



Woodworking machinery at its best!

**BELT & DISC SANDER
OWNERS MANUAL
MODEL: BD610**



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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 the 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
8. from the work area.
9. Make workshop childproof. Use padlocks, master switches and remove starter keys.
10. Do not force the machine. It will do the job better and be safer at the rate for which it is designed.
11. 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.
12. 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.
13. Always use safety glasses. Normal spectacles only have impact resistant lenses. They are not safety glasses.
14. Do not over-reach. Keep proper footing and balance at all times.
15. Maintain the machine in good condition. Keep the machine clean for best and safest performance. Follow instructions for lubrication and changing accessories.
16. Disconnect the machine from power source before servicing and when changing the blade.
17. Never leave the machine running unattended. Turn the power off. Do not leave the machine until it comes to a complete stop.
18. Do not use any power tools while under the effects of drugs, alcohol or medication.
19. 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.



Risk of Injury.
Never reach into
a moving part

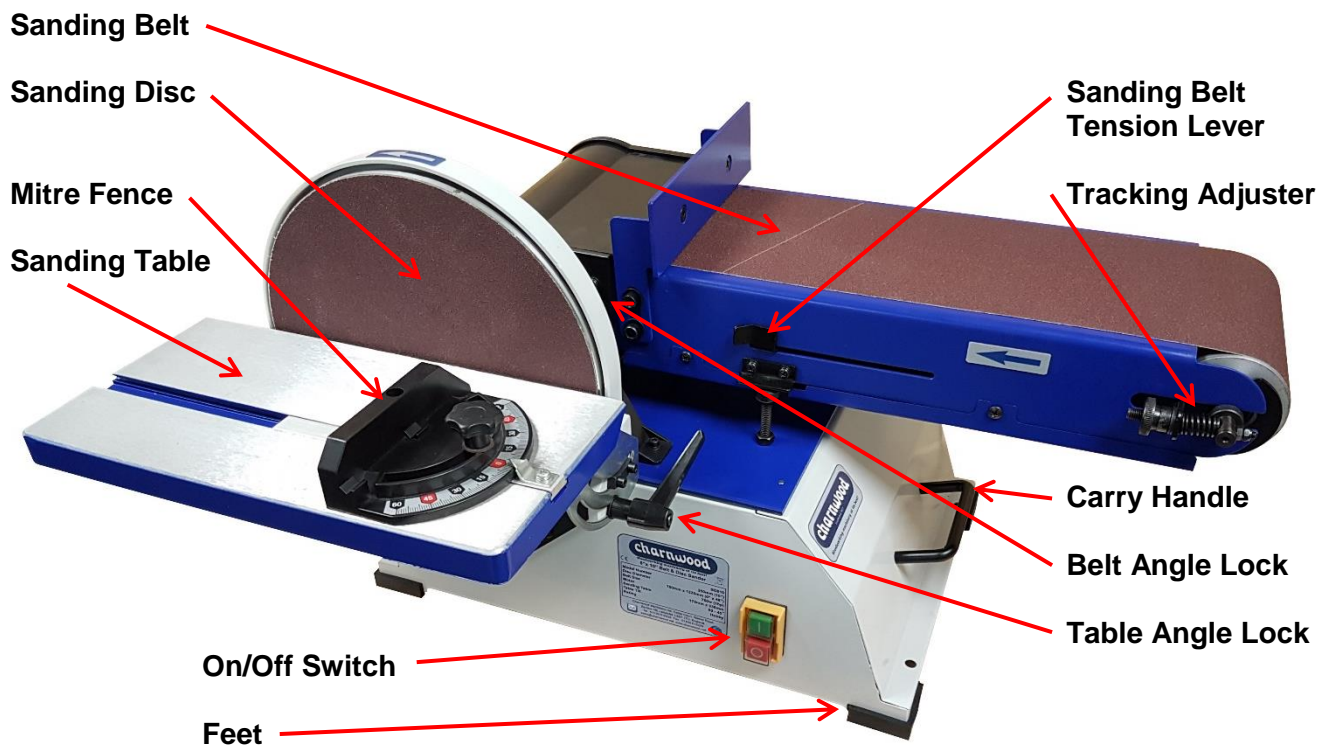


Wear Eye
Protection



Wear Ear
Protection

Overview of BD610 Belt & Disc Sander



Specification

Disc Diameter	250mm (10")
Disc Speed	2850rpm
Belt Size	150mm x 1220mm (6" x 48")
Belt Speed	550m/min
Motor (Induction) 240v 50hz	750w (1hp)
Weight	31kg
Manufacturer's Warranty	1 year
Rating	Hobby

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

All items are contained in one carton.



Carefully unpack and check that all the items are included as in the photograph.

Assembly



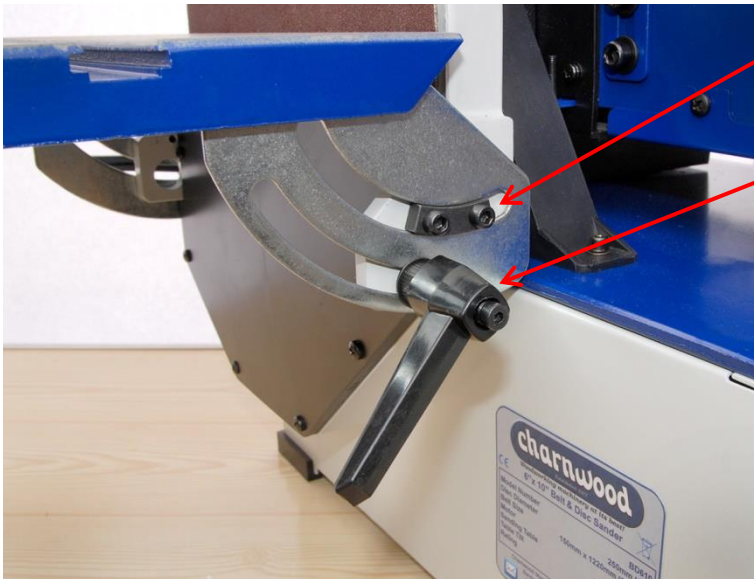
Place the sander on a level surface and adjust the two bed supporting bolts so that the belt is also level.

- Tighten the locknuts using a 13mm spanner.



Attaching the Work Table

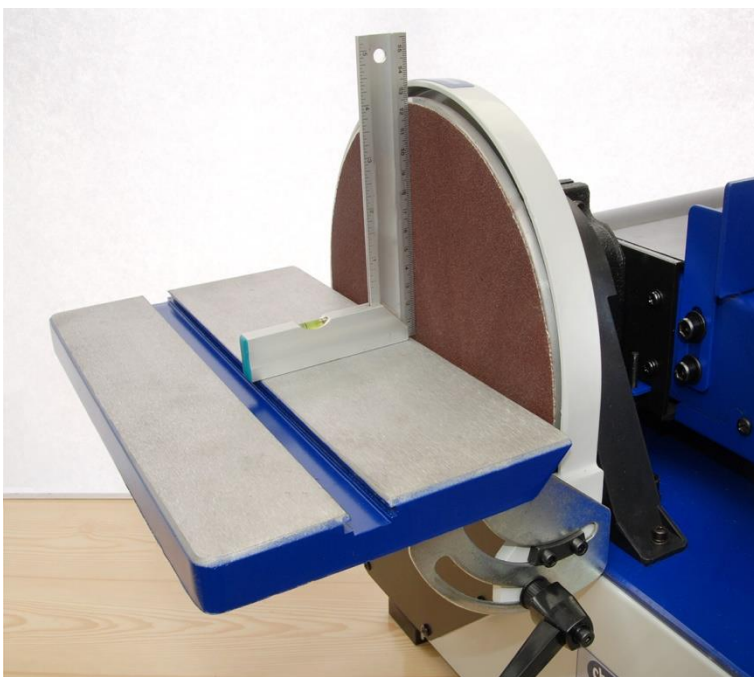
First, offer up the table so that the curved slots in the brackets align with the holes in the base, as shown.



Insert one of the guide blocks into the upper slot and secure with two M5 x 16mm screws using a 4mm hex key.

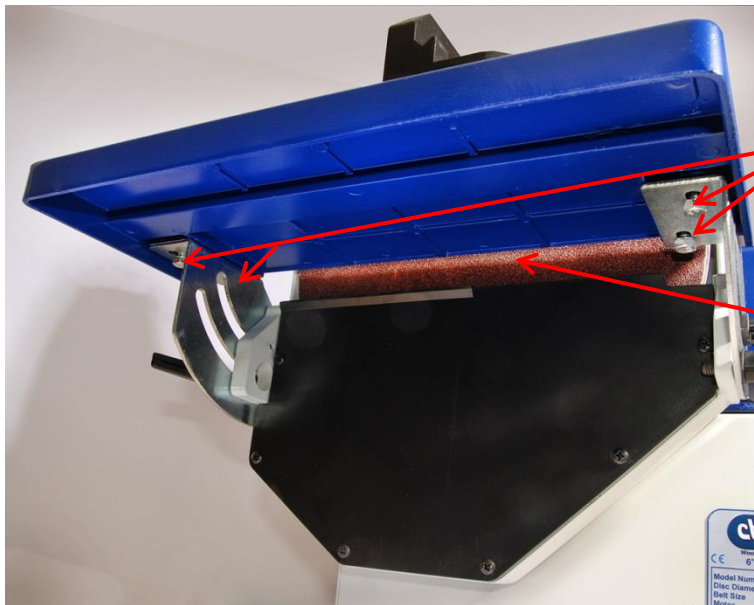
Insert the M8 Locking Handle through the lower slot.

Repeat with the other bracket at the opposite end of the table.



Adjust the table using a set square so that it is at right angles to the disc.

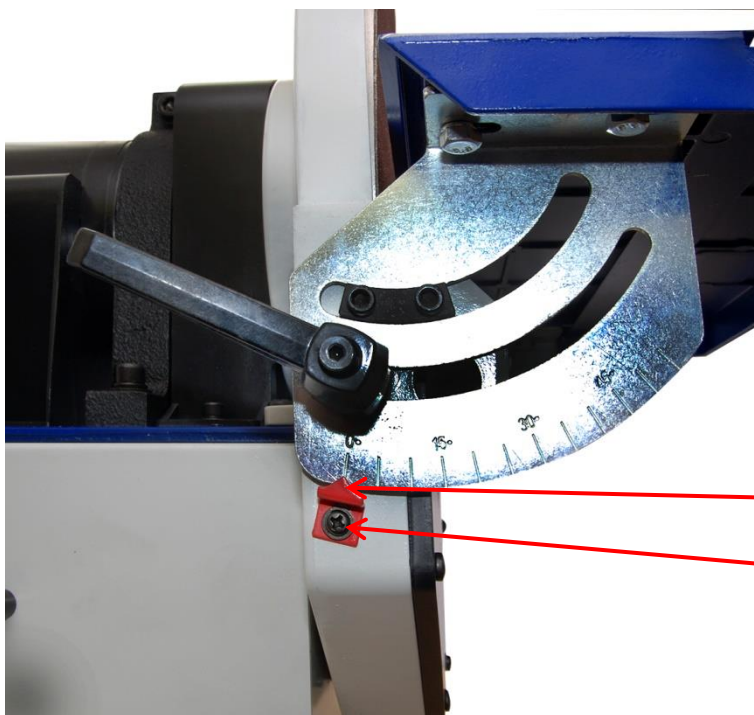
Tighten both locking handles.



From below the table, loosen the four bolts that connect the cast table to the brackets using a 10mm spanner.

Adjust the table so there is a maximum gap of 1.6mm between its rear edge and the sanding disc. This will prevent fingers being trapped when using the sander.

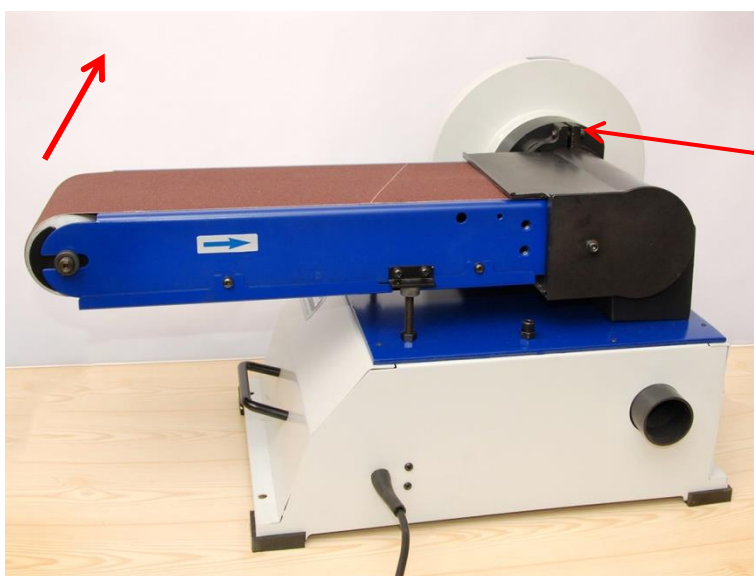
Re-tighten the four bolts.



Adjust the red pointer, using a cross-head screwdriver, so that it indicates '0' degrees against the scale.

Pointer

Locking screw

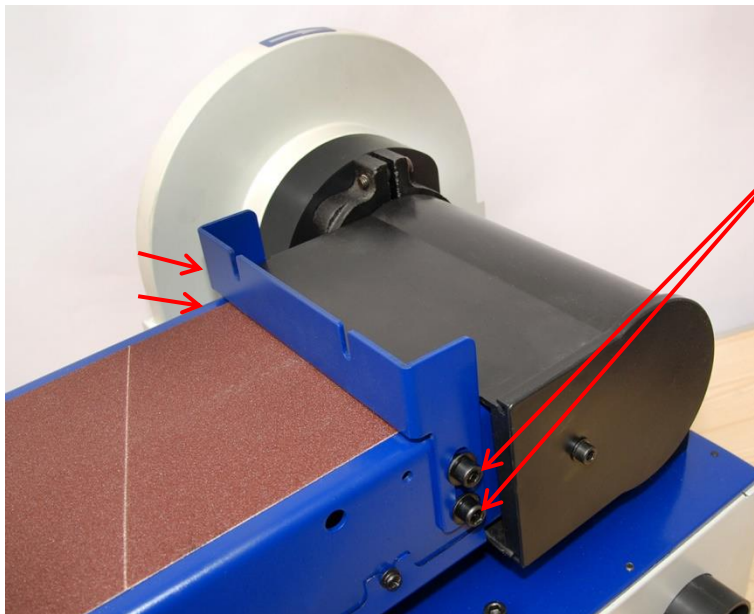


The sanding belt can be used in the vertical or horizontal position - or any angle in between.

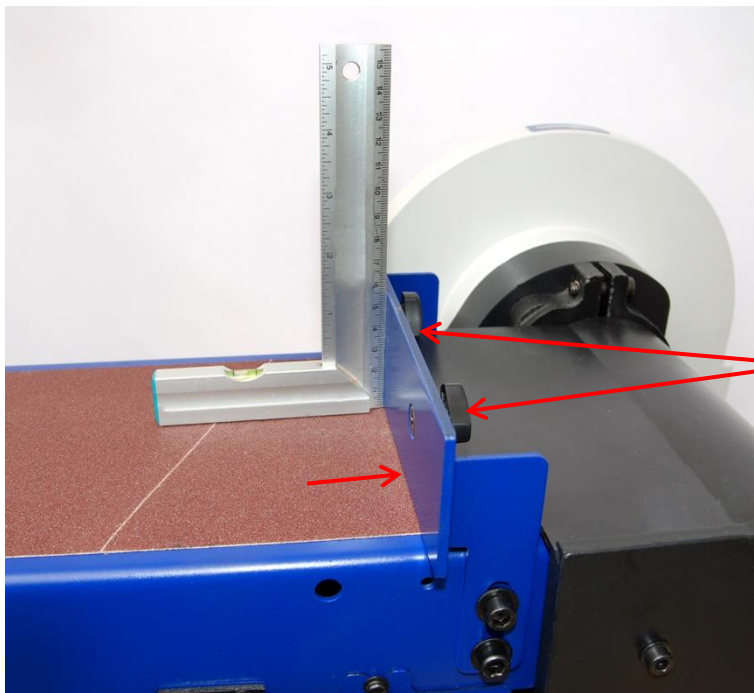
To raise the bed, first loosen the hex socket clamping bolt with the key provided.

Rotate the bed to the required angle.

Re-tighten the bolt.



The belt stop bracket is attached using the four socket head screws and washers provided.



Attach the belt stop to the bracket.

Adjust the Rest so that it is at 90 degrees to the belt and tighten the four mounting bolts.

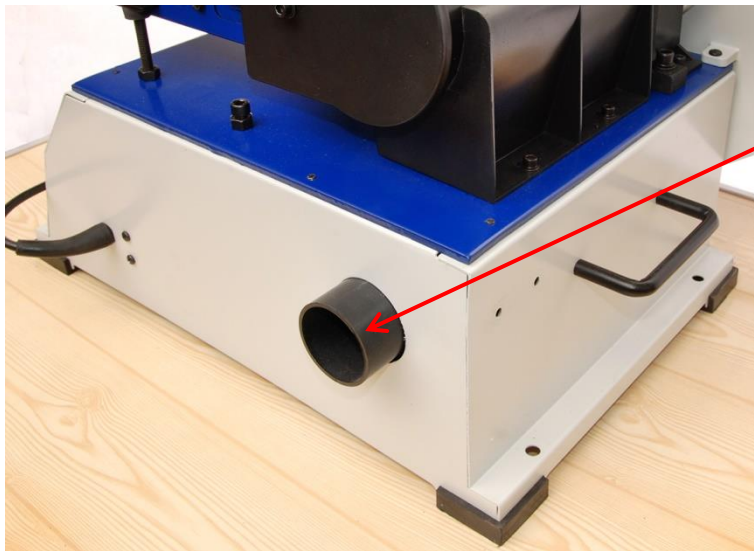
Adjust the rest platform ensuring there is a maximum gap of 1.6mm between it and the sanding belt.

Tighten the two locking knobs.



The mitre guide is slides in the slot in the table.

It can be locked at any angle in a 120 degree range.

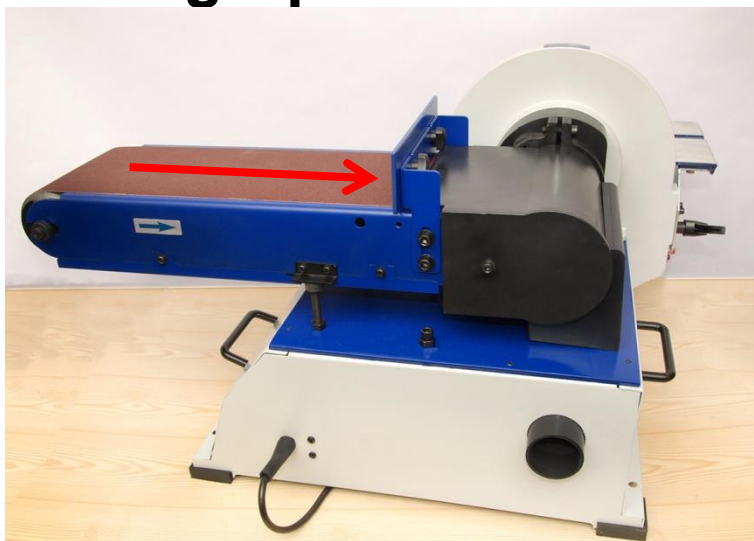


It is essential to use dust extraction when using your sander.

There is a single extraction port for the belt and disc with an inside/outside diameter of 45/50mm.

A 50mm diameter hose will connect directly to the port. Our adaptor 100/58RC can be used to convert for using 100mm diameter hose.

Setting Up

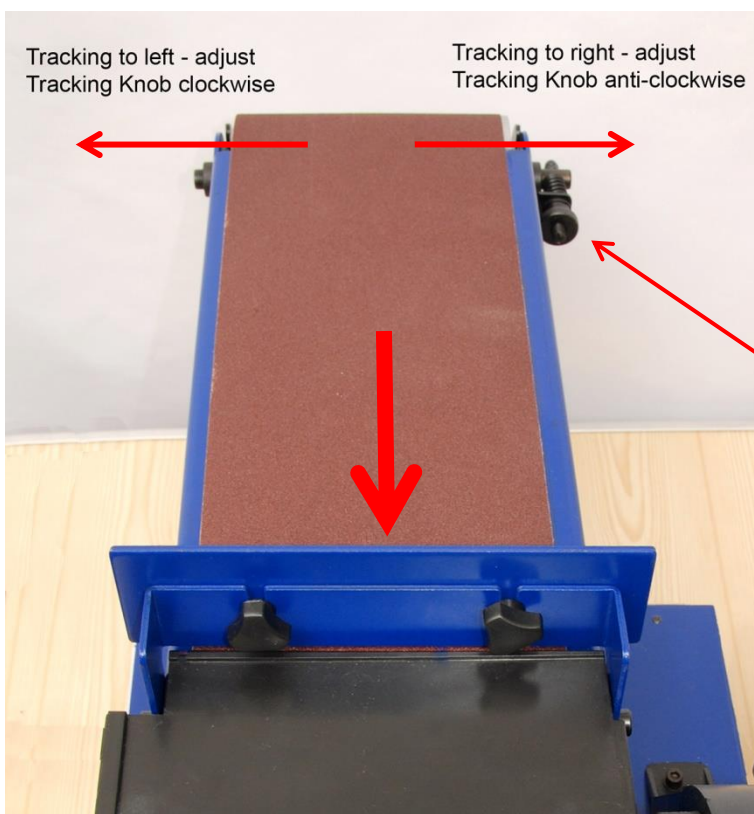


Tracking the belt

Ensure the machine is disconnected. Slowly rotate the sanding belt by hand. Ensure it is travelling in the direction of the arrow.

Note if the belt is tending to slide off the bed and to which side.

If the belt doesn't slide sideways it is already correctly tracked.



Viewed from the covered end – if the belt moves sideways towards the disc, turn the tracking knob anti-clockwise (1/4 turn is usually sufficient).

If the belt moves sideways away from the disc, turn the knob clockwise.

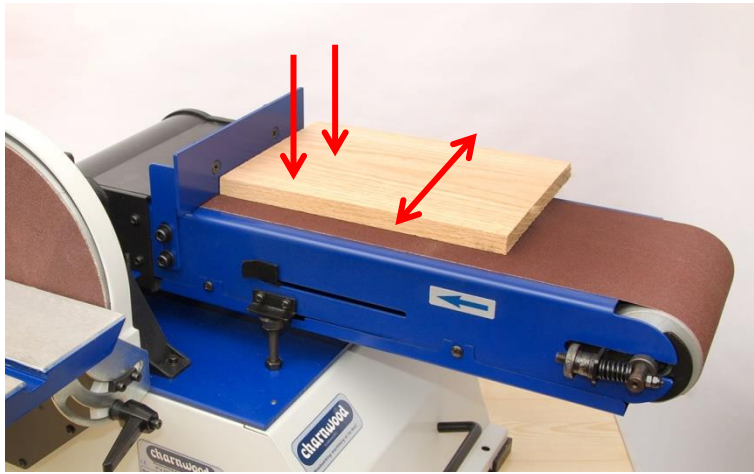
Continue adjustments until the belt remains central on the rollers.

Tracking knob.

Using the Sander

This sander is designed for use with wood and wood-based products only. It should not be used for sanding metal and any such use would invalidate the warranty.

The machine should be placed on a firm level surface before use.



Sanding with the belt in the horizontal position

The back stop must always be used as a support when carrying out edge or face sanding in the horizontal position.

Move the workpiece across the belt while keeping one edge against the stop.

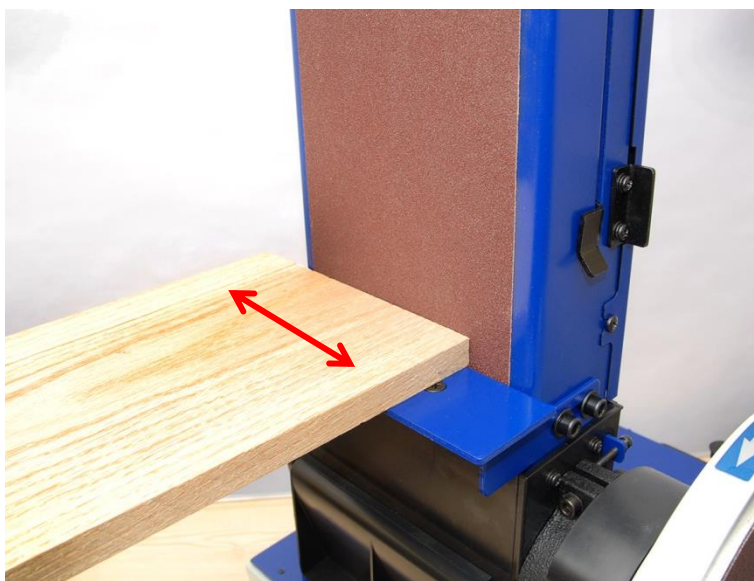
Do not use excessive pressure and take extra care when sanding thin material.



Sanding internal curves

With care the idler drum end of the sanding belt can be used for smoothing & shaping the inside of curved workpieces.

Never present the end of a workpiece to the drum as this can cause it to kick back.

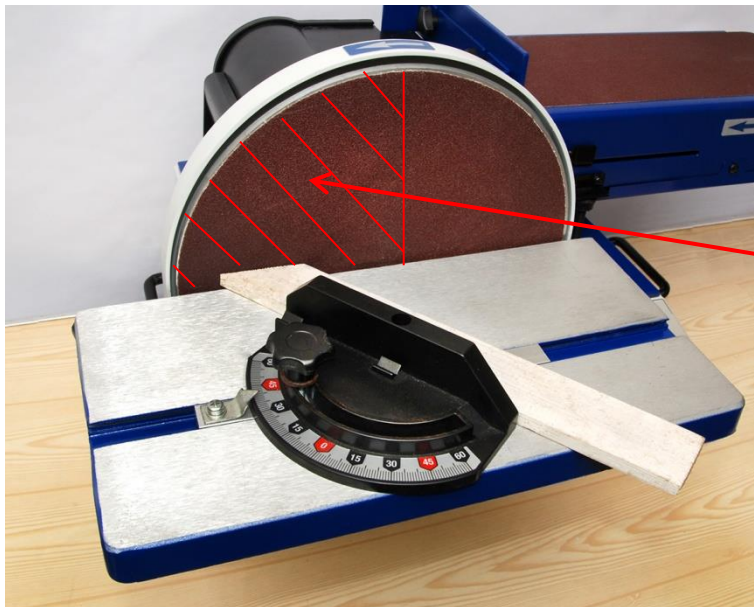


Sanding with the belt in the vertical position

Sometimes sanding on the belt is more convenient when it is positioned vertically – or at any angle in between 0 & 90 degrees.

To adjust, loosen the locking screw using the 6mm hex key. Position the belt bed as required and then re-tighten the screw.

Always use the tool rest to support the workpiece.



Sanding with the Disc

The disc sander is ideally suited to smoothing end grain and fine-tuning angled cuts with the aid of the mitre guide.

Whenever possible use the front half of the exposed disc as this will hold the workpiece against the table.

If it is necessary to use the full width of the disc, care must be taken to hold the workpiece firmly as the rear half will tend to cause it to lift.

Keep the workpiece moving to achieve the best finish.

Maintenance



Replacing the Sanding Disc

Always ensure the machine is disconnected from the power supply before changing the sanding disc.

Remove the disc work table and then the disc cover which is secured with six screws.



Carefully remove the existing self-adhesive sanding disc using a flat-bladed scraper.

Remove any residue from the sanding plate using mineral/methylated spirit.

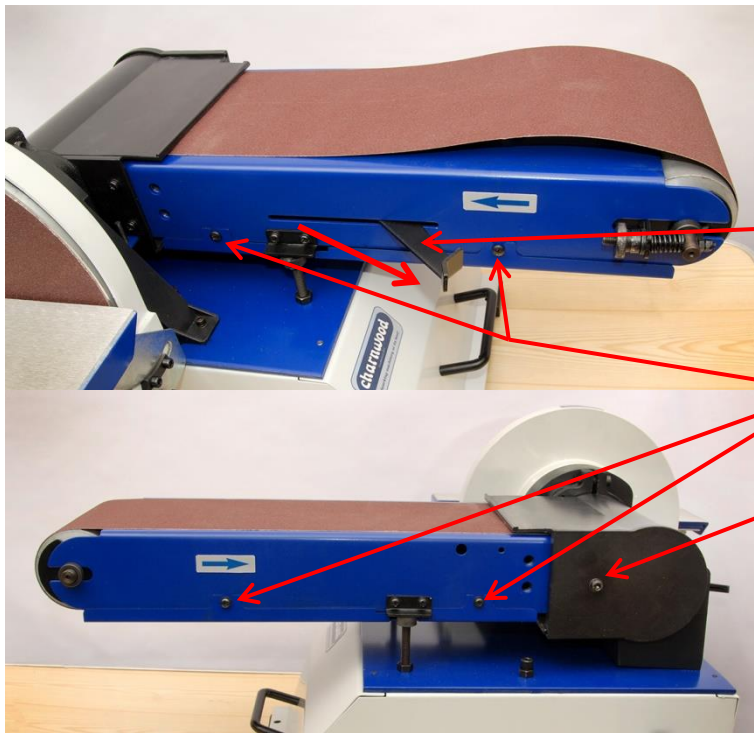
Peel the backing from the new sanding disc and apply to the sanding plate.

Ensure that it is positioned centrally on the plate, then press firmly into place.

Re-fit the disc cover and tighten all screws. Re-attach the work table.

The sanding disc can be converted to use the Hook & loop type discs.

A conversion backing pad (VB300) can be attached to the plate, then allowing Velcro-backed sanding discs to be used. The great advantage of this system is that discs can be swapped in seconds and discs can be remounted multiple times, allowing the user to work through different grits to achieve the desired finish.



Replacing the Sanding Belt

Remove the back stop.

Release the tension on the sanding belt by pulling out the tension lever.

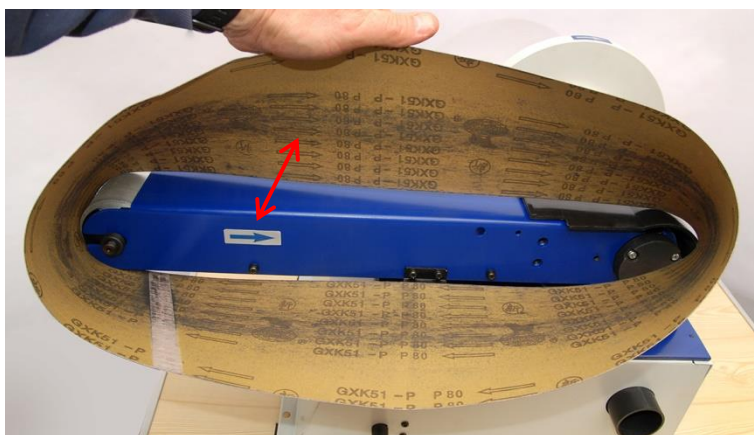
Loosen the four screws indicated which hold the belt lower dust cover.

Remove the screw holding the roller dust cover using a 5mm hex key.



Lift the belt bed to the vertical position and remove both dust cover and tray.

The belt can now be removed.



Locate the new belt over the two rollers. Ensure that the arrow on the inside of the belt corresponds to the direction marked on the machine.

Replace the drum dust cover and bottom tray, refitting and tightening all screws.

Re-tension the belt by closing the lever.

Track the belt as in previous instructions.

Re-attach the tool rest.

The life of the belts and discs can be greatly extended by regular cleaning with the BC01 Abrasive Disc & Belt Cleaner which will remove any build-up of sawdust and resin.

Troubleshooting

Problem	Cause	Remedy
Machine does not start	Blown House Fuse	Replace Fuse
	Loose switch terminal	Inspect back of switch
	Faulty switch	Replace switch
	Failed Motor	Replace Motor
Only starts when Green button is held down	Faulty switch	Replace switch
Machine Slows Down when Sanding	Operator applying too much pressure to work Piece	Use less pressure when applying work piece to sanding surface
Sanding Belt Runs Off Pulleys	Not tracked correctly	Adjust sanding belt tracking
Wood burns while sanding	Sanding surface clogged	Clean or replace disc or belt
	Excessive pressure being applied to work piece	Use less pressure when applying work piece to sanding surface
Motor overheats	Motor overloaded	Allow to cool, restart with reduced load




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


Declaration of Conformity for CE Marking

Charnwood Declare that Belt & Disc Sander, Model BD610

Conforms with the following 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. WAR-17AP0821 & WAR-17AP0807 have been issued by LCIE China, Building 4, no. 518, Xin Zhuan Road, CaoHejing Songjiang High-Tech Park, Shanghai, China.

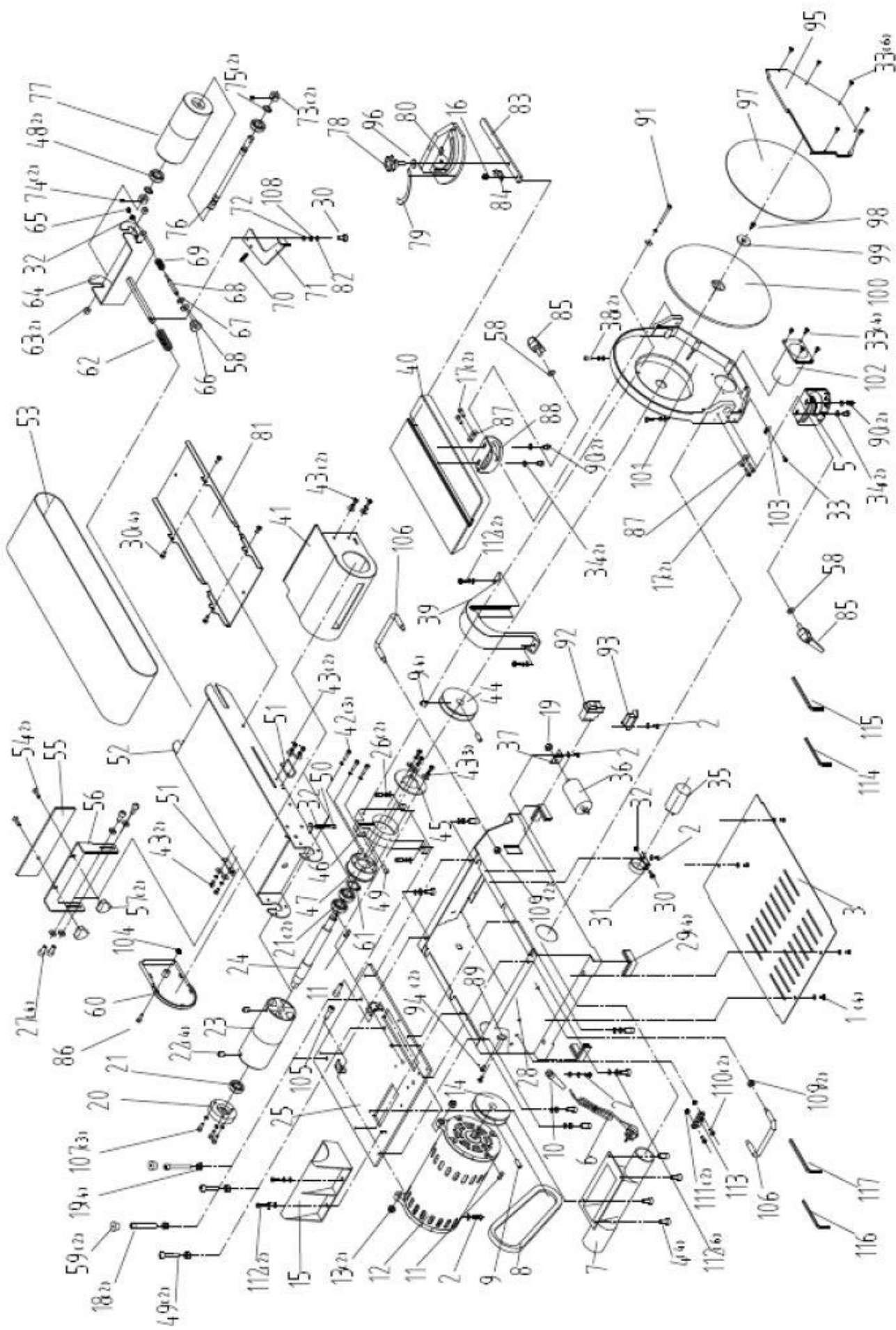
I hereby declare that equipment named above has been tested and found to comply with the relevant sections of the above referenced specifications. The machinery complies with all essential requirements of the directive.

Signed:  Dated: 04/12/2017 Location: Leicestershire

Richard Cook, Director

Parts Drawing

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Parts List

Part No.	Description	Part No.	Description
001	Philips Screw M4 x 6	002	Philips Screw M4 x 8
003	Baseplate	004	Philips Screw M5 x 8
005	Left Dial	006	Cable & Plug
007	Suction Connection	008	Vee Belt A600
009	Screw M6 x 8	010	Cable Sheath
011	Flat Key A5 x 15	012	Motor Assy
013	Non-Metallic Insert Nuts M8	014	Driving Wheel
015	Suction Hood	016	Screw & washer assembly M5 x 8
017	Hex socket head cap screw M5 x 16	018	Hex socket head cap screw M8 x 55
019	Type I Hexagon Nut M8	020	Bearing Cap
021	Deep groove ball bearing	022	Screw M8 x 12
023	Driving Roller	024	Driving Shaft
025	Support baseplate assembly	026	Hex socket screw & washer M8 x 30
027	Hex socket screw & washer M8 x 16	028	Base assembly
029	Foot	030	Philips Screw M5 x 12
031	Capacitor bracket	032	Type I Hexagon Nut M5
033	Philips Screw M4 x 10	034	Galvanised Flat washer
035	Capacitor	036	Capacitor
037	Capacitor Bracket	038	Hex socket screw & washer M8 x 18
039	Belt Cover	040	Work Table of disc
041	Suction Inlet	042	Screw & Spring washer assy M5 x 25
043	Hex socket screw & washer M5 x 12	044	Driven Wheel
045	Platen	046	Bracket Pedestal
047	Bearing pedestal	048	Deep groove Ball bearing
049	Hex socket head cap screw M8 x 30	050	Hex socket head cap screw M5 x 30
051	Support Plate	052	Bracket Assembly
053	Sanding Belt	054	Countersunk Head Screw M6 x 14
055	Auxiliary Baffle	056	Baffle
057	Lock Nut	058	Flat Washer
059	Rubber Feet	060	Suction Inlet Cover
061	Axial Spring Retainer	062	Strain Spring
063	Sheath	064	Guide Frame Assembly
065	Insert Nuts M5	066	Knurled High nuts M8
067	Rubber Pad	068	Adjusting Screw Rod
069	Adjusting Spring	070	Tension spring
071	Sanding belt Strain Lever	072	Powder Metallurgy Sheath
073	Driven Shaft Positioning Sleeve	074	Screw M5 x 6
075	Circlip for Shaft	076	Driven Shaft
077	Driven Roller	078	Mitre Gauge Knob
079	Mitre Gauge Scale Mark	080	Mitre Gauge
081	Sanding Belt Guard Plate	082	External gear Lock washer
083	Mitre Joint pole	084	Mitre Gauge Pointer
085	Lock Knob Assembly M8 x 17	086	Hex socket head cap screw M6 x 28
087	Guide Block	088	Right Dial
089	Strain Relief Plate	090	Hexagon Bolt M6 x 8
091	Hex socket head cap screw M5 x 56	092	Magnetic Switch
093	Electronic Centrifugal Switch	094	Philips Screw M4 x 12
095	Sanding Disc Cover	096	Big Flat Washer
097	Sanding Disc Paper	098	Cross Recessed Sunk Head Screw
099	Sanding Disc Pads	100	Sanding Disc
101	Sanding Disc Cover	102	Connecting Pipe

103	Pointer		104	Insert nuts M6
105	Philips Screw M8 x 25		106	Handle
107	Philips Screw & Spring washer assy.		108	Big Flat Washer
109	Hexagon Flange nuts M6		110	Cross Recessed sunk head Screw
111	Hexagon Flange Nuts M5		112	Hex socket head cap screw M5 x 10
113	Mitre Gauge Clip		114	Allen Wrench (S = 6)
115	Allen Wrench (S = 4*120)		116	Allen Wrench (S = 3*60)
117	Allen Wrench (S = 5*80)			



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Updated March 2019

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