

AW355WL

Woodturning Lathe



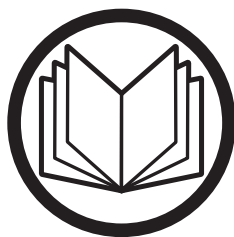
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EU DECLARATION OF CONFORMITY

Object of the Declaration: Axminster Workshop AW355WL Woodturning Lathe (107701)		
UK: Supply of Machinery (Safety) Regulations 2008 as amended Electromagnetic Compatibility Regulations 2016 as amended	EU: Machinery Directive 2006/42/EC EMC Directive 2014/35/EU	UK Address: Axminster Tool Centre Ltd Weycroft Avenue Axminster. Devon EX13 5PH
Standards used or references to the other technical specifications in relation to which conformity is declared: ISO 12100:2010, EN 60204-1:2018, ISO 19085-1:2021 IEC 55014-1:2021, IEC 55014-2:2021, IEC 61000-3-2:2019+A1, 61000-3-3:2013+A1+A2		European Address: Axminster Tool Centre Ltd A-201. Haagsche Hof Parkstraat 83 The Hague 2514 JG Netherlands
Date: 7/29/2025 Place: Axminster	 Ian Styles Product Director	

The symbols below advise the correct safety procedures when using this machine.



Fully read manual
and safety instructions
before use



Ear protection
should be worn



Eye protection
should be worn



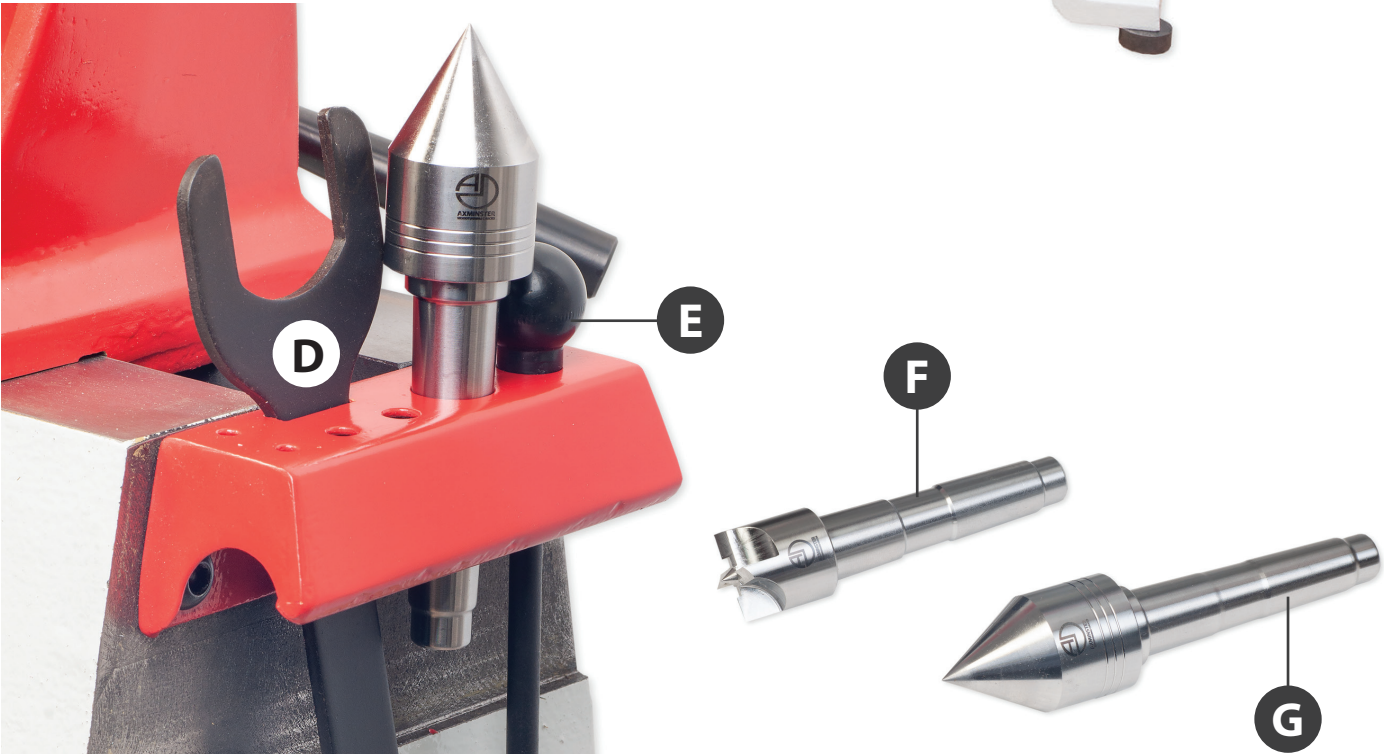
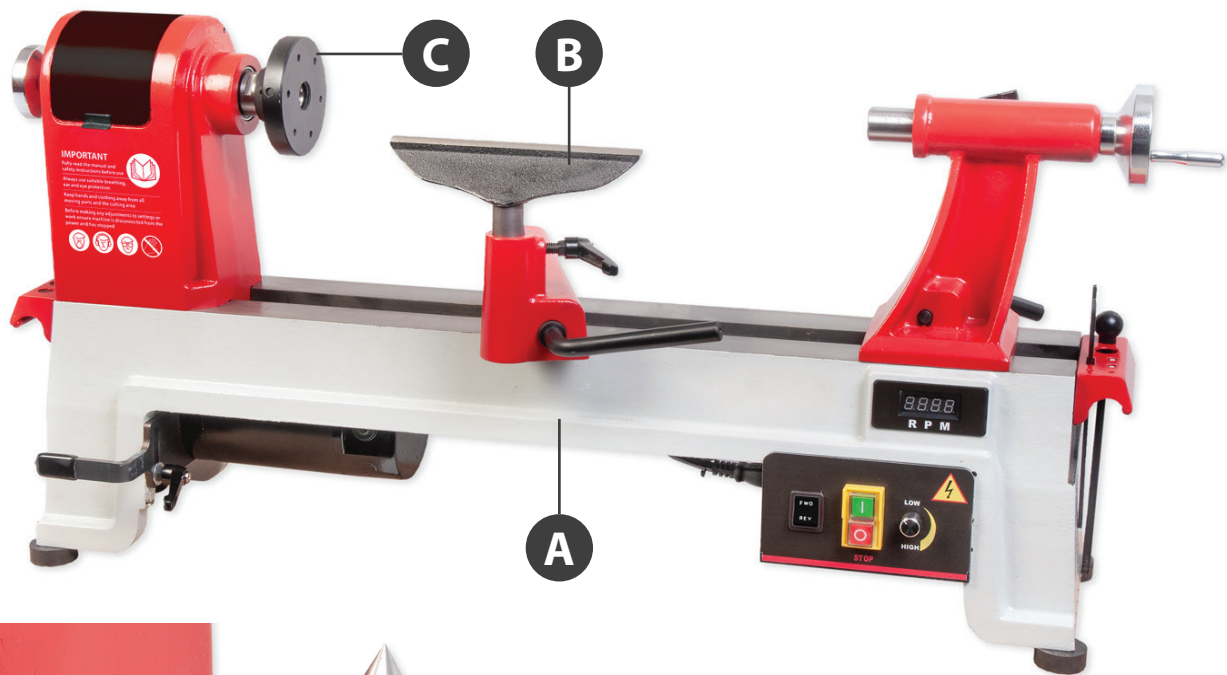
Dust mask
should be worn



HAZARD

WHAT'S INCLUDED

Quantity	Item	Part	Model Number
			AW355WL
1	Woodturning Lathe	A	
1	204mm Tool Rest	B	
1	100mm Faceplate	C	
1	Spanner	D	
1	Push Rod	E	
1	Axminster 4 Prong Drive Centre	F	(Code 340106)
1	Axminster Standard 60° Live Centre	G	(Code 340203)
1	Power Cable		
1	Instruction Manual		



GENERAL INSTRUCTIONS FOR 230V MACHINES

The following will enable you to observe good working practices, keep yourself and fellow workers safe and maintain your tools and equipment in good working order.



WARNING!! KEEP TOOLS AND EQUIPMENT OUT OF REACH OF YOUNG CHILDREN



KEEP WORK AREA AS UNCLUTTERED AS IS PRACTICAL. UNDER NO CIRCUMSTANCES SHOULD CHILDREN BE ALLOWED IN WORK AREAS.

Mains Powered Tools

- Tools are supplied with an attached 13 Amp UK 3 pin plug, fitted with 13 amp fuse.
- Inspect the cable and plug to ensure that neither are damaged. Repair if necessary by a suitably qualified person.
- Do not use when or where it is liable to get wet.

Workplace

- Do not use 230V a.c. powered tools anywhere within a site area that is flooded.
- Keep machine clean.
- Leave machine unplugged until work is about to commence.
- Always disconnect by pulling on the plug body and not the cable.

- Carry out a final check e.g. check the cutting tool is securely tightened in the machine and the correct speed and function set.
- Ensure you are comfortable before you start work, balanced, not reaching etc.
- Wear appropriate safety clothing, goggles, gloves, masks etc. Wear ear defenders at all times.
- If you have long hair wear a hair net or helmet to prevent it being caught up in the rotating parts of the machine.
- Consideration should be given to the removal of rings and wristwatches.
- Consideration should also be given to non-slip footwear etc.
- If another person is to use the machine, ensure they are suitably qualified to use it.
- Do not use the machine if you are tired or distracted.
- Do not use this machine within the designated safety areas of flammable liquid stores or in areas where there may be volatile gases.
- Check cutters are correct type and size, are undamaged and are kept clean and sharp, this will maintain their operating performance and lessen the loading on the machine.
- **OBSERVE....** make sure you know what is happening around you and **USE YOUR COMMON SENSE.**

SPECIFIC SAFETY INSTRUCTIONS FOR WOODTURNING LATHES

1. Do not use 'split' work pieces.
2. Always start at the lowest speed when starting a new task.
3. Try to render a new work piece "round" (or as close as is practical) before turning.
4. Check that the tool rest is at or slightly below the centre line of the work piece.
5. Check the work piece is securely mounted in the lathe before switching on the power.
6. Rotate the work piece by hand, to check that it is: centralised, clear of the tool rest, not 'split' or has loose knots.
7. Where lathes have the facility to be reversed; check the machine is rotating in the correct direction.
8. If your lathe has the facility to run in reverse, you must ensure that the mounting accessories (chucks, faceplates etc.,) can be 'locked' onto the lathe mandrel, and in the case of chucks have some form of security device to prevent them 'unwinding' during reverse operation.
9. Make sure your tools are stored/racked away from the turning area of the lathe. Do not reach over a rotating work piece at any time.
10. Do not 'dig in' or try to take too large a cut.
11. Do not leave the lathe running unattended; or leave the machine until everything is stopped.
12. If you are turning between centres with 'softish stuff', check and reposition the tailstock centre frequently.

Code	107701
Model	AW355WL
Rating	Home Workshop
Power	750W 230V 50Hz 1ph
Speed	250-3,550rpm
Spindle Thread	T38 M33 x 3.5 mm
Taper Tailstock	2MT
Distance Between Centres	510 mm
Max Diameter over Bed	355 mm
Tool Rest Stem Diameter	25.4 mm
Overall L x W x H	1,040 mm x 370 mm x 480 mm
Weight	57 kgs

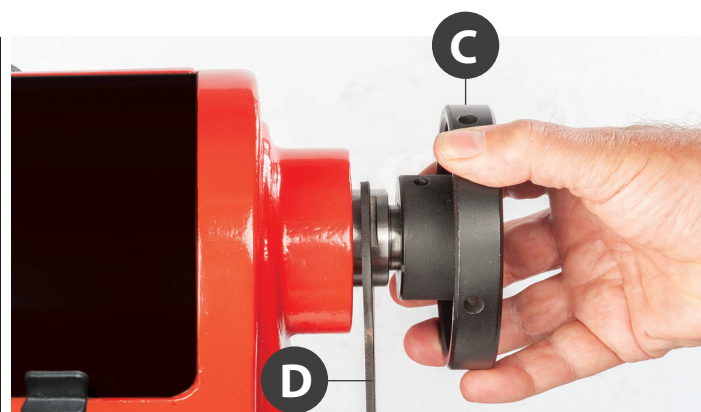
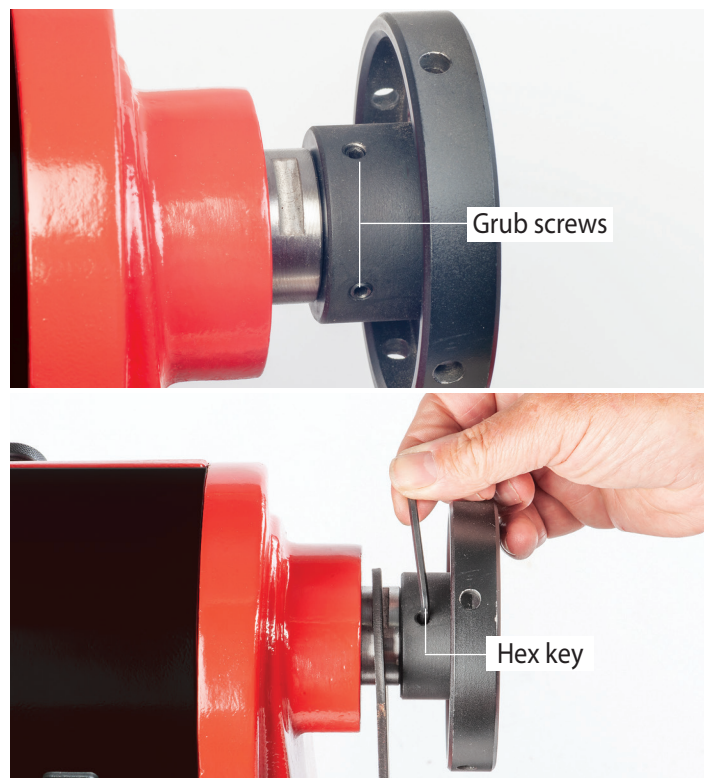
ASSEMBLY

The machine and its accessories will arrive coated with corrosion preventative grease. This will need to be cleaned from the machine, its components and accessories prior to it being set up. Use proprietary de greaser. Wear overalls, coverall and eye protection before cleaning.

95% of the machine comes fully assembled, all that remains is to fit the four prong drive centre (F) and the 60° live centre (G) and tool rest (B).

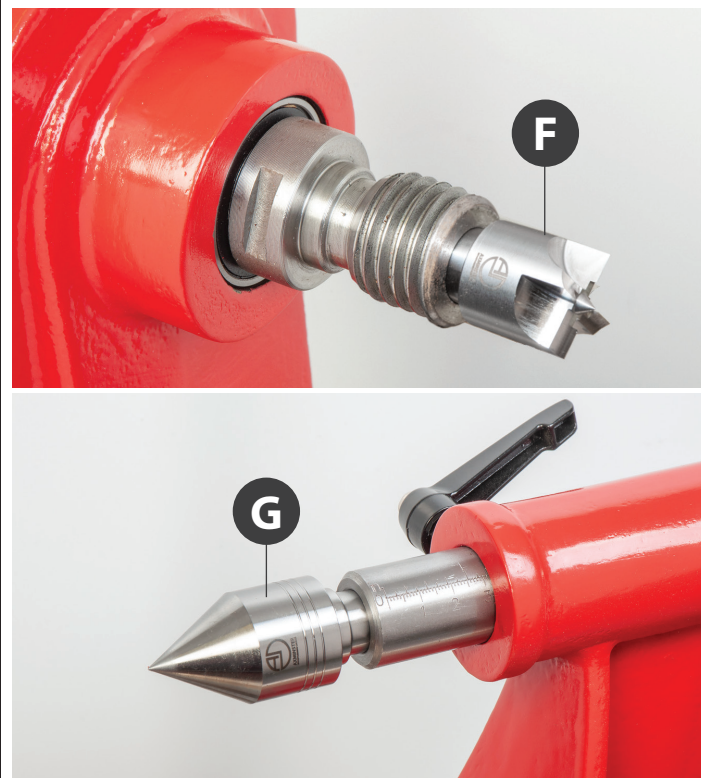
1. Locate the four prong drive centre (F) and live centre (G).
Remove the faceplate (C) by loosening the two grub screws and using the spanner (D), unscrew the faceplate from the spindle left handed thread and place aside, see fig 01-02-03.

Fig 01-02-03



2. Insert the drive centre (F) into the spindle and repeat for the live centre (G) into the tailstock barrel, see fig 04-05.

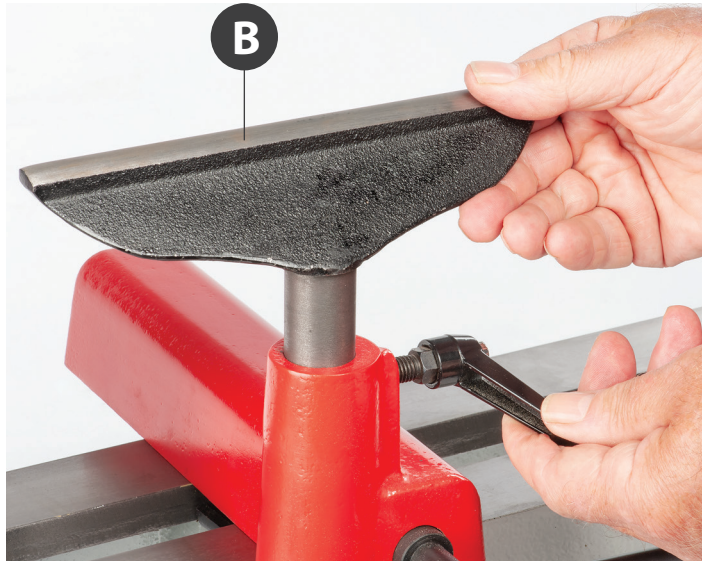
Fig 04-05



ASSEMBLY

3. Inset the tool rest (B) into the machined hole on the banjo arm and secure using the lift and shift handle lock, see fig 06.

Fig 06



4. Place all accessories into one of the two tool holders, see fig 07-08.

Fig 07-08

Tool holder/carrying handle



5. Locate the power cable and insert the connector into the three pinned socket to the side of the control box, see fig 09.

Fig 09



6. Place the lathe on a work bench and adjust the four feet until level.

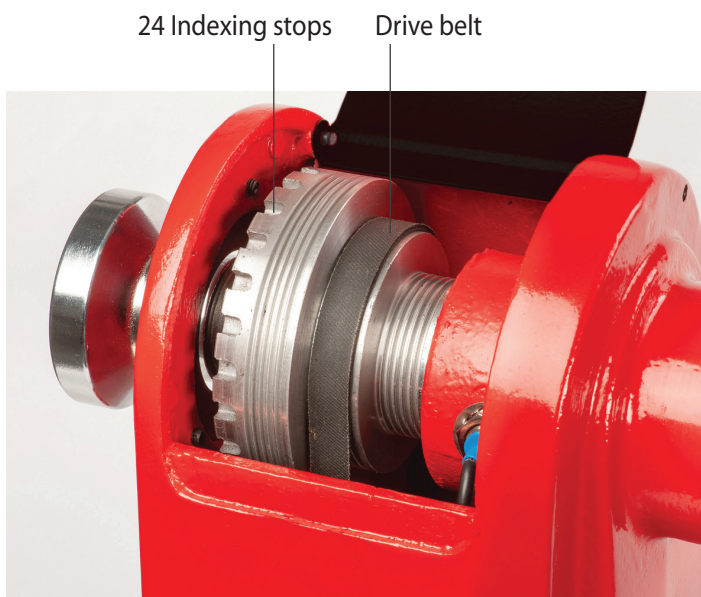
Optional Accessories (see page 14)

Please contact our Customer Service Department for further details or visit our website at axminster.co.uk.



Floor stand assembly

ILLUSTRATION AND PARTS DESCRIPTION



Spindle pulley with a 24 indexing stop facility



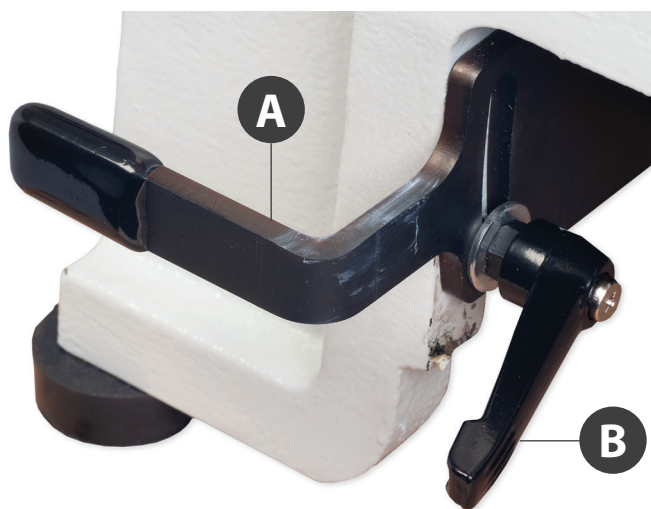
ILLUSTRATION AND PARTS DESCRIPTION



Forward/Reverse switch to change the spindle's direction (A)
(DO NOT operate this switch while lathe is in motion)
 ON/OFF NVR switch (B)



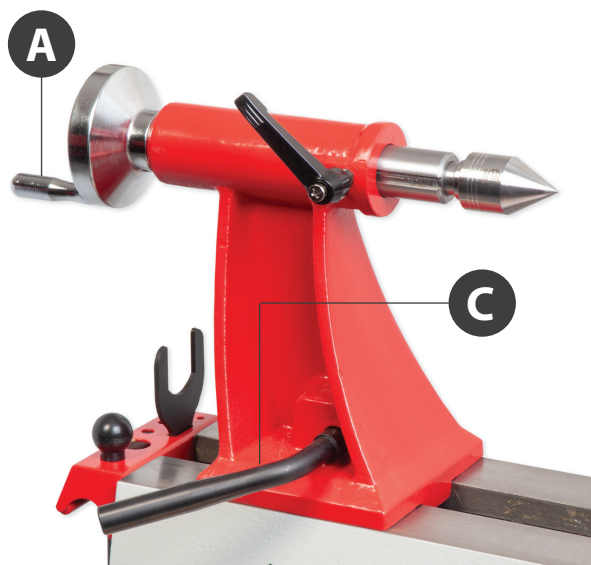
Variable speed control knob
 250-3,550rpm



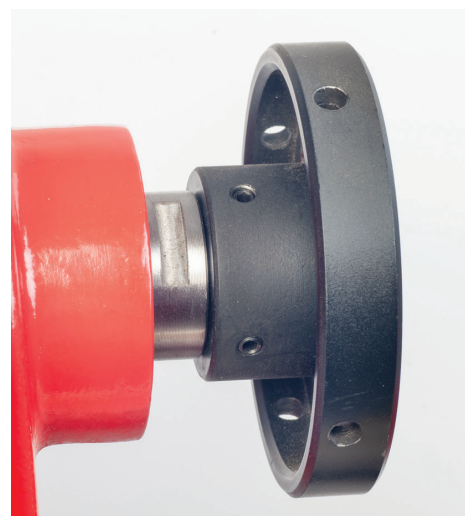
Handle (A) to raise/lower the motor for drive belt position
 Motor lock (B)



Tool holder/carrying handle
 on either end of lathe bed



Tailstock operating handle (A, Tailstock barrel lock (B),
 Tailstock handle lock (C)

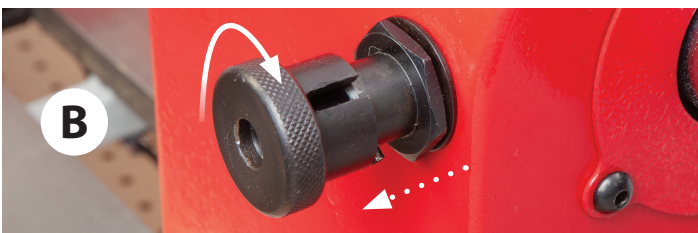
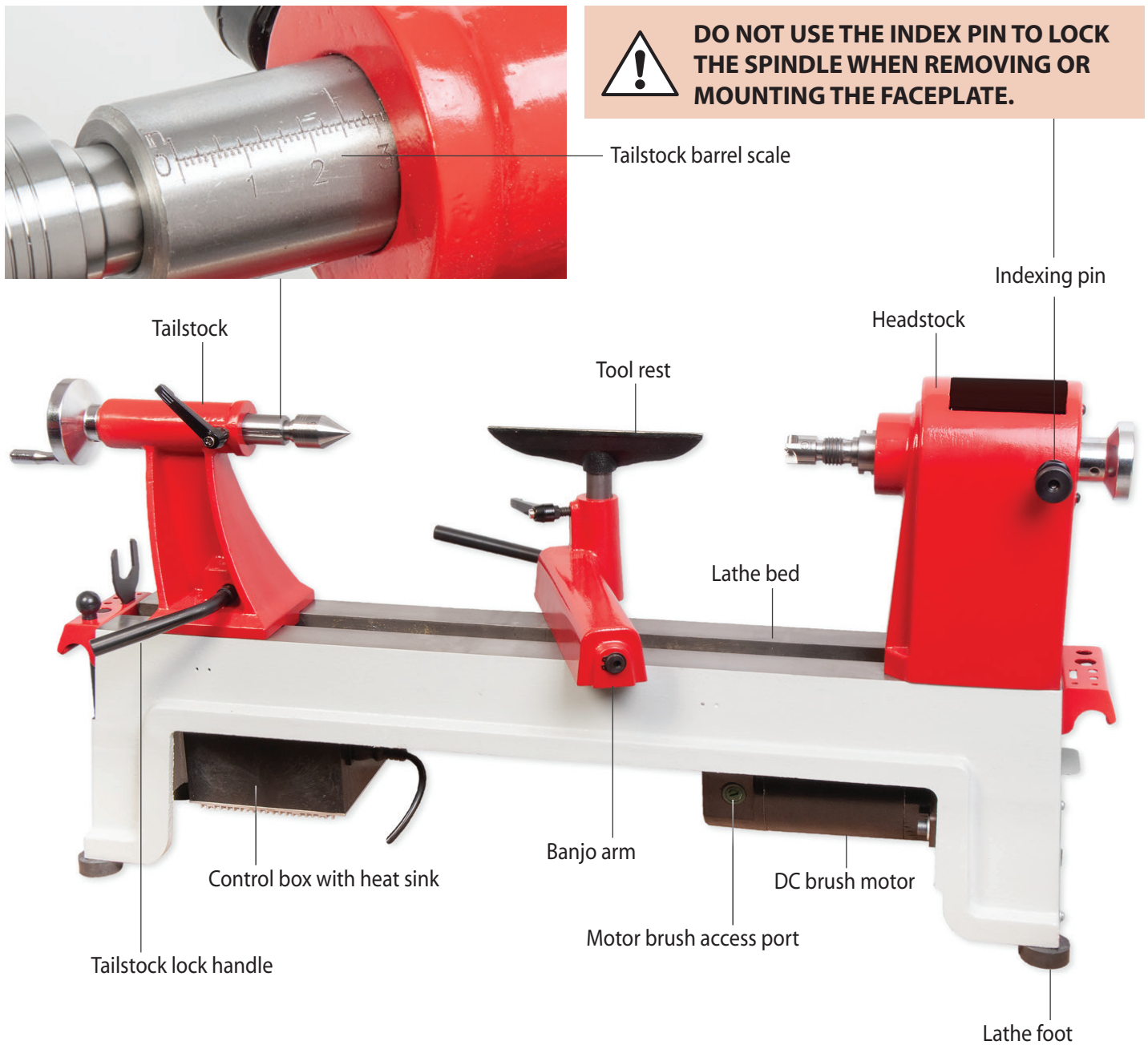


100mm Faceplate

ILLUSTRATION AND PARTS DESCRIPTION



DO NOT USE THE INDEX PIN TO LOCK THE SPINDLE WHEN REMOVING OR MOUNTING THE FACEPLATE.



Indexing pin (A) locked
Indexing pin (B) unlocked



Lower motor pulley access plate

OPERATING INSTRUCTIONS



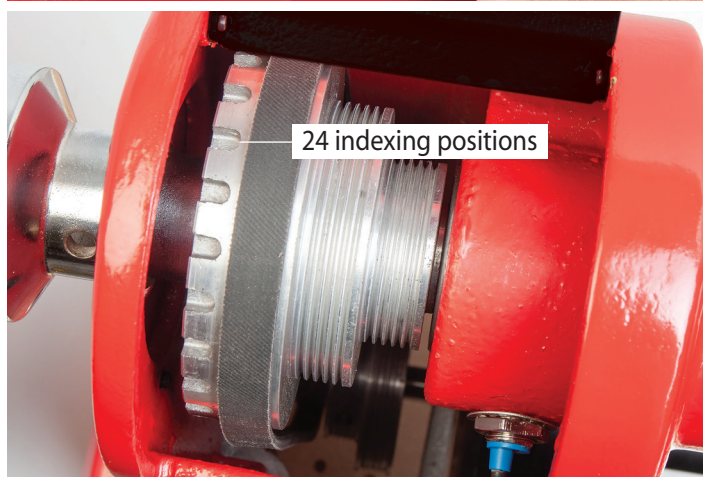
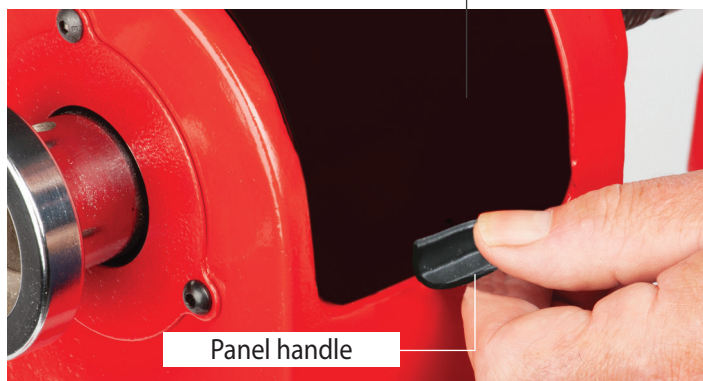
DISCONNECT THE LATHE FROM THE MAINS BEFORE CONTINUING!

Indexing Facility

The indexing facility is useful for fluted columns, clock faces and accurate hole positioning. The index pulley has 24 positions, see fig 10-11.

Fig 10-11

Access panel



1. Open the headstock access panel, pull out the indexing pin knob to the rear of headstock and turn until its in the unlocked position, see fig 12.

Fig 12



2. Rotate the spindle by turning the headstock operating wheel, lower the indexing pin knob until the pin engages into one of 24 indexing slots, see fig 13-14. Replace the access panel.

Fig 13-14



Removing the Drive & Live Centres

Locate the 'push rod' (E), insert it through the centre of the spindle operating wheel to push out the drive centre (F), see fig 15. Repeat for the live centre (G)

Fig 15



Adjusting the Tailstock

Fig 16

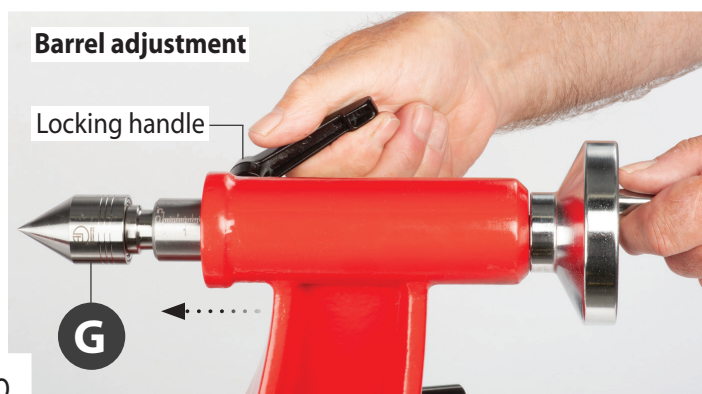


Fig 17



DISCONNECT THE LATHE FROM THE MAINS BEFORE CONTINUING!

Mounting the Faceplate



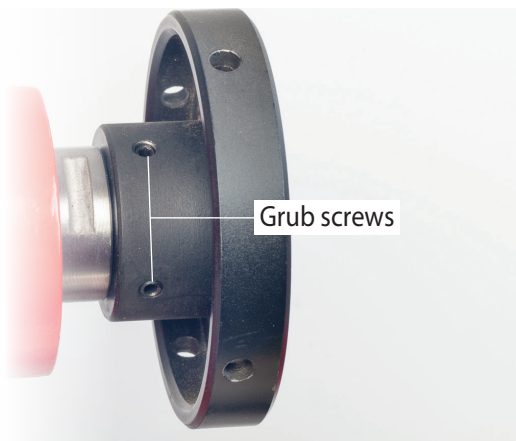
DO NOT USE THE INDEX PIN TO LOCK THE SPINDLE WHEN REMOVING OR MOUNTING THE FACEPLATE.



NOTE: LOOSEN THE TWO GRUBSCREWS SUFFICIENTLY WHEN MOUNTING OR REMOVING THE FACEPLATE.

1. Loosen the two grab screws sufficiently to prevent it snagging on the spindle, see fig 18.

Fig 18



2. Screw the 'faceplate' (C) on the spindle, remember right hand thread. Using the spanner (D) to hold the spindle, tighten the grab screws to secure the faceplate, see fig 19.
3. Note: The faceplate will be tight after use. To remove follow steps 1-2, insert the push stick rod (E) into one of the machined holes in the faceplate. Hold the spanner (D) in place and pull the push stick (E) towards you, see fig 20.

Fig 19

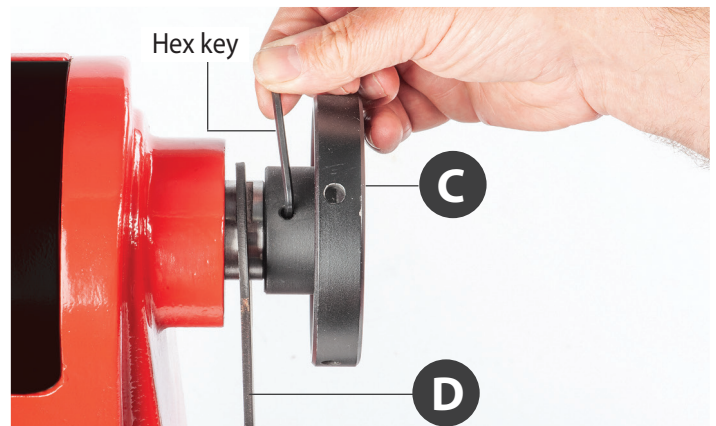
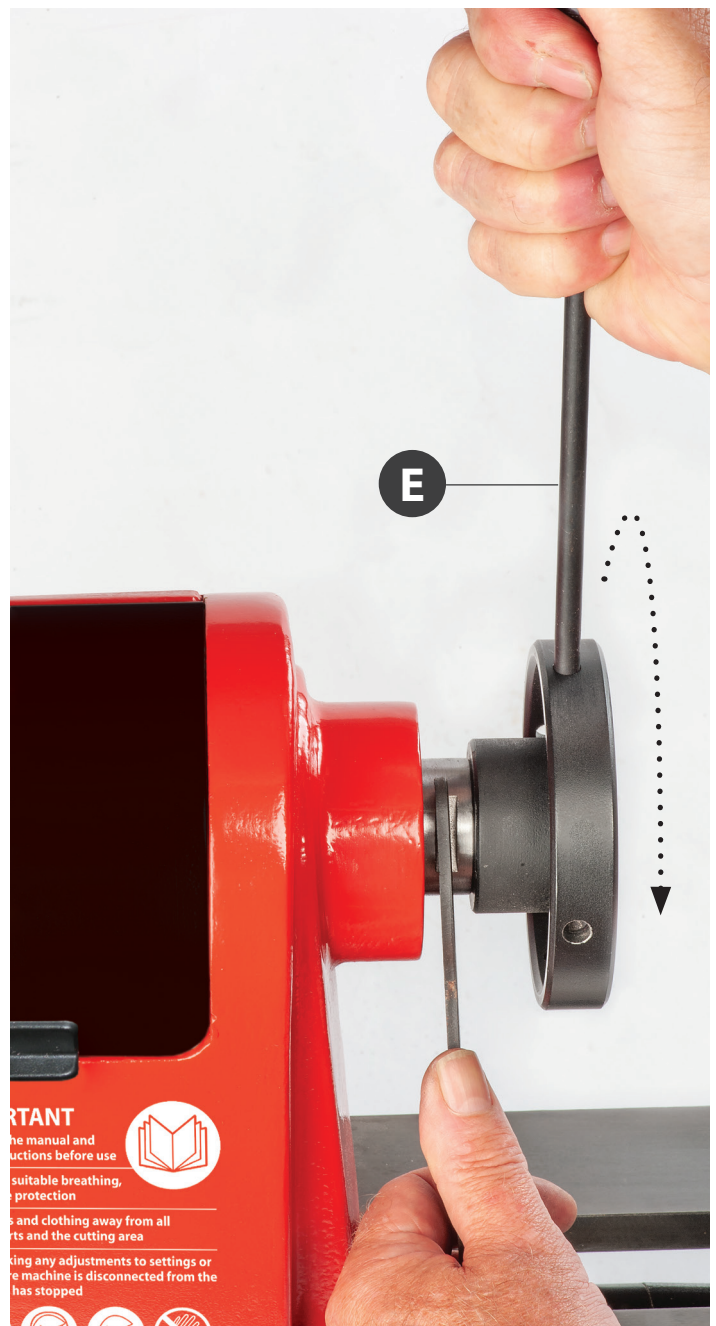


Fig 20



IMPORTANT

Read the manual and instructions before use

Wear suitable breathing, eye and hearing protection

Keep hands and clothing away from all moving parts and the cutting area

After making any adjustments to settings or after the machine has stopped, disconnect it from the mains



OPERATING INSTRUCTIONS

Changing the Lathe Speed



DISCONNECT THE LATHE FROM THE MAINS BEFORE CONTINUING!

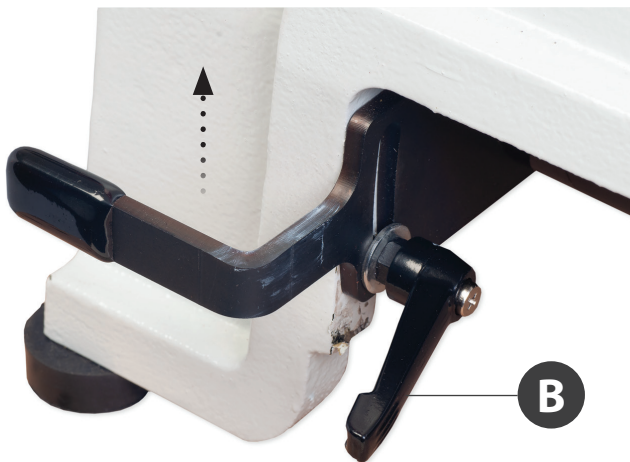
1. Open the access panel, see fig 10-11. Loosen the four screws holding the motor pulley access plate (A) and remove, see fig 21-22.

Fig 21-22



2. Release the motor locking handle (B) and lift up the motor, retighten the locking handle, see fig 23-24.

Fig 23-24



3. Reposition the drive belt to one of the three positions, see fig 25-26-27. Note: The speed chart shows approximate speeds.

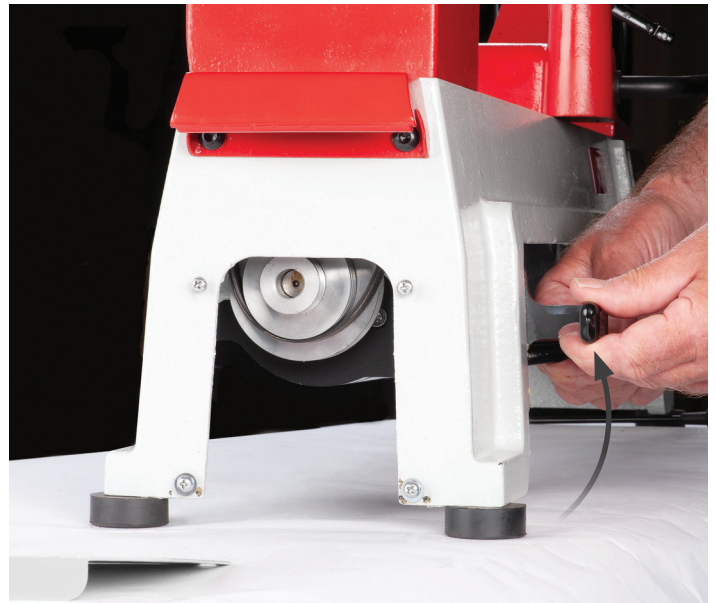
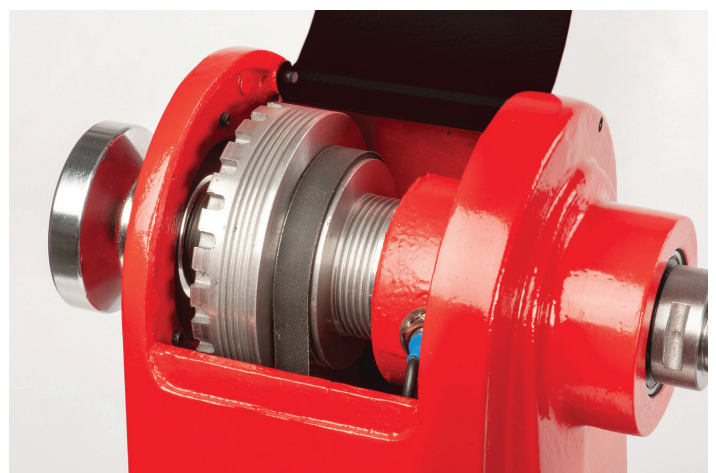
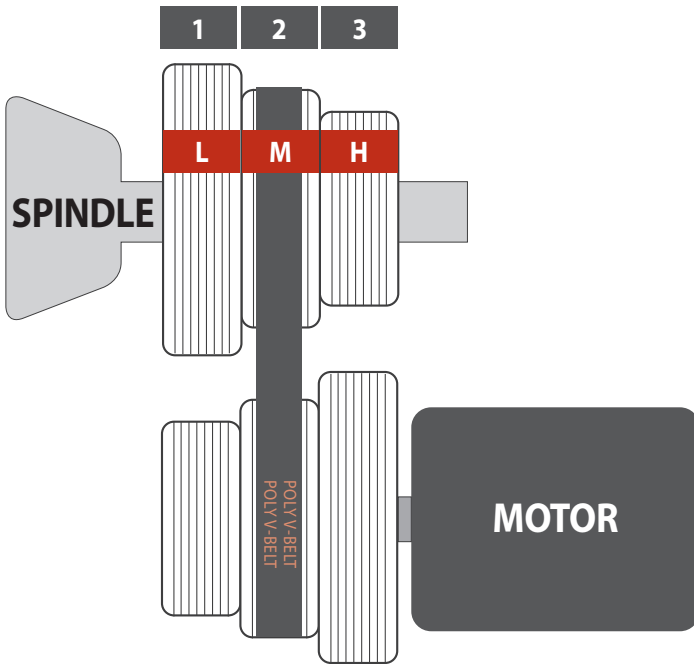


Fig 25-26-27





MAKE SURE THE BELT IS INSERTED CORRECTLY INTO THE PULLEY GROOVES!



Position	Spindle Speed Chart RPM		
1	LOW	250	720
2	MEDIUM	600	1,700
3	HIGH	1,200	3,550

4. Release the clamping handle and press down the motor to retention the belt, secure in place.

5. Replace the motor pulley access plate and close the headstock access panel.

Control Box

1. The control box comprises a Forward/Reverse switch, ON/OFF NVR buttons and a variable speed control dial. Before switching on make sure the indexing pin is disengaged and the speed control dial is turned down to low, see fig 28-29.

Fig 28-29



2. Select 'Forward or Reverse' on the selector switch, DO NOT change direction while in operation, see fig 30.
3. Make sure the work piece is secure and all tools are clear of the work area. Switch on the mains supply and press the NVR 'GREEN' button to start the lathe, see fig 31.
4. Increase the spindle speed, the reading will be displayed on the digital readout indicator, see fig 32. When operation is completed reduce the speed down to 'LOW' and press the NVR 'RED' button to stop the lathe, see fig 31. Switch off the mains supply.

Fig 30-31

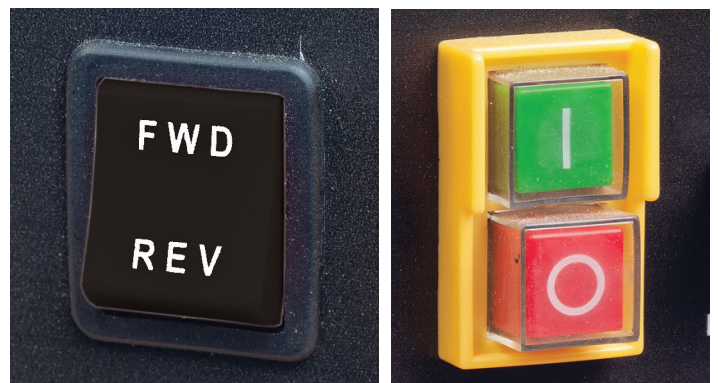


Fig 32



OPTIONAL ACCESSORIES



Code 104794 Floor stand assembly

The floor stand for the Axminster Craft AC355WL wood turning lathe is made from box section steel and simple to assemble and sturdy enough to hold the lathe securely. It is adjustable in height from 610mm-875mm to create a comfortable working height. The feet are splayed back to give plenty of foot space, and are also fitted with rubber feet which are adjustable to accommodate an uneven workshop floor. Unscrew the lathe feet, line up the holes on top of the stand assembly and secure with bolts washer/nuts.

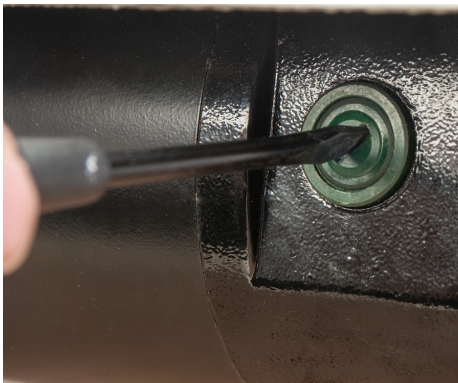
Motor Brushes



DISCONNECT THE LATHE FROM THE MAINS SUPPLY!

1. After 100 hours of use, check the condition of the motor brushes by unscrewing each access port cap in turn, see fig 33.

Fig 33



Remove the access port with a flat headed screwdriver

NOTE: Take careful note of the orientation of the brushes, remember that they have bedded themselves to the profile of the commutator in that position. If you fit them reversed, it can cause excessive sparking and heat until they have re-bedded themselves.

2. Remove the motor brushes and check the condition of the brush head, see fig 34.

Fig 34

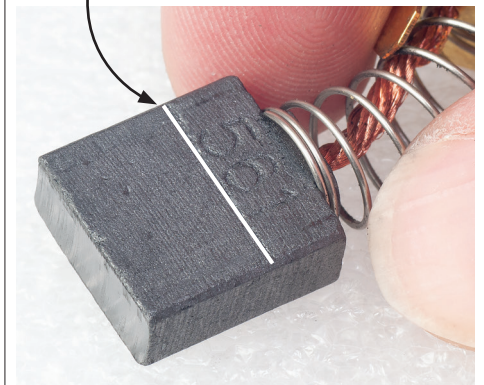


Remove the motor brush and check its condition

3. If they are in good condition, re-fit. If they were worn to the 'Line' replace with new brushes, see fig 35. **For after sales enquires, call 03332 406406.**
4. Replace the new brushes and access port cap screws, connect to mains supply and run the machine off load for approximately 20 minutes to bed the new brushes in.

Line

Fig 35



Replace the motor brush if worn down to the 'Line'



DISCONNECT THE LATHE FROM THE MAINS SUPPLY!

Daily After Use

- Clean wood shavings away from the lathe bed and tool rest.
- Smear a light coat of wax, 'Axminster Machine Wax', code 105806, see fig 36, over the lathe bed to allow the banjo and tailstock to run more smoothly over the bed and to prevent corrosion.
- Spray 'Axc caliber Dry Lubricant', code 503468, over the tailstock barrel/live centre and headstock spindle/chuck after use, see fig 37.



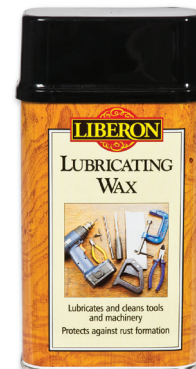
Axminster Machine Wax
Code: 105806



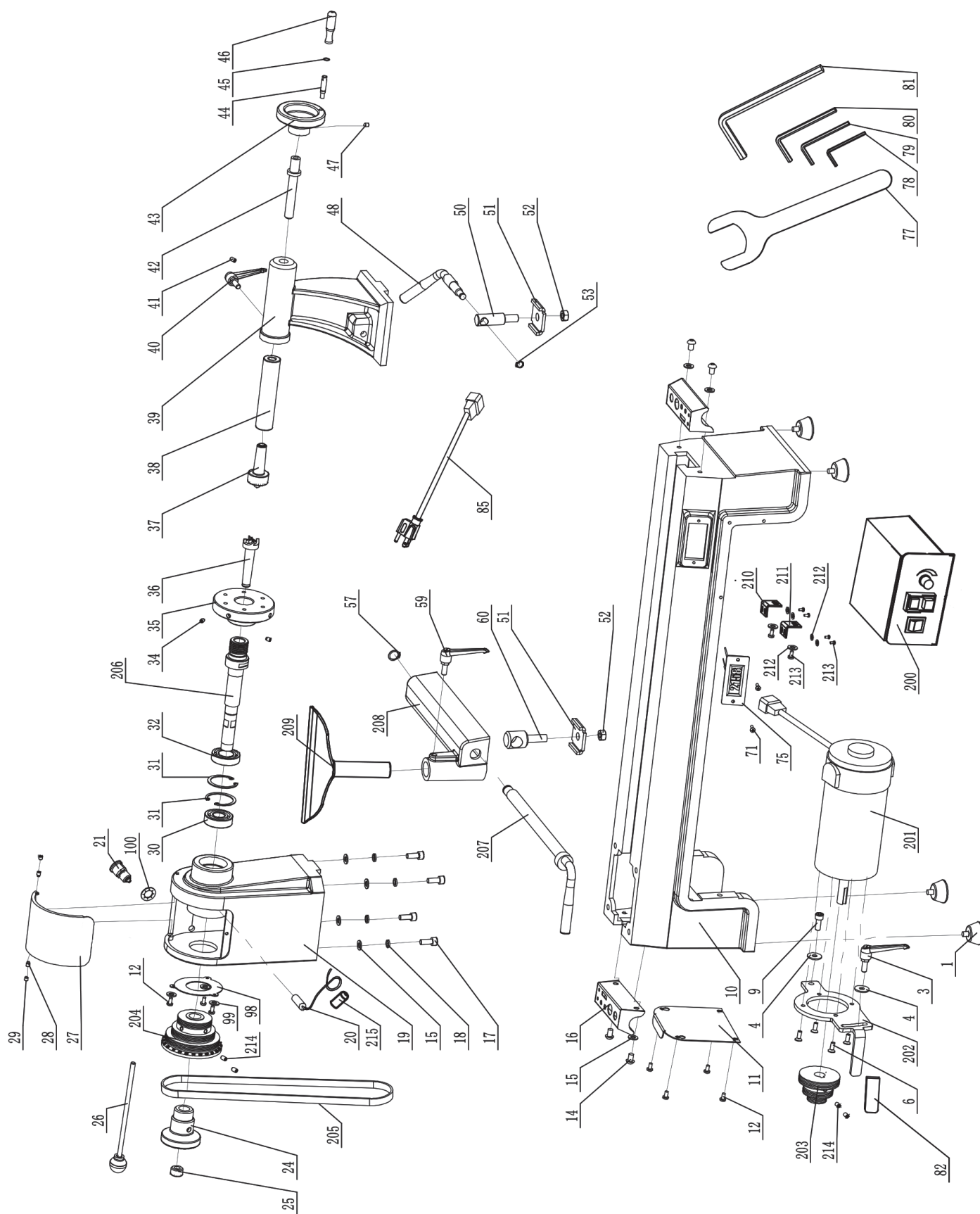
Axc caliber Dry Lubricant
Code: 503468

Monthly

- Check the tension of the belt and adjust, see page 12 for Changing the Belt Speed.
- Check any build up of wood shavings on the motor and spindle pulleys and clean if necessary.
- Use an 'M' class vacuum cleaner to clean the heat sink air vents on the NVR control box assembly.

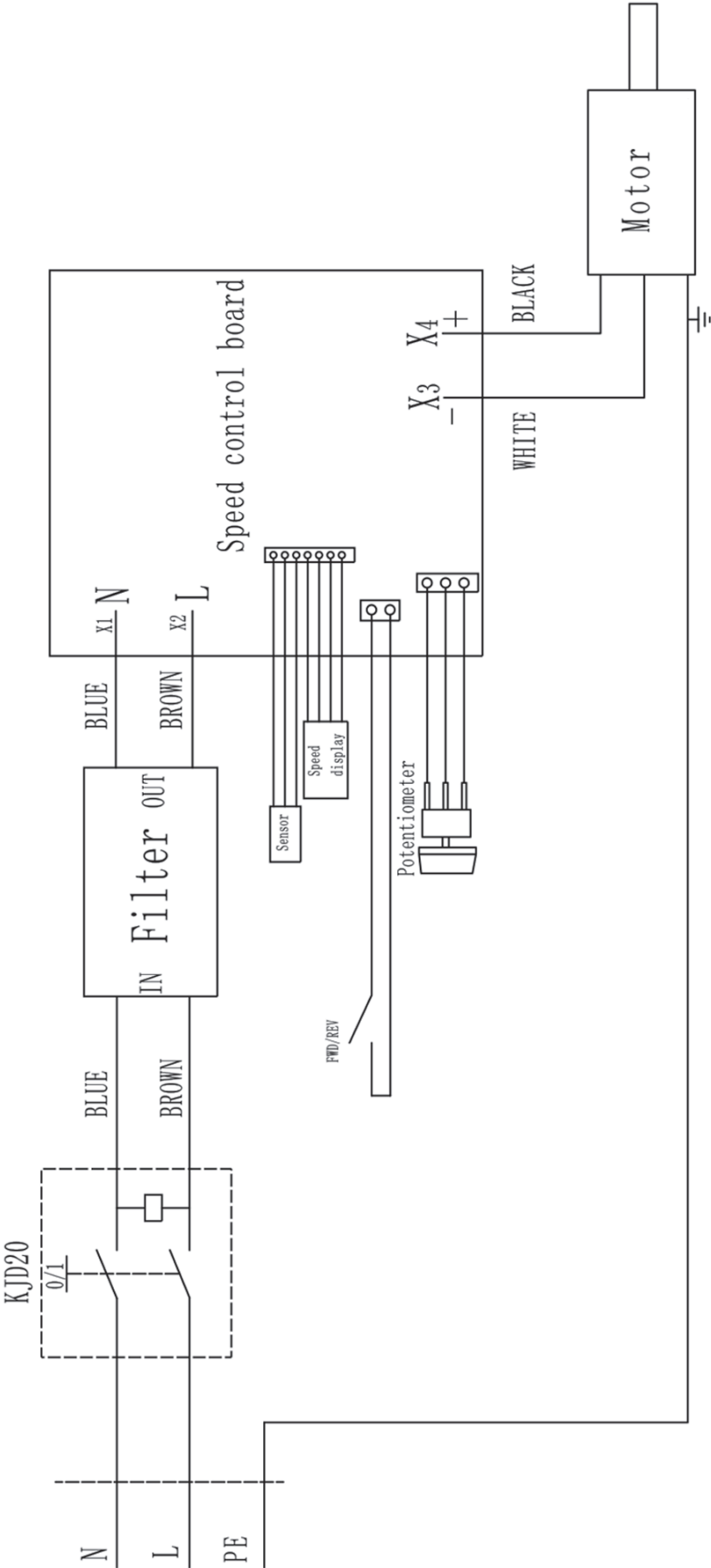


Liberon Lubricating Wax
Code: 600221



PART NO	DISCRIPTION	QTY
1	FOOT	4
3	BELT TENSION LOCK LEVER	1
4	FLAT WASHER	2
6	HDCAP SCREW M6X16	4
9	CAP SCREW M8X16	1
10	BED	1
11	BELT DOOR	1
12	HEX HEAD SCREW M5X10	7
14	HD SCREW M8X12	4
15	FLAT 8MM	8
16	HANDLE	2
17	CAP SCREW M8X20	4
18	SPRING WASHER M8	4
19	HEADSTOCK	1
20	DIGITAL READOUT SENSOR	1
21	LOCATION PIN ASSEMBLY	1
24	HEADSTOCK WHEEL	1
25	LOCKING NUT	1
26	KNOCKOUT ROD ASSEMBLY	1
27	COVER FOR MOTOR PULLEY	1
28	CAP SCREW M5X10	2
29	SET SCREW M5X6	2
30	BEARING 6204	1
31	RING	2
32	BEARING 6005	1
34	CAP SCREW M6X8	2
35	FACE PLATE	1
36	SPUR CENTRE	1
37	LIVE CENTRE	1
38	QUILL	1
39	TAILSTOCK	1
40	QUILL LOCK HANDLE	1
41	HEX HEAD BOLT M8X10	1
42	LEADSCREW	1
43	TAILSTOCK WHEEL	1
44	HANDWHEEL AXLE	1
45	C-RING 8	1
46	HANDWHEEL HANDLE	1

47	SET SCREW M8X10	1
48	TAILSTOCK LOCK LEVER	1
50	TAILSTOCK CLAMP BOLT	1
51	TAILSTOCK CLAMP	2
52	NUT M12	2
53	C-RING	1
57	C-RING	2
59	ADJUSTING HANDLE	1
60	TOOL REST CLAMP BOLT	1
71	PHLP HD SCREW M4X8	2
75	DIGITAL READOUT	1
77	WRENCH	1
78	HEX WRENCH 03	1
79	HEX WRENCH 04	1
80	HEX WRENCH 05	1
81	HEX WRENCH 012	1
82	KNOB	1
85	US/CSA PLUG CORD (WITH USB INTERFACE)	1
98	HEADSTOCK REAR PLATE	1
99	WASHER M5	3
100	INTERNAL TOOTH LOCK WASHER M16	1
200	US DRIVE ASSEMBLY(110V)	1
201	DC-MOTOR	1
202	MOTOR CONNECT PLATE-1	1
203	MOTOR PULLEY-1	1
204	SPINDLE PULLEY-1	1
205	POLY V-BELT	1
206	SPINDLE	1
207	LOCKING BAR FOR TOOL REST	1
208	TOOL REST BASE	1
209	8" TOOL REST	1
210	CONNECT PLATE-2	1
211	CONNECT PLATE-1	1
212	WASHER	6
213	SOCKET HEX HEAD BOLT M5X10	6
214	SOCKET HEX HEAD BOLT M8X10	4



MC1420VDA-WIRING DIAGRAM FOR EUROPE MARKET WITH 1 PHASE POWER



The packaging is suitable for recycling.
Please dispose of it in a responsible manner.



EU Countries Only

Do not dispose of electric tools together with household waste material.
By law they must be collected and recycled separately.



Axminster Tools, Axminster Devon EX13 5PH

axminstertools.com