



triton


**Oscillating
Spindle Sander 450W / 3.5A**


TSP S450


 **Operating and
Safety Instructions**

 **Gebrauchs- und
Sicherheitsanweisung**

 **Bedienings- en veiligheids-
voorschriften**

 **Istruzioni per l'uso e la
sicurezza**

 **Instructions d'utilisation et
consignes de sécurité**

 **Instrucciones de funcionamiento
y seguridad**



www.tritontools.com

Thank you for purchasing this Triton tool. Please read these instructions: they contain information necessary for safe and effective operation of this product. This product has a number of unique features and, even if you are familiar with similar products, reading the instructions will help you get the full benefit of its unique design. Keep these instructions close to hand and ensure all users of this tool have read and fully understand them.

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SPECIFICATIONS

Model no:	TSPS450
Voltage:	220V - 240V (450W)
No load speed:	2,000 RPM
Oscillations:	58 OPM
Stroke length:	15mm ($\frac{5}{8}$ ")
Sanding sleeve sizes:	13mm, 19mm, 26mm, 38mm, 51mm, 76mm dia ($\frac{1}{2}$ ", $\frac{3}{4}$ ", 1", $1\frac{1}{2}$ ", 2", 3")
Dust extraction port:	38mm ($1\frac{1}{2}$ ")
Table size:	370mm ($14\frac{1}{2}$ ") x 295mm ($11\frac{1}{2}$ ")
Spindle dimensions:	12.7mm ($\frac{1}{2}$ ") x 1.5mm ($\frac{1}{16}$ ") thread
Insulation:	Double insulated
Net weight:	14.6 kg (32.1 lbs)

SYMBOLS

ENVIRONMENTAL PROTECTION



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.



Always wear ear, eye and respiratory protection.



Conforms to relevant legislation and safety standards.



WARNING. To reduce the risk of injury, user must read instruction manual



Instruction warning.



Double insulated for additional protection.

KNOW YOUR PRODUCT



- 1. On-Board Table Insert Storage
- 2. On/Off Switch
- 3. Motor Housing
- 4. Table Top
- 5. Spindle
- 6. Spindle Lock Nut
- 7. Lower Spindle Washer

- 8. On-Board Spindle Storage
- 9. Upper Spindle Washers (x3)
- 10. Table Insert (x6)
- 11. Sanding Sleeve (x6)
- 12. Rubber Drum (x5)
- 13. Dust Extraction Port
- 14. Wrench

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SAFETY INSTRUCTIONS



WARNING Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

NOTE: The term "residual current device (RCD)" may be replaced by the term "ground fault circuit interrupter (GFCI)" or "earth leakage circuit breaker (ELCB)".

3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
 - b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
 - c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
 - d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
 - e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
 - f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
 - g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- ### 4) Power tool use and care
- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
 - b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
 - c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
 - d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.

e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.

f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

5) Service

a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.**

This will ensure that the safety of the power tool is maintained.

ADDITIONAL SAFETY WARNINGS FOR SPINDLE SANDERS

Even when used as prescribed it is not possible to eliminate all residual risk factors. Use with caution. If you are at all unsure of the correct and safe manner in which to use this tool, do not attempt to use it.

Do not operate the spindle sander until it is fully assembled and you have read and understood the following instructions and the warning labels on the spindle sander.

1. Check the condition of the spindle sander. If any part is missing, bent, or does not operate properly, replace the part before using the sander.
2. Determine the type of work you are going to be doing before operating the spindle sander.
3. Secure your work. Support the workpiece securely on the table, and hold it with both hands.

WARNING: Feed the workpiece gradually, AGAINST the direction of rotation, onto the sanding sleeve. Failure to do this could force the workpiece away from the sanding sleeve with risk of injury. Do not apply excessive pressure.

5. Always keep your hands out of the path of the sander and away from the sanding sleeves. Avoid hand positions where a sudden slip could cause your hand to move into the spindle. Do not reach underneath the workpiece or around the sanding sleeve while the spindle is rotating.
6. On completion of task, turn off the machine and disconnect from mains power. Wait for the spindle to stop rotating before performing maintenance. The sander must be disconnected when not in use or when changing insert plates, sanding sleeves, rubber spindles, or other items.

7. Make sure there are no nails or other foreign objects in the area of the workpiece to be sanded.
8. Never use this sander for wet sanding. Failure to comply may result in electrical shock, causing serious injury or worse.
9. Use only identical replacement parts when servicing this spindle sander.
10. Make sure the spindle has come to a complete stop before touching the workpiece.
11. Take precautions when sanding painted surfaces. Sanding lead-based paint is **NOT RECOMMENDED**. The contaminated dust is too difficult to control, and could cause lead poisoning.

When sanding paint:

- Protect your lungs. Wear a dust mask or respirator
- Do not allow children or pregnant women in the work area until the paint sanding job is finished and the clean-up is completed
- Do not eat, drink, or smoke in an area where painted surfaces are being sanded
- Use a dust collection system when possible. Seal the work area with plastic. Do not track paint dust outside of the work area
- Thoroughly clean the area when the paint sanding project is completed

ASSEMBLY



Always ensure that the tool is switched off and disconnected from the power supply before making any adjustments or installing or removing spindles.

BENCH MOUNTING

When mounting the spindle sander in a permanent position ensure that it is secured to a rigid work surface.

- Use the holes in the base of the spindle sander as a template to mark and drill four holes in your intended mounting surface (ie. workbench). Secure the spindle sander into position using large bolts, washers and nuts (not supplied)
- If the spindle sander is intended to be portable, fix a board to the base which can be easily clamped and removed from various mounting surfaces
- Ensure bolts are long enough to penetrate the workbench or board sufficiently for a secure fix



DUST EXTRACTION

It is recommended that the spindle sander is used with a dust extraction system for a cleaner and safer work environment.

1. Attach the hose from the dust extraction system to the Dust Extraction Port (13) and ensure it is secure
2. For greater efficiency, activate the dust extraction system before turning on the spindle sander

SELECTING A TABLE INSERT

Failure to use the correct table insert with its matching sanding sleeve could result in pinched fingers or the workpiece being pulled down between the table insert and the sanding sleeve.

Use the below chart as a guide to choosing table inserts and sanding sleeves.

Sanding Sleeve Dia	Table Insert Size	Upper Spindle Washer Size
13mm (½")	13mm (½")	Small
19mm (¾")	19mm (¾")	Medium
26mm (1")	26mm (1")	Medium
38mm (1½")	38mm (1½")	Large
51mm (2")	51mm (2")	Large
76mm (3")	76mm (3")	Large

The sanding sleeve should fit snugly into the central cutout of the table insert.



FITTING A SANDING SLEEVE

Note: All of the sanding sleeves, except the smallest 13mm (½") sanding sleeve fit over a matching Rubber Drum (12).

1. Fit the lower Spindle Washer (7) over the Spindle (5) with the fin side facing down
2. Select the correct Sanding Sleeve (11) for the intended job. Select the corresponding Rubber Drum (12), (except when using the 13mm sanding sleeve)



Do not use a sanding drum with the 13mm (½") sanding sleeve.

3. Select the appropriate Table Insert (10) in accordance with table above (see 'SELECTING A TABLE INSERT')
4. Fit the Table Insert (10) over the Spindle (5) and onto the lower spindle washer. Ensure the table insert is flush with the table
5. Fit the Rubber Drum (12) over the spindle
6. Slide the Sanding Sleeve (11) over the Rubber Drum (12)
7. Fit the upper Spindle Washer (9) over the Spindle (5)



- Use the large washer with 75mm (3"), 51mm (2"), and 38mm (1½") rubber drums.
- Use the medium washer with 26mm (1") and 19mm (¾") rubber drums

- Use the small washer with 13mm (1/2") sanding sleeve
- 8. Fit the Spindle Lock Nut (6) on the Spindle (5). Tighten the nut just enough to expand the Rubber Drum (12) against the Sanding Sleeve (11). Do not over-tighten



To maximise the service life of the sanding sleeve, turn it upside down to use any remaining serviceable grit.

Do not use a sanding sleeve that is too worn. This can lead to excessive heat build up and damage the rubber drum. Damaged rubber drums due to worn sanding sleeves will not be covered under warranty.



OPERATION

SWITCHING ON AND OFF

- The On/Off Switch (2) is located on the front of the spindle sander
- To turn the spindle sander ON: Press the green button marked (-)
- To turn the spindle sander OFF: Press the red button marked (0)



SANDING

- **WARNING:** Do not sand metal with this sander. Sanding metal will cause sparks that may ignite wood and dust particles on the sander or in the workshop
- **NOTE:** The spindle rotates in an anti-clockwise direction

1. Check the machine is mounted securely on the workbench and the Spindle Lock Nut (6) is fastened correctly with appropriate sanding sleeve and table insert, in accordance with guidance in 'Assembly'
2. Wear appropriate safety equipment, including face mask and safety glasses, then switch on the dust extraction system (if available)
3. Turn the sander ON and allow the motor to reach full speed

WARNING: Feed the workpiece gradually, AGAINST the direction of rotation, onto the sanding sleeve. Failure to do this could force the workpiece away from the sanding sleeve with risk of injury. Do not force the workpiece or apply excessive pressure

4. On completion of task, turn off the machine and disconnect from mains power.

SERVICE & MAINTENANCE

WARNING! Ensure the tool is switched off and the plug is removed from the power point before making any adjustments or carrying out maintenance.

- Any damage to this tool should be repaired and carefully inspected before use, by qualified repair technician.
- Have your power tool serviced by a qualified repair technician using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

GENERAL INSPECTION

Regularly check that all the fixing screws are tight. They may vibrate loose over time.

POWER CORD MAINTENANCE

If the supply cord needs replacing, the task must be carried out by the manufacturer, the manufacturer's agent, or an authorised service centre in order to avoid a safety hazard.

CLEANING

1. Remove dust and dirt regularly. Frequently blow or vacuum dust away from all sander parts and the motor housing.
2. Periodically remove the table insert and lower washer from the spindle and remove any dust accumulation in the table insert area.
3. Re-lubricate all moving parts at regular intervals.
4. Never use caustic agents to clean plastic parts.

Do not use cleaning agents to clean the plastic parts of the tool. A mild detergent on a damp cloth is recommended. Water must never come into contact with the tool.

WARRANTY

To register your guarantee visit our web site at www.tritontools.com* and enter your details.

Your details will be included on our mailing list (unless indicated otherwise) for information on future releases. Details provided will not be made available to any third party.

Triton Precision Power Tools guarantees to the purchaser of this product that if any part proves to be defective due to faulty materials or workmanship within 12 MONTHS from the date of original purchase, Triton will repair, or at its discretion replace, the faulty part free of charge.

This guarantee does not apply to commercial use nor does it extend to normal wear and tear or damage as a result of accident, abuse or misuse.

* Register online within 30 days.

Terms & conditions apply.

This does not affect your statutory rights

PURCHASE RECORD

Date of Purchase: ___ / ___ / ___

Model: TSPS450

Serial Number: _____

Retain your receipt as proof of purchase