

# OPERATION MANUAL

Heavy Duty Band saw

## WINTER *BS* series



### **WARNING!**

*The operator must thoroughly read this manual before operation.  
Keep this manual for future reference.*

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## SPECIFICATIONS

Item	BS500	BS600	BS700
<b>Motor Power</b>	400V,3~,50Hz,3.5KW	400V,3~,50Hz,4.0KW	400V,3~,50Hz,4.0KW
<b>Blade Length</b>	4100 mm	4590 mm	5020 mm
<b>Blade Width</b>	19~38 mm	19~38 mm	19~50 mm
<b>Blade Speed</b>	22 m/sec	26 m/sec	26 m/sec
<b>Throat Capacity</b>	500 mm	600 mm	700 mm
<b>Max Cutting height</b>	350 mm	430 mm	430 mm
<b>Table Size</b>	640x500 mm	700x610 mm	900x700 mm
<b>Table Tilt</b>	-5°~+45°	-5°~+45°	-5°~+45°
<b>Dust Port</b>	2x100 mm	2x100 mm	2x100mm
<b>N.W./G.W.</b>	280/316 kgs	330/365 kgs	398/437 kgs
<b>Packing Size (mm<sup>3</sup>)</b>	930x730x2140	1030x730x2240	1130x730x2330
<b>Noise(unloading)</b>	78 dB(A)	78 dB(A)	78 dB(A)

**NOTE:** The above specifications and the constructions were current at the time this manual was published, but because of our policy of continuous improvement, we reserve the right to change specifications and the constructions without notice and without incurring obligations.

## GENERAL SAFETY INSTRUCTIONS

Please read the following instructions carefully, **failure to do so could lead to serious personal injury.**

When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.

Read all these instructions before operating the tool and save this user manual for future reference.

We recommends that this tool should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us using the telephone number on the back of this user manual, and we will be more than happy to advise you.

**KNOW YOUR POWER TOOL:** Read and understand the owner's manual and labels affixed to the saw. Learn its applications and limitations, as well as the potential hazards specific to this tool.

**KEEP WORK AREA CLEAN AND WELL LIT:** Cluttered work benches and dark areas invite accidents. Floors must not be slippery due to oil, water or sawdust etc.

**DO NOT USE THE SAW IN DANGEROUS ENVIRONMENTS:** Do not use power tools in damp or wet locations, or expose them to rain. Provide adequate space surrounding the work area. Do not use in environments with a potentially explosive atmosphere.

**KEEP CHILDREN AND UNTRAINED PERSONNEL AWAY FROM THE WORK AREA:** All visitors should be kept at a safe distance from the work area.

**STORE TOOLS SAFELY WHEN THEY ARE NOT IN USE:** All tools should be stored in a dry, locked cupboard and out of the reach of children.

**WEAR THE CORRECT CLOTHING:** Do not wear loose clothing, neckties, rings, bracelets, or other jewellery, which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves up above the elbow.

**USE SAFETY GOGGLES AND EAR PROTECTION:** Wear CE approved safety goggles at all times, Normal spectacles only have impact resistant lenses, they are NOT safety glasses. A face or dust mask should be worn if the operation is dusty and ear protectors (plugs or muffs) should be worn, particularly during extended periods of operation.

**PROTECT YOURSELF FROM ELECTRIC SHOCK:** When working with power tools, avoid contact with any earthed items (e.g. pipes, radiators, hobs and refrigerators, etc.). It is

advisable wherever possible to use an RCD (residual current device) at the mains socket.

**STAY ALERT:** Always watch what you are doing and use common sense. Do not operate the saw when you are tired or under the influence of alcohol or drugs.

**DISCONNECT THE TOOL FROM THE MAINS SUPPLY:** When not in use, before servicing and when changing accessories such as cutters, etc.

**AVOID UNINTENTIONAL STARTING:** Make sure the switch is in the OFF position before connecting the tool to the mains supply.

**NEVER LEAVE THE TOOL RUNNING / CONNECTED WHILST UNATTENDED:** Turn off the tool and disconnect it from the mains supply between jobs. Do not leave machine until it comes to a complete stop.

**DO NOT ABUSE THE MAINS LEAD:** Never attempt to move the saw by means of the mains lead or pull it to remove the plug from the mains socket. Keep the mains lead away from heat, oil and sharp edges. If the mains lead is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid unwanted hazards.

**CHECK FOR DAMAGED PARTS:** Before every use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate correctly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, and any other conditions that may affect its operation. A guard or other part that is damaged should be correctly repaired or replaced by an authorized service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service agent. Do not use the tool if the switch does not turn it on and off.

**KEEP ALL GUARDS IN PLACE:** And in full working order.

**MAINTAIN TOOLS WITH CARE:** Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories. All extension cables must be checked at regular intervals and replaced if damaged.

**USE ONLY RECOMMENDED ACCESSORIES:** Consult this user manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards and will invalidate any warranty you may have.

**REMOVE ADJUSTING KEYS AND WRENCHES:** Form a habit of checking to see that keys and adjusting wrenches are removed from the tool before every use.

**DO NOT ABUSE THE MAINS LEAD:** Never attempt to move the saw by means of the mains lead or pull it to remove the plug from the mains socket. Keep the mains lead away from heat, oil and sharp edges. If the mains lead is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid unwanted hazards.

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**REMOVE ADJUSTING KEYS AND WRENCHES:** Form a habit of checking to see that keys and adjusting wrenches are removed from the tool before every use.

**DO NOT OVERREACH:** Keep proper footing and balance at all times.

**USE THE RIGHT TOOL:** Do not use the tool or attachment to do a job for which it was not designed.

**DO NOT FORCE THE TOOL:** It will do the job better and more safely at the rate which it was designed.

**DO NOT OPERATE POWER TOOLS IN EXPLOSIVE ATMOSPHERES:** Do not use the tool in the presence of flammable liquids, gases, dust or other combustible sources. Power tools may create sparks which can ignite the dust or fumes.

**DO NOT EXPOSE THE TOOL TO RAIN OR USE IT IN WET CONDITIONS:** Water entering a power tool will greatly increase the risk of electric shock.

**HAVE YOUR TOOL REPAIRED BY A QUALIFIED PERSON:** The tool is in accordance with the relevant safety requirements. Repairs should only

be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

## SPECIAL SAFETY INSTRUCTIONS

1 .Some wood and wood type products, especially MDF (Medium Density Fibreboard) can produce dust that can be hazardous to your health. We recommend the use of an approved face mask with replaceable filters when using this machine in addition to using the dust extraction facility.

2 .Approved safety glasses or goggles and ear defenders must be worn when using the saw.

3 .Ensure that the band saw is securely fastened to its base and wherever possible secure the base to the floor - When selecting a location for the band saw consideration needs to be given to the size of material to be cut and the area around the Band Saw.

4 .Do Not attempt to use for wet cutting operations a fatal electric shock could occur. This machine is to be used for dry cutting only.

5 .Do Not over tension the drive belt, the drive belt will last longer if the tension is released after each use.

6 .Do Not allow sawdust to build up around the motor or inside the machine. A build up of sawdust is a fire hazard.

7 .Do Not stop the blade by forcing the work piece against it or by using sideways pressure.

8 .Keep Guards in place and in good working order.

9 .Always ensure that the blade guide rollers are set correctly.

10 .Do Not start the machine with the blade in contact with the work piece.

11 .Check the work piece for any protruding nails, screw heads or anything that could damage the blade.

12 .Do Not attempt to modify the machine or its accessories in any way.

13 .Do Not use excessive force when feeding the work piece to the blade, feeding the work piece gradually will reduce wear on the machine and blade, increasing its efficiency and operating life.

14 .For your safety; remove the chippings and work debris etc. from the table top and from inside the extraction port before each operation.

15 .Keep hands out of path of saw blade, never reach around saw blade .

16. Before making the first cut using the saw, let it run for a while; Watch for vibration or wobbling that could indicate poor installation or a poorly balanced blade. Adjust or replace as necessary.

17 .Allow the blade to run up to full speed before cutting.

18 .Stop operation immediately if you notice anything abnormal.

19 .Wait for the saw blade to stop completely and remove the plug from the mains supply before servicing or adjusting tool.

20 .Be alert at all times, especially during repetitive, monotonous operations. Don't be lulled into a false sense of security. Blades are extremely unforgiving.

21 .Use of improper accessories may cause damage to the saw and surrounding area as well as increasing the risk of injury.

22. Turn off the saw and wait for it to complete stop before moving work-piece or changing settings.

23. Do not modify the saw to do tasks other than those intended.

24. Keep the site free of tripping hazards. Ensure adequate lighting conditions.

25. The saw must only be operated with all correctly mounted guards etc.

26. Never use cracked or distorted saw blades - Only use sharp saw blades.

27. Use a push stick when rip sawing narrow work-piece.

- Always release the blade tension, when the machine is not in use.
- Always wear gloves and eye protection when fitting or removing blades.
- Always uncoil blades in spacious areas, away from other people, and take great care.
- Always keep looped blades secure with tie wires.
- Always keep fingers away from moving blades.

#### **Use of extension leads:**

- Always unwind any extension leads fully.
- For extension leads up to 15 metres use a wire cross section of at least 1.5 mm<sup>2</sup>.
- For extension cords over 15 metres but less than 40 metres use a wire cross section of at least 2.5 mm<sup>2</sup>.
- Always replace a damaged extension lead before using the band saw.
- Protect your extension cord from sharp objects, excessive heat and damp or wet locations.



**CAUTION:** The warnings and cautions mentioned in this user manual can not cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be applied.

#### **Blade Safety:**

- Use only blades that are recommended by the manufacturer.
- Do Not use blades that are deformed or have missing teeth, this is highly dangerous and could result in a serious accident to the operator and bystanders as well as damaging the machine.
- Only use blades that are recommended by the supplier and that are in good condition.
- Ensure that the directional arrow, if marked on the blade corresponds with the rotational direction of the motor, the teeth of the blade should always point downward when viewed from the front of the saw.

## SAFETY SYMBOLS



When using the saw always ensure the operator as well as those in the area wear ear protection.



When using the saw always ensure the operator as well as those in the area wear eye protection.



Some wood and wood composites have the potential to be highly toxic; always wear a face mask when operating saw.

## SAFETY SYMBOLS USED THROUGHOUT THIS MANUAL



**Danger / Caution:** Indicates risk of personal injury and/or the possibility of damage.



**Warning:** Risk of electrical injury or damage!



**Note:** Supplementary information.



**Drawing-in / trapping hazard!** Risk of personal injury to body parts or clothing by being drawn into the rotating saw blades.

## SITE CONSIDERATIONS

### General Condition:

- 1 .Electrical connection: Steady state voltage: 0.9-1.1 of nominal voltage.  
Frequency: 0.99-1.01 of nominal frequency continuously; 0.98-1.02 short time
- 2 .Altitude are not exceeding 1000m,  
Maximum ambient air temperature is +40 °C,  
minimum ambient air temperature is not less Than+5 °C,  
Storage and transportation temperature range is -15 °C ~ +55 °C.  
The relative humidity does not exceed 50% at a maximum temperature of +40 °C, higher relative humidity may be permitted at lower temperature (e.g. 90% @ 20 °C).

## Floor Load

This machine represents a moderately large weight load in a small footprint. Most commercial shop floors will be adequate for the weight of the machine. Some floors may require additional support. Contact an architect or structural engineer if you have any question about the ability of your floor to handle the weight.

*To ensure sufficient upright stability of the machine it should be bolted to floor .For this purpose 4x12mm diameter holes are provided in the machine 's base plate .*

## Working Clearances

Working clearances can be thought of as the distances between machines and obstacles that allow safe operation of every machine without limitation. Consider existing and anticipated machine needs, size of material to be processed through each machine, and space for auxiliary stands and/or work tables. Also consider the relative position of each machine to one another for efficient material handling. Be sure to allow yourself sufficient room to safely run your machines in any foreseeable operation.

## Lighting and Outlets

Lighting should be bright enough to eliminate shadow and prevent eye strain. Electrical circuits should be dedicated or large enough to handle combined motor amp loads. Outlets should be located near each machine so power or extension cords are not obstructing high-traffic areas. Be sure to observe local electrical codes for proper installation of new lighting, outlets, or circuits.

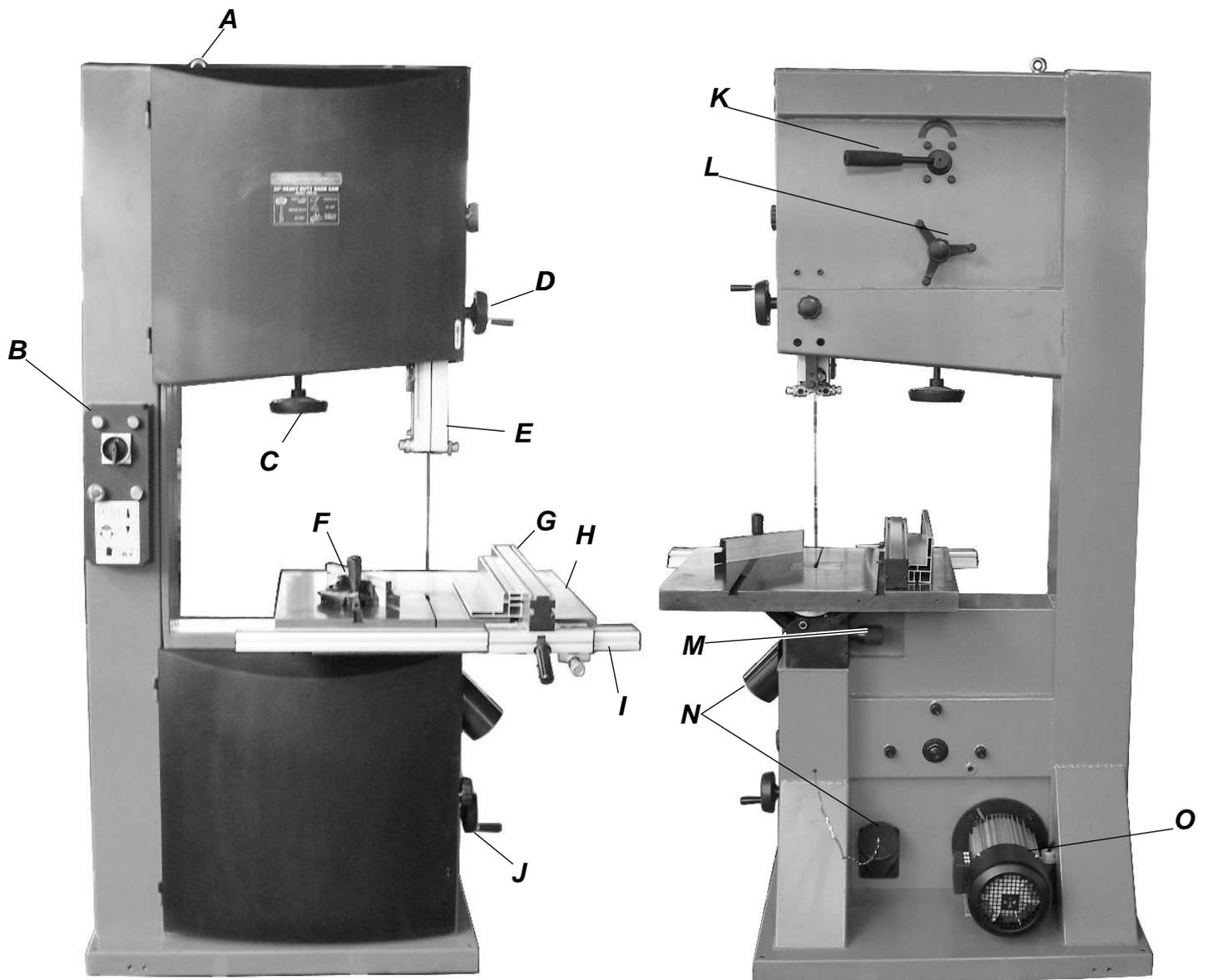
## Dust Collector

As a rule, this machine must be vacuumed during use. A time relayed socket is available as an accessory. In addition, the vacuum performance must be sufficient to achieve the required negative pressures and a maximum air speed of 20m/sec at the connector.



**Read the manual before assembly and operation. Become familiar with the machine and it's operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.**

## GETTING TO KNOW YOUR MACHINE

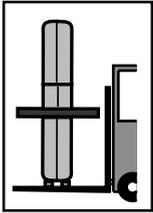


- A.** Lift Ring
- B.** Switch Box
- C.** Blade Tension Handwheel
- D.** Guide Post Handwheel
- E.** Blade Guide & Guard
- F.** Mitre Gauge
- G.** Rip Fence
- H.** Table

- I.** Fence Rail
- J.** Belt Tension Handwheel
- K.** Quick Release Lever
- L.** Blade Tracking Lock knob & Star-Knob
- M.** Table Tilting Knob
- N.** Dust Ports
- O.** Motor

## UNPACKING

The Heavy-Duty Bandsaw is shipped from the manufacturer in a carefully packed crate. If you discover the machine is damaged after you have signed for delivery, please call Customer Service immediately for advice. When you are completely satisfied with the condition of your shipment, you should inventory its parts.



**The Heavy-Duty Bandsaw Is a heavy machine. DO NOT over-exert yourself while unpacking or moving your machine you will need assistance and power equipment. Serious personal injury may occur if safe moving methods are not followed.**



**Some metal parts may have sharp edges on them after they are formed. Please examine the edges of all metal parts before handling them. Failure to do so could result in injury.**

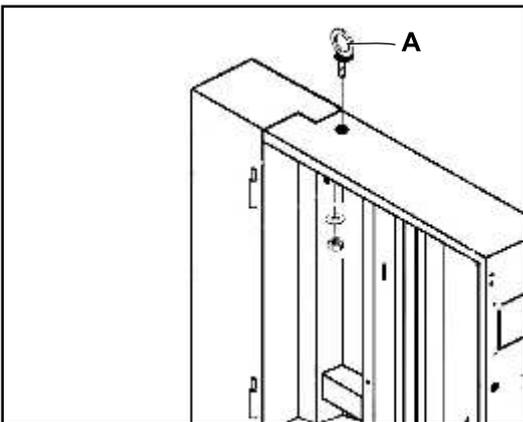
### Piece Inventory

After all the parts have been removed from the carton, you should have:

- Bandsaw Unit with Blade
- Table
- Fence Rail
- Fence
- Dust Port
- Miter Gauge
- Push Stick w /Hold Pin
- Hardware Bag
  - (1) Lift Ring
  - (1) Hex Nut M10
  - (1) Flat Washers 10mm
  - (1 set) 3mm,4mm,5mm,6mm "L" Wrench

### To mount the lift ring

Firstly, mount the lift ring(A) on the upper body of bandsaw with Hex Nut M10 & Washer 10mm.



Lifts out the bandsaw from crate with crane or forklift.

### Clean Up

The unpainted surfaces are coated with a oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser. To clean thoroughly, some parts may need to be removed. For optimum performance from your machine, make sure you clean all moving parts or sliding contact surfaces that are coated. Avoid chlorine-based solvents as they may damage painted surfaces should they come in contact.



**Do not use gasoline or other petroleum-based solvents to clean with. They have low flash points which make them extremely flammable. A risk of explosion and burning exists if these products are used.**



**Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Always work in well ventilated areas far from potential ignition sources when dealing with solvents. Use care when disposing of waste rags and towels to be sure they do not create fire or environmental hazards.**

## ASSEMBLY

### Fitting the guide post handwheel

Attach the guide post handwheel lever(B) to the guide post handwheel, tighten it with the 10mm open wrench.



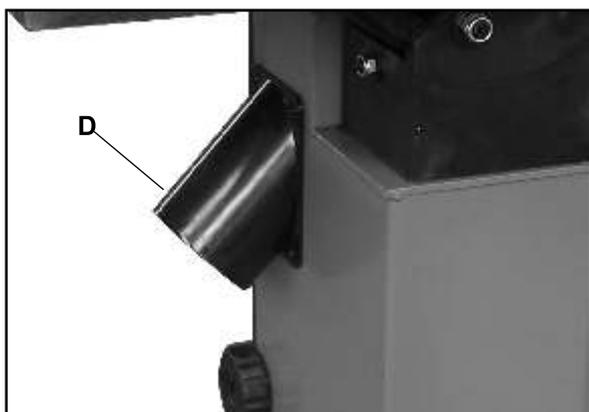
### Fitting the belt tension handwheel lever

Attach the belt tension handwheel lever(C) to the belt tension handwheel, tighten it with the 10mm open wrench.



### Fitting the upper dust port

Fit the upper dust port(D) to the side of lower wheel housing. Tighten 4 M5x16(D) pan head screw (washers and nuts inside the housing).



### Fitting the table



The table for this bandsaw is very heavy. Get help when placing it on the trunnion.

With the help of another person, carefully lift the table(E) through blade onto the trunnion.

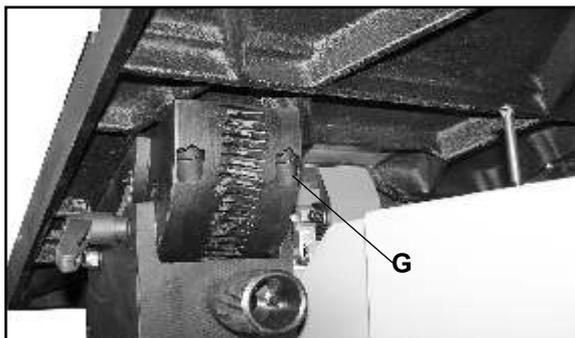
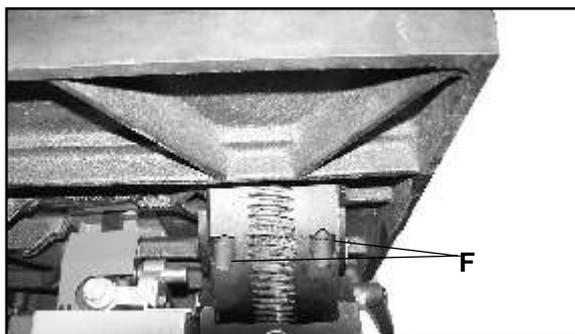
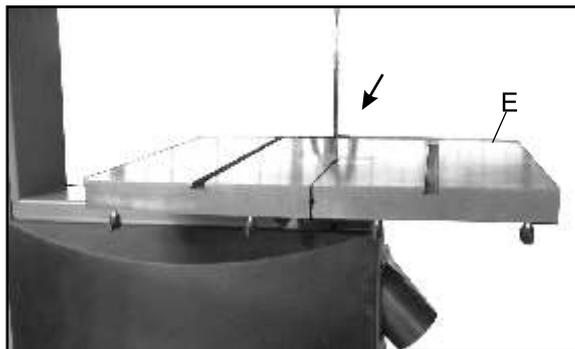
Place 3 M8x30 Allen Screw(F) through the table trunnion, tighten them to the table.

Then tilts the table to 30°, place 1 M8x30 Allen Screw(G). Tighten it.



Note: The bolts do not need too tighten at this point as some adjustment may be necessary to set the table correctly.

- The blade should sit in the centre of the gap on the table insert, if it does not tap the edge of the table (either left or right depending on which way the table needs to go) with a mallet (a scrap piece of wood and a hammer will suffice if a mallet is not available) until the blade is in the correct position.
- Proceed to fully tighten the securing bolts.



## Fitting the fence rail

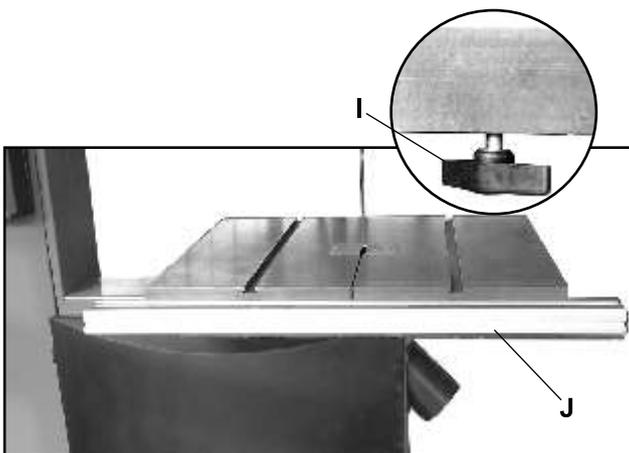
To fit the fence rail, firstly check 4 winged screws and washers(I) supplied into the 4 threaded holes on the bottom of the table.

 Note: The winged screw only need to be fitted with a few turns so there is an adequate gap to fit the rip fence rail(J).

Line the cut-outs on the fence guide with the winged screws earlier fitted to the bottom of the main table.

Push the fence rail forwards against the front edge of the main table.

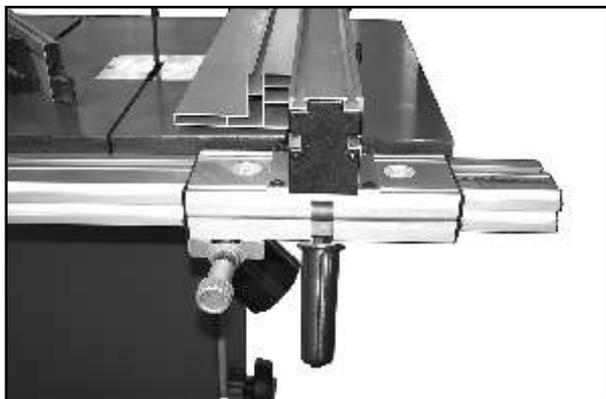
Fully tighten the winged screws to secure.



## Fitting the rip fence

Fit the profile of the rip-fence carrier into the opposite profile on the rip-fence rail.

Secure it in the desired position by simply pressing down on the rip-fence locking handle.



## SET UP



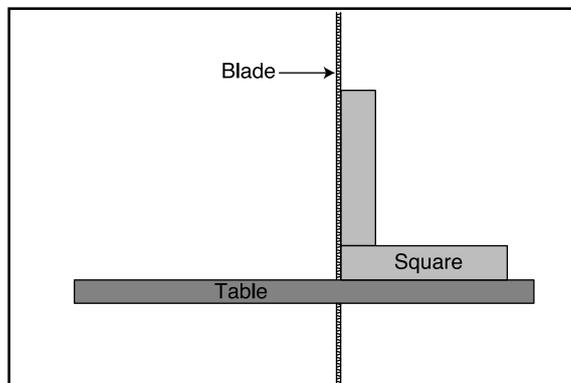
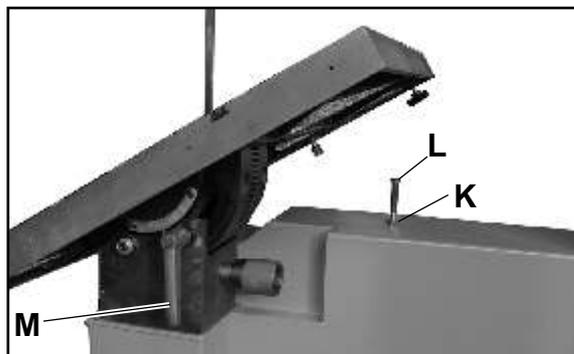
**Warning !** Before carrying out any maintenance or adjustments the machine must be disconnected from the power supply .

### Setting the table stop

The positive stop under the table allows you to repeatedly square up the table after adjusting the table to another angle.

To adjust the positive stop:

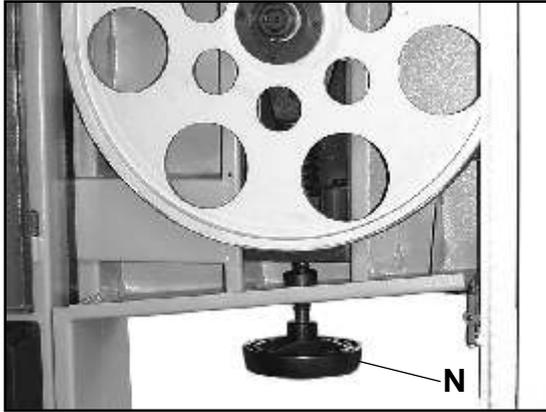
1. Loosen the ratchet lever (M) on the table trunnion
2. Loosen the hex nut (K) on the positive stop bolt (L) and lower the stop bolt.
3. Raise the upper blade guide assembly and place a 6" machinist's square on the table against the blade. Notice how far out of square your table is and approximate this distance by adjusting the positive stop up or down. Turning the positive stop so the table will stop at a 90° angle (square) to the blade.
4. Lock the positive stop by tightening the hex nut. Do not let the stop turn while tightening the hex nut. Tighten the ratchet lever (M).
5. Set the angle pointer to zero on the table tilt gauge.



## Setting up the blade tension & tracking

### Setting up the blade tension

With the power supply disconnected, set the blade tension with the blade tension handwheel (**N**). Rotating the wheel in a clockwise direction will increase the blade tension and anti clockwise will decrease the tension. The blade is at the correct tension if it can be moved approximately 10 mm sideways with moderate hand pressure .



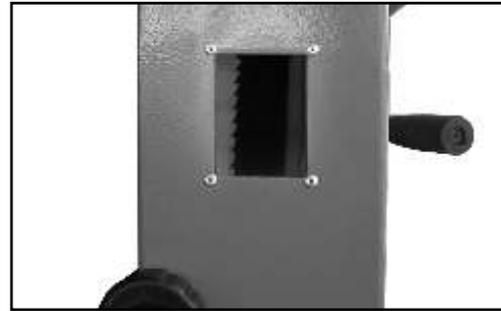
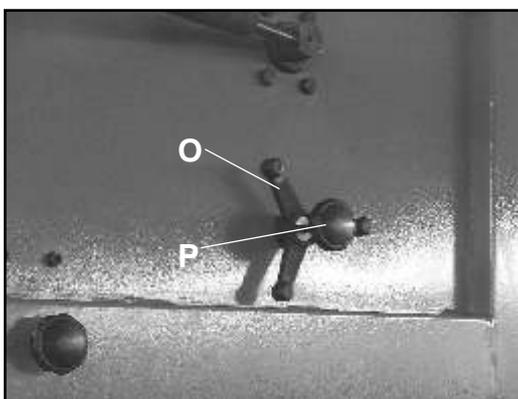
### Tracking the saw-blade

- Release the blade tracking lock starknob (**O**).
- With the top door open, turn the drive-wheel by hand.
- Continue to turn the drive-wheel and at the same time turn the blade tracking knob (**P**).
- Turn both the drive-wheel and the blade tracking knob until the blade is sitting on the centre of the drive-wheel.



Note: Daily run you can use the blade tension indicator window to check the blade tracking.

- Once the blade has been correctly set, Turn the lock knob clockwise to lock into position.

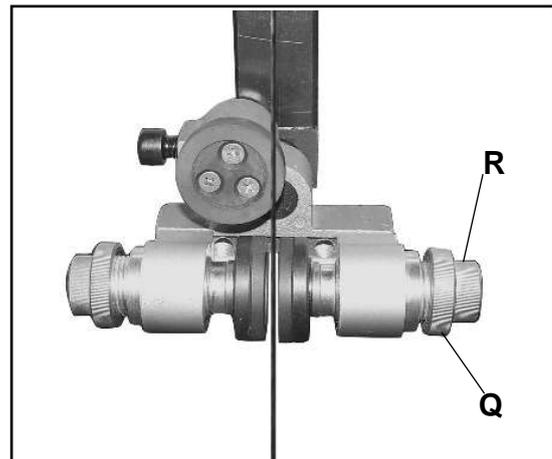


### Setting the blade guide

#### Upper guide:

The lateral support guide blocks should be set so that they are approximately 0.5 mm away from the blade.

- Loosen the knurled jam nuts (**Q**) that lock the adjusting rod for the guide blocks in place.
- Rotate the adjusting rod (**R**) counterclockwise and slide guide block back. This will allow the blade to be removed or tracked without interference.

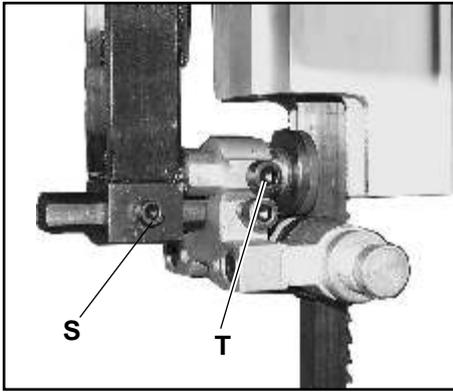


The rear guide blocks should be set so that they are approximately 3 mm behind the blade. They will only come into contact with the blade as the work-piece is being cut.

Due to the many different sizes of band-saw blades available, the rear support guide block needs to have extra movement compared to the lateral support guide block. This is achieved by having 2 different points of movement as opposed to 1 on the lateral guide blocks.

Allen bolt **S** - This allows the guide assembly support pole to be moved and should be utilized when large movement is required.

Allen bolt **T** - This allows the rear guide block to move along the channel on the guide assembly and should be utilized when only a small amount of movement is required.

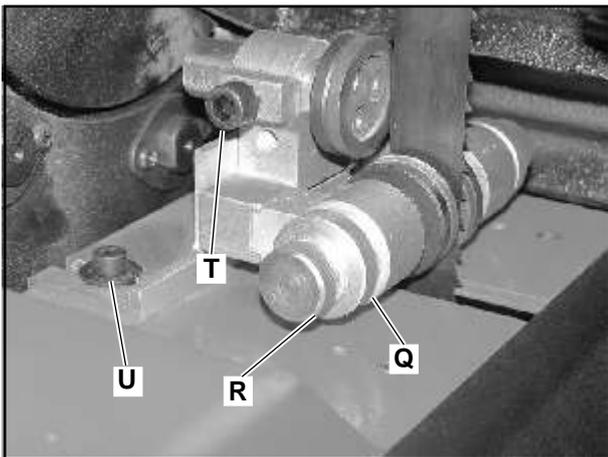


Loosen the required allen bolt/s.

Move the guide block, guide assembly and/or the pole until the guide block is set in the correct position.

Re-tighten all of the allen bolts to secure the guide block in place.

#### Lower guide :



●Loosen the knurled jam nut(Q)and rotated the adjusting rod to set the lateral guide block.

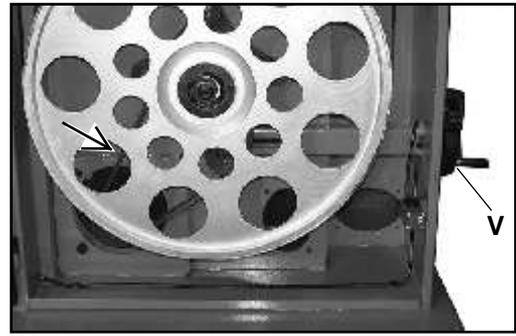
●The rear guide block is adjustment by the allen screws (U) & (T).

Allen bolt U - This allows the guide assembly to be moved and should be utilized when large movement is required.

Allen bolt T - This allows the rear guide block to move along the channel on the guide assembly and should be utilized when only a small amount of movement is required.

#### Setting the V-belt tension

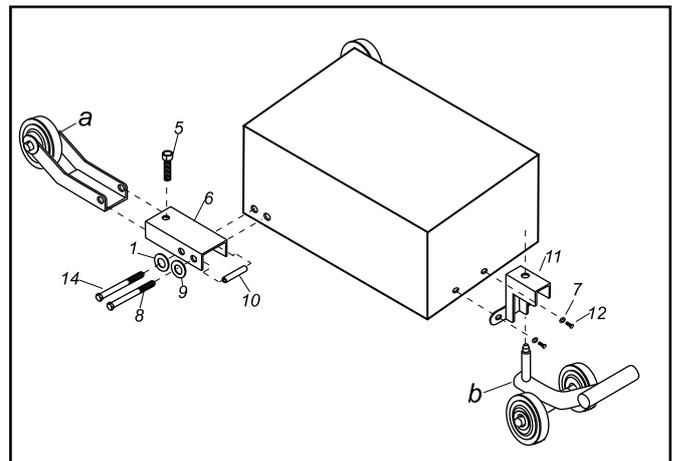
The V-belt is accessed via the lower door. Squeeze the center of the V-belt. Note the amount of deflection. Deflection should be approximately 3/4".



Rotate the belt tension handwheel(V) to adjust the V-belt tension.

#### Setting the Mobile Wheel Kit (optional)

- Place "U" Shape Bracket(6) onto Front Wheel Kit Ass'y (a). The Front wheel Kit Ass'y Assembled by factory enclosed the parts 1,2,3,15 and 4. (**refer diagram F**)
- Insert Hex Head Screw M10x70(8) with washer(9), secure Front Wheel Kit(a) and Sleeve(10) to work stand.
- Insert Special Thread(14) with washer(1) and secure Front wheel kit.
- Secure Rear Castor Frame(11) to workstand with two Hex Head Screw M10x20(12) & washer(7).
- When move the machine adjust the Allen Bolt M12x50(5),and raise the machine about 5mm above floor. Insert the Rear Castor Ass'y(b), push the lever down and pull the machine round the workshop.



## OPERATION

### Switch

Turn the **POWER** on or off using the Power Switch .

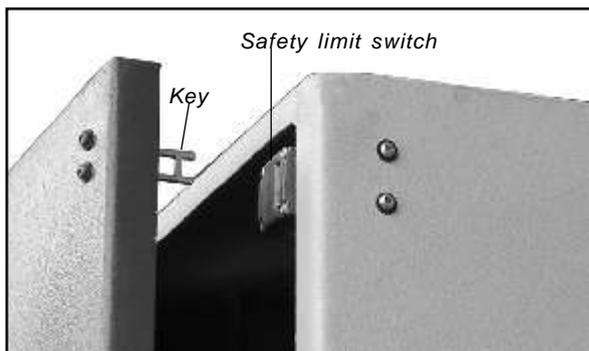
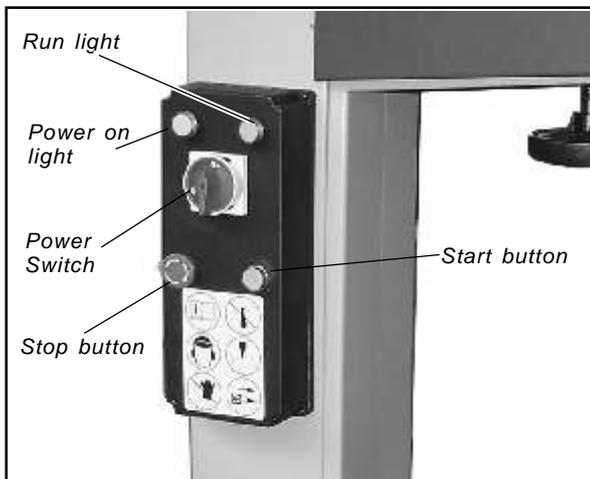
Turn the **machine** on using the green button on the switch box. Turn off the **machine** off using the red button, it also with the emergency-stop function, and they must be unlocked before turn the **machine** on.

There are two indicator lights. **Red** light works when **POWER** on. **Green** light works when machine run.



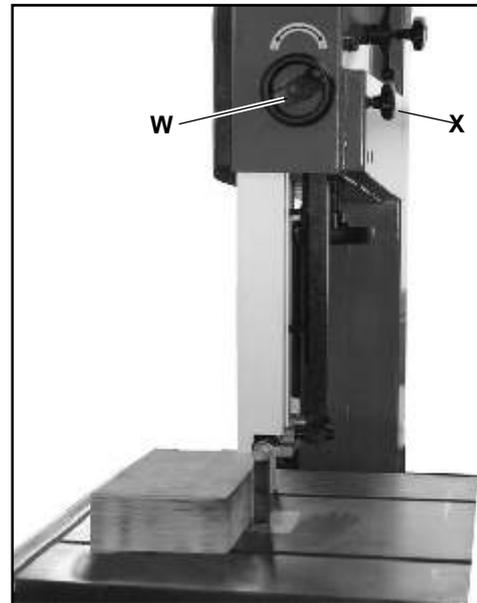
#### Attention!

Your machine is equipped with two safety limit switches .The bandsaw can only run when upper & lower doors are closed.



### Blade guide

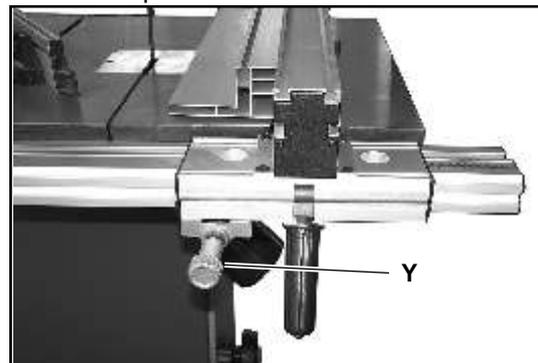
The upper blade guide assembly must be lowered to just clear of the work piece. To lower the upper guide loosen the cut depth lock knob (**W**) and turn the guide post handwheel (**X**) to slide the upper guide assembly down. Re-secure the cut depth lock knob (**W**).



### Rip fence

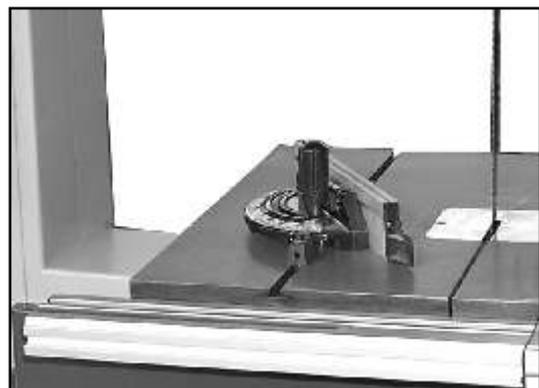
Set the rip fence to the desired width (ensure that the largest section of the material is against the fence).

For precise cutting, push in the fine adjustment knob (**Y**) and turn to desired position, then push down the rip fence lock handle.



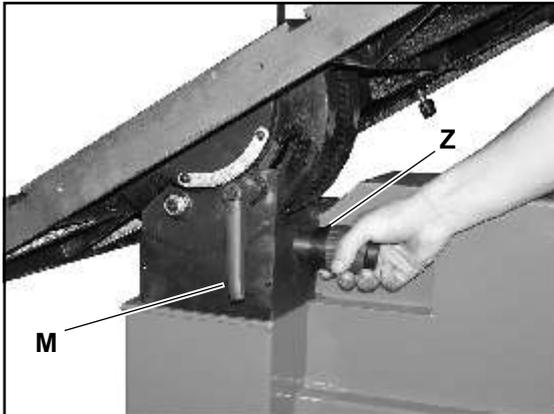
### Using the mitre gauge

Make a practice cut with the gauge in the 0° position then test the cut with a suitable set square. If adjustment is necessary loosen the screw that holds the "pointer" and move the pointer accordingly. The mitre gauge can be used in either groove in the table. Set the desired angle on the mitre scale and make the cut securely holding the work piece to the mitre gauge.



## Tilting the table to perform bevel cuts

To use the table to perform a bevel cut, loosen the table trunnion locking lever (**M**) and turn the table tilt handle (**Z**) to tilt the table over to the desired angle. Re-secure the locking lever (**M**). Compound mitre cuts can be made by using the mitre gauge in conjunction with the table tilting facility.



## MAINTENANCE

### Changing the blade



**Warning!** Unplug the machine from the electrical supply. This ensures that the bandsaw will not accidentally turn on if the ON/OFF switch is bumped.

- Remove the rip-fence.
- Remove the rip-fence rail.
- Open both the upper and lower doors.
- Turn the blade tension adjustment hand-wheel (**N**) to release the tension (if needed).
- Turn the blade tension quick release lever (**A1**) to fully release the tension of blade.
- Remove the blade.
- Fit the new blade around both top and bottom drive-wheels, taking care that the correct size of blade is being fitted and that the direction of the blade is also correct.

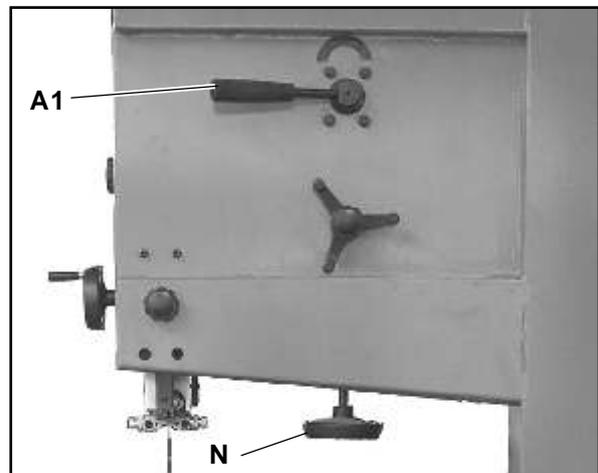


**Caution:** Because the blade is an endless loop it may spring and coil itself into smaller loops.



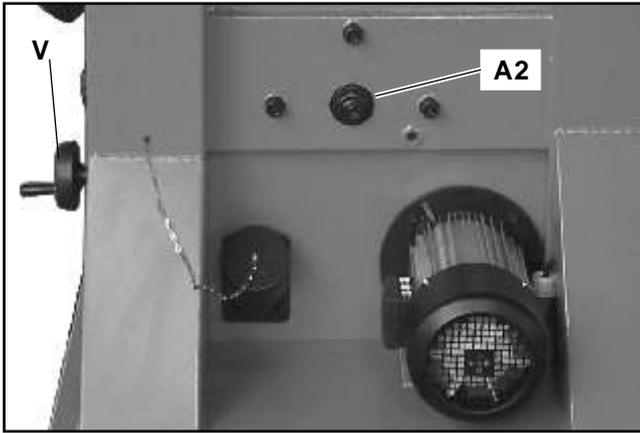
**Note:** The teeth of the blade should be pointing downwards if the blade has been fitted in the correct direction.

- Return the pressure to the blade by turning the blade tension quick release lever back to its original position.
- Continue to tension the blade fully by turning the adjustment hand-wheel.



### Replacing the drive belt:

- Remove the blade (see above).
- Turn the belt tension handwheel to release tension from the drive belt.
- Loosen and remove the drive wheel securing nut and washer (**A2**) (located at the rear of the saw).



**Note:** It may be necessary to tap the threaded section of the shaft with a soft faced mallet to remove the drive wheel.

- Place the new drive belt over the pulley on the main drive-wheel.
- Re-fit the drive-wheel to the saw and fully tighten the lock nut to secure.
- Follow the instructions to re-fit the blade and to re-tension the drive belt.

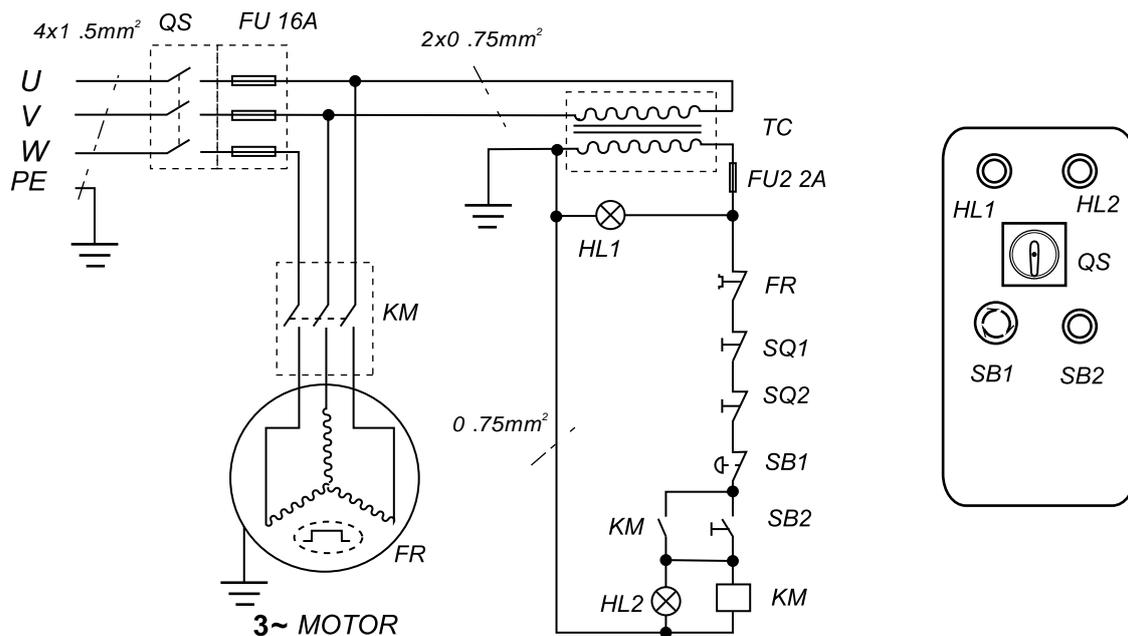
## WIRING DIAGRAM



**WARNING!**  
This machine must be grounded.



Replacement of the power supply cable should only be done by a qualified electrician.

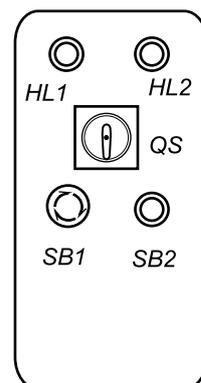
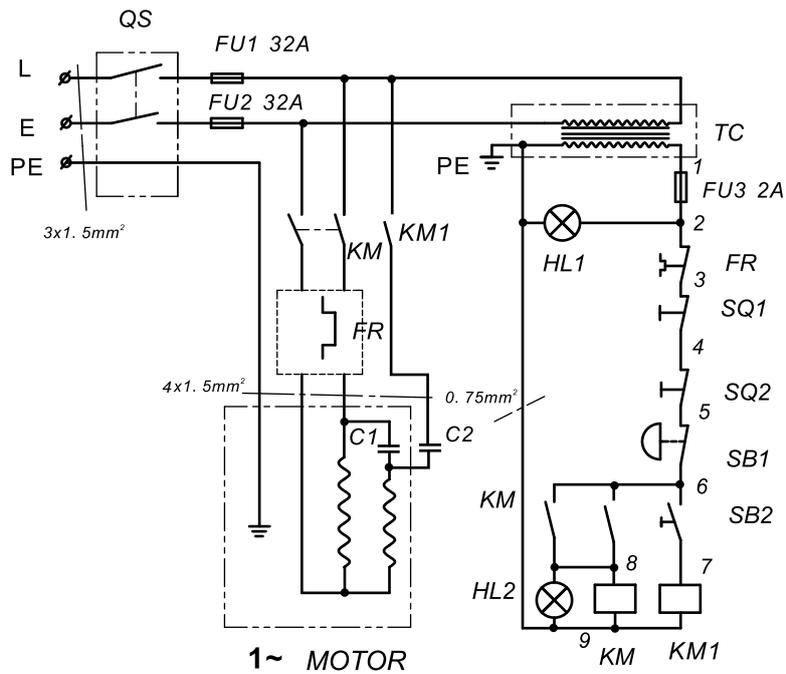


## Cleaning:



**Caution!** Before cleaning or carrying out maintenance work, disconnect the machine from the power source (wall socket). Never use water or other liquids to clean the machine. Use a brush. Regular maintenance of the machine will prevent unnecessary problems.

- Always remove excess chips and waste debris from the band-saw, pay particular attention around the motors air inlets, failure to do so could result in overheating and even fire.
- Periodically clean and lubricate the internal moving parts of the band-saw such as the rack and pinion blade guide assembly, belt tension screw, table tilting assembly and the belt tension assembly to ensure easy accurate adjustments.



## TROUBLESHOOTING



**Warning:** For your safety, always turn off and unplug the machine before carrying out any troubleshooting.

Problem	Possible Cause	Remedy
<b>The machine does not work when switched on:</b>	<ul style="list-style-type: none"> <li>● Damaged mains lead.</li> <li>● Problem with the electrical supply.</li> <li>● Defective switch.</li>   <li>● Defective motor.</li> </ul>	<ul style="list-style-type: none"> <li>● Check the cable for damage.</li> <li>● Check for power at the mains.</li> <li>● Have the switch checked, repaired / replaced.</li> <li>● Have the motor checked, repaired / replaced.</li> </ul>
<b>The blade does not move with the motor running:</b>	<ul style="list-style-type: none"> <li>● The quick release lever or blade tension handwheel has not been tightened.</li> <li>● The blade has fallen from one of the wheels.</li> <li>● The saw blade has broken.</li>   <li>● The drive belt has snapped.</li> </ul>	<ul style="list-style-type: none"> <li>● Switch off the motor, tighten the quick release lever and/or blade tension hand-wheel.</li> <li>● Open the door and check the blade, replace as necessary.</li> <li>● Check the blade, replace as necessary.</li> <li>● Check the belt and replace as necessary.</li> </ul>
<b>The blade does not cut in a straight line:</b>	<ul style="list-style-type: none"> <li>● Rip-fence for not used or incorrectly fitted.</li> <li>● Feed rate too fast.</li>   <li>● The blade teeth are dull or damaged.</li> <li>● Blade guides not correctly adjusted.</li> </ul>	<ul style="list-style-type: none"> <li>● Use a fence, check for correct alignment.</li> <li>● Use lighter pressure on the work-piece &amp; allow the saw to do the cutting.</li> <li>● Replace the damaged blade with a new one.</li> <li>● Adjust the blade guides.</li> </ul>
<b>The blade does not cut, or cuts very slowly:</b>	<ul style="list-style-type: none"> <li>● The teeth on the blade are dull.</li> <li>● Incorrect blade being used for the type of cut / material.</li> <li>● Wrong speed being used for type of cut / material.</li> <li>● The blade was mounted in the wrong direction.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the blade.</li> <li>● Fit the correct blade.</li>   <li>● Change the speed of the blade.</li> <li>● Fit the blade correctly.</li> </ul>
<b>Sawdust builds up inside the machine:</b>	<ul style="list-style-type: none"> <li>● This is normal.</li> </ul>	<ul style="list-style-type: none"> <li>● Regularly clean out sawdust from all areas of the saw. Use of an adequate dust extractor will minimize this issue.</li> </ul>
<b>Table saw vibrates excessively:</b>	<ul style="list-style-type: none"> <li>● Floor surface is uneven.</li> <li>● V-belt is damaged.</li> <li>● Saw blade is damaged.</li> <li>● Loose bolt, Screws, Nuts.</li> </ul>	<ul style="list-style-type: none"> <li>● Sit the saw on a level surface.</li> <li>● Replace the V-belt.</li> <li>● Replace the Saw Blade.</li> <li>● Tighten all Hardware.</li> </ul>
<b>Fuses or circuit breakers blow or open frequently:</b>	<ul style="list-style-type: none"> <li>● Motor is overloaded.</li> <li>● Fuses or circuit breakers are wrong size or defective.</li> <li>● Dull saw blade.</li> <li>● Power Switch or motor is defective.</li> </ul>	<ul style="list-style-type: none"> <li>● Feed work-piece more slowly.</li> <li>● Replace fuses or circuit breakers.</li>   <li>● Replace the saw blade.</li> <li>● Have the Power Switch or motor checked, repaired or replaced.</li> </ul>

## PARTS LIST & DIAGRAM



When ordering repair parts , always give the following information :  
 Model number , Diagram Number , Item number , Part description  
 i.e. Model : BS500 Diagram A ,A-71 ,Saw blade

### Parts List (Diagram A)

<b>No</b>	<b>Description</b>	<b>No</b>	<b>Description</b>
A-1	Allen screw M8x35	A-41	Hex nut M5
A-2	Cam shaft	A-42	Hand wheel, belt tension
A-3	Cam base	A-43	Lever
A-4	Thin hex nut M24	A-44	Pan head screw M4x12
A-5	Washer 24mm	A-45	Sliding guard
A-6	Tyre, wheel	A-46	Upper blade guard
A-7	Sunk head screw M6x12	A-47	Bolt guide, guard
A-8	Block bearing	A-48	Spacer, lower wheel
A-9	Bearing 6207	A-49	Cover, upper guard
A-10	Space, upper wheel	A-50	Cover, upper guard
A-11	Inner space, upper wheel	A-51	Spacer
A-12	Upper wheel	A-52	Sunk head screw M5x10
A-13	Shaft, upper wheel	A-53	Rack
A-14	Lower wheel	A-54	Square tube, upper guide
A-15	Spring	A-55	Allen screw M5x45
A-16	Spring seat	A-56	Worm
A-17	Indicator base	A-57	Tread tube
A-18	Washer 30mm	A-58	Mount, upper guide
A-19	Thin hex nut M30	A-59	Ring worm
A-20	Mount, upper wheel	A-60	Set screw M4x5
A-21	Allen screw M6x25	A-61	Gear, upper guide
A-22	Hex nut M6	A-62	Thread, gear
A-23	Bracket upper wheel	A-63	Block, upper guide
A-24	Thread upper wheel	A-64	Allen screw M6x16
A-25	Set screw M6x8	A-65	Mount upper guide
A-26	Hand wheel, upper wheel	A-66	Shaft, upper guide
A-27	Flat washer 8mm	A-67	Hex screw M6x16
A-28	Allen screw M8x12	A-68	Washer 6mm
A-29	Parallel pin	A-69	Brush
A-30	Washer 8mm	A-70	Hex nut M6
A-31	Spring washer 8mm	A-71	Saw blade
A-32	Hex screw M8x16	A-72	Motor belt "A"
A-33	Lock cam	A-73	Shaft, lower wheel
A-34	Lever, lock cam	A-74	Special bolt
A-35	Flower screw M10x40	A-75	Bracket Lower wheel
A-36	Star lock knob, wheel tilt	A-76	Washer 16mm
A-37	Washer 10mm	A-77	Spring washer 16mm
A-38	Pointer mount	A-78	Cap nut M16
A-39	Pan head screw m5x16	A-79	Hex screw M8x180
A-40	Washer 5mm	A-80	Allen screw M8x30

## Parts List (Diagram A cont.)

<b>No</b>	<b>Description</b>	<b>No</b>	<b>Description</b>
A-81	Block, pulley	A-100	Scale, table tilt
A-82	Motor pulley	A-101	Table trunion, upper
A-83	Set screw M8x10	A-102	Allen screw M8x30
A-84	Flat key	A-103	Allen screw M10x20
A-85	Motor	A-104	Ratchet lever, table tilt
A-86	Hex nut M8	A-105	Block trunion
A-87	Ring circle 20mm	A-106	Pointer tilt
A-88	Washer 20mm	A-107	Lock shaft, trunion
A-89	Bearing 6204	A-108	Washer, lock shaft
A-90	Ring circle 42mm	A-109	Knob, table tilt
A-91	Tension pulley	A-110	Set screw M8x8
A-92	Shaft tension pulley	A-111	Gear, table tilt
A-93	Collar, tension rod	A-112	Table trunion, lower
A-94	Inner space, lower wheel	A-113	Lock nut M10
A-95	Thread tension rod	A-114	Trust bearing 8201
A-96	Washer 12mm	A-115	Spring
A-97	Insert table	A-116	Hex nut M12x1
A-98	Table	A-117	Hex nut M30
A-99	Pan head screw M5x6		

## Parts List (Diagram B)

<b>No</b>	<b>Description</b>	<b>No</b>	<b>Description</b>
B-1	Door lock pin	B-21	Hex screw M8x30
B-2	Washer 6mm	B-22	Hex nut M8
B-3	Hex nut M6	B-23	Washer 8mm
B-4	Pan head screw M4x12	B-24	Suction cover
B-5	Washer 4mm	B-25	Taping screw ST3.5x12
B-6	Key, micro switch	B-26	Chain, suction
B-7	Hex nut M4	B-27	Suction connector
B-8	Upper door	B-28	Pan head screw M5x16
B-9	Copper washer	B-29	Washer 5mm
B-10	Hex nut M10	B-30	Hex nut M5
B-11	Washer 10mm	B-31	Pan head screw M5x6
B-12	Ring, lift up	B-32	Clamp, wire
B-13	Bush wire	B-33	Push stick
B-14	View windows	B-34	Holder, push stick
B-15	Pan head screw M4x50	B-35	Pan head screw M5x25
B-16	Rivet	B-36	Cover, switch box
B-17	Allen screw M6x25	B-37	Seal, box
B-18	Door lock	B-38	Switch box
B-19	Lock nut M6	B-39	Lower door
B-20	Micro switch	B-40	Saw frame

### Parts List (Diagram C)

No	Description	No	Description
C-1	Taping screw ST4.2x10	C-23	Set screw M6x6
C-2	Cap , fence	C-24	Handle, fine adjust
C-3	Plate, fence	C-25	Spring, gear
C-4	Sunk head screw M4x10	C-26	Eccentric, fine adjust
C-5	Fence	C-27	Seat, fine adjust
C-6	Wing nut M6	C-28	Rod, gear
C-7	Guide plate, screw	C-29	Gear
C-8	Countersunk screw M5x8	C-30	Washer 5mm
C-9	Carriage bolt M6x70	C-31	PVC sticker
C-10	Jointer, fence	C-32	Right cap, fence guide
C-11	Pan head screw m4x6	C-33	Rod, lock handle
C-12	Ring circle	C-34	Scale, fence guide
C-13	Len	C-35	Left cap, fence rail
C-14	Allen screw M6x12	C-36	Fence rail
C-15	Left cap, fence guide	C-37	Rack, fine adjust
C-16	Fence guide	C-38	Wing screw
C-17	Lock handle, fence	C-39	Right cap, fence rail
C-18	Hex nut M8	C-40	Screw guide plate
C-19	Lock eccentric cam	C-41	"L" fence
C-20	Square nut M5	C-42	Lock plate
C-21	Washer 5mm	C-44	Cap , fence
C-22	Pan head screw M5x10		

### Parts List (Diagram D)

No	Description	No	Description
D-1	End cap, thread	D-13	Guide base
D-2	Adjustable tread	D-14	Allen screw M6x12
D-3	Adjustable nut	D-15	Washer 6mm
D-4	Seat, adjustable thread	D-16	Spring washer 8mm
D-5	Pan head screw M4x8	D-17	Washer 8mm
D-6	Flat washer 4mm	D-18	Angle bracket
D-7	Bush, copper	D-19	Hex screw M5x12
D-8	Seat, hard alloy block	D-20	Flat washer 5mm
D-9	Hard alloy block	D-21	Guard, lower guide
D-10	Sunk head screw M4x8	D-22	Guard, lower guide
D-11	Allen Screw M8x12	D-23	Set screw M8x10
D-12	Adjustable rod		

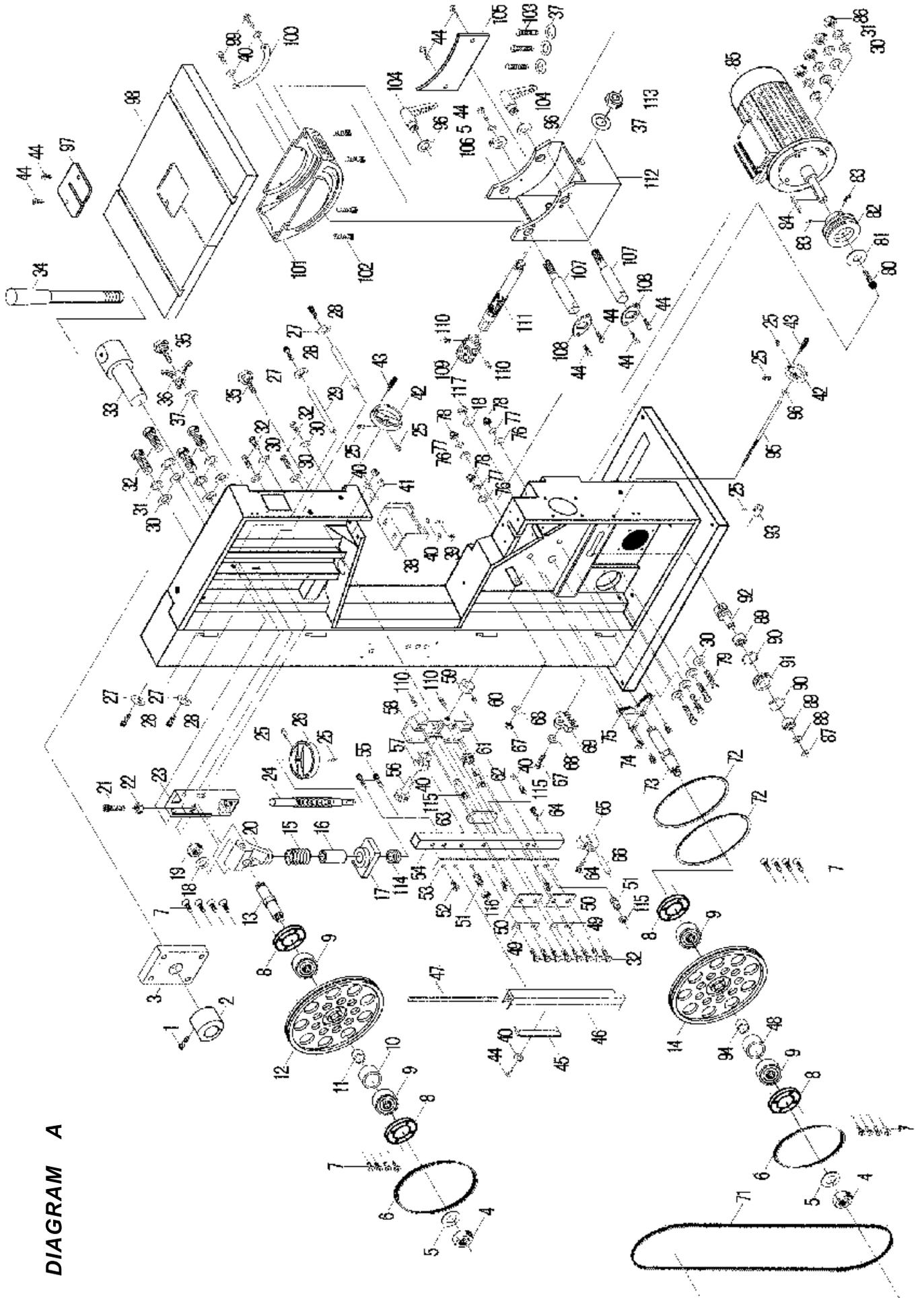
### Parts List (Diagram E)

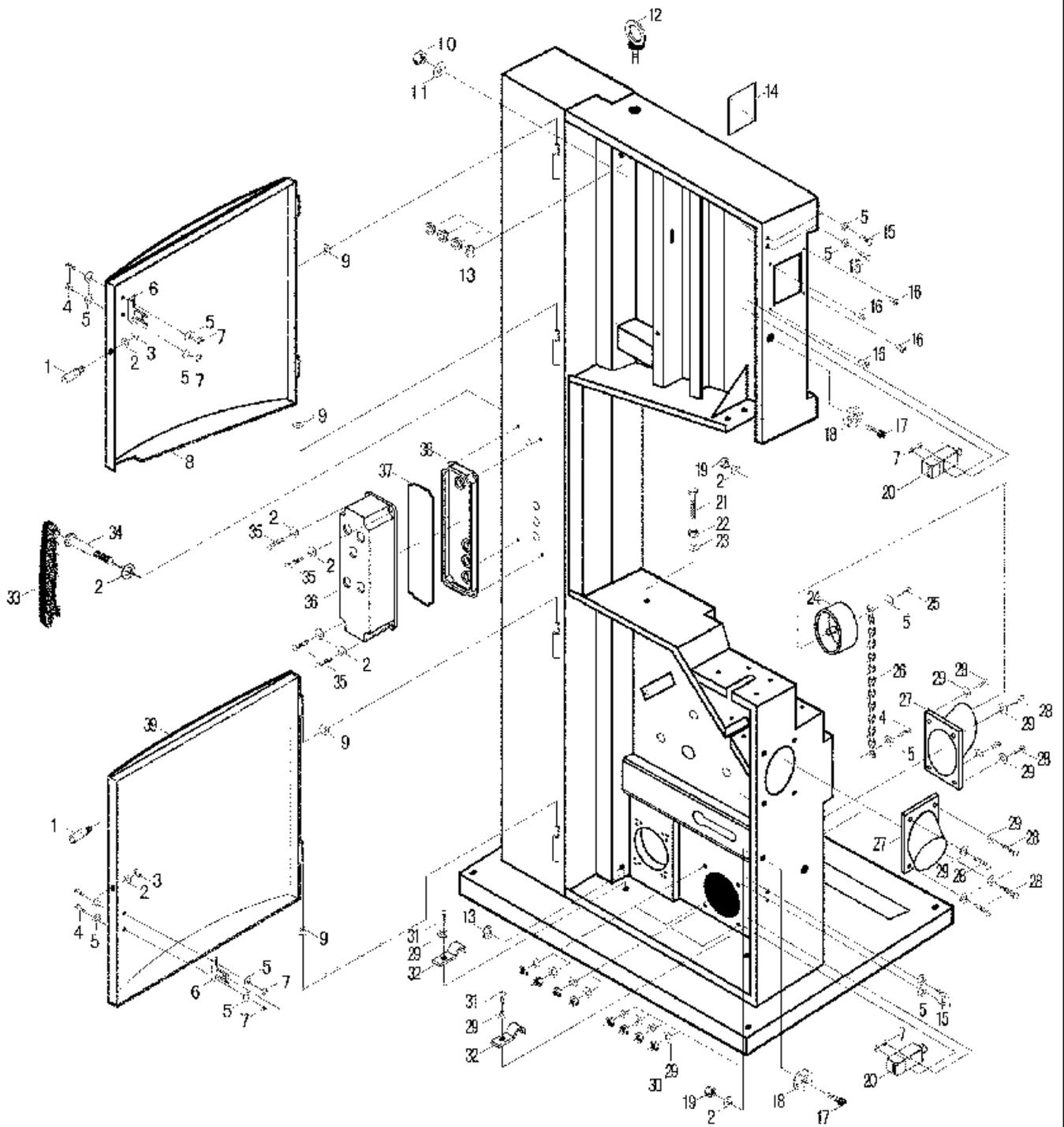
<b>No</b>	<b>Description</b>	<b>No</b>	<b>Description</b>
E-1	Mitre gauge knob	E-11	Mitre gauge rod
E-2	Washer 6mm	E-12	Pan head screw M4x18
E-3	Mitre gauge base	E-13	Hex nut M4
E-4	Pan head screw M5x10	E-14	Scale, gauge
E-5	Indicator gauge	E-15	Taping Screw ST4.8x10
E-6	Block indicator	E-16	End cap, Gauge fence
E-7	Stop pin	E-17	Gauge fence
E-8	Sunk head screw M5x8	E-18	End cap, Gauge fence
E-9	Roller, gauge	E-19	Carriage bolt M6x32
E-10	Guide pin	E-20	Washer 6mm

### Parts List (Diagram F)

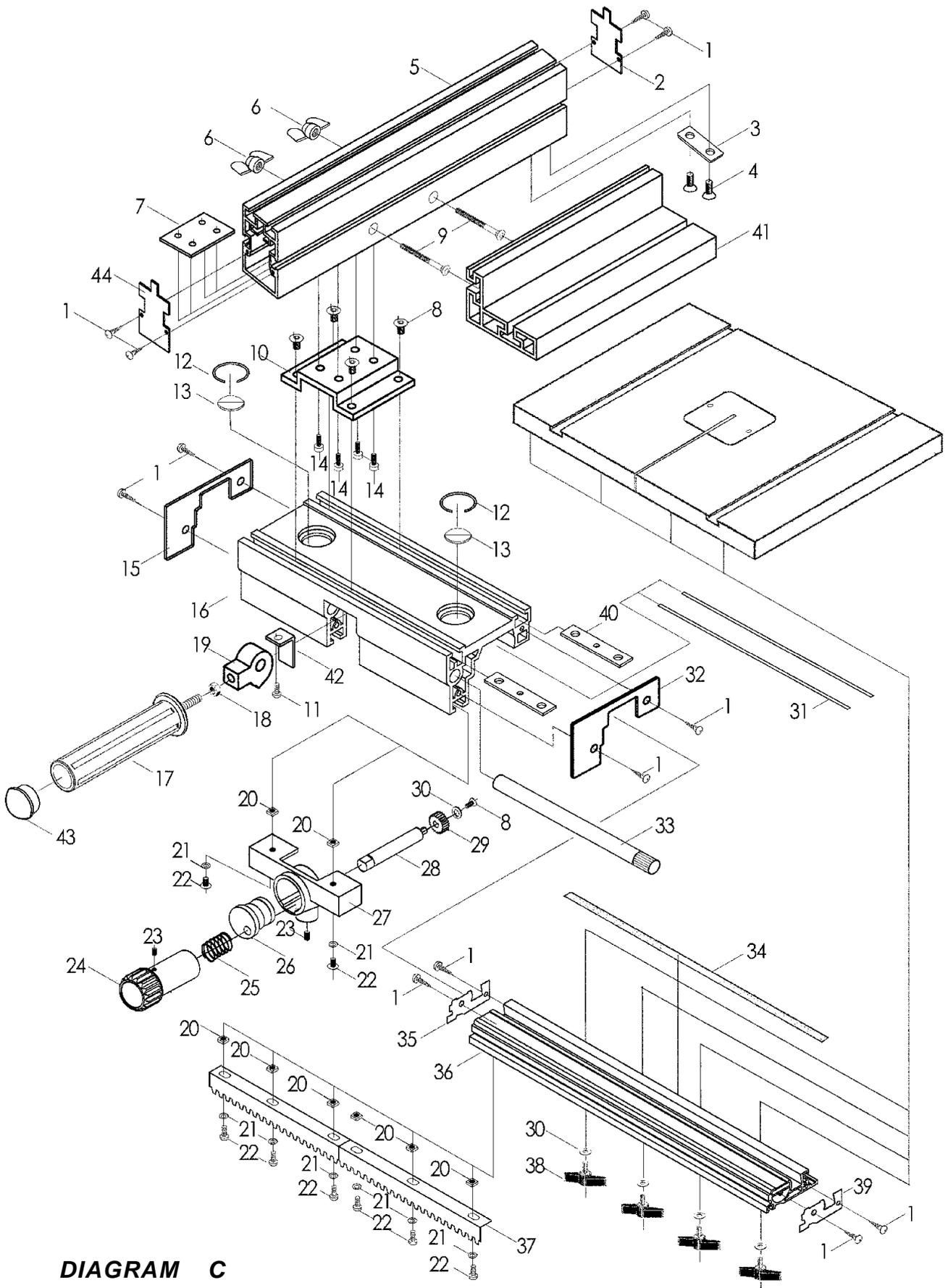
<b>No</b>	<b>Description</b>	<b>No</b>	<b>Description</b>
F-1	Washer 16mm	F-9	Washer 12mm
F-2	Castor	F-10	Bushing bracket
F-3	Roll pin 4x30	F-11	Support, pull rod
F-4	Bracket castor	F-12	Hex screw M10x55
F-5	Allen screw M12x50	F-13	Pull rod
F-6	Bracket castor	F-14	Bolt, bracket
F-7	Washer 10mm	F-15	Shaft, castor
F-8	Hex screw M12x80		

DIAGRAM A



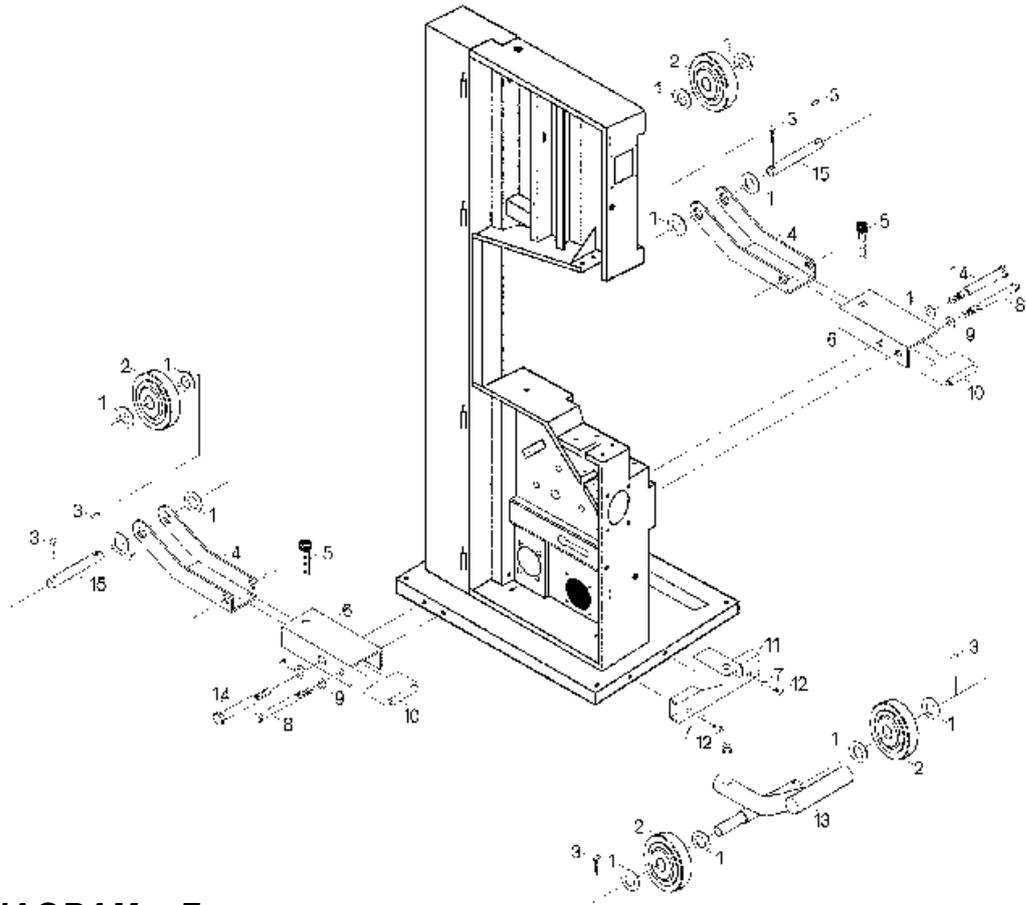


**DIAGRAM B**



**DIAGRAM C**





**DIAGRAM F**