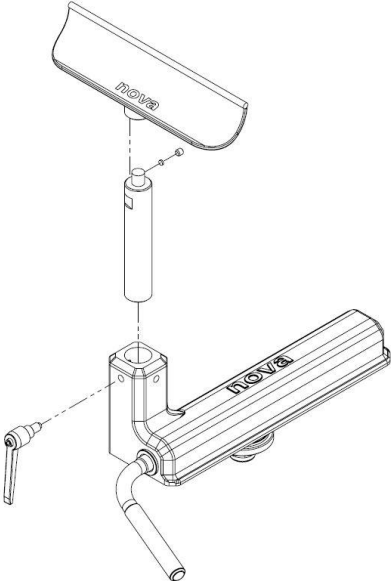
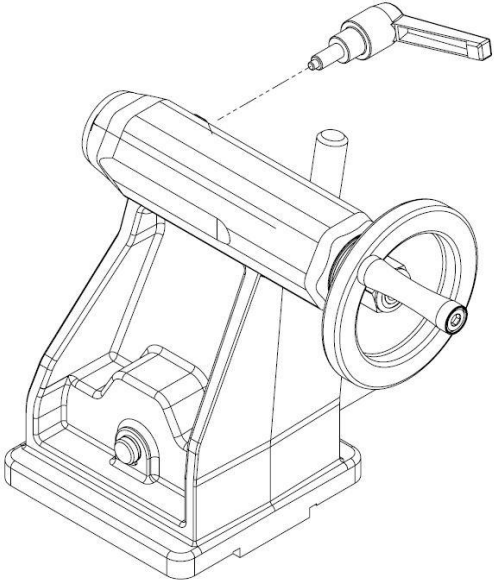
**Step 8:**

WARNING! The stand is heavy. Ask a second person to help you to turn over the stand.

Turn over the stand and align it - Use the nuts on the feet to adjust the height.

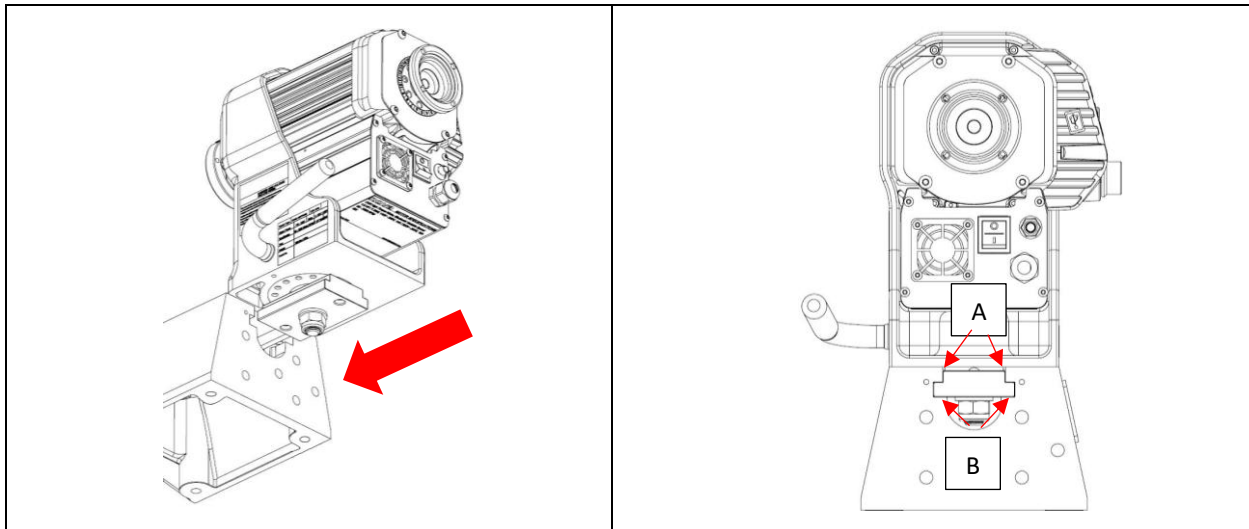


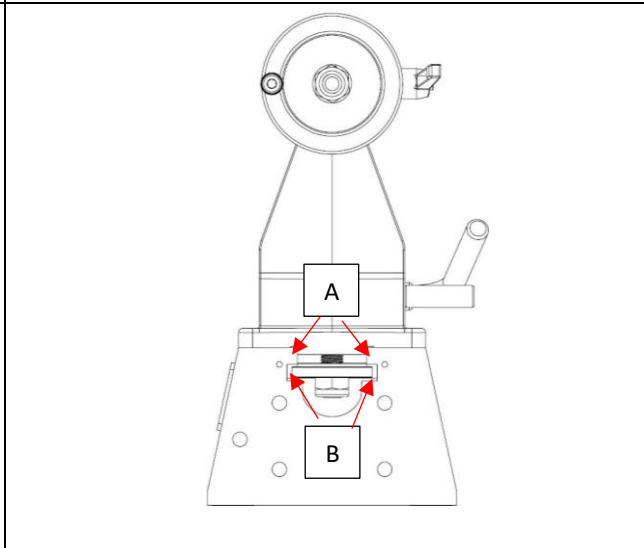
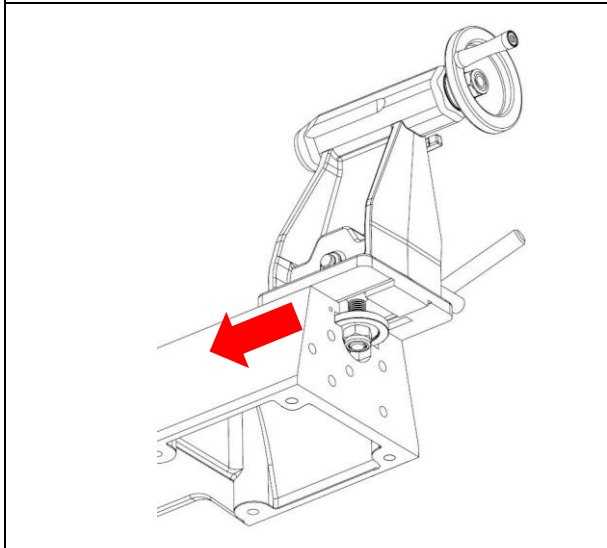
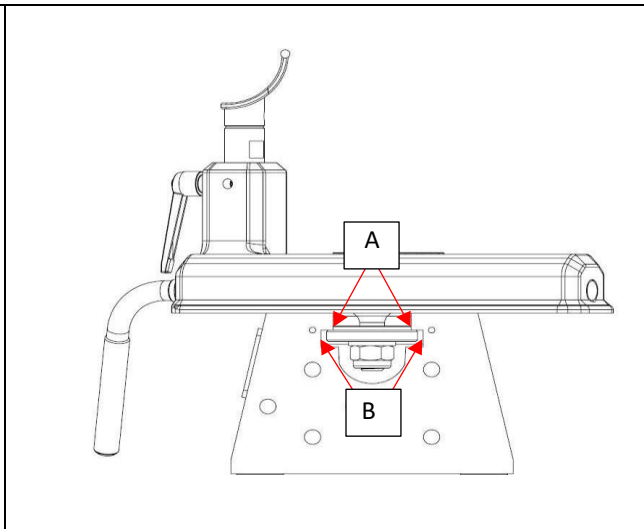
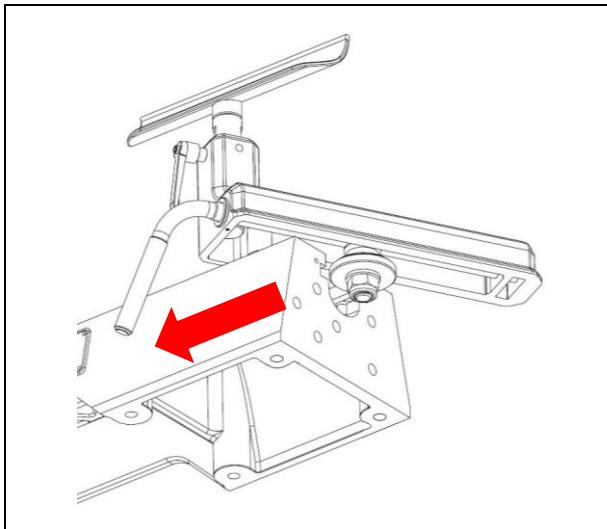
8.2.3 Assembling the tool rest and tailstock

Assemble the tool rest as shown.	Assemble the tailstock as shown.
	

8.2.4 Mounting the headstock, tool rest and tailstock onto the bed

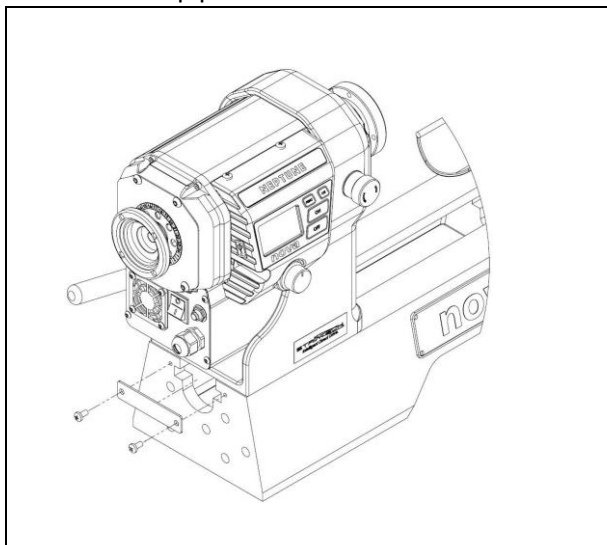
1. Slide the headstock, the tool rest and the tailstock onto the bed and make sure that the lock plate (A) is correctly lined up with the bed way (B) as shown below:



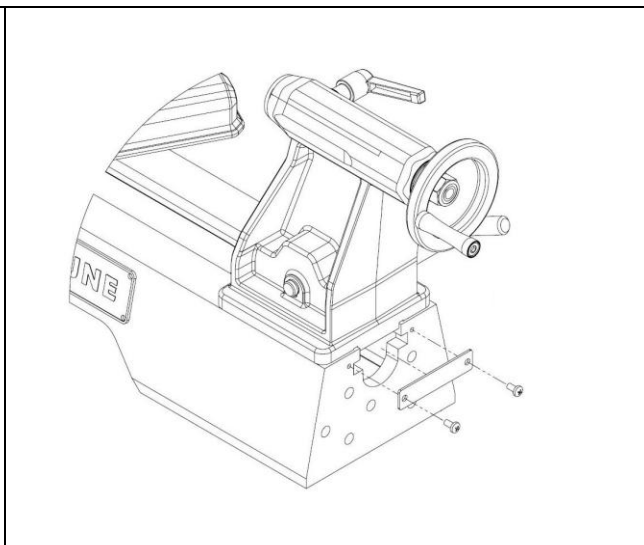


NOTE: Turn the clamping lever to change the position of the lock plate if you cannot slide the components onto the bed.

2. Mount the stop plates on both ends of the bed.



Screw a stop plate into the bed to secure the headstock onto the bed.

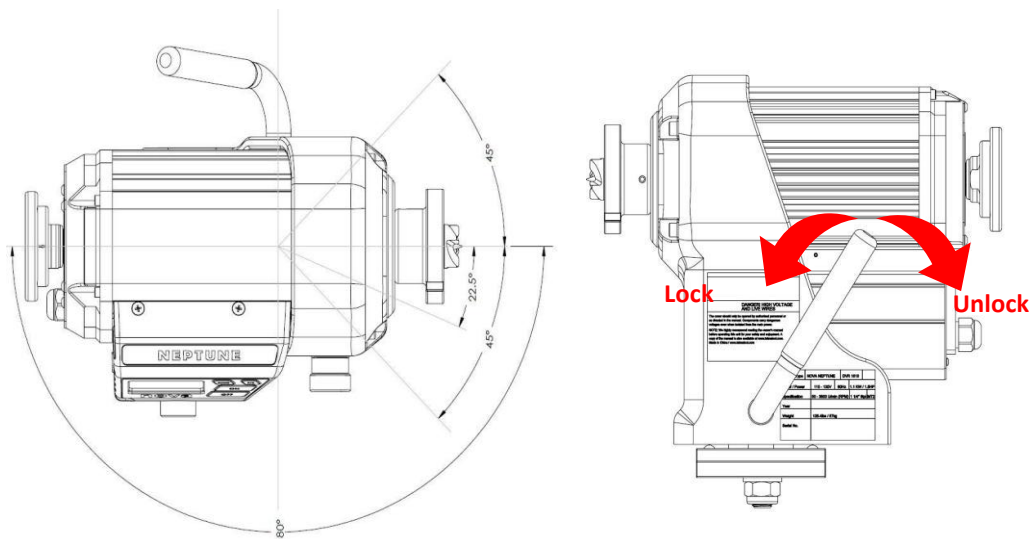


Screw the other stop plate into the bed to secure the tailstock onto the bed.

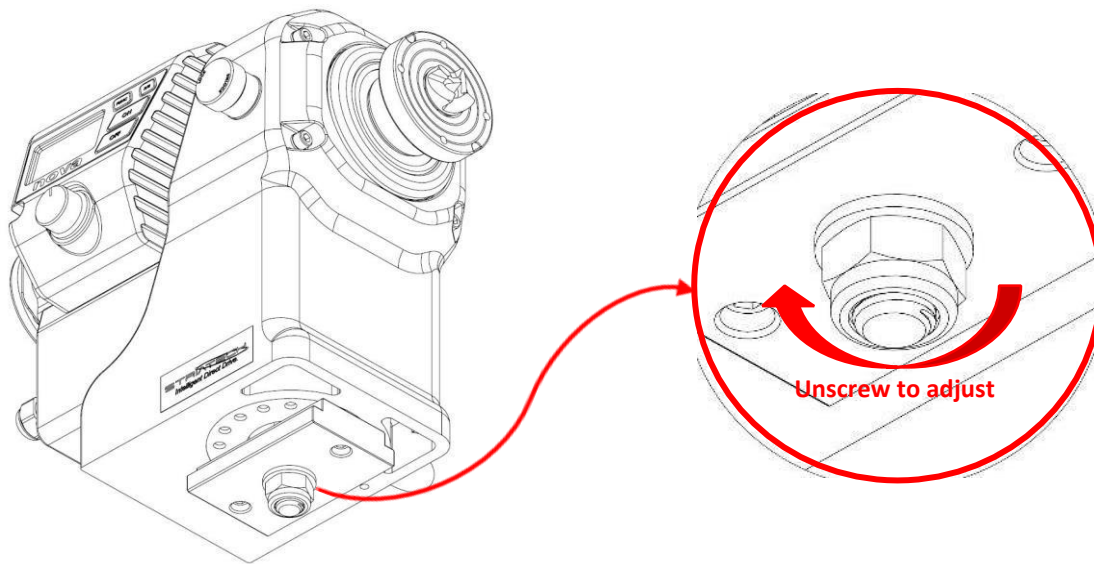
8.3 Positioning the headstock on the bed

The headstock is secured on the bed with a cam-lock assembly. To move the headstock, proceed as follows:

1. Push the clamping lever backwards to unlock the headstock.
2. When the headstock is unlocked, slide and swivel it to the desired position on the bed.



3. Lock the headstock by pulling the clamping lever forwards. Ensure the headstock is secure before running the lathe.
4. To adjust the clamping force and the orientation of the clamping lever, use the nut at the bottom of the lock plate (see illustration below).

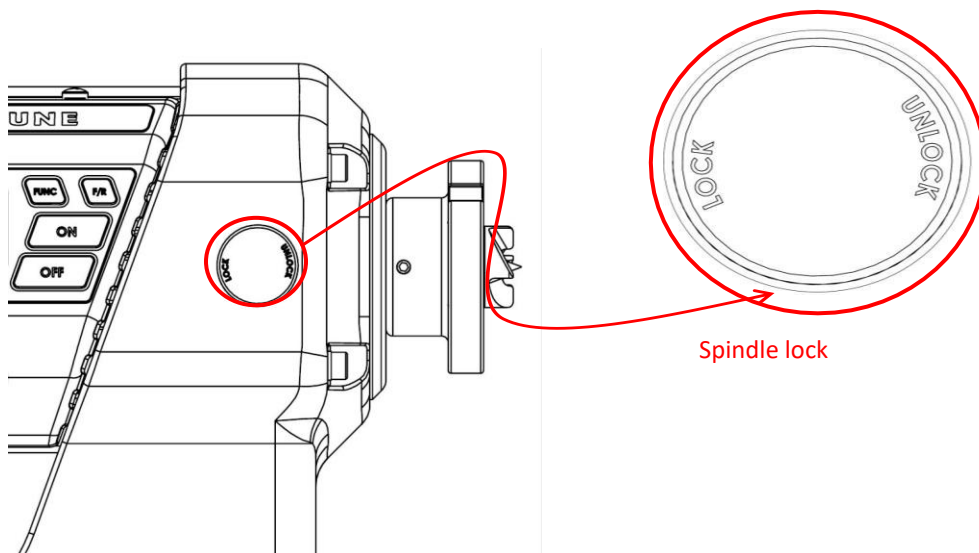


WARNING! PINCH HAZARD - Remove your hand from the clamping lever when swivelling the headstock.

8.4 Indexing device and spindle lock

The index locking pin locks the headstock spindle. The division is made in 15-degree increments (24 in total). You can read the setting on the machine display.

1. Turn off the machine.
2. To lock the spindle, pull and turn the index locking pin into the “**LOCK**” position until the pin engages into the index plate. **CAUTION: Make sure the pin is engaged! For this, turn the spindle by hand.** To unlock the spindle, turn the index locking pin into the “**UNLOCK**” position.



WARNING! Make sure the index locking pin is disengaged before operating the lathe.

8.5 Tool rest

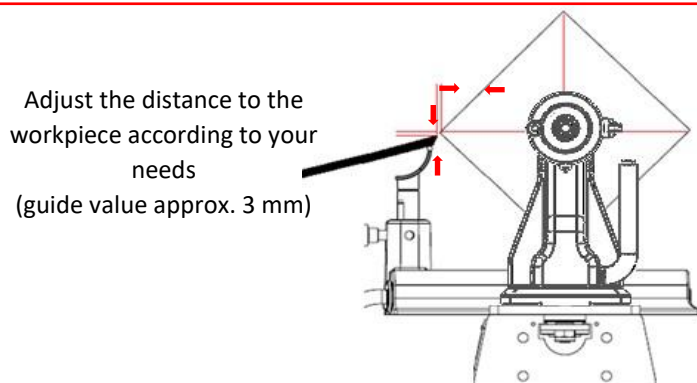
To move the banjo along the bed, loosen the clamping lever counterclockwise, move the banjo to the desired position and tighten the clamping lever clockwise.

Adjust the tool rest close to the workpiece. Adapt the position to suit your needs. Before each start, rotate the workpiece by hand to make sure that it runs freely.

Turn off the lathe from time to time and readjust the tool rest.



WARNING! As long as woodturning tools are in contact with the workpiece, they must rest firmly on the tool rest. Remove the tool rest when sanding or polishing to avoid pinching your fingers.



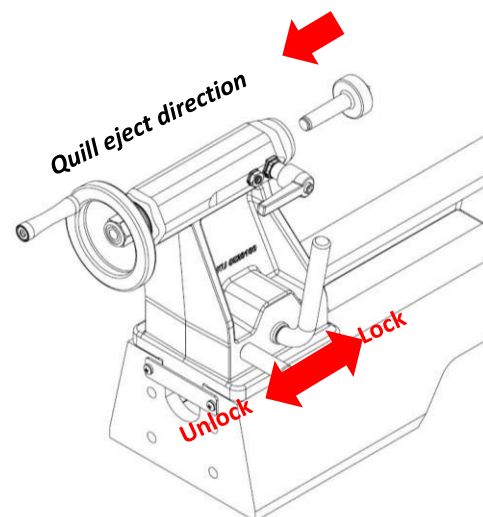
8.6 Tailstock

To move the tailstock along the bed, loosen the clamping lever, slide the tailstock to the desired position and tighten the clamping lever.

To move the tailstock quill in or out, loosen the quill lock handle and turn the handwheel. Lock the quill in place with the quill lock handle.

The quill can be used with live centres and tools with a Morse taper no. 2 (MT2). To mount the tool, firmly insert it into the quill shaft by hand. Do not pound the tool into the shaft.

To remove a taper, either wind the quill into the tailstock until the taper is ejected, or insert the knockout bar through the tailstock quill hole. Hold the taper to prevent it from falling and then tap it out.



WARNING! Never loosen the quill of the tailstock or the tailstock itself while the workpiece is rotating.

8.7 Aligning the lathe



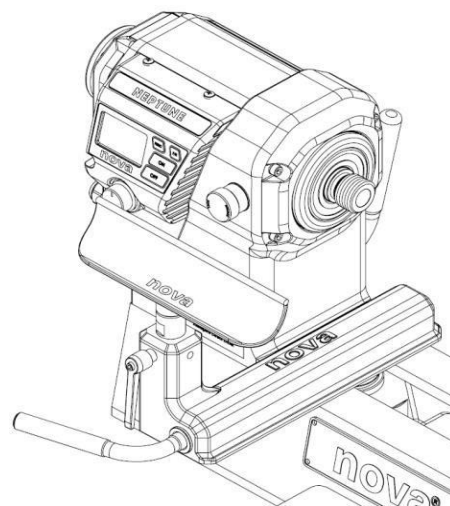
WARNING! Make absolutely sure that the machine is always switched off before turning or displacing the headstock or before aligning it by means of the double taper (pull the power plug). Otherwise, injuries or material damages may occur.

Realign the headstock as described below every time you have turned the headstock, e.g. for outboard turning.

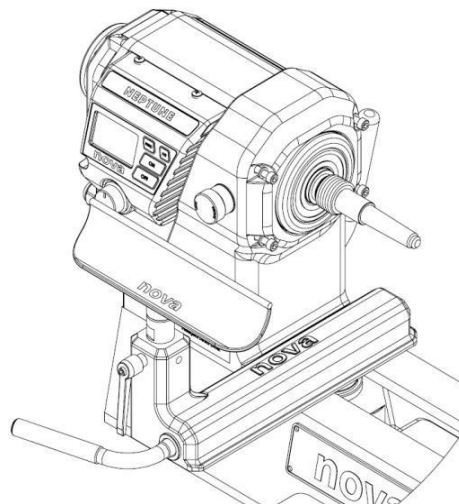
To align the lathe, proceed as follows:

1. Alignment with double taper

- Move the headstock to the 0° position. The clamping lever is not locked.

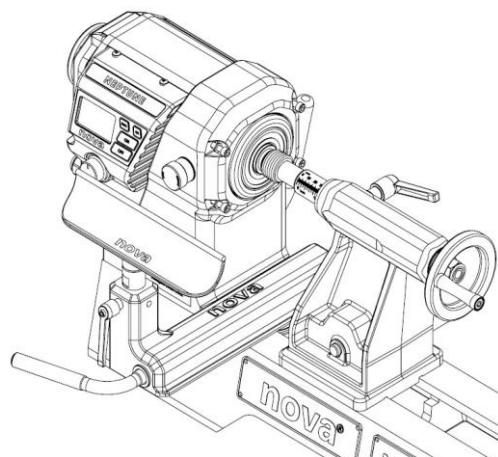


b. Firmly install the MT2 double taper into the headstock spindle.



c. Slide the tailstock to the headstock and lock the tailstock into place. Extend the quill until the other end of the double taper sits firmly in the quill.

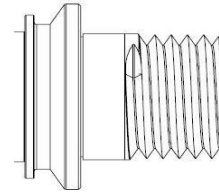
Gently shaking the headstock can make alignment easier.
The headstock is clamped slowly, but steadily. This prevents unintentional twisting.



d. Remove the double taper from the tailstock and headstock (use a knockout bar if necessary).

8.8 Mounting a faceplate or chuck

Your Neptune lathe is equipped with an M33 x 3.5 spindle with a right-hand thread.



M33

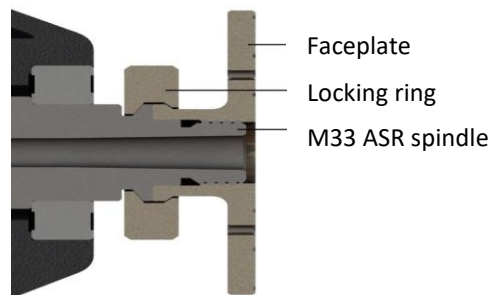


CAUTION! Secure accessories (faceplates, chucks, etc.) with a safety screw or an (optionally available) ASR EUROLOCK locking ring. This prevents the accessories or the workpiece from unwinding when the spindle brakes.

The illustration below shows a cross-section of the spindle with mounted faceplate and attached ASR EUROLOCK locking ring.



WARNING! The faceplate or chuck body must contact the shoulder on the spindle bearing. Before installation or removal, the side-locking safety screws on faceplate or chuck (if any) must be completely removed. This avoids possible damage to the spindle.



Mounting the locking ring (optional)

Use the index locking pin to lock the spindle before commencing.

Step 1:

Screw the faceplate or chuck onto the spindle thread as far as it will go. Make sure that the flanges of spindle and faceplate or chuck are touching.

Step 2:

Put the lower part of the locking ring on the two flanges from below.

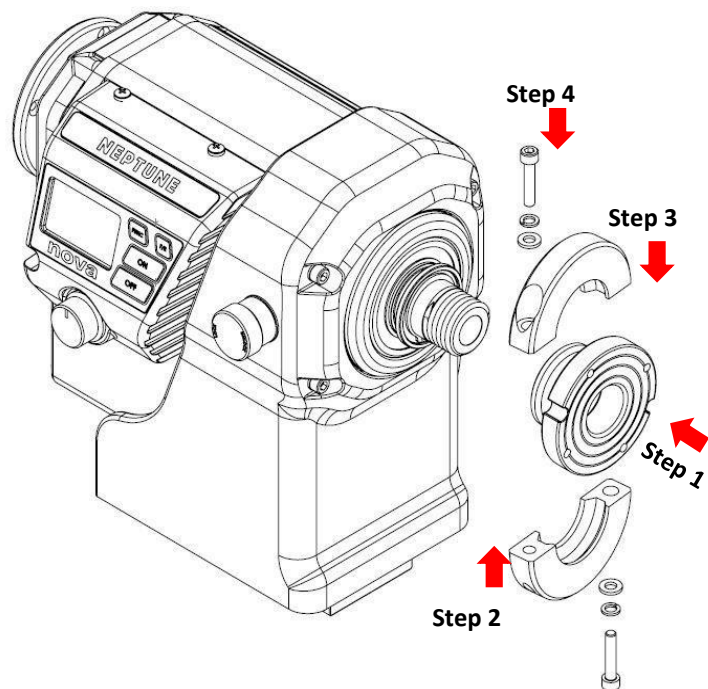
Step 3:

Put the upper part of the locking ring on the two flanges from above.

Step 4:

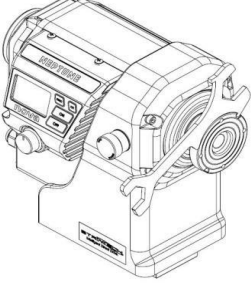
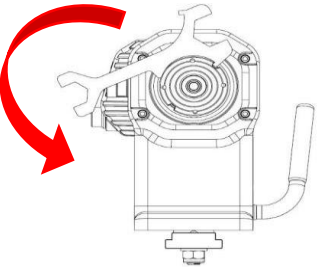
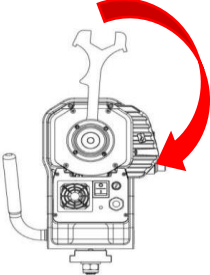
Fix the two parts of the locking ring to each other with the bolts. For this, use a hex key.

Unlock the spindle before turning the machine on.



8.9 Removal of faceplate or handwheel

If the faceplate has been overtightened onto the spindle, the universal spanner is required to remove the faceplate. Ensure that the safety screw or the locking ring has been removed before.

Align the universal spanner as shown. Apply pressure in the direction shown to loosen the faceplate.		
The universal spanner is also required to loosen the handwheel on the rear of the motor. Align the universal spanner as shown and apply pressure in the direction shown.		

9 | Connecting to power



WARNING!



Improper power connection can be life-threatening.

Before connecting the lathe to a power source, check that the main switch is turned off.

Make sure that the local regulations regarding electrical installations are observed.

In order to operate the lathe, a suitable household 240 V type F socket protected with a 16-amp fuse (C16) is required. Electrical cables and sockets must comply with local electrical codes. In case of doubt, ask your electrician.

Avoid using an extension cord. If this is not possible, make sure

1. that the extension cord has the necessary diameter and is rated for the expected voltage.
2. that the insulation is sufficient and intact.



9.1 Residual-current circuit breaker (RCCB)

For a RCCB to be compatible with the DVR motor, a **leak current threshold rating of 30 mA (0.03 A)** is recommended.

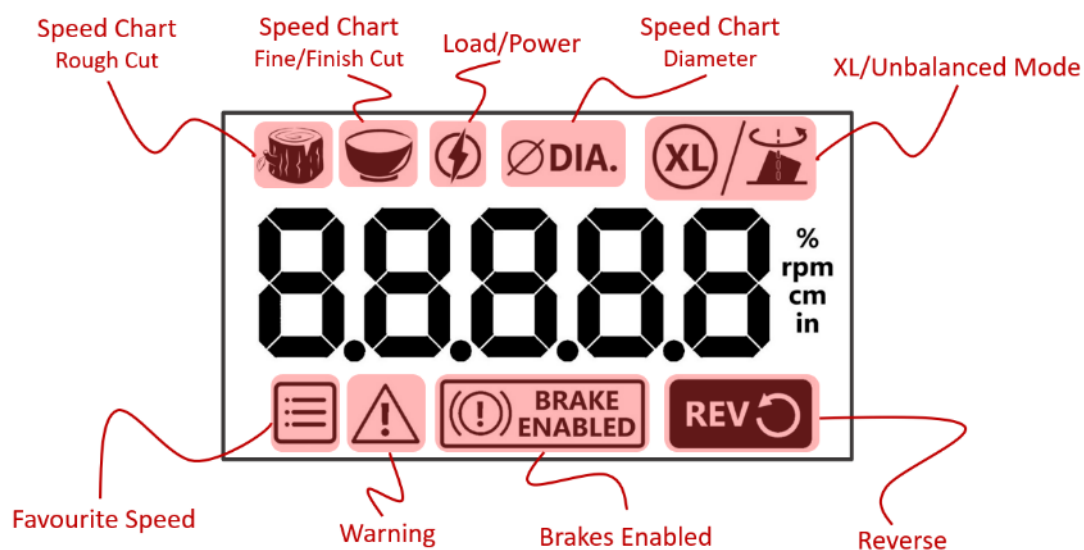
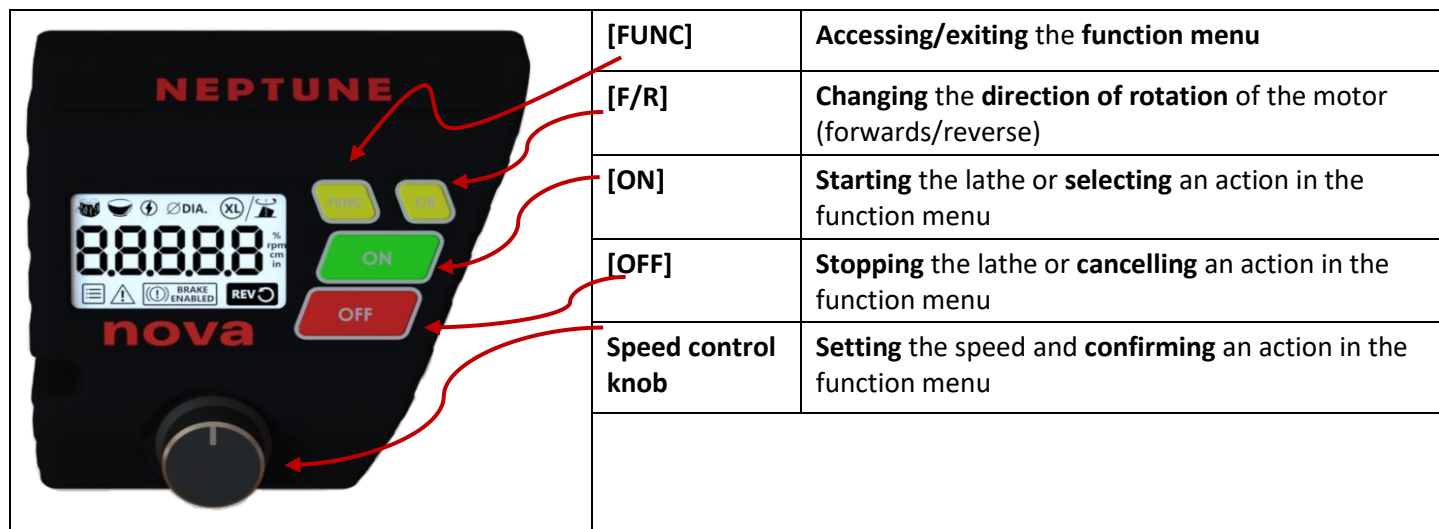


Note: A normal household RCCB is typically rated at 5 mA (0.005 A) and may trigger during the operation of the DVR motor. However, frequent tripping of the residual-current circuit breaker will not cause any harm to the DVR motor or its control electronics as it has a built-in protective circuit to prevent damage from frequent switching.

10 | Operating the lathe via the control panel

10.1 Control panel description

The control panel of your lathe has four keys, a speed control knob and a 2.4" LCD display showing the status of the lathe in real time.



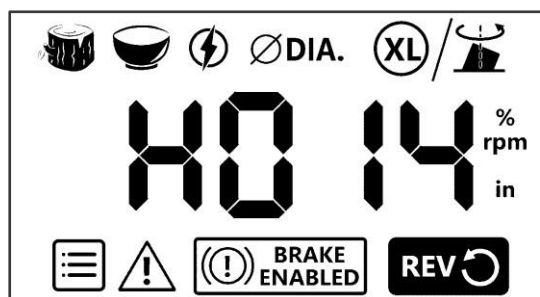
Favourite speed	Indicates that one of the four favourite speeds is set. The favourite speeds are preset, but reprogrammable.
Warning	Indicates existing warning messages.
Brake Enabled	Indicates that the brake function is enabled when the [OFF] button is pressed.
Reverse	Indicates that the reverse rotation is activated.
Speed Chart	Indicates that the speed chart for rough or fine/finish cut is enabled.
Load/Power	Indicates that the machine is running. Load factor display if selected.
Speed Chart Diameter	Displays the diameter selection on the speed chart pages.
XL/Unbalanced Mode	Indicates that the XL/Unbalanced mode is enabled.

10.2 General control panel operations

10.2.1 Start-up

After switching on the main switch, the control panel will run a self-test for 3 seconds. During the self-test, the LCD screen will show all icons and the software version number. Then it goes to the home page.

The machine is ready to run now. The default speed is 500 rpm.



Software version display



Home page

10.2.2 Starting the lathe

With the home page displayed, press **[ON]**. The motor will accelerate to reach the set speed.

10.2.3 Stopping the lathe

Press **[OFF]** at any time to stop the motor (depending on your selection with or without brake function). The LCD screen will display the home page. To find out how to enable or disable the brake function, see chapter 10.3.4.

10.2.4 Selecting the direction of rotation

With the home page displayed, press **[F/R]** to change the direction of rotation of the spindle. The **[REV]** icon on the screen will toggle between forward and reverse.



NOTE! For your safety, changing the direction of rotation is not possible when the lathe is running.



Reverse mode enabled

10.2.5 Speed control knob

The speed control knob has two functions: It is used to set the speed and to select/confirm functions.

Fine adjustment of speed +/- 5 rpm	With the home page displayed or the motor running, turn the speed control knob clockwise or counterclockwise.
Coarse adjustment of speed +/- 50 rpm	With the home page displayed or the motor running, push down and turn the speed control knob clockwise or counterclockwise.
Selecting/confirming functions	Turn the speed control knob in the function menu to select a function. Push down the speed control knob in the function menu to confirm or save a setting. More information below.

10.3 Function menu [FUNC]: Advanced functions and features

The function menu [FUNC] provides 5 preset, programmable functions:

- Favourite speed [SPEED]
- Brake function [brAKE]
- Speed chart for rough cut [rou9h]
- Speed chart for fine/finish cut [Flne]
- XL/Unbalanced mode [Unb-c]

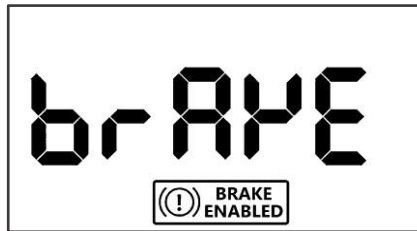
10.3.1 Navigating in the function menu

With the home page displayed, press [FUNC] once to enter the function menu. Turn the speed control knob clockwise or counterclockwise. The screen will show all 5 functions in a sequence:

Favourite speed → Brake enabled → Rough cut → Fine/Finish cut → XL/Unbalanced mode



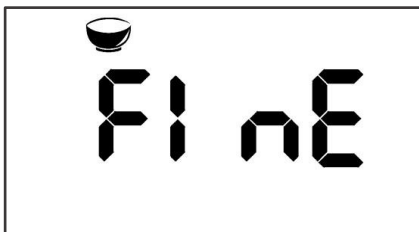
Favourite Speed



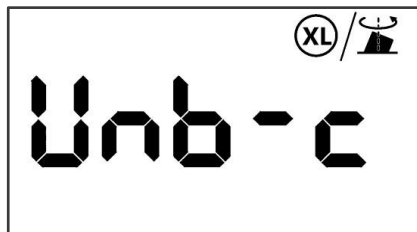
Brake Enabled



Rough Cut



Fine/Finish Cut



XL/Unbalanced Mode

In the function menu, press [FUNC] again or [OFF] to return to the home page. If you have selected a function, press [FUNC] to return to the previous page or press [OFF] to return directly to the home page.

10.3.2 Entering desired functions

Turn the speed control knob until you have reached the desired function. Press [ON] to confirm the selection. The screen will display the desired function page (see, for example, chapter 10.3.3).

With the function page displayed, press [FUNC] to return to the previous function page or press [OFF] to return to the home page.

10.3.3 Favourite Speed

The four preset favourite speeds enable an easy and quick speed adjustment. To use the favourite speeds, proceed as follows: (while the motor is running or stopped.)

1. With the home page displayed, press **[FUNC]** and then **[ON]** to enter the function page. Turn the speed control knob to display the four preset default favourite speeds in sequence. The four preset speeds are: **250 rpm, 500 rpm, 750 rpm, 1000 rpm**. Press **[ON]** to select the desired speed and then press **[FUNC]** or **[OFF]** to exit the page.
2. If **[ON]** is pressed, the screen will immediately show the selected speed and the machine will run at this speed.

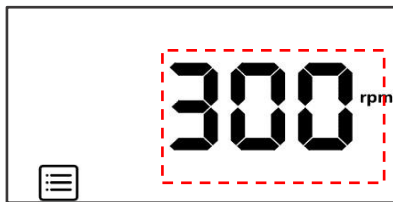
To change the favourite speeds and save the settings, proceed as follows:

With the home page displayed, press **[FUNC]** and then **[ON]** to enter the function page. Turn the speed control knob to select one of the four preset speeds. Press down and hold the speed control knob until the function page starts to flash. Turn the speed control knob to select another speed and then push down and hold the speed control knob until the function page stops flashing. The new speed is saved instead of the preset speed. Press **[ON]**. The screen will display the home page and the new speed and the machine will run at this speed.

Simplified instructions for this procedure: **[FUNC]** → **[ON]** → **[turn speed control knob = select preset speed]** → **[press down and hold speed control knob]** → **[turn speed control knob = change speed]** → **[press down and hold speed control knob = confirm]**.



Favourite Speed
function page



Programming mode
(flashing)

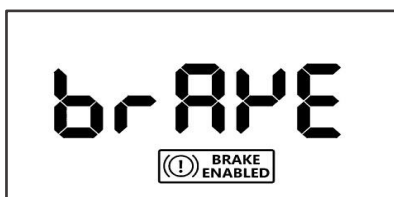


Preset default speed

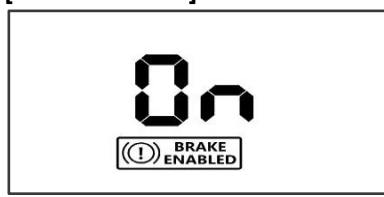
10.3.4 Brake Enabled

Optionally, the **[OFF]** key can be assigned a brake function. With the brake enabled, the motor speed will be deaccelerated quicker than normal. The brake function is disabled by default.

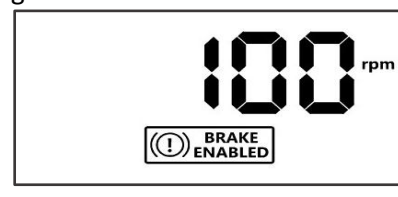
1. With the home page displayed, press **[FUNC]** and turn the speed control knob until you reach the brake icon. Press **[ON]** to enter the function page. Press **[FUNC]** or **[OFF]** to exit.
2. With the function page displayed, turn the speed control knob to change the setting from **OFF** to **ON**. Press **[ON]** to confirm. The screen will now show the **[Brake Enabled]** icon on the home page.



Brake Enabled function page



Brake enabled ON



Speed screen with enabled brake

10.3.5 Speed Chart for Rough/Fine Cut

The speed chart is a recommended, editable speed guide based on the workpiece diameter and the type of turning. The speed chart can be accessed when the motor is running and stopped.

1. With the home page displayed, press **[FUNC]** and turn the speed control knob until you reach the **Rough Cut** or **Fine Cut** icon. Press **[ON]** to enter the function page. Press **[FUNC]** or **[OFF]** to exit.



Rough Cut function page

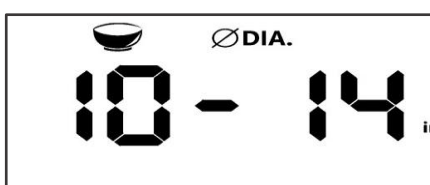


Fine/Finish Cut function page

2. With the function page displayed, turn the speed control knob to switch between diameter options 1-3 (small, medium and large). Press **[ON]** to confirm or press **[FUNC]** or **[OFF]** to exit.



Rough Cut diameter selection (imperial)



Fine Cut diameter selection (imperial)

To switch between imperial and metric display, press down and hold the speed control knob for 2 seconds.



Rough Cut diameter selection (metric)



Fine Cut diameter selection (metric)

3. Once you have confirmed the workpiece size, the screen will immediately show the recommended speed. By default, the following speed chart is used:

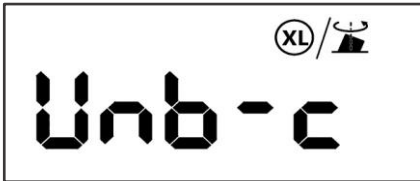
Workpiece Diameter		Rough Cut	Fine/Finish Cut
[inches]	[cm]	[rpm]	[rpm]
1-6	0-15	750	1450
6-10	15-25	450	1000
10-14	25-35	250	350

To change the default speed, press down and hold the speed control knob until the function page starts to flash. Turn the speed control knob to change the speed. Press down and hold the speed control knob until the function page stops flashing. **The new speed is saved now.** Press **[ON]** again. The screen will show the new speed and the machine will run at this speed.

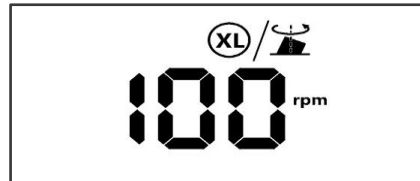
10.3.6 XL/Unbalanced Mode

The control panel offers smart profiles, such as slow starting and smooth and steady speed acceleration, for turning unbalanced/large workpieces. This mode is **ONLY** accessible when the motor is stopped. By default, this mode is disabled.

1. With the home page displayed, press **[FUNC]** and turn the speed control knob until you reach the XL/Unbalanced icon. Press **[ON]** to enter the function page. Press **[FUNC]** or **[OFF]** to exit.
2. Turn the speed control knob to switch between **OFF** and **ON**. Press **[ON]** to confirm. The home page will now show the **XL/Unbalanced** icon. When the unbalanced mode is on, the speed profiles immediately apply.



XL/Unbalanced Mode function page



Speed screen with enabled unbalanced mode

10.4 Further control panel functions

10.4.1 Load monitoring in real time

The control panel can show a load factor as reference for the motor capacity.

While the motor is running, press down and hold the speed control knob for 2 seconds. The screen will show the approximate motor capacity needed for turning. Press down and hold the speed control knob again for 2 seconds. The screen will show the home page again.



Load factor display

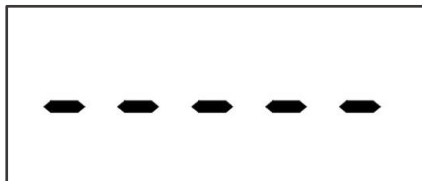
10.4.2 Electronic indexing

This feature provides 24 indexing positions.

Caution! Always stop the motor and unlock the spindle before activating the electronic indexing!

With the home page displayed, press down and hold **[FUNC]+[ON]** for 2 seconds. The motor will be initialized and self-aligned. This will take 3 seconds and is low-noise. The screen will show a dash line. Then the screen will show the indexing number **[Ind01]**.

Slowly turn the spindle clockwise or counterclockwise. The screen will show the 24 indexing numbers in sequence. As soon as you reach the desired position, lock the spindle.



Initialization



Indexing number

Press **[FUNC]** or **[OFF]** to exit the function.

10.4.3 Control panel safety lock

To prevent unwanted operations by others (e.g. children), unintentional starting and thus accidents, the control panel can be locked.

While the motor is stopped and the home page displayed, press down and hold the speed control knob for 2 seconds. The control panel will be locked and operations are disabled. To unlock the control panel, press down and hold the speed control knob for another 2 seconds. Operations are enabled again.

When the control panel is locked, the screen will display the following:



Control panel is locked

10.4.4 Warning messages

The warning message table is not editable. If you require assistance when troubleshooting, please report the fault and the error code.

Error code	Error description	Error code	Error description
E-0	Unexpected Fault	E-6	Low Voltage
E-1	SRM not Rotate	E-7	PFC_Fault
E-2	RPS_State_Error_0	E-8	Overheat
E-3	RPS_State_Error_1	E-9	EEPROM_Data_Fault
E-4	Hardware Fault	E-10	EEPROM_Work_Fault
E-5	Unexpected Trap		

10.4.5 Factory reset

Stop the motor. Press down and hold the speed control knob and **[ON]** for 3 seconds. The control panel is reset to factory settings and will reboot.

10.4.6 USB mode for firmware upgrade

Usually, a firmware upgrade is not necessary unless stated by the manufacturer or dealer.

If an upgrade is necessary, stop the motor. Press down and hold the speed control knob and **[FUNC]** for 3 seconds. The control panel enters the USB mode and is ready for a firmware upgrade.

Download the USB/DFU update software and firmware from the website www.teknatool.com. Follow the instructions to upgrade the firmware.

11 | Guidelines for rotational speeds

Turning above the bed

Workpiece diameter	Turning RPM
up to 15 cm	1000
15 – 20 cm	800
20 – 25 cm	650
25 – 30 cm	500
30 – 35 cm	450
35 – 40 cm	400
40 – 45 cm	360

Recommendations on working with the 80 mm faceplate



CAUTION! Observe the rule of thirds!

The faceplate should not be smaller than 1/3 of the workpiece diameter.
For workpieces with a diameter of more than 24 cm, use bigger faceplates.

- Select the speed corresponding to the workpiece conditions.
- Create a flat supporting surface.
- Avoid impact stress.
- Shorter thick screws are better than long thin ones. (Shear force)
- Do not use faceplates with recognizable damages.
- Always use the supplied tool to remove the faceplate from the spindle.
- Never stand in a critical area while working (critical: directly in front of the workpiece).
- Only mount blanks that are as homogeneous and round as possible.
- Do not use unbalanced, cracked or crack-prone wood.
- Avoid using risky and untrained techniques or turning tools that can get caught / stuck.

Regular maintenance increases the service life of your machine.



WARNING!

- Do not carry out maintenance work unless the main switch is switched off and the power plug is disconnected.
- Have work on the electrical system carried out only by qualified electricians.



WARNING!

- Cleaning rags or polishing wool soaked in oils, greases, solvents and cleaning agents are flammable. Collect them in suitable closed metal containers.
- Oil-soaked cleaning rags or polishing wool tend to self-ignite and must be stored and disposed of separately.

Regular maintenance

After each use	Clean the work area and the lathe. Remove shavings and dust from the machine (headstock, bed way, tool rest, tailstock). Proceed carefully, especially after turning green wood. Insufficient cleaning after green wood turning may lead to rust marks and pitting on the lathe surfaces.
Monthly	Protect the exposed cast iron parts, especially the bed rails, with appropriate products (Metallglanz, WD-40, Caramba or the like) or a dry silicone spray. Check all bolts and nuts for tightness. Clean all tapers to ensure a secure hold.
Every six months	Lubricate the tailstock quill and the inside thread with a light coat of light oil. Check for any rust on the underneath of the tool rest and tailstock and on the bed. If you find rust, remove it by using a rust removal agent and an abrasive sponge. NOTE: Some rust removal agents may leave a stain on the metal surface. Test the removal agent on an inconspicuous area.

Cleaning the banjo

Clean and lubricate the banjo if it becomes hard to move and adjust.

1. To allow the banjo to move more freely along the bed, make sure the bed rails are clean. Apply some corrosion protection with slight lubricating properties to the bed rails.
2. If the banjo is difficult to adjust, remove it from the bed. Clean the eccentric rod with a petroleum-based solvent. Make sure not to oil or lubricate the eccentric rod. This reduces the holding force.
3. Slide the banjo back onto the bed.

Cleaning the tailstock

Clean and lubricate the tailstock if the tailstock quill becomes hard to adjust or if the handwheel is hard to turn.

1. Remove the M16 nylon nut from the rear of the tailstock handwheel. Now the handwheel and the key that holds it in position may be removed.
2. Remove the quill by unscrewing the quill lock handle and extending the quill out all the way. Remove the handwheel from the tailstock.
3. Wipe clean all parts including the inside of the tailstock bore.
4. Lubricate the quill, the threaded spindle and the tailstock bore with light oil. Apply a small amount of oil to the quill thread.
5. Reassemble the tailstock.

13 | Troubleshooting

13.1 Mechanical issues

Symptom	Where to check	How to resolve
Excessive vibration	□ Workpiece attached to lathe □ Lathe mounting □ Bed or stand	1. Remove any workpiece/accessory from the headstock. Check the threads for dirt or damages. 2. Attach the accessories one at a time and check which part is causing the vibration. 3. Add extra weight to the lathe to reduce the amount of vibration when working on large and unbalanced workpieces.
Faceplate or chuck running out of true	□ Back of faceplate □ Threads □ Inner threads on faceplate □ Spindle thread on headstock	1. Check the threads for damages. 2. Mount the faceplate or chuck onto the machine and check that it is firmly seated. 3. The back of the chuck or faceplate must be in contact with the spindle collar.
Woodturning tools not sliding smoothly across tool rest	□ Tool rest surface	Smooth the edge with a file and then lightly sand the surface of the tool rest with sandpaper or a sanding machine.
Drive/live centre not holding in spindle or quill taper when turning	□ Morse taper surface	1. Check the male and female Morse taper surfaces for foreign materials or defects. 2. Clean the surfaces and remount the tools.
Tailstock and headstock centres not aligning	□ Bed connection □ Headstock detent position □ Tailstock adjustment plate	1. Inspect all connections of the bed sections to make sure all the top surfaces are flush with one another. 2. Check if the headstock is properly locked in the zero-degree position. 3. Loosen the tailstock adjustment plate located on the bottom of the tailstock and align headstock and tailstock. Tighten the tailstock adjustment plate.
Tailstock handwheel hard to turn or does not turn at all	□ Quill lock □ Inside of tailstock quill	1. Make sure that the quill lock on the tailstock is not engaged. 2. Fully extend the quill and extract the quill from its housing. Check the surfaces of quill and housing and the threads for damages or dirt. Apply machine grease to the quill surface and the thread and mount the quill again.
Tailstock binds while sliding along the bed	□ Bed □ Tailstock adjustment plate	1. Check the bed for foreign materials and damages. 2. Loosen the tailstock lock.
Tailstock jumps at bed section joints	□ Bed □ Tailstock bottom surface	1. Inspect the uneven surfaces and make sure the bed connection areas are flush. 2. Check for any foreign materials and defects on the bottom of the tailstock. 3. Lightly sand down the defects on the tailstock or bed with sandpaper.

14 | Decommissioning

Please observe the following notes when preparing for final decommissioning:



- When decommissioning the machine, adhere to the applicable laws and regulations for disposal.



- Dispose of all parts of the machine in such a way that health and environmental damages are excluded. Check which materials can be recycled and recycle them properly.



- Do not dispose of the machine or parts of it together with domestic waste.



- Oils, greases, solvents and cleaning agents are hazardous to the environment and must not be allowed to reach sewage or normal domestic waste. Dispose of them via local recycling centres. The same applies to cleaning rags or polishing wool soaked in oils, greases, solvents and cleaning agents.

Of course, you can also bring your defective machine to your local dealer.
He will ensure proper recycling.

15 | Terms of guarantee

Teknatool grants a voluntary manufacturer's guarantee on this product from the date of purchase:

10 years on the motor (bearings, sensors excluded)

5 years on mechanical parts and electronics (wear parts excluded).

If defects in material or workmanship occur during the intended use of the product, please contact your dealer. After submission of a copy of the invoice and the serial number, the defect in question will be verified in coordination with our service department and, as required, it will be repaired or the product will be replaced. The organisation of a possible transport (after consultation with our service department) lies within the responsibility of the customer. The packaging must be safe for transport. For the return transport to the customer, the most cost-effective transport will be chosen. Any costs for special transport will be at the expense of the customer. The value of the guarantee is limited to the value of the product or a corresponding product and will in no case exceed the purchase price.

If it is determined that the complaint lies outside the granted terms of guarantee (e.g. in the case of defects arising from normal wear, improper use, power overload, overvoltage, unauthorized modifications of the machine, use of force, failure to observe the safety precautions or own attempts of repair), the customer has to pay the full costs for transport and repair.

Only the terms of guarantee cited here are valid, any side agreements are not recognised unless they are presented in written form and signed (documented) by the manufacturer/importer. No claim whatsoever arises from verbal agreements that have not been documented. The present terms of guarantee are valid in German-speaking countries; elsewhere different terms of guarantee may apply. In this case, please contact your local dealer.

Please note that your statutory rights are not restricted by the above guarantee.

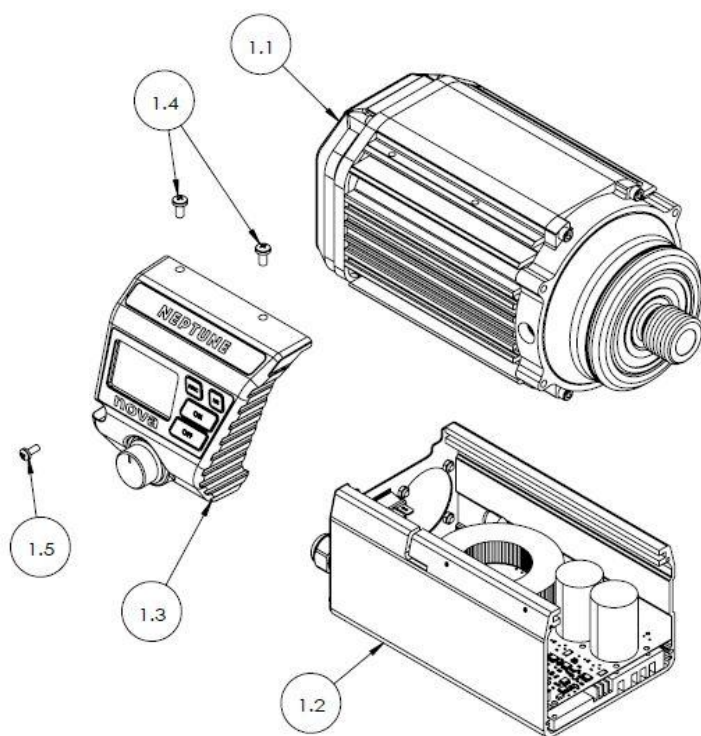


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16 | Exploded views and parts lists

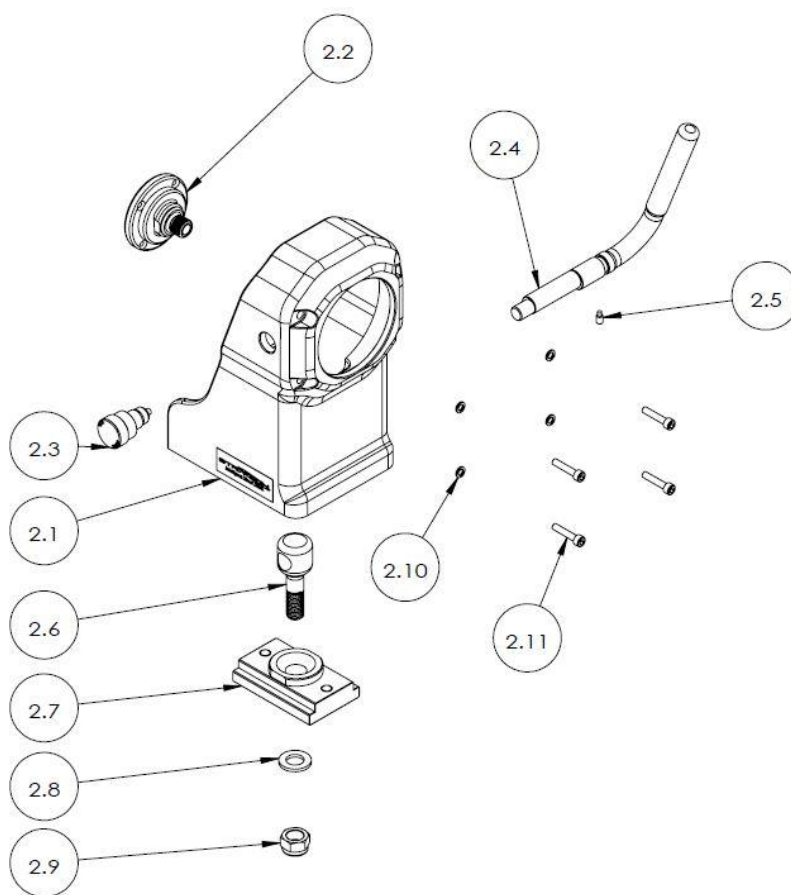
Motor unit



ITEM	DESCRIPTION	PART NO.	QTY.
1	Neptune DVR motor assembly		1
1.1	Motor	5529172	1
1.2	Controller	5529015	1

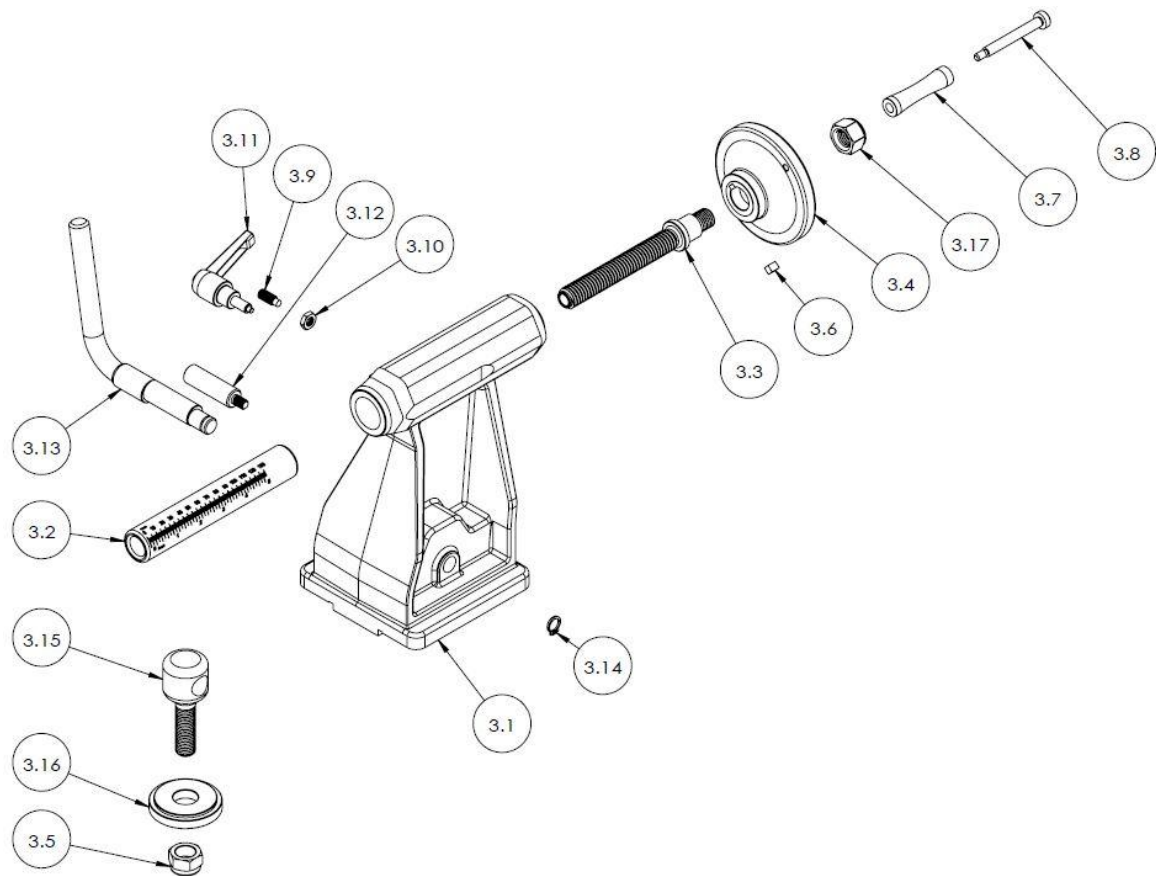
ITEM	DESCRIPTION	PART NO.	QTY.
1.3	Control panel assembly	5529018	1
1.10	Control panel top mounting screws M5 x 10 mm	MPB0510	1
1.11	Control panel bottom mounting screws M4 x 10 mm	MPB0410	1

Headstock



ITEM	DESCRIPTION	PART NO.	QTY.	ITEM	DESCRIPTION	PART NO.	QTY.
2	Headstock assembly	5529013	1	2.6	Headstock clamping bolt	5529117	1
2.1	Headstock casting	5529127	1	2.7	Headstock lock plate	5529116	1
2.2	Handwheel	5529128	1	2.8	Washer M16	FW16	1
2.3	Index locking pin	5529121	1	2.9	Locknut M16	LN16	1
2.4	Headstock clamping lever	5529115	1	2.10	Spring washer M6	SW06	4
2.5	Clamping lever set screw M6 x 12 dog point	G0612DE	1	2.11	Mounting screw M6 x 30 mm	C06030	4

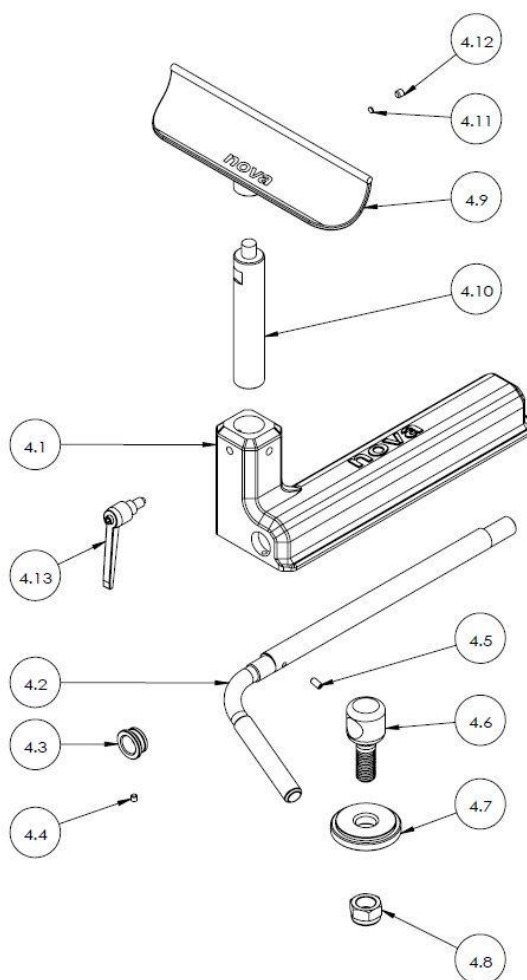
Tailstock



ITEM	DESCRIPTION	PART NO.	QTY.
3	Tailstock assembly	5529019	1
3.1	Tailstock casting	5529160	1
3.2	Tailstock quill	5529163	1
3.3	Tailstock spindle	5529162	1
3.4	Tailstock handwheel	5529111	1
3.5	Locknut M16	LN16	1
3.6	Handwheel key 6 mm	5529165	1
3.7	Handwheel handle	5699028	1
3.8	Mounting bolt handwheel handle	5699046	1

ITEM	DESCRIPTION	PART NO.	QTY.
3.9	Quill alignment screw	SZ0820	1
3.10	Alignment screw nut	5569068	1
3.11	Quill lock handle	46025	1
3.12	Clamping lever stop	5569024	1
3.13	Tailstock clamping lever	5529161	1
3.14	External circlip 12 mm	EC12	1
3.15	Tailstock clamping bolt	5569025	
3.16	Tailstock clamping plate	5569043	1
3.17	Locknut M16	LN16	1

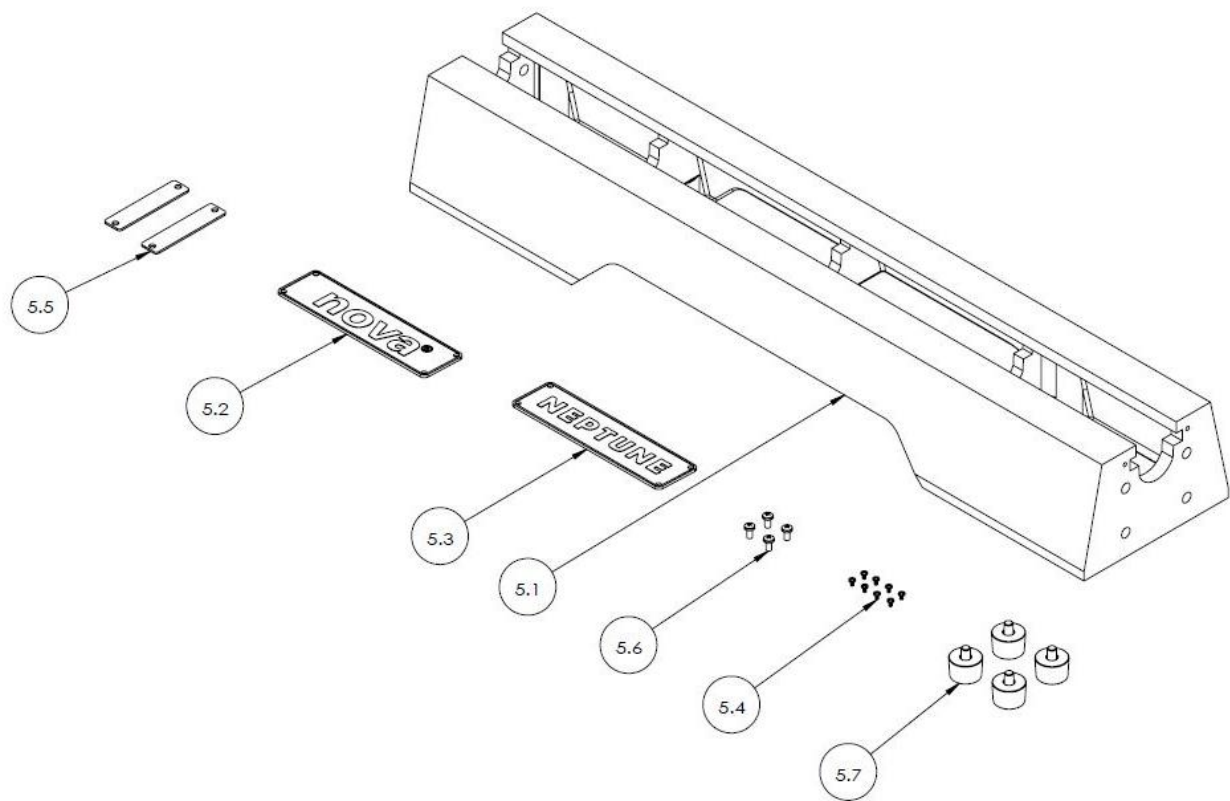
Tool rest



ITEM	DESCRIPTION	PART NO.	QTY.
4	Tool rest assembly	5529011	
4.1	Banjo	5529102	1
4.2	Banjo clamping lever	5529103	1
4.3	Clamping lever bush	5529104	1
4.4	Mounting screw for bush M5 x 5 mm - cone end	G0505CE	1
4.5	Mounting screw M5 x 10 mm	G0510	1
4.6	Banjo clamping bolt	5529120	1

ITEM	DESCRIPTION	PART NO.	QTY.
4.7	Banjo clamp	5529106	1
4.8	Locknut M16	LN16	1
4.9	Tool rest	5529167	1
4.10	Tool rest post	5529153	1
4.11	Soft washer	NS1000	1
4.12	Set screw M6 x 6 mm	SZ0606	1
4.13	Tool rest lock handle	5529105	1

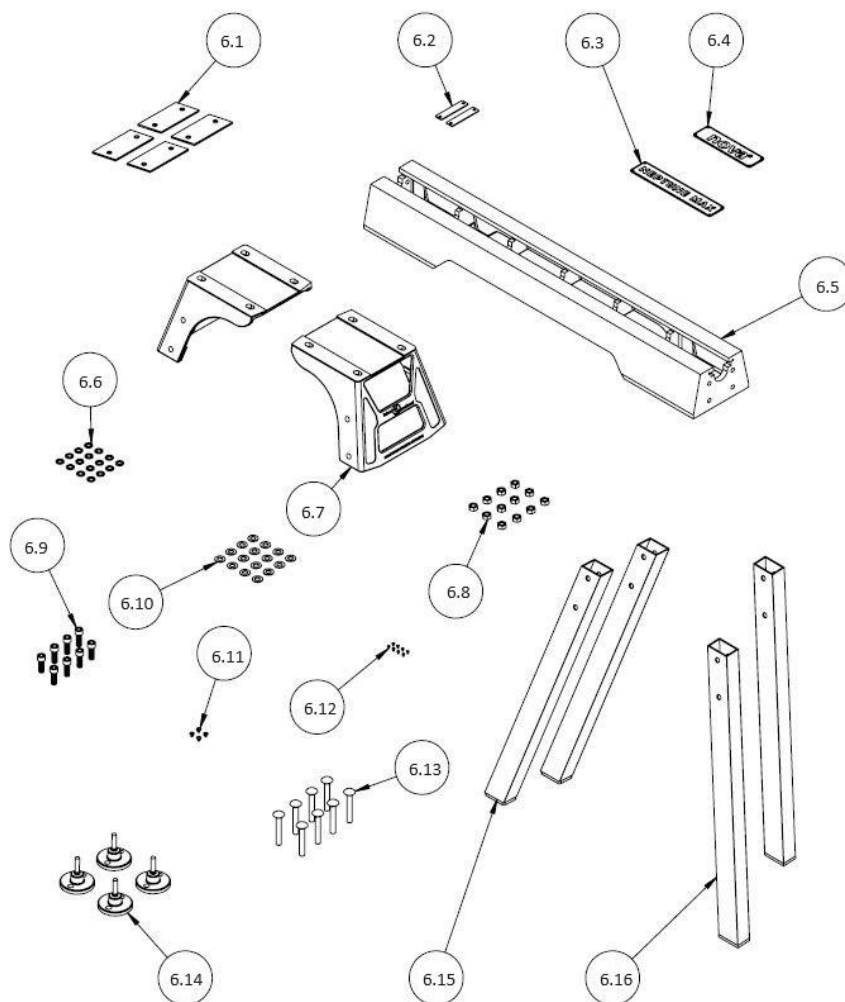
Bed



ITEM	DESCRIPTION	PART NO.	QTY.
5	Bed assembly		1
5.1	Bed	5529123	1
5.2	“NOVA” nameplate	5529182	1
5.3	“NEPTUNE” nameplate	5529166	1

ITEM	DESCRIPTION	PART NO.	QTY.
5.4	Nameplate mounting screw	MPB0305	8
5.5	Stop plate	5569059	2
5.6	Stop plate screw M5 x 6 mm	MPB0506	4
5.7	Machine foot	5529146	4

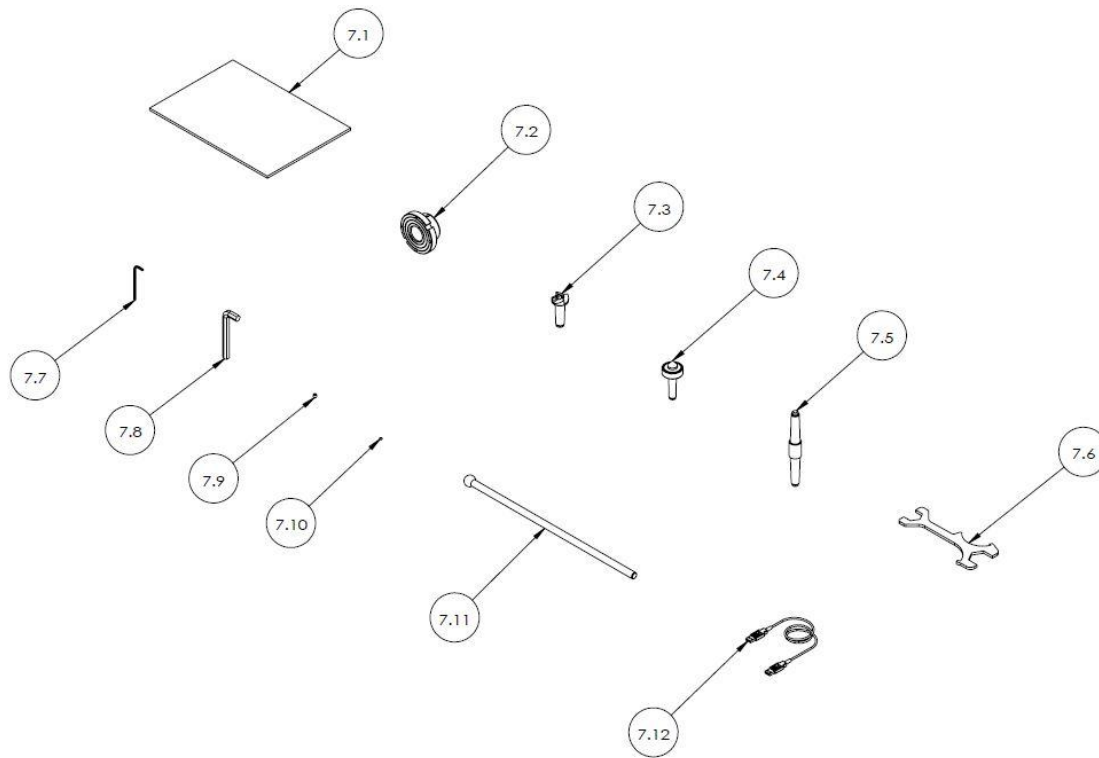
Neptune Max bed and stand



ITEM	DESCRIPTION	PART NO.	QTY.
6	Neptune Max bed and Hybrid stand assembly		1
6.1	Bolster plate	25053	4
6.2	Stop plate	5569059	2
6.3	"NEPTUNE MAX" nameplate	5519019	1
6.4	"NOVA" nameplate	5529182	1
6.5	Bed	5519091	1
6.6	Spring washer M12	SW12	16
6.7	Cast iron frame	25045	2
6.8	Hex nut ZP M12	NHZ12	12

ITEM	DESCRIPTION	PART NO.	QTY.
6.9	Mounting screws M12 x 35 mm	C12035	8
6.10	Washer M12	FW12	16
6.11	Stop plate screw M5 x 6 mm	MPB0506	4
6.12	Nameplate mounting screw M3 x 5 mm	MPB0305	8
6.13	Coach bolt M12 x 90 mm	CBNZ12090	8
6.14	Machine foot	24161	4
6.15	Legs stand RHS L	25047	2
6.16	Legs stand RHS R	25046	2

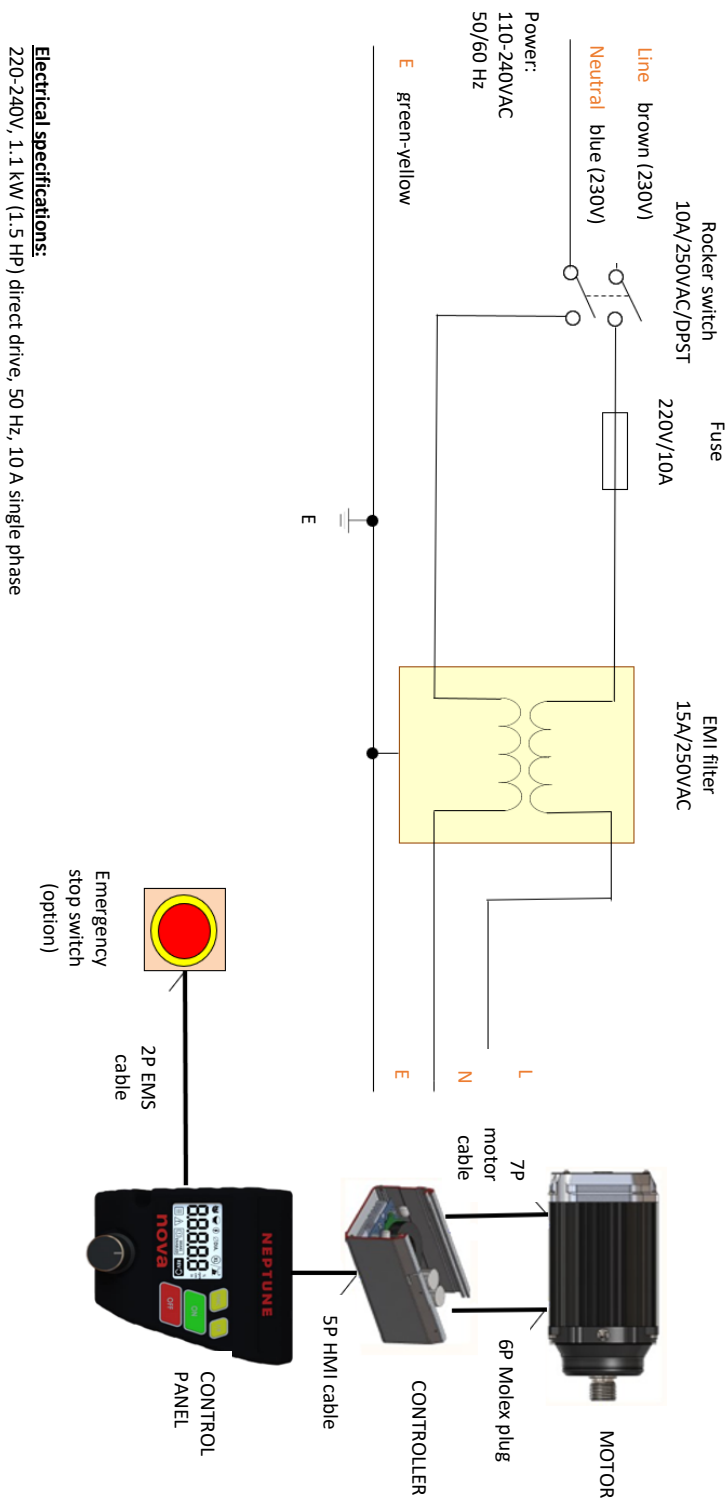
Accessories



ITEM	DESCRIPTION	PART NO.	QTY.
7	Accessories		1
7.1	Operating instructions		1
7.2	80 mm faceplate M33 ASR	5529171	1
7.3	MT2 drive centre	2MTSPUR	1
7.4	MT2 live centre	2MTLC	1
7.5	Double taper	2MTNA	1
7.6	Universal spanner	5568099	1

ITEM	DESCRIPTION	PART NO.	QTY.
7.7	3 mm hex key	AK3	1
7.8	10 mm hex key (ONLY FOR Neptune Max model)	AK10	1
7.9	Set screw M6 x 6mm	SZ0606	1
7.10	Soft washer	NS1000	1
7.11	Knockout bar	5529179	1
7.12	USB cable	8379059	1

17 | Wiring diagram



18 | Optional accessories

	
Emergency stop switch (Part number: 55226)	Mounting plate (Part number: 55267)
	
Outboard turning attachment (part number: 55266)	Bed extension (part number: 55265)
	
Neptune stand (part number: 55264)	



EC – Declaration of Conformity

For Machines (according to EC Directive 2006/42/EC)

No. of Declaration of Conformity:	Neu-TT-241-407-EN
Distributor:	Neureiter Maschinen GmbH Gewerbegebiet Brennhoflehen Kellau 167 A – 5431 Kuchl
Responsible person for technical documentation:	Ludwig Neureiter Kellau 167 A – 5431 Kuchl
Object of the declaration:	Woodturning Lathe
Product designation:	NOVA Neptune DVR 15" NOVA Neptune MAX DVR 15"
Manufacturer:	<i>Teknatool</i>

The serial number, crucial technical information and marks of conformity can be found on the rating plate of each machine.

The distributor bears the sole responsibility for issuing this EC Declaration of Conformity. The object of the declaration described above is in conformity with the relevant **Union harmonisation legislation**:

Machinery Directive 2006/42/EC
Electromagnetic Compatibility (EMC) Directive 2014/30/EU

The following harmonised standards and technical specifications have been applied:

EN ISO 12100:2010	Safety of machinery – General principles for design – Risk assessment and risk reduction
EN ISO 23125:2015	Machine tools – Safety – Turning machines
EN 60204-1:2018	Safety of machinery – Electrical equipment of machines – Part 1: General requirements
EN 61000-6-2:2019	Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity standard for industrial environments
EN 61000-6-4:2019	Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments

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Kuchl, January 15, 2024
Ludwig Neureiter (Owner)

DT55703_Neu-TT-241-407-EN



Operating Instructions NOVA Neptune / Neptune Max DVR 15" lathe

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