

SAFETY AND OPERATING MANUAL 10" Table Saw TS254SL



ORIGINAL INSTRUCTIONS



TS254SL

PRODUCT SPECIFICATION

Table Saw	TS254SL
Motor Power	1800W
Table Size	940x640 mm
Saw Blade	254X30X48T
Cutting Thickness	90° 85mm / 45° 65mm
Blade angle	90°~45°
Max. Ripping Capacity	645mm
Blade Speed	4100 1/min
Net Weight	22KG

USE

This table saw has been designed for cutting wood and plastic materials. You must not cut metal with this table saw.

The machine cannot be used for works other than for which the machine has been designed and that are specified in the Operating Instructions.

The manufacturer will not be liable for any consequential damage and injuries if used incorrectly.

SAFETY INSTRUCTIONS

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

Read all these instructions before operating this product and save the instructions.

GENERAL

- Read through the entire operating instructions before putting into operation.
- The operating instructions must always be near the machine. They must be read by every operator before beginning work and observed conscientiously. Only people who have been trained in the use of the machine and have been informed of the various dangers may work with the machine.
- In addition to the safety requirements contained in these operating instructions and your country's applicable regulations, you should observe the generally recognised technical rules concerning the operation of the woodworking machine.

- The machine must only be used in technically perfect condition in accordance with its designated use and the instructions set out in the operating manual, and only by safety-conscious persons who are fully aware of the risk that is involved in operating the machine. Any functional disorders, especially those affecting the safety of the machine; should therefore be rectified immediately.
- Observe all safety instructions and warnings attached to the machine
- See to it that safety instructions and warnings attached to the machine are always complete and perfectly legible.
- Do not use power tools in damp or wet locations or expose to rain.
- Keep the work area well lit.
- Caution when working, There is a danger to fingers and hands from the rotating cutting blade.
- Make sure that the machine stand is on a level surface.
- Check all power supply lines. Do not use defective lines.
- Keep children away from the machine when it is connected to the power supply.
- Persons working on the machine may not be diverted from their work
- The working space on the machine must be free of chips and wood scrap.
- Wear only close-fitting clothes. Remove rings, bracelets and other jewelry.
- Cleaning, changing, calibrating, and setting of the machine may only be carried out when the motor is switched off. Pull the power supply plug out of the socket and wait for the rotating tool to completely stop.
- Use only sharpened, nick-free and non-deformed saw blades
- Lower the guard onto the workpiece during every working operation. It must stand horizontal above the saw blade
- Always use a push-stick for longitudinal cuts of narrow workpieces (less than 120 mm). The push-stick must be used to prevent you from having to work with your hands near the saw blade. Stop the machine to repair a failure or remove pieces of wood which have become jammed. Make sure you have disconnected the saw from the mains.
- The table insert must be renewed when the saw slot is worn or cracked. Pull out power supply plug before changing.
- When leaving the work place, switch the motor off. Pull the power supply plug out.
- Cut off the external power supply of the machine even if only minor changes are envisaged. Properly reconnect the machine to the supply mains before powering up.

- Avoid accidental starting. Be sure switch is off when plugging in any tool.
- Turn the power off. Don't leave tool until it comes to a complete stop.
- Protect your lungs. Wear a face or dust mask if the cutting operation is dusty.
- Protect your hearing. Wear hearing protection during extended periods of operation.
- Use only correct blades. Do not use blades with incorrect size holes. Never use blade washers or blade bolts that are defective or incorrect. The maximum blade capacity of this saw is 10 inch (254mm).

Use only as authorised

- The machine has been built in accordance with state of the art standards and the recognised safety rules. Nevertheless, its use may constitute a risk to life and limb of the user or of third parties or cause damage to the machine and to other material property.
- The saw is constructed exclusively for the sawing of wood. The required saw blade should be inserted according to the cut type and the wood type (solid wood, chip board or plywood).
- The machine must only be used in technically perfect condition in accordance with its designated use and the instructions set out in the operating manual, and only by safety-conscious persons who are fully aware of the risks involved in operating the machine. Any functional disorders, especially those affecting the safety of the machine, should therefore be rectified immediately.
- Any other use exceeds authorisation. The manufacturer is not responsible for any damages resulting from unauthorised use; risk is the sole responsibility of the operator.
- The safety work and maintenance instructions of the manufacturer as well as the technical data given in the calibrations and dimensions must be adhered to.
- Relevant accident prevention regulations and other, generally recognised safety-technical rules must also be adhered to
- The Table Saw may only be used, maintained, and operated by persons familiar with and instructed in its operation and procedures. Arbitrary alterations to the machine release the manufacturer from all responsibility for any resulting damages
- Remove all fences and auxiliary table before transporting saw. Failure to do so can result in an accident causing possible serious personal injury.
- Always secure work firmly against the rip fence or mitre gauge. Never use the rip fence during the same operation as the mitre gauge.
- Never stand or have any part of your body in line with the path of the saw blade.
- Move the rip fence out of way when cross cutting.
- Never use rip fence as cutoff gauge when cross cutting.

Remaining hazards

The machine has been built using modern technology in accordance with recognised safety rules. Some remaining hazards however, may still exist.

- The rotating saw blade can cause injuries to fingers and hands if the work piece is incorrectly fed
- Thrown work pieces can lead to injury, if the work piece is not properly secured or fed such as working without a limit stop.
- Noise can be a health hazard. The permitted noise level is exceeded when working. Be sure to wear personal protective gear such as ear protection.
- Defective saw blades can cause injuries. Regularly inspect the structural of saw blades.
- The operating instructions supplied with the special accessories must be observed and carefully read when special accessories are used.
- Even when all safety measures are taken, some remaining hazards which are not yet evident may still be present.

ACCESSORIES AND ATTACHMENTS

RECOMMENDED ACCESSORIES

To avoid injury:

- Use only accessories recommended for this machine.
- Follow instructions that accompany accessories. Use of improper accessories may cause hazards.
- Use only accessories designed for this machine to avoid injury from thrown broken parts or workpieces.
- Do not use any accessory unless you have completely read the instruction or operator's manual for that accessory.

BOX CONTENTS

UNPACKING AND CHECKING CONTENTS

Carefully unpack the table saw and all its parts, and compare against the illustration following.

WARNING:

• To avoid injury from unexpected starting, do not plug the power cord into a power source receptacle during unpacking and assembly. This cord must remain unplugged whenever you are assembling or adjusting the machine.

• If any part is missing or damaged, do not plug the machine in until the missing or damaged part is replaced, and assembly is complete.



TABLE OF LOOSE PARTS

Unpack carton; check your machine to see parts listed below:

- 1. Table saw
- 2. Table extension
- 3. Support struts
- 4. Push stick
- 5. Legs
- 6. Leg support stay
- 7. Feet
- 8. Short cross brace
- 9. Long cross brace
- 10. Rip fence
- 11. Blade guard
- 12. Suction hose
- 13. Right fence guide rail
- 14. Left fence guide rail
- 15. Mitre gauge
- 16. Hardware bag (not shown)

ASSEMBLY

Carefully lift the saw from the box and place it on a level work surface.

WARNING: If any parts are damaged or missing, do not operate this tool until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

WARNING: Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

Dust Extraction

Dust from different kinds of wood, minerals and metal maybe harmful to health. Touching or inhaling the dust can cause allergic reactions and/or ailments of the respiratory tract of the user or persons in vicinity. Certain dust such as oak or beech dust is considered carcinogenic, particularly in combination with wood treatment additives (chromate, wood preservatives).

• Always use a dust extraction facility.

- Make sure the workplace is well ventilated.
- Always wear a dust protection mask.
- Observe the regulations valid in your country for the materials to be processed.

Attach the Table Extensions

1. Make sure that the saw blade is at its lowest setting. Turn the saw upside down and place it on the floor with the table facing down.

2. Line the table extension up with the edge of the saw table.

3. Loosely fasten the extension to the table using hex head bolts, flat washers and nuts. Repeat the procedure on the opposite side of the table.

4. Attach the support struts to the table extensions by using hex head bolts, flat washers and nuts.

5. Tighten the nuts when both extensions have been attached.



Attach the Legs and Braces

1. Attach the legs as shown in the picture. The ends of the support struts are fastened using the same screws as legs, as shown in the picture.

2. Attach the cross braces. The long cross braces should be installed parallel to the front side of the saw.



- 3. Push the rubber feet onto the ends of the legs.
- 4. Install the leg supports as shown in the picture. They should be installed on the rear legs.
- 5. With the aid of an assistant turn the saw upright.



Install The Guide Rail

- **1.** Assemble the left guide rail and right guide rail together.
- 2. Position seven bolts in the T-slot of the guide rail. Align all the bolts to the holes on the table.
- **3.** Attach guide rail to the table using flat washers, and hex nuts.
- 4. Hand tighten the hex nuts, Do not completely tighten.

5. Place the rip fence on the table, slide it to just touch the saw blade, check if the pointer indicates "0" on the scale. If not, slide the guide rail to the left or right.

6. Tighten the hex nuts to fix the guide rail.



Set the Riving Knife

- 1. Loosen and remove the screw, lift out the table insert.
- 2. Turn the hand wheel clockwise, set the saw blade to its maximum height.
- 3. Loosen the riving knife locking screw by using supplied wrench.
- 4. Pull the riving knife to the highest position and re tighten the locking screw.



Install the Blade Guard and Suction Hose

Attach the blade guard onto the top of the riving knife by using the hex bolt and wing nut. If a dust extractor is used, connect the suction hose between the blade guard and dust extraction port adaptor.



OPERATION

Make sure the saw is completely intact and correctly assembled before commencing work. Check

that the saw blade is vertical (90°) and is set so that the upper guard is closed to the workpiece.

Regularly check that all nuts and screws are tight.

ON/OFF Switch

Connect the plug to the power source.

Switching on: Push the green button to start the motor.

Switching off: Push the red button to turn the motor off

No-volt release switch

The saw is equipped with a no-volt release switch which prevents it from starting automatically when the power comes back on following a power cut. Once power has been restored the saw must be switched on again by pressing the green button.

Motor overload protector

If the motor is overloaded due to incorrect workpiece feeding or the saw blade being obstructed by debris, the overload cut-out may be triggered.

If the overload protector is triggered:

Unplug the mains lead and let the saw cool down for at least 10 minutes.

Make sure that no contaminants hinder the rotation of the saw blade, brush off and vacuum saw dust.

Press the overload protector reset button.

Switch the saw on by pressing the green button



CHANGE BLADE DEPTH

The blade depth should be set so that the upper guard is close to the workpiece.

Tighten the saw blade bevel locking knob.

Raise the blade by turning the height/bevel adjusting hand wheel clockwise or lower it by turning the handle anticlockwise.

CHANGE THE BLADE ANGLE

Unplug the saw.

Loosen the bevel locking knob.

Adjust the bevel by pushing the hand wheel in towards the saw then turn it. Turning the wheel anticlockwise increases the angle of the blade, bringing it closer to 45°. Turning it clockwise decreases the angle of the blade closer to 90°.

Tighten the bevel locking knob.



CUTTING WITH THE RIP FENCE

Place the rip fence onto the guide rail and lock it in place by lowering the locking lever

Check for a smooth gliding action. If adjustments are needed, see "To Check the Alignment of the Rip Fence to the Blade" in the Adjustment section of this manual.



Note: Rehearse every step of the cutting task without turning the saw on if you are unsure how to hold the workpiece and work safely.

Make a test cut and measure before starting to rip cut on the actual workpiece.

Always let the saw come up to full speed before starting to cut.

Be extra careful at the beginning of every cut.

When rip-cutting thick workpieces where the saw blade is set to its maximum height: check that the riving knife is set to its maximum height setting otherwise there is a risk of the workpiece fastening on the blade guard.

Hold one side of the workpiece against the rip fence and the flat face against the surface of the table.

Do not stand directly behind the workpiece when rip cutting. The workpiece can be thrown back towards the operator.

Place the push stick on the workpiece and press it against the table and the rip fence. Feed the workpiece into the blade in a controlled and smooth motion.



CUTTING WITH THE MITRE GAUGE

The mitre gauge provides greater accuracy in angled cuts. For very close tolerances, test cuts are recommended.

Slide the mitre gauge into one of the slots on the table.

Loosen the locking knob and set the desired angle. Tighten the locking knob again.

If necessary, loosen the two wing knobs and move the fence to the side so that it does not catch on the blade, then tighten the wing nuts back up again.



ADJUSTMENT

TO REPLACE THE BLADE

- Unplug the saw.
- Raise the saw blade to its maximum height, remove the blade guard.
- Loosen and remove the flat head screw, lift out the table insert.
- Make sure that the saw blade tilt angle is set to 0° and locked using the locking knob.
- Loosen the hex head bolt by using two spanners, remove the hex head bolt and outer flange washer.
- Remove the old saw blade, check the inner flange washer is properly placed on the drive shaft, place the new saw blade onto the inner flange washer. Make sure that the saw blade is facing the right way (the teeth must point down toward the front of the saw to work properly).
- Replace the outer flange washer and hex bolt. Hold the drive shaft with one of the spanners on the outer flange washer whilst simultaneously tightening lock nut (clockwise).
- Rotate the blade by hand to make sure it turns freely. Lower the saw blade and reinstall the table insert.





TO CHECK THE ALIGNMENT OF THE RIP FENCE TO THE BLADE

Unplug the saw, check the alignment of the rip fence to the blade.

If necessary, loosen the two hex bolts and adjust so that the rip fence is parallel to the saw blade.

Tighten the two hex bolts again.



MAINTENANGE

Warning: Turn off the machine and disconnect from the power supply before conducting maintenance work.

- Store the manual close to the machine.
- Keep the machine clean.
- Wear goggles when cleaning the machine.
- Check the saw blade regularly. Use only sharp, crack free and not distorted saw blades.
- Regularly clean the inner section of the machine were the wood and chip rests.
- Remove possible sawdust blockages at the port.

TROUBLESHOOTHING

PROBLEM	CAUSE	SOLUTION
Heavy Vibration	Blade is out of balance.	Replace blade.
	Blade is damaged.	Replace blade.
	Saw is not mounted securely.	Tighten all hardware.
	Work surface is uneven.	Reposition on flat surface.
	Blade is warped.	Replace blade.
Rip fence does not	Rip fence not mounted correctly.	Remount the rip fence.
move smoothly.	Rails are dirty or sticky.	Clean and wax rails.
	Clamp screw is out of adjustment.	Adjust clamp screw.
Rip fence does not lock at the rear.	Clamp screw is out of adjustment.	Adjust clamp screw.
Cutting binds or burns	Blade is dull.	Replace or sharpen blade.
work.	Working is fed too fast.	Slow the feed rate.
	Rip fence is misaligned.	Align the rip fence.
	Wood is warped.	Replace the wood . Always cut with convex side to table surface.
Wood edges away	Ripping fence is misaligned.	Check and adjust the rip fence.
from the rip fence when ripping.	e Positive stops inside the saw need Adjusting (Bevel Cuts).	Adjust positive stops.
Saw does not make accurate 90°or 45° cuts.	Mitre gauge is misaligned (Mitre Cuts) .	Adjust the mitre gauge.
Height/bevel adjusting handwheel is hard to turn.	Gears or post inside cabinet are clogged with saw dust.	Clean the gears or screw post.
Saw does not start.	Motor cord or wall cord is not	Plug in motor cord or wall cord.
	plugged in. Switch Defective	Have switch replaced.
	Low Line Voltage	Correct low live voltage.
	Brushes Worn.	Check brushes.
	Circuit breaker is tripped.	Reset circuit breaker.
	Cord or switch is damaged.	Have the cord or switch replaced.

Blade makes poor	Blade is dull or dirty.	Clean, sharpen, or replace blade.
cuts.	Blade is wrong type for cuts being made.	Replace with correct type.
	Blade is mounted backwards.	Remount blade.
Blade does not lower	Locking lever is not at full	Move locking lever to
when turning height	left hand position.	left.
/bevel adjusting hand- wheel.	Some of the rail or teeth broken.	Check the rail and cog teeth.
Motor labors in rip cut.	Blade not correct for rip cut.	Change blade; rip blade typically has fewer teeth.

	Parts List	
1	Extension table	2
2	M4X10 Flat head screw	1
3	Table insert	1
4	M6X14 Hex head bolt	4
5	6mm Flat washer	8
6	M6 Hex nut	4
7	Table	1
8	M6X25 Flat head screw	4
9	M6X25 Flat head screw	4
10	Mitre guage	1
10.1	Locking knob	1
10.2	Mitre guage assembly	1
10.3	Self tapping screw	1
10.4	4mm Lock washer	1
10.5	4mm Flat washer	1
10.6	Pointer	1
10.7	M6X30 Hex head bolt	1
10.8	Sliding bar	1
10.9	Wing knob	2
10.10	M6X25 Carriage bolt	2
10.11	Endstop of plate	2
10.12	Sliding plate	1
10.13	Cover	1
11	Fence assembly	1
11.1	Front cover	1
11.2	Support bracket	1
11.3	Locking bracket	1
11.4	Self tapping screw	2
11.5	Locking knob	1
11.6	4X16mm Spring pin	2
11.7	Fence	1
11.8	Locking rod	1
11.9	Self tapping screw	1
11.10	4mm Lock washer	1
11.11	4mm Flat washer	1
11.12	Fence pointer	1
11.13	M5X14 Pan head screw	2

11.14	5mm Lock washer	2
11.15	M5 Hex nut	2
11.16	M6X10 Hex head bolt	2
11.17	6mm Flat washer	2
11.18	Front support	1
11.19	Guide block	1
11.20	Rear support	1
11.21	Spring	1
11.22	Rear locking plate	1
11.23	M6 Lock nut	1
12	M6 Hex nut	4
13	6mm Flat washer	8
14	M6X14 Hex head bolt	4
15	Support strut	4
16	M6X16 Carriage blot	7
17	6mm Flat washer	7
18	M6 Hex nut	7
19	Left cover	1
20	Right guide rail	1
21	Right cover	1
22	Scale	1
23	M6 wing nut	1
24	Left blade guard	1
25	Self tapping screw	4
26	Right blade guard	1
27	M6X30 Hex head bolt	1
28	Riving knife	1
29	Supporting block	1
30	M8X12 Plastic screw	1
31	6mm Flat washer	2
32	M6X20 Hex head bolt	2
33	Locking plate	1
34	M6X20 Hex head bolt	1
35	Front centre bracket	1
36	Limiting plate	2
37	MOLLENNE	1
	M6 Hex nut	Т
38	Centre shaft	1

40	Connecting plate	2
41	Rear centre bracket	1
42	Motor	1
43	608 Ball bearing	1
44	14mm Retaining ring	1
45	Gear	1
46	M5X10 Socket pan head screw	2
47	5mm Flat washer	2
48	15mm Retaining ring	2
49	6002 Ball bearing	1
50	Gear box cover	1
51	M5X10 Socket pan head screw	3
52	5x5x10mm Key	1
53	Shaft	1
54	Base plate	1
55	Dust cover	1
56	M5X10 Pan head screw	1
57	Inner flange	1
58	Blade	1
59	Outer flange	1
60	M8X16 Hex flange face nut	1
61	Lifting screw	1
62	4X4X10mm Key	1
63	M5X16 Flat head screw	4
64	5mm Flat washer	4
65	M5 Lock nut	4
66	M5X10 Socket head screw	2
67	5mm Flat washer	2
68	Bevel gear	2
69	M5X10 Socket head screw	2
70	5mm Lock washer	2
71	M4X20 Pan head screw	1
72	Extension bracket	1
73	10mm Retaining ring	1
74	Handwheel shaft	1
75	3X20mm Spring pin	1
76	Spring	1
77	Handwheel	1

78	M6 Lock nut	1
79	Cover	1
80	Knob	1
81	Screw	1
82	Knob cover	1
83	10mm Flat washer	2
84	M10 Lock nut	1
85	Angle locking knob	1
86	6mm Flat washer	1
87	5mm Flat washer	1
88	M5X10 Socket head screw	1
89	Pointer supporting plate	1
90	Angle pointer	1
91	5mm Flat washer	1
92	M5X10 Socket head screw	1
93	Base	1
94	M6 Hex nut	4
95	Сар	2
96	Power cord	1
97	Strain relief	1
98	Cord clamp plate	1
99	Self tapping screw	2
100	Overload protector	1
101	Self tapping screw	3
102	Cord clamp	1
103	Switch box	1
104	Self tapping screw	4
105	Switch	1
106	M6X12 Hex head bolt	2
107	6mm Flat washer	2
108	Limiting block	2
109	M5X16 Flat head screw	3
110	Angle rack	1
111	5mm Flat washer	3
112	M5 Lock nut	3
113	Nut	8
114	M6X25 Carriage bolt	1
115	Support bracket	1

116	Washer	1
117	10-21mm Open-end wrench	1
118	10-13mm Open-end wrench	1
119	M6 wing nut	1
120	Dust chute	1
121	Suction hose	1
122	5mm Flat washer	2
123	M5X10 Pan head screw	2
124	Guard plate	1
125	Lock plate	1
126	Self tapping screw	1
127	5mm Flat washer	2
128	Self tapping screw	2
129	Push stick	1
130	6mm Flat washer	8
131	M6X14 Hex head bolt	8
132	Leg	4
133	Long cross brace	2
134	Short cross brace	2
135	M6 Hex nut	20
136	6mm Flat washer	40
137	M6X14 Hex head bolt	20
138	Foot	4
139	Leg support stay	2
140	Left guide rail	1
141	Rail connector	1
142	Self tapping screw	1
143	Side guard plate	1
144	Side guard plate	1
145	4mm Flat washer	4
146	Self tapping screw	4

ASSEMBLY DIAGRAM







DECLARATION OF CONFORMITY

We the Importer:

TOOLSAVE LTD

Unit C, Manders Ind. Est., Old Heath Road, Wolverhampton, WV1 2RP.

Declare that the product:

Designation: 1800W Table saw Model: TS254SL

Standards & technical specifications referred to:

EN IEC 55014-1:2021 EN IEC 55014-2:2021 EN IEC 61000-3-2:2019/A1:2021 EN IEC 61000-3-11:2019

Authorised Technical File Holder: Bill Evans

20/09/2023

The Director