Clarke CWL325V Variable Speed Lathe Instruction Manual

WOODWORKER

VARIABLE SPEED LATHE
MODEL NO: CWL325V
PART NO: 6501660
OPERATION & MAINTENANCE INSTRUCTIONS
ORIGINAL INSTRUCTIONS

Contents

INTRODUCTION

Thank you for purchasing this CLARKE Wood Lathe.
Before attempting to operate the machine, it is essential that you read this manual thoroughly and carefully follow all instructions given. In doing so you will ensure the safety of yourself and that of others around you, and you can also look forward to the product giving you long and satisfactory service.

GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase.
This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.
Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.
This guarantee does not affect your statutory rights.

SPECIFICATION

Weight	21 kg
Dimensions (L x W x H)	732 x 222 x 300 mm
Speed	890 – 3190 rpm (variable)
Distance between centers	325 mm
Turning Capacity	200 mm
Spindle Thread	3/4″ x 16TPI (UNF)
IP (Ingress Protection) rating	IP 20
Motor voltage/frequency	230V / 50Hz
Rated input wattage	300 W
Sound Pressure Level (Lp)	No-load 75.3 / loaded 82.5 dB(A)
Sound Power Level Measured (Lw)	No-load 84.3 / loaded 91.8 dB(A)

SAFETY WARNING

 **CAUTION: FAILURE TO FOLLOW THESE PRECAUTIONS COULD RESULT IN PERSONAL INJURY, AND/OR DAMAGE TO PROPERTY.**

WORK ENVIRONMENT

1. **Keep the work area clean and well-lit**. Cluttered and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks that may ignite dust or fumes.
3. **Keep children and bystanders away while operating a power tool. Anyone entering the work area must wear personal protective equipment.** Distractions can cause you to lose control and fragments of work or a broken disc may fly away and cause injury.
4. **Store power tools properly when not in use.** Abrasive products should be stored in a dry, secure place out of the reach of children.
5. Please read these instructions carefully and retain them for future reference.

ELECTRICAL SAFETY

1. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce the risk of electric shock.
2. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
3. **Do not abuse the power cable. Never use the cable for carrying, pulling, or unplugging the power tool. Keep the cable away from heat, oil, sharp edges, or moving parts.** Damaged or entangled wires increase the risk of electric shock.
4. **When operating a power tool outdoors, use an extension cable suitable for outdoor use.** The use of a

cable ideal for outdoor use reduces the risk of electric shock.

PERSONAL SAFETY

1. **Stay alert, watch what you are doing, and use common sense when operating a power tool.** Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in personal injury.
2. **Use personal protective equipment.** Always wear eye protection. Safety equipment such as a dust mask, non-skid safety shoes, hearing protection, and a workshop apron capable of stopping small abrasive or workpiece fragments.
3. **Avoid accidental starting**. Ensure the switch is in the off position before plugging in. Plugging in power tools that have the switch on invites accidents.
4. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
5. **Do not overreach.** Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations. Dress properly. Do not wear loose clothing or jewelry.
6. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Keep the work area clean and tidy.
7. Regularly clean the power tool's air vents. The motor fan will draw the dust inside the housing and the accumulation of material could cause electrical hazards.
8. **Avoid operator fatigue.** Stop the power tool at regular intervals for a short break to rest hands and arms.
9. **Maintain your tools.** Keep all handles and grips dry and clean.

ELECTRICAL SAFETY

1. Position the power cable so that it cannot be inadvertently pulled or pinched, and where it does not cause a trip hazard.
2. This machine is designed for indoor environments and must not be used for other purposes.
3. If the machine requires repair, always contact your Clarke dealer. Always insist on original spare parts. Repairs carried out by unauthorized persons may be dangerous and invalidate the guarantee.
4. This machine must only be used by adults. Children should not be allowed to play with this appliance.
5. Do not use extension power cables.
6. Before cleaning or maintenance operations, always unplug the machine from the power supply.

POWER TOOL USE AND CARE

1. **Do not force the machine.** Use the correct power tool for your application. It will do a better and safer job at the rate at which it was designed.
2. **Do not use the power tool if the switch does not turn on and off** . Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. **Disconnect the power tool from the power supply before making any adjustments, changing accessories, or storing the tool.** These measures will reduce the risk of the power tool starting accidentally.
4. **Store power tools out of the reach of children and do not allow persons unfamiliar with these instructions to operate the power tool.** Power tools are potentially dangerous in the hands of untrained

users.

5. **Maintain power tools in top condition. Keep tools/ machines clean for the best and safest performance** . Check for misalignment or binding of moving parts, broken parts, or any condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
6. **Use recommended accessories.** The use of improper accessories could be hazardous.
7. **Machine cleanliness.** Do not allow the ventilation slots in the machine to become blocked with dust.
8. **Check the power tool for damage before using the machine.** Any damaged part should be inspected to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, breakage of parts, mountings, and any other condition that may affect the machine's operation. Any damage should be properly repaired or the part replaced. If in doubt, DO NOT use the machine. Consult your local dealer.

SERVICING

1. **When necessary, have your power tools serviced or repaired by a qualified person using identical replacement parts.** This will ensure that the safety of the power tool is maintained.
   ADDITIONAL PRECAUTIONS FOR WOOD LATHES

 **WARNING: DUST GENERATED FROM CERTAIN MATERIALS CAN BE HAZARDOUS TO YOUR HEALTH. ALWAYS OPERATE THE LATHE IN A WELL-VENTILATED AREA. USE A DUST COLLECTION SYSTEM WHENEVER POSSIBLE.**

1. Always familiarise yourself with wood lathes and turning techniques before using the machine. If there is any doubt whatsoever you should consult a qualified person.
2. ALWAYS store chisels safely when you have finished with the machine.
3. CAUTION: This machine is designed for use with woodturning chisels only.
4. NEVER attempt to turn a workpiece unless suitable support is used.
5. ALWAYS stop the lathe before removing workpieces, work supports, or swarf from the table.
6. ALWAYS be sure that the workpiece is securely locked in position
7. ALWAYS keep hands and fingers away from the moving workpiece.

SAFETY SYMBOLS

The following safety symbols may be found on the machine.

 Wear a dust mask

 Wear eye protection

 Read the instruction manual before use

ENVIRONMENTAL PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All unwanted accessories and packaging should be sorted and taken to a recycling center for disposal in a manner that is compatible with the environment.

ENVIRONMENTAL RECYCLING POLICY

Through the purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery, and environmentally sound disposal of the WEEE. In effect, this means that this product must not be disposed of with general household waste but according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognized disposal facility.

ELECTRICAL CONNECTIONS

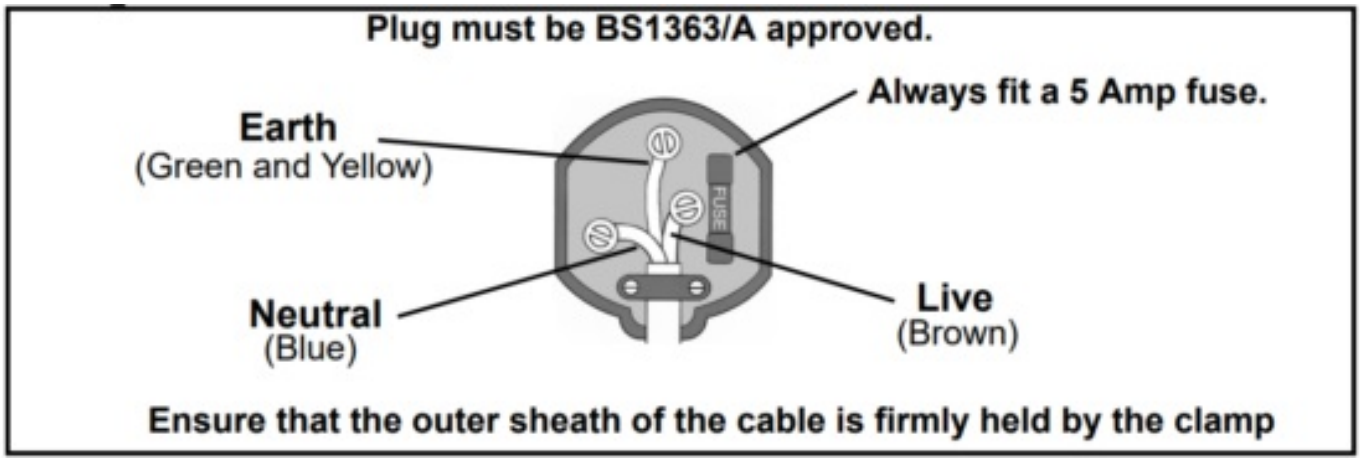
WARNING! Read these electrical safety instructions thoroughly before connecting the product to the mains supply.

Before switching the product on, make sure that the voltage of your electricity supply is the same as that indicated on the rating plate. This product is designed to operate on 230VAC 50Hz. Connecting it to any other power source may cause damage.
This product may be fitted with a non-rewireable plug. If it is necessary to change the fuse in the plug, the fuse cover must be refitted. If the fuse cover becomes lost or damaged, the plug must not be used until a suitable replacement is obtained.
If the plug has to be changed because it is not suitable for your socket, or due to damage, it should be cut off and a replacement fitted, following the wiring instructions shown below. The old plug must be disposed of safely, as insertion into the main socket could cause an electrical hazard.

WARNING! The wires in the power cable of this product are colored in accordance with the following code: Blue = Neutral Brown = Live Yellow and Green = Earth

If the colors of the wires in the power cable of this product do not correspond with the markings on the terminals of your plug, proceed as follows.

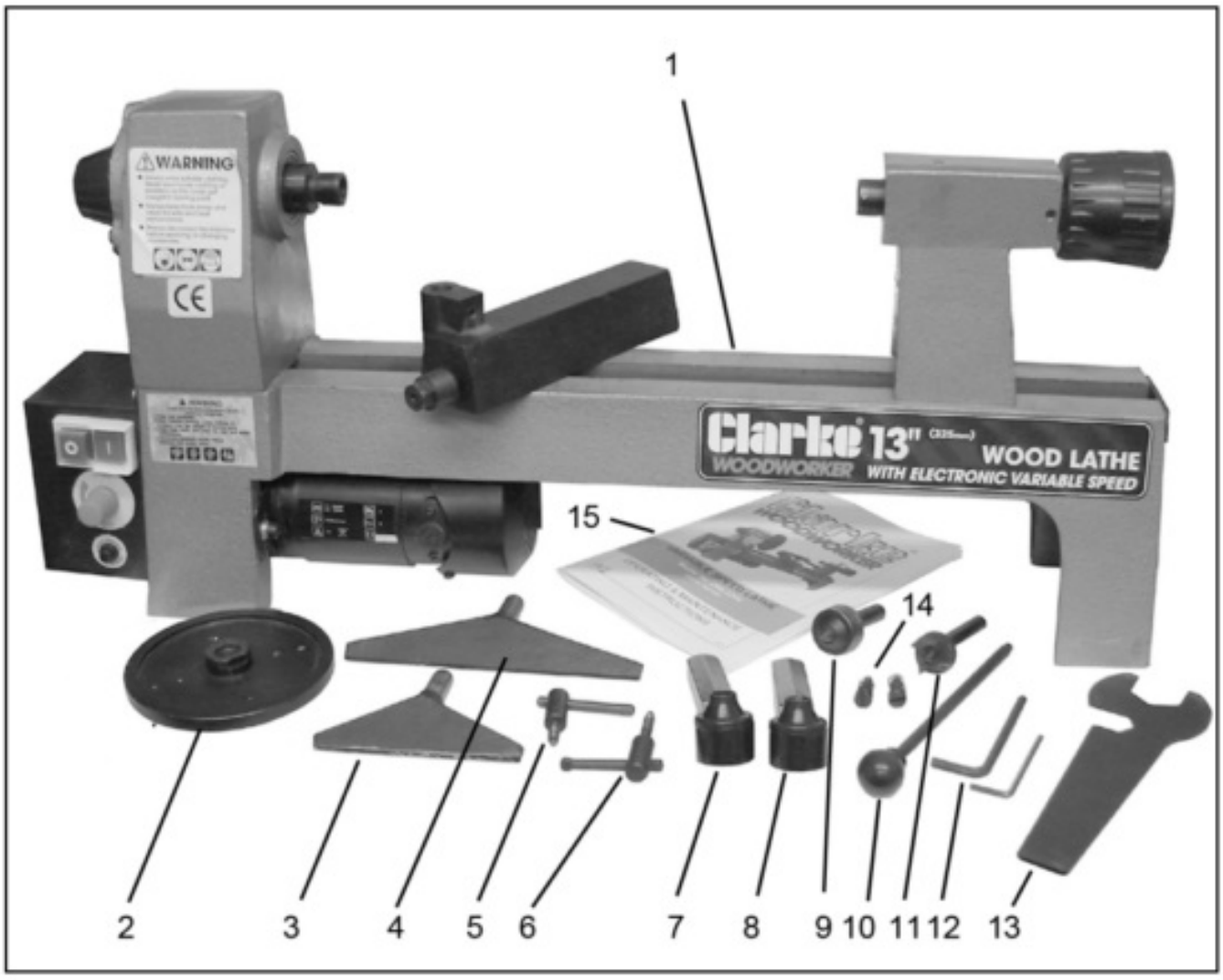
- The **Blue** wire must be connected to the terminal marked N or colored Black.
- The **Brown** wire must be connected to the terminal marked L or colored **Red.**
- The **Yellow and Green** wire must be connected to the terminal marked  or colored **Green.**



We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD) If in any doubt, consult a qualified electrician. DO NOT attempt any repairs yourself.

CONTENTS

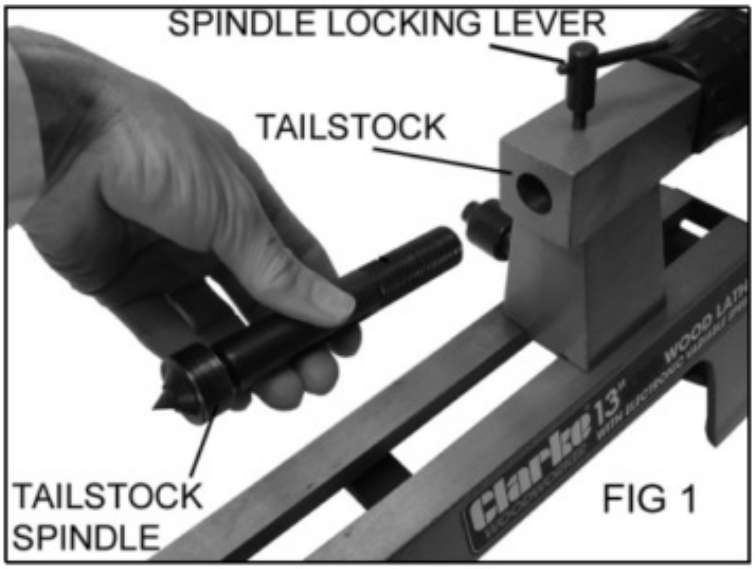
Ensure the wood lathe and its components suffered no damage during transit and that all components are present. Should any loss or damage be apparent, please contact your CLARKE dealer immediately.
The following components are supplied with the lathe assembly.

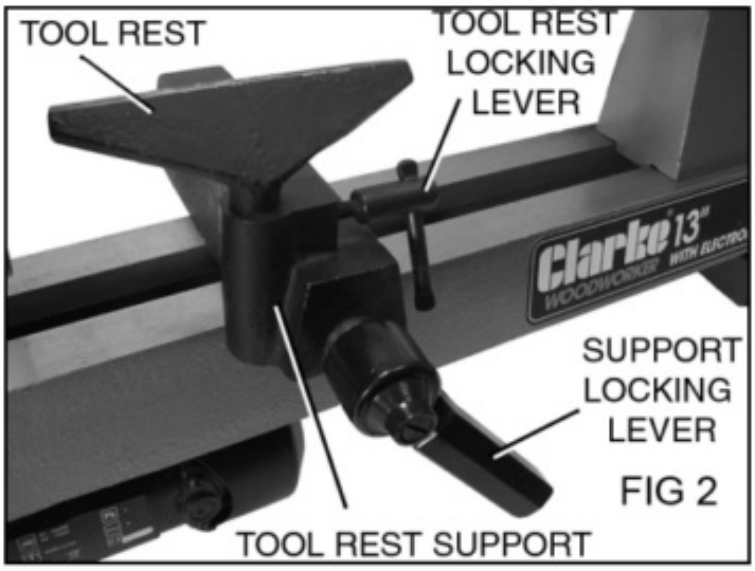


Item	Description
1	Lathe Assembly
2	Faceplate
3	Tool Rest, 110mm
4	Tool Rest, 170mm
5	Tool Spindle Locking Lever
6	Tailstock Locking Lever
7	Toolrest Locking Lever
8	Tool Rest Support Locking Lever
9	Tailstock Centre Spindle
10	Drift Rod
11	Headstock Centre Spur
12	2 x Allen Keys
13	Open Spanner
14	Fixings pack
15	User Manual

ASSEMBLY

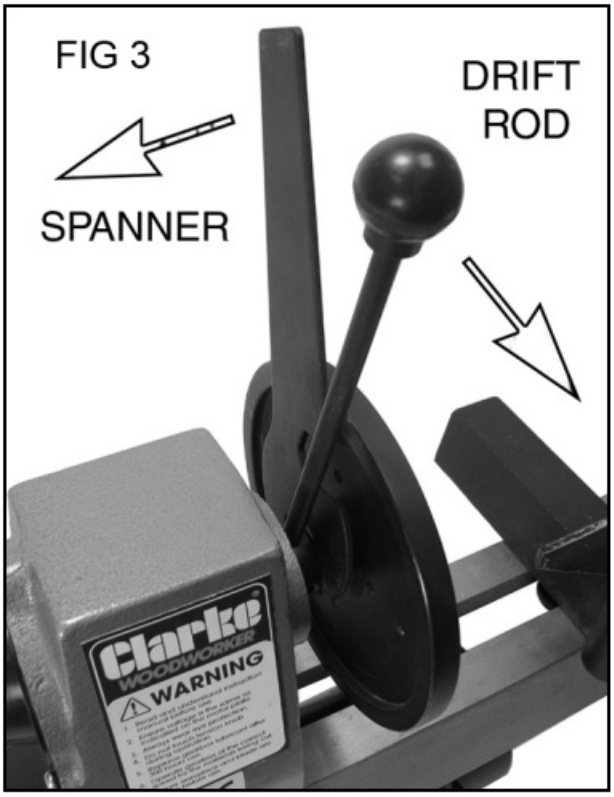
1. Screw the tailstock spindle into the tailstock as shown in Fig 1.
   • Note: A left-hand thread is used for this.
2. Attach the tailstock spindle locking lever and the tailstock locking lever in their positions using the coil spring and machine screw provided.
3. Attach the tool rest locking lever and the support locking lever in their positions using the coil spring and machine screw provided for each as shown in Fig 2.
4. Install the tool rest of your choice into the hole in the tool rest support. Position the working edge of the rest parallel with the centre axis of the lathe and secure it with the tool rest locking lever. The position of the support will be adjusted to suit the workpiece.





5. Screw the faceplate onto the headstock spindle while inserting the drift rod into the hole in the spindle to prevent it from turning. Tighten the faceplate using the open spanner provided as in Fig 3.
6. If the work is to be held in position between the headstock and tailstock, insert the headstock spur into the tapered hole in the headstock spindle.

   • If the faceplate is fitted, the spur can be removed from the headstock by unscrewing the faceplate with the spanner in the usual way. With no faceplate, the spur can simply be tapped out by inserting the drift rod through the spindle



OPERATION

1. Press the green push button to start the lathe and adjust the speed using the speed control knob.
2. Always use the lowest speed when starting a new workpiece.
3. Always rotate the workpiece by hand before turning on the motor and check it does not strike the tool/tool rest.
4. Ensure tool rest and tailstock are securely locked in position before starting work.
5. Always position the tool rest just above the center line of the lathe.
6. Avoid turning timber that has splits or substantial knots or voids and take special care if these are discovered.
7. When turning, always roughly turn the work to a round form at a slow speed.
8. Take care that the turning tools do not bite suddenly into the workpiece.

MAINTENANCE

For maximum performance, it is essential that the machine is properly maintained. Always inspect before use. Any damage should be repaired and faults rectified. The machine requires very little maintenance other than the following guidelines.

IMPORTANT: Disconnect from mains power before cleaning.

1. Vacuum clean any dust or shavings that accumulate in or on the motor.
2. Check all cables periodically and ensure that they are in good condition and not cracked.
3. Check the tightness of the mounting bolts.
4. Check the drive belt for wear and replace it if it is frayed or otherwise damaged.
5. Periodically lubricate the tail stock, and screw threads with engine oil such as SAE20 or SAE30 grade if they become stiff to use.
6. Lightly lubricate the tail-stock and tool-post locking handles with oil if they become difficult to use.
   • The ball bearings in the headstock and tail-stock spindles are greased and permanently sealed at the factory

and require no further lubrication.

REPLACING THE BELT
NOTE: Part numbers refer to the Parts Diagram & List on pages 14/15.

1. Undo the three screws (28) and remove the end cover (27).
2. Using the Allen key supplied, loosen the bolts (39) to enable the motor to move and the drive belt to go slack.
3. Dismount the drive belt from the motor pulley (34) and then lift it off the drive pulley (31) towards you. Use the Allen key to help you as shown in Fig 4. The belt can now be removed from the headstock frame.

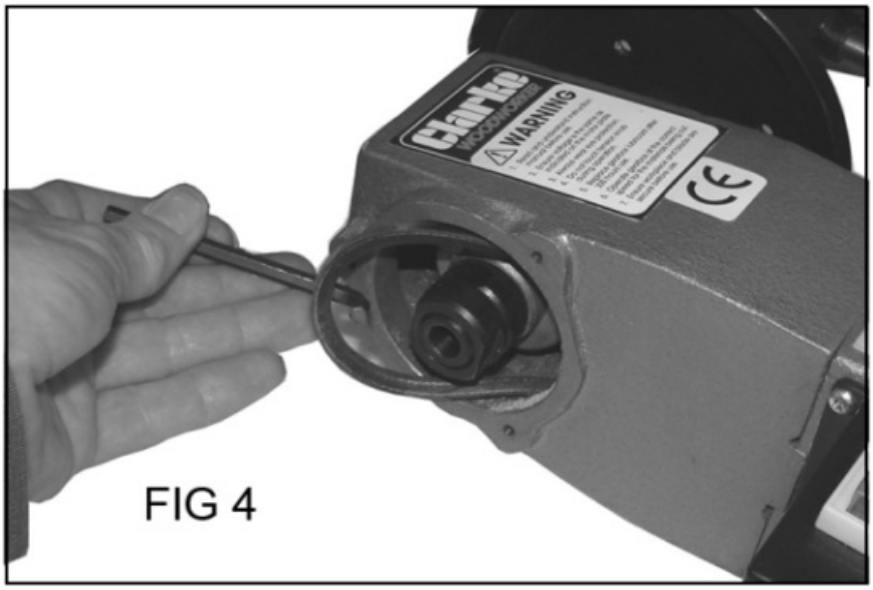


FIG 4

4. Replacement is a reversal of the removal procedure. Tension the belt by hinging the motor downwards prior to tightening the bolts (39).
   Please refer to TROUBLESHOOTING on page 12. If you are unable to rectify any faults, please contact your local dealer or Clarke International Service Department on 0208 988 7400 for assistance.

TROUBLESHOOTING

Problem	Check	Solution
Motor stops and will not r un.	1. Overload switch has tripped due to exc essive load on the chuck. 2. Defective/broken switch. 3. Damaged power cable. 4. Open circuit, loose connections, or bur ned-out motor. 5. Blown fuse or circuit breaker. 6. Low voltage.	Switch off the machine and wait for the components to cool down and the overl oad to re-set. Then turn the lathe back on and press the reset button to re-start . Send to your Clarke dealer for repair. Send to your Clarke dealer for replacement. Replace fuse or reset circuit breaker. T urn off other machines on the same circ uit. Check the power supply for correct voltage. Use another circuit or have a q ualified electrician upgrade the power s upply.
The motor will not start a nd fuses or circuit breaker trip out.	1 Short circuit in motor or power cable. 2. Incorrect fuses or circuit breakers.	Send to your Clarke dealer for repair. Replace with a correct fuse or circuit br eaker for the circuit.
Motor fails to reach full p ower.	1. Overloaded circuit. 2. Unsuitable extension cable	Turn off other machines & retry Replace with a correct size extension cable.
Motor stalls.	1. Short circuit in the motor. 2. Incorrect fuses or circuit breakers. 3. Overloaded circuit. 4. Low voltage.	Send to your Clarke dealer for repair. Replace with a correct fuse or circuit br eaker for the circuit. Turn off other mach ines & retry Check the power supply for correct voltage. Use another circuit or h ave a qualified electrician upgrade the service
Noisy operation	1. Incorrect belt tension. 2. Dry spindle. 3. Loose drive pulley.	Adjust belt tension. See Replacing the belt on all. Lubricate the spindle. Tighten the retaining setscrew on the p ulley.

DECLARATIONS OF CONFORMITY

CE

Clarke® INTERNATIONAL

Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY
This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):
2014/30/EU Electromagnetic Compatibility Directive.
2006/42/EC Machinery Directive.
2011/65/EU Restriction of Hazardous substances.
The following standards have been applied to the product(s):
EN 60745-1:2009+A11, EN 60745-2-5:2010, EN 60745-2.22:2011+A 11, EN 55014-1:2006+A1+A2, EN 55014-

2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013.
The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.
The CE mark was first applied in 2019
Product Description: 500W Mini Plunge Saw
Model number(s): CPS85
Serial I batch Number: N/A
Date of Issue: 15/03/2019

J.A. Clarke
Director

Signed:

UK CA

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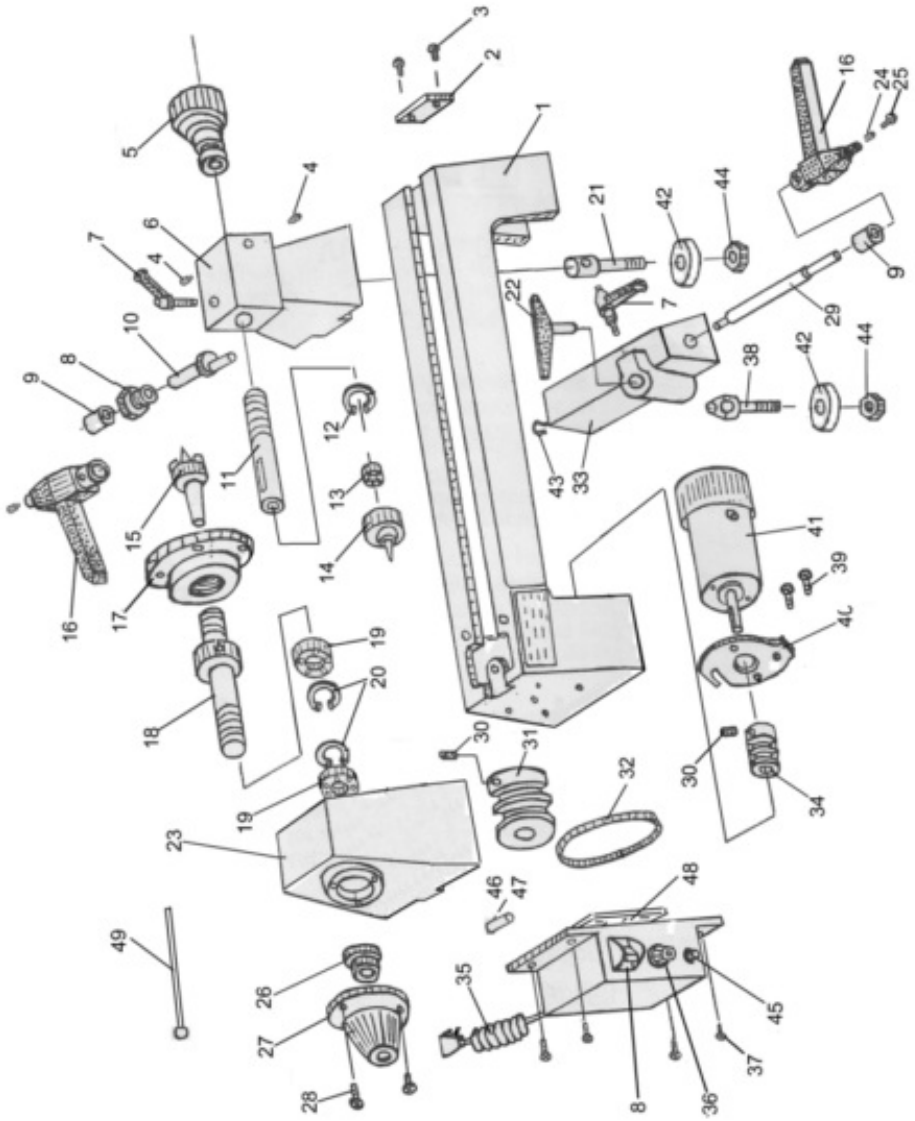
DECLARATION OF CONFORMITY
This is an important document and should be retained.

We hereby declare that this product(s) complies with the following statuary requirement(s):
Electromagnetic Compatibility Regulations 2016
Supply of Machinery (Safety) Regulations 2016
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
The following standards have been applied to the product(s):
EN 55014.1:2017+A11, EN 55014-2:2015, EN IEC 6100032:2019, EN 61000-3-3 2013•A 1.
EN ISO 12100:2010
The technical documentation required to demonstrate that the product(s) meets) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities
The UKCA mark was first applied In 2022
Product Description: 13- Wood Lathe (Variable Speed)
Model number(s): CWL325V
Serial I batch Number: N/A
Date of Issue: 04104/2022

J.A. Clarke
Director

Signed:

PARTS DIAGRAM



PARTS LIST

PART NO	DESCRIPTION
1	Bed
2	Retaining End Plate
3	Self-tapping Screw
4	Grub Screw
5	Handwheel
6	Tailstock Frame
7	Small Locking Lever
8	Threaded Boss
9	Sleeve
10	Eccentric Shaff
11	Tailstock Spindle
12	Circlip
13	Bearing
14	Tailstock Spur Centre
15	Headstock Spur Centre
16	Large Locking Lever
17	Faceplate
18	Headstock Spindle
19	Bearing
20	Circlip
21	Tension Bolt
22	Tool Rest
23	Headstock Body
24	Coil Spring
25	Special Bolt

PART NO	DESCRIPTION
26	Headstock Spindle Nut
27	End Cover
28	Screw
29	Eccentric Shaft
30	Setscrew
31	Drive Pulley
32	Drive Belt
33	Tool Rest Base
34	Motor Pulley
35	Power Cable
36	Speed Controller
37	Screw
38	Tension Bolt
39	Socket Head Bolt
40	Motor Mount Plate
41	Motor
42	Retaining Disc
43	Circlip
44	Retaining Nut
45	Circuit Breaker
46	Fuse (10 amp)
47	Fuse Holder
48	Printed Circuit Board
49	Drift Rod

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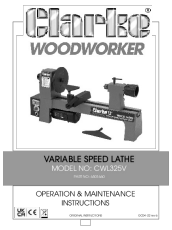
Documents / Resources

	Clarke CWL325V Variable Speed Lathe [pdf] Instruction Manual CWL325V Variable Speed Lathe, CWL325V, Variable Speed Lathe