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*Submersible, electric and engine driven for DIY, agriculture and industry.*

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*Angle grinders, cordless drill sets, saws and sanders.*

**STARTER/CHARGERS**

*All sizes for car & commercial use.*



# Clarke® WOODWORKER



## 10" PORTABLE THICKNESSER

MODEL No. CPT250

Part No. 6500860

**Clarke** INTERNATIONAL

For spare parts and servicing, please contact your nearest dealer, or Clarke International on

**020 - 8988 - 7400**

e-mail: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com) e-mail: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)

## OPERATING AND MAINTENANCE INSTRUCTIONS



## Contents

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## Specifications

Model .....	CPT250
Part No .....	6500860
Voltage .....	230vac
Power Input .....	1250Watts
No Load Speed .....	8000 rpm
Weight .....	27 Kg
Sound Power Level.....	107,3 <b>dB<sub>LWA</sub></b>
Feed Speed .....	8 m/min
Max Cutting Depth .....	2.5mm
Max Machining Width .....	254mm
Min Machining Width .....	19mm
Min Machining Length .....	355mm
Min Machining Thickness .....	12mm

## List Of Contents

1off	Thicknesser
1off	Instruction Manual
4off	Pan Head Screws
1off	Spare Drive Belt
1off	Handle + Hex Head Bolt
1off	Socket Wrench
1off	5mm Allen Key
1off	Gauge Base Set (2 Pieces)

# Clarke<sup>®</sup>

## INTERNATIONAL

This is an important document and should be retained

## DECLARATION OF CONFORMITY



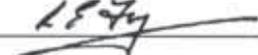
We declare that this product complies with the following standards/directives:

- 93/68/EEC
- 89/336/EEC
- 98/37/EC

Description: Wood Thicknesser

Model No: CPT 250

Serial (Batch) No: See Machine Data Plate

Signed: 

**Clarke** INTERNATIONAL  
Hemnal Street, Epping, Essex CM16 4LG

Item	Part No	Description	Qty
93-1	TMCPT25093-1	Screw ST3.9x22	4
93-2	TMCPT25093-2	Connection Box Cover	1
93-3	TMCPT25093-3	Fuse	1
93-4	TMCPT25093-4	Connector	2
93-5	TMCPT25093-5	Inductor	1
93-6	TMCPT25093-6	Capacitor	1
93-7	TMCPT25093-7	Screw ST3.9x22	4
94	TMCPT25094	Spring	1
95	TMCPT25095	Screw M6x12	1
96	TMCPT25096	13 Amp Plug	1
97	TMCPT25097	Screw	1
98	TMCPT25098	Switch	1
99	TMCPT25099	Screw M6x20	12
99-1	TMCPT250991	Blade Clamp	2
100	TMCPT25100	Blade Bracket	2
101	TMCPT25101	Blade	2
102	TMCPT25102	Nut M6x1.5	1
103	TMCPT25103	Circlip	1
104	TMCPT25104	Parallel Key	1
105	TMCPT25105	Sprocket	1
106	TMCPT25106	Circlip	1
107	TMCPT25107	Bearing 181203	1
108	TMCPT25108	Blade Cylinder	1
108-1	TMCPT251081	Bearing Block	2
108-2	TMCPT251082	Claw Shaft	1
109	TMCPT25109	Air Frame	1
109-1	TMCPT251091	Ogalloy 14G7x20x16	4
110	TMCPT25110	Bearing 180202	1
111	TMCPT25111	Circlip	1
112	TMCPT25112	Circlip	1
113	TMCPT25113	Sprocket	1
114	TMCPT25114	Bearing	2
115	TMCPT25115	Spring	2
117	TMCPT25117	Feed Roller	2
118	TMCPT25118	Spring	2
119	TMCPT25119	Bearing	2
120	TMCPT25120	Carriage	2
121	TMCPT25121	Screw M5x12	4
123	TMCPT25123	Carriage	2
124	TMCPT25124	Screw M5x12	4
125	TMCPT25125	Circlip	1
126	TMCPT25126	Sprocket	1
127	TMCPT25127	Circlip	1
128	TMCPT25128	Hex Wrench	1
130	TMCPT25130	Socket Spanner	1
131	TMCPT25131	Sharpening Holder	1
132	TMCPT25132	Blade Setting Jig	1



**Please read these instructions carefully before operating the tool**

Thank you for purchasing this **CLARKE** 10" portable thicknesser. Before using the device, please read this manual thoroughly and carefully follow all instructions given. This is for your own safety and that of others around you, and is also to help you achieve a long and trouble free service from your new tool.

### CLARKE GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not affect your statutory rights.

**PARTS & SERVICE TEL: 020 8988 7400**

or e-mail as follows:

**PARTS: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)**

**SERVICE: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**

Please note that the details and specifications contained herein are correct at the time of going to print. However CLARKE International reserve the right to change specifications at any time without prior notice. Always consult the machines data bracket

## General Safety Precautions



**WARNING:**

As with all machinery, there are certain hazards involved with their operation and use. Exercising respect and caution will considerably lessen the risk of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator or damage to property, may result.

1. **ALWAYS** Learn the machines' applications, limitations and the specific potential hazards peculiar to it. Read and become familiar with the entire operating manual.
2. **ALWAYS** use a face or dust mask if operation is particularly dusty.
3. **ALWAYS** check for damage. Before using the machine, any damaged part, should be checked to ensure that it will operate properly, and perform its intended function. Check for alignment of moving parts, breakage of parts, mountings, and any other condition that may affect the machines' operation. Any damage should be properly repaired or the part replaced. If in doubt, **DO NOT** use the machine. Consult your local dealer.
4. **ALWAYS** disconnect the tool/machine from the power supply before servicing and when changing accessories.
5. **ALWAYS** wear safety goggles, manufactured to the latest European Safety Standards. Everyday eyeglasses do not have impact resistant lenses, they are not safety glasses.
6. **ALWAYS** keep work area clean. Cluttered areas and benches invite accidents.
7. **ALWAYS** ensure that adequate lighting is available. A minimum intensity of 300 lux should be provided. Ensure that lighting is placed so that you will not be working in your own shadow.
8. **ALWAYS** keep children away. All visitors should be kept a safe distance from the work area, especially whilst operating the machine.
9. **ALWAYS** maintain machine in top condition. Keep tools/machines clean for the best and safest performance. Follow maintenance instructions.
10. **ALWAYS** handle with extreme care do not carry the tool/machine by its' electric cable, or yank the cable to disconnect it from the power supply.
11. **ALWAYS** ensure the switch is off before plugging in to mains. Avoid accidental starting.
12. **ALWAYS** concentrate on the job in hand, no matter how trivial it may seem. Be aware that accidents are caused by carelessness due to familiarity.
13. **ALWAYS** keep your proper footing and balance at all times, don't overreach. For best footing, wear rubber soled footwear. Keep floor clear of oil, scrap wood, etc.



Item	Part No	Description	Qty
44	TMCPT25044	Base	1
45	TMCPT25045	Pin	2
46	TMCPT25046	Roller Support Arm	1
49	TMCPT25049	Bearing 180200	1
50	TMCPT25050	Stator	1
51	TMCPT25051	Bearing 180201	1
52	TMCPT25052	Screw M4.8x65	2
53	TMCPT25053	Spring Washer M5	10
54	TMCPT25054	Washer M5	10
55	TMCPT25055	Bracket	1
56	TMCPT25056	Armature	1
57	TMCPT25057	Housing	1
58	TMCPT25058	Sprocket	1
59	TMCPT25059	Brush Holder	2
60	TMCPT25060	Brush	2
61	TMCPT25061	Brush Cap	2
62	TMCPT25062	End Frame	1
63	TMCPT25063	Oil Bearing 8G7x12x10	2
64	TMCPT25064	Circlip	1
65	TMCPT25065	Gear 4	1
66	TMCPT25066	Parallel Key 4x8	1
67	TMCPT25067	Spindle	1
68	TMCPT25068	Circlip	1
69	TMCPT25069	Circlip	1
70	TMCPT25070	Gear 6	1
71	TMCPT25071	Parallel Key 4x10	1
72	TMCPT25072	Circlip	1
73	TMCPT25073	Bearing 60202	1
74	TMCPT25074	Oil Bearing 8G7x10x18	1
75	TMCPT25075	Circlip	1
76	TMCPT25076	Gear 4	1
77	TMCPT25077	Parallel Key 3x6	1
78	TMCPT25078	Spindle	1
79	TMCPT25079	Circlip	1
80	TMCPT25080	Spindle	1
81	TMCPT25081	Oil Bearing 8G7x12x10	1
82	TMCPT25082	Oil Bearing 8G7x10x8	1
83	TMCPT25083	Screw M4.8x50	3
84	TMCPT25084	Gearbox	1
85	TMCPT25085	Switch Cover	1
86	TMCPT25086	Bearing	1
87	TMCPT25087	Housing Cover	1
88	TMCPT25088	Sprocket	1
89	TMCPT25089	Circlip	1
90	TMCPT25090	Capacitor	1
91	TMCPT25091	Screw ST1.9x12	4
92	TMCPT25092	Cord Grip	1
93	TMCPT25093	Cable	1

## Parts List

Item	Part No	Description	Qty
1	TMCPT25001	Handle	1
2	TMCPT25002	Pin	2
3	TMCPT25003	Top Cover	1
4	TMCPT25004	Screw M6x20	16
5	TMCPT25005	Spring Washer	13
6	TMCPT25006	Height Adjusting Handle	1
7	TMCPT25007	Washer	8
8	TMCPT25008	Screw M4x8	12
9	TMCPT25009	Left Cover	1
10	TMCPT25010	Bracket	1
11	TMCPT25011	Bevel Gear	2
12	TMCPT25012	Bearing Block	2
13	TMCPT25013	Screw	4
14	TMCPT25014	Key 4x13	2
15	TMCPT25015	Bevel Gear	2
16	TMCPT25016	Circlip	2
17	TMCPT25017	Shaft	1
18	TMCPT25018	Belt Cover	1
19	TMCPT25019	Drive Belt	1
20	TMCPT25020	Height Gauge	1
21	TMCPT25021	Chain (1) Q8A-1x26	1
22	TMCPT25022	Chain (2) Q8A-1x26	1
23	TMCPT25023	Left Guide Shaft	1
24	TMCPT25024	Spring	2
25	TMCPT25025	Column Pin	1
26	TMCPT25026	Column Pin	1
27	TMCPT25027	Screw	8
28	TMCPT25028	Bearing Plate	2
29	TMCPT25029	Roller	2
29-1	TMCPT250291	Spacer	2
30	TMCPT25030	Roller Arm	1
31	TMCPT25031	Left Side Guide	1
32	TMCPT25032	Base Plate	1
33	TMCPT25033	Right Side Guide	1
34	TMCPT25034	Indicator	1
35	TMCPT25035	Screw	1
36	TMCPT25036	Right Guide	1
37	TMCPT25037	Right Cover	1
38	TMCPT25038	Securing Bracket	1
39	TMCPT25039	Screw M6xM20	4
40	TMCPT25040	Spring Washer	4
41	TMCPT25041	Washer M6	4
42	TMCPT25042	Securing Bracket	1
43	TMCPT25043	Pin	2
43-1	TMCPT250431	Lock Nut M8	8
43-2	TMCPT250432	Support Post	4

- ALWAYS** wear proper apparel. Loose clothing or jewellery may get caught in moving parts. Wear protective hair covering to contain long hair.
- ALWAYS** use recommended accessories, the use of improper accessories could be hazardous.
- ALWAYS** remove plug from electrical outlet when adjusting, changing parts, or working on the machine.
- NEVER** operate machine while under the influence of drugs, alcohol or any medication.
- NEVER** leave machine running unattended. turn power off. Do not leave the machine until it comes to a complete stop.
- NEVER** force the machine, it will do a better and safer job at the rate for which it was designed.
- NEVER** use power tools in damp or wet locations or expose them to rain. Keep your work area well illuminated.
- DO NOT** use in explosive atmosphere (around paint, flammable liquids etc). Avoid dangerous environment.



## Additional Precautions For Thicknessers

- ALWAYS** ensure the cutter/cutters is secured fully before use.
- ALWAYS** ensure the cutter/cutters are sharp, blunt cutters increase the risk of kick back.
- ALWAYS** switch the machine OFF immediately the task is completed.
- ALWAYS** ensure safety devices etc are in place and working correctly, if not **DO NOT** use the machine until rectified.
- ALWAYS** fit new blades as a pair.
- ALWAYS** allow the machine to reach full speed before introducing workpiece.
- DO NOT** use the machine if the electric cable, plug or motor is in poor condition.
- DO NOT** allow the ventilation slots in the machine to become blocked.
- DO NOT** touch the cutter immediately after use, allow time for it to cool.
- NEVER** leave machine running unattended, **ALWAYS** ensure the m/c is switched off and come to a complete stop before leaving it.
- NEVER** use the machine unless it is securely bolted down to workbench etc.
- NEVER** attempt to reverse the workpiece towards the infeed.
- AVOID** accidental starting, by switching off and isolating from the main electrical supply by removing the plug from the socket.

**Additionally, please keep these instructions in a safe place for future reference.**

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INTERNATIONAL

## Electrical Connections

This product is provided with a standard 13 amp, 230 volt (50Hz), BS 1363 plug, for connection to a standard, domestic electrical supply. Should the plug need changing at any time, ensure that a plug of identical specification is used.



**WARNING**

*This appliance is Double Insulated, and the two wires in the mains lead should be wired up in accordance with the following colour code:*

**BLUE - NEUTRAL**

**BROWN - LIVE**

- Connect the BLUE coloured cord to the plug terminal marked a letter "N"
- Connect the BROWN coloured cord to the plug terminal marked a letter "L"

If this appliance is fitted with a plug which is moulded on to the electric cable (i.e. non-rewireable) please note:

1. The plug must be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket outlet.
2. Never use the plug without the fuse cover fitted.
3. Should you wish to replace a detachable fuse carrier, ensure that the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local Clarke dealer or most electrical stockists.



## FUSE RATING

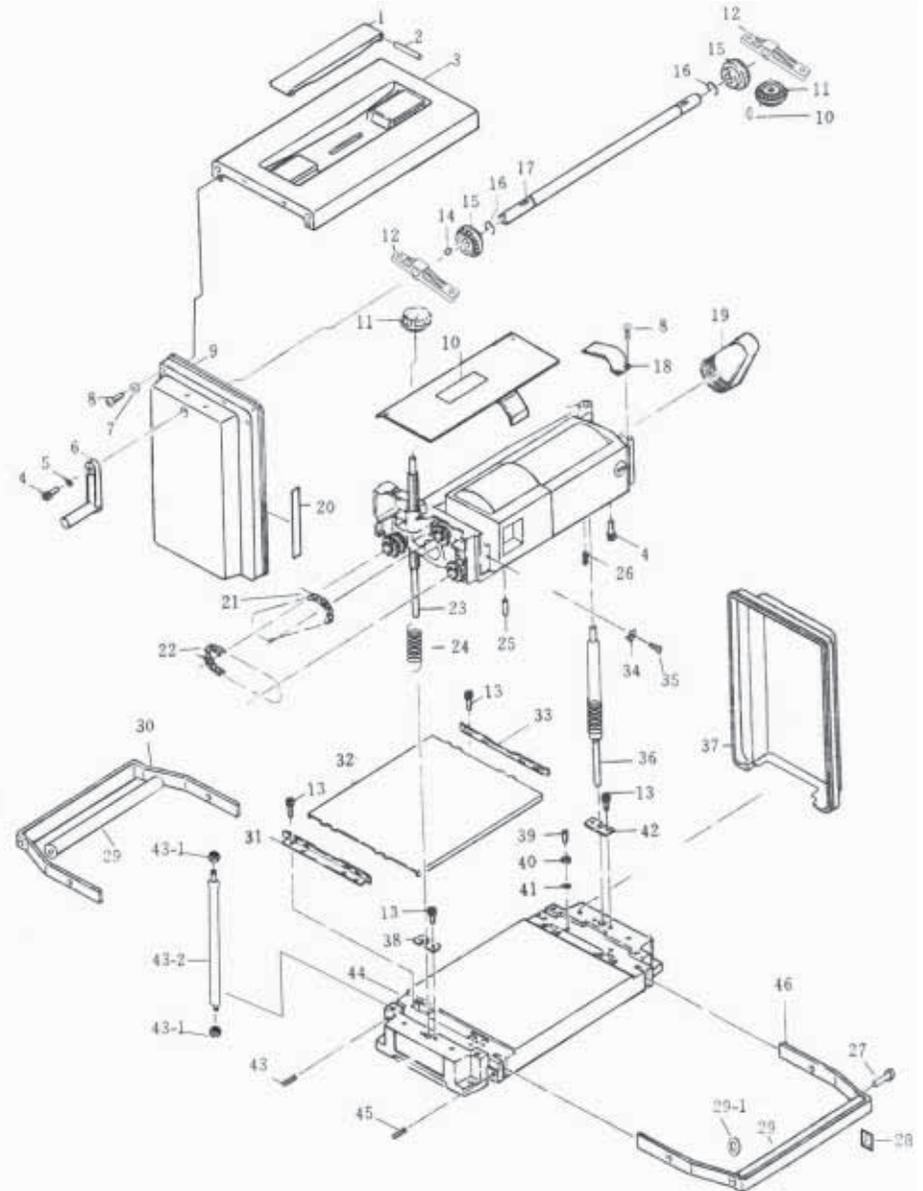
The fuse in the plug must be replaced with one of the same rating (**13 amps**) and this replacement must be ASTA approved to BS1362.

If in doubt, consult a qualified electrician. Do not attempt any electrical repairs yourself.

## CABLE EXTENSION

Always use an approved cable extension suitable for the power rating of this tool (see specifications), the conductor size should also be at least the same size as that on the machine, or larger. When using a cable reel, always unwind the cable completely.

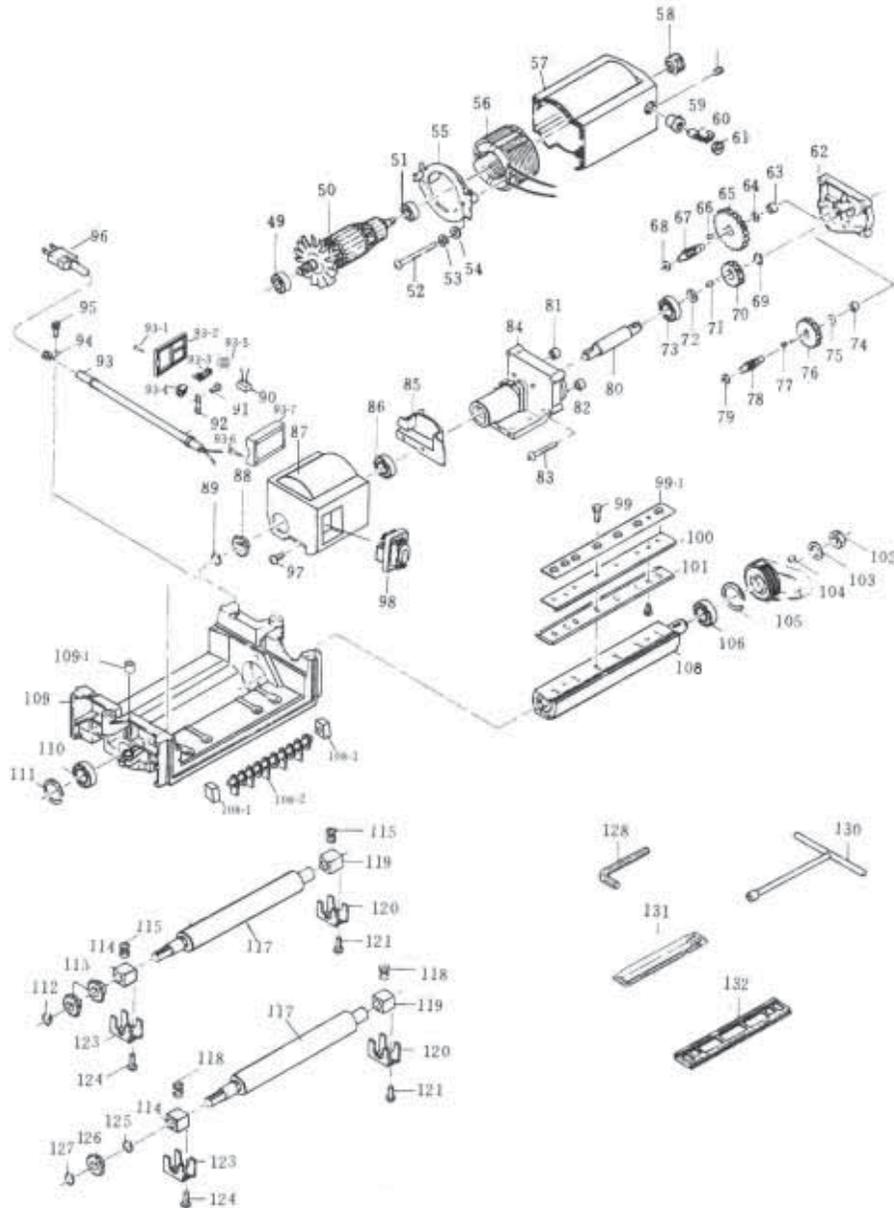
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## IMPORTANT:

The use of parts other than CLARKE replacement parts may result in safety hazards, decreased tool performance and may invalidate your warranty.

## Parts Diag



A wide range of accessories is available from your nearest CLARKE dealer, for further information, contact your nearest dealer, or telephone CLARKE International Sales department on 01992 565300.

## General View

A = ON/OFF Switch + Emergency Stop.

B = Carrying Handle.

C = Motor Brush Holder.

D = Thickness Adjusting Handle.

E = Outfeed Support Roller.

F = Thickness Gauge Rule.

G = Infeed Support Roller.

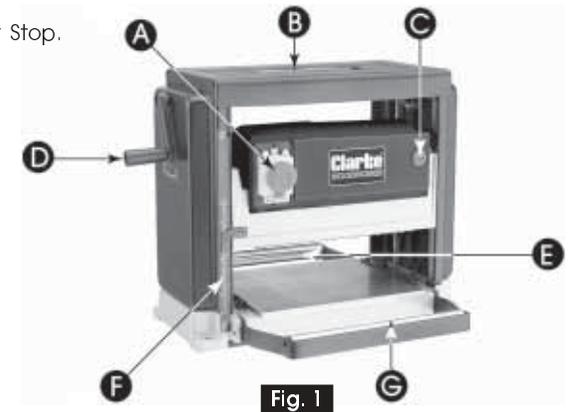


Fig. 1

## Assembly

Before commencing with the assembly, lay out all components and check for shortages and or damage, see list of contents on page 3 .

Any shortages or damage should be reported immediately, to your Clarke dealer where the machine was purchased.



Fig. 3

Outfeed Roller  
Infeed Roller

Attach the Thickness adjustment handle with the hex head bolt supplied, Fig. 2.



Fig. 2

Ensure that the infeed and outfeed rollers Fig. 3 are adjusted correctly also ensure both rotate freely. It is important for safety and accurate operation both rollers are aligned parallel to the base plate (item 32 in the parts list). To adjust the rollers, proceed as follows.

1. Loosen screws 'A' Fig. 3a on the infeed roller and set in mid position, lightly tighten both screws, repeat for other end.



Fig. 3a

'A'



Fig. 3b 'B'

- Loosen locknut and unscrew allen screws 'B' Fig. 3b approx 4 full turns anticlockwise. Repeat for other side, infeed roller should now lower as the second screw is turned.

- Place straight edge across the centre of the base plate and the infeed roller Fig. 3c, there should now be a gap between the straight edge and infeed roller. Whilst holding the straight edge flat on the base plate, slowly turn one of the allen screws 'B' Fig. 3b in a clockwise direction, keep turning screw until the roller is just clear of the straight edge. Gently tighten the locknut ensuring the allen screw doesn't move, check with straight edge the roller is still clear, if not readjust. Carefully turn the other allen screw clockwise until it just touches the bracket without raising the roller, tighten the locknut ensuring screw doesn't move, recheck the roller is just clear of the straight edge, check both ends as well as the centre, if necessary readjust as required.



Fig. 3c

- Whilst holding the straight edge flat across one end of the base plate and roller, loosen the corresponding screws 'A' Fig. 3a and adjust the roller so that it just touches the straight edge, carefully tighten screws, repeat for other end.

Recheck other end and adjust if necessary.

Once satisfied the roller is level with the base plate, carefully ensure all screws and nuts are securely tightened.

Once all screws and nuts are tight, recheck and if necessary readjust as required.

Repeat steps 1 - 4 for the outfeed roller.

#### Dust Extraction

The thicknesser is provided with a dust extraction facility, where a vacuum extractor or dust bag may be connected. An adapter is provided for this purpose, and must be fitted at all times whether using dust extraction or not, this is a safety requirement which prevents finger access to the blades.

The adapter fitting is a bayonet type and is simply fitted by pushing onto the outlet port on the rear of the machine and twisting clockwise, once in position, the adapter **must** be secured in position by tightening both screws, **Do Not** overtighten.

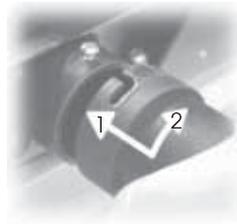


Fig. 4

Please note however, using dust extraction does not preclude the user from wearing a face mask to prevent the inhalation of dust particles.

Remove 2 screws securing belt safety cover and remove cover to expose the drive belt (see Fig. 19& 20).



Fig. 19

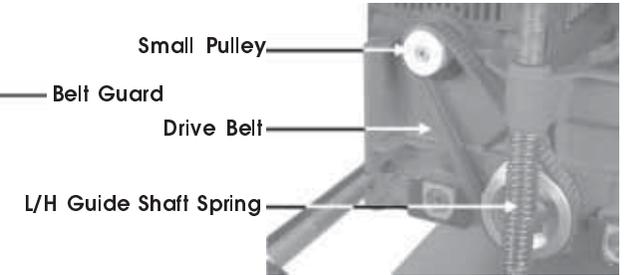


Fig. 20

Whilst rotating the blade cylinder by hand, ease the belt off the small pulley by applying side pressure to the belt as the pulley rotates.

Remove the belt, working it between the large pulley and the left hand guide shaft spring.

#### IMPORTANT

**When carrying out this procedure, it is recommended that a pair of good quality industrial gloves is worn to protect against cuts etc. Also take care fingers are not trapped between the belt and pulleys.**

When fitting new belt, ensure the belt is centralised on both pulleys, and that all the grooves in the pulleys are used.

With the new belt in situ, reassemble the machine in reverse order, taking care to fit all lockwashers etc, and ensuring all screws etc are tightened sufficiently, **DO NOT** overtighten.

After fitting new belt or blades, when first starting the machine allow it to run for a couple of minutes before attempting to use it. If any unusual noises or excessive vibration is detected, switch off and isolate from the main electrical supply by removing the plug from the socket.

Investigate the cause and rectify before attempting to switch on and use again.

#### Anti Kick back Mechanism

The effectiveness of the device for the prevention of kickback should be regularly inspected to ensure safe operation.

The kick back claws are located at the front of the machine (see Fig. 21).

Ensure all the claws are in place, not broken, and move freely on the shaft, if any claws are broken or missing, these must be replaced before using the thicknesser again.



Fig. 21

Anti Kick Back Claws

## Maintenance

Before carrying out any cleaning or maintenance activities, ALWAYS ensure the machine is switched OFF and isolated from the main electrical supply by removing the plug from the socket.

Clean the machine regularly and inspect for signs of wear and or damage, any defects should be rectified before using the machine again.

### Motor Brushes

Inspect the motor brushes regularly and check for even wear and signs of excessive sparking etc, replace the brushes if necessary, DO NOT allow the brushes to wear down to less than 1/3rd their original size (7mm min).

Always replace brushes in pairs NEVER singly.

Motor brushes are located either side of the motor housing see (Fig. 16).

To replace the brushes, unscrew the brush cap using a suitable flat bladed screwdriver. Withdraw the motor brush, if the brushes are removed for inspection only, ensure they always go back in the same positions, and are not swapped over.

When refitting the brushes, ensure the brushes are seated against the armature before screwing the cap back on. When screwing the cap back DO NOT force it, it may be necessary to gently screw the cap backwards and forwards until the brush fits into the brush housing correctly, allowing the cap to screw fully home, DO NOT overtighten.

### Belt Replacement

The drive belt is located behind the housing on the opposite side to the height adjustment handle.

To replace the belt, proceed as follows.

Remove the 8 cover screws (4 at each end) securing the top cover (see Fig. 17). Remove the cover.

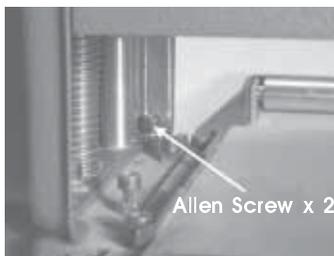


Fig. 18

Remove 2 allen screws securing the side cover to the machine base (see Fig. 18). Remove the cover.

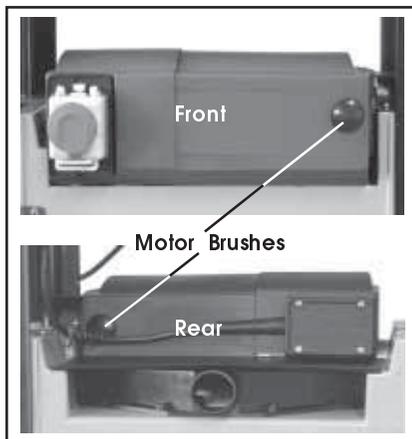


Fig. 16



Fig. 17

## Operation

The machine must NEVER be used free standing, it must always be anchored to workbench or similar, using 4 suitable 10mm nuts and bolts, one on each corner of the thicknesser, (see Fig. 5). Choose carefully the location where the machine is to be located, ensuring there is sufficient space around it in order to operate safely.

Anchor Points (4)

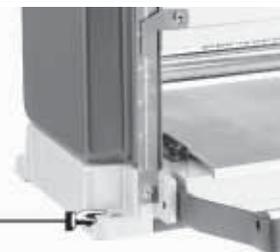


Fig. 5

With the thicknesser securely anchored proceed as follows:

Measure the timber to be machined.

Using the thickness adjusting handle and the depth gauge rule, set the machine to the thickness of the material.

Before switching ON and offering the timber into the machine, ensure the timber is free of nails, screws or other foreign material that could damage the blades and cause personal injury.

For the initial cut, it is recommended that the depth of cut should be 1mm.

Subsequent cuts can be made up to a maximum of 2.5mm until the desired thickness is achieved.

To switch ON, press the switch cover down, slide in direction of arrow (see fig. 6) and lift up, this will expose the ON/OFF buttons, (see fig. 7) Push the ON button, (green button 'I'). DO NOT close the cover as this will switch the machine OFF again.

NOTE : in case of emergency, close the switch cover quickly, cover will latch down and motor will be switched OFF.

To switch OFF normally, press OFF button, (red button 'O'), always close cover to prevent accidental starting.



Fig. 6



Fig. 7

The ON/OFF switch is a "No Volts Switch", so that in the event of a power failure etc, the machine does not restart automatically once the power is back on.

When the power has been restored, disconnect from the power supply by switching off and removing the plug from the socket. Remove any timber left jammed in the machine, to do this simply raise the cutting head to release it.

Reset the machine to the required cutting height, switch the machine ON again and proceed with machining.

DO NOT force the workpiece into the machine, forcing the material overloads the machine and could damage the motor.

ALWAYS feed material to be machined from the front of the thicknesser, NEVER from the back.

When machining long pieces, ensure that it is supported as it exits the machine. When the desired thickness is reached, switch the machine OFF and remove the plug from the main electrical supply.

Always use a push stick when machining short or narrow workpieces.

When finished, remove all shavings and sawdust from the machine and surrounding area and dispose of safely, accumulation of dust and shavings is a fire hazard and should not be allowed to build up.

## Blade Replacement

Plane blades require sharpening or replacing. Care should be taken at all times when handling them, they are very sharp, even when dull.

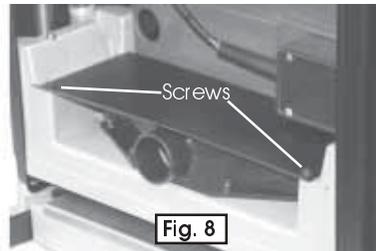
Blades must always be fitted as a pair, and must be of the same type, only fit blades recommended by the manufacturer.

### Blade Removal

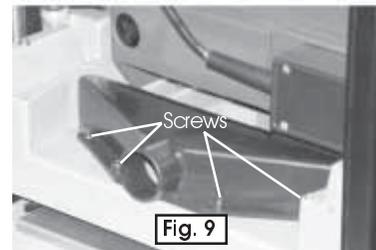
First, ensure the machine is switched OFF and isolated from the main electrical supply by removing the plug from the socket.

**NOTE: store all parts removed for reuse when reassembling.**

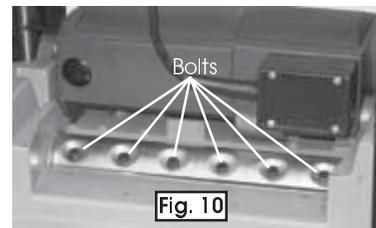
- Lower the head down as far as possible to gain adequate access (see Fig. 8).
- Remove two screws securing the top bracket, Remove bracket (see Fig. 8).



- Remove 4 screws securing the dust extraction port (see Fig. 9).



- Carefully rotate the blade cylinder to gain access to six blade securing bolts (see Fig. 10). Loosen and remove all six bolts, using the socket wrench supplied.



- Remove the blade clamp, carefully lift out the blade assembly.

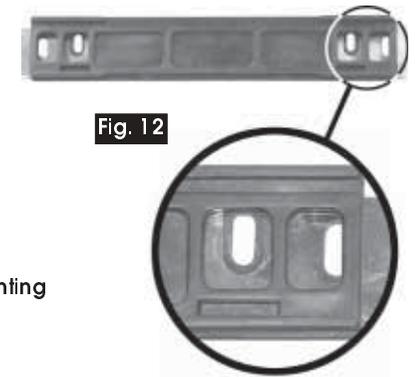
- Rotate the blade cylinder to access the other blade, repeat as above to remove it.

### Fitting New Blades

- Loosen and remove two screws on each blade assembly, noting which way round the blades are fitted to the blade mounting brackets.



- Lay the blade onto the blade setting jig (see Fig. 11), ensure the two elongated holes used for securing the blade to the blade mounting bracket line up with the larger holes in the setting jig (see Fig. 12).



- Place the blade mounting bracket on the blade (see Fig. 13).

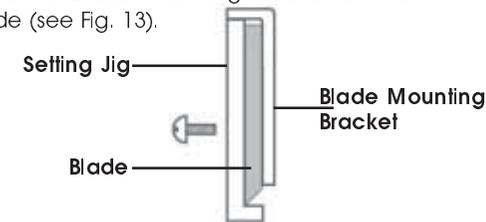
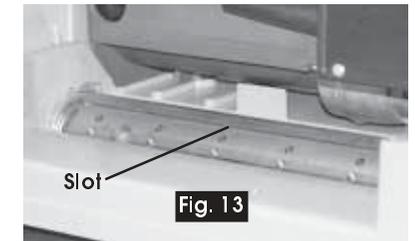


Fig. 13

- Secure Blade to the blade mounting bracket using the two screws removed earlier, before final tightening, check the blade has not moved.
- Repeat as above for the other blade.
- Refit the blade assemblies to blade cylinder, ensuring the blade mounting bracket locates in the slot on the cylinder (see Fig. 13).



Continue to reassemble the machine in the reverse procedure, ensure all locking washers removed on disassembly are fitted, this prevents the blades from working loose due to vibration and causing serious damage to the machine, and or injury to yourself and that of others around you.

### Blade Sharpening

Blade sharpening should only be carried out by a qualified person.

To sharpen the blades proceed as follows:

- Remove both blades as before.
- Fit the blades to the sharpening jig (see Fig. 14). Attach the blades to the jig using the screws used to secure the blades onto the blade mounting brackets.



Fig. 14

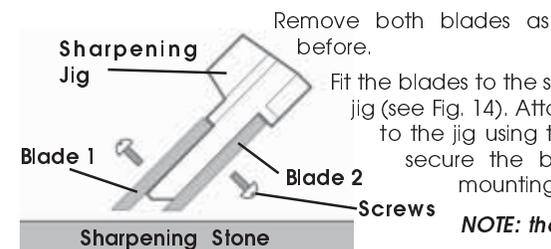


Fig. 15

**NOTE: the screw positions (see Fig. 15)**

When sharpening the blades, ensure that both blades are kept in contact with the sharpening stone at all times, this not only preserves the correct angle, but ensures both blades remain stone exactly the same size, this is necessary to maintain the correct balance and help reduce vibration when operating the machine.