

# INSTRUCTION MANUAL

## BP-305 Wood Band Saw (240V) 305 x 175mm



W4202

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## 1.0 General

### 1.1 Specifications

Dimension (lxwxh)	535x760x1710mm	
Weight with motor	60kg	
Table height from floor	480-495mm	
Table height from floor on workstand	1080-1100mm	
Throat width	306mm	
Max. cutting height	160mm(150mm)	
Sawblade length	2240mm	
Sawblade width	6-15mm	
Sawtable tilt	to45°	
Sawtable size	400x480mm	
Sawblade speeds	372x802m/min	
Motor capacity	P1-0.81KW S1 P2-0.55KW S2	
Noise information:	no-load	working
Sound power level	84.1dB(A)	85.5dB(A)
Workplace related noise emission value	73.3dB(A)	79.4dB(A)

### 1.2 User Responsibility/Warranty

This appliance will perform in conformity with the description contained in the instructions provided. This machine must be checked periodically. Defective equipment(including power cables) should not be used. Parts that are broken,missing, obviously worn, distorted or contaminated, should be replaced immediately. Should such repair replacement become necessary, it is recommended that only genuine replacement parts are used and that such repairs are carried out by qualified persons.Failure to comply relieves from product liability.The aforementioned also applies to all accessories offered for this appliance.

This appliance or any of its parts should not be altered or changed from standard specifications.The user of this machine should have the sole responsibility for any malfunction which results from improper use or unauthorized modification from standard specifications,faulty maintenance, damage or improper repair by anyone other than qualified persons approved by supplier.

supplier.

Please fill in the warranty registration card and send to the address shown on it. Normal wearing parts and consumable are not covered by the warrant.

### 1.3 Final Assembly and Installation

Unpack machine and check for any visible damage which may have occurred during transport. If a damage is detected notify your dealer immediately. This machine is shipped partly disassembled. Saw table, rip fence and crank handle have to be installed prior to use.

- \*Remove the rip fence guide extrusion from the table.
- \*Place the table onto the upper table trunnion.
- \*Install to trunnion with 4 each serrated lock washer and hexagon head screws M8x16.
- \*Attach rip fence guide extrusion to table with the four thumb screws.
- \*Place table insert in to the table center hole (table insert with wide slot for bevel cuts only).
- \*Insert cup square neck screw into rip fence guide secure with washer  $\varnothing 8.4$  and wine nut.
- \*Attach rip fence extrusion with 2 each cup square neck screw M6x35, washer  $\varnothing 6.4$  and knurled nut M6 to the rip fence guide.
- \*Install crank handle with cap screw M6x55 and 2 hex. flat nuts M6 to the crank.

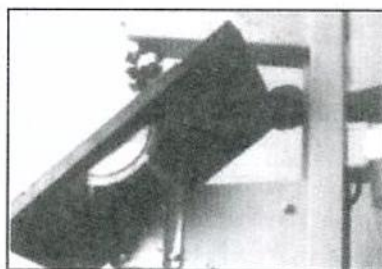
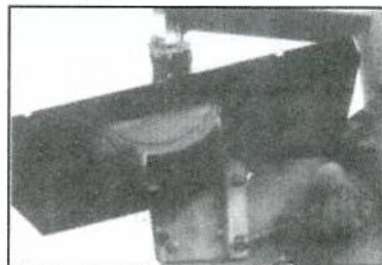
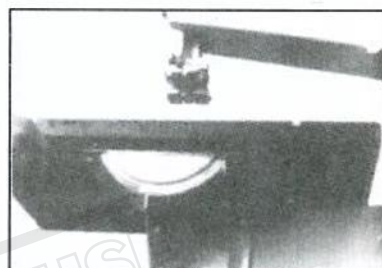
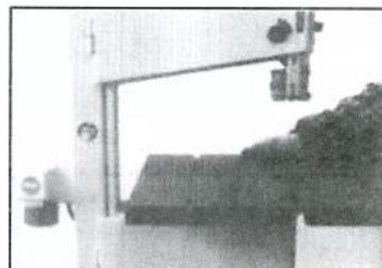
After installation adjust the table so that the saw blade runs through the center of the table insert slot.

#### entering the Table

- \*Loosen the screws holding the lower table trunnion.
- \*Move table sideways as required, until sawblade runs through the center of the table insert.
- \*Tighten the table trunnion screw, ensure the table stays in its set position.

#### Setting the Table Square with the Sawblade

- \*The sawblade can be tilted up to 45°. To tilt, loosen the wing nut of the table trunnion.
- \*A stop on the underside of the table rests on the lower wheel housing when the table is at 90° with the blade.
- \*By turn the hexagon nut (A) in or out, as required, the angle against the sawblade can be adjusted.
- \*After setting the table affix the scale to the rip fence carrier extrusion.





To ensure sufficient upright stability of the machine it should be bolted to floor, bench or table, or mounted on the workstand, available as optional accessory. For this purpose  $\Phi$  8 mm holes are provided in the machines base plate.



#### Sawblade Guard

When opening the lower wheel housing door the sawblade guard swings down.

When closing the door, the sawblade guard must be lifted by hand, so the door can close fully.

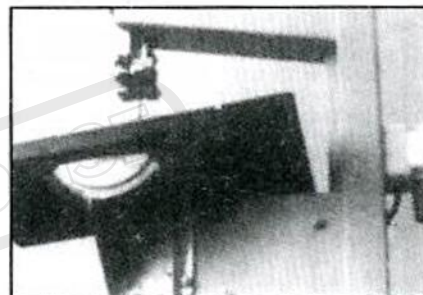
**Important:** Operating saw only with the lower wheel housing door closed.



#### Rip Fence

The rip fence supplied with this saw can be used on both side of the blade.

Loosen the two knurled nuts (pos.2) to set the extrusion to the other side of the rip fence carrier. With the starknob screw(pos.1) the fence extrusion can be set to square with the table top.



#### Dust Collection

If this bandsaw is operated indoors it is recommended to have it connected to a dust collection.

The suction connector, supplied with the machine, have to be fitted to the dust ejection port of the saw for this purpose. The diameter of the suction connector is 100 mm. The dust collector this saw is connected to must provided for an air flow rate of 20mtr/sec.

## 2.0 Band Saw Settings

### 2.1 Selecting the Correct Blade Speed

This band saw can be operated at two different speeds. By changing the V-ripped belt on the pulleys either 372m/min (20.2fps) or 802m/min (43.7fps) are possible. The band saw blade speed most suitable for the job at hand should be found by making trial cuts in a piece of scrap wood.

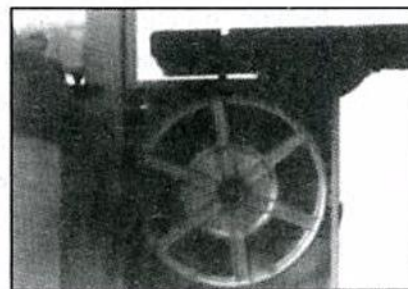
We recommend: 802m/min for all timber

372m/min for hard woods, certain plastics and NF-metals

#### Change the Saw Blade Speed.

Slacken the V-ripped belt with the crank located at the side of the lower wheel housing Both

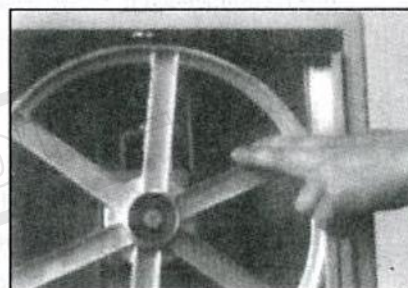
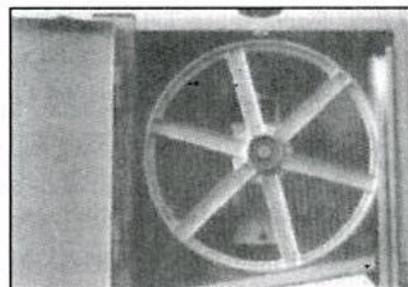
the lower band saw wheel and the motor pulley are 2-stepped. Please belt on either front or rear V-grooved step on both pulleys (see also label in the lower door). Adjust belt tension pulley position on its shaft accordingly, then tighten the belt.



## 2.2 Changing and Setting the Saw Blade

This band saw is factory-equipped with the general purpose woodcutting blade, the blade set. To change the blade, remove the rip fence carrier extrusion from the table. Then slacken the blade tension by turning the handwheel on top of the upper wheel housing. Remove the blade. Fit new blade and tension lightly.

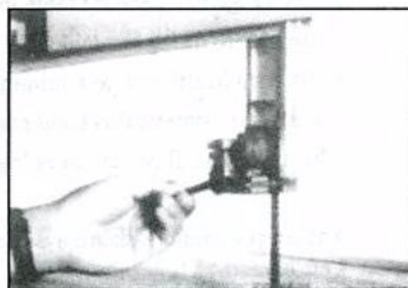
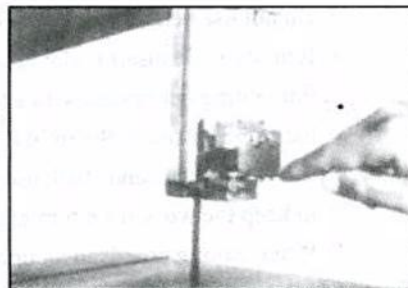
The blade should run in the center of the rubber lined band saw wheels or else it may jump off. To check the tracking, turn upper wheel by hand. If required, adjust tracking with the knurled handle at the rear of the upper wheel housing.



## 2.3 Blade Guiding

The saw blades guide of this band saw model RBS-12A ensure an exact guiding of the blade for clean cuts. When using narrow blades ensure that the lower blade guide positively supports the blade from both sides and the rear.

Set the bearings of the upper blade guide to within approx. 0.5 mm of the blade, and the large thrust bearing against the back of the blade, just clear of it. Do not set the bearing too close, as the friction generates heat, which may have an adverse effect on the bearings and the saw blade as well.

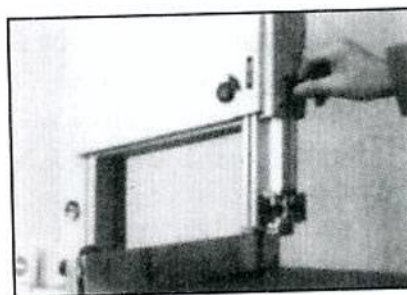




## 2.4 Setting the Cutting Height

The upper blade guide should always be set as close as practical against the work. To adjust, loosen the wing nut at the side of the upper wheel housing, and set the blade guide to the required height.

Tighten wing nut after setting.



## 2.5 Saw Table Tilt

For bevel cuts the saw table tilts steplessly through 45°. To tilt, loosen the wing nut on the table turnknions, set table to the required angle and tighten the wing nut again.

Exchange the table insert against the one with the wide slot, so the blade can travel freely.

It is recommended to verify the correct angle setting by making trial cuts in scrap wood.

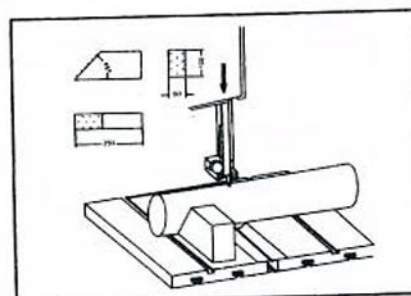
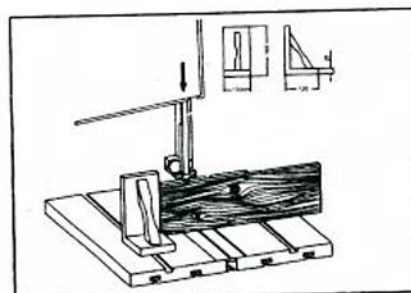


## 2.6 Safety Information

1. Check that all guards are in place and securely locked before switching the machine on.
2. Always disconnect from power when servicing the machine.
3. Do not use bent or cracked band saw blades.
4. Replace table insert if slot have enlarged.
5. For cutting operations with a tilted table the rip fence has to be locked to the right hand side of the blade.
6. When cutting round stock use a suitable jig or fixture to keep the work from turning.
7. When cutting boards in an upright position use a suitable push block to prevent the kickback.
8. Exchange the standard table insert against the one slot before tilting the table.
9. To keep health risk to a minimum it is recommended to always connect this band saw to a dust collector having an air flow rate of at least 20m/s.

The most common hazard associated with the operation of band saws are the following:

- a hazard by running saw blade, e.g. contact with the teeth of the blade.



- flinging of cutoffs or knots
- workpiece kickback

The principal hazard areas of a band saw are:

- the work area
- the area around a running machine
- the kickback area

Despite the use of the specific safety devices and compliance with all relevant regulations for the prevention of accidents, when operating a band saw the following residual risks remain:

- hearing damage by excessive noisy;
- danger of accidents in the unprotected cutting area of the running saw blade;
- danger of injury when changing blade (danger of cuts by the sharp teeth);
- endangering by flung about workpieces or parts;
- squashing of fingers;
- danger of injury by kickback of workpieces;
- health risk caused by the dust emission, especially from oak and beech saw dust.

## 2.7 Other Information

This band saw can be fitted and/or upgraded with a range of optional accessories. Supplier or its representatives can only assume liability regulations if the machine, and all accessories offered or made available for it, is used for its intended purpose.

## 2.8 Electrical Installation

This band saw is equipped with either a 0.55KW 230V single-phase, or 0.55KW 400V three-phase motor. Connection to a supply circuit is made by an extension cable, plugged directly into the switch.

This machine must be connected to an earthed outlet and should be operated on a residual current device (RCD) of 30mA capacity. The three-phase model must be connected to a 5-wire supply system. Ensure that only 5-wire extension cables are used. Extension cable must have a minimum lead cross section of 3x1.5mm(230V) or 5x1.5mm(400V).

Have damaged power cables replaced at once by a qualified electrician.

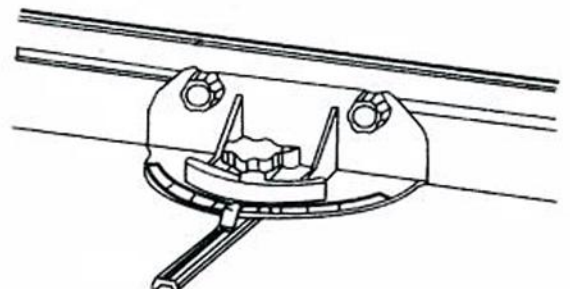
**Risk of electric shock** if operated with a damaged power cable.

Children should not operate this band saw.

## 3.0 Accessories

### 3.1 Mitre Fence Stock-no. 0910008048

If the mitre fence needs to be used on the left-hand side of the saw blade, both extrusion end plugs have to be removed from the mitre fence extrusion, otherwise the mitre fence can not pass between the blade and the machines frame.



### 3.2 Workstand Stock-no. 0909004276

Provided a stable base for a firm stand and a convenient working height.



### 4.0 Band Saw Blade

The following blades are suitable for this machine:



General purpose blade  
tooth spacing 6 mm  
2240x12x0.5 mm  
Stock-no. 0909000467



Blade for wood  
circular cutting  
tooth spacing 4 mm  
2240x6x0.5 mm  
Stock-no. 0909000475

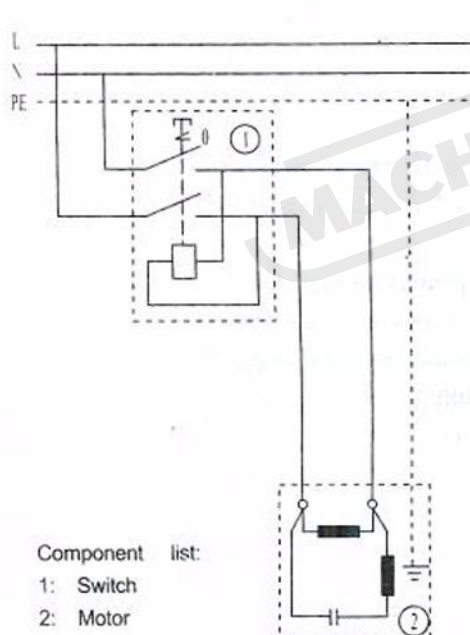


Blade for wood ripping  
tooth spacing 6 mm  
2240x15x0.5 mm  
Stock-no. 0909000483

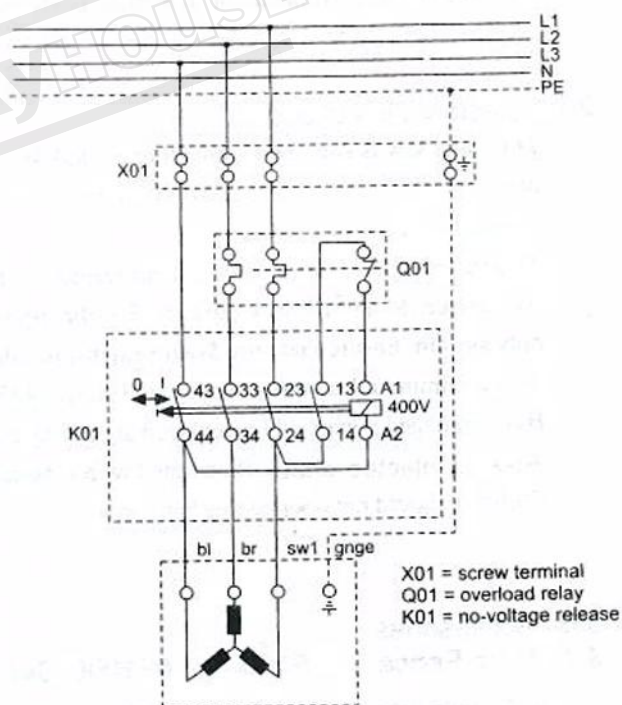


Blade for NF-metals  
tooth spacing 2 mm  
2240x15x0.5 mm  
Stock-no. 0909000491

### 5.0 Wiring Diagrams



Single-phase



Three-phase



**6.0 Spare Parts List**

<b>Item</b>	<b>Description</b>	<b>Dimension</b>	
4	Guide support		
6	Upper band saw wheel ass'y		
7	Tension bracket frame		
8	Tension bracket	25x5x175	
9	Blade tensioner		
10	Guide carrier extrusion	375mm	
11	Knurled nut	M8	
12	Wheel carrier bracket	128x165	
13	Spacer bushing	8x40 galv	
14	Pilot pin	6.9x5.9x35	
17	Parallel pin	10h11x100	
18	Upper bearing shaft		
19	Lower bearing bolt		
21	Thrust bearing small		
22	Suction connector BAS	Ø 100	
23	Table insert narrow slot	Ø 70x5	
26	Star knob screw	M8x65	
28	Thumb screw	M8	
29	Starlock w/o cap	Ø 10	
30	Set screw	M6x12	GB77-85
31	Deep groove ball bearing 60203 ZZ		
32	Deep groove ball bearing 60203 LLU	17x40x12	
33	Circlip ring	17x1	GB894.1-86
35	Washer	6	GB97.1-85
37	Hexagon nut self-locking	M6 galvanized	DIN985
42	Hexagon nut	M16x1.5 galv	GB6171-86
43	Hexagon nut	M20x1.5	GB6171-86
46	Spring washer	B16 galv	GB93-87
48	Washer	8	GB97.1-85
50	Lower band saw wheel ass'y		
51	Crank		
52	J-belt pulley, 2-step	4Jx62	
53	Tension wheel		
54	Deep groove ball bearing 6001-ZZ		
56	Circlip ring	12x1	GB894.1-86
57	Set collar	A10 galv	DIN 705
58	Disk spring	20x10.2x0.8	
59	Sliding shaft		
60	Tongue narrow		
61	Lock housing	Ø28	
62	Slotted insert		
64	Leaf spring-rear lock		
65	Slider	45x95	
67	Lamello plug	100x60	
75	Crank handle	Ø 25x45	
76	Hexagon thin nut	M6 galv	GB6170-86
82	Pan-head tapping screw	ST 3.5x9.5C H galv	GB845-85
84	3-roller guide ass'y, heavy-duty		
85	Thrust bearing, heavy-duty		
86	Nut	M6	
87	Knurled thumb screw	M6x25 galv.	
88	Table insert, wide slot	70x5	

Item	Description	Dimension	
90	Band saw table	400X548	
91	Table trunnion, lower		
92	Table trunnion, upper		
93	Table trunnion scale 0-45		
94	Fence extrusion	450mm	
95	Rip fence carrier	145X130X98	
96	Scale, metric		
97	Bolt guide	22X60	
98	Bolt guide	16X53.5	
100	Pin guide seat		
101	Cup square neck bolt	M8X100 galv.	GB14-88
102	Glide piece, table trunnion	20.5X20.5X8	
103	Spacer bush	8x50 galv.	
104	Knurled nut	M6	DIN similar to 466
105	Brush strip		
106	Band saw tyre	310X2.5X20	
107	Cap screw	M6X55 galv.	GB65-85
109	Washer	8	GB96-85
110	Serrated lock washer	8	GB862.2-87
111	Hexagon nut	M8 galv.	GB6172-86
112	Cup square neck screw	M8X50 galv.	GB14-88
113	Cup square neck screw	M6X40 galv.	GB14-88
116	Cup square neck screw	M8X20 galv.	GB14-88
119	Upper door ass'y 315		
120	Lower door ass'y 315		
121	Pilot pin guide ass'y		
122	Pan-head tapping screw	4.8X16 C H galv.	GB845-85
125	Thumb screw	M8X18	
201	Rip fence carrier extrusion	548mm	
203	Flange nut	M8 galv.	
204	Hexagon head screw	M8X16 galv.	GB5783-86
209	Hexagon head screw	M6X16 galv.	GB5783-86
210	combination nut	M6 galv.	
211	Guide bracket	25X135	
214	Washer	6	GB97.1-85
215	Hexagon head screw	M6X20 galv.	GB5783-86
216	Hexagon head screw	M6X12 galv.	GB5783-86
217	Serrated lock washer	6	GB862.2-87
223	Connecting tube		
224	Set screw	M5X12 galv.	GB77-85
227	Starknob screw	M6X28 galv.	
229	Switch		
234	Cross recessed raised cheese head screw	M4X50	
240	Cap screw	M8X40	
241	Hexagon nut	M8 galv.	GB6170-86
242	Cap screw	M4X10	
243	Hexagon head screw	M4	
244	Washer	4.3	
245	Saw blade guard		
250	Motor 0.55KW		
260	Blade		
7000	Poly-V-belt	4PJ610	

