RECORD POWER
ESTABLISHED 1909®

Original Instruction Manual

PT107 10" x 7" Heavy Duty Planer Thicknesser

Version 3.1
June 2014

5 YEAR GUARANTEE

To register this product please visit

www.recordpower.info

It is important to register your product as soon as possible in order to receive efficient after sales support and be entitled to the full **5 year guarantee**. Your statutory rights are not affected. Please see back cover for contact details.

Always wear safety glasses when using woodworking equipment.

Always read the instructions provided before using woodworking equipment.

Important

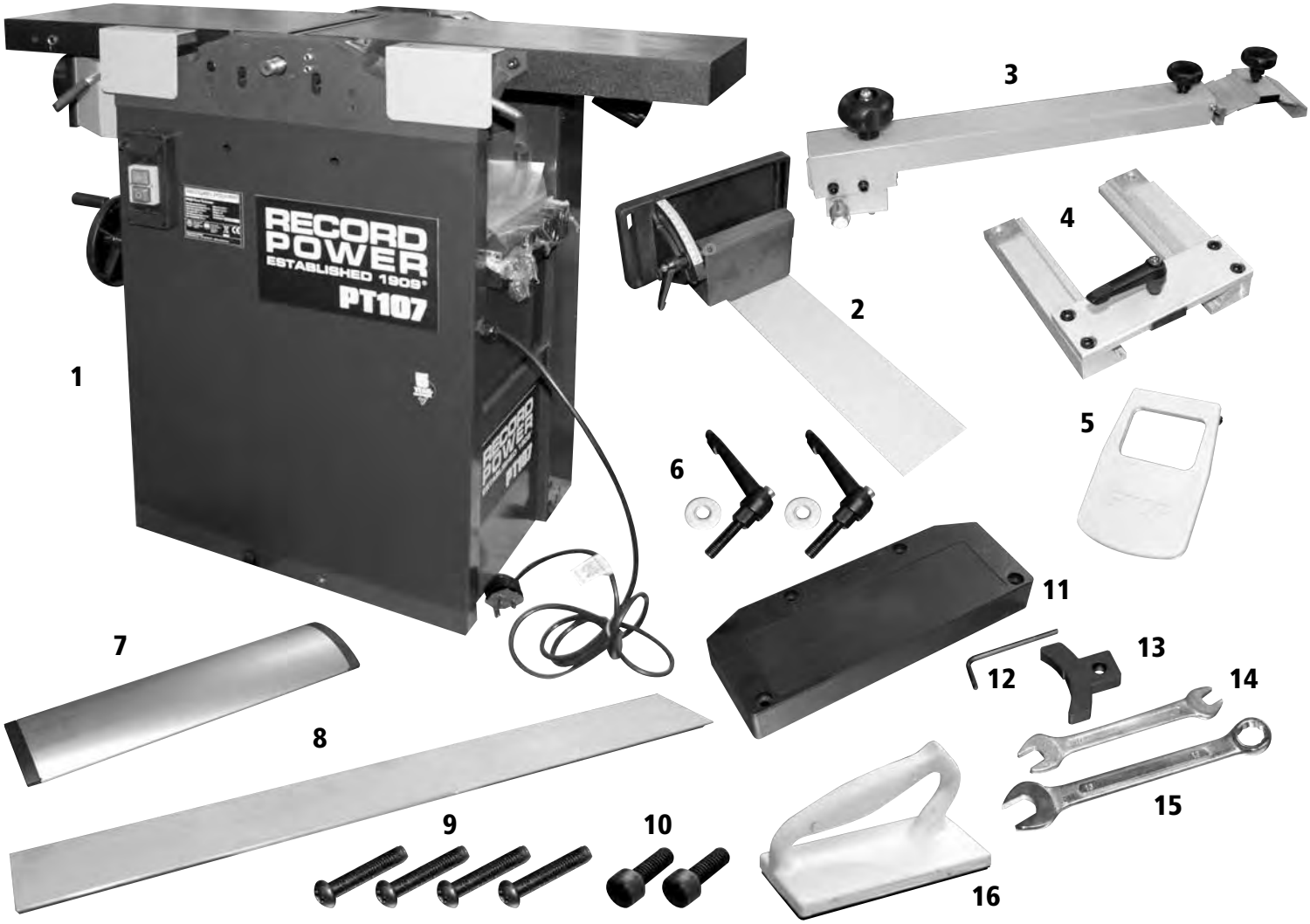
For your safety read instructions carefully before assembling or using this product.

Save this manual for future reference.

5. Specifications

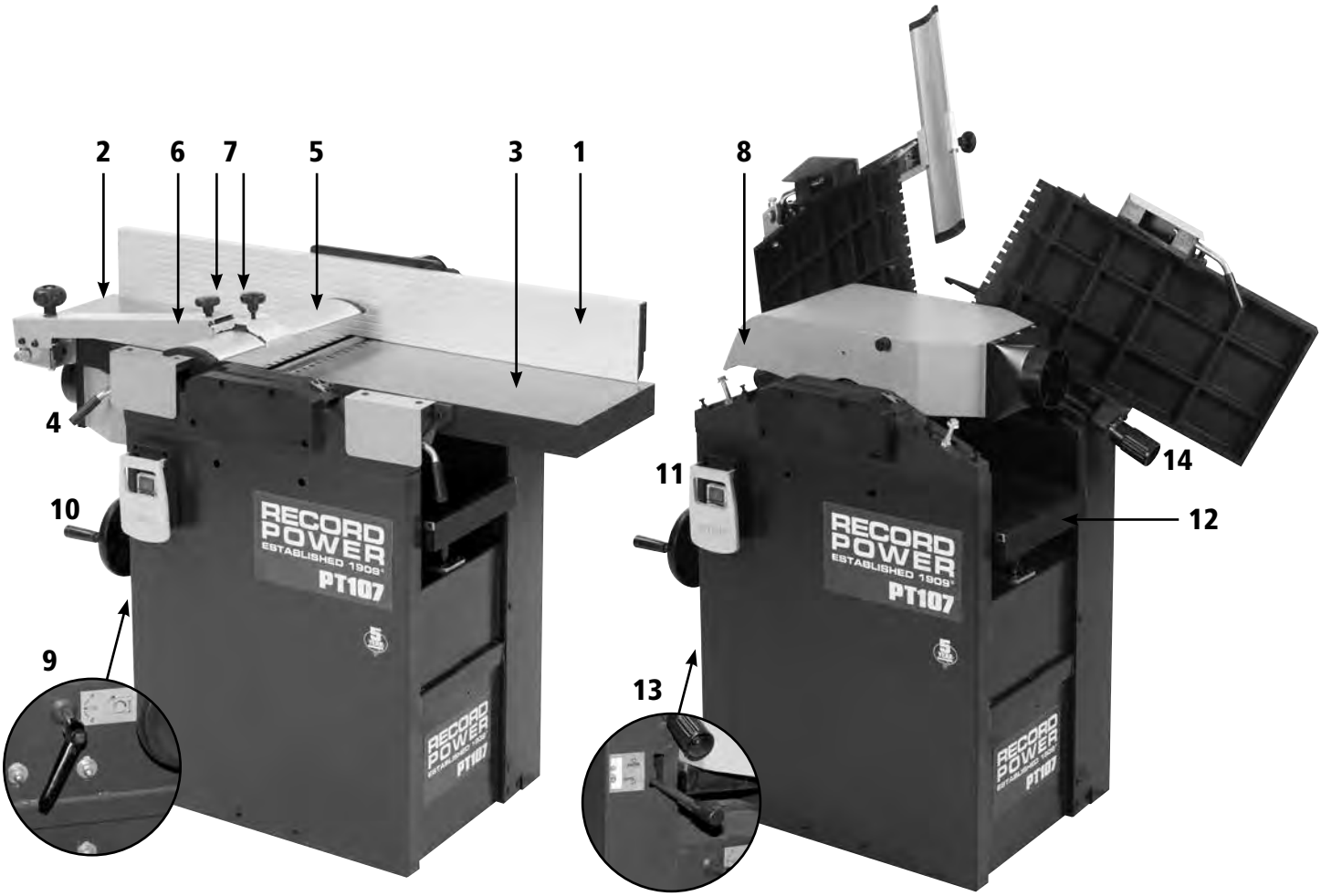
Cutter block diameter:	75 mm
Number of cutters:	3
Blade size:	260 x 18.5 x 3 mm
Cutter block speed:	4000 rpm
Planing table size:	1100 x 265 mm
Maximum planing width:	265 mm
Thicknessing table size:	600 x 265 mm
Maximum thicknessing width:	265 mm
Maximum planing depth of cut:	3 mm
Maximum thicknesser depth of cut:	2 mm
Maximum thicknessing height:	190 mm
Thicknesser feed rate:	5 metres / minute
Fence size:	1080 x 130 mm
Fence tilt:	90° - 45°
Dust port diameter:	100 mm
Weight:	162 kg
Sound power level: loaded	85 db(a) / 106 db(a) unloaded /
Sound pressure level: loaded	83 db(a) / 100 db(a) unloaded /
Motor:	230 v / 50 hz / 3 hp / 2200 w
Full load current:	9.7 A

6. Contents of the Package



1 **PT107** Planer Thicknesser
2 Fence bracket
3 Bridge guard bracket
4 Fence carrier
5 Emergency stop cover
6 Ratchet handles and M8 washers x 2
7 Bridge guard
8 Fence
9 Spindle cover screws x 4
10 M5 hex head socket bolts x 2
11 Spindle cover
12 3 mm hex wrench
13 Blade setting jig
14 10 / 8 mm wrench
15 13 mm wrench
16 Push block

7. Getting to Know Your Planer Thicknesser



1 Fence
2 Outfeed table
3 Infeed table
4 Table lock
5 Bridge guard
6 Bridge guard bracket
7 Bridge guard adjustment knobs

8 Dust extraction hood
9 Thicknesser table lock lever
10 Thicknessing table hand wheel
11 Power switch
12 Thicknesser table
13 Thicknesser feed clutch
14 Infeed table adjustment handle

8. Assembly

Unpacking

The planer thicknesser is a heavy machine. DO NOT over-exert yourself. while unpacking or moving the machine. You will need assistance and possibly powered equipment to move it. Serious personal injury may occur if safe moving methods are not adhered to.

Warning: Never lift the machine by the planer tables when unloading as shown in Fig. 8.1. Belt and chains may only be attached to the stand.

Ensure that lifting gear used has an adequate capacity and the load is secured against lateral slipping.

Unloading can be performed using a forklift, pallet jack or crane.

Use of the **PT107/W** Jockey Style Wheel Kit is recommended for transport of the machine, **Fig. 8.2**.

Warning: Some metal parts may have sharp edges on them. Please examine the edges of all metal parts before handling them. Failure to do so could result in injury.

Cleaning

The unpainted surfaces are coated with a waxy oil to protect them from corrosion during transport. Remove this protective coating with a solvent cleaner, de-greaser or white spirit. For optimum performance of the machine, make sure to 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 with them.

After cleaning it is recommended that Record Power **CWA195** Silicone Spray or wax be applied to the tables to give smooth movement of timber.

Warning: 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.

Warning: Do not smoke while using solvents. A risk of explosion or fire exists and may result in serious personal injury.

Fig 8.1

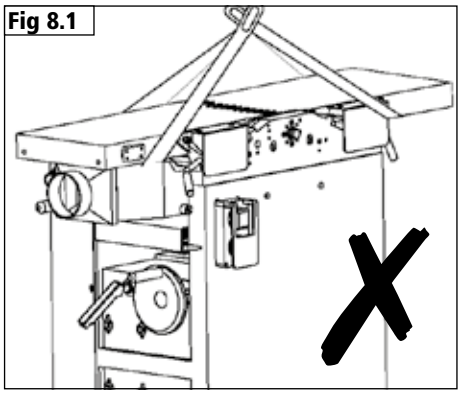


Fig. 8.2

8. Assembly

Fitting the Bridge Guard & Bracket

The bridge guard bracket is supplied with an M10 x 100 mm securing bolt, spacer plate and nylon locking nut already fitted, **Fig. 8.3**. Remove the nut and attach the bracket to the outfeed table by screwing the bolt into the threaded hole in the outfeed table, locating the hole in the spacer plate over the registration collar and securing with the nylon locking nut, **Fig 8.4**. To fit the nut, access to the bolt is gained from the underside of the outfeed table, **Fig. 8.5**.

Slide the bridge guard into the holder on the bracket as shown in **Fig 8.6** and tighten the locking knob on top of the holder.

Fig 8.3

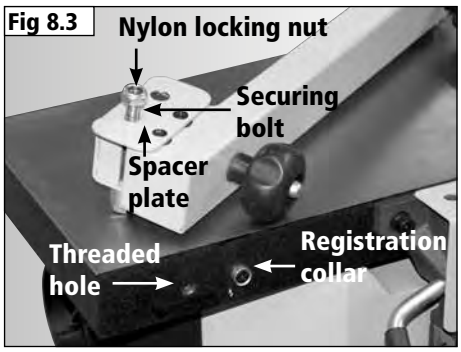


Fig 8.4

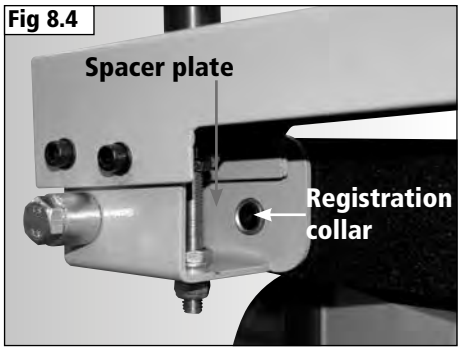


Fig 8.5

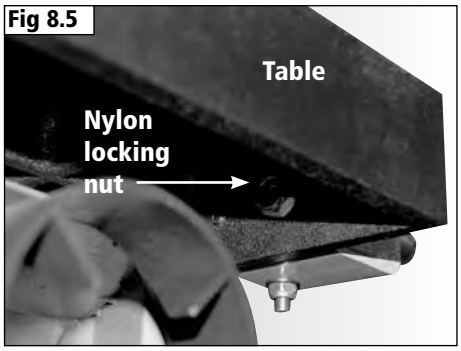
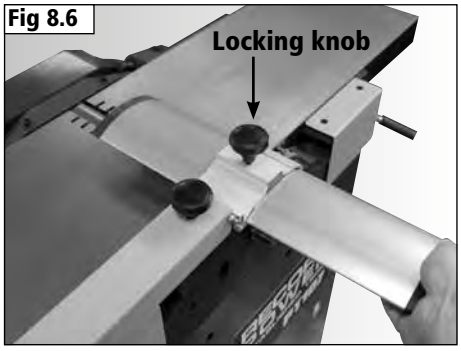


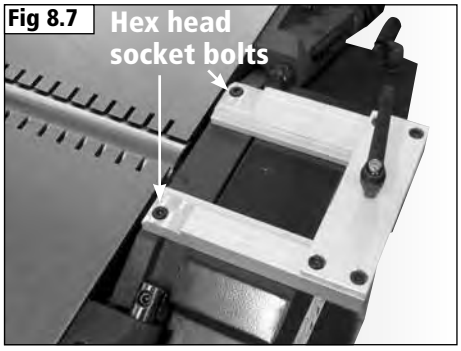
Fig 8.6



Fitting the Fence

Attach the fence carrier to the machine body using the 2 hex head socket bolts as shown in **Fig. 8.7**.

Fig 8.7



8. Assembly

Slide the fence bracket into the carrier as shown in **Fig. 8.8**. The bracket can be locked in position using the locking handle of the carrier. Ensure that the plate attached to the underside of the locking handle mount is positioned beneath the locking handle as shown in **Fig. 8.9**.

The fence features a moving plate with threaded holes inside the groove on the rear of the fence, **Fig. 8.10**. Attach the fence to the bracket by screwing the two bolts with ratchet handles attached into the holes as shown in **Fig. 8.11**. Ensure the washers supplied are placed between the ratchet handles and the fence bracket as shown.

The fence features a stop which must always be positioned as shown in **Fig. 8.11**. The fence is shaped to allow maximum support to the workpiece by having a deeper surface on its right hand side, see **Fig. 8.12**. The left hand side of the fence is raised to give clearance to the outfeed table. The purpose of the stop is to eliminate the risk of the fence being positioned so the lower part of it comes into contact with the cutter block.

Fig 8.8

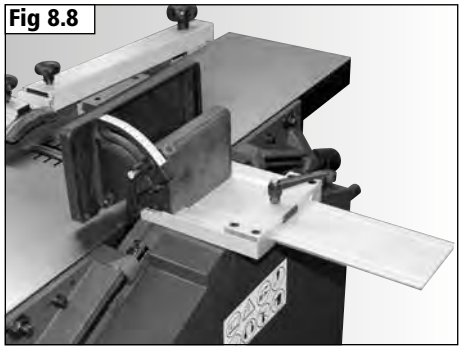


Fig 8.9

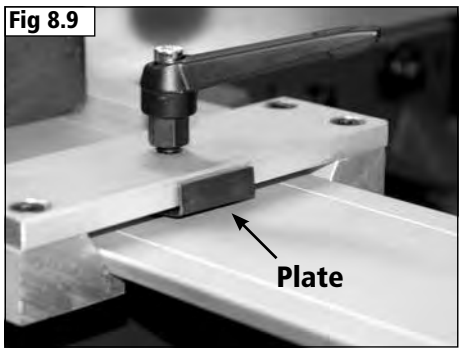


Fig 8.10

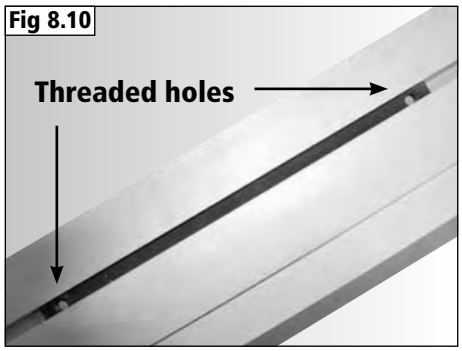


Fig 8.11

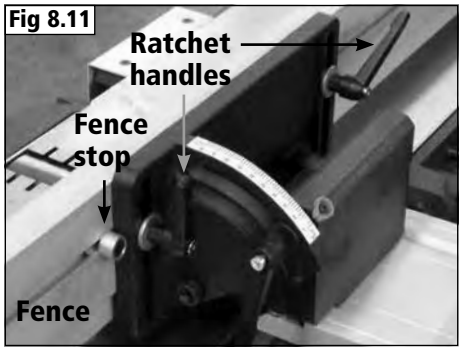
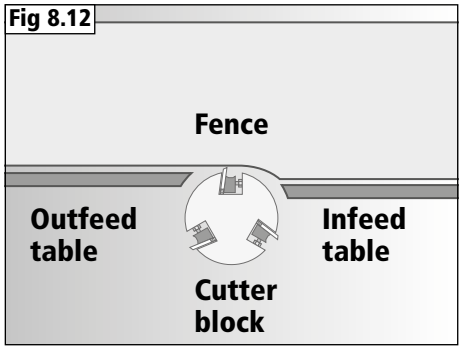


Fig 8.12



8. Assembly

Once the whole fence assembly is installed, check that the fence is square to the table. If not, adjust the position of the fence carrier until alignment is achieved. See **Fig. 8.13**.

Attach the switch cover to the switch box on the front of the machine as shown in **Fig. 8.14** using the nuts and bolts supplied pre-assembled to the switch cover.

To fit the spindle cover, pass the spindle cover screws through the holes in the cover and screw into the threaded holes on the side of the machine as shown in **Fig. 8.15**.

Fig 8.13

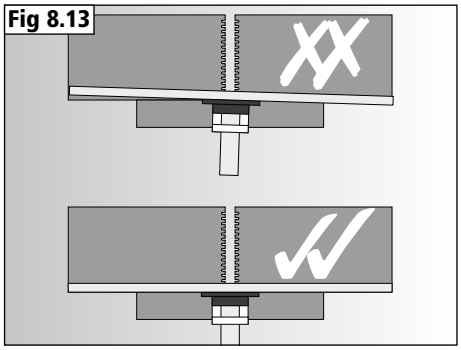


Fig 8.14

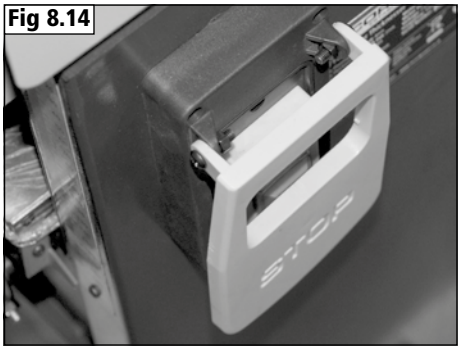
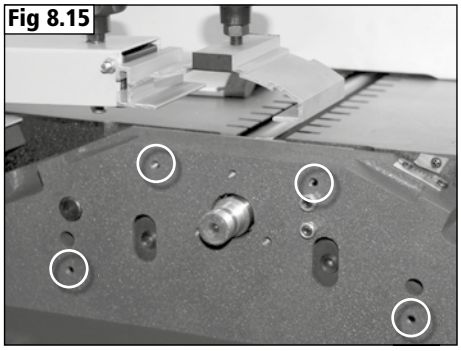
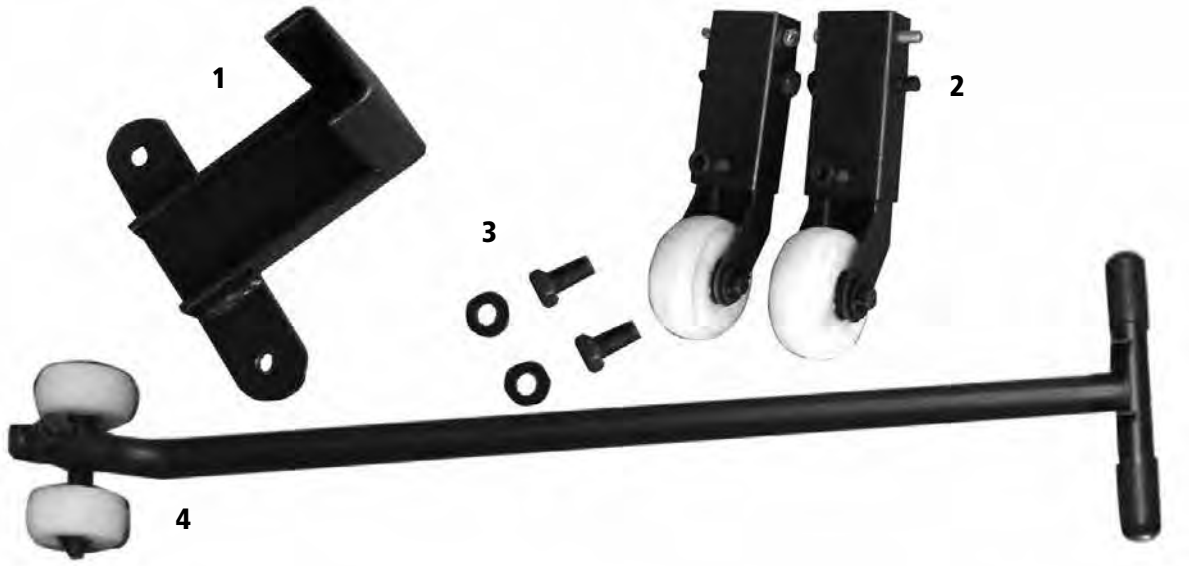


Fig 8.15



9. Assembly of the Optional Wheel Kit

Fig. 9.1



Contents of the Package
See **Fig. 9.1**.

1 Lifting bracket
2 Wheel assemblies, hex head nuts and bolts x 2
3 Hex head nuts and bolts x 2
4 Jockey bar and wheels

Access to the underneath of the machine is required to fit the nuts to the bolts which hold the wheel kit components to the machine. To do this safely, mount the machine securely on blocks of wood which are tall enough to allow access, **Fig. 9.2.**
DO NOT attempt to gain access to the underneath of the machine by tipping it as this introduces the risk of it becoming unstable and falling over.

The wheel assemblies are supplied with hex head nuts and bolts pre-assembled. To attach them to the machine, remove the nuts and pass the bolts through the assemblies and the pre-drilled holes in the machine body and secure with the nuts, as shown in **Fig. 9.3**. Ensure the assemblies are installed with the wheels pointing upwards as in **Fig. 9.3**.

Using the remaining two nuts and bolts, attach the lifting bracket to the front of the machine as shown in **Fig. 9.3**.

Fig. 9.2

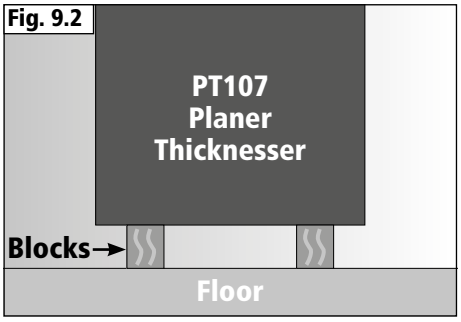
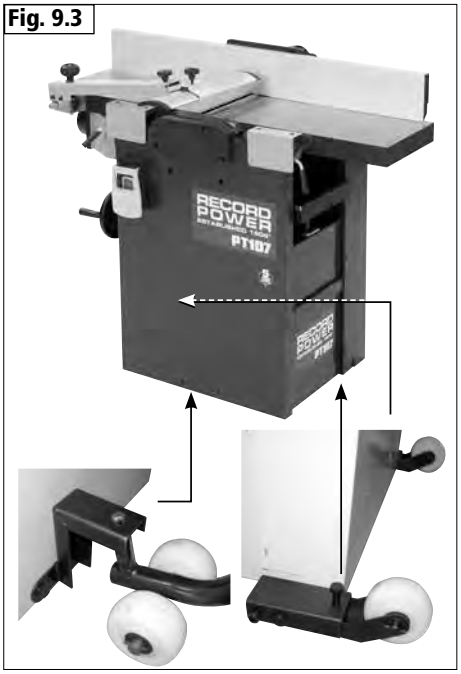


Fig. 9.3



9. Assembly of the Optional Wheel Kit

When the wheel kit is not in use, the wheels fitted to the main body of the machine can be raised by unscrewing the adjusting screw, **Fig. 9.4**, so that they are clear of the floor. The wheels must be lowered again before using the wheel kit.

When fully assembled, the wheel kit should be as shown in **Fig. 9.5**.

Never attempt to move the machine with the wheel kit whilst the planer tables are in the raised position. The centre of gravity will be high, making the machine unstable. Always ensure that the tables are in the closed position before attempting to move the machine.

Fig. 9.4

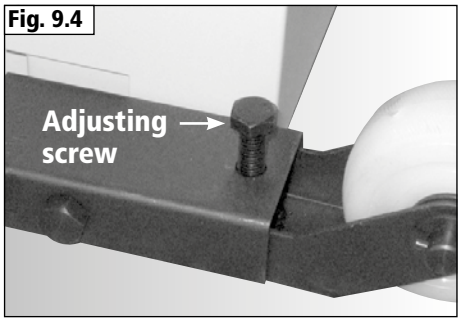
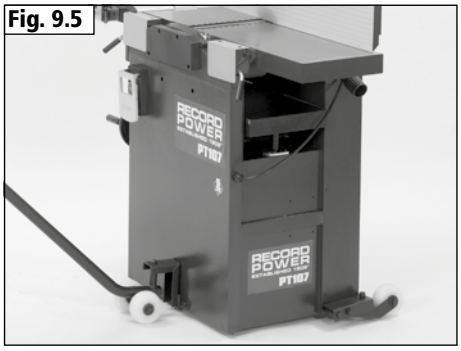


Fig. 9.5



10. Operation

Working techniques

Permitted working techniques.

All uses deviating from those described below are considered improper uses and are therefore not permitted.

- Planing the wide side of a workpiece.
- Planing the narrow side of a workpiece.
- Bevelling the edges of a workpiece.

Prohibited Working Techniques

The following work techniques are prohibited on the machine. This list is not exhaustive.

- Down-cut jointing (direction of cutter block rotation same as feed direction).
- Insertion cuts (workpiece is not worked along its entire length).
- Planing of excessively warped timber.
- Thickness planing of multiple workpieces of different thicknesses.

Before first use of the machine check that the fence is at 90º to the table to ensure accurate results. Use a set square as shown in Fig. 10.1.

If adjustment is required, loosen the locking nut at the rear of the fence bracket and adjust the blind set screw, **Fig. 10.2**. If the fence is less than 90º to the table, turn the screw anti-clockwise until it rests against the roll pin when the table is at 90º. If the fence is more than 90º to the table, turn the screw clockwise until it rests against the roll pin when the table is at 90º.

Before planing, connect a suitable dust or chip extractor to the dust extraction outlet situated beneath the outfeed table.

Setting the Infeed Table

Open the table lock, **Fig 10.3**. and turn the adjusting handle until the desired depth of cut is shown (maximum 3 mm). Re-tighten the table lock securely.

Fig 10.1

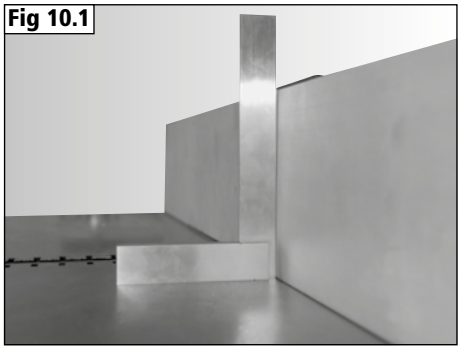


Fig 10.2

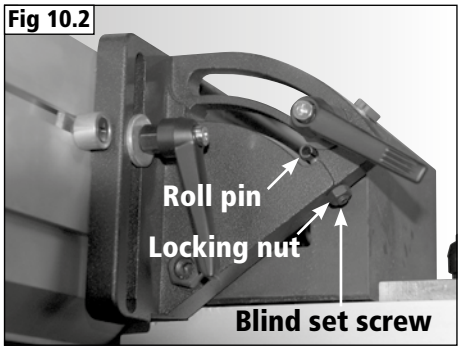
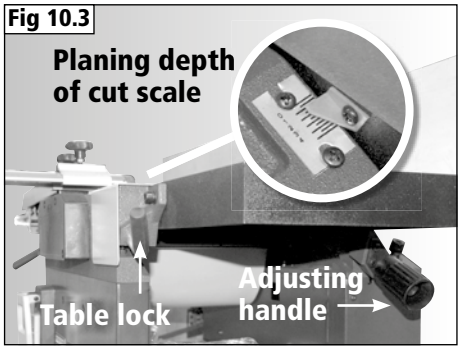


Fig 10.3



10. Operation

Positioning the Bridge Guard

Place the timber on the tables and position the bridge guard to be as close as possible to the timber without touching it, **Fig 10.4**. To set the height of the bridge guard use the height adjustment knob on the bracket, **Fig 10.4**. Ensure the bridge guard is covering as much of the cutter block as possible by loosening the guard locking knob, sliding the guard as far towards the fence as possible and re-tightening the knob.

The bridge guard levelling knob can be used to position the guard parallel to the workpiece, depending on its depth, as shown in **Fig. 10.5**.

The guard should always be used above the workpiece when planing timber below 75 mm in height, **Fig. 10.6**. For timber greater in height than 75 mm, move the bridge guard up to the side of work-piece and let it rest on the planing table, covering as much of the cutter block as possible, **Fig 10.7**.

The fence assembly features a rear guard as shown in **Fig. 10.8**. When planing narrow workpieces, this guard covers the area of the cutter block which may otherwise be accessible from behind the fence.

Fig 10.4

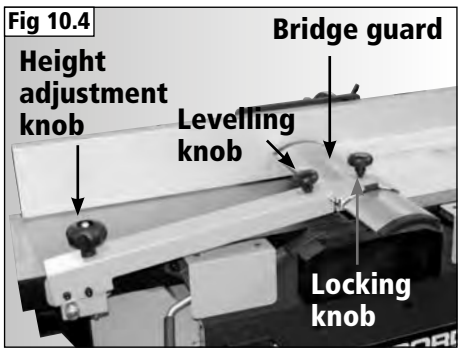


Fig 10.5

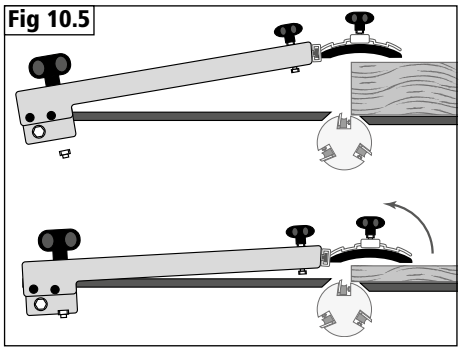


Fig 10.6

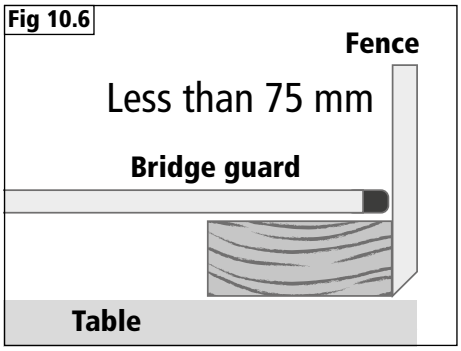


Fig 10.7

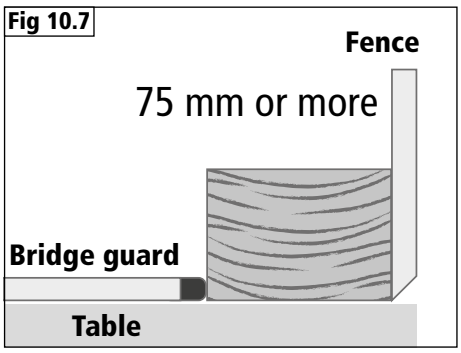
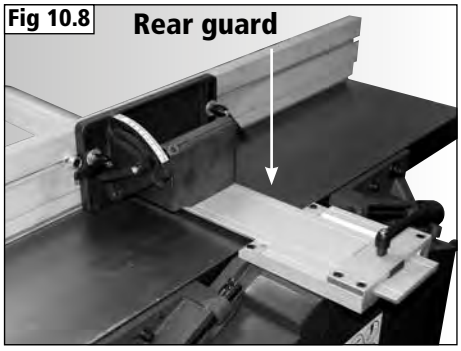


Fig 10.8



10. Operation

Surface Planing

Caution: Minimise positioning hands above the cutter block. It is not necessary to exert feeding pressure directly over the cutter block.

When surface planing, always feed the workpiece at a slow and consistent rate. Feeding the workpiece too quickly will reduce the quality of finish of the planed surface. Fine ridges or marks across the width of the workpiece are an indication that the feed rate is too fast.

Before switching the machine on, ensure the feed clutch is in the lower position as shown in **Fig. 10.9**.

Power Switch

To switch the planer on use the green button, **Fig. 10.10**.

To switch the planer off use the large red button beneath the emergency stop flap.

In an emergency the machine can be stopped quickly using the yellow emergency stop flap.

Safety Limit Switches

The machine is equipped with 2 safety limit switches.

The cutter block can only run when either the planer tables are closed, **Fig 10.11**, or the extractor hood is positioned over the cutterblock when the tables are raised for thicknessing operations, **Fig 10.12**.

Correct hand placement when surface planing is important for good results and safe operation. Stand at the front of the machine, at approximately 45° to the table. Hold the timber down on the infeed table with the left hand and apply feed pressure with the right hand, **Fig. 10.13**. As soon as there is enough timber on the outfeed table to accommodate the left hand, it should be moved over the bridge guard and onto the timber. Feed pressure should then be applied with the left hand onto the timber on the outfeed table, with the right hand following to complete the feeding operation, **Fig. 10.14**.

Fig 10.9

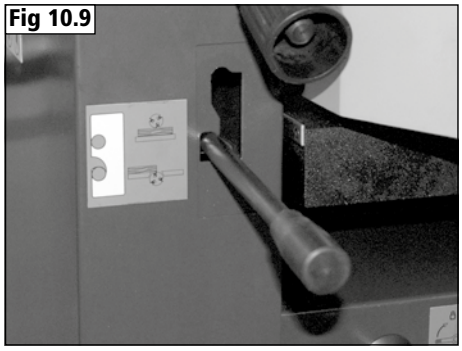


Fig 10.10

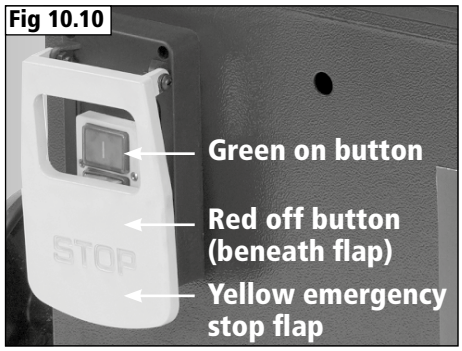


Fig 10.11

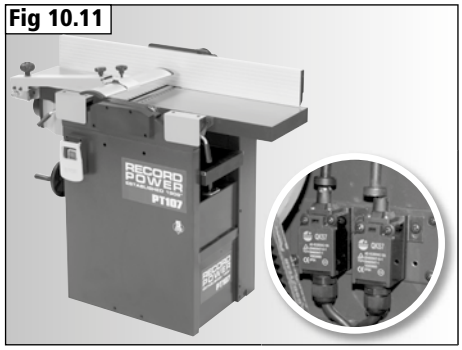


Fig 10.12

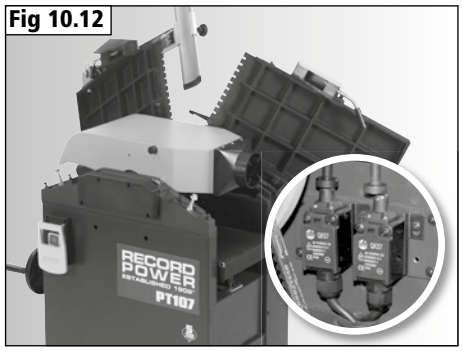
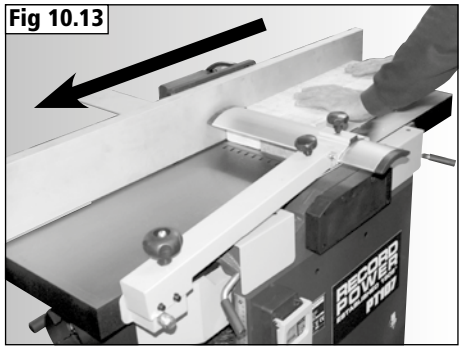
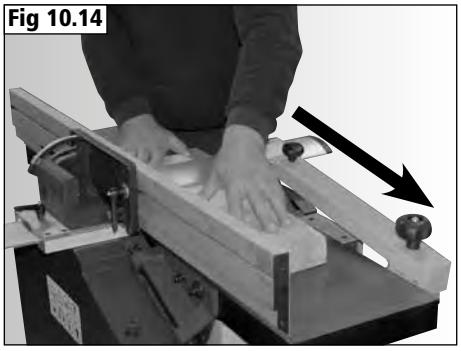


Fig 10.13



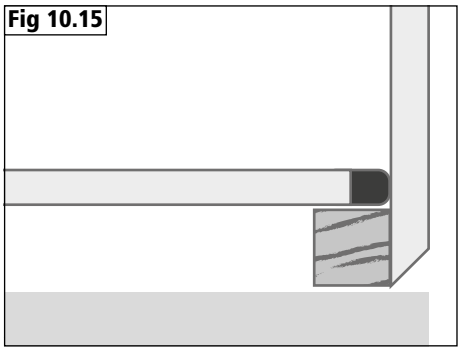
10. Operation

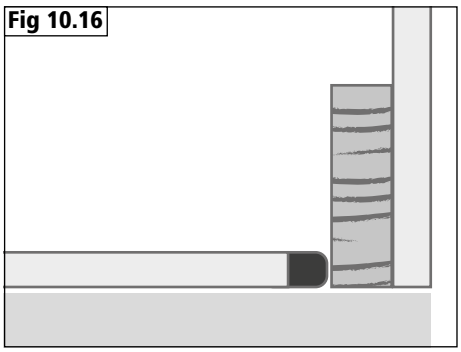


Edge planing

When edge planing small stock as shown in **Fig. 10.15** the bridge guard should be positioned above the work piece to guard as much of the cutter block as possible. When edge planing larger or tall pieces the bridge guard should be positioned against the table as shown in **Fig. 10.16**. In this instance, if the guard was above the timber the gap left between the cutter block and guard would be too large and therefore not offer enough protection. There is no specific rule as to the position of the bridge guard when edge planing and user discretion must be exercised to ensure the safest possible position based on these guidelines.

Feed the workpiece across the cutter block as described for surface planing, taking extra care to not let the hands pass over the cutter block. Pressure should be applied sideways to keep the timber against the fence, ensuring an accurate cut.

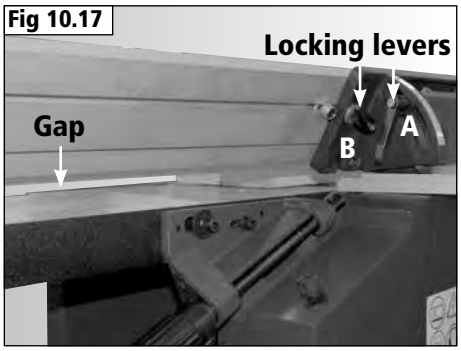




Tapering & Edge Bevelling

During this procedure the longitudinal edges of a work-piece are bevelled or tapered to the required angle.

To adjust the angle of the fence, loosen locking lever **A** on the fence bracket, **Fig. 10.17**, and position the fence to the required angle. This adjustment will bring the fence away from the table as shown in **Fig. 10.17**. To bring the fence back to meet the table, loosen the locking levers **B** on both sides of the bracket and lower into position.



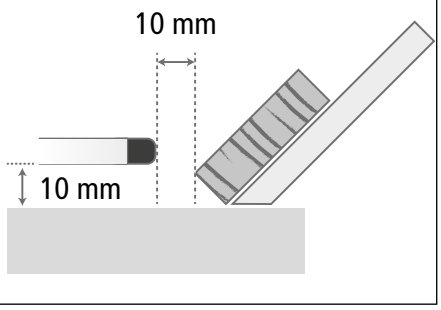
10. Operation

When bevelling, set the bridge guard as shown in **Fig 10.18** and when tapering as shown in **Fig. 10.19**. Due to the nature of the cuts to be made, the guard cannot be placed as close to the timber and cutter block as when surface planing. However, ensure that the guard is a maximum of 10 mm from the timber and cutter block.

Adjust the fence to required angle and press the work piece against the fence and guide evenly over the cutterblock, **Fig. 10.20**.

To ensure an accurate cut and help prevent the timber slipping, press the workpiece mainly against the fence and only lightly against the planing table.

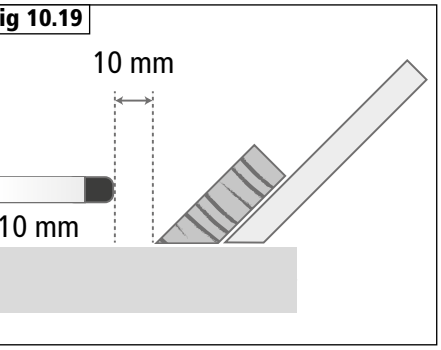
Fig 10.18



Using Additional Support

When surfacing planing small workpieces, extra care must be taken to keep the hands a safe distance from the cutter block. If a workpiece is too small to be held with both hands, the supplied push block can be used to hold the timber as shown in **Fig. 10.21**, providing the timber is large enough to allow the push block to sit fully upon it.

Fig 10.19



Changeover from Planing to Thicknessing

Remove the planer fence before changeover. Ensure that the thicknessing table is at least 160 mm below the cutterblock to allow the extraction hood to move freely between the surface planing and thicknessing positions.

Open the table lock, **Fig. 10.22**, of the outfeed table, pull out the lever fully and lift up the outfeed table.

Fig 10.20

Fig 10.21

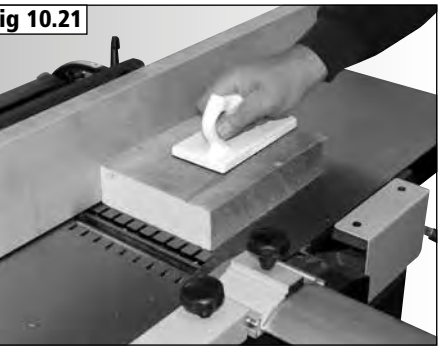
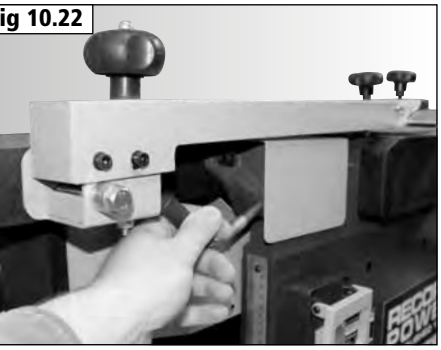


Fig 10.22



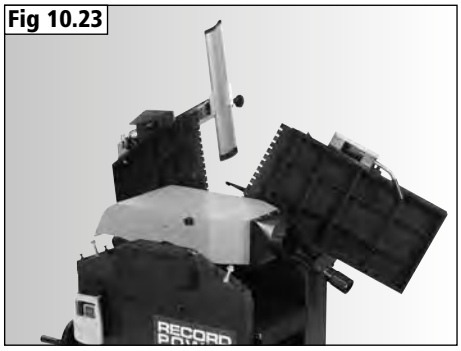
10. Operation

Be sure the outfeed table is fully raised and tilted, **Fig. 10.23**.

Now raise the infeed table in the same manner.

Finally, raise the extraction hood to cover the cutter block, **Fig 10.23**.

To return the machine to planing mode follow the above instructions in reverse order.

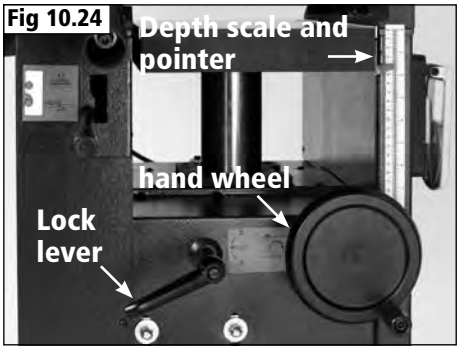


Adjusting the Height for Thicknessing

Unscrew the lock lever that clamps the thicknessing table, **Fig 10.24**.

Now adjust the thicknessing table to the required height using the hand wheel, **Fig 10.24**. The depth scale and pointer to the right of the hand wheel indicate the table height.

Retighten the lock lever to clamp the table in place.



Attention: The depth of cut should be minimised under the following circumstances:

- The timber is very wide.
- The timber is hard wood.
- The timber is damp.
- The planer blades are in need of sharpening.

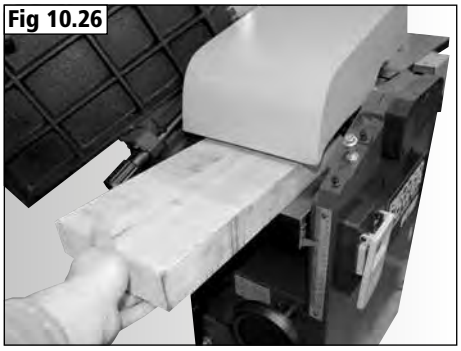
Thicknessing

Adjust the thicknessing table height to that of the workpiece height, minus the depth of cut required.

Ensure the feed clutch is in the upper position as shown in **Fig 10.25**.

Turn the machine on and carefully slide the work-piece onto the thicknesser table until it is drawn in by the feed rollers, **Fig. 10.26**. Keep hands as far away from the cutter block as possible.

Warning: If the workpiece becomes trapped when feeding into the thicknesser, immediately switch the machine off and disconnect from the power before attempting to free the workpiece. To release the workpiece, lower the thicknessing table.



Restarting

In the Event of a Blockage or if the Machine Stalls

If the machine stalls due to the work piece becoming trapped in the cutter block, switch it off immediately by pressing the emergency stop button (Red button marked 'O') and wait for the machine to come to a complete stop before proceeding further.

If the work piece is trapped between the cutter block and thicknessing table, it may be necessary to lower the thicknessing table in order to free the blockage.

To re-start the machine, press the green button marked 'I' on the switch.

In the Event of a Power Failure

The machine is fitted with a no volt release (NVR) switch to protect the user against automatic starting of the machine when power is restored after a power failure.

In the event of a power failure, first locate and rectify the source of the failure. If the fault is within the power circuit of the workshop, there may be an underlying cause (circuit overload etc.) that should be investigated by a qualified electrician, before attempting to restore the power source. If a cutting operation was taking place when the power supply was interrupted, then it may be necessary to free the work piece from the cutter before attempting to re-start the machine.

Once the power is restored, the machine can be re-started by pressing the 'on' switch.

10. Operation

Using a Planer Thicknesser to Achieve 90º to All Adjacent Sides of the Timber

The most common use of a planer thicknesser is to plane timbers to accurate sizes and with all adjacent sides at 90º to one another. Using the methods already described in this manual and following the process below, any number of pieces can be planed and dimensioned to exact sizes. This preparation gives the best base possible for carrying out projects successfully.

Fig. 10.27 shows an exaggerated cross section of a typical rough-sawn piece of timber before being machined.

Plane surface **C** to be flat using the machine in the planing mode, **Fig. 10.28**.

Place surface **C** against the fence, which is set to 90º, and plane surface **B** until it is at 90º to surface **C, Fig. 10.29**.

Once these two adjacent faces are at 90º to each other, the remaining opposite faces can be thicknessed parallel by using them as a reference, **Fig. 10.30**.

Fig 10.27

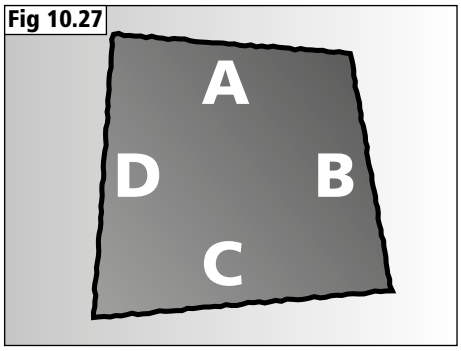


Fig 10.28

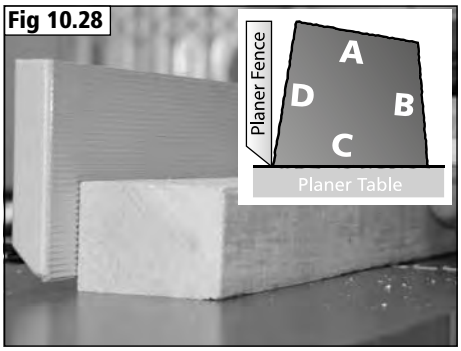


Fig 10.29

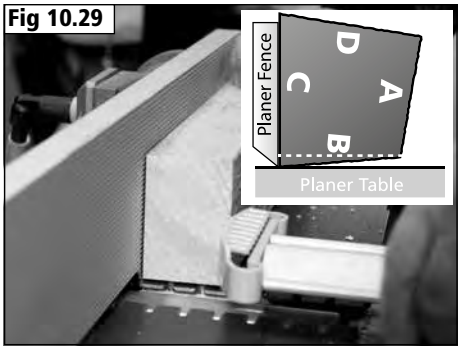
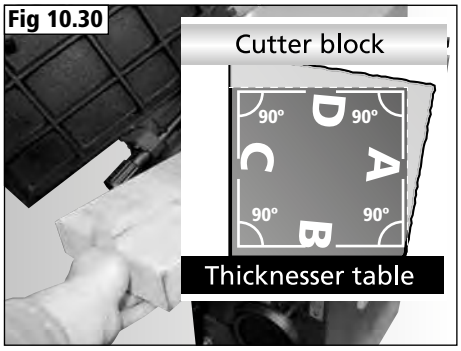


Fig 10.30



11. Adjustments & Maintenance

Outfeed Table Adjustment

Please note: The height of outfeed table is factory set. It should only require adjustment in cases where other normal adjustments to the planer knives have not rectified any alignment issues.

Please note: Before carrying out any of the adjustments below, ensure that the machine is switched off and that the power cord is disconnected from the mains supply.

CAUTION! This procedure involves close contact with the planer blades. Ensure that protective gloves are worn at all times to prevent injury to hands.

Aligning the Outfeed Table

Loosen the two hex nuts inside the adjusting handle, **Fig. 11.1**.

Open the table lock, **Fig. 11.2**, and leave the table in the down position.

Remove the bridge guard to give access to the cutter block.

Rotate the cutter block so that one of the knives is at top dead centre. A knife is at top dead centre when it is at its highest point during the rotation as shown in **Fig. 11.3**.

Place a straight edge on the outfeed table, and using the adjusting handle, position the table so that it is 0.1 mm (or as close as possible to 0.1 mm) lower than the blade at its highest point, **Fig. 11.4**.

Re-tighten the table lock and 2 hex nuts in the adjusting handle.

Adjusting the Infeed Table

Before making any adjustments to the infeed table, ensure the outfeed table is in the correct position as described above.

Place a straight edge across the outfeed table and the infeed table, **Fig. 11.5**.

Note: The straight edge used must be long enough to span the full length of both tables.

Fig 11.1

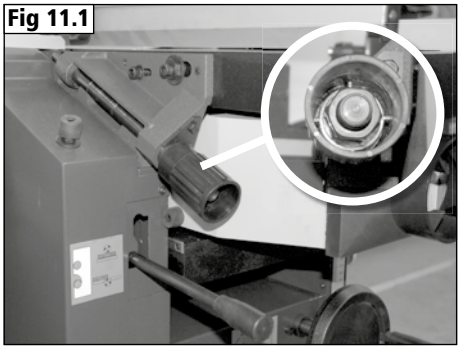


Fig 11.2

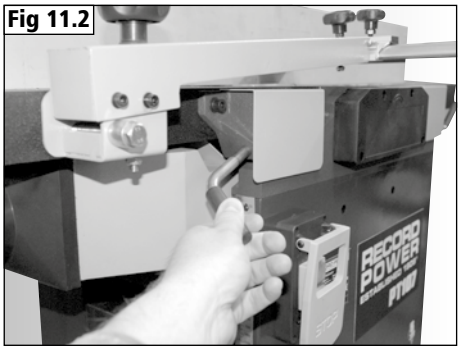


Fig. 11.3

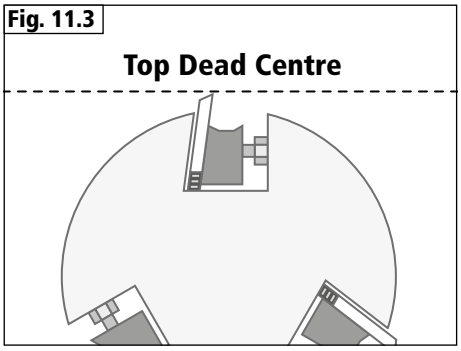


Fig. 11.4

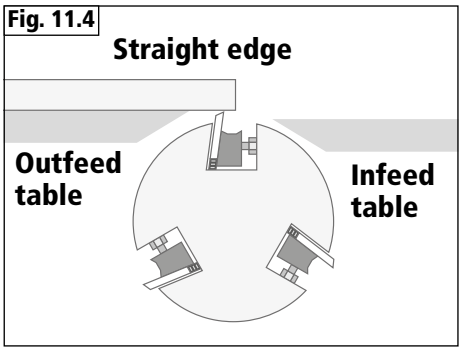
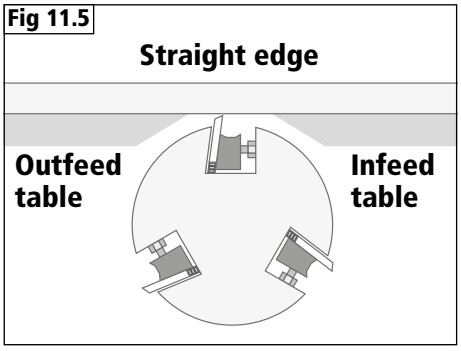


Fig 11.5



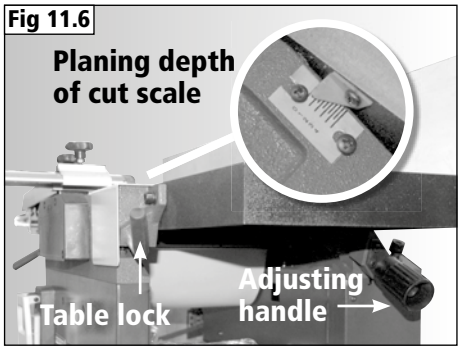
11. Adjustments & Maintenance

Release the infeed table lock, **Fig. 11.6**, and adjust the table until it is at the same height as the outfeed table, **Fig. 11.5**.

Lock the infeed table in place.

Set the pointer as shown in **Fig. 11.6** to 0 on the planing depth of cut scale.

Fig 11.6

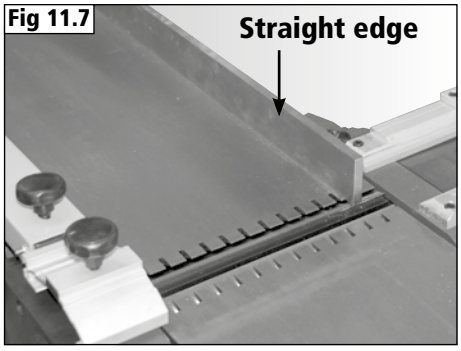


Aligning the Out Feed Table with the Cutter Block

To ensure accurate results when planing and thicknessing, the in feed and out feed tables must both be aligned square to the cutter block. This alignment is carried out during assembly and manufacture and no adjustment should be needed. If the tables become misaligned due to damage in transit or misuse (e.g. moving the machine around the workshop by the tables) then follow the instructions below to realign them.

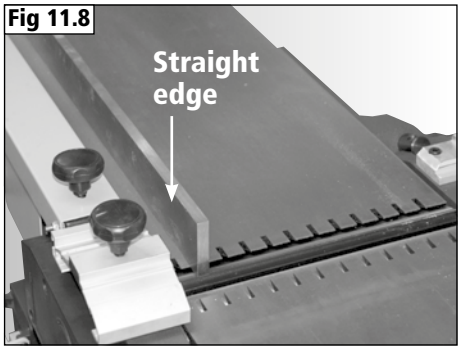
Place a straight edge on the out feed table at the end of the cutter block nearest the fence mount, **Fig. 11.7**, and position the table to be 0.1 mm (or as close as possible to 0.1 mm) below the blade, as previously described.

Fig 11.7



Place the straight edge on the out feed table at the opposite end of the cutter block as shown in **Fig. 11.8** and check that the table is at the same height in relation to the cutter block as at the other end.

Fig 11.8



If adjustment is needed, remove the protective cover as shown in **Fig. 11.9** by removing the 2 Phillips head screws from the top to gain access to the table levelling bolts, **Fig. 11.10**.

Adjust the table levelling bolts until the table is aligned square with the cutter block.

Fig 11.9

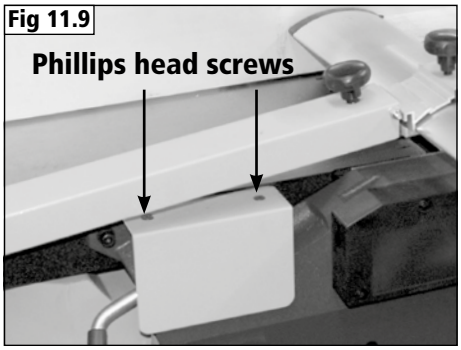
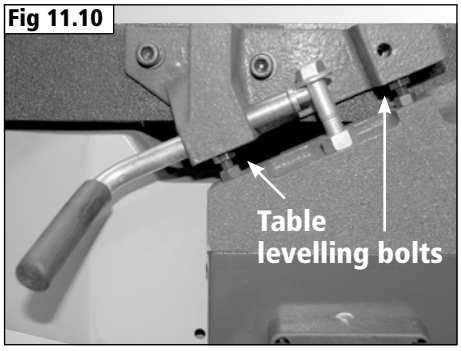


Fig 11.10

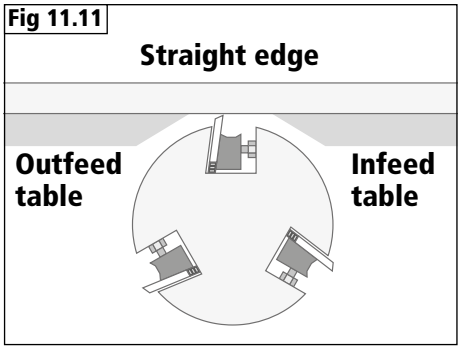


11. Adjustments & Maintenance

Aligning the In Feed Table with the Cutter Block

Once the out feed table is aligned correctly, use a straight edge as shown in **Fig. 11.11** to align the in feed table along its full width to be flush with the out feed table. The in feed table also features levelling bolts which can be used to adjust the alignment in the same way as the out feed table.

Fig 11.11



Adjusting the Table Cam Locking Mechanism

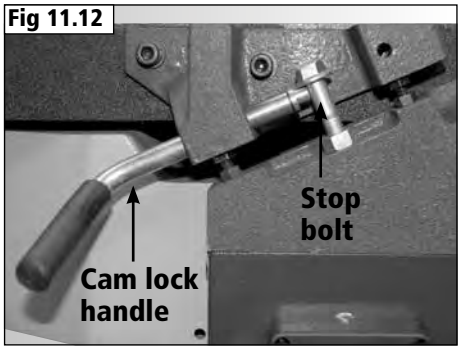
Both the in feed and out feed tables have an adjustable cam lock mechanism to ensure correct pressure can always be applied to keep the tables in position.

To lock the table in position, push the handle in and turn clockwise.

If the cam lock handle is too difficult to apply, raise the stop bolt as shown in **Fig. 11.12**.

If the cam lock handle can be turned with ease but does not lock the table in position, lower the stop bolt until the table can be secured with the handle.

Fig 11.12



11. Adjustments & Maintenance

The cutter block in this machine is designed to hold three blades. Never attempt to use the machine if any of the blades are missing or damaged. Replacement blades must conform to BS EN 847-1.

Changing the Planer Blades

CAUTION! This procedure involves close contact with the planer blades. Ensure that protective gloves are worn at all times to prevent injury to hands.

To make setting the blades an easier and faster operation, Record Power offer the RPPSJ Planer Blade Setting Jig. Please see online for full details.

Check the height of the Blade

The blades should be periodically checked for sharpness and position. Adjustments should be as precise as possible to a tolerance within 1- 1.1 mm to prolong the sharpness of the blades.

Improperly adjusted blades can unbalance the cutterblock and shorten bearing life as well as producing substandard results.

The planer blades fitted to this machines are made from high speed steel and can be sharpened to maintain their cutting edge and optimise performance of the machine. The process of sharpening blades will remove a small amount of material from the blade's edge and will therefore reduce the overall width of the blade. Never attempt to use blades that have been reduced by more than 25% of their original width. Always ensure that the blade can be held securely by the blade holder. Replace defective blades immediately.

Caution: Before carrying out any adjustments or maintenance ensure that the machine is isolated and disconnected from the electricity supply.

Checking the Height of the Blades

Remove the bridge guard to give access to the top of the cutter block.

Raise both tables into the upright position to give access to the sides of the cutter block, **Fig. 11.13**.

Position the blade setting jig over the blade as shown in **Fig. 11.14**. The outer pads of the jig should sit fully on the cutter block. If the blade is set correctly it should be just touching the recessed area of the jig. If the blade does not touch the middle slot, or if it causes the outer pads of the gauge to not sit flush then it must be adjusted. The blades should protrude from the cutter block by a maximum of 1.1 mm.

Adjusting the Height of the Blades

Each blade is held in the cutter block by a blade holder which runs the full length of the cutter block. The blade holder is secured in place by 4 blade holder screws which are spread across the length of the holder as shown in **Fig. 11.15**. Beneath the blade is a spring which pushes it upwards when the screws are loosened.

Carefully turn the cutter block until the first blade is at top dead centre.

Loosen each blade holder screw enough to allow the blade to move.

Place the blade setting jig as shown in **Fig. 11.16** over the blade at one end of the cutter block. The spring will push the blade up to meet the recess in the blade setting jig. Tighten the blade holder with the screw just enough to keep it in place but allow movement at the other end.

Repeat this process at the opposite end of the cutter block then fully tighten all blade holder screws.

Repeat the above process on the remaining 2 blades.

Fig 11.13

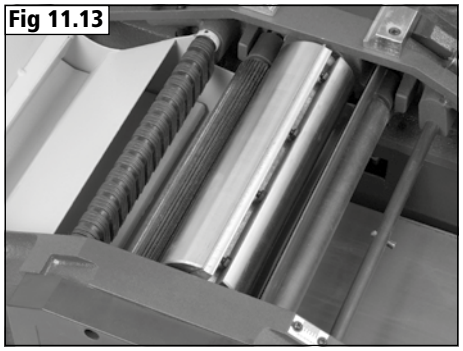


Fig 11.14

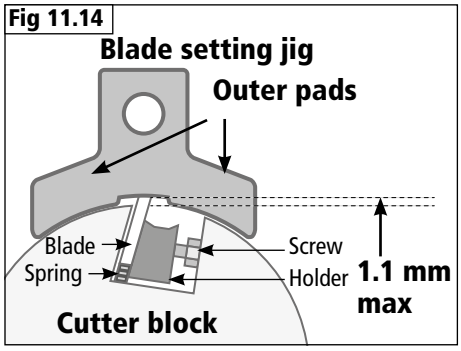


Fig 11.15

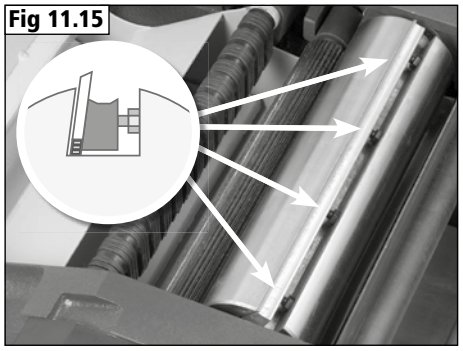
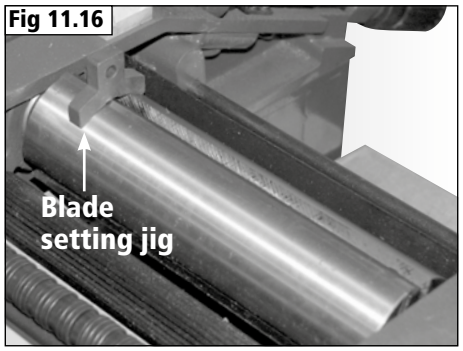


Fig 11.16



11. Adjustments & Maintenance

Drive belts
Over time the drive belt may loosen slightly. In this case, the belt must either be tightened or replaced. Check the belt regularly for cracks or lateral tears and replace it if necessary.

To access the interior of the machine, remove the 6 screws (3 on either side of the machine) as shown in **Fig 11.17**.

In addition, the fence carrier must be removed, **Fig. 11.18**.

The side panel can now be removed by lifting upwards slightly and then away from the machine, **Fig 11.19**.

Loosen the motor mounting bolts on the side of the machine, beneath the outfeed table, **Fig 11.20**.

Use the weight of the motor to tension the drive belt. When the correct tension is applied, tighten the motor mounting bolts.

When re-positioning the motor to apply tension, ensure it is kept level in the horizontal plane. Also ensure both pulleys are aligned.

Cutter Block Bearings
After prolonged use the bearings of the cutter block may become slightly loose and need tightening. To do so, remove the spindle cover from the side of the machine and adjust the 3 blind set screws shown in **Fig. 11.21** with a 3 mm hex wrench. This will adjust only the bearing on that side of the cutter block. However, the amount of movement that is likely to occur is so small that under normal circumstances adjustment of this bearing only will be sufficient. When tightening the blind set screws, only minimal adjustment is needed. Turn them each 1/8 of a turn at a time and stop when resistance is felt. In the highly unlikely event that the other bearing needs adjustment, please contact Record Power customer services in your area.

Fig 11.17

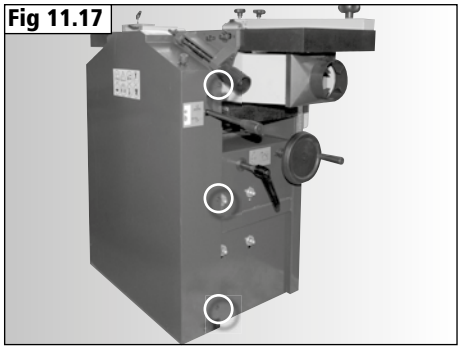


Fig 11.18

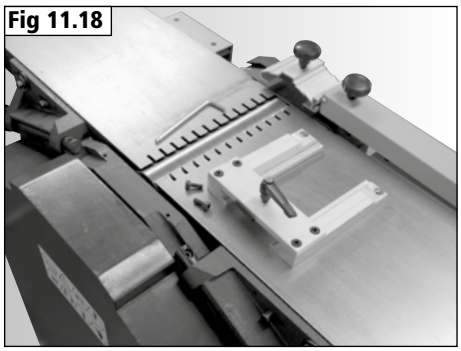


Fig 11.19

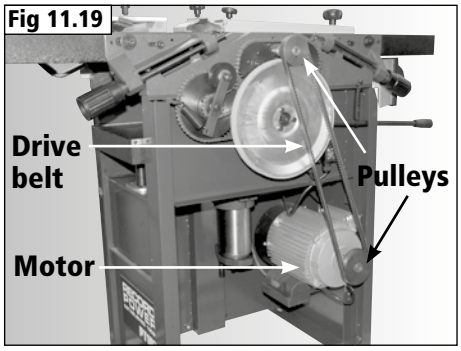


Fig 11.20

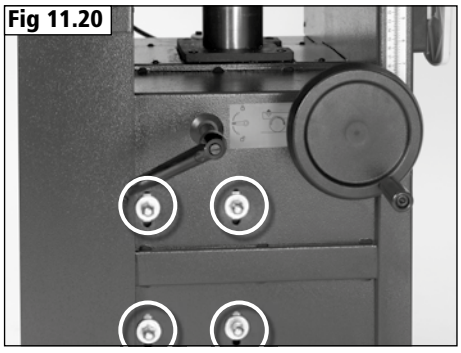
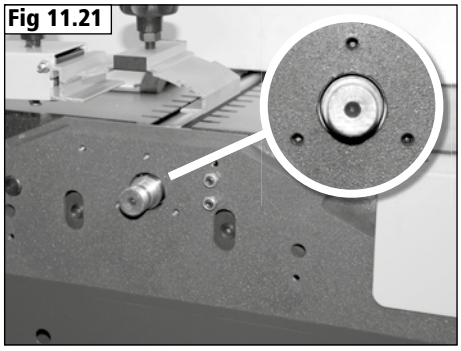


Fig 11.21



11. Adjustments & Maintenance

Cleaning

Caution: Before carrying out any adjustments or maintenance ensure that the machine is isolated and disconnected from the electricity supply.

To avoid a build-up of wood dust, regularly clean the thicknesser drive gear using a brush, **Fig. 11.22**.

Ensure that all moving parts and the chain are sufficiently lubricated with standard machine grease. The friction wheel is a consumable part and may need replacement. See **Fig. 11.22**.

Clean the thicknessing bed rise and fall lead screw periodically and lubricate with standard machine grease, **Fig. 11.23**. The rod is situated behind the thicknesser table support column.

Clean the thicknessing bed support column, **Fig. 11.24**, on a regular basis to prevent the build-up of wood chips and dust and lubricate with silicone spray. Do not use ordinary oil as this will attract dust.

Keep the infeed and outfeed tables and thicknessing bed free of resin. Clean regularly with white spirit, then coat lightly with silicone spray to enhance passage of workpiece, **Fig 11.25**.

Kickback Guards

Remove traces of resin as required. When lifted, the guards must drop back into position by their own weight. Test their function before each use. See **Fig. 11.26**.

Feed Roller

Remove traces of resin regularly, when marks appear in the timber or in the event of poor feed. See **Fig. 11.26**.

This machine will perform in conformity with the description contained in this manual when installed, operated, maintained and repaired in accordance with the instructions provided.

This machine must be checked periodically. Defective equipment (including power cable) should not be used. Parts that are broken, missing, plainly worn, distorted or contaminated, should be replaced immediately. Should such repair or replacement become necessary, it is recommended that such repairs be carried out by qualified persons.

This machine or any of its parts should not be altered or changed from standard specifications. The user of this machine shall have the sole responsibility for any malfunction which results from improper use or unauthorised modification from standard specification, faulty maintenance, damage or improper repair.

Fig 11.22

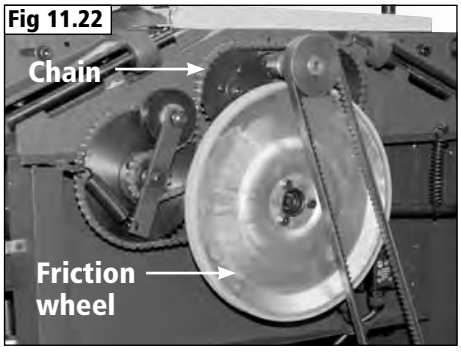


Fig 11.23

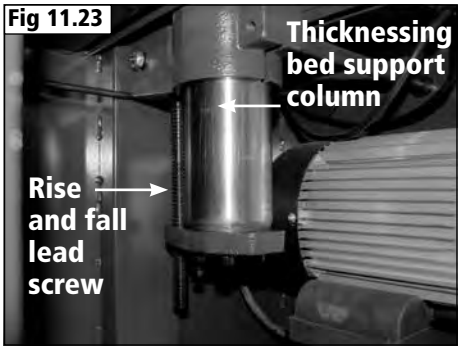


Fig 11.24

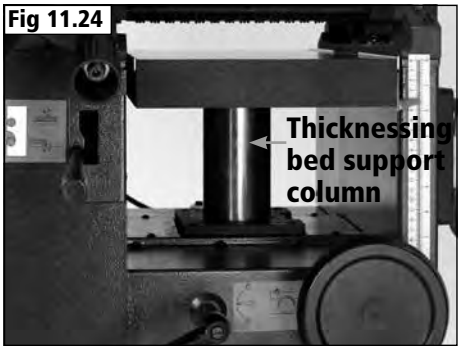


Fig 11.25

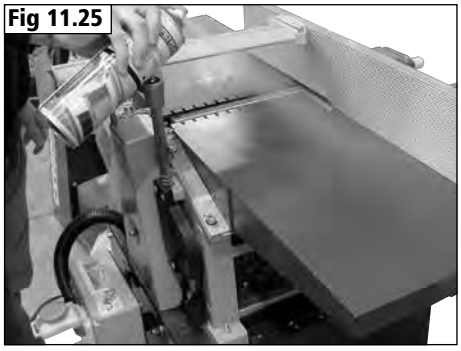
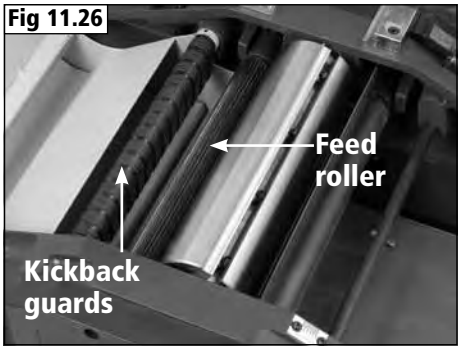


Fig 11.26



11. Adjustments & Maintenance

Cutter Block & Blades

CAUTION! This procedure involves close contact with the planer blades. Ensure that protective gloves are worn at all times to prevent injury to hands.

Clean the blades, blade holders and cutter block to remove any traces of resin, waste and debris as often as necessary.

Each blade is held in the cutter block by a blade holder which runs the full length of the cutter block. The blade holder is secured in place by 4 blade holder screws which are spread across the length of the holder as shown in **Fig. 11.27**. Beneath the blade is a spring which pushes it upwards when the screws are loosened.

Carefully turn the cutter block until the first blade is at top dead centre.

Loosen each blade holder screw enough to free the blade.

Ensuring protective gloves are worn, carefully lift the blade from the cutter block holding at each end as shown in **Fig. 11.28**.

Carefully clean the blade, blade holder and also the recess that houses them.

Refit the blade to the correct height as described in the **Adjusting the Height of the Blades** section of the manual.

Repeat the above process on the remaining 2 blades.

Fig 11.27

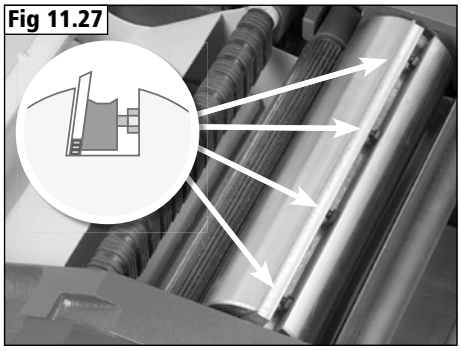
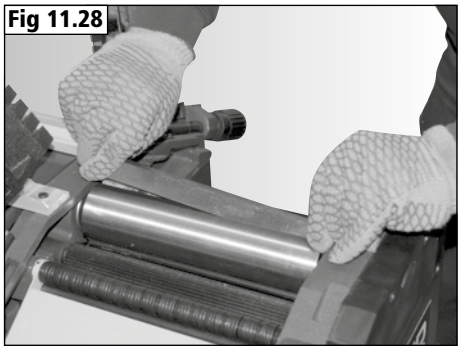


Fig 11.28



12. Dust Extraction

The Importance Of Dust Extraction

Before the machine is started, ensure that adequate dust extraction provisions have been installed. Dust extraction is extremely important not only for health and safety but also for the correct upkeep of the machine. Saw dust can cause the machine not to operate properly or even fail completely. By keeping the machine free of large amounts of waste the performance will be optimised.

If a large amounts of MDF or toxic woods are to be cut we recommend that there is a good ventilation system in place and that in addition to proper extraction a mask or respirator be worn as minimum protection.

Record Power Extractors

Record Power offer a range of high quality dust extractors, we offer both drum and bag type extractors which filter down 0.5 micron providing protection from harmful fine dusts. All Record Power dust extractors & chip collectors have 100 mm inlets and hoses.

DX1000 High Filtration Dust Extractor
Drum type extractor, 45 litre capacity, single 1 kW motor, suitable for intermittent use ie must be switched off for 20 minutes every hour.
0.5 micron filtration

RSDE1 High Filtration Dust Extractor
Drum type extractor, 45 litre capacity, single 1 kW motor, suitable for intermittent use ie must be switched off for 20 minutes every hour.
0.5 micron filtration

RSDE2 High Filtration Dust Extractor

Drum type extractor, 50 litre capacity, single 1 kW motor, suitable for intermittent use ie must be switched off for 20 minutes every hour.
0.5 micron filtration

RSDE/2A High Filtration Dust Extractor with Auto Switching
Drum type extractor, 50 litre capacity, single 1 kW motor, auto switching allows the machine to be turned on and off as machines and power tools are operated. Suitable for intermittent use ie must be switched off for 20 minutes every hour. Maximum auto switch capacity tools up to 1.1 kW.
0.5 micron filtration

DX4000 High Filtration Dust Extractor
Drum type extractor, 80 litre capacity, Twin 1 kW motor, suitable for heavy usage ie if one motor is switched off for 20 minutes then the other can be used thus enabling continuous usage. Or both motors can be used simultaneously giving maximum suction but in this mode the extractor must be switched off for 20 minutes every hour. **0.5 micron filtration**

DX5000 High Filtration Dust Extractor
Bag type extractor, 200 litre capacity, Twin 1 kW motor, suitable for heavy usage ie if one motor is switched off for 20 minutes then the other can be used thus enabling continuous usage. Or both motors can be used simultaneously giving maximum suction but in this mode the extractor must be switched off for 20 minutes every hour. **0.5 micron filtration**

CX2000 Compact Chip Extractor
Medium capacity chip collector, with a powerful 0.56 kW induction motor. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.

CX2600 Chip Collector
Large capacity chip collector, with a powerful 0.37 kW induction motor. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.
Suitable for chip collection or finer dust using the optional filter cartridge

CX3000 Chip Collector
Larger capacity chip collector, with a more powerful 0.75 kW induction motor and heavy duty construction. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.

Suitable for chip collection or finer dust using the optional filter cartridge

Air Cleaners
It is strongly advised to also use an air cleaner to remove the fine airborne dust present in the workshop which cannot be removed using machine extraction. Record Power offer a range of air cleaners suitable for all home workshops. Please contact your preferred stockist or visit www.recordpower.info.

	DX1000	RSDE1	RSDE2	RSDE/2A	DX4000	DX5000	CX2000	CX2600	CX3000
Bandsaws Circular saws Sanders Intermittent usage	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended			
Bandsaws Circular saws Sanders Heavy usage					✓ Recommended	✓ Recommended			
Planer Thicknessers Spindle Moulders Universals Intermittent usage	✓ Recommended	✓ Recommended			✓ Can be used	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended
Planer Thicknessers Spindle Moulders Universals Heavy usage					✓ Can be used	✓ Recommended		✓ Recommended	✓ Recommended
Dust Extraction System Intermittent usage					✓ Can be used	✓ Recommended			

13. Electrical Connection & Wiring Diagram

Machines supplied for use in the UK are fitted with a 3 pin plug conforming to BS1363, fitted with a fuse conforming to BS1362 and appropriate to the current rating of the machine.

Machines supplied for use in other countries within the European Union are fitted with a 2 pin Schuko plug conforming to CEE 7/7.

Machines supplied for use in Australia & New Zealand are fitted with a 3 pin plug conforming to AS/NZS3112.

In all cases, if the original plug or connector has to be replaced for any reason, the wires within the mains power cable are colour coded as follows:

230 V (Single Phase)

Brown:	Live (L)
Blue:	Neutral (N)
Green and Yellow:	Earth (E)

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

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

The wire coloured green and yellow must always be connected to the terminal marked 'E' or with the earth symbol:

or coloured green / green and yellow.

It is important that the machine is effectively earthed. Some machines will be clearly marked with the double insulated logo:

In this case there will not be an earth wire within the circuit.

In the case of the BS1363 plug for use in the UK, always ensure that it is fitted with a fuse conforming to BS1362 appropriate to the rating of the machine. If replacing the original fuse, always fit a fuse of equivalent rating to the original. Never fit a fuse of a higher rating than the original. Never modify the fuse or fuse holder to accept fuses of a different type or size.

Where the current rating of the machine exceeds 13 A at 230 V, or if the machine is designated for use on a 400 V 3 phase supply a connector conforming to BS4343 (CEE17 / IEC60309) will be used.

230 V machines will be fitted with a blue 3 pin connector. The wiring for this type of this connector will be the same as shown above.

400 V, 3 phase machines will be fitted with a red 4 or 5 pin connector. The wiring for this type of connector is as shown below:

400 V (3 phase)

Brown:	Live (L1)
Black:	Live (L2)
Grey:	Live (L 3)
Blue:	Neutral (N)
Green and Yellow:	Earth (E)

The wire coloured brown must always be connected to the terminal marked 'L1'.

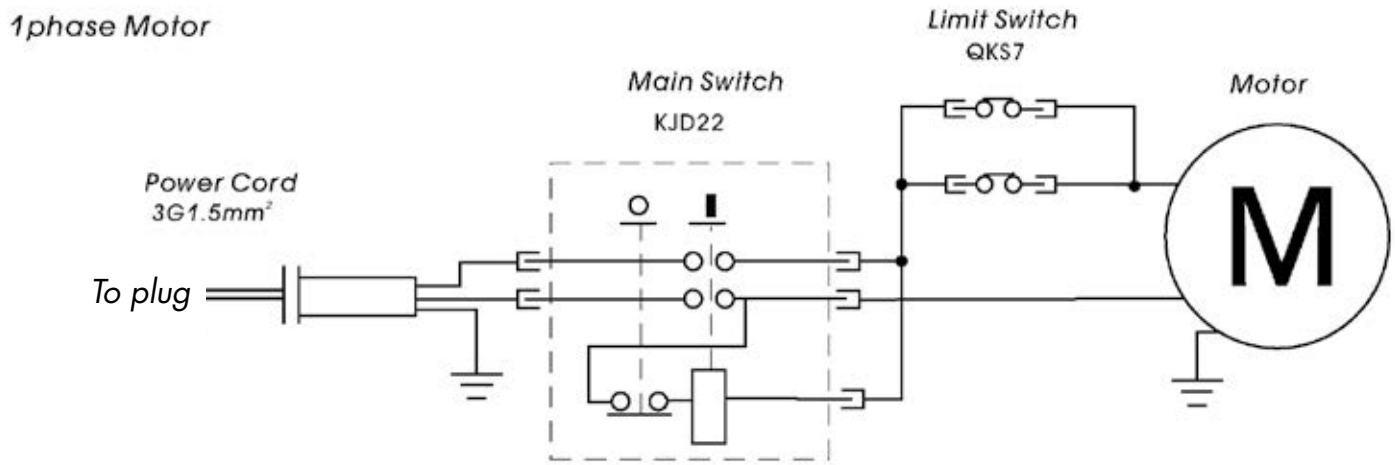
The wire coloured black must always be fitted to the terminal marked 'L2'.

The wire coloured grey must always be connected to the terminal marked 'L3'.

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

The wire coloured green and yellow must always be connected to the terminal marked 'E' or with the earth symbol

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



14. Troubleshooting

Problem	Cause	Solution
Motor is slow or weak.	1. Low voltage supply.	1. Request a voltage check from local power company.
	2. Circuit is overloaded with appliances, lights, or other electrically powered equipment.	2. Do not use other appliances or electrically powered equipment on the same circuit when using this machine.
Motor overheats.	1. Machine is operating beyond capacity.	1. Take smaller cuts and / or reduce planing feed speed.
	2. Dull planer blades.	2. Sharpen or replace the planer blades.
	3. Low voltage supply.	3. Request a voltage check from the local power company.
The cut burns the timber.	1. Planer blades are dull.	1. Sharpen or replace the planer blades.
Height handles are hard to turn.	1. Dust has collected on the mechanisms inside the base.	1. Clean and lubricate the mechanisms inside the base.
Planer thicknesser vibrates excessively.	1. Floor surface is uneven.	1. Readjust the machine.
	2. V-belt is damaged.	2. Replace the V-belt.
	3. Planer blades are damaged.	3. Replace the planer knives.
	4. Loose bolt, screws or nuts.	4. Tighten all hardware.
The machine does not start.	1. Power cord is not plugged in.	1. Plug in power cord to volt electrical outlet.
	2. Circuit fuse is blown.	2. Replace circuit fuse.
	3. Circuit breaker is tripped.	3. Reset circuit breaker.
	4. Motor cord or switch is damaged.	4. Have the motor cord or switch replaced.
	5. Microswitches not made.	5. Switch microswitch.
	6. Motor windings are worn out.	6 Replace the motor.
	7. Power switch is faulty.	7. Replace the power switch.
	8. Power switch connections are loose or damaged.	8. Check and repair if necessary.
Fuses blow or circuit breakers trip frequently.	1. Motor is overloaded.	1. Feed work-piece more slowly.
	2. Fuses or circuit breakers are wrong size or defective.	2. Replace fuses or circuit breakers.
	3. Dull planer blades.	3. Replace the planer blades.
	4. Power Switch is defective.	4. Have the power switch replaced.
	5. Dull planer blades.	5. Sharpen or replace the planer blades.
	6. Fuses or circuit breakers are wrong size or defective.	6. Replace fuses or circuit breakers.
	7. Feeding work-piece too rapidly.	7. Feed work-piece more slowly.
	8. Cold ambient temperature produces current surge on operation.	8. Increase ambient temperature of work area.
Machine is noisy when running.	1. Motor is loose or defective.	1. Have the motor checked/repaired.
	2. Feed roller drive chain is loose.	2. Adjust tension.
	3. Cutter block bearings are loose.	3. Adjust as described in the **Adjustment & Maintenance** section of this manual.