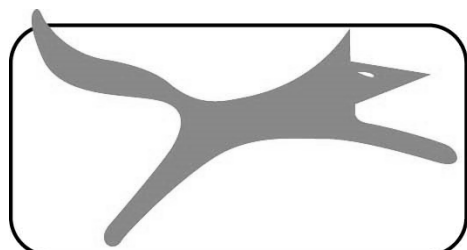


SPINDLE SHAPER

FOX Model F60-105



ASSEMBLY AND OPERATING INSTRUCTIONS



FOX

Spindle Shaper

FOX MODEL F60-105

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ATTENTION :

- Read the instructions for use carefully before using the machine
- This device meets current safety standards for electrical machines.
- Incorrect use may result in injury. Anyone not familiar with the instructions for use should not use the machine. Keep these instructions for use safe.

SAFETY INSTRUCTIONS

ALWAYS DISCONNECT THE MACHINE FROM THE POWER SOCKET BEFORE ATTEMPTING ANY MAINTENANCE.



Keep a safe working zone for both staff and equipment. NO CHILDREN must be allowed in the working zone under any circumstance.

The machine must be always disconnected when not in use. Use the on/off switches on the machine. Always disconnect the machine by pulling the plug, do not pull the power cord.

Before using the machine, remove all tools used for setup and keep them away from your working zone. Reconnect the machine. Check that the working zone is clear and that there is plenty room to work with the wood.

Ensure you are in good working position. If the work will produce dust or small pieces, wear safety gear, protective glasses, gloves, a mask and ear defenders. If you have long hair, tie it up. Do not wear watches or bracelets. Wear shoes with good grip and remember to never place your fingers too near the blade.



Do not use the machine if you are tired or distracted because you risk injury.



Do not use this machine anywhere containing flammable liquids and/or volatile gases.

1. Keep your working area clean. Untidy working zones and busy workbenches invite injuries.
2. **Avoid** a dangerous environment. Do not expose machines to rain and not use them in wet places. Ensure your working zone is well lit. Do not use the machine where there is gas or flammable liquids.
3. **Protect yourself** from electric shocks. Avoid touching earthed surfaces.
4. **Keep** children and visitors well away from the working area.
5. **Tidy** up any tools not in use. When tools are not used, they should be kept in a dry, locked place, out of reach of children.
6. **Do not force** the machine. It will work better when used with the pressure it was designed for.
7. **Use** the correct tools. Do not force a small tool to do the work of a bigger tool. For example, do not use a circular saw to cut branches or logs.

8. **Wear** appropriate clothing. Avoid loose clothing, and remove jewellery which could become caught in moving parts. Non-slip shoes are particularly recommended when working outside. Keep long hair tied up.
9. **Always** wear safety glasses. Also wear a mask if operating the machine creates dust.
10. **Do not** mistreat the power cord. Never use the power cord to pull out the plug. Keep the power cord away from heat, oil and sharp edges.
11. **Do not** bend over the machine. Keep your balance at all times.
12. **Keep** tools in good condition. Clean tools to obtain the best results with them. **Follow instructions** to grease and change accessories. Regularly check the power cord and replace it if damaged. Keep handles dry, clean and free from oil and grease.
13. **Disconnect** the tool when not in use, before the maintenance and while changing accessories such as blades, drills, etc.
14. **Remove** all maintenance tools. Get used to checking that all maintenance tools are removed before using the machine.
15. **Avoid** accidentally starting the machine. Make sure that the switch is in the "OFF" position before connecting the power.
16. If the machine is used outside, use only extension leads designed for outdoor use.
17. **Be observant.** Use common sense when operating machinery. Do not use the tool when tired.
18. **Inspect** parts before use. Before continuing to use the tool, inspect any protective parts) which could be damaged to make sure that they work well. Verify that the moving parts are properly aligned, and are not jammed or broken. Check the assembly and any other conditions which may affect the correct functioning of the machine. Any damaged part or guard must be repaired or replaced by an approved after-sales service centre. Do not use the tool if the switch does not work correctly.
19. **Warning:** the use of any non-recommended accessory can present a health risk.
20. **Have the machine repaired** by a qualified person. This machine is built according to relevant safety requirements. Repairs must only be made by a qualified person using original spare parts, otherwise it may be very dangerous for the user.
21. **Keep these instructions.**

SPECIFIC SAFETY INSTRUCTIONS FOR SPINDLE SHAPERS

1. **Before** connecting the machine to the power supply, ensure that all safety items are in their active positions and check that they function correctly. If it is necessary to remove the doors or protective covers, turn off the switch and disconnect the plug from the socket.
2. **Kick-back catchers** must be able to move freely and their functioning must be checked regularly.
3. **Do not** connect the machine to the power supply while the door or protective cover are removed.
4. **Acquaint** yourself fully with the locations of all switches before turning the machine on.
5. **Memorise** the location of the emergency stop switch so you can use it promptly at any time.
6. **Take care** to not touch any switches accidentally while the machine is being operated.
7. **Do not** touch any rotating tool by hand or any other object, under any circumstances.
8. **Before** performing any maintenance work inside the machine, switch it off and disconnect it from the mains supply.
9. **Do not** alter the machine from its factory specification in any manner which may risk its safe operation.
10. **If** you are in any doubt about a procedure with the machine, contact a qualified person.
11. **Ensure** you regularly inspect the machine in accordance with the instructions.
12. **After** your work with the machine is finished, adjust and clean the machine so it is ready to be used again.
13. **If** the power supply fails for any reason, switch off the machine immediately.
14. **Do not** paint, allow to become dirty, damage, alter or remove the safety plates. If they become illegible or are lost, contact the manufacturer for replacement plates.
15. This machine **must not** be used for curved work.

SPECIFICATIONS

Motor input :	1500W – 240V (2hp)
Motor output :	1100W
Diameter of spindle :	30mm
Spindle travel :	80mm
2 speed :	4500, 6500rpm
Length of spindle :	80mm
Max. diameter of spindle :	144mm
Dimensions (h x l x d) :	1102x800x885mm
Dimensions of carriage (h x l x d) :	145x650x225mm
Weight :	106.5kg

NOISE CONDITIONS

The noise emitted, measured in conformity with the standards EN 3744 and EN 11201, is:

Sound pressure level	No load - LpA = 81.7 dB(A), Load - LpA = 89.5 dB(A)
Sound power level	No load - LWA = 94.5 dB(A), Load - LWA = 103 dB(A)

Noise levels are emission levels and do not necessarily indicate safe working conditions. Even if there is a connection between emission levels and exposure levels, the first cannot be used to determine safety if other precautions are necessary. The factors that can influence the actual exposure level of the operator include exposure length, environment features and other sources of noise, as for example the number of machines and operations present. Besides, exposure levels can change from country to country. However, these instructions enable the user of the machine to better evaluate the dangers and risks.

ELECTRICAL CONNECTIONS

EXTENSION CORDS

Before using an extension cord, ensure the insulation is not cut or worn. Immediately repair or replace a damaged or frayed cord.



ATTENTION :

Extension cords must be removed from the work area or located so that they will not get caught in parts, tools or other objects while using the tool.

ELECTRICAL CONNECTION

Your spindle shaper must be connected on an electrical supply of 240V, 50 Hz. If your machine does not work when it is connected please check your electrical supply.

EARTHING INSTRUCTIONS

In case of malfunction or short circuit, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with a power cord with an earthing conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and regulations.


Do not modify the plug provided. If it does not fit into the outlet, have a proper outlet installed by a qualified electrician. Improper connection of the grounded equipment can result in a risk of electric shock. The green wire with or without yellow stripes is the earth wire. If repair or replacement of the power cord is necessary, do not connect the grounding conductor to a live terminal.

If the earthing instructions are not completely understood, check with a qualified electrician or a person responsible for maintenance, or if there is any doubt that the tool is properly grounded.

If the power cable is damaged, it must be replaced by the manufacturer, after sales service or similarly qualified persons in order to avoid a hazard. Do not operate the tool with a damaged power cable.

This machine is intended for use on an electrical circuit with a wall outlet and earthing pin.

ENVIRONMENTAL PROTECTION

England		<p>Only for EU countries</p> <p>Do not dispose of electric tools together with household waste material!</p> <p>In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.</p>
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The crossed-out wheeled bin means that within the European Union the product must be taken to separate collection at the product end-of-life. This applies to your device but also to any enhancements marked with this symbol. Do not dispose of these products as unsorted municipal waste.

The European directive DEEE concerning the environment, states that it is forbidden to dispose of used electric or electronic devices in household waste. They must be taken to a compatible recycling facility.

ATTENTION:

The manufacturer reserves the right to change specifications without notice.

Images are supplied for information purposes only. Actual machine and accessories may differ in appearance.

SYMBOLS



Always wear protective goggles when using this machine.



Always wear ear defenders when using the machine.



Read and understand the instruction manual before using the machine



Heavy lift. Transporting the machine requires two people.



Always wear a protective mask if the operation is dusty.



Product meets relevant CE standards.

TRANSPORT AND STORAGE

While transporting or handling the machine, take utmost care.

When loading or unloading the machine, ensure that no-one is crushed by the machine! Do not walk under the machine while it is being lifted by a crane or high-lift trolley.

During transportation, precautions must be taken to protect the machine against excessive vibration and humidity. It should be stored in a shelter at temperatures ranging from -25°C to 55°C. The machine is packaged in a plastic tray as standard and is transported this way.

Lifting the machine

The machine or its individual parts may only be lifted by means of an approved lifting device with verified lifting capacity.

1. Prepare a high-lift truck (D) or a manual lifting carriage (F) with sufficient lifting capacity.
2. Put the forks (G) below the machine as shown in Fig. 1.

If you are using a crane (E) or similar hoisting equipment, proceed as follows :

1. Prepare four lifting belts (H) or steel ropes at least 2m long with sufficient lifting capacity.
2. Fix the ropes to the hook of the crane with the required capacity.
3. Place the other end of the ropes on lifting rods under the machine (lifting rods not included)
4. After lifting the machine slightly, check the stability of the machine as it hangs from the ropes.
5. Lift the machine carefully and slowly, moving it without any rapid changes of pace.

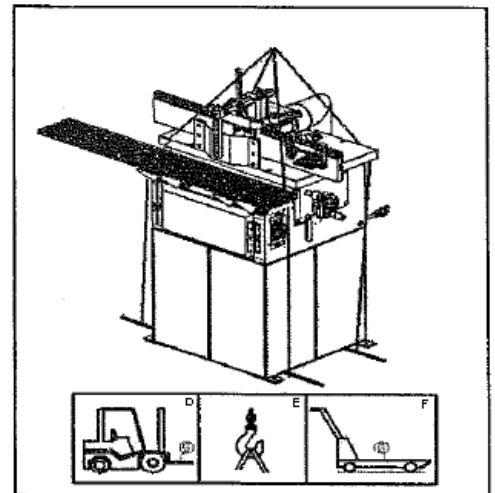


Fig. 1

MACHINE INSTALLATION

Remove the protective coating from the working tables and other parts of the machine either with paraffin oil or any similar solvent. Do not use petrol or similar solvents as they can result in reduced corrosion resistance for certain parts of the machine.

The spindle shaper is packaged with the following parts :

Spindle ring x 18
Table ring x 2
Fence assembly x 1
22m A/F spanner x 1

Working Area

The working area size required depends on the type of machine, assumed working operations and size of material being machined.

It is important to maintain free space of 0.8m around the machine to allow room to work. If long material is being machined, it is necessary to have sufficient room in front of the machine as well as behind it, where the material enters and leaves the machine.

Ensure you leave enough space to connect a dust collector to the machine.

Connecting an Extraction System

Only use the machine with an extraction system fitted. To ensure the proper functioning of the spindle shaper, connect an extraction system with minimum exhaust capacity for dry particles of 570m³ per hour and minimum air flow of 20m/s, and for wet particles 790m³ per hour exhaust capacity and 28m/s minimum air flow.

Switch on the machine's drive and extraction system at the same time. Use a flexible hose of 100mm diameter. The exhaust hose is fitted onto the outlet from the moulding tool cover, which also forms the exhaust connector (A). See Fig. 2.

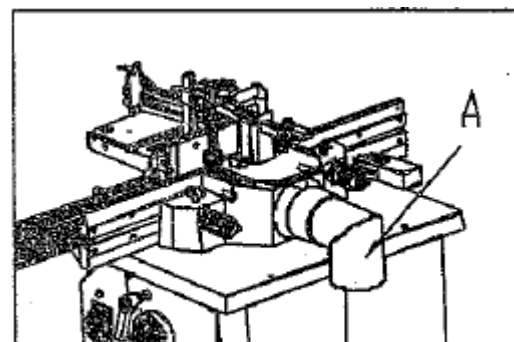


Fig. 2

Connecting to the mains power supply

Damaged power supply cables must be replaced by a qualified specialist immediately. Operating the machine with damaged cables poses a serious risk of injury.

Before using the machine, ensure the voltage and frequency specified on the machine plate comply with the value of the main supply it is connected to.

Over voltage protection should be provided by the user.

Before adjusting or replacing any tools and before making any adjustments, alterations or maintenance, always turn off the switch and disconnect the the plug from the mains supply.

This machine may be earthed. Inspect it and ensure the socket is reliably earthed.

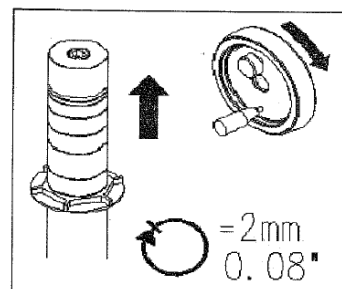
Direction of Rotation

Viewing the machine from above, the spindle rotates anticlockwise.

OPERATING AND ADJUSTING THE SPINDLE SHAPER

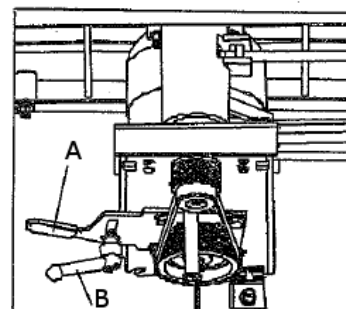
Spindle Height

Set the height of the spindle by means of the hand wheel located on the rear right side of the stand and secure it with the arresting screw. Select the suitable number of table rings according to the tool used.



Speed Change

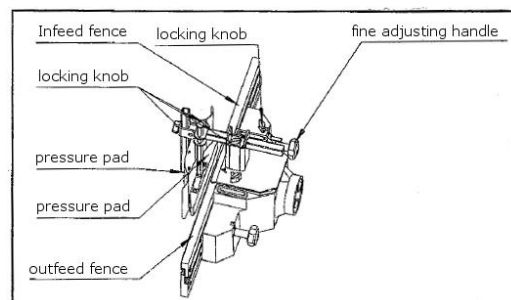
The machine can be operated at 6500rpm (lower pulleys) or 4500rpm (upper pulleys). To change the spindle speed, loosen the lock handle (A) and pivot the motor assembly toward the spindle. Reposition the belt to the desired speed and tension the knob (B).



Lengthwise Moulding

Tool : use suitable tools with a defined thickness of the chip for manual feeding.

Working cycle : while test moulding is being performed, start working with a workpiece of sufficient length, width and height. It is important to prevent blocking of the machine, or to use a safeguard against kickback adapted to the workpiece dimensions. In order to prevent kickback it is necessary to use back and/or front end stops fixed to the fence, table or extension table.



Never set the rulers while the machine is being operated.

While working, perform the lateral adjustment of the fence plates, keep tool opening to a minimum, lock the fence plates and adjust the fine adjusting handle to set the required chip (wood removal) and lock the station using the

locking knob.

Keep the pressure pads firmly and evenly in contact with the table and the fence plates along the guide ruler.

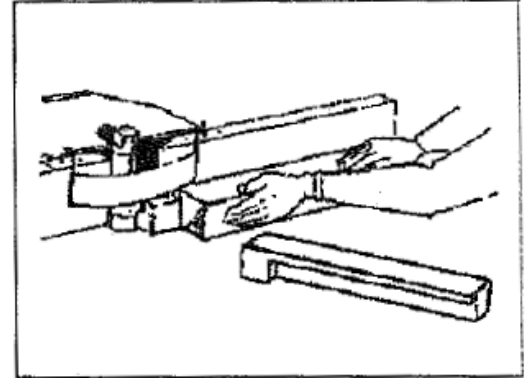
The cutting speed must exceed 40m/s in order to reduce the risk of kickback but must not exceed 70m/s in order to reduce the risk of tool damage.

Adequate general or localised lighting must be used when operating the machine.

Moulding of workpieces with a small cross-section

Tool : select the tool suitable manual feeding.

Working cycle : adjust the moulding machine and put both halves of the ruler close to the tool. Machine the material using only a pusher. Choose the size of the pusher so that it can be help comfortably.



Protective Aids

Eye protection is required when working with the machine. It is advisable to wear ear protectors and working shoes. Overalls should not be worn.

The user must not :

- Perform any alteration of the machine's safety items without the manufacturer's permission.
- Perform any work inconsistent with the safety instructions in this handbook.
- Touch the tool or near it, or any other moving parts.
- Machine materials other than wood or those based on wood.
- Overload the machine while machining large, semi-finished products.
- Remove any chips near the tools by hand or with any object while the machine is being operated.
- Use tools other than those supplied with the machine or recommended by the manufacturer.

Using the Fence as a Guide

Shaping with the fence is the safest and most satisfactory method of working. This method should always be used when work permits. Almost all straight work can be used with the fence.

1. For most work, where a portion of the edge of the work is not touched by the cutter, both the front and rear fences are in a straight line, as show in Fig. 8.

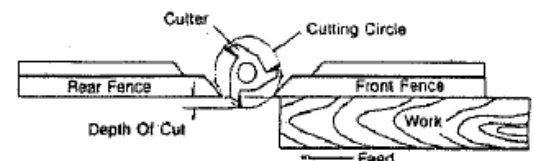


Fig. 8

- When the shaping operation removes the entire edge of the work (ie jointing or making a full bead), the shaped edge will not be supported by the rear fence when both fences are in line, as shown in Fig. 9. In this case, the workpiece should be advanced to the position shown in Fig. 9 and stopped.

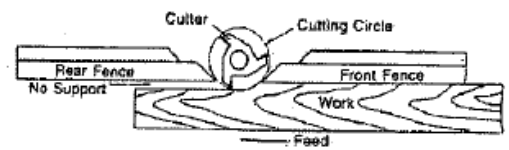


Fig. 9

- The front fence should be advanced to make contact with the work as shown in Fig. 10. The rear fence will then be in line with the cutting circle.

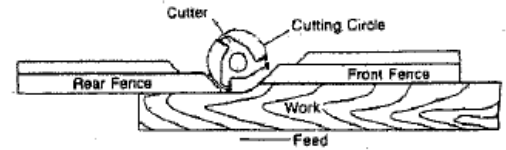


Fig. 10

Shaping with Collars

Follow these rules when shaping with collars for safest operation and best results :

- Collars must be smooth and free from all gum or other substances.
- The edge of the work must be smooth. Any irregularity in the surface, which rides against the collar, will be duplicated on the shaped surface.
- A portion of the work's edge must remain untouched by the cutter so that the collar will have sufficient bearing surface. See Fig. 11 for an example of insufficient bearing surface.

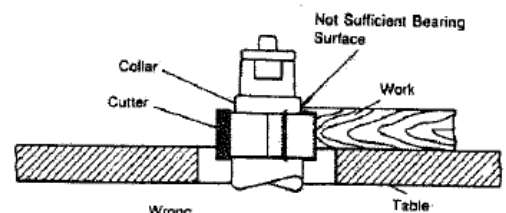


Fig. 11

- Fig. 12 illustrates sufficient bearing surface.

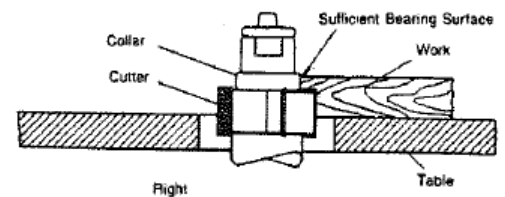


Fig. 12

- Under no circumstances should a small workpiece be shaped against the collars as shown in Fig. 13.

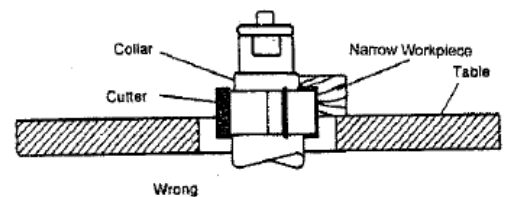


Fig. 13

Collar Positioning

Collars may be positioned above, below or between two cutters.

When using the collar below the cutter, as shown in Fig. 14, the progress of the cut can be observed at all times. A disadvantage of this method is that any accidental lifting of the work will gouge the wood and ruin the workpiece.

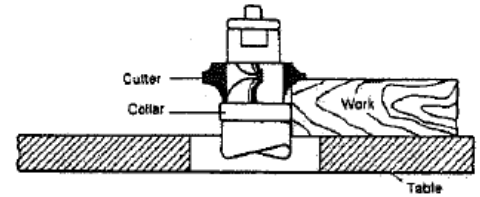


Fig. 14

Using the collar above the cutter, as shown in Fig. 15, offers the advantage of the cut not being affected by slight variations in the stock's thickness. However, the cut is not visible during the operation. Another advantage is that accidental lifting of the workpiece will not gouge the workpiece. Simply correct the mistake by repeating the operation.

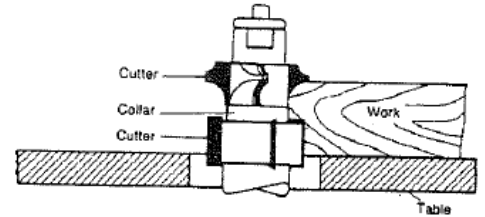


Fig. 16

The collar between cutters method, shown in Fig. 16, has both the advantages and disadvantages of the first two methods. This method is used primarily where both edges of the work are to be shaped.

The machine cannot be used for tenoning!

TOOLS

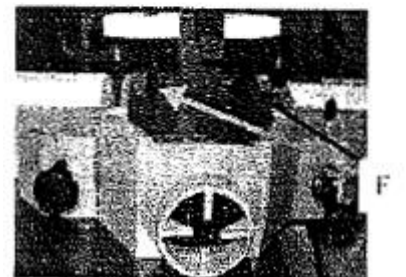
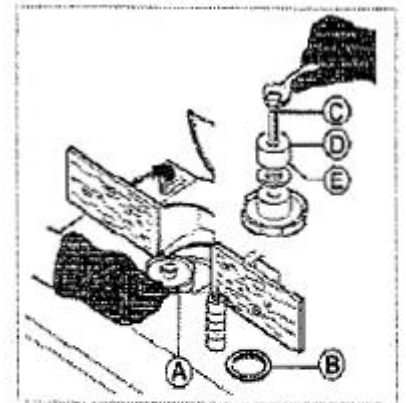
Replacement of Moulding Tools

Only use moulding tools that are designed for manual feeding and may be clamped firmly and safely. Only tools confirming to EN847-1 :2005 and marked MAN shall be used.

Before mounting tool (A) make sure that spacing rings (E) are clean and not damaged. Make sure that the fastening method is proper. The moulding tool is fixed and clamped by bolt (nut) (C), through spindle ring (D) and spacing rings (E) on the moulding spindle. Adjust the hole in the table according to the diameter of moulding tool (A) by table rings (B).

When installing the moulding tools, the cover of guard needs to be opened. Loosen the two locking knobs (F) to open the cover. After installation, close the cover and lock it through the locking knobs.

WARNING! Always close the guard cover and lock it securely after tools are installed.



MAINTENANCE

Before starting maintenance or repair work, always disconnect the machine from the mains supply. Turn off the machine and remove the plug from the power socket.

It is necessary to ensure the V-belts are always kept tight.

The machine should be cleaned regularly. The rods, pins, threads and other parts liable to be rusty should be lubricated with suitable oil. The interval for such maintenance will depend on the manner of work the machine is being used for, but it should be performed at least once a month.

The bearings of the electrical motors and moulding spindle have permanent grease filling, are closed on both sides and do not require any lubrication.

Avoid contamination of belts with oil or grease. If this occurs, clean the belt with paper only, or dry it.

Removing the dust is best done with a vacuum cleaner. Perform this activity regularly, at least once a week.

TROUBLESHOOTING

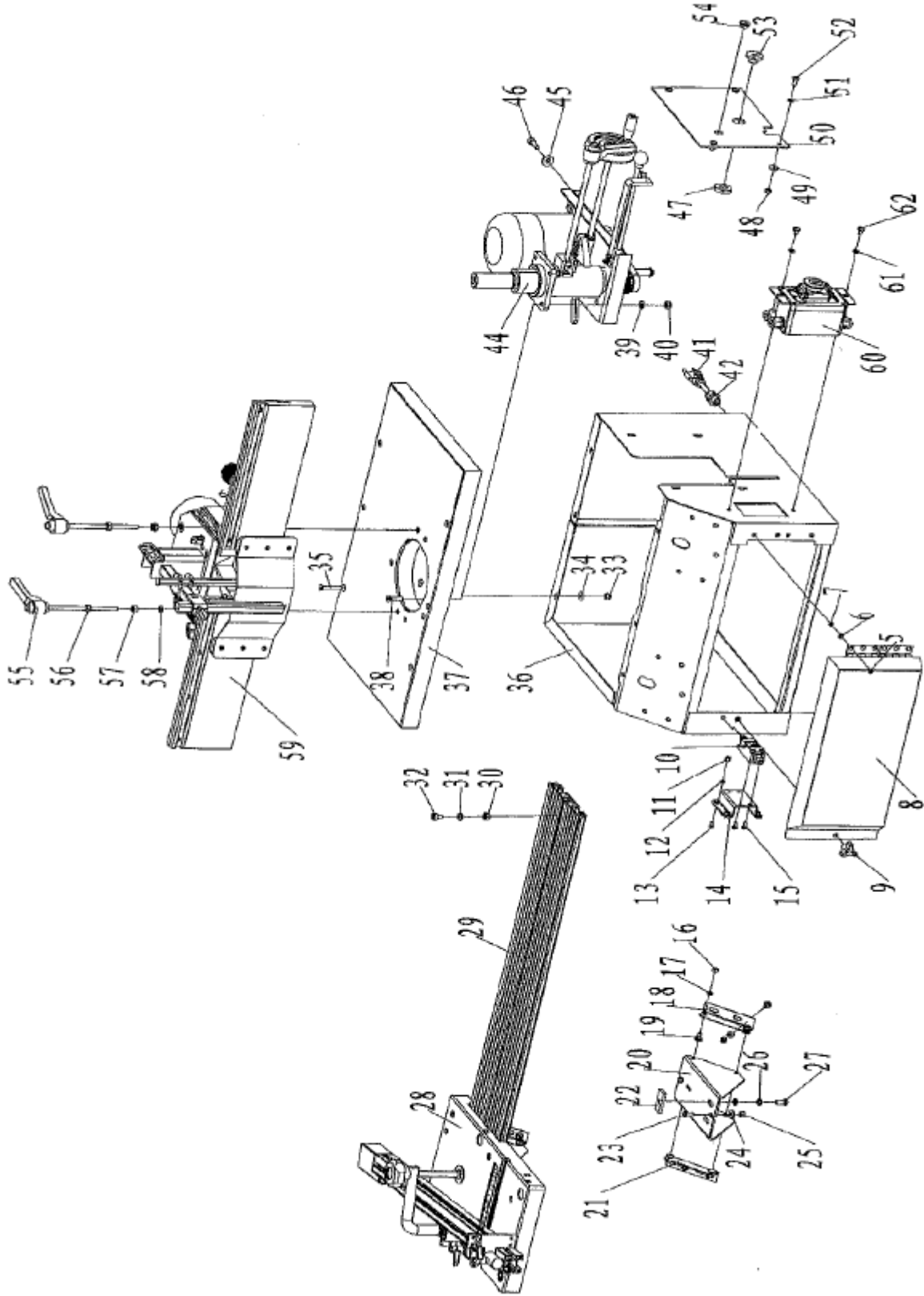
No faults should occur while the machine is used correctly and maintained duly. If the extraction hose is blocked with chips, the machine should be switched off before handling. If a workpiece becomes jammed, turn the machine off immediately. A blunt knife often causes the electric motor to overheat. If the machine vibrates excessively, check its setting and anchoring, possibly also clamping and balancing of the tools used.

Problem	Possible Causes	Solutions
Shaper will not start	Fuse blown or circuit breaker tripped Cord damaged Cord unplugged from the power supply Reversing switch is in the OFF position	Replace fuse or reset circuit breaker Replace cord Plug in power cord Turn switch to forward or reverse
Overload kicks in frequently	Extension cord or wiring is of inadequate size Feeding stock too fast Cutter head is dull	Replace cord or wiring with proper gauge wiring Reduce stock feed rate Use only sharp cutters
Cutter does not come up to full speed	Shop wire gauge is too small Extension cord too light or too long Power source is not adequate	Replace cord or wiring with proper gauge wire Replace with adequate size cord Contact local electrical supplier
Cuts are unsatisfactory	Dull cutter Gum or pitch on cutter Cutterhead rotating in the wrong direction Feeding work in the wrong direction	Replace cutter Remove cutter and clean with solvent Check for proper rotation on startup Feed work against the cutter rotation

Machine vibrates	Cutterhead damaged Stand is on uneven surface Defective V-belt V-belt incorrectly tensioned Bent pulley Motor mounted improperly	Replace cutterhead Stand must rest solidly on level surface, bolt to floor if necessary Replace V-belt Apply proper tension Replace pulley Motor must be properly mounted with snug nuts and bolts
Edge splits off on cross grain cut	Characteristic of this type of cut	Make cross grain cuts first, then finish cut with the grain Use scrap block to support end of cut
Raised areas on shaped edge	Variation of pressure holding work against cutter	Hold work firmly against table and fence Use holddowns
Work pulled from hand	Feeding work in the wrong direction	Always feed work against the rotation of the cutterhead
Depth of cut not uniform	Fence misalignment Side pressure not uniform	Align outfeed fence Use holddowns; keep constant pressure against fence
Work burns	Cutting too deep on one pass Forcing work	On hardwoods take light cuts; attain full depth with several passes Feed work slowly and steadily

PARTS DIAGRAMS

PART.A : FINAL ASSEMBLY

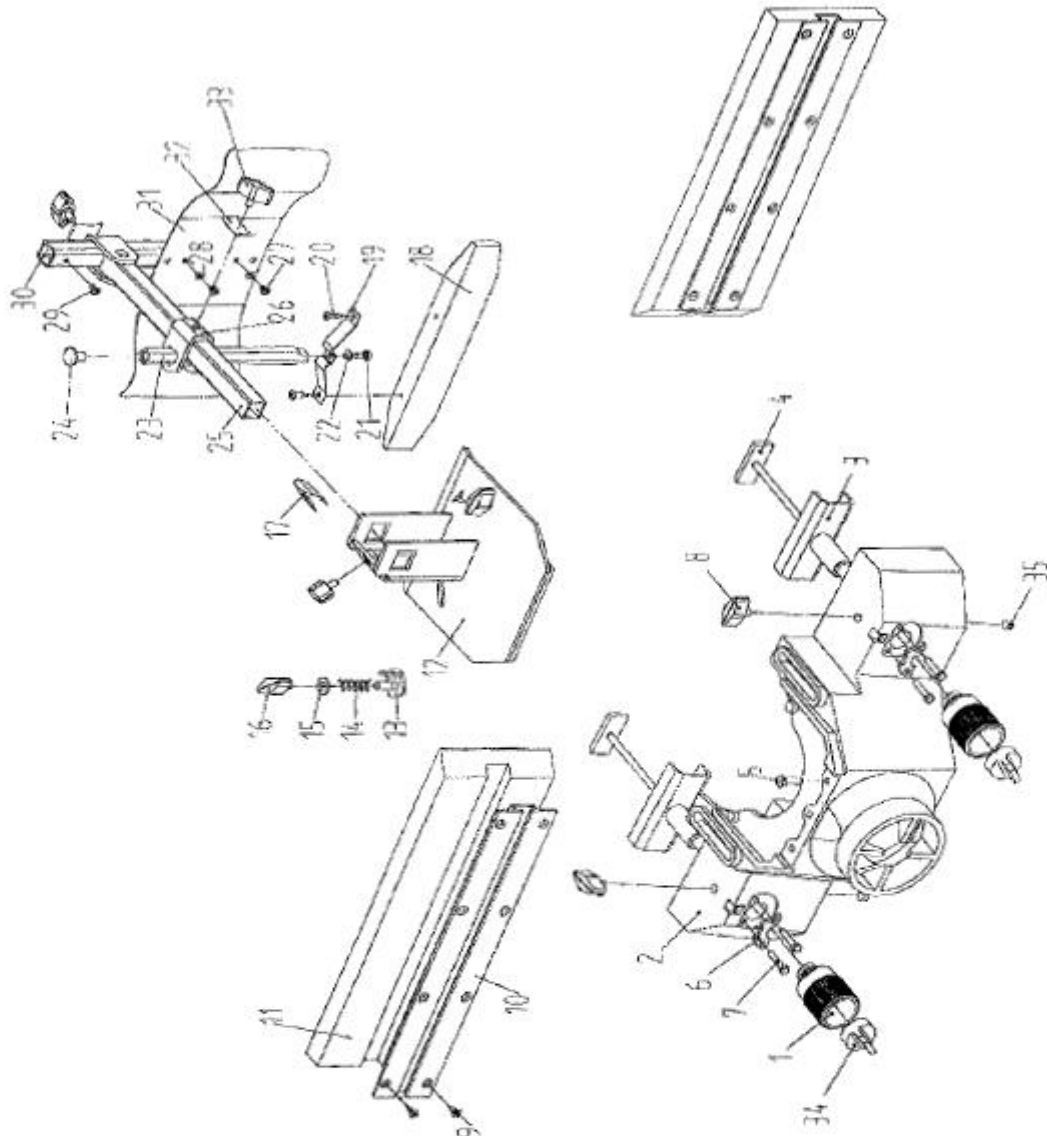


PART.A : PART LIST FOR FINAL ASSEMBLY

NO	REF NO	Description
5	60105-A5	Screw M4X10
6	60105-A6	Washer ϕ 4
7	60105-A7	Hex nut M4
8	60105-A8	Protective cover
9	60105-A9	Door knob
10	60105-A10	Interlocking switch
11	60105-A11	Hex nut M5
12	60105-A12	Washer ϕ 5
13	60105-A13	Screw M5X10
14	60105-A14	Switch plate
15	60105-A15	Screw M5X10
16	60105-A16	Hex nut M6
17	60105-A17	Washer ϕ 6
18	60105-A18	Right supporting plate
19	60105-A19	Screw M6X12
20	60105-A20	Rail support
21	60105-A21	Left supporting plate
22	60105-A22	Locating block
23	60105-A23	Hex bolt M6X16
24	60105-A24	Large washer 6
25	60105-A25	Hex nut M8
26	60105-A26	Washer ϕ 8
27	60105-A27	Hex bolt M8X10
28	60105-A28	Sliding table assembly
29	60105-A29	Guide rail
30	60105-A30	Hex nut M8
31	60105-A31	Washer ϕ 8
32	60105-A32	Screw M8X10
33	60105-A33	Locking nut M6
34	60105-A34	Large washer 6

NO	REF NO	Description
35	60105-A35	Screw M6X45
36	60105-A36	Box assembly
37	60105-A37	Table
38	60105-A38	Screw M8X30
39	60105-A39	Washer ϕ 8
40	60105-A40	Locking nut M8
41	60105-A41	Plug
42	60105-A42	Metric bushing
44	60105-A44	Moulder assembly
45	60105-A45	Large washer 8
46	60105-A46	Screw M8X25
47	60105-A47	Hex nut
48	60105-A48	Hex nut M6
49	60105-A49	Large washer 6
50	60105-A50	Moulding faceplate
51	60105-A51	Washer ϕ 6
52	60105-A52	Screw M6X16
53	60105-A53	Hex bush
54	60105-A54	Bush
55	60105-A55	Locking handle
56	60105-A56	Hex nut M8
57	60105-A57	Locking nut M8
58	60105-A58	Washer ϕ 8
59	60105-A59	Exhaustion socket assembly
60	60105-A60	Switch
61	60105-A61	Washer ϕ 6
62	60105-A62	Screw M6X10

PART.B : MOULDING EXHAUSTION ASSEMBLY

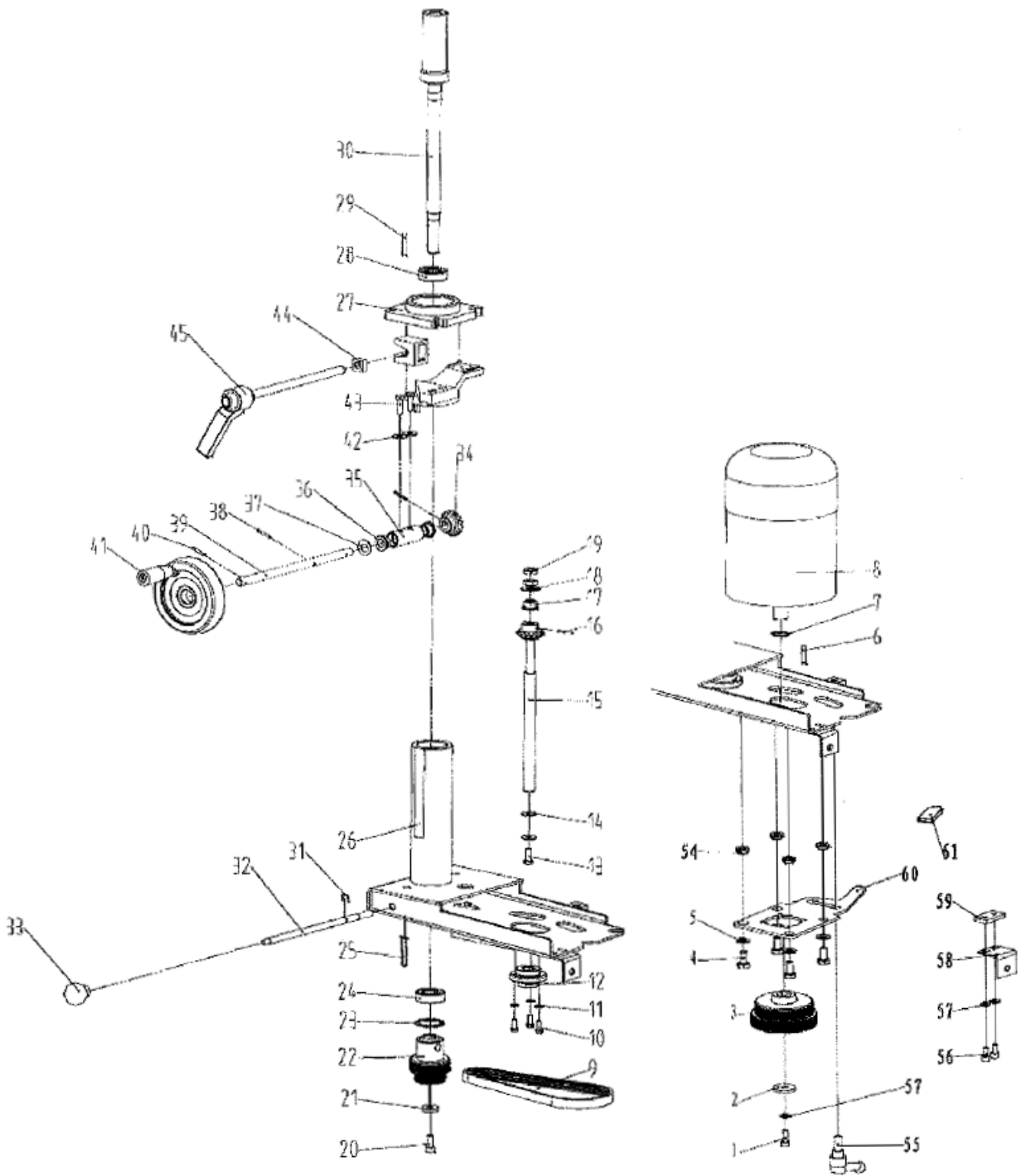


PART.B : PART LIST FOR MOULDING EXHAUSTION ASSEMBLY

NO	REF NO	Description
1	60105-B1	Adjusting wheel
2	60105-B2	Exhaustion socket
3	60105-B3	Guide rack
4	60105-B4	T-shaped bolt
5	60105-B5	Screw M6X10
6	60105-B6	Metal plate
7	60105-B7	Hex bolt M5X12
8	60105-B8	Rhombic handgrip
9	60105-B9	Screw M4X12
10	60105-B10	T-shaped rail
11	60105-B11	Horizontal wood board
12	60105-B12	Turing rack
13	60105-B13	Locking sheet metal
14	60105-B14	Spring
15	60105-B15	Washer φ8
16	60105-B16	Rhombic handgrip
17	60105-B17	Saucer
18	60105-B18	Protective wood board

NO	REF NO	Description
19	60105-B19	M-shaped plate
20	60105-B20	Screw M4X16
21	60105-B21	Hex bolt M5X12
22	60105-B22	Washer φ5
23	60105-B23	Hexangular leader
24	60105-B24	Bolt M8X10
25	60105-B25	Square leader assembly
26	60105-B26	U clamp
27	60105-B27	Screw M4X6
28	60105-B28	Washer φ4
29	60105-B29	Screw M4X6
30	60105-B30	Tube
31	60105-B31	Spring protective broad
32	60105-B32	Locking patch
33	60105-B33	Rhombic handgrip
34	60105-B34	Locking knob
35	60105-B35	Set screw M8X10

PART.C : MOULDING SPINDLE ASSEMBLY

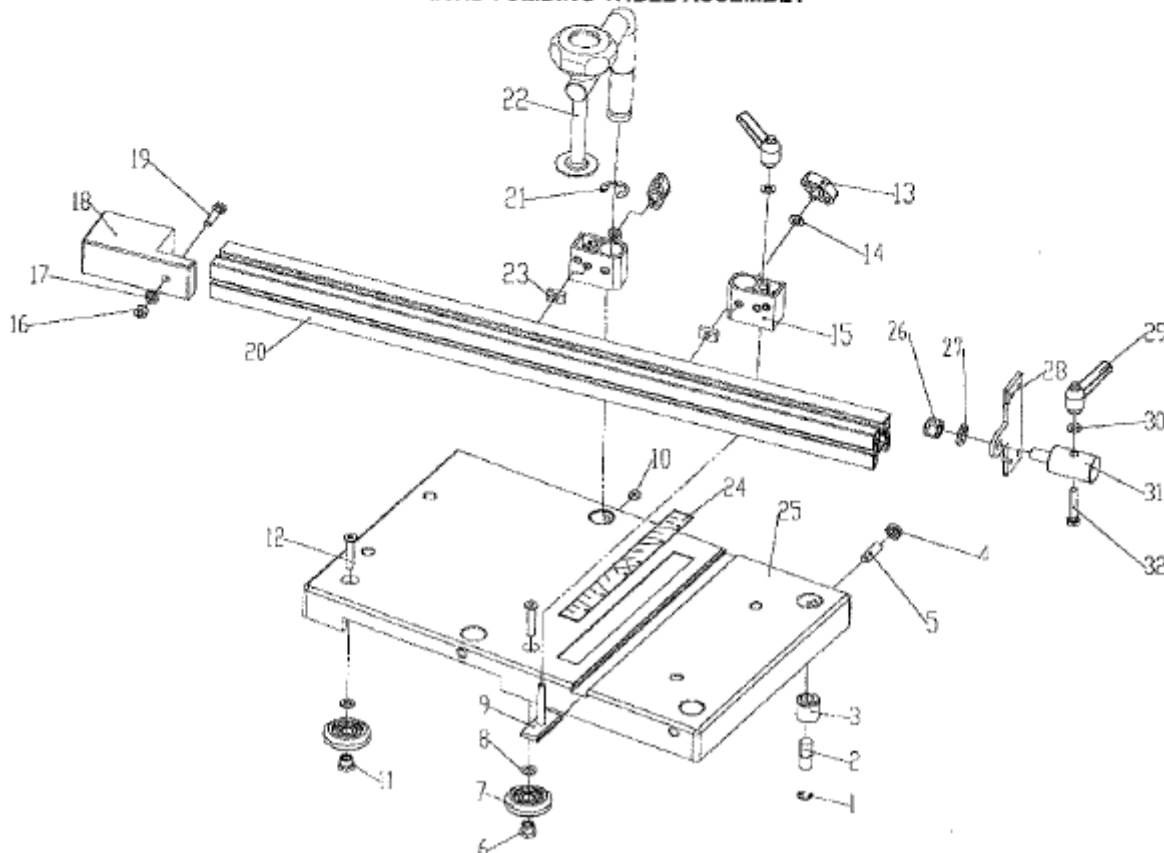


PART.C : PART LIST FOR MOULDING SPINDLE ASSEMBLY

NO	REF NO	Description
1	60105-C1	Screw M6X16
2	60105-C2	Very large washer $\phi 8$
3	60105-C3	Motor pulley
4	60105-C4	Hex bolt M8X16
5	60105-C5	Washer $\phi 8$
6	60105-C6	Key 6X25
7	60105-C7	"C" ring $\phi 19$
8	60105-C8	Motor
9	60105-C9	Cuneal belt
10	60105-C10	Hex bolt M5X12
11	60105-C11	Washer $\phi 5$
12	60105-C12	Nut bush
13	60105-C13	Hex bolt M6X16
14	60105-C14	Large washer $\phi 6$
15	60105-C15	Bolt shaft
16	60105-C16	Spring pin 3X20
17	60105-C17	Bush
18	60105-C18	Flat bearing
19	60105-C19	Hex thin nut M10
20	60105-C20	Screw M6X16
21	60105-C21	Circular washer
22	60105-C22	Driven pulley
23	60105-C23	"C" ring $\phi 35$
24	60105-C24	Bearing 6202
25	60105-C25	Spring clip
26	60105-C26	Motor rack
27	60105-C27	Oriented stand

NO	REF NO	Description
28	60105-C28	Bearing 6003
29	60105-C29	Key 5X30
30	60105-C30	Spindle
31	60105-C31	"E" ring $\phi 6$
32	60105-C32	Locking pole
33	60105-C33	Handball
34	60105-C34	Cone gear
35	60105-C35	Bearing bush
36	60105-C36	Bush
37	60105-C37	Washer $\phi 10$
38	60105-C38	Spring pin 3X20
39	60105-C39	Turning shaft
40	60105-C40	Spring pin 3X25
41	60105-C41	Hand wheel
42	60105-C42	Large washer $\phi 6$
43	60105-C43	Hex bolt M6X16
44	60105-C44	Square toes nut M10
45	60105-C45	Locking pole
54	60105-C54	Space bush
55	60105-C55	Locking handle
56	60105-C56	Screw M6X12
57	60105-C57	Washer $\phi 6$
58	60105-C58	Angle plate
59	60105-C59	Plate
60	60105-C60	Rotation plate
61	60105-C61	Handle coat

PART.D : SLIDING TABLE ASSEMBLY

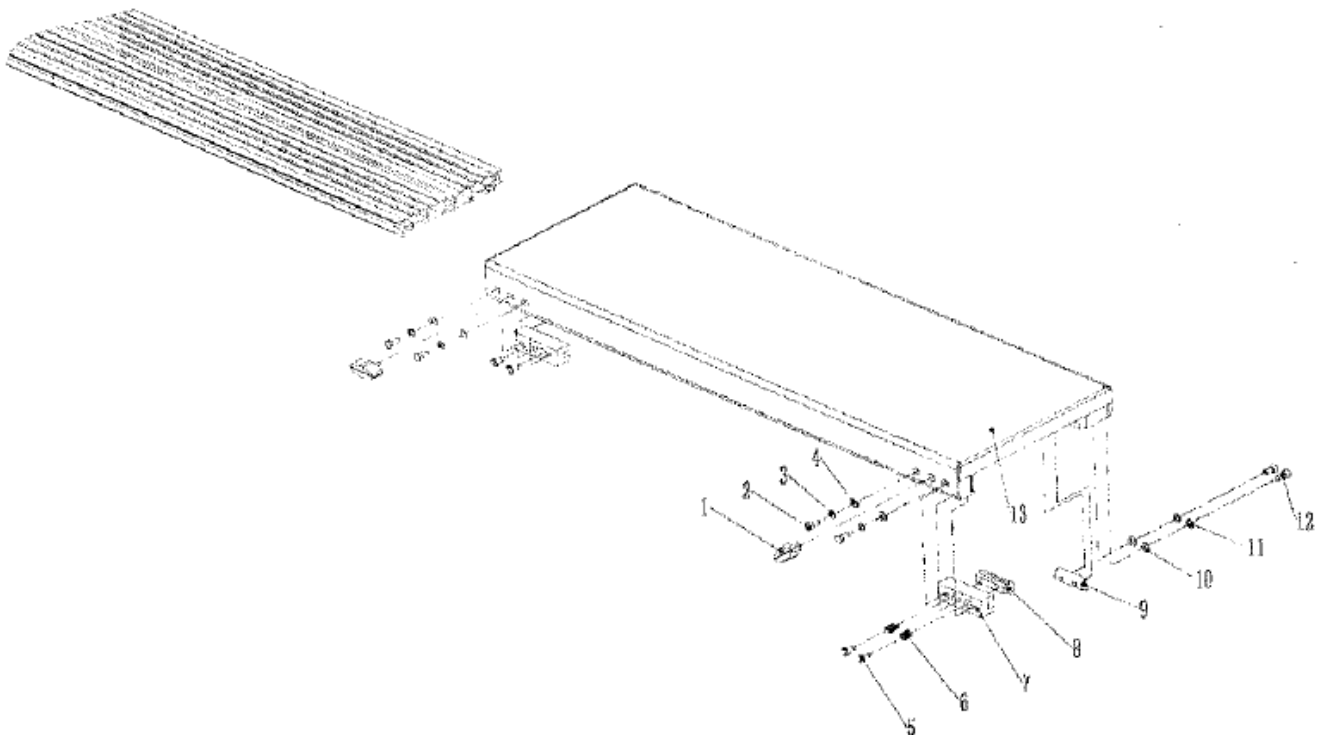


PART.D : PART LIST FOR SLIDING TABLE ASSEMBLY

NO	REF NO	Description
1	60-105-D1	C-shaped ring
2	60-105-D2	sliding axle
3	60-105-D3	Eccentric bush
4	60-105-D4	Hex thin nut M8
5	60-105-D5	Set screw M8X25
6	60-105-D6	Eccentric nut
7	60-105-D7	Trolley
8	60-105-D8	Washer $\phi 6$
9	60-105-D9	T-shaped bolt
10	60-105-D10	Set screw M8X10
11	60-105-D11	Homocentric nut
12	60-105-D12	Socket countersunk screw M6X35
13	60-105-D13	Rhombic handgrip
14	60-105-D14	Washer $\phi 6$
15	60-105-D15	Connecting block
16	60-105-D16	Hex nut M6

NO	REF NO	Description
17	60105-D17	Washer $\phi 6$
18	60105-D18	Wood block
19	60105-D19	Hex bolt M6X25
20	60105-D20	Angle fence
21	60105-D21	"E" ring $\phi 12$
22	60105-D22	Press handle
23	60105-D23	Square toes nut
24	60105-D24	Angle ruler
25	60105-D25	Sliding table
26	60105-D26	Locking nut M10
27	60105-D27	Washer $\phi 10$
28	60105-D28	Turing plate
29	60105-D29	Small handgrip
30	60105-D30	Washer $\phi 6$
31	60105-D31	Locating pole
32	60105-D32	Hex bolt M6X35

PART.E : EXTENSION TABLE ASSEMBLY

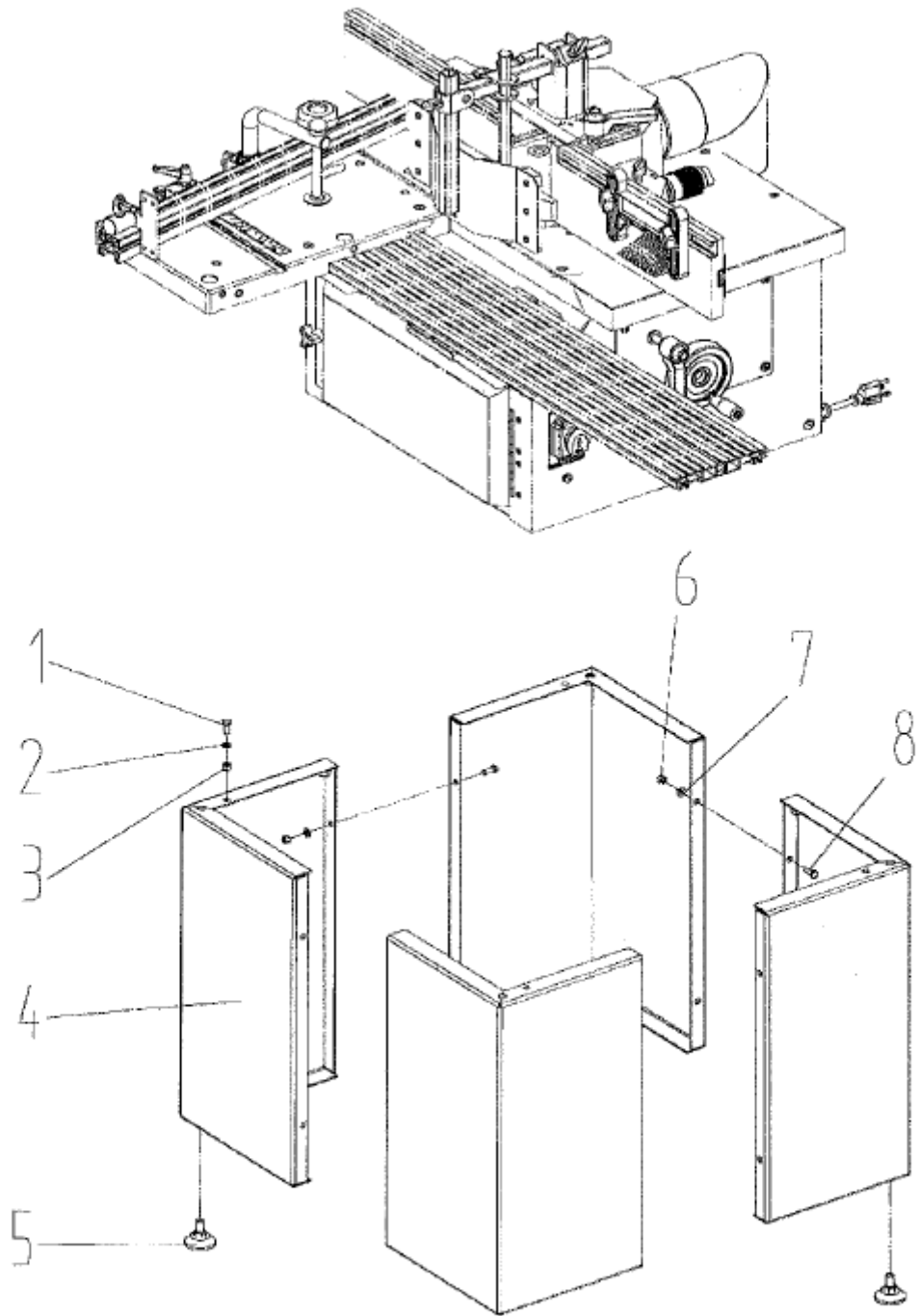


PART.E : PART LIST FOR EXTENSION TABLE ASSEMBLY

NO	REF NO	Description
1	60105-E1	Rhombic handgrip
2	60105-E2	Hex bolt M5X10
3	60105-E3	Spring washer $\phi 5$
4	60105-E4	Washer $\phi 5$
5	60105-E5	Screw
6	60105-E6	Spring
7	60105-E7	Supporting block

NO	REF NO	Description
8	60105-8	Sliding pin
9	60105-9	Fixing pin
10	60105-10	Washer $\phi 5$
11	60105-11	Spring washer $\phi 5$
12	60105-12	Socket cap screw M5X10
13	60105-13	Extending table

PART.F : CABINET STAND ASSEMBLY



PART.F : PART LIST FOR CABINET STAND ASSEMBLY

NO	REF NO	Description
1	60105-F1	Hex bolt M6X16
2	60105-F2	Washer 6
3	60105-F3	Hex nut M6
4	60105-F4	leg

NO	REF NO	Description
5	60105-F5	Underprop
6	60105-F6	Hex nut M6
7	60105-F7	Washer 6
8	60105-F8	Hex bolt M6X16

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CE DECLARATION OF CONFORMITY OF THE MANUFACTURER

SERRACON

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Declares that the: SPINDLE SHAPER (F60-105)

is in compliance with the regulations included in the Directives: CEE 2006/42-2004/108-2006/95

Person authorized to create the technical file: **Robert Paterson**



06.05.2011

The Director

Robert Paterson