

SAFETY AND OPERATING MANUAL Heavy Duty Drum Sander DS460VS



ORIGINAL INSTRUCTIONS



DS460VS

TECHNICAL SPECIFICATION

Attention: Please choose proper power source, voltage and frequency that are shown in the label for your

machine.

| Drum Sander | DS460VS |
|-----------------------------|----------------------|
| Main Motor | 1800W |
| Feed motor | 80W |
| Maximum Board Width | 460mm (18") |
| Minimum Board Width | 25mm (1") |
| Maximum Board thickness | 115mm (4-1/2") |
| Minimum Board thickness | 3mm (1/8") |
| Sandnaner speed | 50Hz 950m/min |
| Sanupaper speeu | 60Hz 3600FPM |
| Conveyor belt Speed | 0.5~4m/min (2~12FPM) |
| Grinding sand belt Size | 76 X 2115 mm |
| Conveyor belt size | 450X1120 mm |
| Table Size (Length x Width) | 465x460mm |
| With dust collection system | Yes |
| Dust port Size | 75mm (3") |

SAFETY

WARNING: To avoid electrical hazards, fire hazards, or damage to the machine, use proper circuit protection. Use a separate electrical circuit for your machine. To avoid shock or fire, replace power cord immediately if it is worn, cut or damaged in any way.

GENERAL SAFETY INSTRUCTIONS

WARNING: Read carefully these Operating Instructions. Familiarise with the controls and proper use of the machine. Keep the Operating Instructions for future reference. The warning labels with instructions attached to the machine provide important information on safe operation.

1. READ and become familiar with the entire Operator's Manual. LEARN the machine's application, limitations and possible hazards.

- 2. KEEP GUARD IN PLACE and in working order.
- 3. REMOVE ADJUSTINGTOOLS. Form a habit of checking to see that keys, adjusting wrenches or any other tools are removed from the machine before turning ON.
- 4. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- 5. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use machinery in damp or wet locations, or expose them to rain. Keep work area well lighted.
- 6. **KEEP CHILDREN AWAY.** All visitors should be kept at a safe distance from work area.
- 7. MAKE WORKSHOP CHILDPROOF with padlocks.
- 8. DON'T FORCE THE MACHINE. It will do the job better and safer at the rate for which it was designed.
- 9. USE THE RIGHT TOOL. Do not force tool or attachment to do a job for which it was not designed.
- 10. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An under sized cord will result in a drop in line voltage and in loss of power that will cause the tool to overheat.

- 11. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 12. ALWAYS WEAR EYE PROTECTION. Wear goggles for protection against projected chips.
- 13. DON'T OVERREACH. Keep proper footing and balance at all times.
- 14. **MAINTAIN WITH CARE.** Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.
- 15. **DISCONNECT POWER FIRST** before servicing; when changing belt and other part.
- 16. **USE RECOMMENDED ACCESSORIES.** Consult the Operator's Manual for recommended accessories. The use of improper accessories may cause serious injury.
- 17. **NEVER STAND ON MANCHINE.** Serious injury could occur if the machine is tipped or if the cutting tool is unintentionally contacted.
- 18. CHECK FOR DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 20. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER "OFF". Don't leave tool until it comes to a complete stop.
- 21.**BE CAREFUL**. Pay attention to what you are doing. Work reasonably. Do not use the machine when you are tired.
- 22. HAVE YOUR MACHINE REPAIRED BY AN EXPERT ONLY! This machine meets the applicable safety provisions. Any repairs may only be executed by an expert, using original spare parts; otherwise, the user could face a risk of injury.
- 23. **STABLE MACHINE.** Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.
- 24. **HAZARDOUS DUST.** Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a proper respirator to reduce your risk.
- 25. **HEARING PROTECTION.** Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.
- 26.Children and persons not familiarised with the machine and persons with limited physical, sensory and mental skills must not use the machine.

SPECIFIC SAFETY INSTRUCTIONS FORTHE MACHINE

- 1.Do not place your hands or any part of your body between the cutting head and the conveyor belt while the machine is running. It is very danger.
- 2. Do not place fingers under bottom of workpiece while feeding it into sander. It can result in pinching injuries, or possibly getting trapped and pulled into sanding area of machine.
- 3. Tie back long hair, remove jewelry, and do not wear loose clothing or gloves. These can easily get caught in moving parts.
- 4. Check carefully whether the safety guards are intact before starting the machine.
- 5. Never reach inside machine or try to clear jammed workpiece while machine is operating.
- 6. Do not sand any metal products. This sander is designed to sand only natural wood products or some products made from natural wood fiber.

ELECTRICAL REQUIREMENTS

POWER SUPPLY AND MOTOR SPECIFICATIONS

WARNING: To avoid electrical hazards, fire hazards, or damage to the tool, use proper circuit protection. Use a separate electrical circuit for your tools. To avoid shock or fire, if power cord is worn or cut, or damaged in any way, have it replaced immediately.

GROUNDING INSTRUCTIONS

WARNING: This tool must be grounded while in use to protect the operator from electrical shock.

IN THE EVENT OF A MALFUNCTION OR BREAKDOWN, grounding provides a path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment-grounding conductor and a grounding plug. The plug MUST be plugged into a matching receptacle that is properly installed and grounded in accordance with ALL local codes and ordinances.

DO NOT MODIFY THE PLUG PROVIDED. If it will not fit the receptacle, have the proper receptacle installed by a qualified electrician.

IMPROPER CONNECTION of the equipment-grounding conductor can result in risk of electric shock. The conductor with green insulation (with or without yellow stripes) is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, DO NOT connects the equipment-grounding conductor to a live terminal.

CHECK with a qualified electrician or service person if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

Refer to picture:



WARNING: Improper connection of equipment grounding conductor can result in the risk of electrical shock. Equipment should be grounded while in use to protect operator from electrical shock.

WARNING: This machine is for indoor use only. Do not expose to rain or use in damp locations.

GUIDELINES FOR EXTENSION CORDS

USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord,

Be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and cause overheating.

Be sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it. Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

PACKING BOX CONTENTS

UNPACKING AND CHECKING CONTENTS



ASSEMBLY

Assemble the stand.

• 1. Assemble stand with M8x16 carriage bolts, 8mm flat washers and M8 hex nuts. Attach the four feet to the button of the leg and fix them by using 8mm flat washers and M8 hex nuts. Place the stand on a level ground, make sure there is no wobbling or tilting in the stand after fully tightening the nuts.



2. Attach the caster assembly into stand, fix it to legs by using M8X12 socket button cap screws and flat washers.



3. Place the drum sander onto the stand, secure them by using six M8X16 hex head bolts and washers.



Install the filter bag

Align the slot of the filter bag with the circular support and rotate it into place.

Attach the dust chute onto the dust export and push it deep enough.

Attach the filter bag and bag support onto the side bracket.

Connect the filter bag to the dust chute with the hose clamp.





IDENTIFICATION

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.



ADJUSTMENTS

Warning: Turn off the machine and disconnect from the power supply before doing any adjustment.

1. Table adjustment

The height of the conveyor table can be adjusted by turning the hand wheel.

Each full turn of the hand wheel raises the conveyor table 2mm. Maximum depth for most sanding conditions is 0.5mm (1/4 turn=0.3mm).

After adjusting to the desired table height, tighten the locking knob to prevent the hand wheel from accidentally rotating.



If the thickness of the finished workpiece is not the same from left to right, you can loosen the set screw and adjust the adjusting collar to make the table parallel to the sanding drum.



2. Tension & tracking conveyor belt

The conveyor belt will stretch when new and will eventually need to be tensioned. This is most obvious if the conveyor belt starts slipping on the rollers.

When you tension the conveyor belt, focus on adjusting the tensioning bolts in even increments. Adjusting one side more than the other will cause tracking problems_o

To tension conveyor belt:

- 1. Loosen feed roller lock bolts on both sides of conveyor belt.
- 2. Loosen lock nuts and turn both conveyor belt tensioning bolts clockwise one full turn at a time until feed belt no longer slips during operation.

If conveyor belt starts tracking to one side, back off the conveyor belt tensioning bolt that is being adjusted.

3. Tighten lock nuts to lock conveyor belt tensioning bolts in place.



The conveyor belt must track straight. If the feed belt tracks to either side, then the tracking must be corrected or the conveyor belt will become damaged and have to be replaced. The tracking was properly set at the factory, but it is the responsibility of the end user to keep it tracking properly during the life of the machine.

To track conveyor belt:

- 1. Turn conveyor belt ON and watch it track.
- 2. Tension tracking adjustment screw until conveyor belt tracks in opposite direction.
- 3. When conveyor belt is near the middle of the rollers or table, loosen tracking adjustment screw until feed belt stops moving and tracks straight. If conveyor belt tracks too far to the other side, loosen tracking adjustment screw as necessary to bring it back.



3. Sanding depth gauge adjustment

The optimum depth of cut will vary based on the type of wood, feed rate, board width, and finish quality. Attempts to remove too much material can cause jamming, wood burning, rapid paper wear or tearing, poor finish and motor overload.

Place a flat workpiece on the table, turn machine ON and feed workpiece into the sander. Slowly raise the table until workpiece makes light contact with sanding drum. After sanding, feed the workpiece into the machine again by not adjusting table height. Then turn the machine off and use the workpiece to check sanding depth gauge. The sanding depth gauge should indicating zero. If not, Open the top frame cover and loosen the three socket pan head screw and adjust the cutting depth gauge box to set the pointer indicating zero.





4. Feed rate adjustment

The potentiometer allows you to increase the feed rate from 2-12FPM. The correct speed to use depends on the type of stock you are using (hardwood vs. softwood) and the stage of finish with that workpiece

As a general rule, a slower feed rate will sand the surface smoother, but runs the risk of burning the wood; a faster feed rate will remove material faster, but runs the risk of overloading the motor or damaging the sandpaper.

To adjust feed belt speed:

- 1. Turn ON the conveyor belt (DO NOT adjust conveyor speed when the conveyor motor is off).
- 2. Rotate potentiometer clock wise to increase the feed speed or counterclockwise to decrease the conveyor feed speed.



OPERATION

To complete a typical sanding operation, the operator does the following:

- 1. Examines workpiece to verify it is suitable for sanding and to determine which sanding belt grit size to use.
- 2. Verifies workpiece has necessary outfeed clearance and support. If workpiece is wider than conveyor table, operator supports workpiece full width. If workpiece is overly long and difficult to handle, operator uses a roller support stand to assist with feeding.
- 3. Adjust table height to approximate workpiece thickness.
- 4. Put on required safety glasses and respirator.

- 5. Turn the machine ON.
- 6. Feed workpiece into sander by placing front end on infeed side of conveyor table and supporting back end until workpiece engages with pressure rollers.

Note: During initial pass with a new workpiece, operator adjusts table height as necessary so workpiece only makes light contact with sanding belt and does not overload sander.

- 7. Receive workpiece from outfeed side of conveyor table.
- 8. Raises height of conveyor table a small amount (typically 1/8-1/4 of a full rotation of handwheel), then repeats the feeding process of workpiece through sander.
- 9. Change sandpaper to a finer grit as needed.
- 10. Turns sander OFF, and disconnects it from power.



Note: If there is an unexpected situation and you need to stop the machine in an emergency, you can push the emergency stop switch or the emergency stop panel on the front side of the frame.



Sanding Tips

- Replace coarse grit grinding sand belt with a finer grit to achieve a smoother finish.
- Raise the table a maximum of 1/4 turn of the hand wheel until the workpiece is the desired thickness.
- Feed boards into the sander at different places on the conveyor to maximize grinding sand belt life and prevent uneven conveyor belt wear.
- DO NOT sand boards less than 6" long or less than 1/8" thick to prevent damage to the workpiece

- When sanding workpieces with irregular surfaces, such as cabinet doors, take very light sanding passes to prevent gouges. When the drum moves from sanding a wide surface to sanding a narrow surface, the load on the motor will be reduced and the drum will speed up causing a gouge.
- DO NOT edge sand boards. This can cause boards to kickback, causing serious personal injury. Edge sanding boards also can cause damage to the conveyor belt and grinding sand belt.
- When sanding workpieces with a bow or crown, place the high point up (prevents the workpiece from rocking) and take very light passes.
- Feed the workpiece at an angle to maximize stock removal and sandpaper effectiveness, but feed the workpiece straight to reduce sandpaper grit scratches for the finish passes.

MAINTENANCE

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

Replacing grinding sand belt

This drum sander is designed for 3" wide sand belt rolls To change grinding sand belt:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Open top cover and loosen cap screw on sand belt clamps.
- 3. Remove the old grinding sand belt from clamp. Use a flat head screwdriver if necessary to loosen clamp to free sand belt.

Note: Take care not to rip or tear the old sand belt so you can use it as a template when cutting out the replacement sand belt strip.

- 4. Loosen the set screw, turn the left disc so that the internal spring to the tightest position, tighten the set screw to hold the left disc
- 5. Insert corner of new sand belt into right clamp and tighten cap screws
- 8. Wrap sand belt around drum ensuring there are no bubbles or over lapping edge
- 9. When sand belt reaches left side of drum, Place end of sandpaper into clamp, secure it.
- 10. Loosen the set screw release the left disc, make the sand belt tensioned automatically, Tighten the set screw again.





Replacing Conveyor belt

Replacing the conveyor belt is a relatively simple process, but it will require re-tensioning and tracking once the new conveyor belt is installed.

To replace conveyor belt:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Loosen the roller lock bolts.Turn both of the feed belt adjustment bolts clockwise one full turn at a time to release tension from feed belt
- 3. Loosen and remove the table fixing cap screws.
- 4. Have an assistant lift outside edge of the table then slide conveyor belt out
- 5. Clean any dirt or dust off table and rollers, have an assistant lift the table then slide the new conveyor belt on.
- 6. Re-install and tighten all of the screws.



Machine care

- Usually check the condition of the power supply cords and replace them if they are broken, or even worse if the internal wires are shown.
- Use a brush and a shop vacuum to remove chips and other debris from the machine.
- Always keep the machine handgrip clean to prevent accidental slipping during use.
- Clean/vacuum dust buildup from inside cabinet and off of the motor.
- If you do not intend to use the sander machine for a long time, clean it and put it in a dry place if possible.
- Before each use, inspect the general condition of the Belt Sander. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. Do not use damaged equipment.

TROUBLESHOOTHING

| PROBLEM | CAUSE | SOLUTION | | |
|--------------------------|--|--|--|--|
| Machine does not work | • Defective motor, power cable or | Specialized personnel should check the | | |
| | plug, | machine, | | |
| | Overload protector is tripped, | Reset the overload protector, | | |
| | Start capacitor is at fault. | ● Test/replace. | | |
| | Wall fuse/circuit breaker is | Ensure correct size for machine load; | | |
| | blown / tripped. | replace weak breaker. | | |
| | Power switch is at fault. | Replace faulty power switch. | | |
| | Motor is at fault. | Test / repair / replace. | | |
| | • Emergency stop switch is locked | Release the emergency stop | | |
| Machine stalls or is | Workpiece material is not | Only sand wood; ensure moisture is | | |
| underpowered. | suitable for machine. | below 20% and there are no foreign | | |
| | | materials in the workpiece. | | |
| | • Feed rate too fast. | • Decrease feed rate. | | |
| | Machine undersized for | Clean/replace grinding sand belt; | | |
| | task. | reduce feed rate/sanding depth. | | |
| | • V-belt is slipping. | Replace bad belt, and re-tension | | |
| | | V-belt | | |
| | • Plug or receptacle at fault. | • Test for good contacts/correct wiring. | | |
| | • Overload protector is tripped, | Reset the overload protector, | | |
| | Motor is at fault. | Test / repair / replace. | | |
| Machine has vibration or | • Machine undersized for task. | Reduce feed rate/sanding depth. | | |
| noisy operation | Motor or component loose. | Inspect/replace damaged bolts/nuts, | | |
| | | and re-tighten with thread-locking | | |
| | | fluid. | | |
| | V-belt is worn, loose | Inspect/replace belt | | |
| | Pulley loose. | Inspect and retighten the set screw on | | |
| | • Motor mount loose/broken. | pulley. | | |
| | • Bearings at fault. | Test and replace bearing | | |
| 1 | | | | |

| Grinding, screeching, or rubbing noise when | • Drum bearings are worn and need replacement. | Replace drum bearings. |
|---|--|--|
| sanding drum is powered | | |
| Machine lacks power; | • V-belt loose. | • Tighten V-belt 2. |
| drum stops turning under load. | Too much pressure on sanding drum. | Lower conveyor table. |
| Conveyor belt slips under load. | Belt tension not properly adjusted. | Properly adjust belt tension. |
| | Belt tracking not properly adjusted. | Properly adjust belt tracking. |
| | • Conveyor belt worn. | • Replace conveyor belt. |
| | Workpiece too heavy. | • Use lighter workpiece. |
| Conveyor belt tracks to | Conveyor belt tracking is | • Track the conveyor belt so it runs |
| one side | incorrect. | straight. |
| Burn marks on workpiece. | Using too fine of sanding grit | • Use coarser grit sand belt or decrease |
| | for depth of cut. | depth of cut. |
| | Grinding sand belt loaded with sawdust and gum | Clean/replace sand belt |
| | • Feed rate too slow. | Increase feed rate. |
| | • Grinding sand belt not properly wrapped onto drum. | • Re-install grinding sand belt. |
| | • Worn sand belt. | Replace sand belt. |

ASSEMBLY DIAGRAM





Parts List

| 1 | 4.2-1.4X19mm Thread forming screw | 6 |
|----------------------------------|---|--------------------------------------|
| 2 | Rear plastic support A | 1 |
| 3 | Insert cap | 4 |
| 4 | Return roller | 2 |
| 5 | Rear plastic support B | 1 |
| 6 | Front plastic support A | 1 |
| 7 | Front plastic support B | 1 |
| 8 | 4-1.2X14X28 Thread forming screw | 2 |
| 9 | Head frame cover | 1 |
| 10 | Plastic cover | 1 |
| 11 | 3.5-1.3X9.5mm Thread forming screw | 4 |
| 12 | Knob | 1 |
| 13 | M8 Lock nut | 1 |
| 14 | Support base plate | 1 |
| 14.1 | Chip deflector plate | 1 |
| 14.2 | Sponge gasket | 1 |
| 15 | M5X10 Socket button head cap screw | 7 |
| 16 | M4 Hex nut | 4 |
| 17 | 4mm Flat washer | 8 |
| 18 | M4X12 Pan head screw | 4 |
| 19 | Hinge | 2 |
| 20 | 4mm Flat washer | 4 |
| 20 | M4X8 Pan head screw | 4 |
| 21 | Fan pulley | 1 |
| 22 | M6X8 Set screw | 2 |
| 25 | MEX16 Socket button bood con service | 2 |
| 24 | 6mm Elet weeker | 2 |
| 25 | | 2 |
| 26 | Mounting plate | 1 |
| 27 | 3.5-1.3X13mm Thread forming screw | 5 |
| 28 | Ball bearing 6000-2RS | 2 |
| 29 | Zomm Internal retaining ring | 1 |
| 30 | Fan snatt | 1 |
| 31 | Fan | 1 |
| 32 | 6mm Flat washer | 1 |
| 33 | 6mm Lock washer | 1 |
| 34 | M6X12 Socket head cap screw | 1 |
| 35 | Dust exhaust | 1 |
| 35.1 | Pin | 1 |
| 36 | Dust chute | 1 |
| 37 | Hose clamp | 1 |
| 38 | Filter bag | 1 |
| 39 | Filter bag support | 1 |
| 40 | Knob | 1 |
| 41 | Side cover | 1 |
| 42 | M5 Lock nut | 1 |
| 43 | M5X10 Socket head cap screw | 6 |
| 44 | M8X20 Socket head cap screw | 6 |
| 45 | 8mm Lock washer | 6 |
| 46 | 8mm Flat washer | 6 |
| 47 | Side cabinet | 1 |
| 48 | | |
| 49 | Scale plate | 1 |
| | Scale plate Height scale | 1 |
| 50 | Scale plate Height scale 5mm Flat washer | 1 1 6 |
| 50 51 | Scale plate Height scale 5mm Flat washer M5X10 Hex head bolt | 1 1 6 2 |
| 50 51 52 | Scale plate Height scale 5mm Flat washer M5X10 Hex head bolt M6X12 Socket head cap screw | 1 1 6 2 6 |
| 50 51 52 53 | Scale plate Height scale 5mm Flat washer M5X10 Hex head bolt M6X12 Socket head cap screw Bearing house (Left) | 1 1 6 2 6 1 |
| 50 51 52 53 54 | Scale plate Height scale 5mm Flat washer M5X10 Hex head bolt M6X12 Socket head cap screw Bearing house (Left) Ball bearing 6006-2RS | 1 1 6 2 6 1 2 |
| 50 51 52 53 54 55 | Scale plate Height scale 5mm Flat washer M5X10 Hex head bolt M6X12 Socket head cap screw Bearing house (Left) Ball bearing 6006-2RS Head frame | 1 1 6 2 6 1 2 1 |

| 56 | Ball bearing 6205-2RS | 1 |
|-------|------------------------------------|--------|
| 57 | Bearing house (Right) | 1 |
| 58 | M6X12 Socket head cap screw | 3 |
| 59 | Depth scale label | 1 |
| 60 | Cutting depth indicator assembly | 1 |
| 60.1 | Mounting box | 1 |
| 60.2 | Joint rod | 1 |
| 60.3 | M4X6 Socket head cap screw | 1 |
| 60.4 | Rod connecting plate | 1 |
| 60.5 | Transition panel | 1 |
| 60.6 | 4mm Flat washer | 1 |
| 60.7 | 3 5-1 3X9 5mm Thread forming screw | 2 |
| 60.8 | Sring | 1 |
| 60.0 | 3mm Elat washer | 1 |
| 60.10 | 2.0.1x6.5 Thread forming scrow | 1 |
| 60.10 | Sliding block | 1 |
| 60.11 | Silding block | 1 |
| 60.12 | | 1 |
| 60.13 | | 1 |
| 61 | 6mm Flat washer | 3 |
| 62 | M6X10 Socket pan head screw | 3 |
| 63 | Rod connecting block | 1 |
| 64 | 3.5-1.3X9.5mm Thread forming screw | 2 |
| 65 | Pointer trigger plate | 1 |
| 66 | Right support plate | 1 |
| 67 | Left support plate | 1 |
| 68 | M6X8 Socket pan head screw | 4 |
| 69 | M6X8 Socket pan head screw | 2 |
| 70 | 6mm Flat washer | 2 |
| 71 | Micro switch supporting plate | 1 |
| 72 | Micro switch cover | 1 |
| 73 | Rubber bushing | 1 |
| 74 | Inner wire | 1 |
| 75 | Micro switch | 1 |
| 76 | Micro switch box | 1 |
| 77 | 4mm Flat washer | 3 |
| 78 | M4X20 Pan head screw | 3 |
| 79 | Cord clamp | 1 |
| 80 | M5X12 Socket head cap screw | 1 |
| 81 | Stop panel base | 1 |
| 82 | M6X8 Socket pap bead screw | 4 |
| 83 | Spring plate | 2 |
| 84 | MAX6. Socket head can screw | 2 |
| 04 | Shoulder screw | 2 |
| 00 | | 1 |
| 00 | | 1 2 |
| 8/ | | ۲ ۱ |
| 88 | | 1 |
| 89 | MCV20 Socket head cap screw | 1 |
| 90 | Delta shine black | 2 |
| 91 | Beit locking block | 2 |
| 92 | Compression spring | 2 |
| 93 | Sanding belt clamp bracket (Left) | 1 |
| 94 | M6X12 Socket head cap screw | 1 |
| 95 | Belt tension spring | 1 |
| 96 | M8X35 Socket head cap screw | 4 |
| 97 | Left drum cover | 1 |
| 98 | Shaft | 1 |
| 99 | Belt drum | 1 |
| 100 | 8X7X25mm Key | 1 |
| | | |

| 101 | Right drum cover | 1 |
|-------|------------------------------------|---|
| 102 | M8X35 Socket head cap screw | 4 |
| 103 | Sanding belt clamp bracket (Right) | 1 |
| 104 | M6X20 Socket head cap screw | 2 |
| 105 | M6X8 Set screw | 2 |
| 106 | Right limiting collar | 1 |
| 107 | Rear pressure plate | 1 |
| 108 | Front pressure plate | 1 |
| 108.1 | Sponge gasket | 1 |
| 109 | M5 Hex nut | 8 |
| 110 | 5mm Lock washer | 8 |
| 111 | 5mm Flat washer | 8 |
| 112 | 5mm Flat washer | 8 |
| 113 | M5X10 Socket head cap screw | 8 |
| 114 | Connecting plate | 4 |
| 115 | M5X10 Socket head cap screw | 4 |
| 116 | M5X10 Socket button head cap screw | 8 |
| 117 | Grinding Sand belt | 1 |
| 118 | M8X20 Socket head cap screw | 6 |
| 119 | 8mm Lock washer | 6 |
| 120 | 8mm Flat washer | 6 |
| 121 | M8X40 Socket head cap screw | 1 |
| 122 | Bushing | 1 |
| 123 | Ball bearing 6003-2RS | 2 |
| 124 | 8mm Flat washer | 2 |
| 125 | Support plate | 1 |
| 126 | M8 Lock nut | 1 |
| 127 | 6mm Flat washer | 2 |
| 128 | 6mm Lock washer | 2 |
| 129 | M6X12 Socket head cap screw | 2 |
| 130 | Power cord | 1 |
| 131 | Strain relief | 2 |
| 132 | 5mm Serrated washer | 3 |
| 133 | 5mm Flat washer | 3 |
| 134 | 5mm Lock washer | 3 |
| 135 | M5X12 Pan head screw | 3 |
| 136 | Strain relief | 3 |
| 137 | Switch box | 1 |
| 138 | DC motor driver | 1 |
| 139 | 2.9-1x9.5 Thread forming screw | 4 |
| 140 | Terminal | 2 |
| 141 | Switch mounting plate | 1 |
| 142 | M5X12 Pan head screw | 4 |
| 143 | Emergency stop | 1 |
| 144 | Switch | 1 |
| 145 | Overload protector | 1 |
| 146 | Fuse | 1 |
| 147 | Fuse holder | 1 |
| 148 | Potentiometer knob | 1 |
| 149 | Fan belt | 1 |
| 150 | Drive belt | 1 |
| 151 | M6X8 Set screw | 1 |
| 152 | Shaft pulley | 1 |
| 153 | 8X7X25mm Key | 1 |
| 154 | M6X8 Set screw | 1 |
| 155 | Motor pulley | 1 |
| 156 | 6X6X30mm Key | 1 |
| 157 | M8X20 Socket head cap screw | 4 |

| 158 | 8mm Lock washer | 4 |
|-----|------------------------------------|--------|
| 159 | 8mm Flat washer | 4 |
| 160 | Motor | 1 |
| 161 | DC motor | 1 |
| 162 | 4X4X25mm Key | 1 |
| 163 | DC motor mounting plate | 1 |
| 164 | 6mm Flat washer | 4 |
| 165 | 6mm Lock washer | 4 |
| 166 | M6X12 Socket head cap screw | 6 |
| 167 | M5X16 socket head cap screw | 4 |
| 168 | 5mm Lock washer | 4 |
| 169 | 5mm Flat washer | 4 |
| 170 | M5X10 Socket button head cap screw | 2 |
| 171 | Bearing cover | 1 |
| 172 | M8X20 Hex head bolt | 8 |
| 173 | 8mm Lock washer | 8 |
| 174 | 8mm Flat washer | 8 |
| 175 | Rear feed roller bracket (Left) | 1 |
| 176 | Ball bearing 61804-2RS | 1 |
| 177 | Rear feed roller | 1 |
| 178 | Ball bearing 61802-2RS | 3 |
| 179 | Rear feed roller bracket (Right) | 1 |
| 180 | Bearing cover | 3 |
| 181 | M5X10 Socket button head cap screw | 6 |
| 182 | Table | 1 |
| 183 | M8X40 Socket head cap screw | 4 |
| 18/ | 8mm Lock washer | 4 |
| 185 | 8mm Flat washer | 4 |
| 185 | Spacer bushing | 4 |
| 100 | M8X25 Hey head bolt | 4 |
| 107 | M8 Hox put | 2 |
| 100 | Front feed roller bracket (Left) | 2 1 |
| 109 | Front feed roller | 1 |
| 190 | Front feed roller bracket (Right) | 1 |
| 102 | M6 Lock put | 2 |
| 192 | Adjusting rod | 1 |
| 195 | M6X35 Socket head can serow | 2 |
| 194 | | 2 1 |
| 195 | MCV12 Lley head helt | 1 |
| 196 | | 2 |
| 197 | | 4 |
| 198 | omm Flat washer | 4 |
| 199 | Pointer | 1 |
| 200 | | 2 |
| 201 | Adjusting collar | 4 |
| 202 | M6X6 Set screw | 8 |
| 203 | Elevation screw | 4 |
| 204 | 20mm External retaining ring | 4 |
| 205 | M5X16 socket head cap screw | 8 |
| 206 | Bearing seat | 4 |
| 207 | Ball bearing 61904-2RS | 4 |
| 208 | Base cover plate | 1 |
| 209 | Sprocket | 4 |
| 210 | | 3 |
| 211 | 6mm Flat washer | 1 |
| 212 | M6X12 Socket head cap screw | 1 |
| 213 | M5X10 Socket head cap screw | 10 |
| 214 | 5mm Flat washer | 10 |
| 215 | M8X16 Socket head cap screw | 2 |

| 216 | 8mm Lock washer | 2 |
|-----|------------------------------------|---|
| 217 | 8mm Flat washer | 2 |
| 218 | Chain | 1 |
| 219 | Idle sprocket | 2 |
| 220 | Support rod | 2 |
| 221 | Elevation nut | 1 |
| 222 | Base | 1 |
| 223 | Lock knob | 1 |
| 224 | M6X8 Set screw | 1 |
| 225 | Bevel gear (15T) | 1 |
| 226 | Ball bearing 61803-2RS | 2 |
| 227 | Support bracket | 1 |
| 228 | M5X16 socket head cap screw | 2 |
| 229 | Shaft | 1 |
| 230 | 5X5X16mm KEY | 1 |
| 231 | Hand wheel | 1 |
| 232 | 8mm Flat washer | 1 |
| 233 | M8X16 Socket head cap screw | 1 |
| 234 | Bevel gear (25T) | 1 |
| 235 | Ball bearing 61906-2RS | 1 |
| 236 | 47mm Internal retaining ring | 1 |
| 237 | Bearing support block | 1 |
| 238 | 8mm Flat washer | 2 |
| 239 | M8X12 Socket button head cap screw | 2 |





DECLARATION OF CONFORMITY

We Importer:

TOOLSAVE LTD

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

Declare that the product:

Designation: Drum Sander Model: DS460VS

Standards & technical specifications referred to:

EN ISO 19085-1:2017 EN ISO 19085-8:2018

Authorized Technical File Holder: Bill Evans

01/01/2025

The Director

