# (R)WOODWORKER



### VARIABLE SPEED LATHE

MODEL NO: CWL325V

PART NO: 6501660

### **OPERATION & MAINTENANCE INSTRUCTIONS**





**ORIGINAL INSTRUCTIONS** 

GC04 -22 rev 6

#### 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 effect your statutory rights.

#### **SPECIFICATIONS**

Weight	21 kg	
Dimensions (L x W x H)	732 x 222 x 300 mm	
Speed	890 - 3190 rpm (variable)	
Distance between centres	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 WARNINGS



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

#### WORK ENVIRONMENT

- Keep the work area clean and well lit. Cluttered and dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- 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 for future reference.

#### **ELECTRICAL SAFETY**

- 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.
- 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 cables increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cable suitable for outdoor use. Use of a cable suitable for outdoor use reduces the risk of electric shock.

#### PERSONAL SAFETY

 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 dust mask, non-skid safety shoes, hearing protection and a workshop apron capable of stopping small abrasive or workpiece fragments.
- 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 jewellery.
- Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts. Keep the work area clean and tidy.
- Regularly clean the power tool's air vents. The motor fan will draw dust inside the housing and 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**

- 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**

Do not force the machine. Use the correct power tool for your application.
 It will do a better and safer job at the rate for which it was designed.

- Do not use the power tool if the switch does not turn it 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 accidently.
- 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.
- 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**

 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 WOODLATHES



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 woodlathes and turning techniques before using the machine. If there is any doubt whatsoever you should consult a qualified person.
- 2. ALWAYS store chisels safety 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 a 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 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 centre for disposal in a manner which is compatible with the environment.

#### **ENVIRONMENTAL RECYCLING POLICY**



Through 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 recognised 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 a mains socket could cause an electrical bazard.

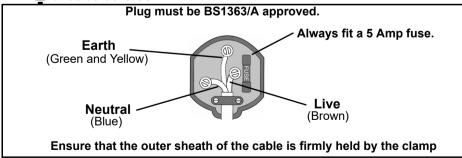


WARNING! The wires in the power cable of this product are coloured in accordance with the following code:

Blue = Neutral Brown = Live Yellow and Green = Earth

If the colours 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 coloured Black.
- The Brown wire must be connected to the terminal marked L or coloured Red.
- The Yellow and Green wire must be connected to the terminal marked E or
   or coloured Green.



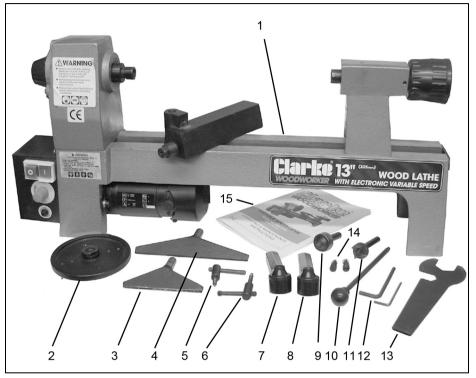
We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD)

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

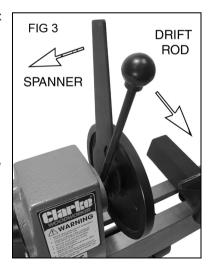
Item	Description		
9	Tailstock Centre Spindle		
10	Drift Rod		
11	Headstock Centre Spur		
12	2 x Allen Keys		
13	Open Spanner		
14	Fixings pack		
15	User Manual		

#### **ASSEMBLY**

- 1. Screw the tailstock spindle into the tailstock as shown in Fig 1.
- Note: A left-hand thread is used for this.
- 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 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.
- 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 centre-line of the lathe.
- 6. Avoid turning timber which 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 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.

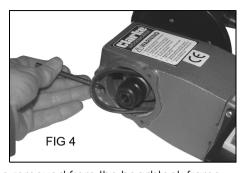
- 1. Vacuum clean any dust or shavings that accumulate in or on the motor.
- 2. Check all cables periodically and ensure that they are in good condition and not cracked.
- 3. Check the tightness of the mounting bolts.
- 4. Check the drive belt for wear and replace if it is frayed or otherwise damaged.
- 5. Periodically lubricate the tail-stock, 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).
- 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.



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 run.	Overload switch has tripped due to excessive load on the chuck.	Switch off the machine and wait for the components to cool down and the overload to re-set. Then turn the lathe back on and press the re-set button to re-start.
	<ul><li>2. Defective/broken switch.</li><li>3. Damaged power cable.</li></ul>	Send to your Clarke dealer for repair. Send to your Clarke dealer for
	<ul><li>4. Open circuit, loose connections or burned out motor.</li><li>5. Blown fuse or circuit breaker.</li><li>6. Low voltage.</li></ul>	replacement. Replace fuse or re-set circuit breaker. Turn off other machines on same circuit. Check the power supply for correct voltage. Use another circuit or have a qualified electrician upgrade the power supply.
Motor will not start and fuses or circuit breaker trip out.	Short circuit in motor or power cable.     Incorrect fuses or circuit breakers.	Send to your Clarke dealer for repair. Replace with correct fuse or circuit breaker for the circuit.
Motor fails to reach full power.	Overloaded circuit.     Unsuitable extension cable	Turn off other machines & retry Replace with correct size extension cable.
Motor stalls.	<ol> <li>Short circuit in motor.</li> <li>Incorrect fuses or circuit breakers.</li> <li>Overloaded circuit.</li> <li>Low voltage.</li> </ol>	Send to your Clarke dealer for repair. Replace with correct fuse or circuit breaker for the circuit. Turn off other machines & retry Check the power supply for correct voltage. Use another circuit or have a qualified electrician upgrade the service
Noisy operation	<ol> <li>Incorrect belt tension.</li> <li>Dry spindle.</li> <li>Loose drive pulley.</li> </ol>	Adjust belt tension. See Replacing the belt on p11. Lubricate the spindle. Tighten the retaining set- screw on the pulley.

#### **DECLARATIONS OF CONFORMITY**



# 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 statuary requirement(s): Electromagnetic Compatibility Regulations 2016

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 Supply of Machinery (Safety) Regulations 2016

The following standards have been applied to the product(s):

EN 55014-1:2017+A11, EN 55014-2:2015, EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1, EN ISO 12100:2010 The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the profroment/oned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The UKCA mark was first applied in: 2022

13" Wood Lathe (Variable Speed) Product Description:

**CWL325V** 

Model number(s): Date of Issue: Signed:

¥ Serial / batch Number:

04/04/2022

J.A. Clarke

Director

Page 1 of 1



Fitzwilliam Hall, Fitzwilliam Place, Dublin 2

# **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):

Electromagnetic Compatibility Directive

2014/30/EU

2006/42/EC

Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive Machinery Directive 2011/65/EU

The following standards have been applied to the product(s):

EN 55014-1:2017+A11, EN 55014-2:2015, EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1, EN ISO 12100:2010 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

The CE mark was first applied in: 2007

13" Wood Lathe (Variable Speed)

Product Description:

CWL325V Model number(s):

Serial / batch Number: Date of Issue:

04/04/2022

Signed:

J.A. Clarke

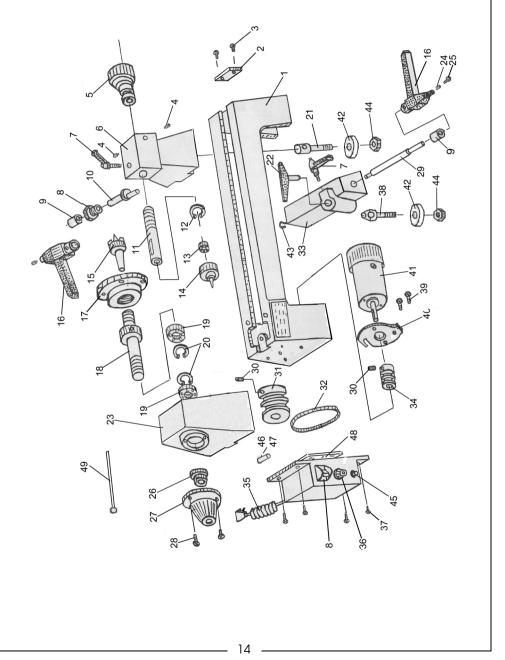
Director

CWL325V CE Clarke DOC 040422

Page 1 of 1

CWL325V UKCA Clarke DOC 040422

### **PARTS DIAGRAM**



#### **PARTS LIST**

PART NO	DESCRIPTION	PART NO	DESCRIPTION
1	Bed	26	Headstock Spindle Nut
2	Retaining End Plate	27	End Cover
3	Self-tapping Screw	28	Screw
4	Grub Screw	29	Eccentric Shaft
5	Handwheel	30	Setscrew
6	Tailstock Frame	31	Drive Pulley
7	Small Locking Lever	32	Drive Belt
8	Threaded Boss	33	Tool Rest Base
9	Sleeve	34	Motor Pulley
10	Eccentric Shaft	35	Power Cable
11	Tailstock Spindle	36	Speed Controller
12	Circlip	37	Screw
13	Bearing	38	Tension Bolt
14	Tailstock Spur Centre	39	Socket Head Bolt
15	Headstock Spur Centre	40	Motor Mount Plate
16	Large Locking Lever	41	Motor
17	Faceplate	42	Retaining Disc
18	Headstock Spindle	43	Circlip
19	Bearing	44	Retaining Nut
20	Circlip	45	Circuit Breaker
21	Tension Bolt	46	Fuse (10 amp)
22	Tool Rest	47	Fuse Holder
23	Headstock Body	48	Printed Circuit Board
24	Coil Spring	49	Drift Rod
25	Special Bolt		

#### A SELECTION FROM THE VAST RANGE OF





#### Cranes, body repair kits, transmission jacks for all types of workshop use.

**WATER PUMPS** Submersible, electric and engine driven

#### for DIY, agriculture and industry. **POWERTOOLS**

Angle grinders, cordless drill sets, saws and sanders.

#### STARTERS/CHARGERS

All sizes for car and commercial use.



## PARTS & SERVICE: 0208 988 7400

**Parts Enquiries** Parts@clarkeinternational.com

**Servicing & Technical Enquiries** Service@clarkeinternational.com

SALES: UK 01992 565333 or Export 00 44 (0)1992 565335

Clark international Hemnall Street, Epping, Essex CM16 4LG www.clarkeinternational.com