

JET

JWL-1015
JWL-1015VS

WOOD LATHE

Original:

GB
Operating Instructions

Translations:

D
Gebrauchsanleitung

F
Mode d'emploi



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CE-Conformity Declaration
CE-Konformitätserklärung
Déclaration de Conformité CE

Product / Produkt / Produit:

Wood Lathe / Drechselbank / Tour a bois

JWL-1015 / JWL-1015VS

Brand / Marke / Marque:

JET

Manufacturer / Hersteller / Fabricant:

JPW (Tool) AG, Tämperlistrasse 5, CH-8117 Fällanden
Switzerland / Schweiz / Suisse

We hereby declare that this product complies with the regulations
Wir erklären hiermit, dass dieses Produkt der folgenden Richtlinie entspricht
Par la présente, nous déclarons que ce produit correspond aux directives suivantes

2006/42/EC

Machinery Directive / Maschinenrichtlinie / Directive Machines

2014/30/EU

electromagnetic compatibility / elektromagnetische Verträglichkeit / compatibilité électromagnétique

designed in consideration of the standards
und entsprechend folgender zusätzlicher Normen entwickelt wurde
et été développé dans le respect des normes complémentaires suivantes

EN ISO 12100:2010

EN 60204-1:2006+A1:2009

EN 61000-3-2:2014

EN 61000-3-3:2013

EN 55014-1:2006+A1:2009+A2:2011

EN 55014-2:1997+A1:2001+A2:2008

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2017-01-16 Alain Schmid, General Manager
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GB - ENGLISH

Operating Instructions

Dear Customer,

Many thanks for the confidence you have shown in us with the purchase of your new JET-machine. This manual has been prepared for the owner and operators of a JET **JWL-1015, JWL-1015VS wood lathe** to promote safety during installation, operation and maintenance procedures. Please read and understand the information contained in these operating instructions and the accompanying documents. To obtain maximum life and efficiency from your machine, and to use the machine safely, read this manual thoroughly and follow instructions carefully.

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1. Declaration of conformity

On our own responsibility we hereby declare that this product complies with the regulations* listed on page 2. Designed in consideration with the standards**.

2. Warranty

The Seller guarantees that the supplied product is free from material defects and manufacturing faults. This warranty does not cover any defects which are caused, either directly or indirectly, by incorrect use, carelessness, accidental damage, repair, inadequate maintenance or cleaning and normal wear and tear.

Guarantee and/or warranty claims must be made within twelve months from the date of purchase (date of invoice). Any further claims shall be excluded.

This warranty includes all guarantee obligations of the Seller and replaces all previous declarations and agreements concerning warranties.

The warranty period is valid for eight hours of daily use. If this is exceeded, the warranty period shall be reduced in proportion to the excess use, but to no less than three months.

Returning rejected goods requires the prior express consent of the Seller and is at the Buyer's risk and expense.

Further warranty details can be found in the General Terms and Conditions (GTC). The GTC can be viewed at www.jettools.com or can be sent by post upon request.

The Seller reserves the right to make changes to the product and accessories at any time.

3. Safety

3.1 Authorized use

This spindle sander is designed for sanding wood and similar materials only. Sanding of other materials is not permitted and may be carried out in specific cases only after consulting with the manufacturer.

The machine is not suitable for wet sanding.

The proper use also includes compliance with the operating and maintenance instructions given in this manual.

The machine must be operated only by persons familiar with its operation and maintenance and who are familiar with its hazards.

The required minimum age must be observed.

The machine must only be used in a technically perfect condition.

When working on the machine, all safety mechanisms and covers must be mounted.

In addition to the safety requirements contained in these operating instructions and your country's applicable regulations, you should observe the generally recognized technical rules concerning the operation of woodworking machines.

Any other use exceeds authorization.
In the event of unauthorized use of the machine, the manufacturer renounces all liability and the responsibility is transferred exclusively to the operator.

3.2 General safety notes

Woodworking machines can be dangerous if not used properly. Therefore the appropriate general technical rules as well as the following notes must be observed.



Read and understand the entire instruction manual before attempting assembly or operation.



Keep this operating instruction close by the machine, protected from dirt and humidity, and pass it over to the new owner if you part with the tool.

No changes to the machine may be made.

Daily inspect the function and existence of the safety appliances before you start the machine.
Do not attempt operation in this case, protect the machine by unplugging the power cord.

Before operating the machine, remove tie, rings, watches, other jewellery, and roll up sleeves above the elbows.
Remove all loose clothing and confine long hair.

Wear safety shoes; never wear leisure shoes or sandals.

Always wear the approved working outfit:

- safety goggles
- ear protection
- dust protection



Do not wear gloves while operating this machine.



Install the machine so that there is sufficient space for safe operation and workpiece handling.

Keep work area well lighted.

The machine is designed to operate in closed rooms and must be bolted stable on firm and levelled table surface or on the supplied cabinet stand.

Make sure that the power cord does not impede work and cause people to trip.
Keep the floor around the machine clean and free of scrap material, oil and grease.

Stay alert!
Give your work undivided attention.

Use common sense. Do not operate the machine when you are tired.

Keep an ergonomic body position.
Maintain a balanced stance at all times.

Do not operate the machine under the influence of drugs, alcohol or any medication. Be aware that medication can change your behaviour.



Never reach into the machine while it is operating or running down.



Keep children and visitors a safe distance from the work area.

Never leave a running machine unattended. Before you leave the workplace switch off the machine.

Do not operate the electric tool near inflammable liquids or gases.
Observe the fire fighting and fire alert options, for example the fire extinguisher operation and place.

Do not use the machine in a damp environment and do not expose it to rain.

Before machining, remove any nails and other foreign bodies from the workpiece.

Work only with well sharpened tools.

Machine only stock which rests securely on the table.

Always close the chuck cover before you start the machine.

Specifications regarding the maximum or minimum size of the workpiece must be observed.

Do not remove chips and workpiece parts until the machine is at a standstill.

Do not stand on the machine.

Connection and repair work on the electrical installation may be carried out by a qualified electrician only.



Have a damaged or worn power cord replaced immediately.

Make all machine adjustments or maintenance with the machine unplugged from the power source.



3.3 Remaining hazards

When using the machine according to regulations some remaining hazards may still exist.

The rotating workpiece can cause injury.

Workpieces that are inhomogeneous or weak can explode when being processed due to centrifugal force.

Only process selected woods without defects.

Unbalanced workpieces can be hazardous.

Injuries can occur when feeding tooling, if tool supports are not correctly adjusted or if turning tools are blunt.

Risk of kickback. The tooling is caught by the rotating workpiece and thrown back to the operator.

Thrown workpieces and workpiece parts can lead to injury.

Dust and noise can be health hazards. Be sure to wear personal protection gear such as safety goggles and dust mask. Use a suitable dust collection system. Work in a well-ventilated area.

The use of incorrect mains supply or a damaged power cord can lead to injuries caused by electricity.

4. Machine specifications

4.1 Machine description

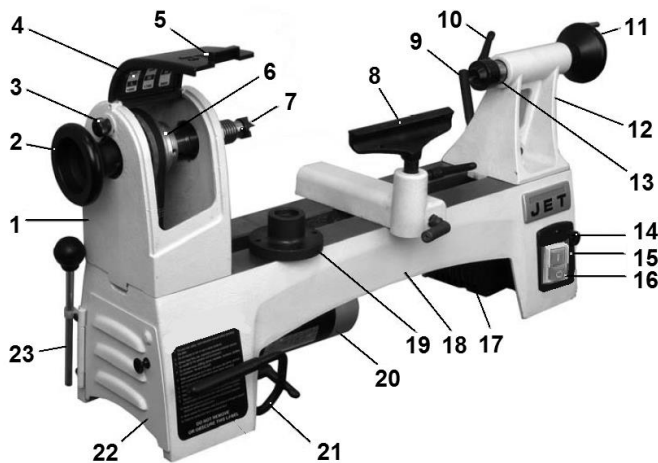


Fig 1 (JWL-1015VS shown)

- 1 Headstock
- 2 Spindle handwheel
- 3 Index pin
- 4..Speed chart
- 5..Upper pulley cover

- 6 Spindle pulley
- 7 Spur centre
- 8 Tool rest
- 9 Tailstock locking handle
- 10 Quill locking handle
- 11 Tailstock handwheel
- 12..Tailstock
- 13 Live centre
- 14 Variable speed control knob (JWL-1015VS only)
- 15 LED light display (JWL-1015VS only)
- 16 On/Off switch
- 17..Controller assembly
- 18 Bed
- 19 Face plate
- 20 Motor
- 21 Belt tension handle
- 22 Lower pulley cover
- 23 Knockout rod

4.2 Technical data

Swing over bed	254mm
Swing over tool rest base	186mm
Centre distance	385mm
Spindle nose	M33x3,5 DIN 800
Headstock spindle taper	MT 2
Spindle indexing	24x15°
Spindle hole diameter	9,5mm
Tailstock spindle taper	MT 2
Tailstock hole diameter	9,5mm
Tailstock ram travel	50mm
Centre above workbench	297mm
Bed width	127mm
Overall (LxWxH)	885x300x370mm

Mains	1~230V, PE, 50Hz
Motor power	0.37kW (0.5 HP)
Reference current	2.5 A
Extension cord (H07RN-F):	3x1.5mm ²
Installation fuse protection	10A
Isolation class	I

JWL-1015:

Number of spindle speeds	6
	400, 700, 1000, 1500, 2200, 3300 rpm
Net weight	35 kg

JWL-1015VS:

Number of mechanical speeds	3
Spindle speed range L	200 - 1050 rpm
Spindle speed range M	300 - 1750 rpm
Spindle speed range H	600 - 3600 rpm
Net weight	33 kg

4.3 Noise emission

Acoustic pressure level (EN ISO 11202):	
Idling	LpA 67,4 dB(A)
In operation	LpA 76,5 dB(A)

The specified values are emission levels and are not necessarily to be seen as safe operating levels. As workplace conditions vary, this information is intended to allow the user to make a better estimation of the hazards and risks involved only.

4.4 Content of delivery

Live centre
 Spur centre
 Tooling knockout bar
 150 mm tool rest
 75 mm face plate
 Operating manual
 Spare parts list.

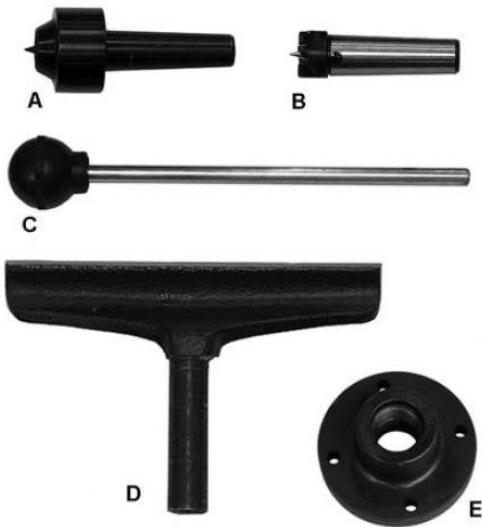


Fig 2

5. Transport and start up

5.1 Transport and installation

The machine is designed to operate in closed rooms and must be placed stable on firm and levelled surface.

For safety reasons, the machine must be bolted to the work bench or to the optional stand.

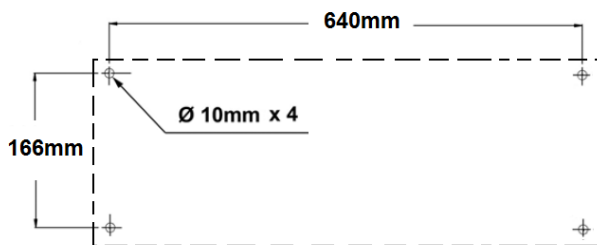


Fig 3

For packing reasons the machine is not completely assembled

5.2 Assembly

If you notice transport damage while unpacking, notify your supplier immediately. Do not operate the machine!

Dispose of the packing in an environmentally friendly manner.

Clean all rust protected surfaces with a mild solvent.

5.3 Mains connection

Mains connection and any extension cords used must comply with applicable regulations.

The mains voltage must comply with the information on the machine licence plate.

The mains connection must have a 10A surge-proof fuse.

Only use power cords marked H07RN-F

Connections and repairs to the electrical equipment may only be carried out by qualified electricians.

5.4 Dust collection

Use a suitable dust collection and air filtration system to avoid high dust concentrations in the air.

5.5 Starting operation

You can start the machine with the green ON-button (D, Fig 4).

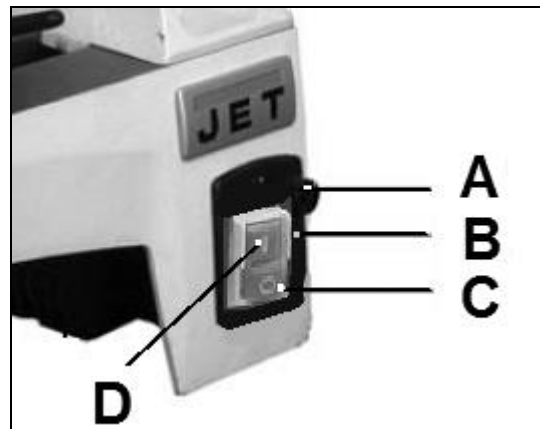


Fig 4

The machine will stop when you push the red OFF button (C). Wait for the workpiece to come to a complete stop.

JWL-1015VS only:

The variable speeds of the lathe are controlled by the speed control knob (A, Fig 4) as well as the position of the belt on the pulleys.

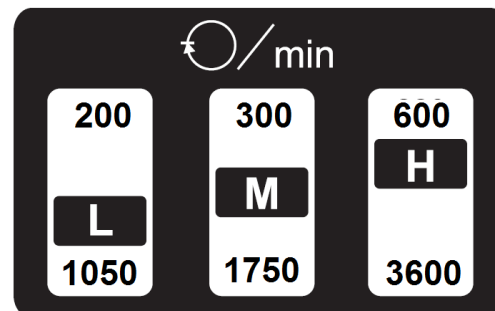


Fig 5

“Low” speed range (200~1050 rpm) for maximum torque.

“Medium” speed range (300~1750 rpm) for general use

“High” speed range (600~3600 rpm) for maximum speed.

Caution:

Always set the speed control knob to its lowest setting before starting lathe. Never start a workpiece at maximum speed.

LED light (B) displays “green” during normal operation.

LED light (B) displays “red” due to overload

LED light (B) displays “red” and “green” in case of error.

...see chapter 9.

6. Machine operation

The information which follows is general in nature and is not intended to be a complete course in wood turning. Nothing can replace the knowledge gained by conversation with experienced woodturners, or consulting books or trade articles.

6.1 Correct operating position

Always support the tool on the tool rest and guide with the palm of your hand keeping your fingers closed. (see Fig 6)

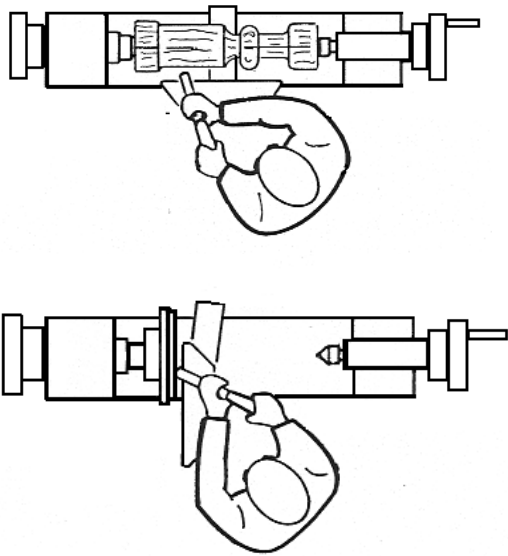


Fig 6

6.2 Tool selection

Successful wood turning does not result from high speeds, but rather, from the correct use of turning tools.

A perfect and sharp wood turner tool is a precondition for professional wood-turning.

Major tools:

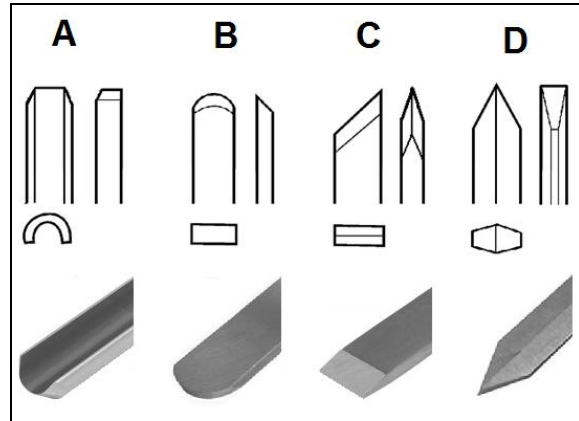


Fig 7

Gouge (A, Fig 7), used for rapidly cut raw wood into round stock, for turning bowls and plates, for turning beds, coves and other detail (Fig 8).

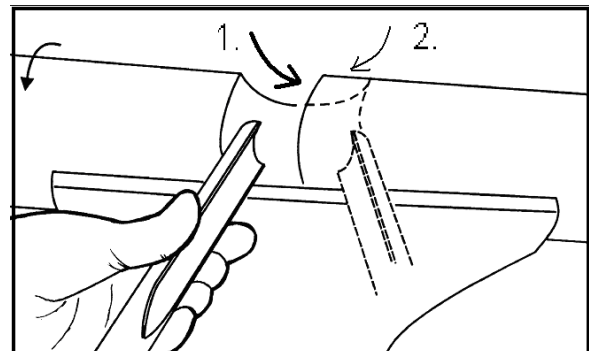


Fig 8

Scraper (B, Fig 7), used for diameter scraping and to reduce ridges.

Skew Chisel (C, Fig 7), used to make vees, beads, etc. (Fig 9). The bevel of skew is parallel to the cut.

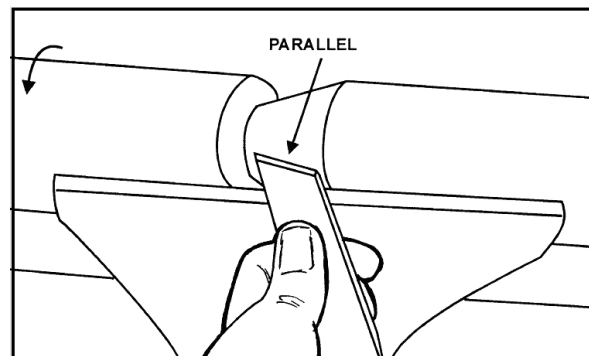


Fig 9

Parting tool (D, Fig 7), used to cut directly into the material, or to make a cut off. Also used for scraping and to set diameters.

6.3 Speed selection:

Use low speeds for roughing and for large diameter work. If vibrations occur, stop the machine and correct the cause. See speed recommendations.

Speed recommendations

Workpiece Diameter mm	Roughing RPM	General Cutting RPM	Finishing RPM
< 50	1500	2200	3300
50-100	700	1500	2200
100-150	500	1000	1500
150-200	400	700	1000
200-250	300	400	700

Fig 10

6.4 Turning between centres

With a ruler locate and mark the centre on each end. Put a dimple in each end of the shock. Extremely hard woods may require kerfs cut into the spur drive end of stock (see Fig 11).

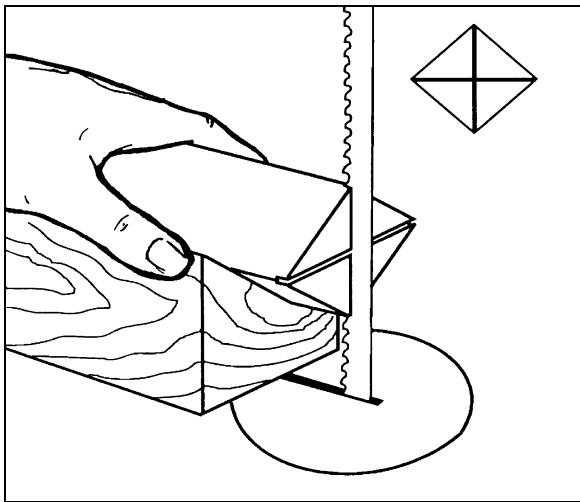


Fig 11

Mount the centred workpiece between the spur drive centre and the tailstock mounted live centre

Turn the tailstock hand wheel until the live centre well penetrates the workpiece. Reverse the hand wheel by one quarter turn and lock the tailstock spindle.

Turn the workpiece by hand to see if it rests securely between centres and can be rotated freely.

For turning between centres the tool rest is set approximately 3mm higher than centre line (Fig 12 and 13).

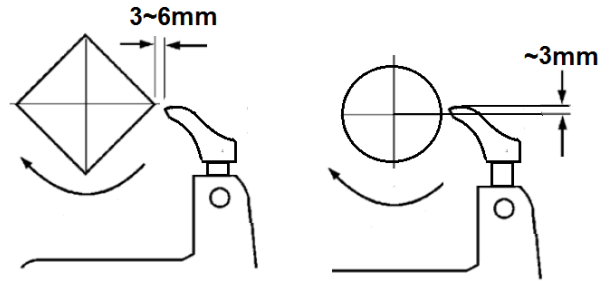


Fig 12



Fig 13

6.5 Bowl turning

Turn outside of bowl between centres.

Turn a short tenon the size of the hole in the faceplate (T, Fig 14). This will allow centring the workpiece.

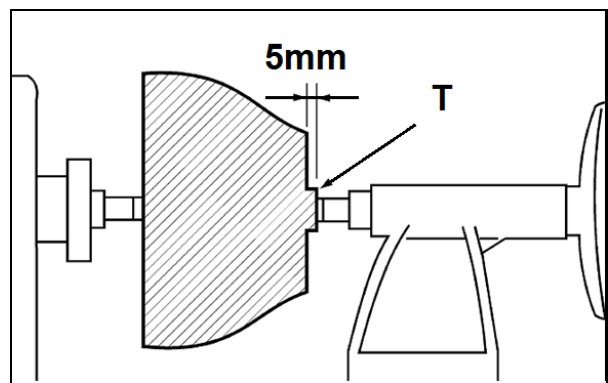


Fig 14

Mount the workpiece (A, Fig 17) directly to the face plate using 4 wood screws (C) from the back. Be careful to use screws short enough not to interfere with the cutting process but long enough to hold the workpiece securely to the face plate.

If screw mounting is not allowed at all, the work may be glued to a backing block (D) and the backing block screwed to the

face plate. A piece of paper in the glue joint will prevent damaging the wood when separated later.

Mount the face plate with the workpiece already attached onto the spindle nose thread and hand tighten.

If reversing spindle rotation, make sure face plate, chuck or other work holding is secured with the set screws, to avoid threading loose.

Move tailstock away, remove centre from tailstock to prevent injury.

Turn the workpiece by hand to see if it rests securely and can be rotated freely.

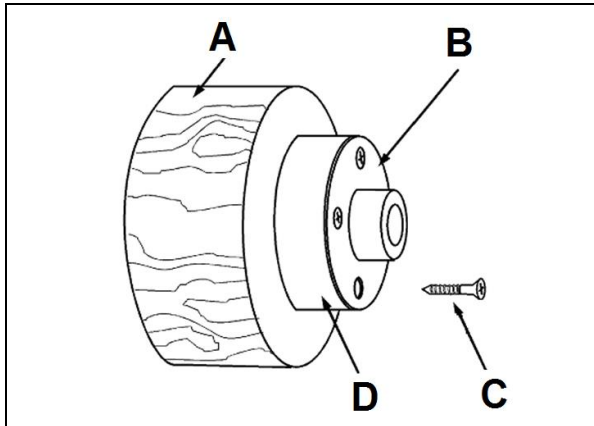


Fig 15

For face plate turning the tool rest is set slightly lower than centre line.

Caution:

Cut with your chisel on the left side of the turning centre only.

Use left hand to control cutting edge of gouge, while right hand swings tool handle around toward your body (Fig 16).

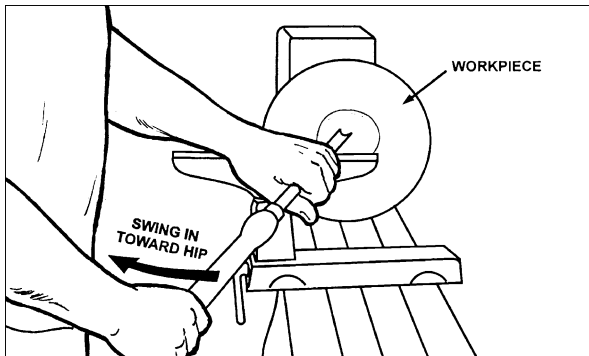


Fig 16

Try to make one, very light continuous movement from the rim to the bottom of the bowl to ensure a clean, sweeping curve through the workpiece.

Move tool support to the exterior to re-define bottom of bowl.

6.6 Sanding and Finishing

Remove the tool rest and begin with a fine grit sandpaper (120 grit) and progress through each grit, using only light pressure.

Use power sanding techniques to avoid concentric sanding marks.

Finish sanding with 220 grit.

Apply first coat of finish. Allow to dry before sanding again with 320 or 400 grit sandpaper.

Turn lathe back on and make a separation cut through the base. Stop at about dia. 80mm and use a fine tooth saw to separate the bowl from the waste.

Apply additional finish coats and allow to dry before buffing.

7. Setup and adjustments

General note:

Setup and adjustment work may only be carried out after the machine is protected against accidental starting by pulling the mains plug.

Make sure all levers and locking handles are tightened before operating the lathe.

7.1 Changing speed range

Disconnect the machine from the power source (unplug) !

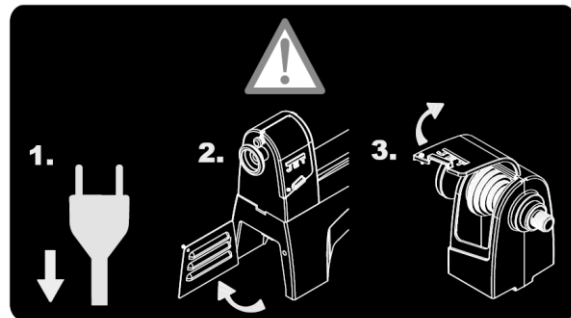


Fig 17

Loosen the locking screw and open the lower pulley cover.

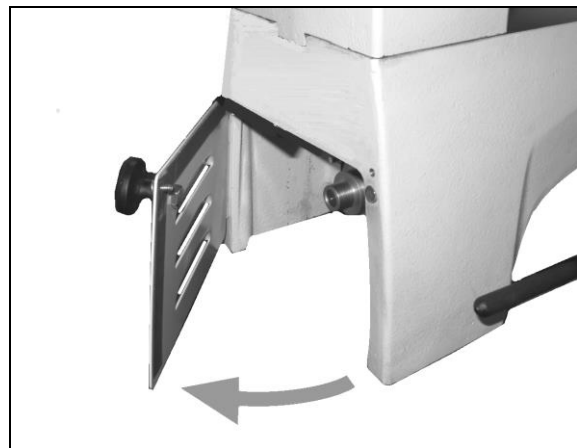


Fig 18

Loosen the locking screw and open the upper pulley cover.

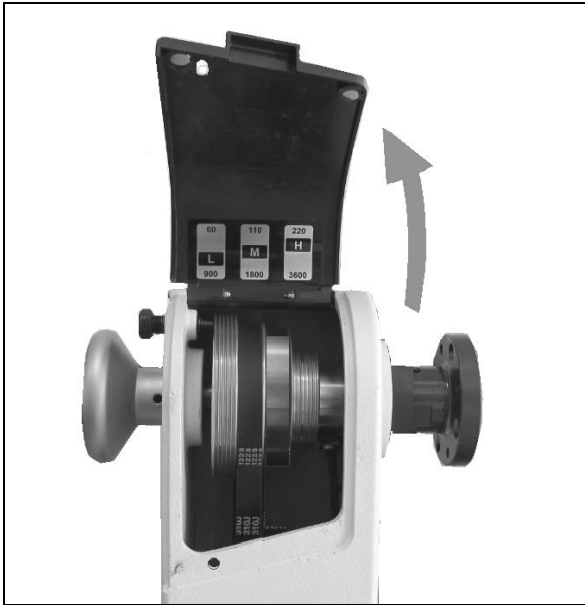


Fig 19

Take tension off the belt. Loosen handle (F, Fig 20) and lift the lever (G).

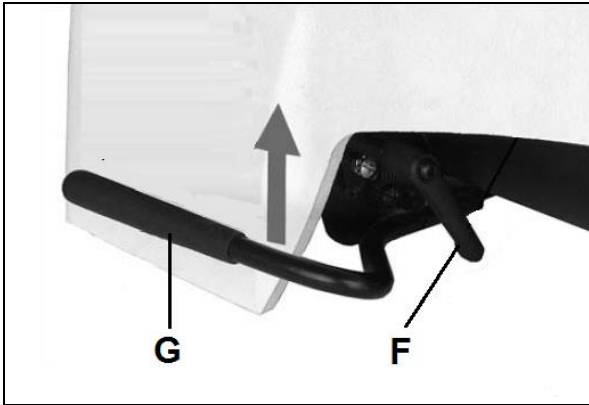


Fig 20

You can now position the belt in the desired speed range.

JWL-1015: 6 speeds

⌚ / min					
400	700	1000	1500	2200	3300

JWL-1015VS: 3 variable speed ranges

⌚ / min		
200	300	600
L	M	H
1050	1750	3600

“Low” speed range (200~1050 rpm) for maximum torque.
 “Medium” speed range (300~1750 rpm) for general use
 “High” speed range (600 ~ 3600 rpm) for maximum speed.

Make sure belt is properly seated in both pulleys.
 Push lever (G) down to tighten the belt.
 Close and lock the pulley covers.

⚠ WARNING
 Keep pulley covers closed during operation.

7.2 Installing work holding

Disconnect the machine from the power source (unplug).

The faceplate (F, Fig 21) is used for tuning bowls. There are a number of holes for mounting the workpiece.

Stop the spindle (G) with the tooling knock out rod (C).

Thread the faceplate onto the spindle in a clockwise direction, and tighten.

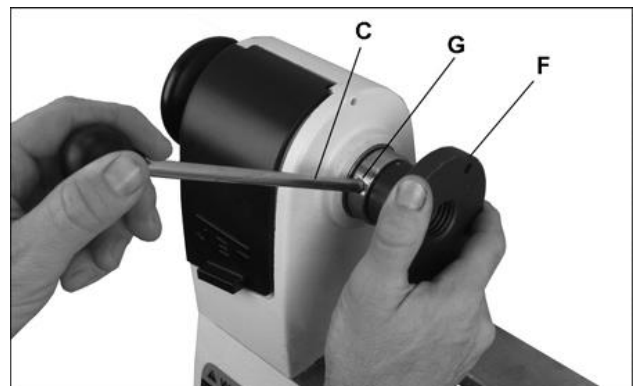


Fig 21

Caution:

Remove the knockout rod before starting the spindle.

The spur centre is used to hold workpieces between centres.

Make sure the mating surfaces are clean.

Push the spur centre into the spindle.

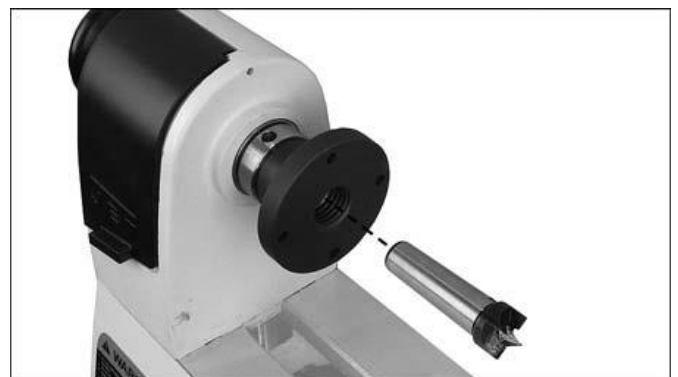


Fig 22



Fig 23

To remove, use the knockout bar to tap out the spur centre. Hold spur centre to prevent it from falling (Fig 23).

The live centre is used to hold a workpiece between centres. Make sure the mating surfaces are clean. Push the live centre into the quill.



Fig 24

To remove, rotate handwheel counter-clockwise to retract quill, until centre releases from quill (Fig 24).

7.3 Adjusting tool rest

Position the tool rest as close to the workpiece as possible. Tighten handle (A, Fig 25) to lock.

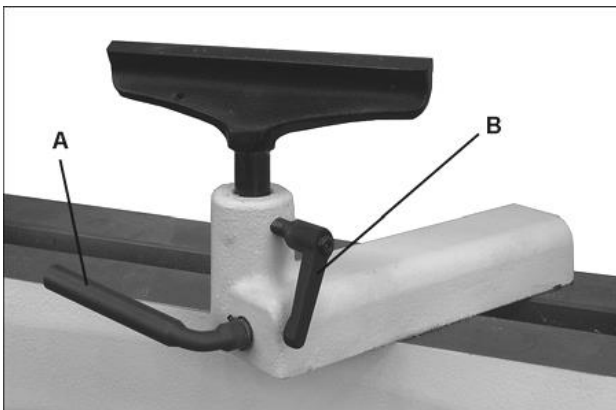


Fig 25

Set the height to approximately 3mm above centre. Tighten indexable knob (B).

7.4 Adjusting tailstock

Turn the hand wheel (E, Fig 26) clockwise to move tailstock quill forward. Lock quill with the indexable knob (D).

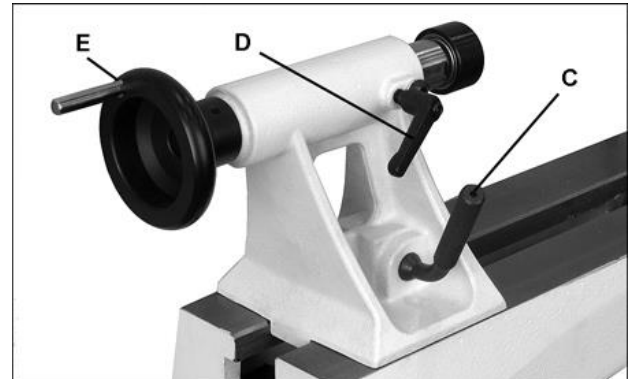


Fig 26

The handle (C) locks the tailstock in position on the bed.

The live centre can be ejected by turning the hand wheel counter-clockwise.

The live centre pin can be removed to allow deep hole drilling operations.

Caution: Do not position tailstock over the edge of bed. This will result in less clamping surface and increase risk of injury.

7.5 Spindle index

The index feature allows you to cut evenly spaced features in a workpiece while keeping the Lathe spindle locked.

The lathe provides 24 index positions.

These are identified by numbers on the spindle pulley (H, Fig 27).

Thread index pin (J) into the headstock. Make sure that it locates in one of the pulley holes (I).

Note: A 3mm hex key (K) can be used to help tighten/loosen the index pin.

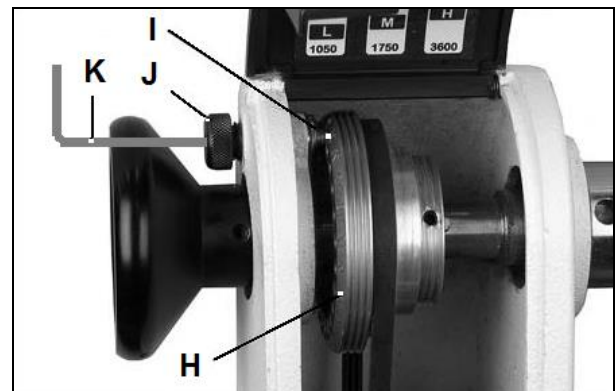


Fig 27

Caution:

Release index pin before turning on the lathe.
Never press the index pin while the spindle is turning.

8. Maintenance and inspection

General notes:

Maintenance, cleaning and repair work may only be carried out after the machine is protected against accidental starting by pulling the mains plug.

Clean the machine regularly (wear eye and dust protection)

Inspect the proper function of the dust collection.

Protect headstock spindle, tailstock quill, tool rest post and machine bed from rust, by applying thin coat of oil or rust protectorant.

Defective safety devices must be replaced immediately.

Repair and maintenance work on the electrical system may only be carried out by a qualified electrician

8.1 Adjusting bed clamping

If adjustment is needed, slide the tailstock or toolrest to the edge of the bed and slightly turn the cam lock nut (B, Fig 28).

Test the clamping function and repeat if necessary.

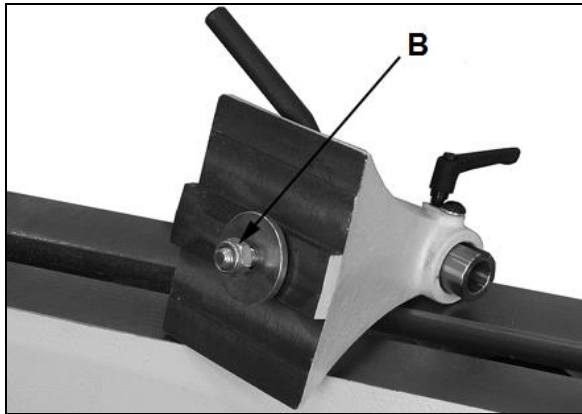


Fig 28

8.2 Inspecting motor brushes (JWL-1015VS only)

Disconnect the machine from the power source (unplug) !

A heavily worn or damaged brush may eventually cause damage to the motor.

Periodically inspect the two carbon brushes, located at each side of the motor.

Unscrew the cap and withdraw brush.

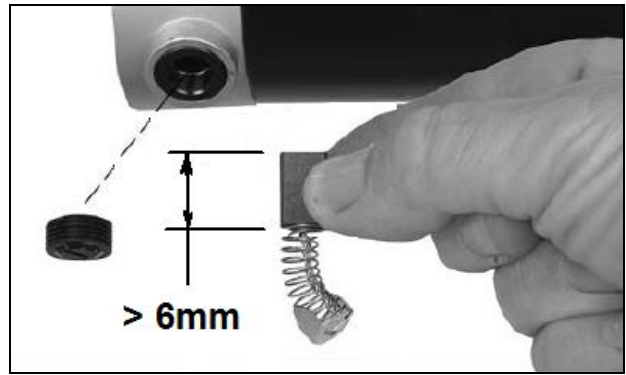


Fig 29

Replace both brushes if worn down to 6mm or if damaged.

(article no.: JWL1015VS-MCB.....motor carbon brush with cap, 2 pieces needed)

Reinstall brushes and caps.

8.3 Changing belt

Disconnect the machine from the power source (unplug) !

Open the pulley covers and remove the Poly-V belt from the lower pulley.

Loosen two set screws (A, Fig 30) and unscrew the hand wheel.

Note: Left hand thread, turn clockwise to remove.

Loosen two set screws (B) in spindle pulley.

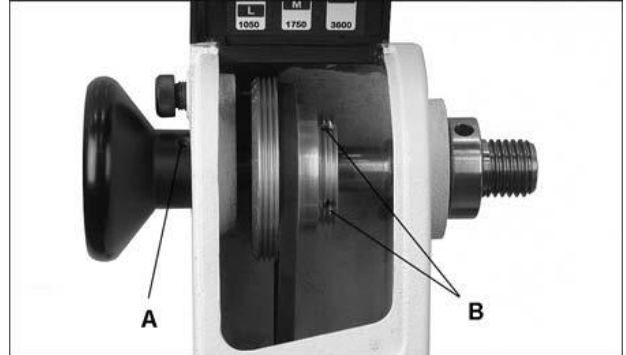


Fig 30

Use a rubber mallet, to tap the spindle towards tailstock. (also can use a piece of hard wood, or brass to protect the spindle).

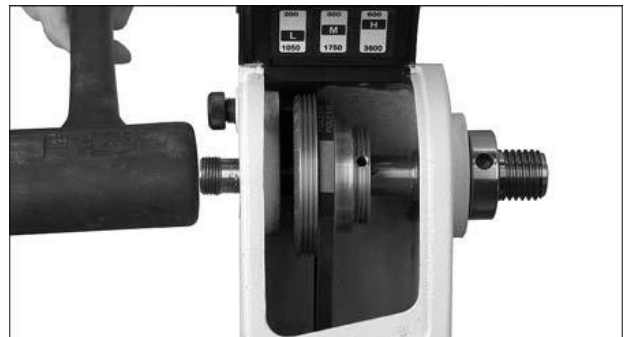


Fig 31

Go only far enough to remove the belt.

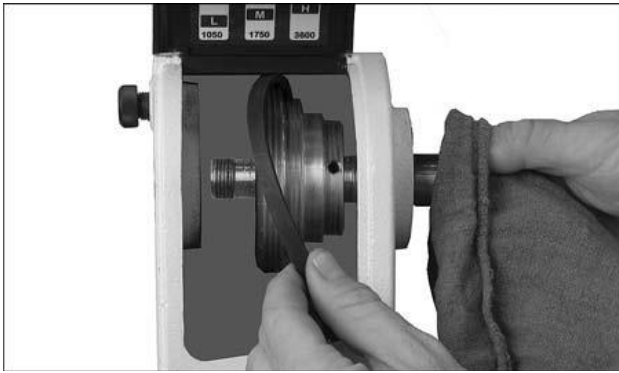


Fig 32

To reassemble reverse the procedure.

Note:

To avoid bearing overload, do not over tighten the handwheel.

Thread it on to the spindle until its snug, then back off slightly and tighten the grub screws.

9. Trouble shooting

Motor fails to develop full power

*Power line overloaded-
Correct overload condition.

*Undersized wires in power supply system-
Increase supply wire size.

Motor or spindle stalls or doesn't start

*No electricity-
check mains and fuse.

*Defective switch, circuit board, motor or cord-
consult an electrician.

*Overload detected on drive unit (JWL-1015VS only)-
wait and restart machine; chose low speed range belt setting
(200-1050 rpm) for better torque.

*Excessive cut-
Reduce depth of cut.

*Improper belt tension or worn belt-
Adjust or replace belt as needed

Machine vibrates excessively

*Stands on uneven surface-
adjust stand for even support.

*Workpiece is not properly centred

*The speed is too high

*Motor mounting fasteners are loose

Tailstock moves when applying pressure

*Cam lock nut needs adjusting-
Tighten cam lock nut (see chapter 8.1)

*Bed and tailstock surfaces are greasy-
Clean surface and re-apply rust protection

Tolls tend to grab or dig in

*Dull tools-
Keep tools sharp

*Tool support set too low-
Reposition tool support height

*Tool support set too far from workpiece-
Reposition tool support closer to work piece

*Improper tool being used-
Use correct tool for operator

JWL-1015VS only:

Red LED light display

*Overload limiter in circuit board activated-
Reduce depth of cut.

*Overheating in heat sink-
Reduce depth of cut.

*Spindle locked-
Release index pin.

Green LED and Red LED light display, both are lit

*Motor cord unplugged-
Check plug connection underneath the machine bed.

*Motor brushes worn or damaged-
Replace brushes

*Worn motor-
Replace motor.

*Circuit board failure-
Consult electrician to verify / replace circuit board.

10. Environmental protection

Protect the environment.

Your appliance contains valuable materials which can be recovered or recycled. Please leave it at a specialized institution.

11. Available accessories

Stock number 719101

Bed Extension 530mm (Fig 33)



Fig 33

Stock number 719102
Machine stand (Fig 34, Fig 35)



Fig 34



Fig 35

Refer to the JET-Pricelist
for various tools and work holding.

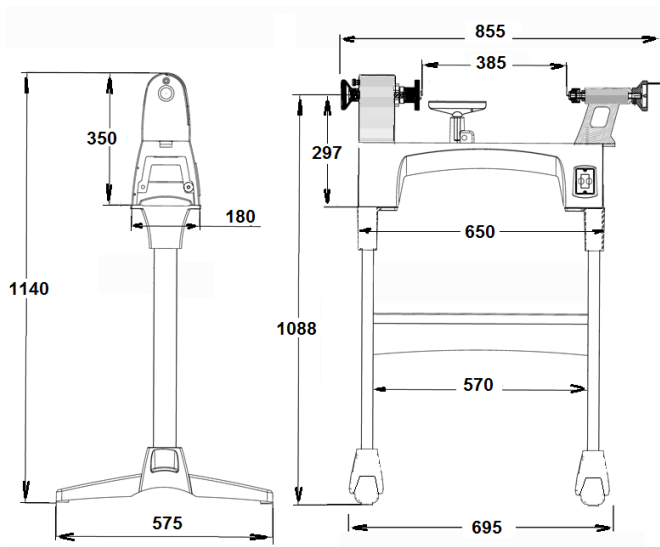


Fig 35

Stock number 719103
Machine stand extension 530mm (Fig 35)