

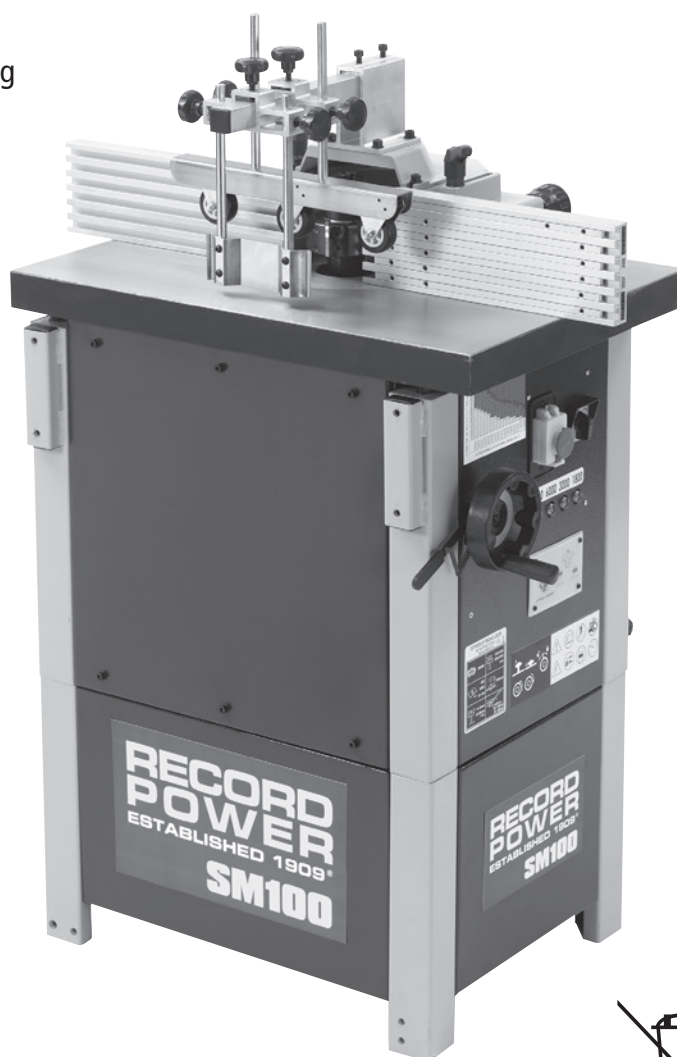
## Original Instruction Manual

### SM100

### Spindle Moulder

#### IMPORTANT

For your safety read instructions carefully before assembling or using this product. Save this manual for future reference.



Version 2.1

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Woodworking Machines & Accessories

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#### HEALTH AND SAFETY GUIDELINES

Always follow the instructions provided with the manual. Always wear safety glasses when using woodworking equipment. Always disconnect the power before adjusting any equipment. Failure to observe proper safety procedures and guidelines can result in serious injury.

**WARNING:** Do not allow familiarity (gained from frequent use of your machine and accessories) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.



Always wear safety glasses when using woodworking equipment.



Always read the instructions provided before using woodworking equipment.

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# Health & Safety Guidance

**READ ALL THE INSTRUCTIONS IN THIS MANUAL CAREFULLY BEFORE ASSEMBLY, INSTALLATION AND USE OF THIS PRODUCT. KEEP THESE INSTRUCTIONS IN A SAFE PLACE FOR FUTURE REFERENCE.**

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

## SAFE OPERATION

### 1. Eye Protection.

The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Always wear safety glasses or other suitable eye protection. Wear safety glasses at all times. Everyday glasses only have impact resistant lenses. They are not safety glasses which give additional lateral protection.

### 2. Keep work area clear.

Cluttered areas and benches invite accidents and injuries.

### 3. Consider work area environment.

Do not expose the machine to rain or damp conditions.

- Keep the work area well lit.
- Do not use the machine in the presence of flammable liquids or gases.

### 4. Guard against electric shock.

Avoid body contact with earthed or grounded surfaces.

### 5. Keep other persons away (and pets).

Do not let persons, especially children, not involved in the work, touch the machine, or extension cord (if used) and keep visitors away from the work area.

### 6. Store idle tools.

When not in use, tools should be stored in a dry, locked- up place, out of reach of children.

### 7. Do not force the machine.

It will do the job better and work more safely if operated at the speed at which it was intended.

### 8. Use the right tool.

- Do not force small tools to do the job of a heavy-duty tool.
- Do not use tools for purposes other than those for which they were intended.

### 9. Dress properly.

- Non-slip footwear is recommended.
- Do not wear loose clothing, neckties or jewellery; they can be caught in moving parts.
- Roll up long sleeves above the elbow.
- Wear protective hair covering to contain long hair.

### 10. Use protective equipment.

- Use safety glasses. (See note 1. above)
- Use face or dust shield if cutting operation creates dust.
- Use ear plugs or ear defenders when the machine is in use

### 11. Connect dust extraction equipment.

### 12. Do not abuse the cord.

Never yank the cord to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.

### 13. Do not overreach.

Keep proper footing and balance at all times.

### 14. Secure work.

Ensure that your work piece is properly held before starting to cut.

### 15. Maintain tools with care.

- Follow instructions for lubrication and changing accessories.

- Inspect electric cords periodically and, if damaged, have them repaired by an authorized service facility or qualified electrician.

- Inspect extension cords (if used) periodically and replace if damaged.

Always use properly rated extension cord with a minimum core cross section of 2.5mm<sup>2</sup> and a maximum length of 3 metres.

### 16. Disconnect Machine.

When not in use, before servicing, changing blades etc. disconnect the machine from the power supply.

### 17. Never leave machine running unattended.

Turn power off, do not leave machine until it comes to a complete stop.

### 18. Remove adjusting keys and wrenches.

ENSURE that all adjusting wrenches and keys are removed before switching the machine 'ON'.

### 19. Avoid unintentional starting.

Ensure the switch is in the "STOP" position before turning on the power from the main electricity supply. Your Record machine already incorporates low voltage protection. This means the machine will not automatically start up after say a power cut, unless you first reset the start switch.

### 20. Out-door Extension Leads.

Your machine should not be used outdoors.

### 21. Stay alert.

Watch what you are doing, use common sense and do not use the machine when you are tired.

### 22. Check for damaged parts.

- Before use of the machine, it should be carefully checked to determine that it will operate properly and perform its intended function.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.
- A guard or other part that is damaged should be properly repaired or replaced by a qualified person unless otherwise indicated in this instruction manual. Have defective switches replaced by a qualified person.
- Do not use the machine if the switch does not turn on and off.

### 23. Warning!

- The use of any accessory or attachment, other than those recommended in this instruction manual, or recommended by our Company may present a risk of personal injury.

### 24. Have your machine repaired by a qualified person.

- This electric machine complies with the relevant safety rules. Only qualified persons using original spare parts should carry out repairs. Failure to do this may result in considerable danger to the user.

### 25. This machine is designed for planing and thicknessing wood.

- Do not use this machine for any other material

## Maintenance and Servicing.

This machine requires very little maintenance. This handbook gives clear instructions on installation, set up and operation.

Read these instructions carefully. Remember always to switch off and unplug from the main electricity supply before carrying out any setting up or maintenance operations.

Should you need advice on the repair or maintenance of this product, our Customer Service Department can be contacted on 01246 561 520 and will be happy to assist you.

# Additional Safety Instructions for Spindle Moulders

**WARNING:** Like all power tools there is a danger associated with spindle moulders. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this tool with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury can occur.

**CAUTION:** No list of safety guidelines can ever be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment or poor work results.

- 1. Never allow your hands** to come within 12 inches of the cutters. Never pass your hands directly over or in front of the cutter.
- 2. Blind cut whenever possible.** This keeps the knives on the underside of the workpiece and provides a distance guard for the operator.
- 3. When shaping contoured work** and using a rub collar, **NEVER** start out at a corner. See the 'rub collar' instructions, further in the manual.
- 4. With the machine unplugged,** always rotate the spindle by hand with any new set up to insure proper cutter clearance before starting the machine.
- 5. Do not shape stock shorter** than 12 inches without special fixtures of jigs. where practical, shape longer stock and cut to size.
- 6. Never attempt** to remove too much material in one pass. You are far more likely to enjoy safer and higher quality results if you allow the cutter to remove material in multiple passes.
- 7. The danger of kickback** is increased when the stock has knots, holes or foreign objects in it. Warped stock should be run through a planer/thicknesser before attempting to run it through a spindle moulder.
- 8. Keep the unused portion** of the cutter below the table surface.
- 9. The use of push sticks** as a safety device in some applications is smart: in others it can be quite dangerous. If the push stick comes in contact with the cutter on the end grain, it can fly out of your hand. Potentially causing serious injury. We recommend using some type of fixture, jig or holding device as a safer alternative. Always use the guard as described in the manual.
- 10. Never force materials** through the spindle moulder. Let the cutter do the work. Excessive force is likely to result in poor cutting and finishes. It will also cause dangerous kickback conditions.
- 11. Always** ensure that cutters, fence and spindle elevator knob have been tightened properly before beginning operation.
- 12. Always** feed the work towards the cutter in the direction opposite of the cutter rotation. Also, using and maintaining a sharp cutter head will greatly reduce the chance of kickback.
- 13. Never** reach behind the cutter to get the workpiece. Your hand may be pulled into the cutter in the event of a kickback.
- 14. If at any time** you are experiencing difficulties performing the intended operation, stop using the machine. Then contact our service department.

## SITE CONSIDERATIONS

### General Condition:

1. Electrical connection: Steady state voltage: 0.9-1.1 of normal voltage.  
Frequency: 0.99-1.01 of normal frequency  
Continuously: 0.98-1.02 short time
2. Altitude does not exceed 1000m,  
Maximum ambient air temperature is +40°C,  
minimum ambient air temperature is no less than +5°C,  
Storage and transportation temperature range is between -15°C and +55°C,  
The relative humidity does not exceed 50% at a maximum temperature of +40°C, higher relative humidity may be permitted at lower temperatures (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 this machine. Some floors may require additional support. Contact an architect or structural engineer if you have any questions about the ability of your floor to handle the weight.

## 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 chords 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 relay socket is available as an accessory. In addition, the vacuum performance must be sufficient to achieve the required negative pressure and a maximum air speed of 20m/sec at the connector.

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

# Record Power Guarantee

## 1. INTRODUCTION

**1.1** We supply machinery through a network of dealers and authorised distributors and you should be aware that your contract of sale is with the retailer from whom you purchased this product.

**1.2** If you are not satisfied with this product you should in the first instance approach the retailer from whom you purchased it.

**1.3** Customers have statutory rights to protect them and information on this can be found at the Citizens Advice Bureau or on such web-sites as that operated by the DTI (<http://www.dti.gov.uk>)

**1.4** Returning your guarantee card will speed up the claims procedure and can be very helpful as a proof of purchase should the initial receipt be mislaid or damaged. We recommend that this is returned as close to your original purchase date as possible.

**1.5** Correct installation, set-up, adjustment and routine maintenance of the machine are the responsibility of the end-user and problems arising from incorrect set-up, adjustment or maintenance are not covered by the terms of this guarantee. However support is available in the first instance from the retailer who supplied you and free technical support is available from Record Power on 01246 561 520 during office hours and from an extensive knowledge base on our website [www.recordpower.co.uk](http://www.recordpower.co.uk). We also recommend that those users who have not had suitable training in the safe use of machinery should seek such training locally before using or attempting to set up and adjust any machinery (please contact your retailer for recommendations in your local area).

## 2. GUARANTEE

**2.1** In addition to the above Record Power guarantees that for a period of 5 years from the date of purchase the components of this product will be free from defects caused by faulty construction or manufacture.

**2.2** During this period Record Power will repair or replace free of charge any parts which are proved to be faulty in accordance with paragraph 2.1 above provided that:

**2.2.1** You follow the claims procedure set out below;

**2.2.2** We are given a reasonable opportunity after receiving notice of the claim to examine the product.

**2.2.3** If asked to do so by us, you return the product to Record Power's premises or other approved premises such as those of the supplying dealer, for the examination to take place.

**2.2.4** The fault in question is not caused by continuous industrial use, accidental damage, fair wear and tear, wilful damage, negligence on your part, incorrect electrical connection, unapproved modification, abnormal working conditions, failure to follow our instructions, misuse, or alteration or repair of the product without our approval.

**2.2.5** This product has been purchased by you and not used for hire purposes;

**2.2.6** This Guarantee extends to the cost of carriage incurred by you returning the product to Record Power as long as it is demonstrated that the defect falls within the terms of this Guarantee and you follow the claims procedure as outlined below;

## 3. CLAIMS PROCEDURE

**3.1** In the first instance please contact the retailer who supplied the product to you. In our experience many initial problems with machines that are thought to be due to faulty parts are actually solved by correct setting up or adjustment of the machines. A good dealer should be able to resolve the majority of these issues much more quickly than processing a claim under the guarantee.

**3.2** If the dealer who supplied the product to you has been unable to satisfy your query, any claim made under this Guarantee should be made directly to Record Power at the address set out at the foot of this Guarantee. The claim itself should be made in a letter setting out the date and place of purchase, and giving a brief explanation of the problem which has led to the claim. This letter should then be sent with proof of the purchase date (preferably a receipt) to Record Power. If you include a phone number or email address this will help to speed up your claim.

**3.3 PLEASE NOTE** that it is essential that the letter of claim reaches the

address below on the last day of this Guarantee at the latest. Late claims will not be considered.

**3.4** We will contact you once we have received your initial written claim. If it is necessary to return the item, in most cases but subject always to clause 2.2.5, we will arrange for collection or will provide freepost information to enable return depending on the weight and size of the product concerned. If the product is to be returned to us, we will agree with you in advance a Returns Number, to speed tracking of the claim and ensure the most appropriate method of return to you is used.

## 4. NOTICE

This Guarantee applies to all goods purchased from an authorised retailer of Record Power within the United Kingdom of Great Britain and Northern Ireland. This Guarantee does not confer any rights other than those expressly set out above and does not cover any claims for consequential loss or damage. This Guarantee is offered as an extra benefit and does not affect your statutory rights as a consumer. Additional written copies of this Guarantee can be obtained by writing to the address below. Please include a stamped and self addressed envelope for each copy of the Guarantee requested.

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# 1. Machine Specification

**MOTOR POWER:** 230V~ 50Hz 2800W

**MOTOR SPEED:** 2800rpm

**TABLE SIZE:** 480 x 690mm

**TABLE HEIGHT:** 900mm

**SPINDLE DIAMETER:** 30mm

**SPINDLE TRAVEL:** 100mm

**Table Opening:** 200mm

**TABLE HEIGHT:** 900mm

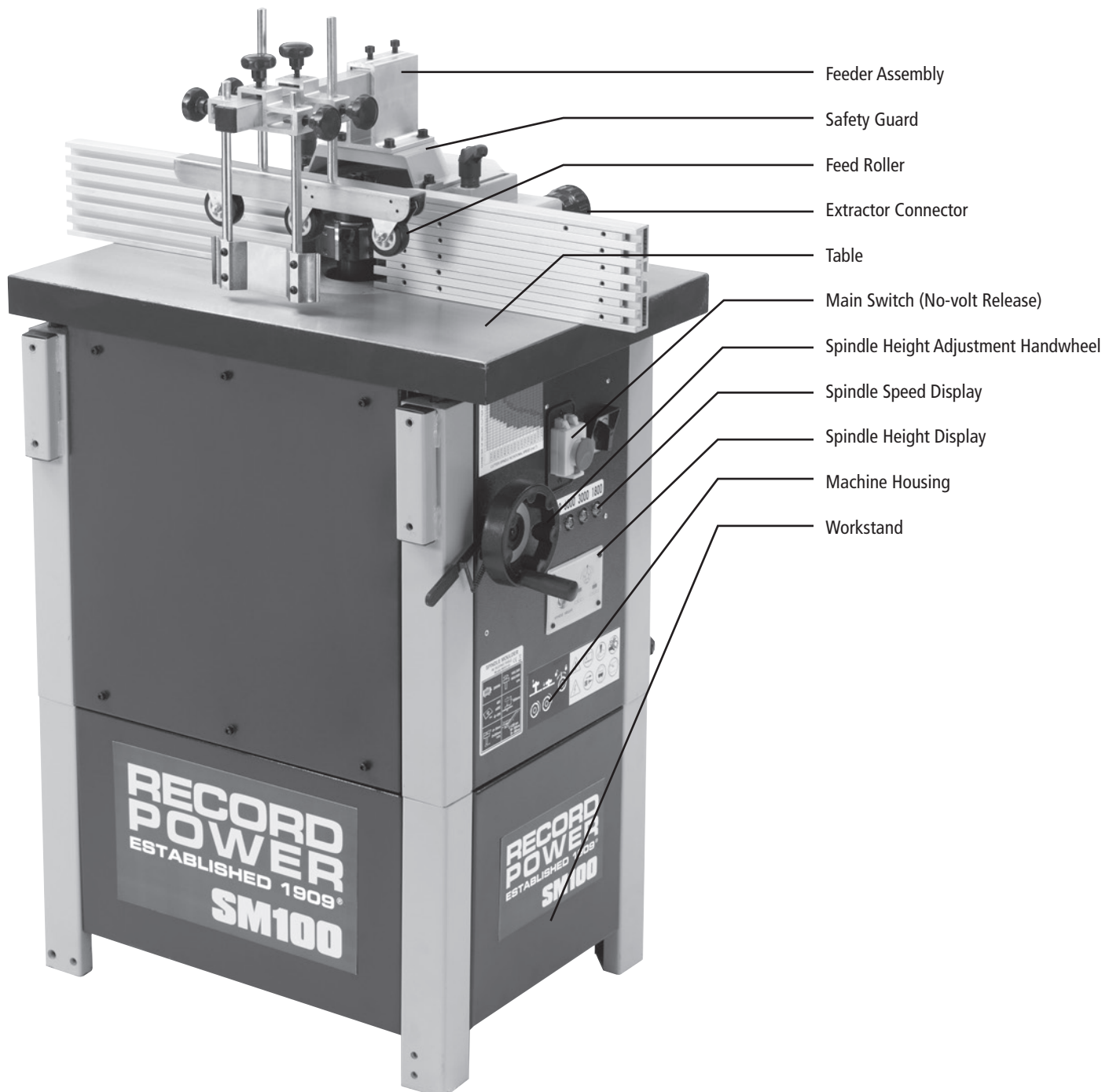
**TABLE RING:** 200mm

**MAXIMUM TOOL DIAMETER:** 200mm

**SPEEDS:** 1800/3000/6000/9000rpm

**EXTRACTION CONNECTOR DIAMETER:** 100mm

## 2. Getting to Know Your Machine





# 3. Assembly

## Unpacking

The spindle moulder is shipped from the manufacturer in a carefully packed carton. If you discover the machine is damaged in any way, please contact your dealer or our customer service department immediately.  
After all the parts have been removed from the carton, you should have:

Spindle Moulder Machine Housing Assembly  
Workstand panel x 4 Column x 4 & hardware (1 bag)  
Safety Guard Assembly  
Feeder Assembly  
Fence Extrusion x 2  
Tools & Hardwares

Most of your spindle moulder has been assembled at the factory, but some parts must be assembled or installed after delivery. We have organized the assembly process into steps.

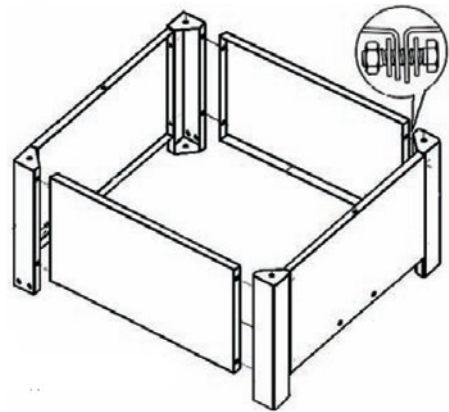
Please follow in the order presented in this section.

## Installing the Work Stand

- 1, Take 4 panels and 4 columns from main carton.
- 2, Take the following hardware from the workstand hardware bag.  
16-Hex head screw M8x20  
32-8mm Flat washer  
16-Hex Nut

- 3, Assemble the work stand as shown in Fig. 3.1.

Fig. 3.1



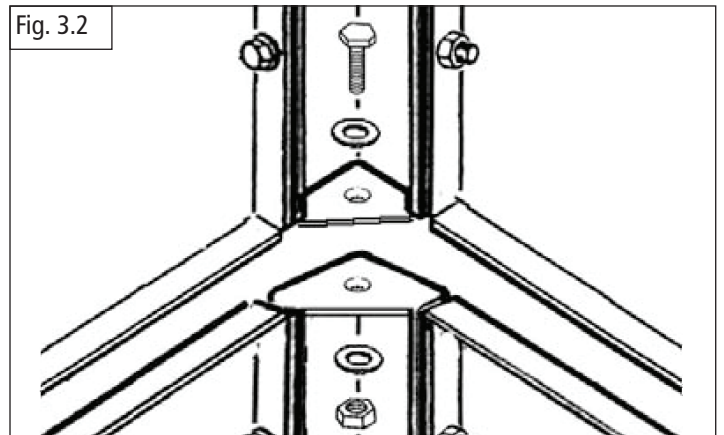
## Installing the Machine Housing Onto Work Stand

**WARNING:** Do not lift the machine housing without help. This machine housing is over 70Kg, always seek assistance before attempting to lift the machine.

- 1, Place the machine housing over the thread holes on the work stand.
- 2, Loosen 2 Star type screw to open the machine housing door and remove 6 x Allen Bolt to the sidepanel.
- 3, Take the following hardware from the workstand hardware bag.  
4 x Hex head screw M8x20  
8-8mm Flat washer  
4 x Hex Nut

- 4, Secure all screws as shown in Fig. 3.2.

Fig. 3.2



## Installing the Cutting Tools

**CAUTION:** Install tool on the spindle as low as possible. It should turn freely in the lowest spindle position. Make sure that tool does not make contact with the table ring or fence extrusion.

### **Danger of Personal Injury!**

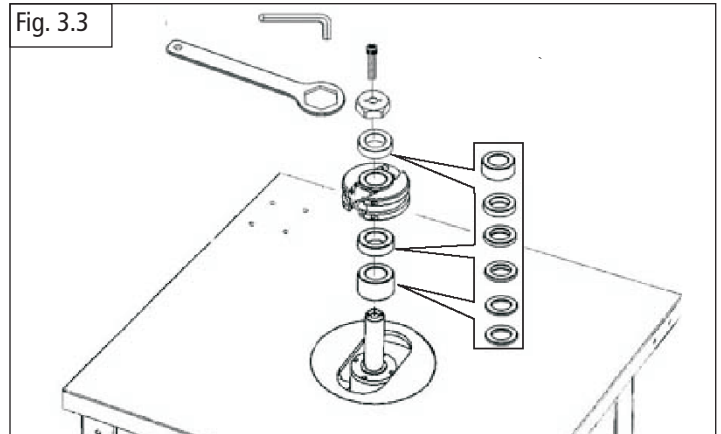
Form a habit of turning the tool by hand before switching machine on to be sure tool runs clear.

1, Lay the table ring flat into table plate.

The table ring, when mounted, should not stand out over the table surface, in order to allow workpiece to be pushed smoothly over the table surface. When doing milling work with a raising cutter, take the table ring out of the table.

2, Position the moulding tool with the spindle ring onto the spindle and secure the lock flange with Allen bolt M12x25 (Fig. 3.3).

3, Adjust the moulding tool height on the shaft, using other thickness spindle ring or rings. The thickness of the spindle ring supplied are 30, 25, 15, 10, 5, 2 & 1 mm.



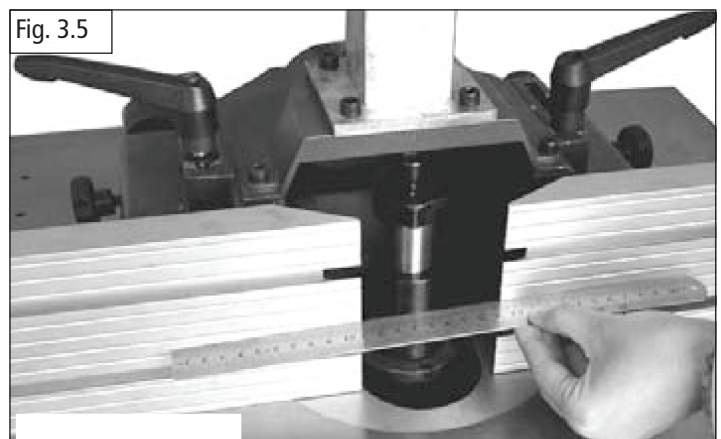
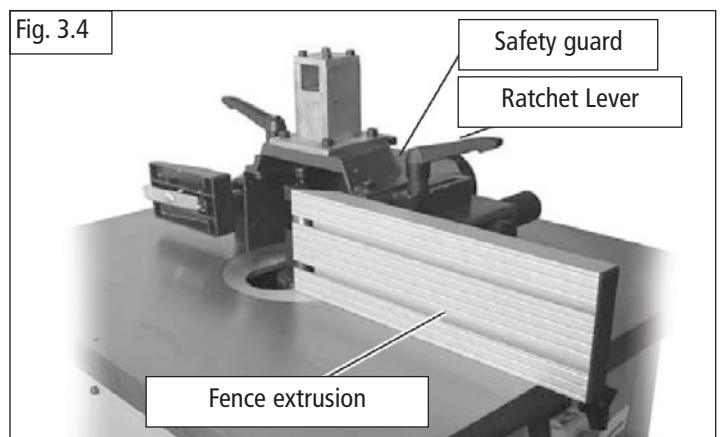
## Installing the Safety Guard

1, Place the safety guard over the threaded holes on the table.

2, Insert the ratchet lever M8x150 with a 8mm large washer into the safety guard as shown in Fig. 3.4, and thread the ratchet lever clockwise to secure to the table.

3, Slide the fence extrusion onto the fence extrusion carriage, and secure it.

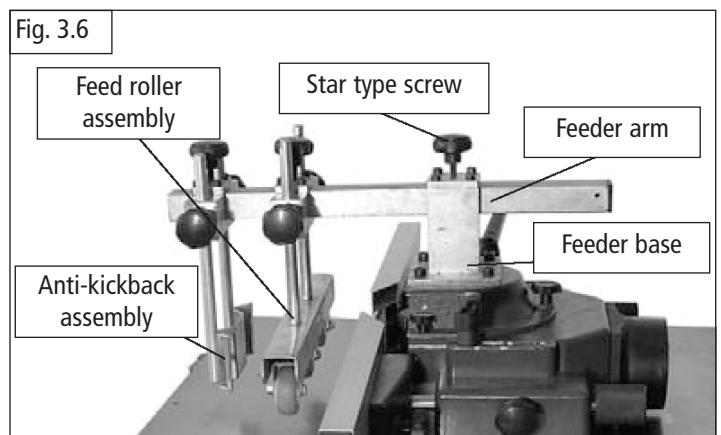
4, To align the fence extrusion, adjust one or both fence so they are in close alignment. Check the alignment with a straightedge as shown in Fig. 3.5.



## Installing the Feeder Assembly

1, Insert the feeder arm into feeder base and secure it with star type screw M8x25.

2, Place the Feeder Assembly and Anti-kickback Assembly onto the Feeder Arm and secure it.





## Installation of the Optional Sliding Carriage

1. To begin installation of the sliding carriage firstly start by attaching the carriage support strut to the machine body via the securing brackets located on the body of the machine (Fig. 3.7).

2. To do this use the two sets of three nuts, two washers and one bolt combinations already attached to the carriage support struts (Fig. 3.8).

3. Screw the first bolt into the top hole of the securing bracket.

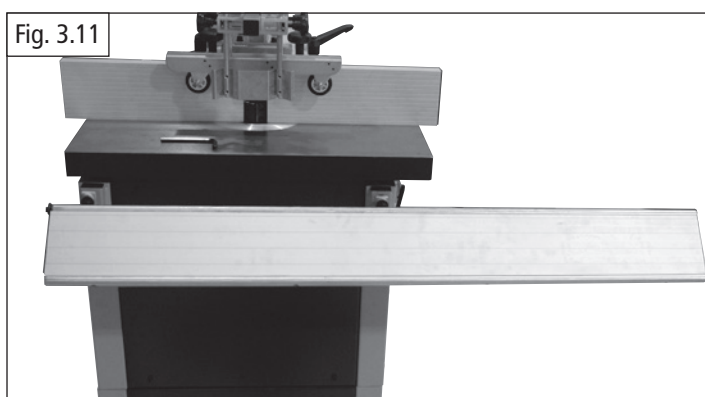
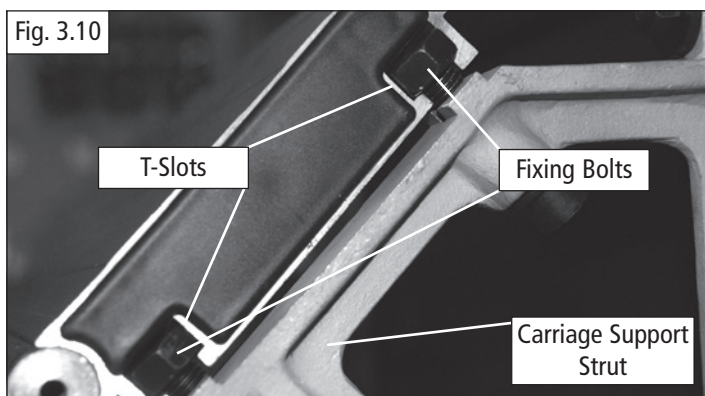
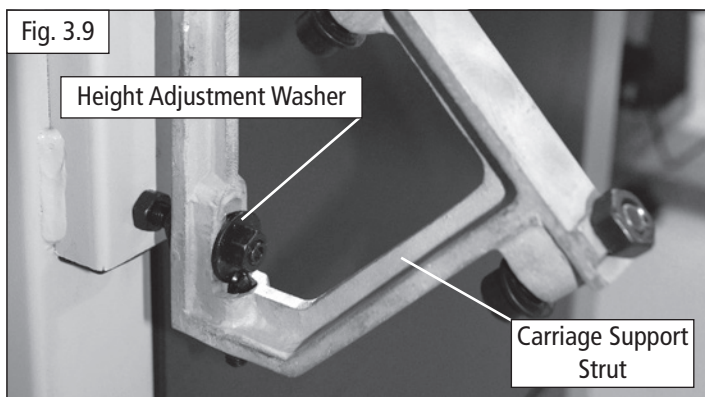
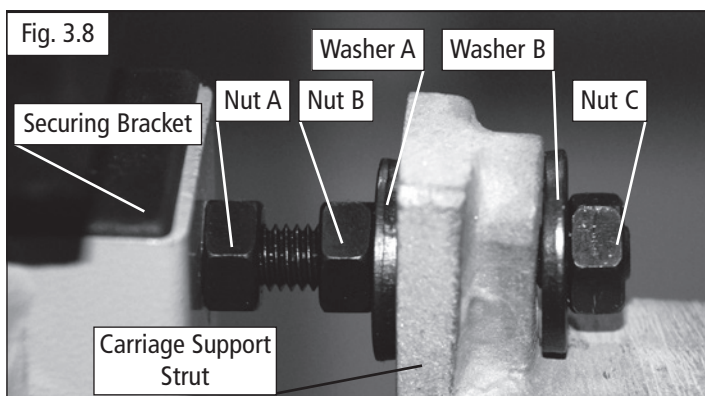
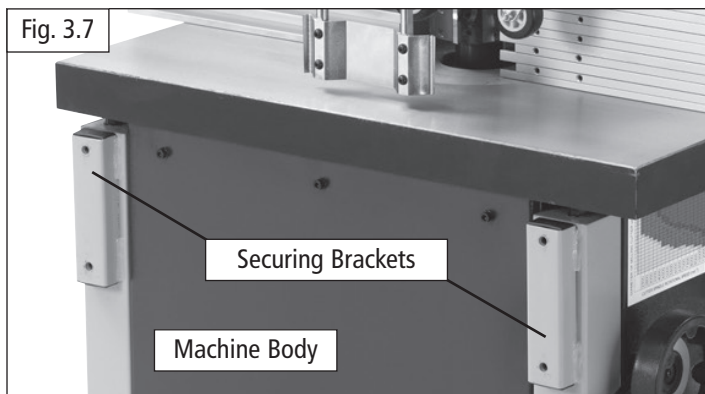
4. Wind on nuts A and B followed by washer A, then the carriage support strut, washer B and finally nut C (Fig 3.8).

5. For the lower hole of the securing bracket repeat step 4 but leave out washer B as the carriage support strut height adjustment washer is used in its place (Fig. 3.9).

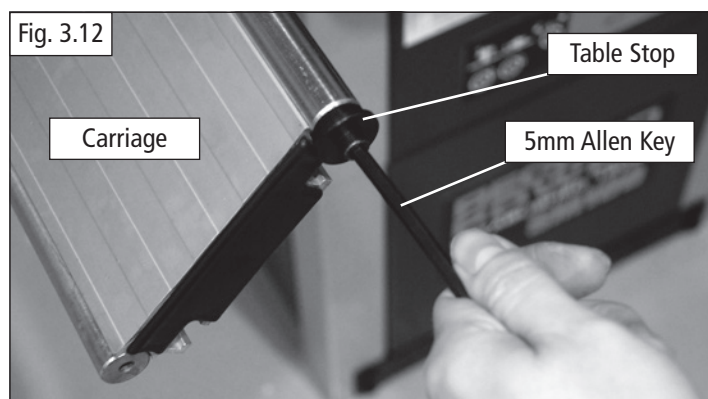
6. To attach the carriage to the support struts position the T-slots, located on the back of the carriage, in line with the fixing bolts (Fig. 3.10).

7. Feed the T-slots onto the fixing bolts and secure in place once in the desired position.

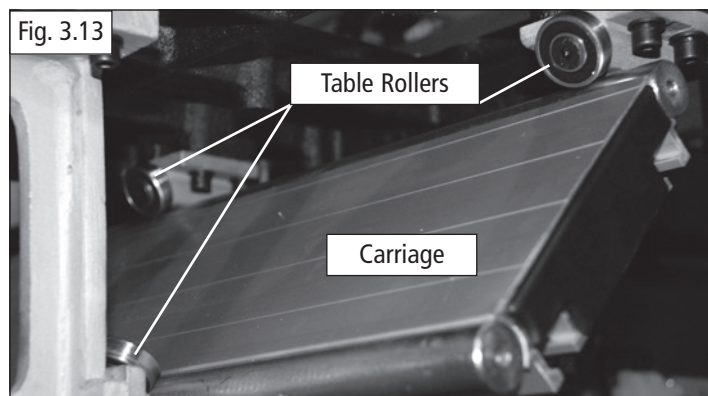
PLEASE NOTE: The carriage can be positioned according to user requirements such as: length of workpiece, position and location in the workshop or user preference (Fig. 3.11).



8. To attach the table to the carriage simply remove one of the stops at either end of the carriage using a 5mm Allen Key (Fig. 3.12).



9. Now slide the pre assembled table and table rollers onto the carriage, making sure all six runners are in contact with the carriage and re-attach the stop. The table should move freely and smoothly along the carriage (Fig. 3.13).

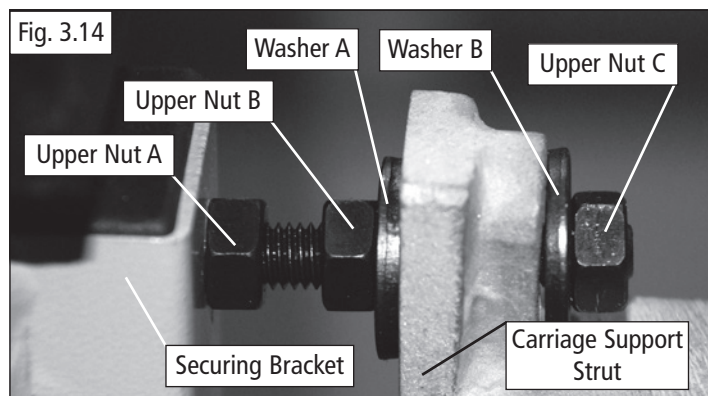


### Fine Adjustment of the Optional Sliding Carriage

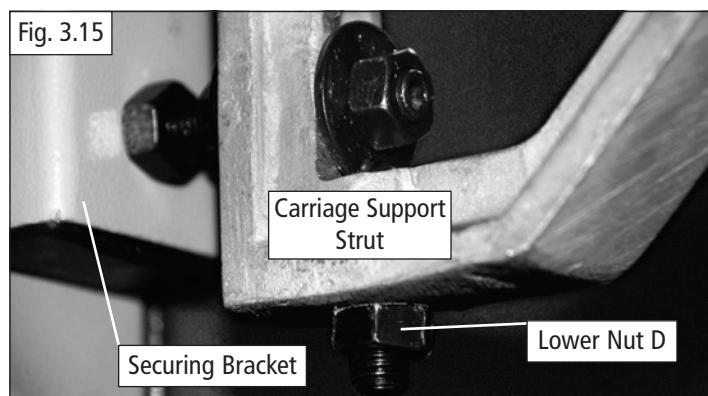
Now the table is attached to the carriage some fine adjustment may be required to position the sliding table parallel to the table of the spindle moulder machine.

There should be a space of 2 to 3mm between the two tables. The sliding table should also be approximately 1mm higher than the spindle moulder table.

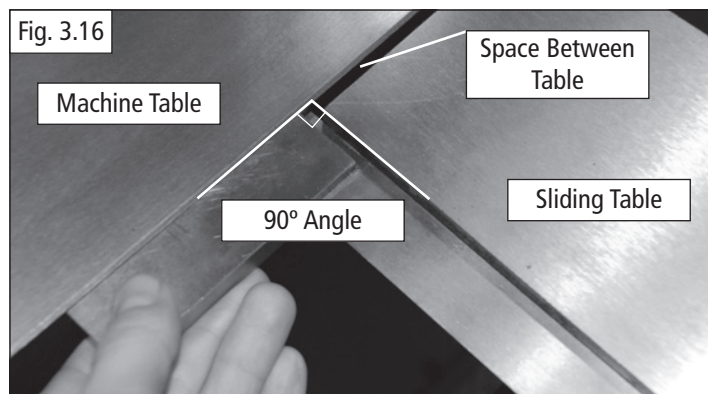
1. To adjust the space between the two tables tighten or loosen the upper nuts B and C of the two carriage support struts using a 13mm spanner (Fig. 3.14). By loosening upper nut B then tightening upper nut C it will result in changes of the verticle angle of the tabe and will be most noticeable at the furthest end of the sliding table.



2. To adjust the height of the sliding table tighten or loosen the lower nut D of the carriage support struts (Fig. 3.15). This will push the carriage support strut higher or lower in relation to the spindle moulder table.



Please Note: The sliding table should be adjusted so that both the distance between the two tables and the height above the spindle moulder table, remain constant (Fig. 3.16) as the sliding table is moved along the length of the carriage. Failure to adjust the table correctly will result in poor quality, inaccurate cuts.



## Installation of the Mitre Gauge Onto the Optional Sliding Carriage

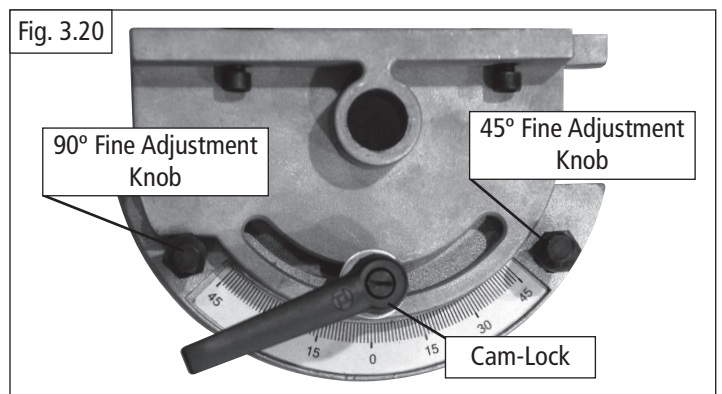
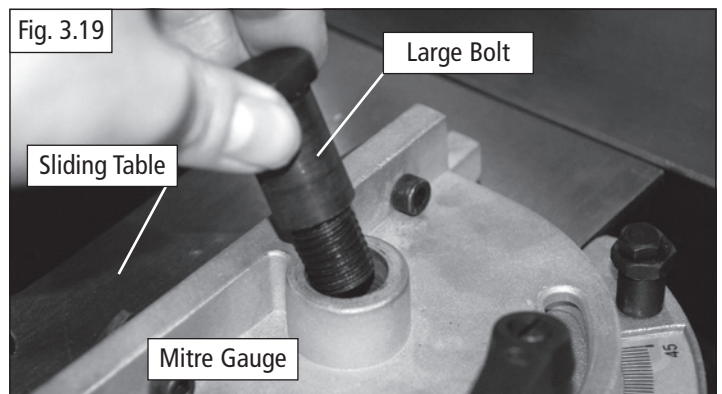
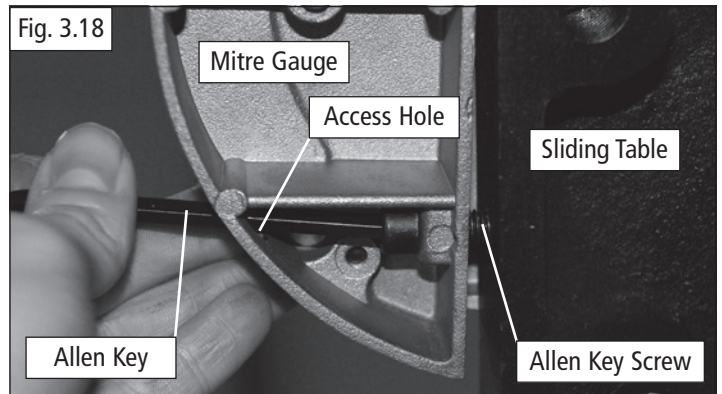
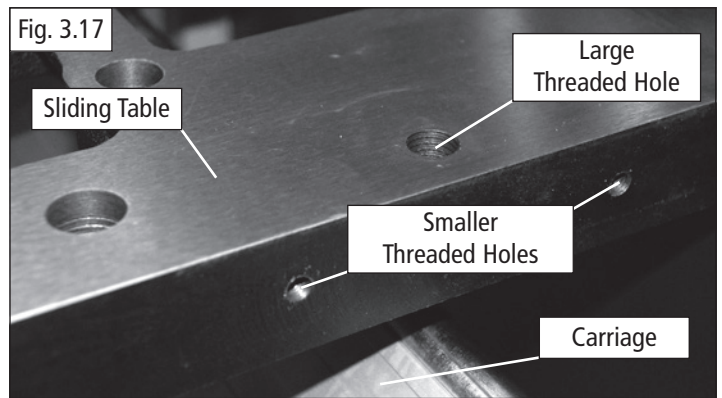
1. Position the mitre gauge on the sliding table so that the two threaded holes (on the side of the table) and the larger threaded hole (on the top of the table) line up with the corresponding fixings of the mitre gauge body (Fig. 3.17).

2. Now secure the mitre gauge in position by firstly placing and tightening the two allen key screws through the gauge and into the corresponding screw holes in the table. Access can be obtained through pre-drilled holes on the outside of the mitre gauge (Fig. 3.18).

Please Note: Do not over-tighten the allen key screws initially as some movement in the gauge will be required for the next step.

3. To secure the larger bolt place it through the hole in the top of the mitre gauge and into the corresponding screw holes in the sliding table. Once this bolt is in place the smaller allen key bolts can be tightened to secure the mitre gauge into place (Fig. 3.19).

4. Micro adjustment can be made when using the mitre gauge by simply turning the two eccentric bolts located on either side of the cam lock. Use the bolt located to the left of the cam lock for adjustment at 90° and the bolt located to the right of the cam lock for adjustment at 45° (Fig. 3.20).

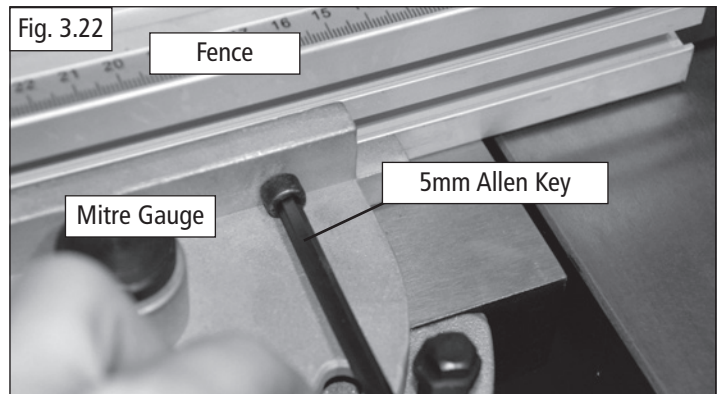
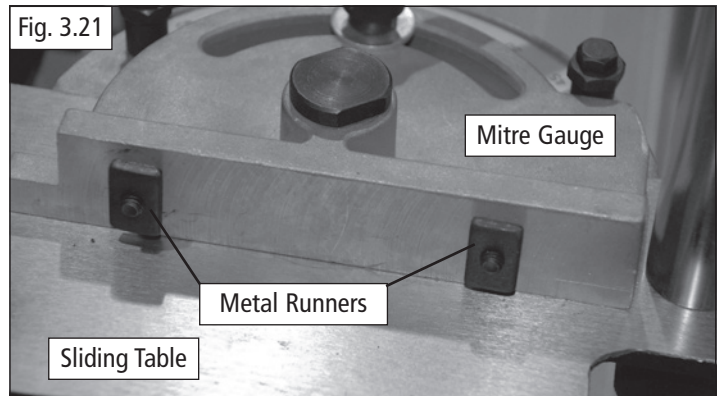




## Installation of the Fence Onto the Optional Sliding Carriage

1. Align the T-slot on the fence extrusion with the metal runners attached to the mitre gauge (Fig. 3.21).
2. feed the fence along the metal runners until in the desired position.

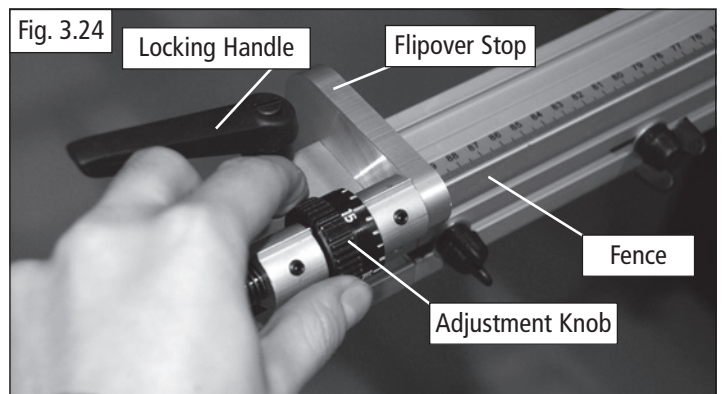
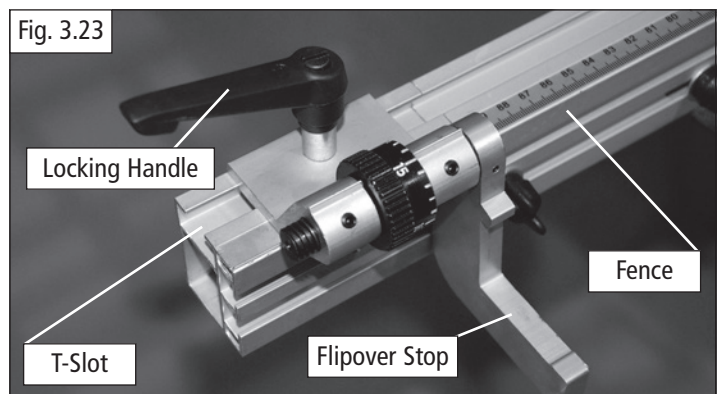
3. Tighten with a 5mm allen key to hold in position (Fig. 3.22).



## Installation of the Flipover Stop Onto the Optional Sliding Carriage

1. Slide the flipover stops metal runner into the T-slot of the fence and tighten the locking handle (Fig. 3.23). Your flipover stop is now secure.

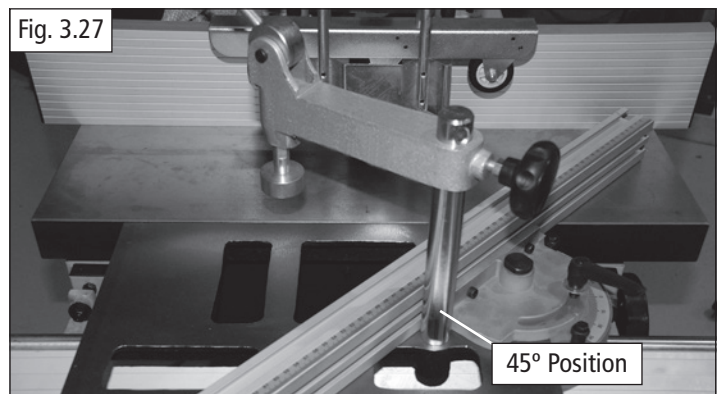
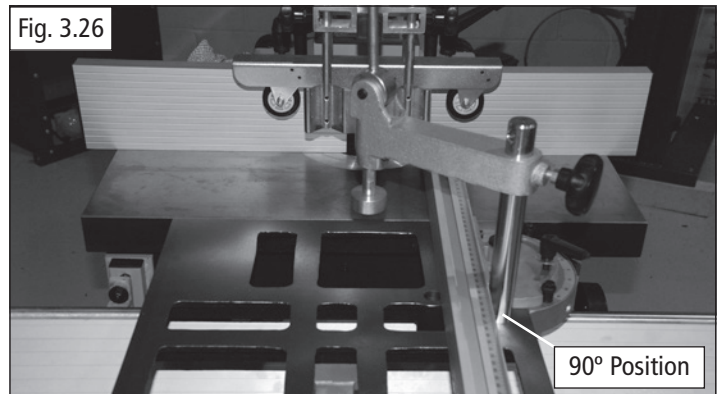
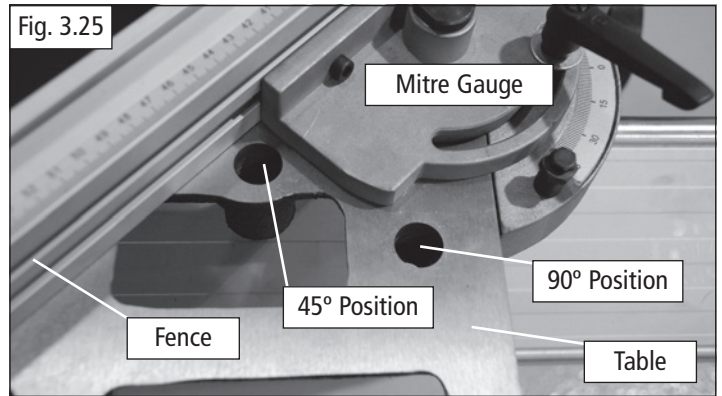
2. Fine adjustment can be made to the flipover stop simply by turning the adjustment knob (Fig. 3.24).



## Installation of the Work Clamp Onto the Optional Sliding Carriage

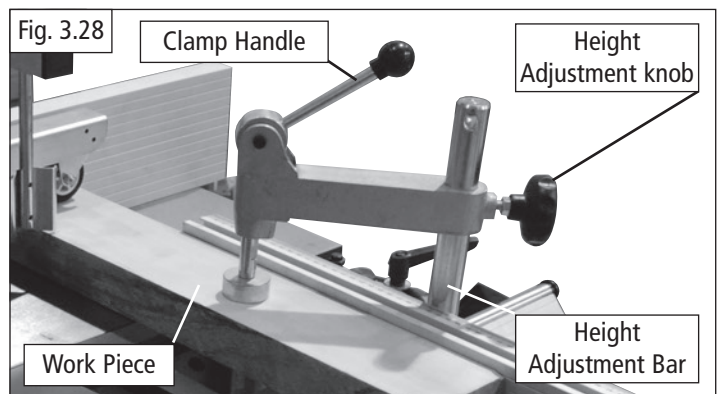
The work clamp can be positioned in two places on the table depending on if you are using the fence at 90° or 45° (Fig. 3.25)

To secure the work clamp in to position simply screw the height adjustment bar into the 90° or 45° hole (Fig. 3.26, Fig 3.27)



## Clamping Work in Position

1. To hold your work in place using the work clamp loosen the height adjustment knob (Fig. 3.28).
2. Slide the work clamp down the height adjustment bar until it comes in contact with the wood.
3. Tighten the height adjustment knob.
4. Lift up the clamp handle until there is adequate pressure on the work piece.
5. Your work piece is now secure and ready to be machined.





# 4. Adjustment & Operation

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

**WARNING:** Before you perform this adjustment switch off the power first.

## Speed Changes

This machine is equipped with a V-belt drive system that controls the speeds. To change spindle speeds:

1. Unplug the machine.
2. Loosen the two Star type Screw M6 x 30, open the Machine Housing Door.
3. Loosen the Allen Bolt M12 x 40 (Fig. 4.1 a) with allen wrench, Pull the Motor Tension Lever (Fig. 4.1 b) out.
4. Select the desired speed. 1800 R.P.M., 3000 R.P.M., 6000 R.P.M., 9,000 R.P.M. Fig. 4.2 shows the belt positions for each available speed.
5. Align the belt along the appropriate pulley grooves
6. Push up the Motor Tension Lever (Fig. 4.1 b) and tighten the Allen Bolt
- When the belt is properly tensioned, there should be approximately 1/4" of deflection in the center of the belt when you press it with moderate pressure.
7. Tighten all the adjusting bolts.
8. Spin the pulley by hand to ensure proper tracking.
9. Close the door.

Fig. 4.1

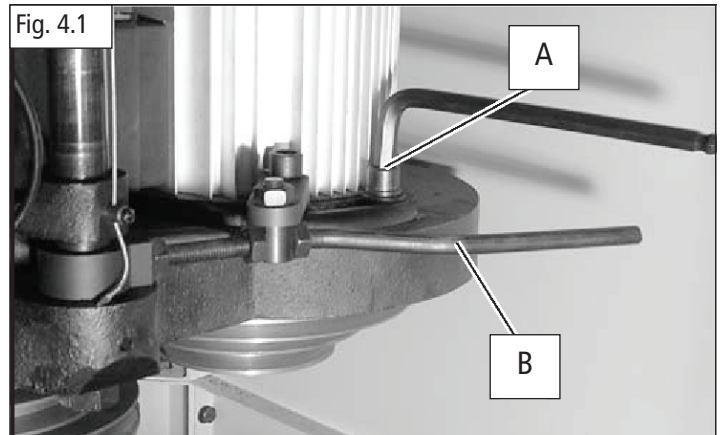
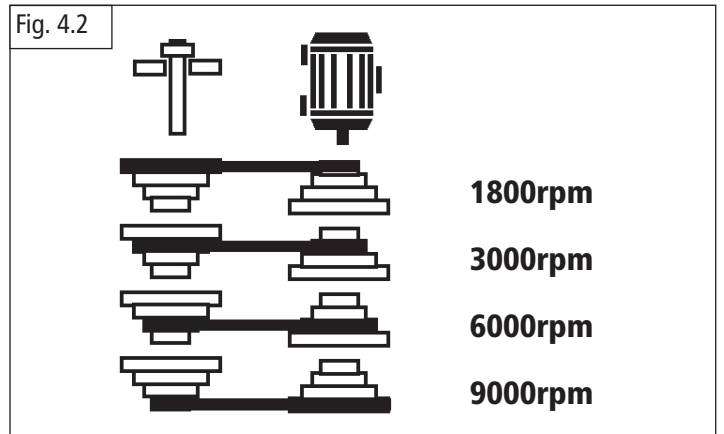


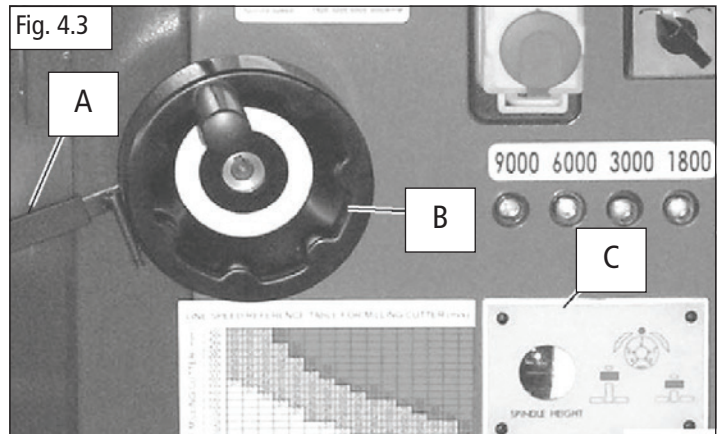
Fig. 4.2



## Adjust the Height of the Spindle

1. Loosen the Spindle Height Lock A (Fig. 4.3).
2. Make sure the fence & table are clear of the moulding tool.
3. Move the spindle up or down with the Spindle Height Handwheel B (Fig. 4.3) until the desired position is obtained.  
To raise = turn counter-clockwise  
To lower = turn clockwise
4. Secure the Spindle Height Lock A (Fig. 4.3).

Fig. 4.3



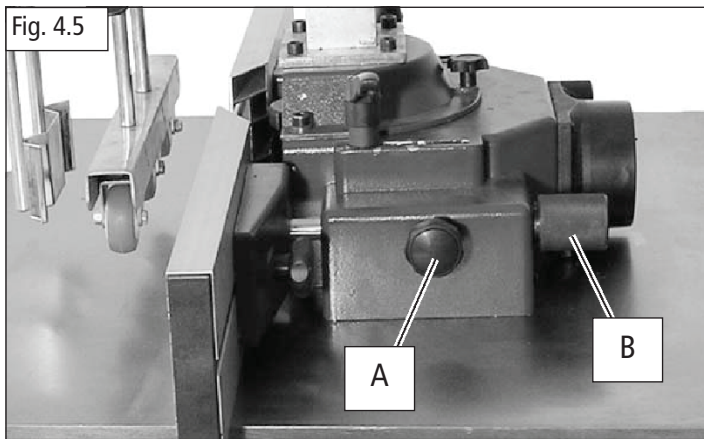
## Fence Adjustment

The fence is a two-piece adjusting system. Each fence is independently adjustable to compensate for different cutting thicknesses and special moulding applications. To adjust the fence:

1. Loosen the fence lock handle Star type Screw M8 x 25 (Fig. 4.5 a)
2. Turn the Spindle Setting Knob (Fig. 4.5 b) until the fence is set to the desired position.
3. Tighten the fence lock handle (Fig. 4.5 a).

**WARNING:** Perform this adjustment only when the spindle and moulding tool are at a standstill.

Fig. 4.5

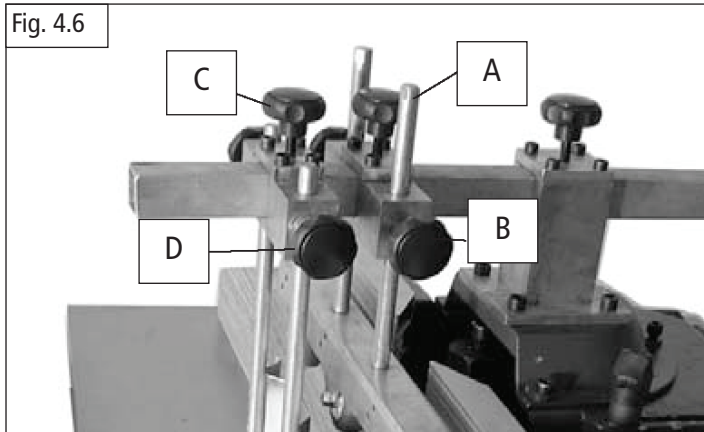


## Adjust the Feed Roller

**WARNING:** Before performing this adjustment, switch off the power first.

1. Loosen the Star type Screw M8x25 A and B (Fig. 4.6).
2. Move the Feed Roller above the workpiece.
3. Lock the Star type Screw M8x25 A (Fig. 4.6), position the feed roller on the center line of workpiece.
4. Lock the Star type Screw M8x25 B (Fig. 4.6), secure the roller as close as possible to workpiece.
5. Loosen the Star type Screw M8x25 C and D (Fig. 4.6).
6. Move the Anti-kickback Plate near the workpiece.
7. Lock the Star type Screw M8x25 C (Fig. 4.6)
8. Lock the Star type Screw M8x25 D (Fig. 4.6), ensure that the plate is as close as possible to the work piece.

Fig. 4.6

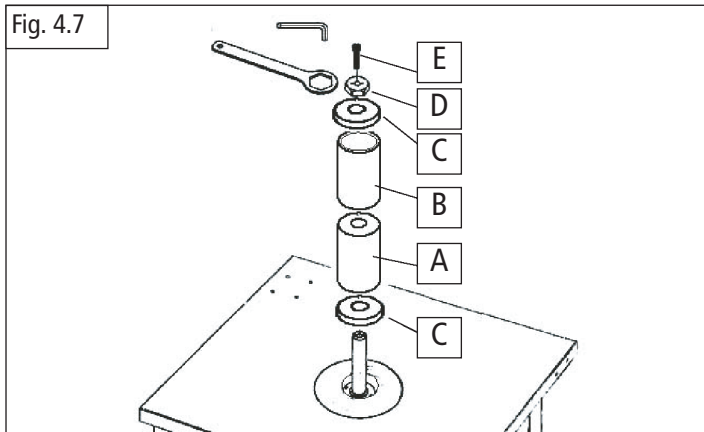


## Sanding

**CAUTION:** To perform this operation, the spindle speed should be at 1800rpm maximum.

1. Remove the Safety Guard and Feed Roller.
2. Adjust the spindle to Highest Position.
3. Insert the Sanding Drum A to Sanding Sleeve B (Fig. 4.7).
4. Place Support Disc C (Fig. 4.7) and Sanding Drum Assembly onto spindle
5. Secure the Lock Flange D (Fig. 4.7) with Allen Bolt M12 x 25 E (Fig. 4.7).

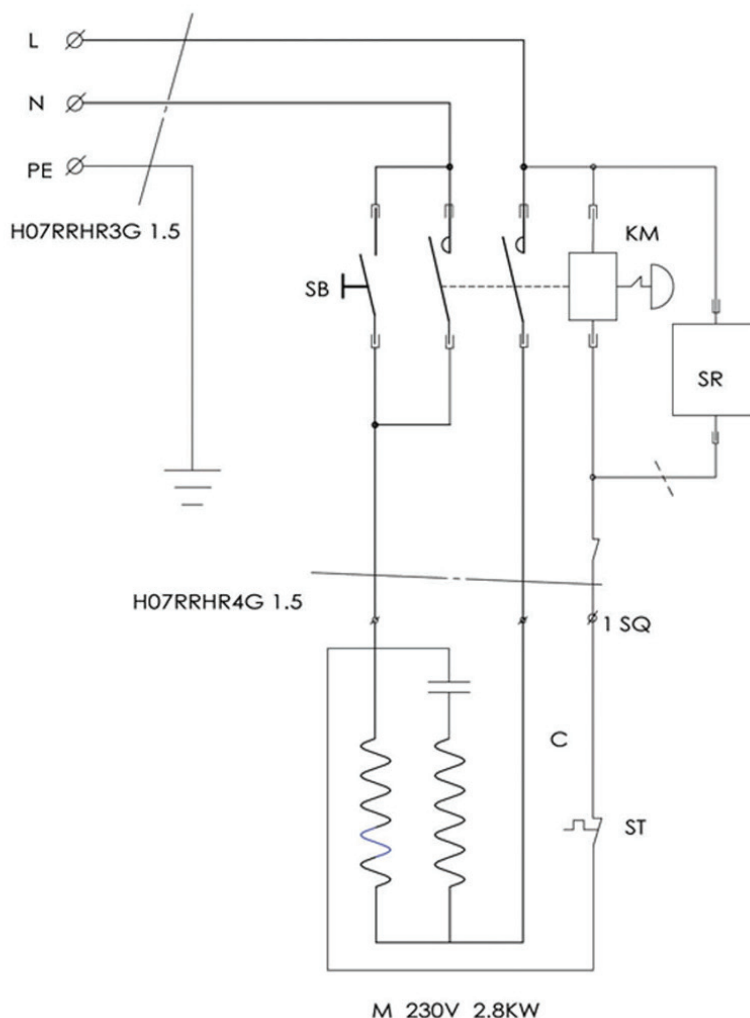
Fig. 4.7



# 5. Wiring Diagram

The electric motor is designed for the S6 40% operating mode. And the motor is equipped with a thermal protect system, therefore the motor is automatically switched off in the event of an overload. The motor can be switched on again after a cooling down period that can vary. Electrical connection cables often suffer insulation damage. Such defective electrical connection cable must not be used as the insulation damaged makes them extremely hazardous.

Check electrical connection cables regularly for damage. Make sure the cable is disconnected from the mains when checking.



Once the machine has been correctly assembled and set up the electricity supply can be connected.

The machine can only be connected to a single phase supply. Before connecting the electrical supply ensure that it is the correct voltage, phase and frequency, and that it has sufficient capacity for the machine. The relevant information can be found on the rating plate located on the rear of the machine.

Machines supplied for use in the UK are fitted with a BS1363 plug fitted with a 13 amp fuse. Ensure that you use the appropriate plug for use in other countries. If the plug fitted to the machine is changed for any reason, the wires in the mains lead are coloured in accordance with the following code:

Green and yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead may not correspond with the coloured markings identifying the terminals on your plug, proceed as follows:

The wire coloured green and yellow must be connected to the terminal marked 'E' or by the earth symbol ~ or coloured green; or green and yellow.

The wire coloured blue must be connected to the terminal marked 'N' coloured black.

The wire coloured brown must be connected to the terminal marked 'L' or coloured red.

**IT IS IMPORTANT THAT THE MACHINE IS EFFECTIVELY EARTHED.**

If in doubt about the connection of the electrical supply consult a qualified electrician.

## RCD (Residual Current Device)

For your additional safety we always recommend the use of an RCD (sometimes called Residual Current Circuit Breaker or Earth Leakage Circuit Breaker).

# 5. Maintenance

NOTE: Always switch off the motor and disconnect the plug from the power supply prior to any maintenance and cleaning work.

Before operation:

- 1, Visually check distance which is 3-8mm, between the moulding tool and fence extrusion, between moulding tool and table.
- 2, Visually check of power cable and power cable plug for damage; if necessary have damage parts replaced by a qualified electrician.

General maintenance:

Check for the following conditions and repair or replace when necessary.

1. Loose mounting bolts.
2. Worn switch.
3. Worn or damaged cords and plugs.
4. Damaged V-belt.
5. Any other condition that could hamper the safe operation of this machine.

## Table

Tables can be kept rust-free with regular applications of silicone based wax or silicone rich spray (CWA195).

## Lubrication

The only parts on this machine that require periodic lubrication are the ways where the cartridge slide rides on the machine housing and where the worm gear and bushing are located. Use a light grease or anti-seizing compound on the ways and worm gear, and give the shaft mount a shot of light oil.

## V-Belt

Avoid getting grease or oil on the V-belt or pulleys. Check the V-belt, as part of a monthly inspection for proper tension and belt condition. Cracking and glazing could result in belt failure. Replace the belt if such conditions appear.

## Schedule

Regularly blow out air vents with compressed air and keep the exhaust port clear.

NOTE: If using compressed air always wear safety goggles and a dust mask.

For every 1 hour of use, clean and wipe down with light grease:

Table and miter gauge slide  
Fence faces

For every 5 hours of use, clean and oil:

Spindle column and cartridge  
Offset adjustment mechanisms on fence  
All worm drive and other gears

Once a year, replace the V-belt, or as and when worn.

# 5. Troubleshooting

Before carrying out any fault service or maintenance work always:

Switch machine OFF

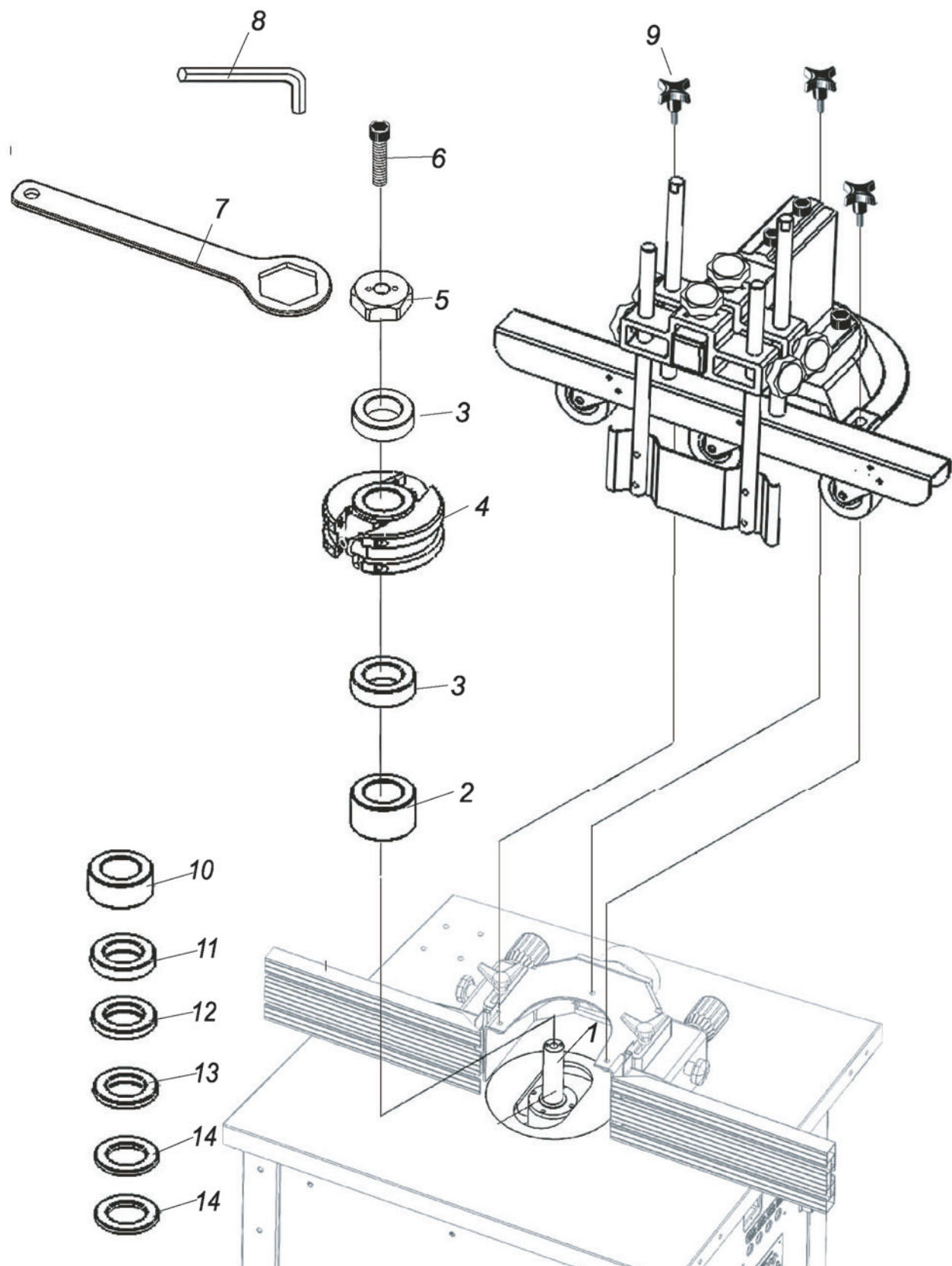
Unplug power cable

Wait for spindle moulder to come to standstill.

Problem	Cause	Solution
Motor is slow or weak	Voltage from source is low. Windings are burned out or open. Power switch is defective. Circuit is overloaded with appliances lights, or other electrically powered equipment.	Request a voltage check from local power company. Have the motor checked / repaired. Have the power switch replaced. Do not use other appliances or electrically powered equipment on the same circuit when using the table saw.
Motor overheats	Motor is overloaded. Dull moulding tool.	Request a voltage check from the local power company. Replace the moulding tool
When moulding, the cut burns the workpiece, or stalls the motor.	Moulding tool is dull. Work-piece is warped.	Sharpen or replace the moulding tool. Replace the work-piece.
Height Handles are hard to turn.	Dust has collected on the mechanisms inside the base.	Clean and lubricate the mechanisms inside the base.
Spindle moulder vibrates excessively.	Floor surface is uneven. V-belt is damaged. Moulding tool is damaged. Loose bolt, screws, nuts.	Readjust the levelling feet. Replace the v-belt. Replace the moulding tool. Tighten all hardware.
Spindle moulder does not start.	Motor cord is not plugged in. Circuit fuse is blown. Circuit breaker is tripped. Motor cord or switch is damaged.	Plug in motor cord to volt electrical outlet. Replace circuit fuse. Reset circuit breaker. Have the motor cord or switch replaced.
Power switch does not operate.	Power switch contacts are burned out. Capacitor is defective. Wiring connections are loose or damaged.	Have the power switch replaced. Request a voltage check from the local power company. Have the capacitor replaced. Have the wiring connections checked / repaired.
Fuses or circuit breakers open frequently	Motor is overloaded. Fuses or circuit breakers are wrong size or defective. Dull moulding tool. Power switch is defective.	Feed work-piece more slowly. Replace fuses or circuit breakers. Replace the moulding tool. Have the power switch replaced.
Motor stalls, blows fuses, or trips circuit breakers.	Motor is overloaded. Dull milling tool. Fuses or circuit breakers are wrong size or defective. Feeding work-piece too rapidly.	Request a voltage check from the local power company. Replace the moulding tool. Replace fuses or circuit breakers. Feed work-piece more slowly.
Spindle moulder is noisy when running.	Motor is loose or defective.	Have the Motor checked/repaired
Warning: To prevent personal injury and/or damage to the spindle moulder, maintenance and repairs should be done only by a qualified technician.		

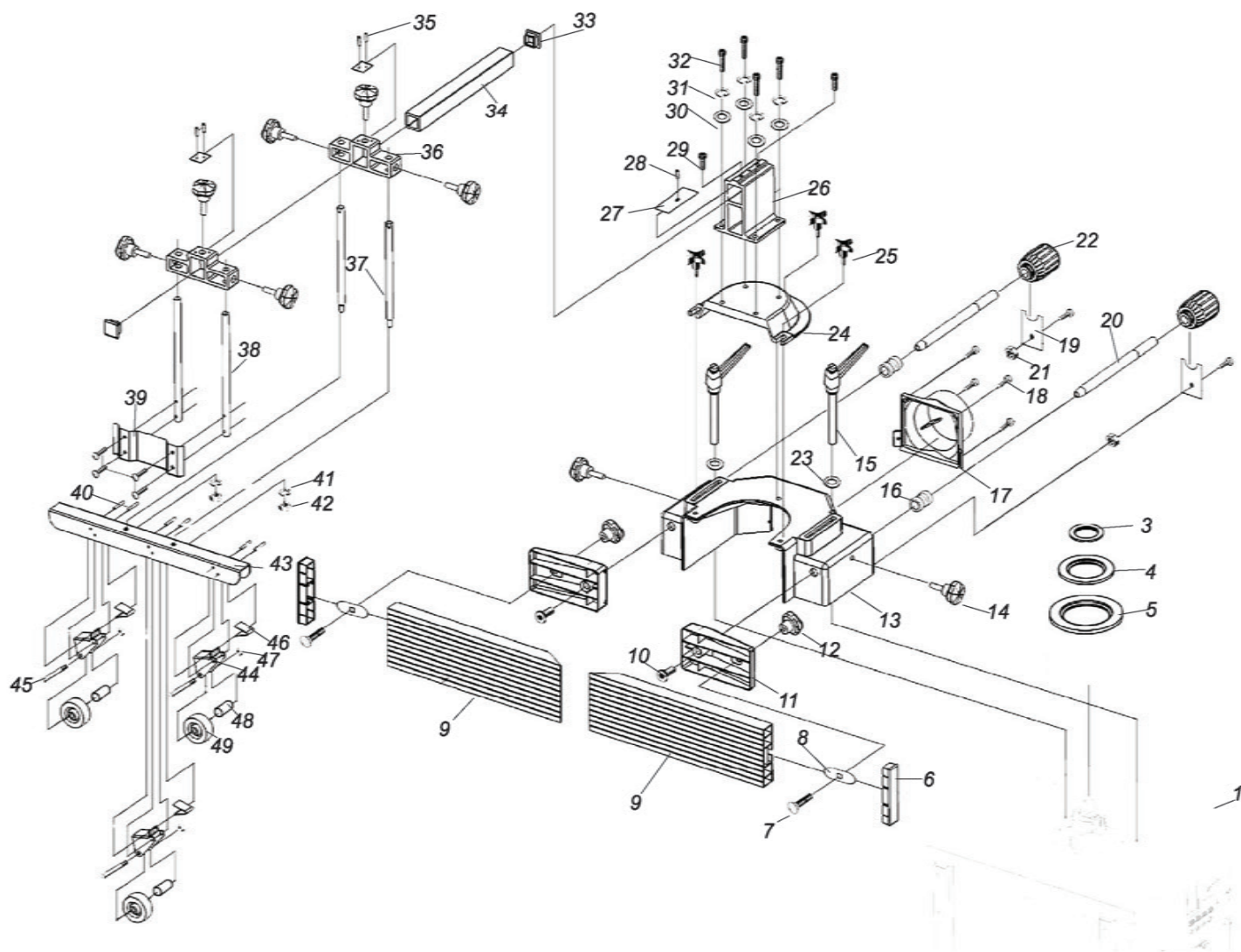


# 6. Parts Lists & Diagrams



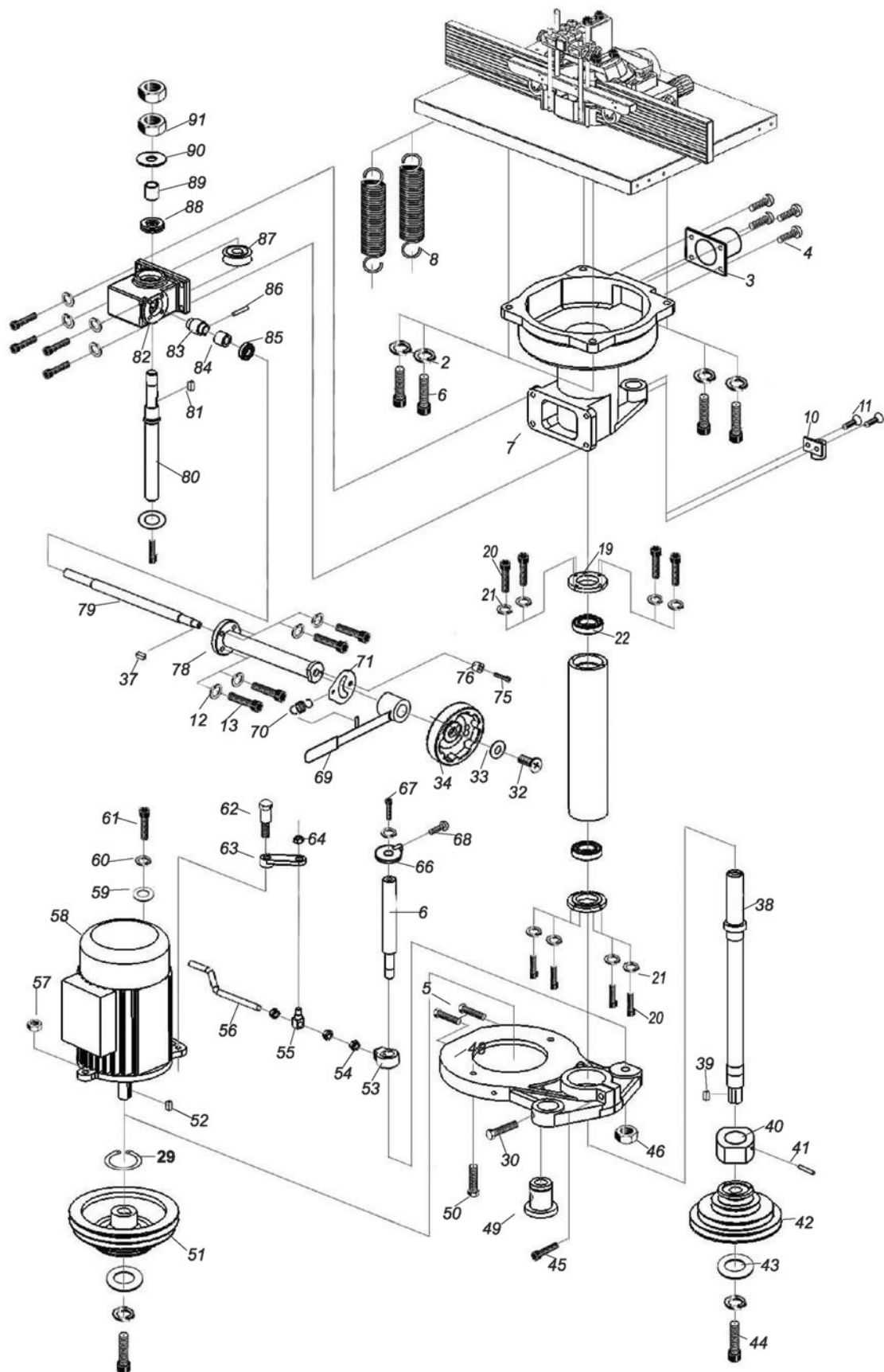
No.	Description	Quantity	No.	Description	Quantity
A-1	Spindle shaft	1	A-8	Allen wrench 10mm	1
A-2	Spindle ring F50x30x30mm	1	A-9	Starknob screw M8x25	3
A-3	Spindle ring F50x30x15mm	1	A-10	Spindle ring F50x30x25mm	1
A-4	Cutting tool	1	A-11	Spindle ring F50x30x10mm	1
A-5	Lock flange	1	A-12	Spindle ring F50x30x5mm	1
A-6	Allen bolt M12x25	1	A-13	Spindle ring F50x30x2mm	1
A-7	Wrench 45mm	1	A-14	Spindle ring F50x30x1mm	2

## 6. Parts Lists & Diagrams - Cont.



No.	Description	Quantity	No.	Description	Quantity
B-1	Table	1	B-26	Feeder base	1
B-3	Table ring 200/150mm	1	B-27	Block, feeder base	1
B-4	Table ring 150/110mm	1	B-28	Roll pin 3x10	5
B-5	Table ring 110/80mm	1	B-29	Allen bolt M8x20	2
B-6	End cap, fence	2	B-30	Flat washer 8mm	4
B-7	Carriage bolt, M8x40	2	B-31	Spring washer 8mm	6
B-8	Guide, bolt	2	B-32	Allen bolt M8x25	4
B-9	Fence extrusion	2	B-33	End cap, feeder arm	2
B-10	Countersunk head screw M8x20	2	B-34	Feed arm	1
B-11	Fence extrusion carriage	2	B-35	Insert, feed arm	2
B-12	Star type nut	2	B-36	Feeder joint	2
B-13	Safety guard	1	B-37	Rod, roller	2
B-14	Starknob M8x25	8	B-38	Rod, roller	2
B-15	Ratchet lever M8x150	2	B-39	Plate, anti-kickback	1
B-16	Lock spacer	2	B-40	Pin, roller	6
B-17	Dust outlet	1	B-41	Spring washer 8mm	2
B-18	Cross recessed pan head screw M5x12	6	B-42	Hex nut M8	2
B-19	Lock piece, handle	2	B-43	Roller frame	1
B-20	Guide spindle, spindle latch	2	B-44	Roller house	3
B-21	Hex nut M5	2	B-45	Hex head screw M6x35	3
B-22	Setting knob, spindle latch	2	B-46	Plate spring	3
B-23	Large washer	2	B-47	Lock nut M6	3
B-24	Cover, safer guard	1	B-48	Roller bushing	3
B-25	Starknob screw M8x25	3	B-49	Roller	3

# 6. Parts Lists & Diagrams - Cont.

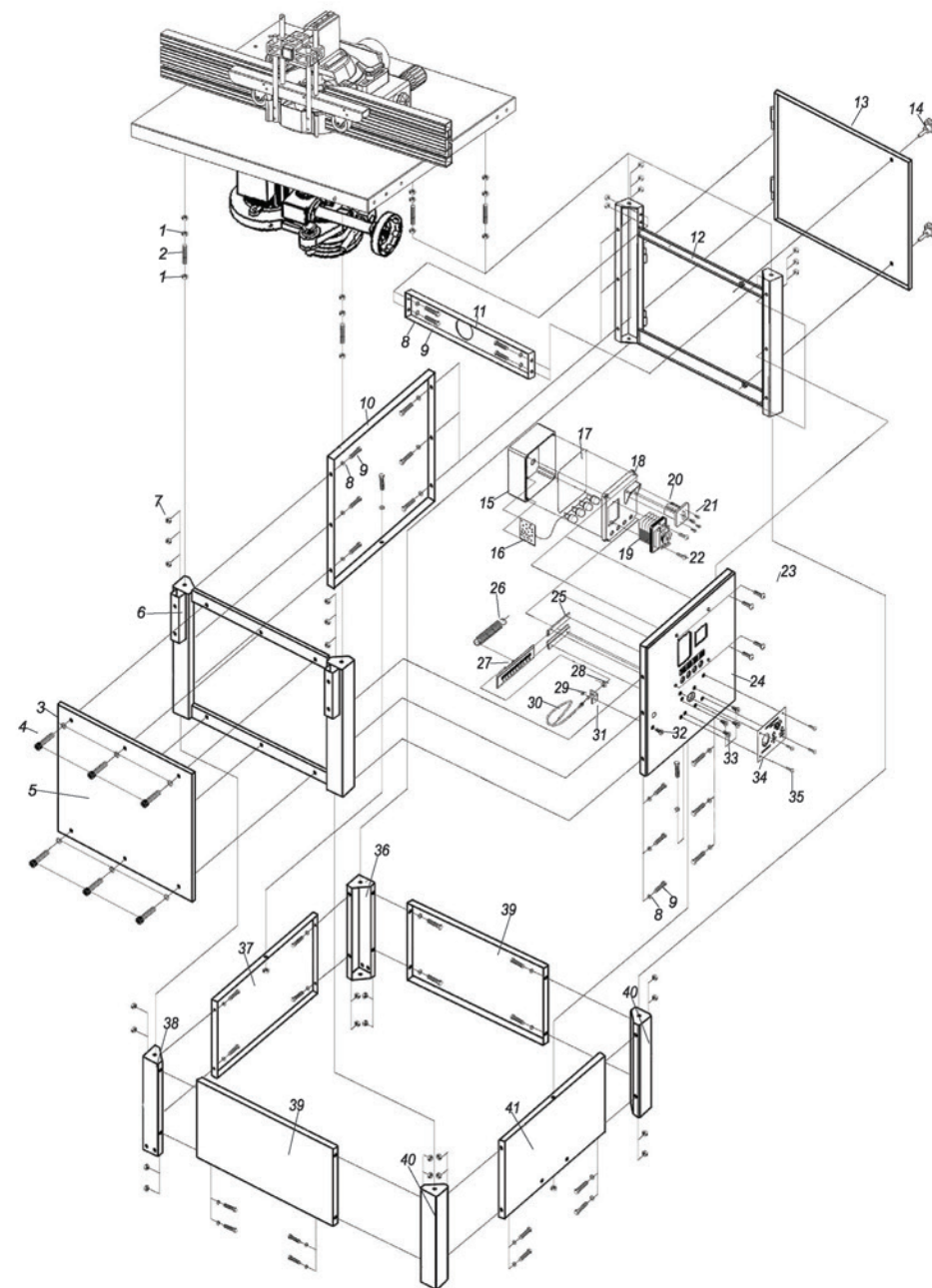


## 6. Parts Lists & Diagrams - Cont.

No.	Description	Quantity	No.	Description	Quantity
C-2	Spring washer 10mm	15	C-54	Hex nut M10	3
C-3	Dust outlet	1	C-55	Thread, tension	1
C-4	Cross recessed pan head screw M4x10	4	C-56	Lever, tension	1
C-5	Hex head bolt M10x30	4	C-57	Lock nut M10	1
C-6	Allen bolt M10x40	8	C-58	Motor	1
C-7	Spindle housing	1	C-59	Flat washer 12mm	1
C-8	Spring	2	C-60	Spring washer 12mm	1
C-10	Scale wire mount	1	C-61	Allen bolt M12x30	1
C-11	Countersunk head screw M4x6	2	C-62	Thread, joint	1
C-12	Spring washer 8mm	16	C-63	Joint, motor tension	1
C-13	Allen bolt M8x25	12	C-64	Lock nut M10	1
C-19	Cup, Spindle guide tube	2	C-65	Guide bar	1
C-20	Allen bolt M4x16	8	C-66	End stop, guide	1
C-21	Spring washer 4mm	8	C-67	Allen bolt M10x15	2
C-22	Ball bearing 80106	2	C-68	Cross recessed pan head screw M4x12	1
C-23	Spindle guide tube	1	C-69	Lock lever, rise	1
C-29	Circle 24mm	1	C-70	Spring, lock lever	1
C-30	Hex head screw M8x20	1	C-71	Pear plate, lock lever	1
C-32	Countersunk head screw M5x12	1	C-72	Cross recessed pan head screw M4x6	1
C-33	Large washer 6mm	1	C-73	Flat washer 4mm	1
C-34	Wheel handle	1	C-74	Pointer	1
C-37	Flat key 4x4x12	1	C-75	Allen bolt M6x25	1
C-38	Spindle shaft	1	C-76	Bushing, pointer	1
C-39	Flat key 8x8x25	1	C-77	Bracket, pointer	1
C-40	Lock nut M30	1	C-78	Housing, rise shaft	1
C-41	Set screw M6x8	1	C-79	Rise shaft	1
C-42	Spindle pulley	1	C-80	Rising spindle	1
C-43	Large washer 10mm	3	C-81	Flat key 6x6x14	1
C-44	Allen bolt M10x20	2	C-82	Carrier, rise gear	1
C-45	Allen bolt M12x40	1	C-83	Worm	1
C-46	Hex nut m16	1	C-84	Bushing, worm	1
C-47	Flat washer 16mm	1	C-85	Ball bearing 80202	1
C-48	Mount, motor	1	C-86	Roll pin 4x20	1
C-49	Special nut, 24mm	1	C-87	Gear-helical	1
C-50	Hex head screw M12x40	1	C-88	Thrust bearing 8105	1
C-51	Motor pulley	1	C-89	Bushing, spindle	1
C-52	Flat key 8x8x40	1	C-90	Special washer	1
C-53	Joint, tension	1	C-91	Thin hex nut M20	2



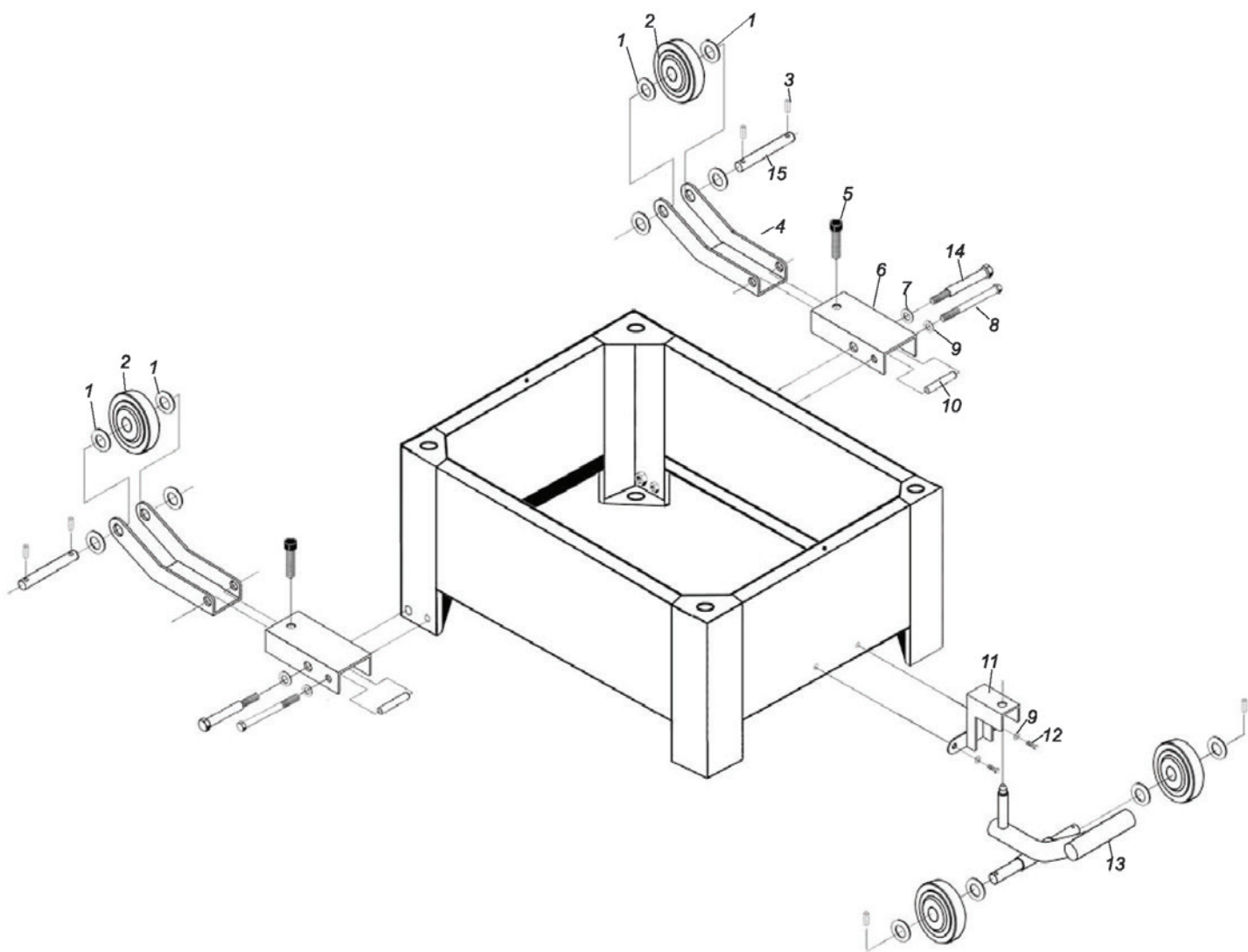
## 6. Parts Lists & Diagrams - Cont.



No.	Description	Quantity	No.	Description	Quantity
D-1	Hex nut M10	12	D-22	Pan head tapping screw M4x10	2
D-2	Set screw M10x70	4	D-23	Pan head tapping screw M4x30	4
D-3	Flat washer 6mm	8	D-24	Front panel, machine housing	1
D-4	Allen bolt M6x30	6	D-25	Scale holder	2
D-5	Left panel, machine housing	1	D-26	Spring	1
D-6	Left frame, machine housing	1	D-27	Scale	1
D-7	Hex Nut M8	38	D-28	Nut scale	1
D-8	Flat washer 8mm	114	D-29	Hex nut M4	1
D-9	Hex head screw, M8x20	38	D-30	Wire scale	1
D-10	Rear panel, machine housing	1	D-31	Wire holder	1
D-11	Beam, machine housing	1	D-32	Cross recessed sunk head screw M4x10	1
D-12	Right frame, machine housing	1	D-33	Cross recessed tapping screw M4x10	4
D-13	Open door, machine housing	1	D-34	View glass	1
D-14	Star type screw M6x30	2	D-35	Cross recessed pan head screw M4x10	4
D-15	Box, switch	1	D-36	Column A	1
D-16	Display assembly	1	D-37	Rear panel, workstand	1
D-17	Seal	1	D-38	Column B	1
D-18	Panel, switch	1	D-39	Side panel, workstand	2
D-19	Main switch (No volt release)	1	D-40	Column C	2
D-20	Turning switch	1	D-41	Front panel, workstand	1
D-21	Cross recessed sunk head screw M4x10	2			

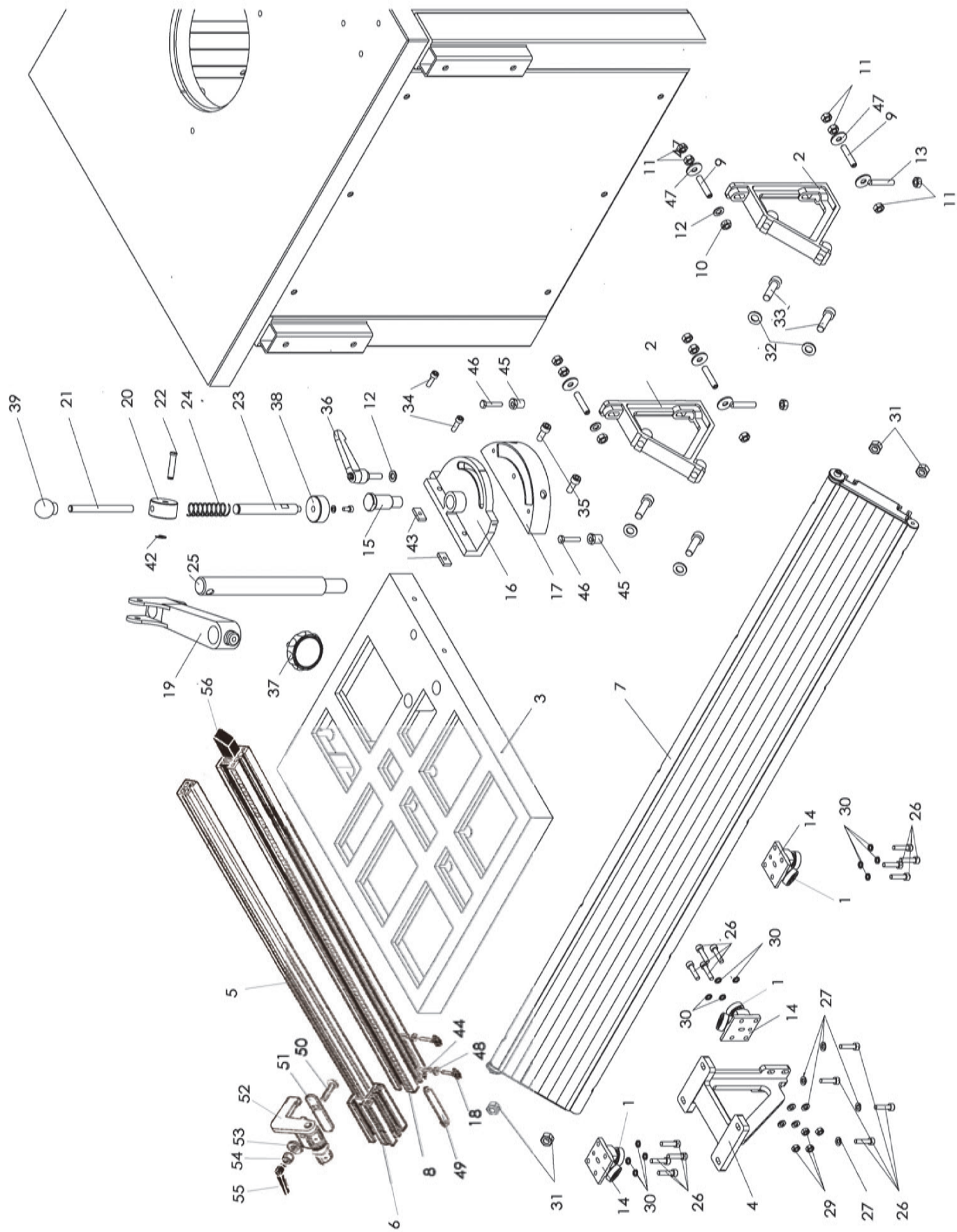


# 6. Parts Lists & Diagrams - Cont.



No.	Description	Quantity	No.	Description	Quantity
F-1	Flat washer 16mm	12	F-9	Flat washer 10mm	4
F-2	Castor	4	F-10	Sleeve	2
F-3	Roll pin	6	F-11	Rear castor frame	1
F-4	Fork, castor	2	F-12	Hex head screw M10x20	2
F-5	Allen bolt M12x50	2	F-13	Lever, Wheel kit	1
F-6	Adjustable U-shape bracket	2	F-14	Special thread	1
F-7	Flat washer 14mm	2	F-15	Pin, castor	2
F-8	Hex head screw M10x70	2			

# 6. Parts Lists & Diagrams for Optional Sliding Carriage



## 6. Parts Lists & Diagrams for Optional Sliding Carriage

No.	Description	Quantity	No.	Description	Quantity
1	Bearing	6	29	Hex. Nut M6	12
2	Support, Sliding Rail	2	30	Spring Washer 6" Diameter	4
3	Sliding Table	1	31	Hex. Nut M10	4
4	Support, Sliding Table	1	32	Washer 10" Diameter	4
5	Guide Fence Rail	1	33	Allen Bolt M10x40mm	2
6	End Stop, Guide Fence Rail	1	34	Allen Bolt M6x20mm	2
7	Sliding Rail	1	35	Allen Bolt M8x20mm	1
8	Guide Fence	1	36	Adjusting Handle M6	1
9	Socket Screw M8x50mm	4	37	Flower Handle	1
10	Nut M8	1	38	Holder	1
11	Nut M8	13	39	Knob	1
12	8" Diameter Washer	3	40	Washer 5" Diameter	1
13	Bolt	2	41	Allen Bolt M5x10mm	1
14	Base, Bearing	3	42	Circle Ring	2
15	Pivot, Mitre Gauge	1	43	Square Nut	2
16	Mitre Gauge	1	44	Roll	2
17	Base, Mitre Gauge	1	45	Eccentric Bushing	2
18	Thumb Screw M6x25mm	1	46	Hex. Bolt M6x30mm	4
19	Workpiece Clamp	1	47	Washer 8" Diameter	2
20	Cam	1	48	Washer 6" Diameter	1
21	Lever	1	49	Intermediate Plate	1
22	Pin	1	50	Carriage Bolt M6x36mm	1
23	Holder Rod	1	51	Bolt Guide	1
24	Spring	1	52	Folding Stop	1
25	Pulling Rod	16	53	Washer 6" Diameter	1
26	Allen Bolt M6x25mm	8	54	Bushing	1
27	6" Diameter Washer	1	55	Ratchet Leaver M6	1
28	Hex. Nut M6	3	56	End Cap	1

# EU Declaration of Conformity

**Cert No: EU / SM100 / 1**

**RECORD POWER LIMITED,**  
Unit B, Ireland Industrial Est.  
Adelphi Way, Staveley, Chesterfield S43 3LS  
declares that the machinery described:-

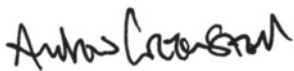
- 1. Type: **Spindle Moulder**
- 2. Model No: **SM100**
- 3. Serial No .....

Conforms with the following directives:-

MACHINERY DIRECTIVE	2006/42/EC
LOW VOLTAGE DIRECTIVE	2006/95/EC
ELECTROMAGNETIC COMPATIBILITY DIRECTIVE	2004/108/EC EN 55014-1:2006 EN 61000-3-2:2006 EN 61000-3-3:1995+A1+A2 EN 55014-2:1997+A1

and conforms to the machinery example for which the  
EC Type-Examination Certificate No. **BM50170155, AN50170154**  
has been issued by **TUV Rheinland LGA Products GmbH**  
at: Tillystrasse 2, D90431 Nürnberg

and complies with the relevant essential health and safety requirements.

Signed..........Dated: **01/06/2010**  
**Andrew Greensted**  
Managing Director

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Woodworking Machines & Accessories

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