



Woodworking machinery at its best!

12" & 14" BANDSAW OPERATORS MANUAL

MODELS: B300 & B350



**Charnwood, Cedar Court, Walker Road,
Hilltop Industrial Estate, Bardon Hill, Leicestershire, LE67 1TU**

**Tel. 01530 516 926 Fax. 01530 516 929
email: sales@charnwood.net website: www.charnwood.net**

GENERAL SAFETY RULES



WARNING: Do not attempt to operate the machine until you have thoroughly read and completely understood 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 switching 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 its 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 BAND SAWS

1. Ensure that the saw table is clear of off-cuts, tools or anything else that might foul the work-piece.
2. When cutting long boards use one or more roller stand(s) to support the work or have a competent helper to support it as it feeds off the rear of the table.
3. Always make sure that the blade is tracked and tensioned correctly before starting to use the saw.
4. Always use a brush to clear the table of dust or debris. **NEVER** use your hands, especially when the machine is running.
5. Always ensure that the thrust bearings and/or guide blocks are correctly adjusted before using the saw.
6. ALWAYS USE A PUSH STICK WHEN IT IS NECESSARY TO PUSH ANY PIECE OF MATERIAL OF SUCH SIZE THAT IT WOULD BRING YOUR HANDS WITHIN 30 CM OF THE BLADE.
7. Do not cut material that is badly warped or which has screws or nails in it.
8. Be extra vigilant when cutting stock which has loose knots in it as these may fly out of the saw.
9. NEVER tilt the table when the saw is running.
10. To avoid exposure to hazardous dust, do not use this saw without connecting it to a suitable dust extractor.
11. Always work with a sharp saw blade and feed the work at a rate suited to the thickness and hardness of the material.
12. Do not try to operate the saw with the doors open. There are safety interlocks to prevent this. Do NOT try to override them.

Note: This band saw has been designed and built solely as a woodworking machine. Do not modify it in any way or use it for anything other than its designated purpose. Neither the manufactures nor the supplier are liable for any damage or injury caused by incorrect assembly, operation or electrical connection of this machine.

Important:



Risk of Injury!
Never reach into
the running saw blade.



Wear Eye
Protection



Wear Ear
Protection

Specification

	B300	B350
Table size	480 x 390 mm	545 x 515 mm
Table height	1000 mm	1020 mm
Motor (240v Induction)	750W (1hp)	1100W (1.5hp)
Blade length	2240 mm	2560 mm
Blade widths	6 - 20 mm (1/4" - 3/4")	6 - 25 mm (1/4" - 1")
Blade speeds (no load)	370 and 800 m/min	370 and 800 m/min
Maximum depth of cut at 90	165 mm (6")	230 mm (9")
Throat capacity	305 mm (12")	345 mm (14")
Dust extractor hose connection	50, 75 & 100 mm	50, 75 & 100 mm
Weight	67kg	75kg
Dimensions (W x D x H)	790 x 580 x 1600 mm	900 x 720 x 1720 mm
Rating	Light Trade	Light Trade

Rating Description

Light Trade: Suitable for professional woodworkers where the machine will not be in daily use.

Mid range machines with a heavier build and more power. Typically used by 2 or 3 people within a small business and also for the dedicated hobbyist with a larger budget. It is expected to be used up to the machines maximum limit with occasional long work periods. Suitable for income generation. Expected maximum use of 300 hours annually.

Unpacking



Cut the strapping, open the carton and remove all parts from the packaging



Familiarise yourself with the components and read this manual.

Assembly

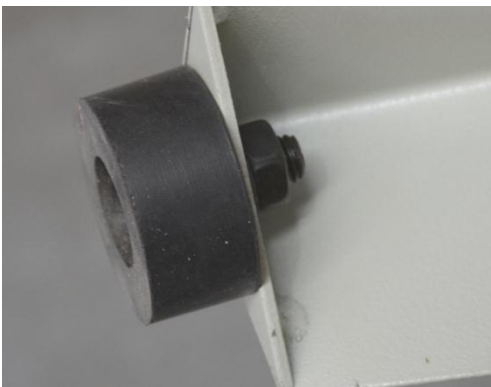
Building the base is most easily accomplished on a bench or table



Leave all nuts and bolts finger tight until you have finished assembling the stand.
Lay the machine on its back and bolt the four legs to its base, using the M6 x 10mm cap head bolts.

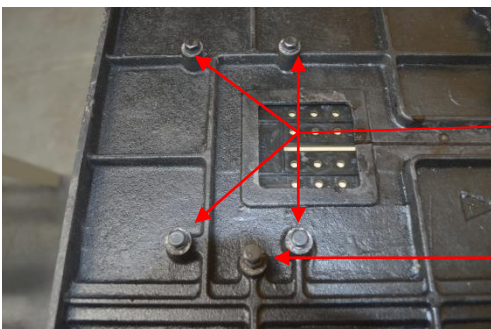


Bolt on the four leg braces, noting that the fold goes to the upper side.
Use M6 x 10mm coach bolts, washers and nuts.



Bolt on the four rubber feet.

Stand the saw upright and true up the floor stand and tighten all the bolts.

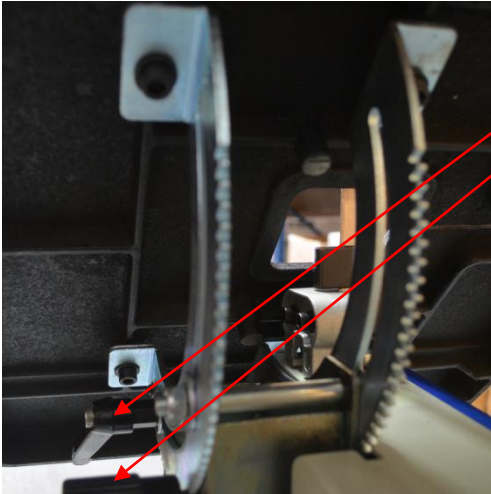


Take the table and lay it on the bench, face down.

Loosen these four bolts and remove them with their washers.

Do **not** touch this one.

Note that the upper face of the table is lacquered and this coating should be removed with thinners



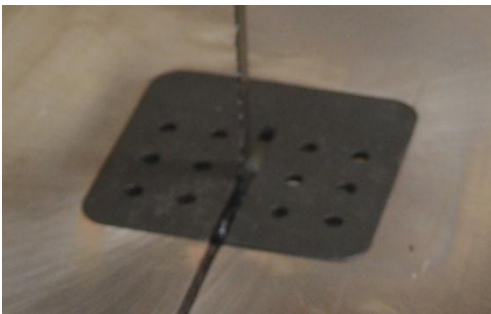
Pull the left hand edge of the table tilt trunnion upward as shown.

Undo the locking lever

Turn the knob clockwise to tilt the trunnion.

Remove the plastic insert from the table. From the back of the bandsaw, slide the table forwards allowing the blade to pass through the slot in the table.

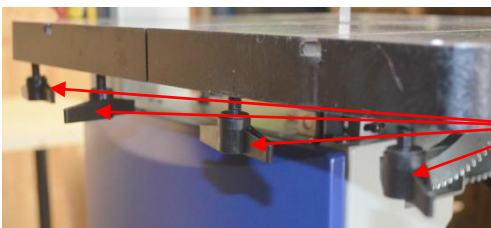
Bolt the table to the trunnion, using the four bolts previously removed. Leave the bolts finger tight for now.



Tilt the table back to horizontal.

Replace the insert and adjust the position of the table so that the blade is centred in the slot.

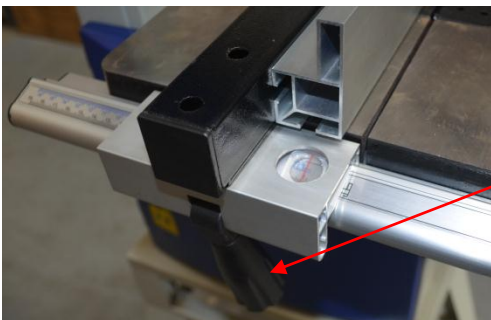
Do not tighten the table fixing bolts yet.



Screw the four large, plastic wing bolts into the tapped holes along the underside of the front edge of the table.



Offer up the fence rail so that the four slots slide over the shafts of the bolts and then tighten the wing bolts.



Place the rip fence on the table, with the black handle in the raised position, seat the assembly on to the guide rail.

Clamp it in place, by moving the handle down as seen here, so that it is roughly in a vertical position.



If necessary, adjust the table so that the slot in the table and the rip fence are parallel to the flat side of the blade.

Now tighten the table into place using four bolts underneath.



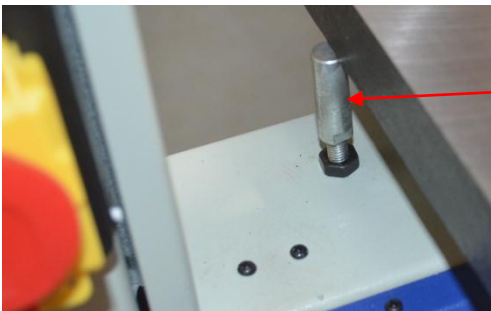
Screw a nut onto the push stick hook and screw this into the tapped hole high up on the left hand side of the saw. Lock it into position with the nut.



Hang the push stick on its hook and place the Allen keys and the spanner into the tool holder.



Insert the dust collection drawer into the slot in the base of the saw.



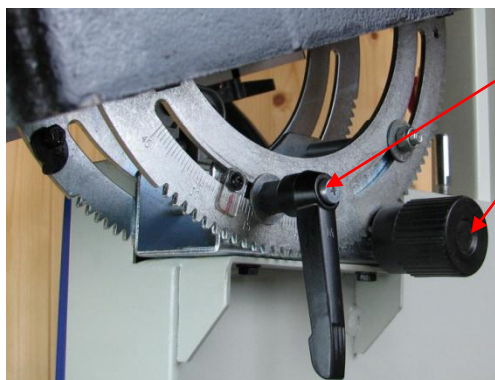
This special bolt sets the angle of the table for 90° cuts. When the edge of the table is resting on it, the blade should be perpendicular to the table top. If necessary this bolt may be loosened and an adjustment made.



Slide the mitre fence into one of the T-slots in the table.

Loosening this handle will enable you to change the angle. There are stops for 90 degrees and 45 degrees each way. Pull out the silver pin at the front of the mitre fence to move past the stop. Ensure that the handle is fully tightened before using the guide.

Setting Up The Bandsaw

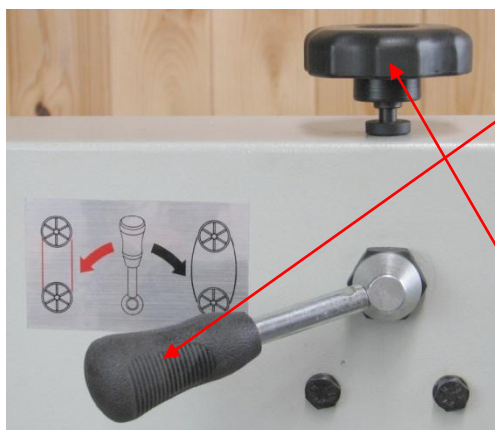


Set The Table Angle

The table angle can be changed by loosening this locking lever.

Then turn the knob move the table to the required angle, using the scale on the trunnion.

Once the angle has been set, tighten the locking lever to hold the table in position.



Set The Blade Tension

This lever is a quick release blade tension control, which enables you to quickly release the blade tension to change the blade.

To set the tension for the first time, move the lever to the tensioned position as shown.

Now turn the fine setting knob clockwise to increase the tension (Turn the knob anticlockwise to lower the tension).



To help you set the correct tension quickly and easily, there is an indicator behind the upper wheel. This can be seen through the small viewing window set into the upper door. Set the blade to the tension that is appropriate for the width of blade fitted.

(Alternately raise the blade guard to its highest position and increase the tension until it is only possible to deflect the blade sideways by 2 to 3 mm at its midpoint between the table and the guard).

It is recommended that you move the quick release lever to the slack position when the saw will not be used for a while.



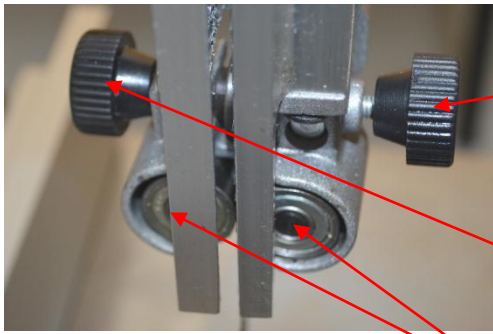
Set The Blade Tracking

When fitting a new blade it may be necessary to adjust the tracking (the alignment of the top wheel).

The blade should sit on the centre or to the front of the rubber band on the wheels. To check the tracking, open both doors and rotate the top wheel by hand. If the blade starts to move towards the front edge of the wheel, turn the adjusting knob clockwise.

The adjusting knob is located at the rear of the machine.

There is a large wing nut to lock the position once set.

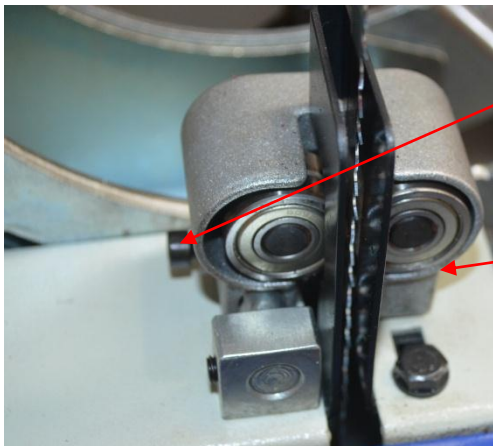


Set The Upper blade Guides

Loosen the right hand knob and adjust the guide assembly forwards or backwards, so that the front of the bearing is 2mm back from the gullet of the blade teeth.

Loosen the left hand knob and adjust the rear thrust bearing so that it is 0.5mm from the back edge of the blade.

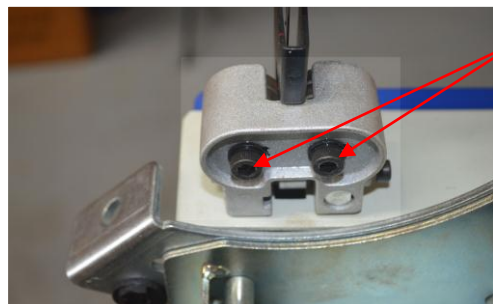
Use the Hex key provided to loosen the bolt behind each of the side bearings. Slide them left or right in the slot so that they are 0.5mm from the side of the blade.



Set The Lower Blade Guides

Use the Hex key provided to Loosen this bolt which allows the guide assembly to move forwards or backwards, so that the front edge of the bearing is 2mm back from the gullet of the blade teeth.

Loosen this bolt and adjust the rear thrust bearing so that it is 0.5mm from the back edge of the blade.



Undo the bolt at the rear of each of the side bearings. Slide them left or right in the slot so that they are 0.5mm from the side of the blade.

Remember to reset the upper and lower guides after changing to a different width of blade.



Set The Blade Speed

The bandsaw has 2 speeds. Use the higher speed, 800m/min, for general wood cutting. Use the lower speed, 370m/min, for cutting hardwoods and metals.

Open the lower door

Turn the drive belt tension roller knob anticlockwise to slacken the drive belt.



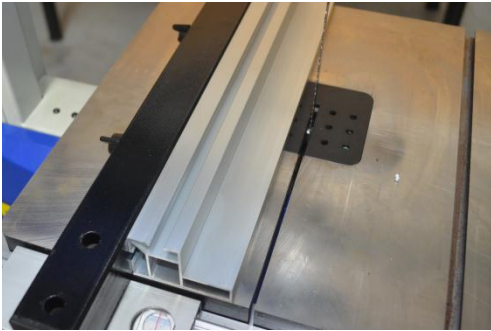
Move the belt over to the other pair of pulleys. Re-tension the belt so that finger pressure deflects it by about 10mm.

Close the lower door.

For every type of cut, the blade guard should be lowered so that the bottom edge of the guide is just above the work piece. This is for safety and to better control the blade during the cut.

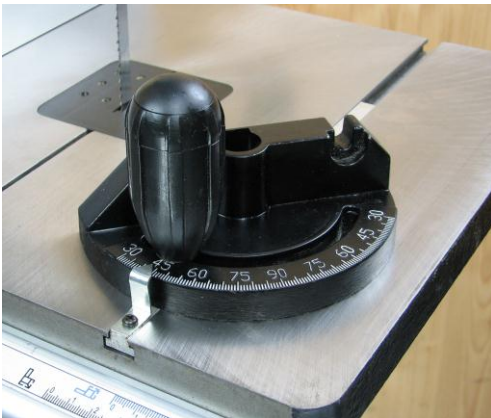
Always use a push stick so that you keep your fingers at least 30cm from the blade.

Making A Cut



Straight Rip Cuts

Ripping cuts are generally made using the guide fence and run along the grain of the timber. The rip fence may be used on either side of the blade. The aluminium fence section can be reassembled for left or right handed cutting and also, as shown, for cutting thin strips in narrow material.



Crosscutting

Cutting across the grain is generally done using the mitre fence.

Cutting Curves

The bandsaw can be used to cut curves freehand. The diameter of the curve you can cut depends on the width of the blade. A narrower blade can cut tighter curves than a wide blade. The table on the left gives a guide.

Note: Once you have cut curves with a blade, the set of the teeth will have changed. After having cut curves with a blade it will not cut so accurately in a straight line. Ideally you should keep one blade for straight cuts and one blade for curved cuts.

Blade width	Min. Diameter
6mm (1/4")	60mm (2.1/2")
10mm (3/8")	100mm (4")
13mm (1/2")	130mm (5.1/4")
16mm (5/8")	160mm (6.1/4")
20mm (3/4")	200mm (8")
25mm (1")	250mm (10")

Changing The Saw Blade



Take care as the blade teeth are sharp. Wear protective gloves if necessary.

Remove the rip fence guide rail by undoing the four large wing bolts underneath the table.

Open the upper door and reduce the blade tension with the quick release lever, located at the rear of the machine.

Wind the blade guard down to its lowest position.

Slide the blade off the wheels and ease it out through the slots in the left hand column, the blade guard and the table.



Follow the procedure in reverse to fit the new blade.

Once the blade is roughly in position, follow the set up section in this manual;
Set the blade tension
Set the blade tracking
Set the upper blade guides
Set the lower blade guides

Maintenance

Clean the interior of the machine on a regular basis, especially if you use it without a dust extractor. The dust drawer will fill quite quickly and dust will collect in both the upper and lower housings. This must be removed with a vacuum cleaner as an accumulation will reduce the efficiency of the saw and in an extreme case will pose a fire risk.

It is strongly recommended that this saw is connected to a dust extractor.

Optional Items



W520 Wheel Base

With the addition of the wheel base, one person can comfortably move the bandsaw around a workshop. There are two fixed wheels and two steering wheels allowing excellent manoeuvring across a relatively flat floor surface.

W510 Roller Stand

When cutting large panels or ripping down long lengths, a roller stand provides the necessary support to complete the job single handed.



Troubleshooting

Problem	Cause	Remedy
Machine does not start	Blown Fuse	Replace Fuse
	Loose switch terminal	Inspect back of switch
	Faulty switch	Replace switch
	Doors not closed	(The machine is fitted with a safety interlock switch, it will not run if a door is open)
Only starts when Green button is held down	Faulty switch	Replace switch
Motor slows down during operation	Blade is blunt	Replace blade
	Feed Speed is Too high	Feed the Work slower, let the blade do the cutting
	Drive belt is slipping	Re-tension drive belt
	Attempting to take too deep a cut	It may exceed the capacity of the machine
Machine does not run but buzzing noise heard from motor	Failed capacitor	Replace the motor start capacitor.


Declaration of Conformity for CE Marking

Charnwood Declare that Woodworking Band Saw, Model B300 & B350

Conforms with the following Directives: Machinery Directive 2006/42/EC
 EMC Directive 2004/108/EC
 Low Voltage Directive 2006/95/EC

And further conforms to the machinery example for which the EC type examination Certificate No. M6A 13 08 28954 037, N8M 13 08 28954 036 and E8N 13 08 28954 038 have been issued by TUV SUD Product Service GmbH, Zertifizierstelle, Ridlerstrasse 65, 80339 Munchen, Germany.

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: 19/08/2013 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

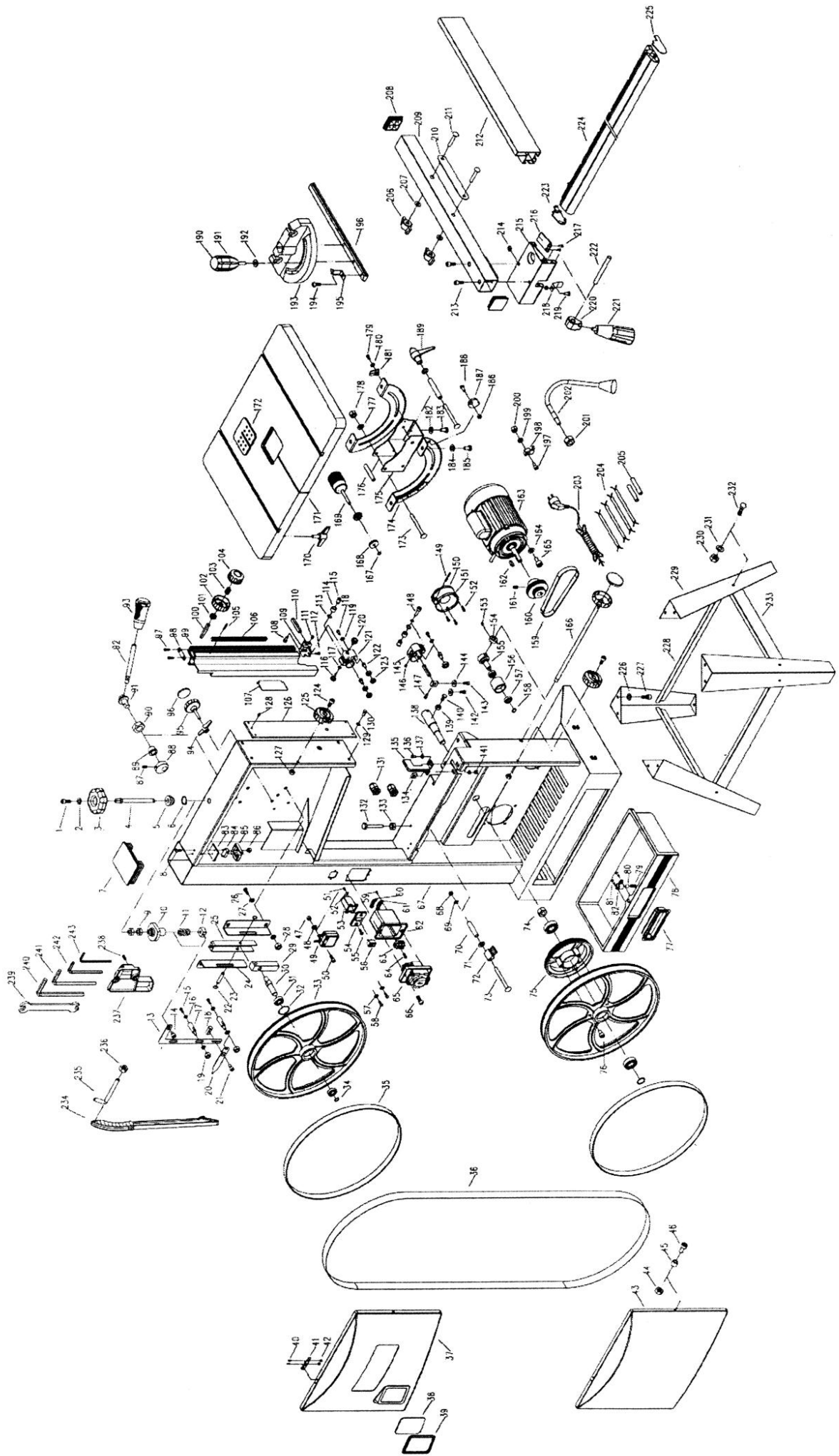
Do not dispose of electric tools together with household waste material!

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



Assembly Diagram



CHARNWOOD B300 & B350 BANDSAW - PARTS LIST

Part Number	Description	Part Number	Description
001	M5 x 12mm Cap Head Bolt	062	Switch Box
002	M5 Washer	063	4 Way Connector Block
003	Blade Tension Knob	064	4mm x 12mm Self Tapper Screw
004	Blade Tension Threaded Bar	065	Switch - KJD17B-4
005	Plastic Bush for Tension Knob	066	M4 x 12mm Pozie Head Bolt
006	Circlip	067	Main Frame
007	Plastic Cap for Main Frame	068	M8 Dome Capped Nut
008	M4 x 25mm Pozi Head Bolt	069	M8 Washer
009	M8 Nut	070	Spacer For Brush
010	Blade Tension Bush	071	M8 Washer
011	Spring 18mm Diameter x 30mm	072	Brush
012	Blade Tension Square Nut M8	073	M8 x 90mm Coach Bolt
013	Blade Tension Indicator Arm	074	Large Nut
014	M6 x 10mm Cap Head Bolt Modified	075	Lower Wheel Pulley
015	M6 x 12mm Hex Head Bolt	076	M6 x 16mm Cap Head Bolt
016	M6 Washer	077	Handle For Dust Tray
017	Blade Tension Indicator Stop	078	Dust Tray
018	Blade Tension Indicator Retainer	079	Spring
019	M6 Nyloc Nut	080	8mm Ball Bearing
020	Blade Tension Pointer	081	3mm x 10mm Self Tapping Screw
021	M6 x 12mm Cap Head Bolt	082	Retaining Clamp
022	Circlip 7mm	083	Door Switch Bracket
023	Shaft	084	Door Switch
024	Blade Tension Guide Plate	085	Door Switch Cover
025	Blade Tension Bracket	086	M4 Nut
026	M8 X 16mm Hex Head Bolt	087	M6 x 6mm Grub Screw
027	M8 Washer	088	Blade Tension Cam
028	M8 Nut	089	Threaded Sleeve
029	Upper Wheel Bearing Block	090	Nut
030	Upper Wheel Bearing Bolt	091	Quick Release Shaft
031	Wheel Bearing 6202Z	092	Quick Release Handle Shaft
032	Circlip	093	Quick Release Handle
033	Wheel	094	Locking Wing Nut M8 Female
034	Circlip	095	Blade Alignment Knob M8 x 40mm
035	Rubber Band for Wheels	096	Cap for Blade Alignment Knob
036	Blade 2240mm	097	Self Tapping Screw
037	Upper Door	098	Cover for Guide Rise & Fall
038	Blade Tension Perspex Window	099	Extrusion for Upper Bearing Guides
039	Blade Tension Window Frame	100	Shaft for Rise & Fall
040	M4 x 12mm Pozi Head Bolt	101	Square Block
041	Door Spring Plate	102	Knob for Guide Rise & Fall
042	M4 Nut	103	Spring 22mm Diameter x 25mm
043	Lower Door	104	Locking Knob for Guide Rise & Fall
044	M6 Nyloc Nut	105	Rise & Fall Cog
045	Lower Door Spacer Bush	106	Rack for Upper Bearing Guides
046	M6 x 16mm Cap Head Bolt	107	Slider Plate for Upper Bearing Guide
047	M4 Dome Capped Nut	108	M6 x 10 Cap Head Bolt
048	M4 Washer	109	Carrier for Upper Bearing Guides
049	LED Control Box - LED-5V700-2	110	Shaft for Upper Bearing Guide
050	M4 x 10mm Cap Head Bolt	111	M6 x 6mm Grub Screw
051	4mm x 10mm Self Tapper Screw	112	Coutersink Self Tapper Screw
052	Plastic Retaining Plate	113	Spring Clip
053	Light Switch Box	114	Upper Guide Rear Bearing HK1010
054	Light Switch Cover	115	M5 Bearing Insert
055	M4 x 12mm Pozi Head Bolt	116	Knob for Bearing Guides M5 x 22mm
056	Light Switch - KND1	117	M5 Washer
057	M4 Washer	118	M6 x 12mm Cap Head Bolt
058	4mm x 12mm Self Tapper Screw	119	M6 Washer
059	4mm x 12mm Self Tapper Screw	120	Knob for Bearing Guides M5 x 8mm
060	Cable Clamp	121	Upper Bearing Guide Housing
061	Cable Clamp	122	M6 Bearing Insert

CHARNWOOD B300 & B350 BANDSAW - PARTS LIST

123	Side Guide Bearing 609Z	184	M8 Washer
124	M6 x 16mm Cap Head Bolt	185	M8 x 16mm Cap Head Bolt
125	Door Locking Knob	186	M6 Nyloc Nut
126	Rise & Fall Strengthener Plate	187	Table Tilt 45 Degree Stop
127	M6 Nyloc Nut	188	M6 x 12mm Hex Head Bolt
128	M6 x 6mm Grub Screw	189	Kipp Handle M8 Female
129	M6 Washer	190	Cap for Mitre Guide Knob
130	M6 x 10mm Hex Head Bolt	191	Mitre Guide Knob M6 x 22mm
131	Plastic Wire Gromit	192	M6 Plastic Washer
132	Table Stop Bolt	193	Mitre Guide
133	M8 Nut	194	M4 x 8 Pozi Head Bolt
134	Lower Bearing Guide Bracket	195	Pointer for Mitre Guide
135	Blade Guard	196	Guide Rail for Mitre Guide
136	M6 x 10mm Hex Head Bolt	197	M5 x 10mm Cap Head Bolt
137	M6 Washer	198	Cable Clamp
138	Lower Wheel Bearing Shaft	199	M5 washer
139	M6 Nut	200	M5 Dome Capped Nut
140	M6 x 16mm Hex Head Bolt	201	M10 Nut
141	M6 Nut	202	Light
142	M6 x 10mm Cap Head Bolt	203	Mains Power Lead
143	M6 x 10mm Cap Head Bolt	204	
144	M6 Washer	205	
145	Lower Bearing Guide Housing	206	Wing Nut for Fence M6 female
146	M6 x 10mm Cap Head Bolt	207	M6 Washer
147	M6 x 6mm Grub Screw	208	Plastic End Cap for Fence Bar
148	M5 x 20mm Cap Head Bolt	209	Fence Bar
149	Pin for Dust Extraction Cap	210	Retaining Plate for Fence
150	Dust extraction Port Cap	211	Coach Bolt M6 x 50mm
151	Dust Extraction Port	212	Fence Extrusion
152	Self Tapping Screw	213	M5 x 16mm Cap Head Bolt
153	M6 x 6mm Grub Screw	214	M5 Washer
154	Belt Tensioner Collar	215	Fence Clamping Extrusion
155	Belt Tensioner Shaft	216	Pointer for Fence
156	Belt tensioner Wheel	217	Self Tapping Screw
157	Belt tensioner Bearing 6001Z	218	Spring Metal Bracket for Fence
158	Circlip	219	M5 x 10mm Dome Head Bolt
159	Drive Belt PJ595	220	Cam for Fence Locking Knob
160	Motor Pulley	221	Fence Locking Handle M6 x 10mm
161	M8 x 10mm Grub Screw	222	Pin for Fence Cam
162	Motor Key	223	Left Hand End Cap for Fence Carrier
163	Motor 750w	224	Fence Carrier
164	M6 Washer	225	Right Hand End Cap for Fence Carrier
165	M6 x 20mm Cap Head Bolt	226	M8 Washer
166	Belt tensioner Hand Wheel & Shaft	227	M8 x 12mm Cap Head Bolt
167	Circlip	228	Front & Rear Bracket for Floorstand
168	Table Tilt Cog	229	Leg for Floorstand
169	Table Tilt Hand Wheel	230	M6 Nut
170	Wing Nut for Fence Carrier M8 x 18mm	231	M6 Washer
171	Table	232	M6 x 10mm Coach Bolt
172	Table Insert	233	Side Bracket for Floorstand
173	M8 x 80mm Coach Bolt	234	Pushstick
174	Table Tilt Bracket	235	Hook for Pushstick
175	Table Tilt Trunnion	236	M6 Nut
176	Spacer for Table Tilt Bracket	237	Tool Holder
177	M8 Large Washer 25mm Diameter	238	Self Tapping Screw
178	M8 Nyloc Nut	239	8mm & 10mm Spanner
179	M4 x 12mm Pozi Head Bolt	240	6mm Allen Key
180	M4 Washer	241	5mm Allen Key
181	Pointer for Table Tilt	242	4mm Allen Key
182	M6 Washer	243	3mm Allen Key
183	M6 x 10 Hex Head Bolt		



Woodworking machinery at its best!

Charnwood, Cedar Court, Walker Road,
Hilltop Industrial Estate, Bardon Hill, Leicestershire, LE67 1TU

Tel. 01530 516 926 Fax. 01530 516 929
email: sales@charnwood.net website: www.charnwood.net