CARP 1420 MIDI 14" x 20" WOOD LATHE. Variable speed tabletop model

PLEASE READ THE INSTRUCTION MANUAL CAREFULLY BEFORE USING THE MACHINE, KEEP THIS INSTRUCTION MANUAL FOR FUTURE REFERENCE.

ALSO READ: Safety instructions for the CARP lathes

ALSO READ: Maintenance instructions for the CARP lathes

Table of contents

1. Technical Specification

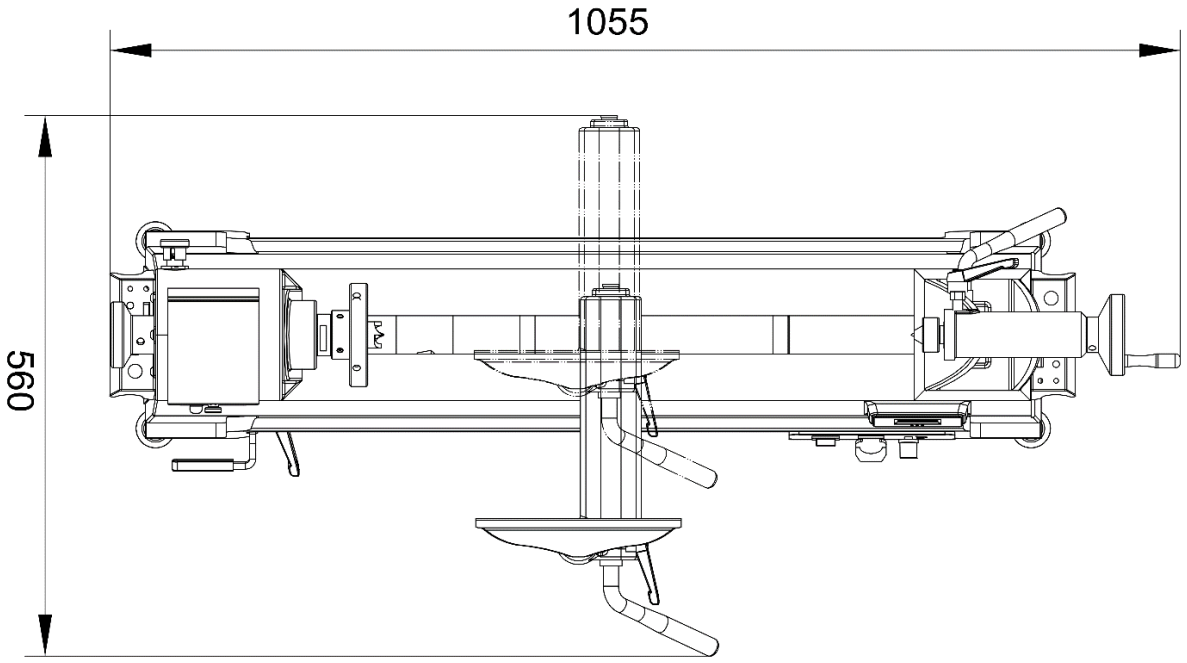
The following information represents the size and weight information and the machine data approved by the manufacturer.

1.1 Specifications

Model Number	**CARP 1420 MIDI**	
Product dimensions:		
Net weight	50KG	
Width (sideways to side) x Depth (front to back) x Height	41-1/2X22X19 inch	
Shipping Dimensions:		
Type	Cardboard box	
Gross weight.	52.5 KG	
Length x Width x Height	970*530*300mm	
Must be shipped upright	Yes	
Electric:		
Power Requirement	220V 60HZ 1PH 230V 50HZ 1PH	
Power Cord Length	2.3 m	
Plug included	Yes included plug	
Switch Type	Push button ON/OFF Switch	
Engines:		
Electrical power	750W	
Amplifiers	4.8 A	
Type Motor	Universal brush type	
Drive	Belt drive	
Usage Information		
Turning diameter above bed	36 cm	
Turning diameter above the chisel support	26 cm	
Distance between centers	51 cm	
Number of spindle speeds	Variable	
Speed range of the main spindle	250-3550 rpm	
Shaft cone	MT2	
size of the spindle thread	M33 x 3.5mm	
Hollow spindle diameter	10 mm	
Type of centers included	4 tooth drive center and cup/cone counter center	
Indexed Axis	15 degrees.	
Number of index points	24	

Model Number	CARP1420	
Toolrest Information		
Toolrest width	20 cm	
Toolrest support diameter	1 inch	
Length of toolrest post	10 cm	
Height of the toolrest support	5 cm	
Tailstock Information		
Taper tailstock	MT2	
Type Supplied Tailstock Center	Live/Cup/Cone Center	
Max displacement of pinole	90 mm	
Other Related Information		
Bed width	13 cm	
Clamping plate size	10 cm	

1.2 Dimensions



2. Mounting

The wood lathe is delivered pre-assembled. After unpacking, the lathe must be installed.

Transport the wood lathe in the packing box to a place near the final installation site before unpacking. If the packaging shows any signs of possible shipping damage, take the necessary precautions not to damage the machine when unpacking. If any damage is discovered, the carrier and/or shipper must be notified immediately in order to make any claims.

2.1 Needed for installation

The following items are required, but not included, for the installation/assembly of this machine.

Description Quantity

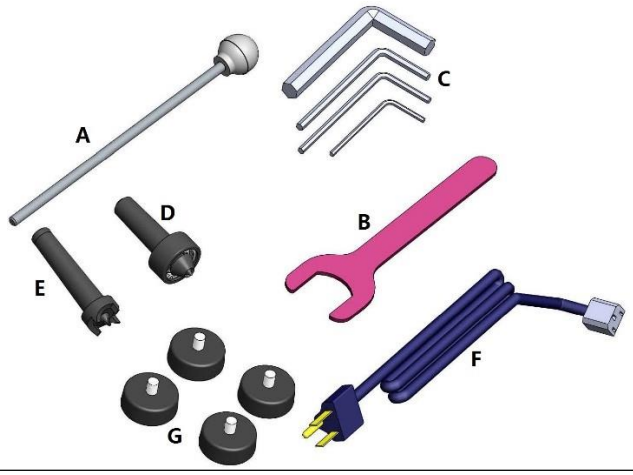
- Extra people. 1
- Goggles. 1
- Cleaner/degreaser. ..... If necessary
- Disposable shopping rags. ..... If necessary

This machine is heavy. DO NOT overexert yourself while unpacking or moving the machine – ask for help!!

2.2 Unpacking the Machine

Inspect the machine completely and carefully, and ensure that all materials, such as shipping documents, instructions, and accessories supplied with the machine, have been received. Below is a list of items shipped with your machine. Before beginning the installation, lay out these items and take inventory.

A. Ejection bar. 1
B. Spanner 32 mm. 1
C. Allen wrenches 3, 4, 5, 12 mm. 1
D. Live Center MC2. 1
E. Drive center MC2.....1
F. Power cord. 1
G. Rubber feet M8-1.25 x 15. 4



If you can't find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packing materials during unpacking or are pre-installed at the factory.

3.3 Clean

The unpainted surfaces of the machine are coated with a robust anti-rust agent that prevents corrosion during transport and storage.
This rust preventant works extremely well, but it will take some time to clean. Be patient and clean your machine thoroughly.

Basic Rust Prevention Removal Steps:
1. Put on safety goggles.
2. Coat the anti-rust agent with a generous amount of cleaner/degreaser and then leave it on for 5-10 minutes.
3. Wipe the surfaces. If your cleaner/degreaser is effective, the anti-rust agent can be easily wiped off. If you have a plastic paint scraper, scrape off as much as you can first and wipe off the rest with the cloth.
4. Repeat **steps 2-3** as needed until clean, then coat all unpainted surfaces with a high-quality metal protector to prevent rust.
5. Spray the bed with a cleaning rust-absorbing lubricatant. For example, Unispray from Agealube. (also available at dehoutdraaierij.nl)

Avoid chlorine-based solvents, such as acetone or brake parts cleaner, which can damage painted surfaces.

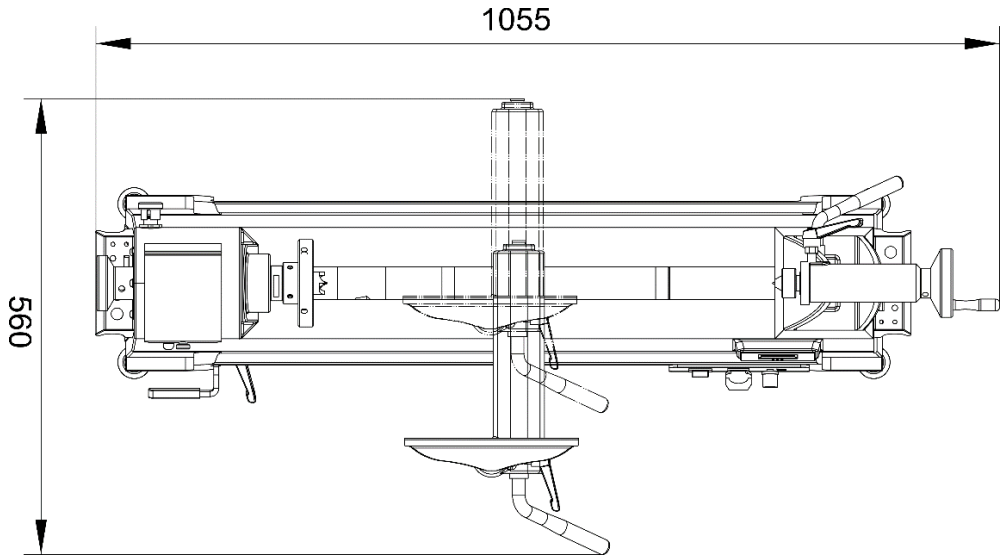
3.4 Pitch

3.4.1 Load on the workbench

Refer to the machine's data sheet for the specifications for your machine's weight and footprint. Some workbenches may require additional reinforcement to support the weight of the machine and workpiece material.

3.4.2 Placement

Consider the expected dimensions of the workpiece and the additional space required for additional stands, work tables, or other machines when determining a location for this machine in the workshop. Below is the minimum amount of space required for the machine.

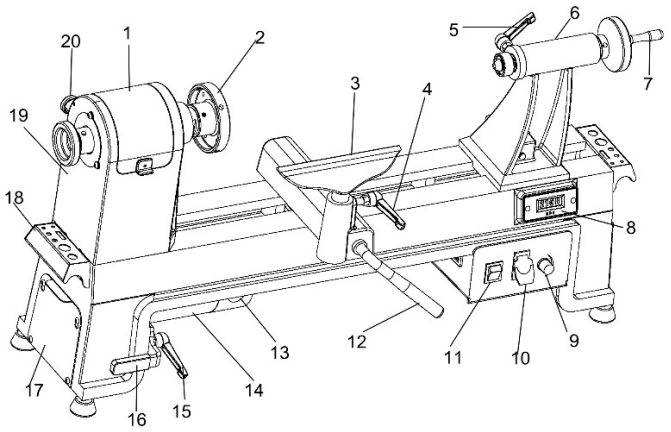

1055
560

3.5 mounting

The machine must be fully assembled before it can be used. Before beginning the assembly process, refer to **Needed for Installation** and gather all the items listed. To ensure that the assembly process goes smoothly, first clean all parts that are covered or coated with heavy-duty rust inhibitor.

3.5.1 Know Your Wood Lathe

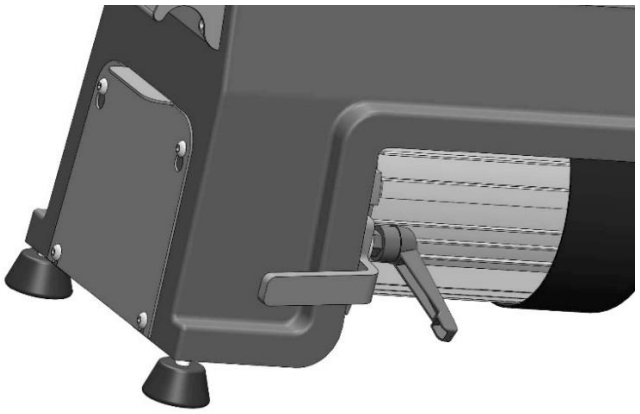
CARP 1420:



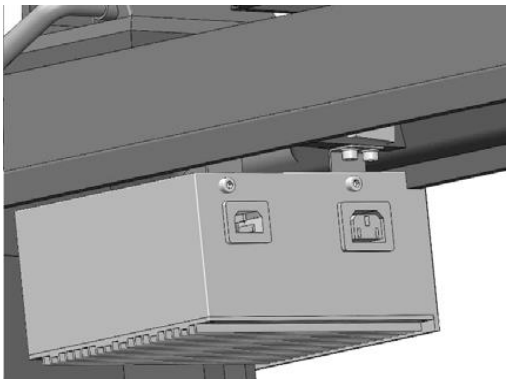
1. Access to belt	11. Forward/reverse switch
2. Faceplate	12. Banjo Locking Lever
3. Toolrest	13. Carbon brush cap
4.Locking lever for toolrest	14. Engine
5. Pinole Locking Lever	15. Belt tension lock lever
6. Tailstock	16. Belt tension lever
7. Tailstock handwheel	17. Access to Pulley
8. Digital RPM readout	18. Accessory holder (not included)
9.Speed regulator	19. Fixed head
10. ON/OFF switch	20. Spindle lock (rear)

3.5.2 To assemble the machine

1. Install (4) rubber feet into the holes in the bottom of the legs and adjust the feet so that the lathe is level without rocking.



2. Plug the end of the power cord into the wall outlet on the back of the control box.



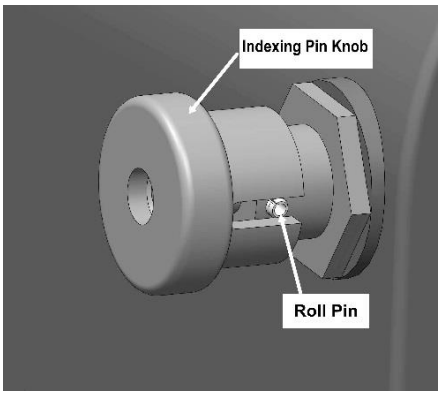
3.6 Initial commissioning

Once assembly is complete, start the machine to ensure that it is properly connected to the power and that the safety components are working correctly. If you find an unusual problem during the test run, stop the machine immediately, unplug the power cord, and troubleshoot the problem BEFORE using the machine again. The troubleshooting table in the SERVICE section of this guide may help.

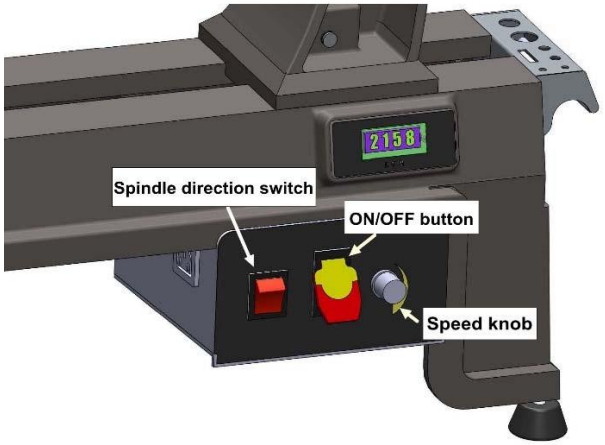
The test run consists of checking that the engine starts up and runs correctly.

To test the machine:

1. Remove all adjustment tools away from the machine.
2. Pull out the knob of the indexing pin and turn it so that the pawl sits on the roller pin. This disables the index pin button.



3. Move the F-R switch to the neutral position (0) and turn the RPM knob to minimum.
4. Connect the machine to the power supply.



FOR CARP 1420 MIDI

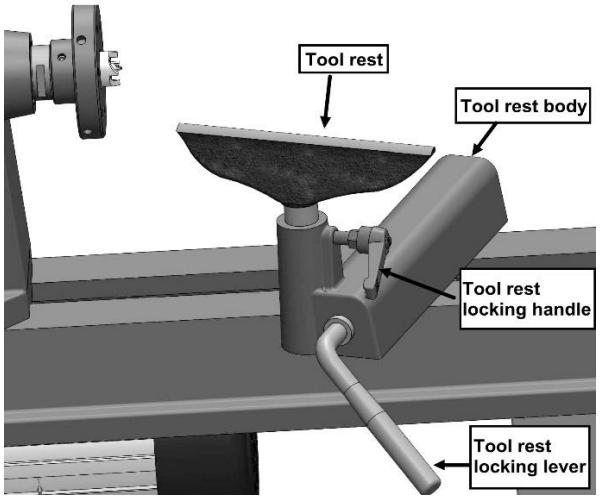
6. Check that the machine is working correctly by moving the rotational direction switch to the forward (down) position, pressing the ON button, and then slowly turning the speed dial clockwise. The digital readout should light up and the spindle should rotate downwards toward the front of the lathe.
7. Turn the spindle speed dial all the way counterclockwise.
8. Press the OFF button.
9. Move the rotation direction switch to the reverse (up) position, press the ON button, and slowly turn the spindle speed knob clockwise.
10. When used correctly, the machine runs smoothly with virtually no vibration or rubbing noises. The spindle should rotate up to the back of the lathe.
11. Press the OFF button.

3.7 Adaptation

3.7.1 Tool Support Adjustment

You can adjust the position, height, and angle of the tool rest to your liking.
1. Loosen the locking lever to slide the tool rest over the lathe bed. Tighten the handle securely when the tool rest is correctly positioned. NOTE: There is a nut on the underside of the tool rest that must be tightened periodically to properly tighten the tool rest locking lever.

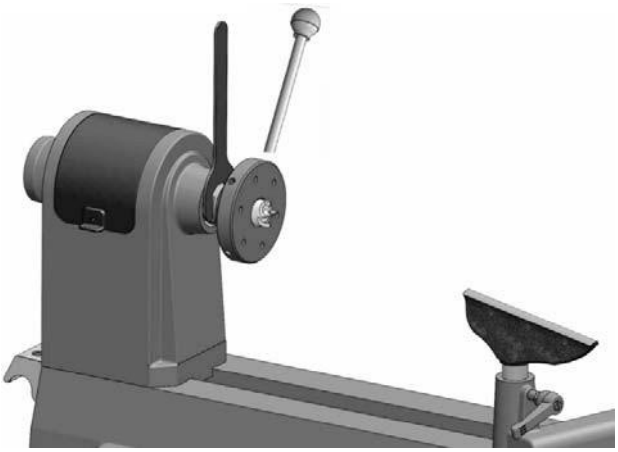
2. The locking lever of the small tool rest locks the chisel support. Loosen the handle to position the tool rest at the specific angle or height. Tighten the handle securely when the tool rest is correctly positioned.



3.7.2 Setting up the faceplate

1. Screw the faceplate onto the wood and rotate the faceplate onto the spindle by turning it clockwise as far as it will go, then tighten the two set screws with an Allen wrench.
2. If necessary, lock the spindle by snapping the knob into the deep groove. Insert the knockout bar into a hole on the side of the faceplate and use the wrench to fully tighten the faceplate. **To remove the faceplate:**
1. Loosen the two faceplate set screws.
2. Lock the shaft and insert the knockout bar into the hole on the side of the faceplate. Use the wrench to unscrew the faceplate by turning it towards the operator.

CAUTION: Do not leave the faceplate on the lathe when not in use. Rust and dirt can cause it to get very stuck.

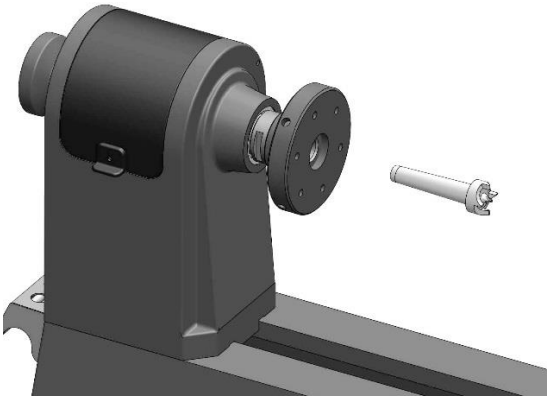


3.7.3 Setting up the drivecenter

1. Make sure that the mating surfaces of both the cleat and the Morse cone are clean. You can use an acetone-dampened cloth to remove dirt, oil, etc.
2. Hammer the center of the drivecenter into the workpiece using a rubber mallet or a piece of scrap wood.

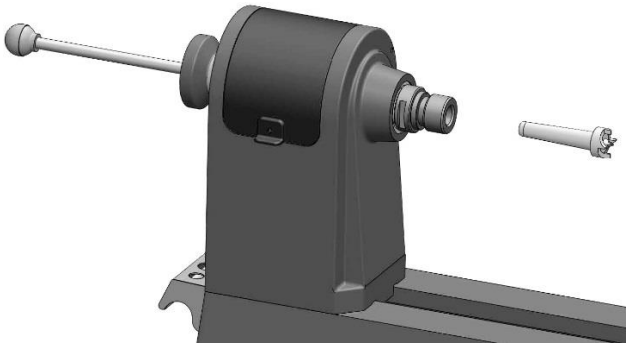
CAUTION: Never drive the workpiece against the drive center with a hamer while the center is in the head.

3. Push the drive center into the spindle



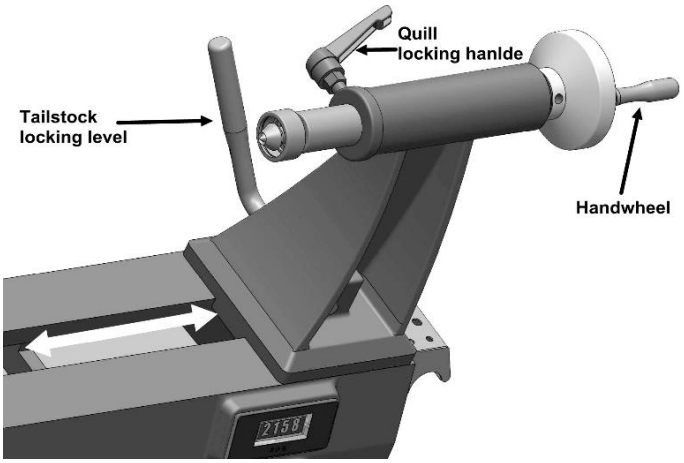
To remove the cleat:

1. Hold the drivecenter to prevent it from falling. If necessary, use a cloth to protect your hand from the sharp teeth.
2. Insert the ejection rod through the spindle hole to tap out the drivecenter.



3.7.4 Tailstock adjustment

Loosen the tailstock locking lever and slide the tailstock along the lathe bed into the desired position. Retighten the locking lever.
Loosen the spindle locking lever just enough to release the tailstock shank. Turn the handwheel clockwise to move the pinole forward and counterclockwise to retract the pinole. Retighten the pinole locking lever.

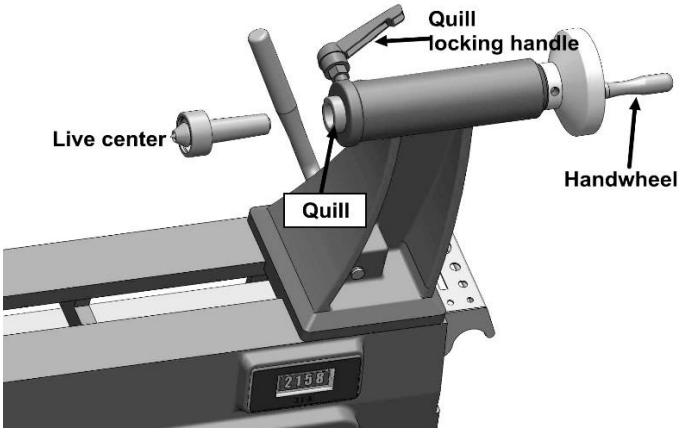


3.7.5 Installing the Live Center

1. Rotate the tailstock handwheel clockwise a few times to move the pinole forward.
2. Make sure the surfaces are clean. Push the center (live center) into the pinole. NOTE: If the tailstock pinole is fully reversed, the live center will be ejected. This is normal. Reassemble the live center by extending the pinole about 1 inch and pushing the live center into place.

To remove the live center:

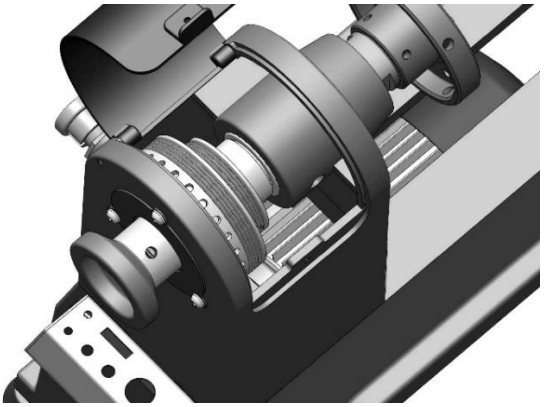
1. Turn the handwheel counterclockwise to retract the pinole (Quill) until the pinole detaches from the pinole.



3.7.6 Indexing / Spindle Locking

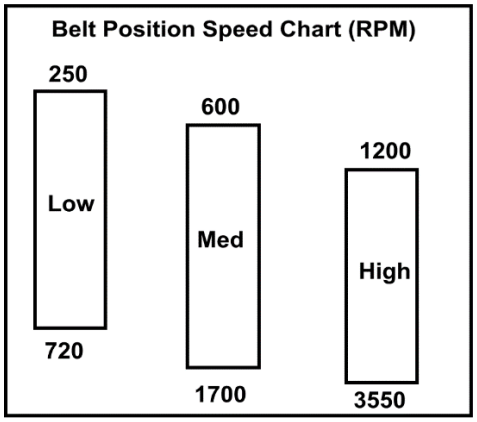
Indexing is used to create evenly distributed features in the workpiece while keeping the shaft locked. There are 24 index positions in the pulley, each 15° apart.

Place the spindle lock in the locked position to maintain the certain index point. CAUTION: Be sure to DISCONNECT the spindle lock before restarting the lathe. Never start the lathe with the pin in the spindle pulley!!



3.7.7 Adjusting the speed

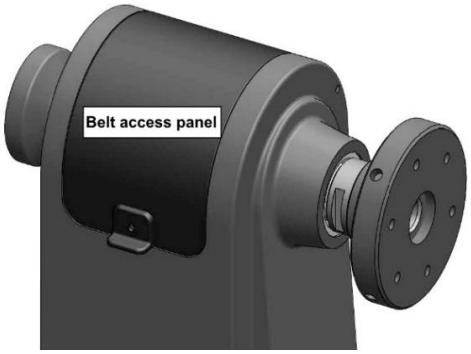
CARP1420 MIDI: Three speed ranges: 250-720 RPM, 600-1700 RPM, and 1200-3550.

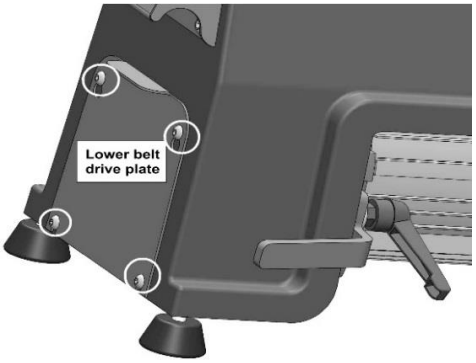


CARP 1420 MIDI

Always start with slower speeds for coarse cuts and larger workpieces. Use higher speeds for refined cuts and small jobs. Set the suitable speed range by adjusting the belt position. Change the speed within a speed range using the speed adjustment knob. The speed is displayed on the digital speed read-out on the front panel.

1. When changing the belt, be sure to turn off and disconnect the lathe.
2. Loosen the knob at the top of the head and open the belt drive access panel.
3. Loosen (but do not remove) the four screws securing the lower belt drive plate to the left side of the head. Lift and remove the lower belt drive plate.





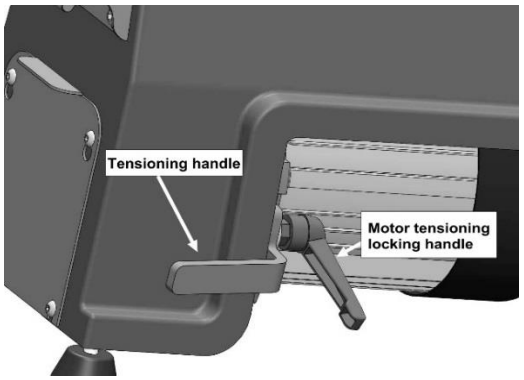
4. Loosen the motor tension locking lever.

NOTE: The screw in the center of the locking lever can be loosened to rotate the locking lever to an optimal position.

5. Pull the tension lever up to release the tension on the belt. It may help to clamp a piece of wood or other support underneath the tension lever to hold it in place while adjusting the belt position.

6. Adjust the position of the belt on both the upper and lower drive pulley to the desired speed range setting. Make sure the belt is aligned vertically on the upper and lower pulleys.

7. Lower the tension lever back to its original position so that the weight of the motor can put tension on the belt. Tighten the locking lever.



8. Replace the lower belt plate and tighten the screws. Lower the upper belt access panel and tighten the belt access panel knob.

9. Use the speed adjustment knob on the front panel to set the speed within your selected speed range. Use the forward/reverse switch to set the direction of rotation.

3.7.8 Speed Recommendations

A high reach is best when turning small workpieces where a tight finish is required and only light cuts are made. The midrange is a compromise between highs and lows. A low range, which has more torque, is best when turning a workpiece that requires a lot of material to be removed and larger diameters. Use the speed dial to adjust the spindle speed within each range.

- Writing pen rotation – 2500 rpm
- Scale unbalanced 30 cm turning – 500 rpm unless the machine starts to vibrate
- Scale 30 cm balanced turning – 1000 rpm
- Pepper mill turning – 1600 rpm

3. Action

The purpose of this overview is to provide the novice turner with a basic understanding of how the machine is used during operation so that the machine controls/components discussed later in this manual are easier to understand. Due to the general nature of this overview, it is not intended as an instructional guide. Read this entire manual to learn more about specific operations, seek additional training from experienced woodturners, and do additional research outside of this manual by reading "how-to" books, trade journals, or websites.

If you have no experience with this type of machine, we strongly recommend that you take additional training outside of this manual. Read books/magazines or get formal training before starting projects.

To perform a typical operation, the turner does the following:

1. Make sure the workpiece is suitable for turning. There should be no extreme bends, knots, or tears.

2. Prepare the workpiece and cut it to make it approximately concentric.

3. Install the workpiece between the centers or attach it to the faceplate or chuck.

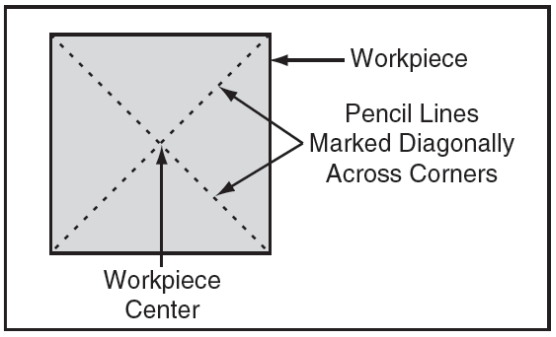
4. Set the toolrest support according to the type of operation and set the minimum distance between the workpiece and the toolrest. Usually about 1 cm.
5. Rotate the workpiece by hand to check that the spindle, and the workpiece can rotate freely over the full range of motion.
6. Check that the pulley speed range is set to the type of wood and the size of the installed workpiece.
7. Check that the speed knob of the spindle is turned all the way counterclockwise so that the spindle does not start at high speed.
8. Check that the spindle rotational direction switch is in the neutral position.
9. Put on goggles or face shields.
10. Set the rotation direction switch to forward or backward, start the spindle, adjust the spindle speed, and begin to rotate gently, holding the tools against the tool rest all the time while cutting or scraping.
11. Turn the lathe ***OFF*** when the woodturning is complete.

TURN OFF THE MACHINE BEFORE CHANGING THE DIRECTION OF ROTATION.

3.1 Spindle turning

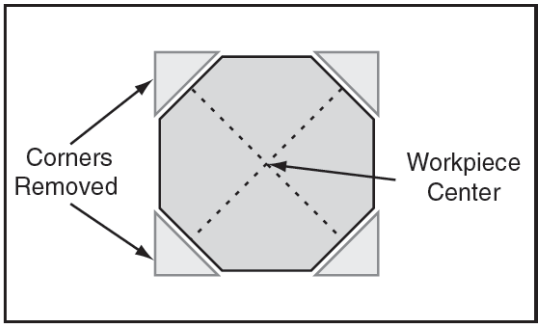
Spindle turning is the operation performed when a workpiece is mounted between centers. The grain of the wood runs from cleat to countercenter. Table legs, tool handles, and candleholders are typical projects that use this operation.

To set up a spindle turning operation:
▲ Find the center of both ends of your workpiece by drawing diagonal lines from corner to corner across the end of the workpiece.

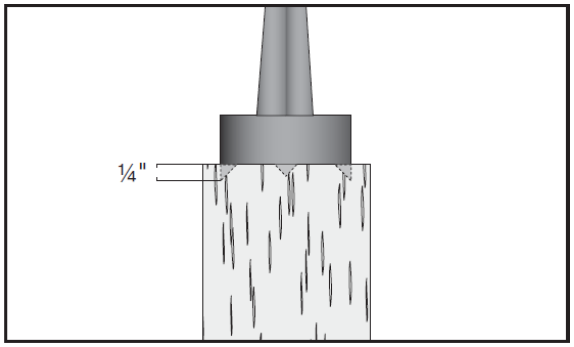


▲ Make a center mark with an awl or other tool and place the wood between the centers.

▲ If your workpiece is larger than 2" x 2", if necessary, cut the corners lengthwise of the workpiece to make turning safer and easier.



6. Make sure that the tines of the drive center penetrate well into the wood.



7. Make sure that the countercenter is properly seated in the wood and lock the pinole
8. Adjust the toolrest properly to the workpiece.
9. Before starting the lathe, you need to turn the workpiece by hand to ensure that there is enough free space on all sides.

3.1.1 Spindle centers

▲ When turning the lathe ON, stand away from the path of the rotating workpiece until the machine is at full speed and you can check that the workpiece does not come loose.

▲ Use the lowest speed when starting or stopping the lathe.

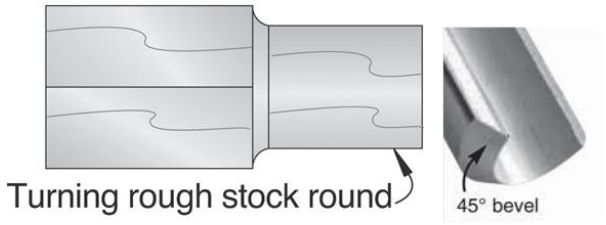
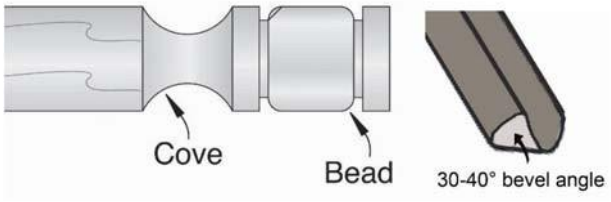
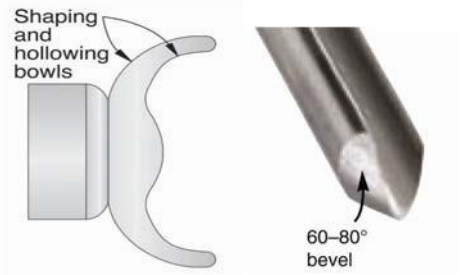
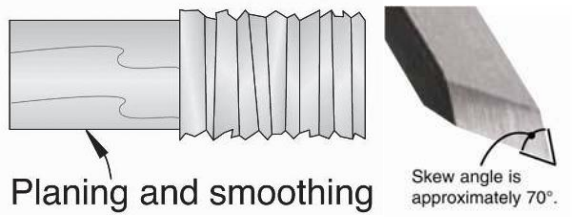
▲ Select the correct speed for the size of the workpiece you are turning.

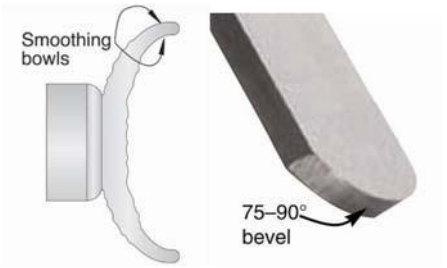
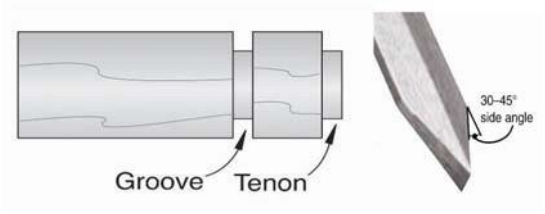
▲ Keep the turning tool on the tool rest for the ENTIRE time it is in contact with the workpiece. ▲ Learn the proper techniques for each tool you will use. If you're not sure how to use the lathe tools, read books or magazines on lathe techniques and seek training from experienced and knowledgeable lathe users.

3.2 Turning tools

Lathe tools come in a variety of shapes and sizes and usually fall into five main categories.

WARNING: Select the appropriate tool for your job. Make sure all tools, chisels, and accessories are sharp before using them.
DO NOT use a blunt or damaged tool!!

▲ Roughing gouge Mainly used for rough roughing of longitudinal timber.	
▲ Profile gouge / Spindle gouge The mold gouge cuts inlets, spheres and free-form contours.	
▲ Bowl gouge The bowl gouge cuts external and internal shapes into transverse wood, such as bowls and bowls.	
▲ Skew A very versatile tool that can be used for almost all longitudinal timber operations	

▲ Schraper This is a flat, with a sharpening angle of about 70 – 80 degrees sharpened tool that comes in different profiles (round nose, spear tip, square nose, etc.)	
▲ Parting tool Used to insert measurements into a workpiece. Or to put a foot on a piece of work. Not used for finishing.	

4. Maintenance

This chapter contains important information about inspection and maintenance

ATTENTION!

Regular maintenance is an essential prerequisite for operational reliability, trouble-free operation, a long service life of the wood lathe and the quality of the products you manufacture. Installations and equipment from other manufacturers must also be in good working order.

4.1 Schedule

For optimal performance of this machine, this maintenance schedule must be strictly followed.

Ongoing	Daily check-up	Monthly check-up
To maintain the risk of injury and proper operation of the machine, if you ever observe any of the items below, immediately shut down the machine and resolve the problem before continuing work: • Loose faceplate or mounting bolts. • Damaged center or tool. • Worn or damaged wires. • Loose machine parts.		• Belt tension, damage or wear. • Cleaning pinole.

4.2 Cleaning

Cleaning this lathe is relatively easy. Vacuum up excess wood chips and sawdust and wipe off the remaining dust with a dry cloth. If resin has accumulated, use a resin-dissolving cleaner to remove it. Protect the unpainted cast iron surfaces by wiping them clean after each use – this will ensure that moisture from wood dust does not remain on bare metal surfaces. For example, use Unispray to clean and lubricate the sofa bed.

4.3 Lubrication

All bearings on this lathe are factory lubricated and sealed and do not require any additional lubrication.
The spindle and pinole can be cleaned and maintained with an oil cloth. DO NOT allow oil to get on the inner mating surfaces of the spindle.
Use the tailstock handwheel to extend the shaft to the furthest position and apply a thin layer of oil to the outside of the pinole. Every few months, remove the pinole from the tailstock and clean the threads and lubricate both parts of the threads.

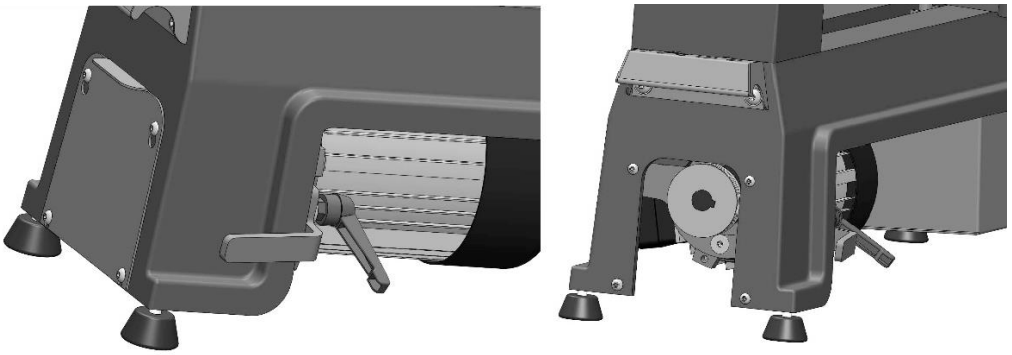
Do NOT allow oil or grease to get on the inside of the matching surfaces of the pinole.

4.4 Belt tensioning and replacement

The belt from the motor to the spindle must be tensioned. If the lathe loses strength while making a cut, the belt should be tightened further. If the belt shows signs of excessive wear or damage, replace it.

4.4.1 Drivebelt

1. Disconnect the machine from the power!
2. Remove the side access door, open the front access door, and release the belt tension lock handle
1. Lift the belt tension lever, then tighten the belt tension lever.

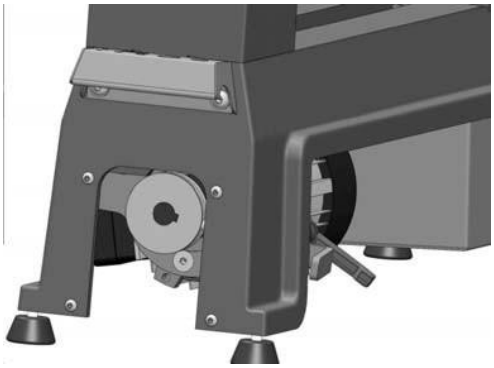


2. Press the belt in the middle with moderate pressure to check the tension. The belt is correctly

tensioned when there is a deflection of about 1 cm.
3. Replace the side access door and close the front access door.

4.4.2 Belt replacement

1. Disconnect the machine from the power!
2. Remove the side access door and open the front access door.
3. Loosen the belt tension lever, release the belt tension, tighten the locking lever, and then remove the belt from the motor pulley.
4. Unscrew and remove the spindle handwheel, then (3) remove the Phillips screws from the spindle cover and remove the cover.
5. Move the belt around the pulley and spindle, then remove the belt through the top opening.
6. Insert the new strap through the bottom opening and pull it around the end of the shaft on the pulley
7. Replace the end cover and drive shaft handwheel.
8. Place the belt loosely at the inner or outer position of the motor pulley.
9. Loosen the belt tension lock lever, move the belt tension lever down to the tension strap, and then tighten the belt tension lever.
10. Follow step 4 in the belt tensioning procedure to set the belt tension.
11. Replace the side access door and close the front access door.



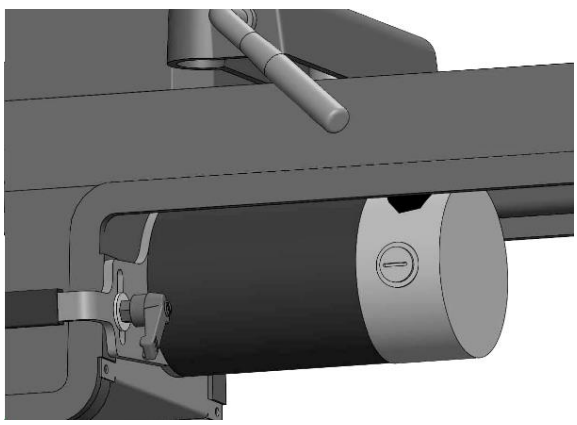
4.5 Replacing brushes (FOR CARP 1420 MIDI ONLY)

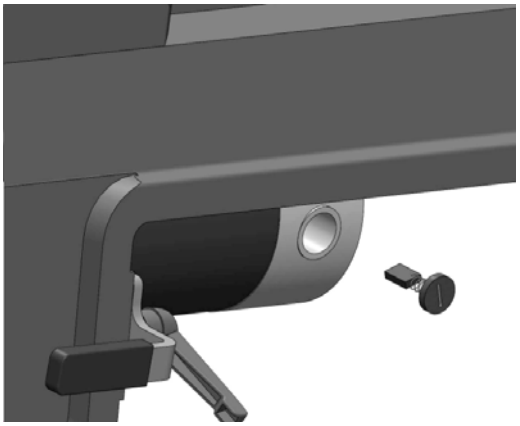
This machine is equipped with a universal motor that uses a pair of carbon brushes to transmit power. These brushes are considered regular "wear and tear items" or "consumables" that will eventually need to be replaced. The frequency of this replacement is directly related to how much the motor is used and how heavy it is loaded. These brushes are not covered by the warranty.

Replace both brushes at the same time if the motor is no longer operating at full power, is operating inconsistently, or if the brushes are less than 6 mm long (new brushes are 16 mm long).

To replace motor brushes:

1. Disconnect the machine from the power!
2. Use a coin to unscrew and remove the brush caps on the front and back of the motor.



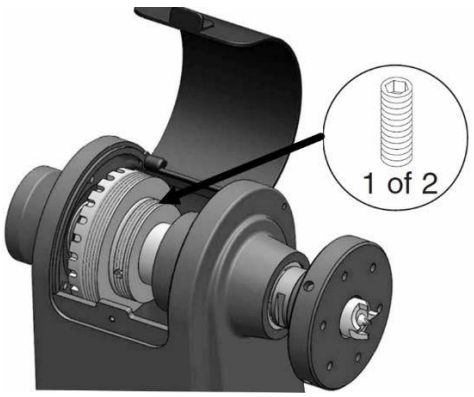


1. Use a ruler to measure the wear and tear of each carbon brush. If either brush is worn to less than 6 mm in length, replace both brushes.
2. Insert new brushes and insert them so that they are slid into the slots in the motor bushings. Press each brush cover individually against the spring, push it into the motor holder, and rotate each brush cover to lock it into the motor housing.
3. Make a test run.

4.6 Aligning pulleys

The motor and spindle pulleys are factory aligned and do not need to be adjusted. If they become misaligned over time, it is important that they are realigned to extend belt life and maximize power transfer from the motor to the spindle.

1. Disconnect the machine from the power!
2. Open the front access door.
3. Loosen the spindle pulley set screws (2).
4. Slide the spindle pulley in line with the motor pulley.
   Note: If the pulleys are properly aligned, there should be no unusual or pulsating noises coming from the belt.
5. Tighten the set screws.



5. Troubleshooting

5.1 Motor & Electric

LIST OF DRO ERROR CODES (FOR CARP1420MIDI ONLY)		
ERROR	**DESCRIPTION**	**SOLUTION**
F1 Formula 1	Low-voltage protection (20% lower than standard)	Check the voltage, restart the lathe
F2	High voltage protection (20% higher than standard)	Check the voltage, restart the lathe
F3	Improper operation of the reverse	Turn off the main switch, restart the lathe after the Speed display with "zero"

Symptom	Possible Cause	Possible solution
Machine does not start, or power supply Fuse/circuit breaker trip immediately after Startup.	1. Switch of the spindle direction in the neutral position 2. OFF button not pressed before switching Switch for the direction of rotation of the spindle. 3. Motor brushes are worn or defective. 4. Blown fuse. 5. The circuit breaker of the power supply has tripped or fuse blown. 6. Motor wires connected incorrectly. 7. Wiring open / has high resistance. 8. ON/OFF switch in case of malfunction. 9. Circuit board defective. 10. Variable velocity potentiometer at fault. 11. Engine at fault.	1. Toggle switch to forward/reverse. 2. Press the OFF button before switching the spindle indicator. 3. Remove/replace the brushes. 4. Replace the fuse/make sure no short circuit occurs. 5. Make sure the circuit is the right size and free of short circuits. Reset the circuit breaker or replace the fuse. 6. Correct the connections of the motor wiring. 7. Check/repair broken, disconnected, or corroded Wires. 8. Replace the switch/circuit breaker. 9. Inspect/replace if the fault is OK. 10. Test/replace if something is wrong.
The machine freezes or performs poorly	1. Machine substandard for task. 2. Workpiece material not suitable for machine. 3. Feed rate/cutting speed too high. 4. Variable speed potentiometer in case of failure. 5. Belt slips. 6. Motor brushes are worn or defective. 7. Circuit board defective. 8. Pulley slips on the spindle. 9. Engine at fault.	1. Use sharp chisels; Reduce feed rate/depth of cut. 2. Only use wood. 3. Reduce feed rate/cutting rate. 4. Test/replace in case of malfunction. 5. Tighten/replace belt; make sure the pulleys are aligned, Belts are clean and not damaged. 6. Remove/replace brushes. 7. Inspect/replace if there is a fault. 8. Tighten/replace the loose pulley/shaft. 9. Test/repair/replace.

Machine has vibration or noisy operation.	1. Engine or part loose. 2. The machine is uneven on the workbench. 3. V-belt worn, loose or misaligned. 4. Pulley loose. 5. Motor fan rubs the fan cover. 6. Workpiece/faceplate in defects. 7. Motorsupport is lose or broken. 8. Motor bearings at fault.	1. Inspect/replace damaged bolts/nuts, and Re-tighten with threadlocker fluid. 2. Adjust the feet. 3. Inspect/replace the belt. Realign the pulleys if necessary 4.Aligning and securing pulleys 5. Protect or replace the fan cover; Replace the damaged fan. 6. Center the workpiece better, speed down. 7. Test by Rotating the spindle 8. Bearing needs to be replaced.
Tailstock moves under load.	1. Tailstock mounting bolt/hex nut is loose. 2. Bed or clamping surface is too greasy or too dirty.	1. Tighten the mounting bolt/hex nut. 2. Clean the bed or clamping surface to remove excess material oil/fat.
No power or Machine starts up slowly.	1. The belt slips. 2. Pulleys are loose. 3. Workpiece too heavy for the spindle.	1. Tighten/adjust belt. 2. Tighten the pulley set screw; re-align/replace shaft, 3. Remove any excess material before reassembling; use lighter workpiece.
Pinole does not move when the handwheel is turned	The keyway is not aligned with the lever for locking the pinole.	1. Align the pinole keyway and the pinole locking lever Tighten the handle to engage the keyway.
Display shows error message or is off.	1. Shorted/disconnected wiring/plugs. 2. Variable speed potentiometer in case of failure. 3. speed sensor at fault. 4. Circuit board defective.	1. Inspect the wiring connections on circuit boards, sensors and plugs. Replace/repair if necessary. 2. Test/replace in case of malfunction. 3. Test/replace in case of malfunction. 4. Inspect/replace if something is wrong.

6. Optional Accessories

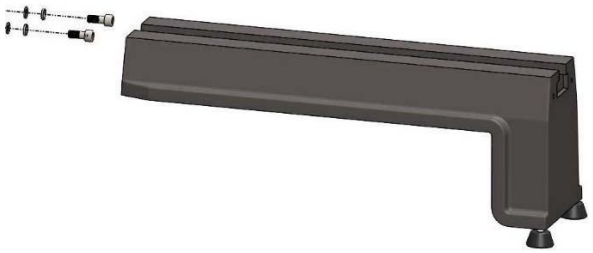
Installing unapproved accessories may cause the machine to malfunction, resulting in serious personal injury or damage to the machine. To reduce this risk, only install accessories that are recommended for this machine.

6.1 Bed extention

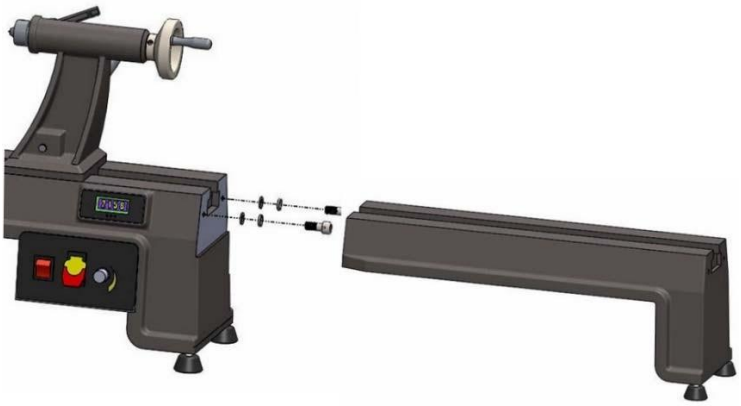
To extend the working capacity of the wood lathe, a bed extension is optionally available. It is made of cast iron and is screwed to the right end of the lathe to extend the working spindle length capacity of the lathe to 111 cm.

6.1.1 Assembling the bed extension

The bed extension is packed in a separate box, including the following items. Please check this carefully when you receive it.

Description Quantity	
Bed extension. ..... 1 Hexagonal socket screws. .....2 Ring. ..... 2 The ring of the spring. .....2 Feet.....2	

1. Install (2) rubber feet into the holes in the bottom of the bed extensions, adjust the feet so that the lathe is level without rocking.
2. Attach the bed extension to the lathe bed using the Allen screw, flat washer, and spring washer.

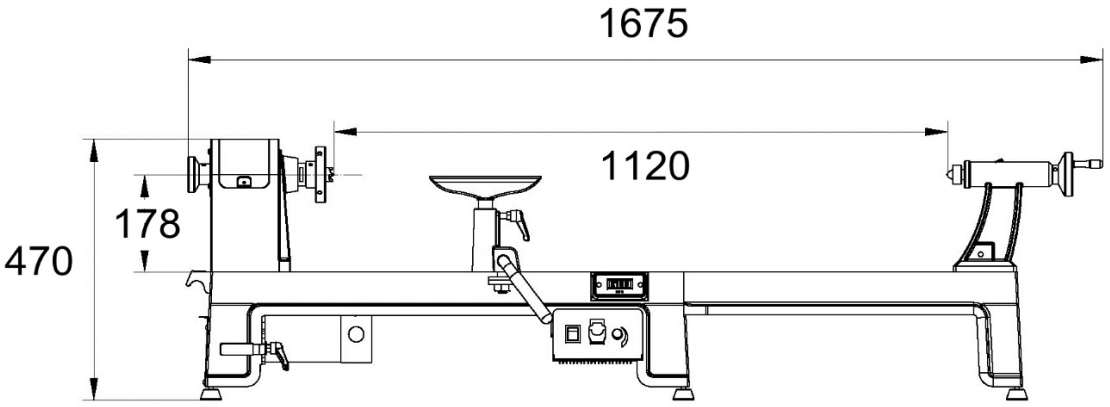


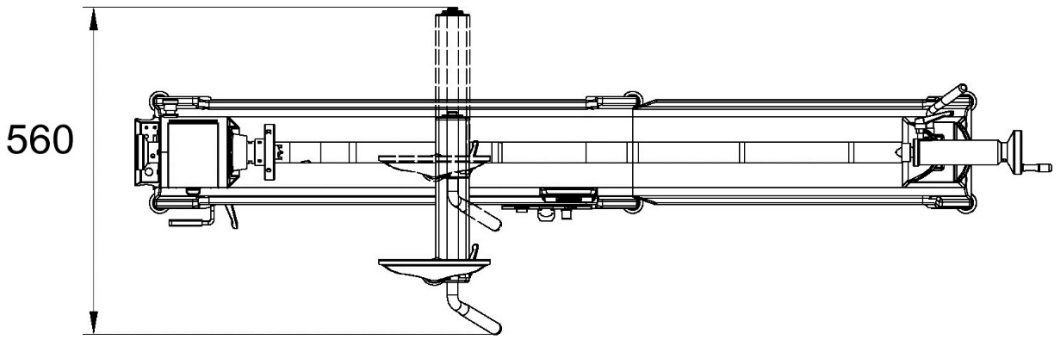
3. Adjust the height of the legs to bring the bed extension to the same height as the lathe bed.

4. The assembly work has been completed. The length capacity has been extended to 1.11 metres.

6.1.2 Dimensions

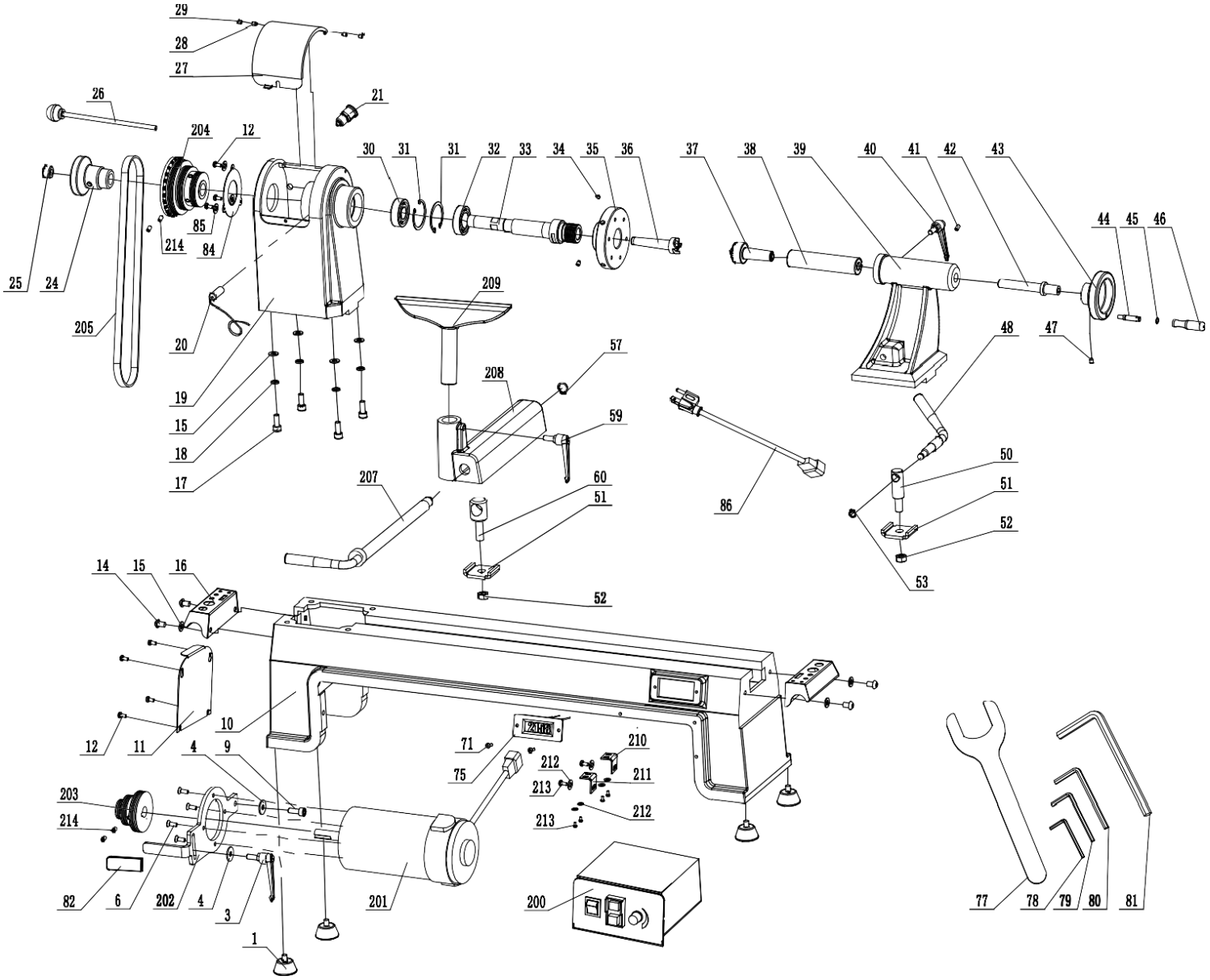
Consider the expected dimensions of the workpiece and the additional space required for additional stands, work tables, or other machines when determining a location for this machine in the workshop. Below is the minimum amount of space required for the extended machine.





7. Schematic and parts list

7.1 Diagram for CARP 1420 MIDI

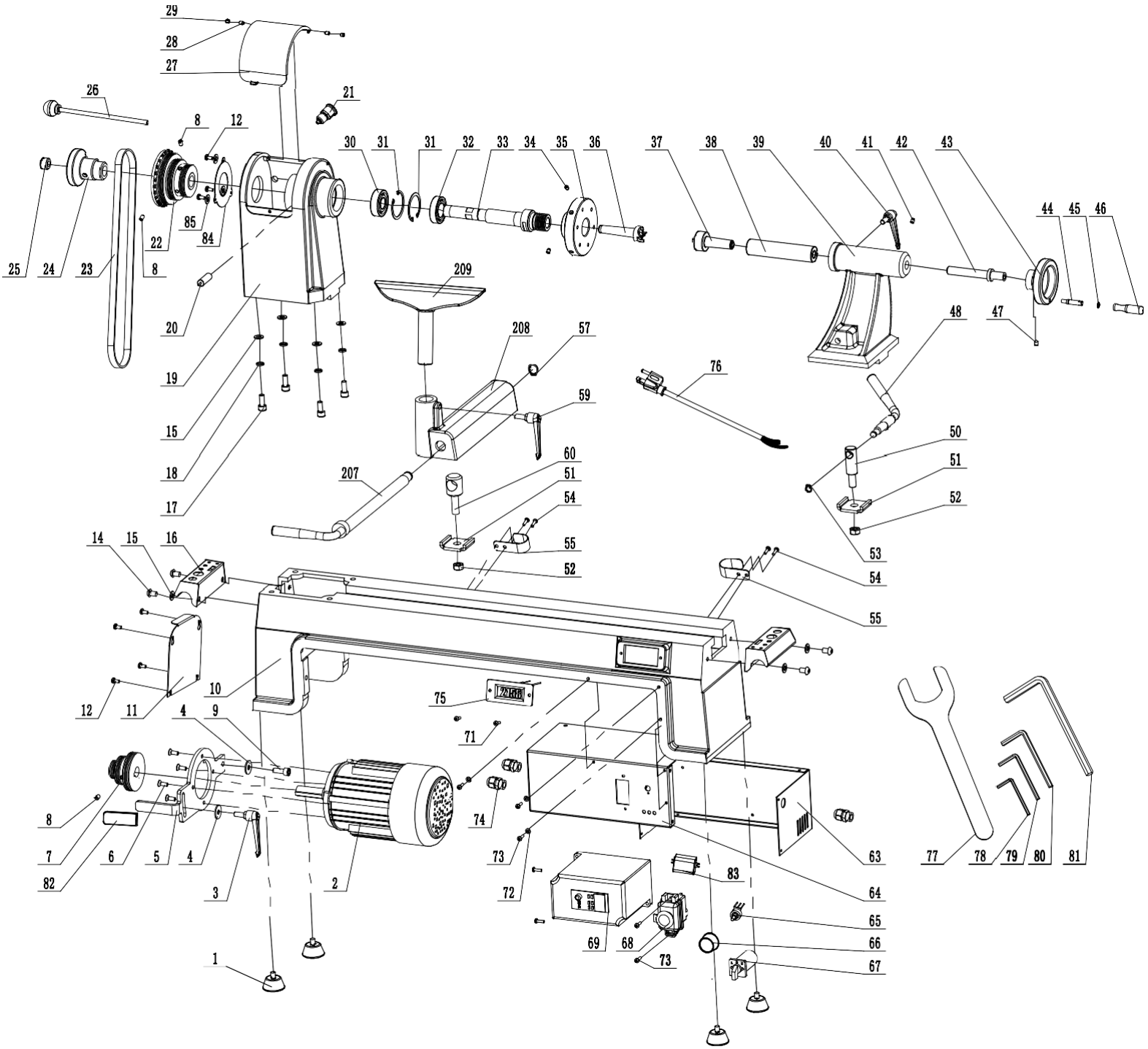


7.2 Parts list for CARP 1420 MIDI

PART NO.	DESCRIPTION	SIZE	NUMBER
1	Foot		4
3	Belt Tension Lock Level		1
4	Flat ring		2
6	HD Cap Screw	M6X16	4
9	Cap screw	M8X16	1
10	Bed		1
11	Call by		1
12	Hexagonal head screw	M5X10	7
13	Screw		1
14	HD Screw	M8X12	4
15	Flat ring		8
16	Handle		2
17	Cap Screw	M8X20	4
18	Spring ring		4
19	Head		1
20	Digital readout sensor		1
21	Location Pin assembly		1
24	Headstock wiel		1
25	Concluding Education		1
26	Knock-out staaf montage		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
33	Spool		1
34	Cap screw	M6X8	2
35	Faceplate		1
36	Spur center		1
37	Live center		1
38	Quill		1
39	Tailstock		1
40	Pinole Locking Lever		1
41	Hex Head Bolt	M8X10	1

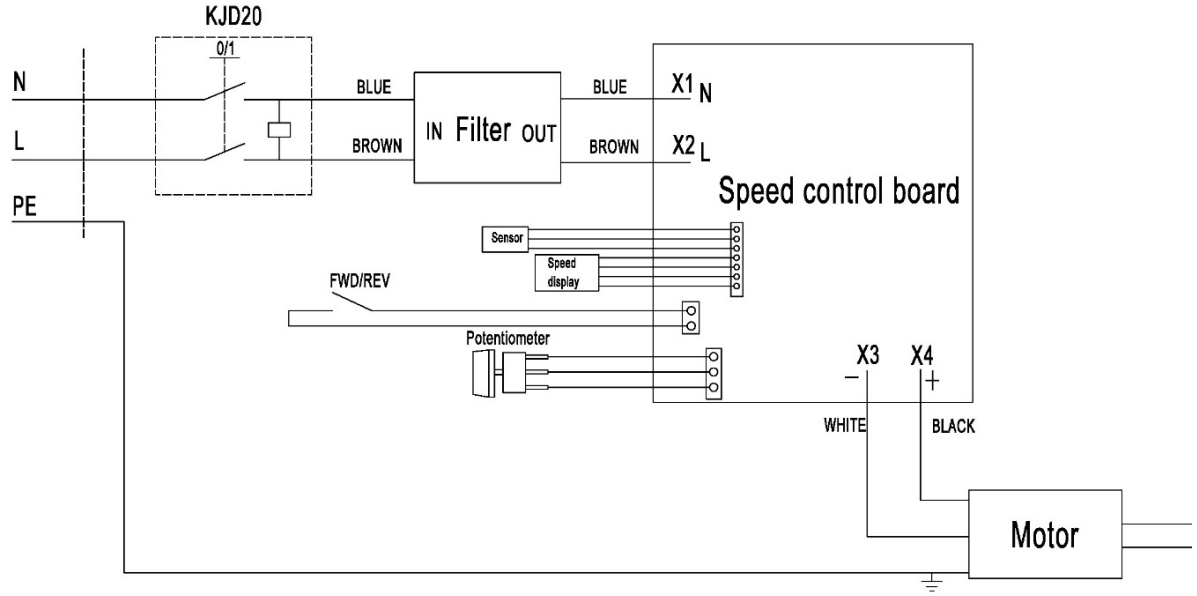
PART NO.	DESCRIPTION	SIZE	NUMBER
45	C-ring		1
46	Handwheel		1
47	Set screw	M8X10	1
48	Level of tailstock locking		1
50	Loose Head Clamp Bolt		1
51	Loose cup clamp		2
52	Nut	M12	2
53	C-ring		1
57	C-ring		2
59	Handle Adjustment		1
60	Clamping bolt for tool rest		1
71	HD Screw	M4X8	2
75	Digital readout		1
77	Key		1
78	Allen wrench	F3	1
79	Allen wrench	F4	1
80	Allen wrench	F5	1
81	Allen wrench	F12	1
82	Bud		1
84	Backplate head		1
85	Flat ring	F5	1
86	Plug		1
100	Internal tooth lack of washer	M16	1
200	Assembly of the drive		1
201	Engine		1
202	Connection plate for the motor		1
203	Engine pulley		1
204	Spindle pulley		1
205	Poly V-belt		1
206	Spool		1
207	Locking rod for tool rest		1
208	Base for tool rest		1
209	8" tool rest		1
210	Connect the plate		1
211	Connect the plate		1
212	Wahser		6

7.3 Diagram for CARP 1420 MIDI



Wiring diagram for CARP 1420 MIDI

230V 50HZ 1PH:



220V 60HZ 1PH: