



Woodworking machinery at its best!

10" x 6" SPIRAL BLOCK PLANER THICKNESSER OWNERS MANUAL

MODEL: PT250SP



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Bardon Hill, Leicestershire, LE67 1TU

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GENERAL SAFETY RULES



WARNING: Do not attempt to operate the machine until you have read thoroughly and understood completely all instructions, rules, etc. contained in this manual. Failure to comply may result in accidents involving fire, electric shock, or serious personal injury. Keep this owner's manual and review frequently for continuous safe operation.

1. Know your machine. For your own safety, read the owner's manual carefully. Learn its application and limitations, as well as specific potential hazards pertinent to this machine.
2. Make sure all tools are properly earthed.
3. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning, make sure it is properly replaced before using the machine again.
4. Remove adjusting keys and spanners. Form a habit of checking to see that all keys and adjusting spanners are removed from the machine before switched it on.
5. Keep your work area clean. Cluttered areas and workbenches increase the chance of an accident.'
6. Do not use in dangerous environments. Do not use power tools in damp or wet locations or expose them to rain. Keep work areas well illuminated.
7. Keep children away. All visitors should be kept a safe distance from the work area.
8. Make workshop childproof. Use padlocks, master switches and remove starter keys.
9. Do not force the machine. It will do the job better and be safer at the rate for which it is designed.
10. Use the right tools. Do not force the machine or attachments to do a job for which they are not designed. Contact the manufacturer or distributor if there is any question about the machine's suitability for a particular task.
11. Wear proper apparel. Avoid loose clothing, gloves, ties, rings, bracelets, and jewellery which could get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
12. Always use safety glasses. Normal spectacles only have impact resistant lenses. They are not safety glasses.
13. Do not over-reach. Keep proper footing and balance at all times.
14. Maintain the machine in good condition. Keep the machine clean for best and safest performance. Follow instructions for lubrication and changing accessories.
15. Disconnect the machine from power source before servicing and when changing the blade.
16. Never leave the machine running unattended. Turn the power off. Do not leave the machine until it comes to a complete stop.
17. Do not use any power tools while under the effects of drugs, alcohol or medication.

18. Always wear a face or dust mask if operation creates a lot of dust and/or chips. Always operate the tool in a well ventilated area and provide for proper dust removal. Use a suitable dust extractor.

ADDITIONAL RULES FOR PLANER/THICKNESSERS

1. This machine is designed for use with wood. Attempting to plane or thickness any other materials will result in damage to the machine, potential fire risk and/or health hazards.
2. The machine is designed for indoor use only.
3. Connection to a suitable dust extraction system is highly recommended. If you must use the machine on its own, you will need to stop it, unplug it from the mains and thoroughly clean it at regular intervals. Continuing to use the machine when it is clogged with shavings will result in damage to it, potential fire risk and/or health hazards.
4. The machine should be bolted to a bench or suitable stand.
5. Always hold the work firmly on to the table, using the push pads provided.
6. Never use the planer/thicknesser with the guard and/or dust hood removed.
7. If planing or thicknessing a long piece of timber, provide additional support at the same height as the table.
8. Switch the machine off and unplug it before removing any debris.
9. Be aware of the possibility of kickback.
10. Do not modify this machine in any way or use it or anything other than its designated purpose. Neither the manufacturer nor the suppliers will be liable for any damage or injury caused by incorrect assembly, operation or electrical connection of this machine.



Risk of Injury!
Never reach into
a running cutterblock



**Eye
Protection**



**Ear
Protection**

Charnwood PT250SP Specification

Voltage and frequency	240V at 50hz.
Motor (Carbon brush)	1500w (2hp)
Planer width	254mm (10")
Maximum planing cut	2.5mm
Work Table	1050 mm x 260 mm
Table height	920mm
Fence tilt	90 to 135°
Max thickening cut	2mm
Thickening capacity	5 to 160mm
Feed speed	8 m/min
Number of cutters	24 (2 x 12)
Cutter block rotation	8,900 rpm
Assembled Dimensions (WxDxH)	1110mm x 560mm x 1060mm
Weight	42kg
Rating	Hobby
Warranty	5 Year

Rating Description

Hobby: Suitable for Weekend DIY'ers and woodworking enthusiasts.

Generally lighter weight machines with lower power ratings and smaller tooling capacities. Typically only ever used by one person for short periods of time or longer periods of time infrequently. Machinery should be well maintained in a clean, dry environment such as a home workshop, garage or timber shed. **Expected maximum use of 100 hours annually.**

Please Note: Using a product in excess of its rating will void the manufacturer's free warranty.

Unpacking



Open the top of the carton

Remove the top half of the polyfoam packaging.

Carefully unpack the contents and lift the machine onto a bench.



Fit the height adjusting handle over the shaft and fully lower the thickening bed.

Remove the components packed on the thickening bed.



Lay out the loose parts and familiarise yourself with them.

Read the manual.

Please do not dispose of the packaging until you have fully assembled and tested the machine.

In the unlikely event there is a fault, you will need to re-use the packaging.

Assembly



Lay the machine on its side using blocks to protect the power cable underneath.

Remove the bolts holding the rubber feet in place.

Identify the Upper Cross Bars.

Using 4 of the M8 x 30mm Cap Head Bolts and washers, attach the bars and feet as shown.



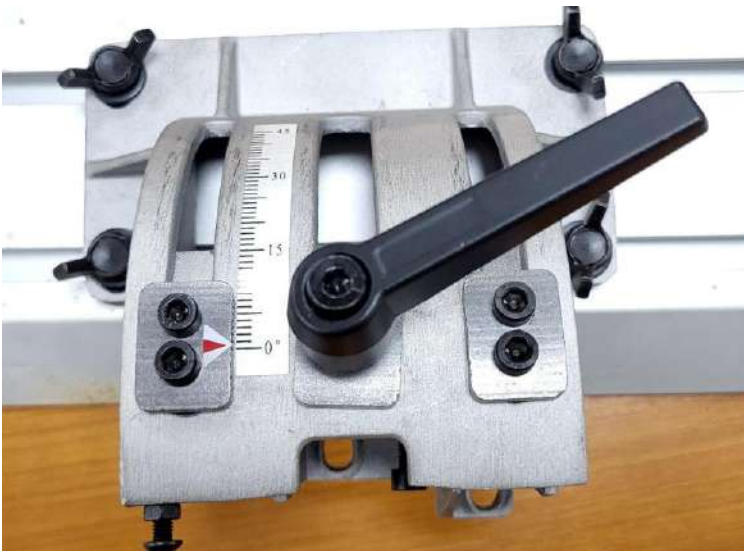
Assemble the two stand end frames and attach the 4 rubber feet.

Using 4 coach bolts, nuts and washers attach the end frames to the upper cross bars.

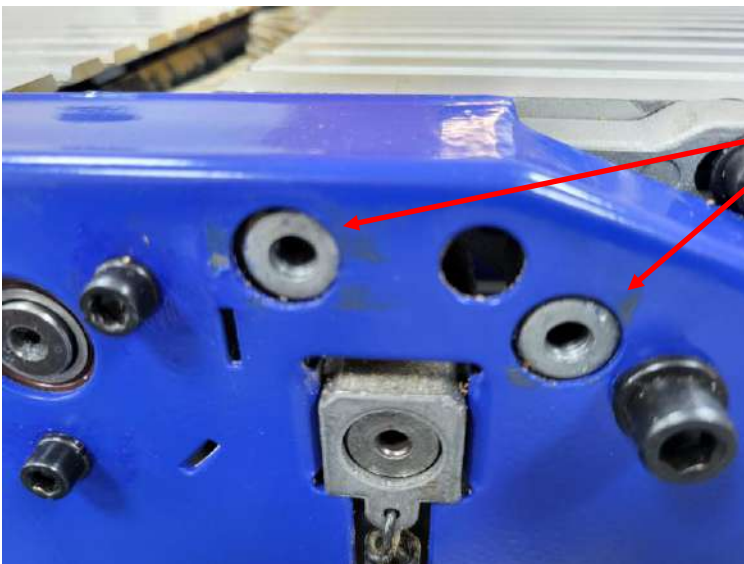


Fit the two lower cross bars using 4 more coach bolts, nuts and washers.

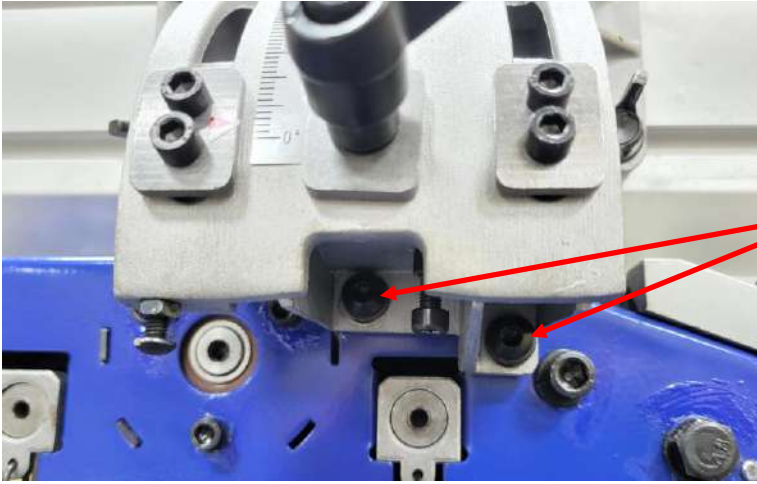
Stand the machine upright.



Fit the M8 Locking lever and guide bracket to the fence bracket and set to 90 degrees.



Locate two tapped holes on the side edge of the table.



Fit the fence to the table

Use the two M6 x 16mm round head bolts and washers.



The dust extraction hood has a 75mm diameter outlet for connecting the extractor hose.

If you are using a 100mm diameter dust extractor hose, you will need to fit an adaptor. (100/35RC)



PLEASE NOTE : THE MACHINE IS FITTED WITH AN INTERLOCKING SAFETY SWITCH AND WILL NOT RUN WITHOUT THE DUST EXTRACTION HOOD CORRECTLY FITTED

The hood can be fitted in two different ways, depending on what type of operation is being carried out:
Planing or Thicknessing

The hood is locked in place using two locking latches which push into a receiver.

One located on each side of the table.



Planing Operations

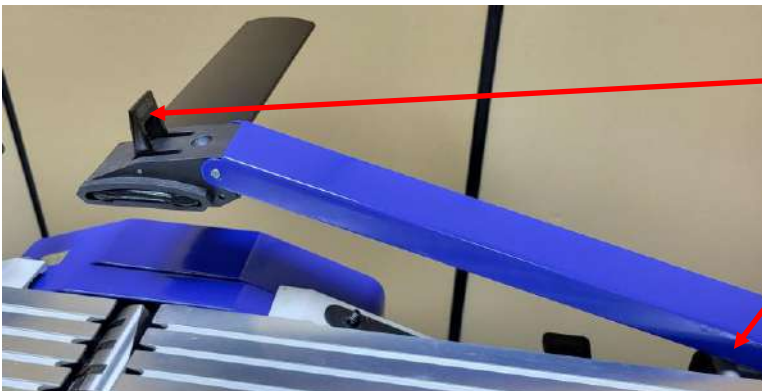
The dust extraction hood must be fitted underneath the outfeed table and locked in place using the two locking latches.

Once fitted wind the thickening bed up to hold in place.



Thickening Operations

Slacken off the 4 wing nuts and slide the fence sideways up to the end stop.



Release the bridge guard lock lever and slide the bridge guard across to the side away from the guide fence.

Raise the bridge guard arm to its full height.



Tilt the fence

Undo the locking lever and tilt the guide fence back to 45 degrees.



Fit the dust extraction hood

Lock into place by engaging the 2 side latches and the locking screw.

Using the Planer Thicknesser



Starting And Stopping

To turn on, press the green button.

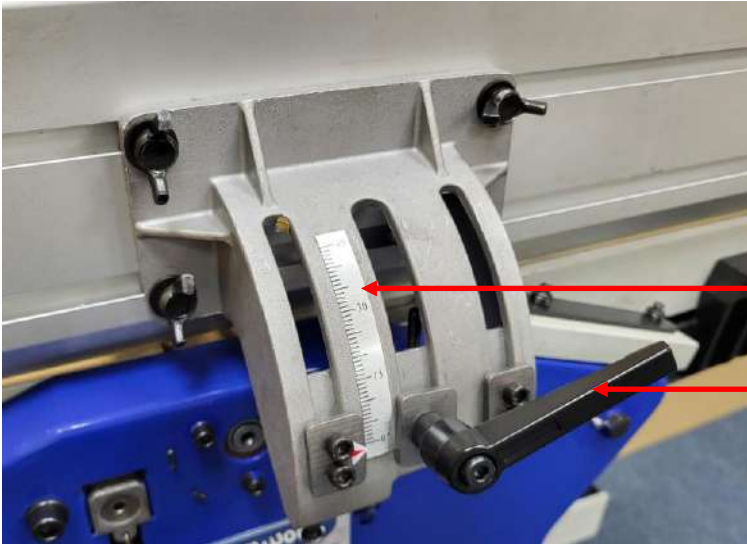
Wait for the knives to reach their maximum speed of rotation before commencing with the cut.

The machine is fitted with an NVR (No Voltage Release) switch.

This type of switch is designed so that if the machine is disconnected from the mains whilst running and then reconnected, the motor will not automatically restart.

Planing Function

Standing with the switch side as the front, the direction of feed is Right to Left.
Fit the extraction hood under the outfeed table and clamp it into place.



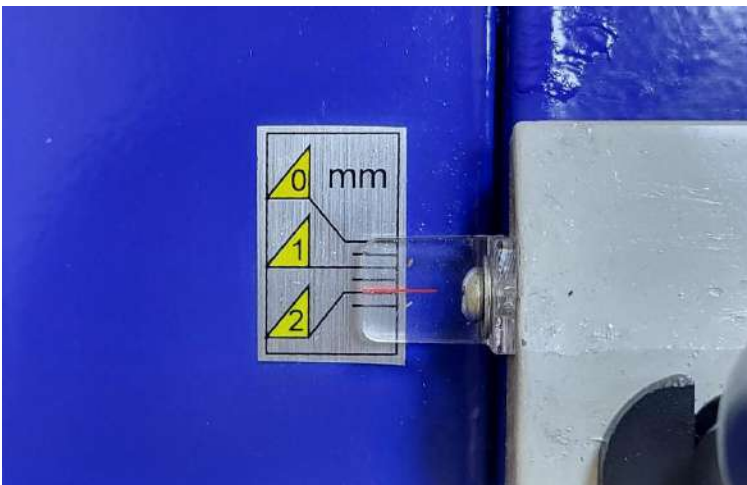
Set The Angle Of The Guide Fence

The guide fence can be set to any angle from 90 to 45 degrees.

There are adjustable pre-set stops for those two positions.

Fence angle can be read from this scale.

The guide fence is locked and unlocked by using this locking lever.



Set the Depth of Cut

Turn the planing depth adjuster located on the end of the infeed table.

Anti-clockwise to increase the depth of cut.

Clockwise to decrease the depth of cut.

The planing scale shows mm increments from 0 to 2.

As a general guide: set the depth at 1mm and, if necessary, make 2 or 3 passes until the desired result is achieved.



Position the bridge guard so it covers any exposed part of the knives.

Use the push stick to hold the work piece firmly down against the table, feed the work piece across the cutters, onto the out-feed table.

When working with very thin material, set the bridge guard all the way across to the fence.

Then set the height of the bridge guard, so the work piece can pass underneath it.

Thickening Function

Standing with the switch side as the front. The direction of feed is Left to Right.
Fit the extraction hood on top of the outfeed table and clamp in place.



Use the thickening bed height adjuster to set the height of the thickening bed to match the work piece.

The maximum depth of cut when thickening is 2mm in one pass.

A feed height restrictor bar prevents a cut of more than 2mm being made. If the workpiece hits that bar: Lower the table.

Standing in front of the machine, hold the work piece so it is flat against the thickening table and gently push forward.

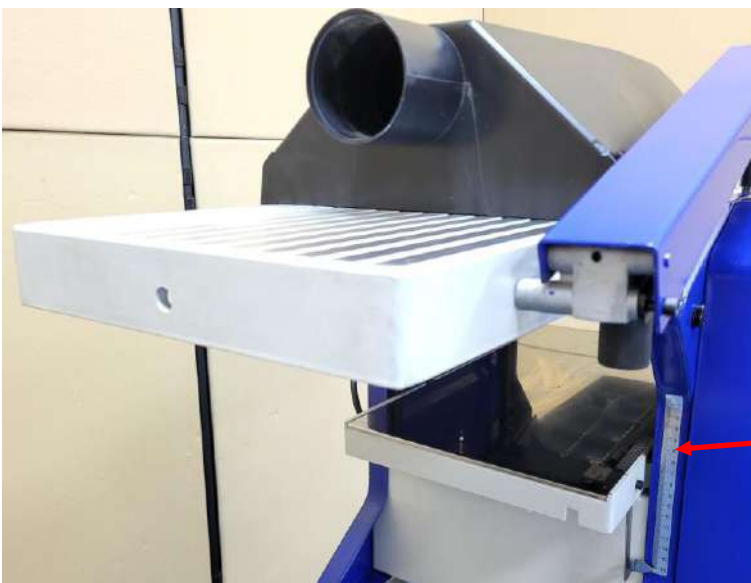
Release the work piece when you will feel the drive roller take hold and feed it past the cutters.

Move around to the other end of the machine to support the piece by hand as a second drive roller feeds it out of the machine.

Repeat as many times as necessary to achieve the required finished dimensions of the piece.

Each pass, rotate the height adjuster clockwise one turn to raise the bed by 2mm.

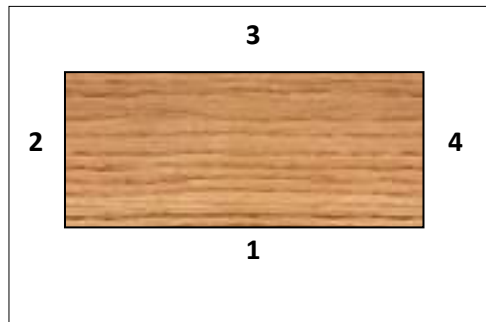
The actual dimension can be read from the thickness scale.



General Guide

When faced with a rough sawn piece of timber which requires planing on all 4 sides and taking down to a specific finished dimension, follow this guide:

- Set the machine up for planing.
- Identify the flattest of the two wider faces on the timber. (Face 1 on diagram)
- Pass that side over the planer as many times as necessary until a flat and smooth finish is achieved.
- Hold the planed side firmly against the guide fence (set at 90 degrees to the bed) and pass the narrow side (Face 2 on diagram) over the planer as many times as necessary until a flat and smooth finish is achieved.
- You should now have two planed sides at 90 degrees to each other.
- Set the machine up for thicknessing.
- Pass the timber through the thicknesser with the wider, already planed side (Face 1 on diagram) facing down against the thicknessing bed. Continue until the desired thickness for the timber is reached.
- Finally, pass the timber through the thicknesser with the planed narrow side (Face 2 on diagram) facing down against the thicknessing bed. Continue until the desired thickness for the timber is reached.



Cutter Removal and Replacement

Disconnect from the power supply before starting any maintenance.

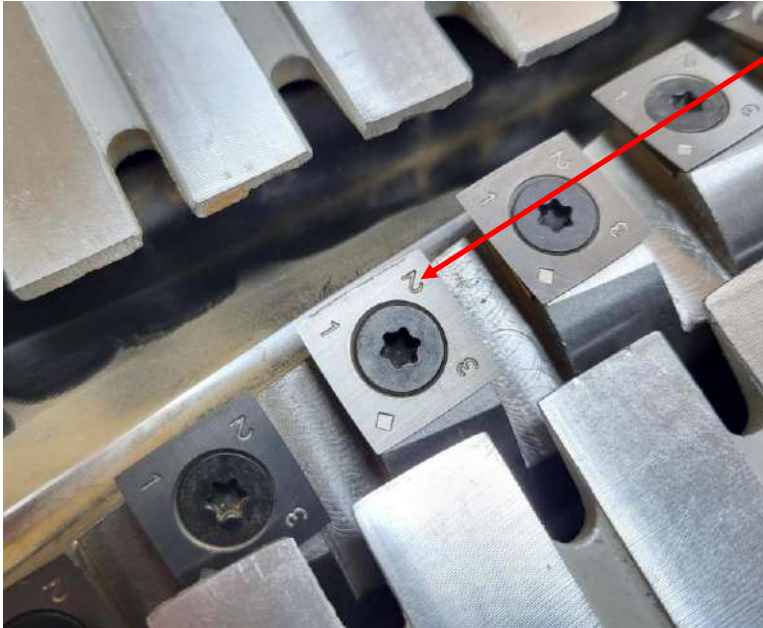


The cutter block is fitted with 2 rows of Tungsten Carbide cutters: 12 in each row.

Each cutter has 4 sides and 4 cutting edges.

When worn, a Cutter can be rotated by 90 degrees to a new position to

renew the cutting edge.



Each corner is numbered so you can keep track of which edge has already been used.

If one edge becomes damaged by a chip or nick, it can be rotated or replaced individually.

Eventually the cutters will become blunt and then the entire row should be rotated or replaced at the same time.



To change a cutter:

Rotate the cutterblock so the cutter to be changed is at the top of the arc.

Use a T20 Torx key to undo the locking screw.

Turn anticlockwise to undo.



Refit the cutter with a new edge uppermost.

The back edge of the cutter should fit tightly against the back stop on the cutter block.

Fit the locking screw and tighten it firmly.

Troubleshooting

Problem	Cause	Remedy
Machine does not start	Blown Fuse	Replace Fuse
	Loose switch terminal	Inspect back of switch
	Faulty switch	Replace switch
	Guard not fitted	Re-fit the plastic guard ensuring it connects with the interlock switch
Only starts when Green button is held down	Faulty switch	Replace switch
Machine runs intermittently	Worn carbon brushes in motor	Replace carbon brushes
Motor running but cutter block is not rotating	Broken or stretched drive belt	Replace drive belt
Motor slows down during the cut	Depth of cut is too great	Take a smaller cut
	Dust & Chip collector hood is blocked	Clear the blockage and ensure the extractor is functioning correctly
	Planing knives are blunt	Replace knives
Excess Vibration	Planing knives out of balance	Reset the height of the knives
Shuts off after a prolonged period of use	Overheating motor	Wait for the motor to cool down, then press the overload reset switch and start the machine.

Declaration of Conformity



Charnwood Declare that Woodworking Planer & Thicknesser, Model PT250SP

Conforms with the following EU Directives: Machinery Directive 2006/42/EC
EMC Directive 2014/30/EU

And further conforms to the machinery example for which the EC type examination Certificate No. BM 50707133 & AE 50541586 have been issued by TUV Rheinland LGA Products GmbH, Tillystrasse 2, 90431 Nurnberg.

I hereby declare that equipment named above has been tested and found to comply with the relevant sections of the above referenced specifications. The machinery complies with all essential requirements of the directives & regulations.

Signed: 

Dated: 12/02/2026

Location: Leicestershire

Richard Cook, Director



Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.

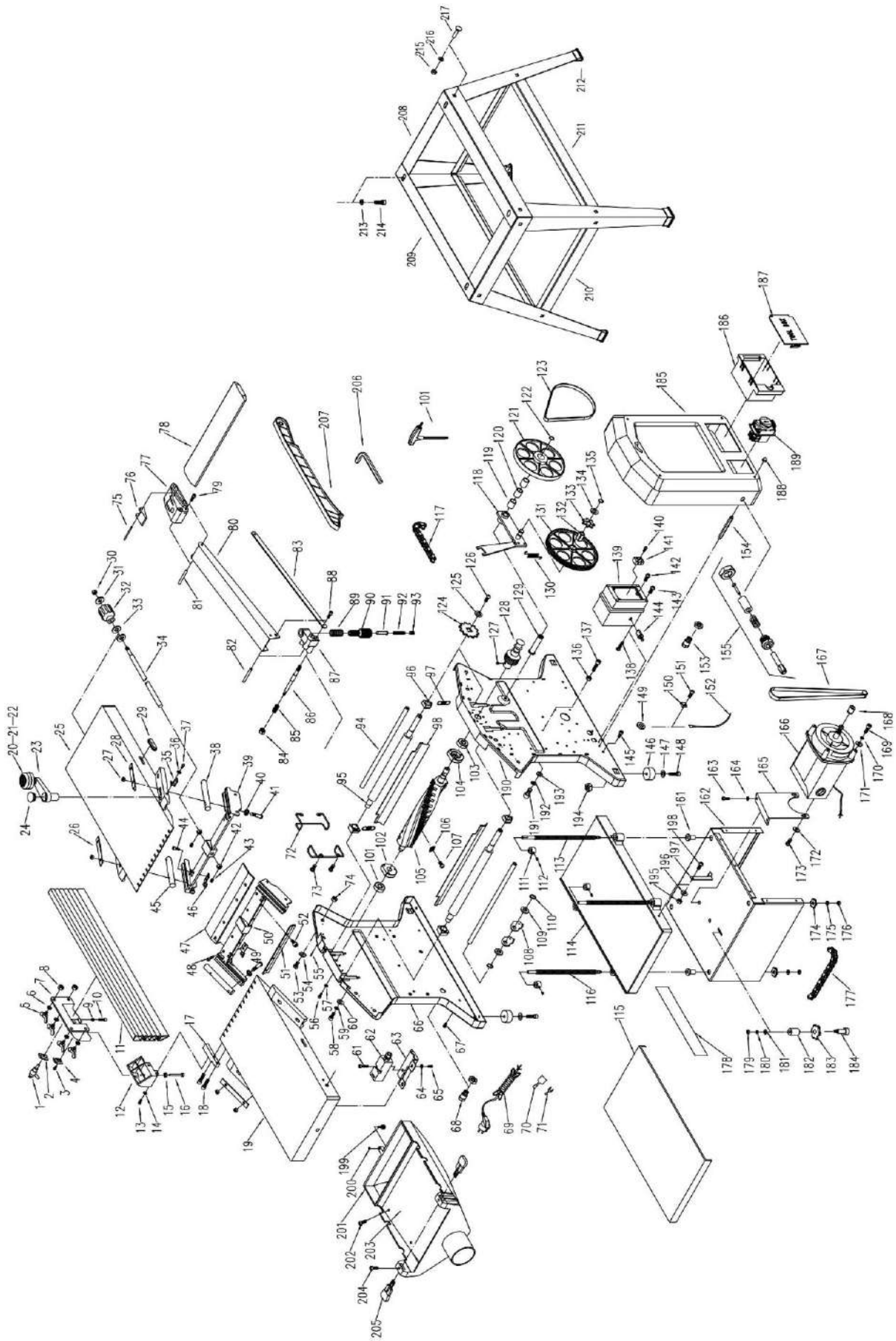


Only for EU countries

Do not dispose of electric tools together with household waste material!

In observance of European Directive 2002/96/EC on waste electrical and electronic equipment (EEE) and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility. Your local refuse amenity will have a separate collection area for EEE goods

Charnwood PT250SP Parts Diagram



Charnwood PT250SP Parts List

No.	Description	QTY.	No.	Description	QTY.
PT250SP#001	Lock handle	1	PT250SP#108	Ratchet	29
PT250SP#002	Lock block	1	PT250SP#109	Spacer	28
PT250SP#003	Socket head screw M5X10	4	PT250SP#110	Retaining ring 12mm	2
PT250SP#004	Stop Block	2	PT250SP#111	Spacer ring	1
PT250SP#005	Wing screw M8X18	4	PT250SP#112	Set screw M6X4	2
PT250SP#006	Flat washer 8mm	4	PT250SP#112.1	Spacer ring	2
PT250SP#007	Rotating seat	1	PT250SP#113	Threaded spindle	1
PT250SP#008	Hex nut M8	4	PT250SP#114	Thickening table	1
PT250SP#009	Hex nut M4	1	PT250SP#115	Table cover plate	1
PT250SP#010	Socket pan head screw M4X16	1	PT250SP#116	Threaded spindle	3
PT250SP#011	Fence	1	PT250SP#117	Chain	1
PT250SP#012	Support seat	1	PT250SP#118	Support plate assembly	1
PT250SP#013	Socket head screw M6X16	2	PT250SP#119	Needle bearing	2
PT250SP#014	6mm Flat washer	2	PT250SP#120	Bushing	1
PT250SP#015	Hex nut M5	1	PT250SP#121	Wheel	1
PT250SP#016	Socket head screw M5X50	1	PT250SP#122	Retaining ring 10mm	1
PT250SP#017	Support block	1	PT250SP#123	V belt	1
PT250SP#018	Socket head screw M6X20	2	PT250SP#124	Large sprocket	2
PT250SP#019	Outfeed table	1	PT250SP#125	Flat washer 6mm	2
PT250SP#020	Crank cap	1	PT250SP#126	Socket head screw M6X10	2
PT250SP#021	Crank handle	1	PT250SP#127	Set screw M6X10	2
PT250SP#022	Crank shaft	1	PT250SP#128	Spindle pulley	1
PT250SP#023	Joining	1	PT250SP#129	Eccentric shaft	1
PT250SP#024	Plug	1	PT250SP#130	Extension spring	1
PT250SP#025	Infeed table	1	PT250SP#131	Gear	1
PT250SP#026	Working table clamping plate	3	PT250SP#132	Square sleeve	1
PT250SP#027	6-1.0mm Acorn nut	8	PT250SP#133	Small sprocket	1
PT250SP#028	Working table clamping plate	1	PT250SP#134	Flat washer 8mm	1
PT250SP#029	Cover	2	PT250SP#135	Retaining ring 9mm	1
PT250SP#030	Lock nut M8	1	PT250SP#136	Hex nut M5	1
PT250SP#031	Flat washer 8mm	1	PT250SP#137	Socket head screw M5X25	1
PT250SP#032	Lift handle	1	PT250SP#138	Thread forming screw	2
PT250SP#033	Flat washer	2	PT250SP#139.1	Upper cover	1
PT250SP#034	Strut	1	PT250SP#139.2	Nether cover	1
PT250SP#035	Pointer	1	PT250SP#140	Thread forming screw	1
PT250SP#036	Flat washer 4mm	1	PT250SP#141	Terminal	1
PT250SP#037	Pan head screw M4X10	1	PT250SP#142	Thread forming screw	3
PT250SP#038	Rail	1	PT250SP#143	Thread forming screw	4
PT250SP#039	Right support	1	PT250SP#144	Overload protector	1
PT250SP#040	6mm Serrated washer	8	PT250SP#145	Socket head screw M5X10	7
PT250SP#041	Socket pan head screw M6X43	8	PT250SP#146	Rubber foot	4
PT250SP#042	Spacer ring	2	PT250SP#147	Flat washer 8mm	4
PT250SP#043	Set screw M5X 6	2	PT250SP#148	Socket head screw M8X16	4

PT250SP#044	Socket head screw M5X 12	8	PT250SP#149	Rubber bushing	1
PT250SP#044.1	Lock washer 5mm	8	PT250SP#150	Cord clamp	6
PT250SP#044.2	Flat washer 5mm	8	PT250SP#151	Socket head screw M5X10	6
PT250SP#045.1	Rail	1	PT250SP#152	Cord line	1
PT250SP#045.2	Rail	2	PT250SP#153	Strain relief	2
PT250SP#046	Right limiting plate	2	PT250SP#154	Rod	4
PT250SP#047	Stop board	1	PT250SP#155	Reset button assembly	1
PT250SP#048	Socket head screw M6X10	4	PT250SP#161	Sleeve	4
PT250SP#049	Left limiting plate	2	PT250SP#162	Base	1
PT250SP#050	Left support	1	PT250SP#163	Socket head screw M6X12	2
PT250SP#051	Max cutting guard	1	PT250SP#164	Flat washer 6mm	2
PT250SP#052	Socket head screw M5X10	4	PT250SP#165	Motor assisting support	1
PT250SP#053	Hex head bolt M8X20	8	PT250SP#166	Motor	1
PT250SP#054	Flat washer 8mm	8	PT250SP#167	V belt	1
PT250SP#055	Spring pin	8	PT250SP#168	Motor pulley	1
PT250SP#056	Socket head screw M5X16	6	PT250SP#169	Socket head screw M5X10	4
PT250SP#057	5mm Lock washer	6	PT250SP#170	Lock washer 5mm	4
PT250SP#058	Socket head screw M8X12	4	PT250SP#171	Flat washer 5mm	4
PT250SP#059	Flat washer 8mm	4	PT250SP#172	Flat washer 6mm	2
PT250SP#061	Socket head screw M4X28	2	PT250SP#173	Socket head screw M6X10	2
PT250SP#062	Interlock switch	1	PT250SP#174	Sprocket	4
PT250SP#063	Switch cover	1	PT250SP#175	Flat washer 5mm	4
PT250SP#064	Flat washer 5mm	4	PT250SP#176	Lock nut M5	4
PT250SP#065	Socket head screw M5X 8	4	PT250SP#177	Chain	1
PT250SP#066	Back side plate	1	PT250SP#178	Graphite stickers	3
PT250SP#067	Socket head screw M5X10	7	PT250SP#179	Hex nut M6	1
PT250SP#068	Strain relief	1	PT250SP#180	Lock washer 6mm	1
PT250SP#069	Power cord	1	PT250SP#181	Flat washer 6mm	2
PT250SP#070	Insulator	6	PT250SP#182	Bushing	1
PT250SP#071	Quick connect terminals	6	PT250SP#183	Tension sprocket	1
PT250SP#072	Cable hook	2	PT250SP#184	Shaft	1
PT250SP#073	Pan head screw M5X10	4	PT250SP#185	Protecting hood	1
PT250SP#074	Hex nut M8	8	PT250SP#186	Toolbox	1
PT250SP#075	Pin	1	PT250SP#187	Toolbox cover	1
PT250SP#076	Lock knob	1	PT250SP#188	Acorn nut M5	4
PT250SP#077	Bridge guard support	1	PT250SP#189.1	Emergency stop switch	1
PT250SP#078	Bridge guard	1	PT250SP#189.2	Switch DKLD DZ-6-2	1
PT250SP#079	Rivet	1	PT250SP#190	Front side plate	1
PT250SP#080	Arm support	1	PT250SP#191	Socket head screw M8X16	1
PT250SP#081	6X55mm Pin	1	PT250SP#192	Lock washer 8mm	1
PT250SP#082	6X55mm Pin	1	PT250SP#193	Flat washer 8mm	1
PT250SP#083	Link board	1	PT250SP#194	Hex nut M8	4
PT250SP#084	Lock nut M8	1	PT250SP#195	Hex nut M5	1
PT250SP#085	Compression spring	1	PT250SP#196	Flat washer 5mm	1
PT250SP#086	Link bar	1	PT250SP#197	Pointer	1
PT250SP#087	Support	1	PT250SP#198	Socket head screw M5X16	1

PT250SP#087.1	Set screw M5×6	1	PT250SP#199	Knob	1
PT250SP#088	Shoulder crew	1	PT250SP#200	Retaining ring 5mm	1
PT250SP#089	Compression spring	1	PT250SP#201	Dust collector	1
PT250SP#090	Lift knob	1	PT250SP#202.1	Thread forming screw	2
PT250SP#091	Sliding bar	1	PT250SP#202.2	Thread forming screw	4
PT250SP#092	Compression spring	1	PT250SP#203	Dust collect cover	1
PT250SP#093	Set screw M12X10	1	PT250SP#204	Thread forming screw	2
PT250SP#094	Ratchet shaft	2	PT250SP#205	Dust collect key	2
PT250SP#095	Feed roller	2	PT250SP#206	Hex wrench 4mm	1
PT250SP#096	Bearing bush	5	PT250SP#207	Push sticker	1
PT250SP#097.1	Extension spring	3	PT250SP#208	Short top frame	2
PT250SP#097.2	Spring	1	PT250SP#209	Long top frame	2
PT250SP#098	Sheet metal deflector	1	PT250SP#210	Short brace	2
PT250SP#100	Torx wrench T-20	1	PT250SP#211	Long brace	2
PT250SP#101	Ball bearing 6001-2RS	1	PT250SP#212	Foot	4
PT250SP#102	Rear bearing house	1	PT250SP#213	Flat washer 8mm	4
PT250SP#103	Ball bearing 6002-2RS	1	PT250SP#214	Hex head bolt M8X30mm	4
PT250SP#104	Front bearing house	1	PT250SP#215	Hex nut M8	16
PT250SP#105	Helical cutterhead	1	PT250SP#216	Flat washer 8mm	16
PT250SP#106	Knife insert	24	PT250SP#217	Carriage bolt M8X16mm	16
PT250SP#107	knife screw	24			

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