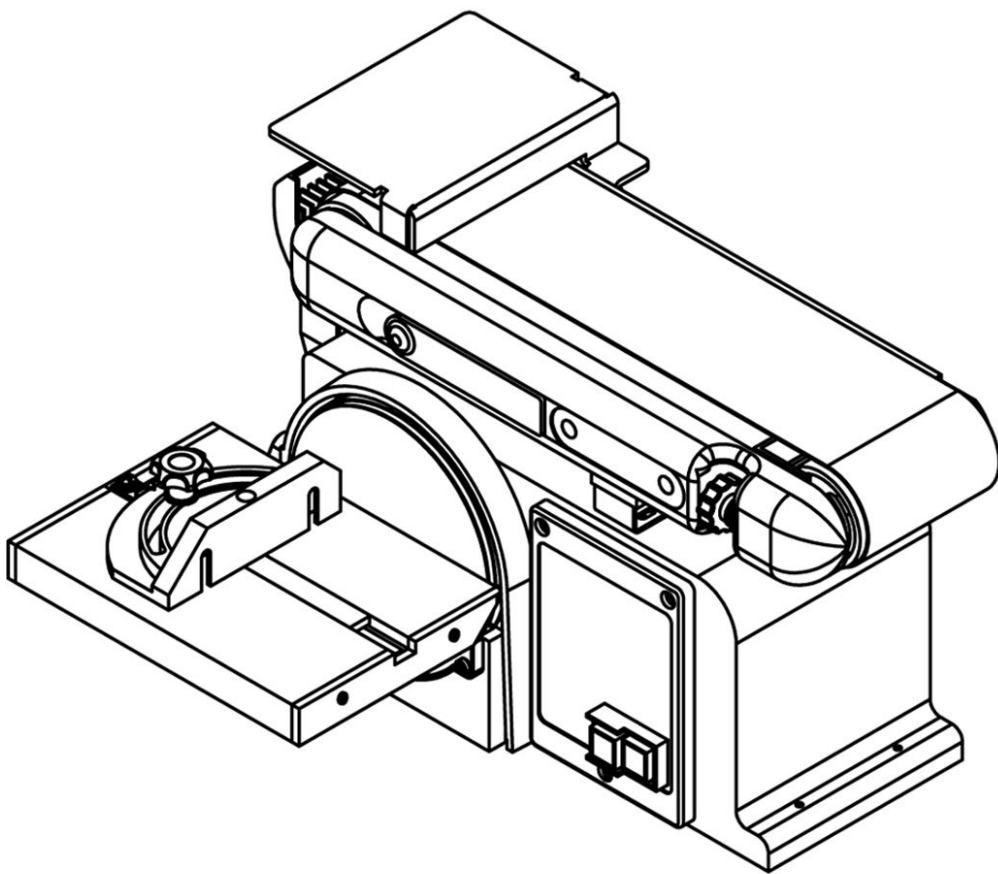


EXCEL

OPERATION & MAINTENANCE INSTRUCTIONS

BELT & DISC SANDER



Important!

It is essential that you read the instructions in this manual before assembling, operating and maintaining the product.

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INTRODUCTION

Thank you for purchasing this product.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

GUARANTEE

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

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

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

This guarantee does not effect your statutory rights.

IN THE BOX

The following should be supplied inside the box.

- 1 x Belt/Disc Sander
- 1 x Sanding Table
- 1 x Tilting Work Table (Fitted)
- 1 x Lower Disc Guard
- 1 x Mitre Guide Assembly
- 1 x 6 mm Hexagon Key
- 1 x Sanding Belt
- 1 x Sanding Disc
- 1 x Fixings Pack

GENERAL SAFETY RULES

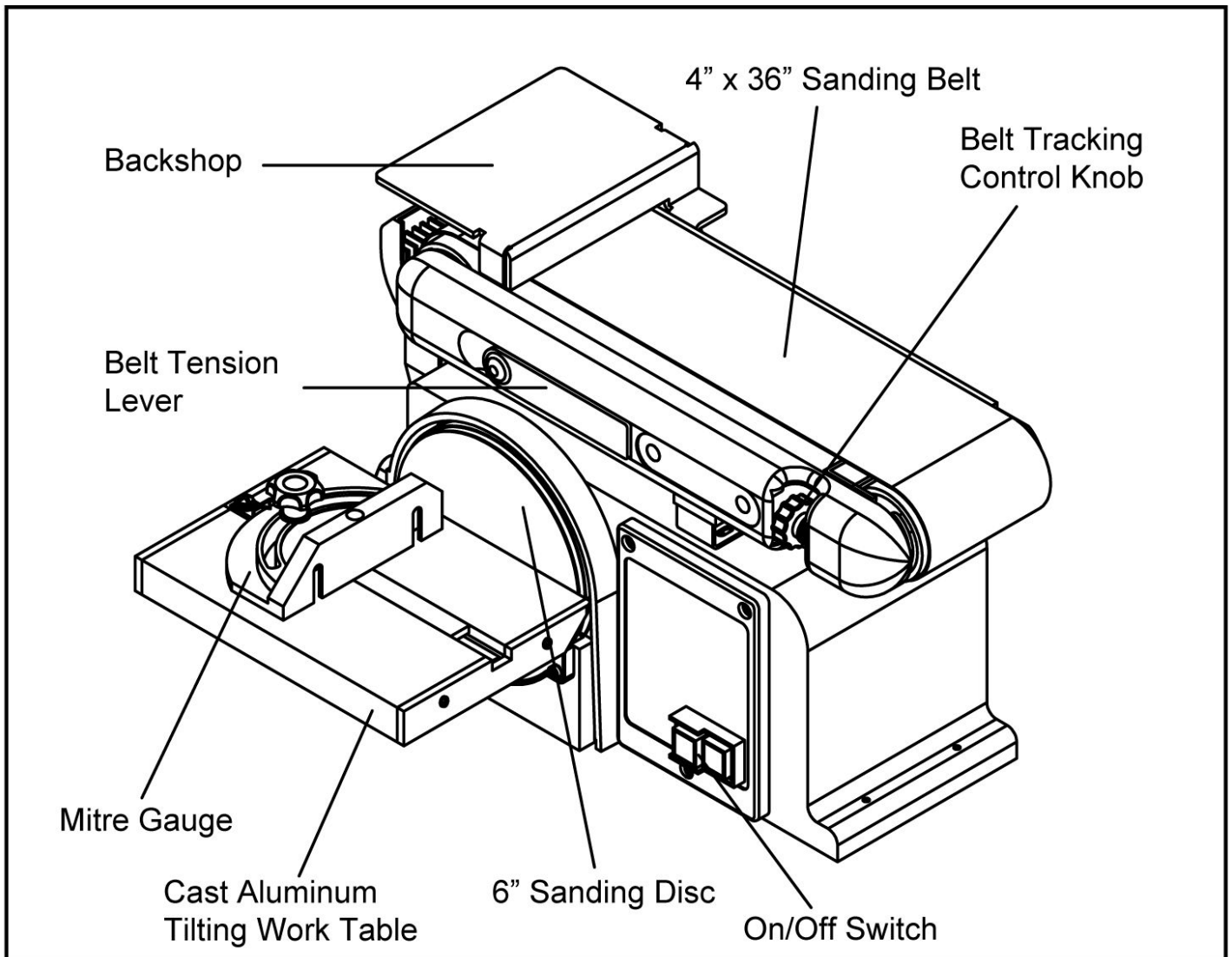
1. **ALWAYS** learn the machines applications, limitations and the specific potential hazards. Read and become familiar with the entire operating manual.
1. **ALWAYS** use a face or dust mask if the operation is particularly dusty.
2. **ALWAYS** check for damage before using the machine, check for alignment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

15. **NEVER** operate machine while under the influence of drugs, alcohol or any medication.
16. **NEVER** leave machine running unattended. Turn power off. Do not leave the machine until it comes to a complete stop.
17. **NEVER** force the machine, it will do a better and safer job at the rate for which it was designed.
18. **NEVER** use power tools in damp or wet locations or expose them to rain. Do not use in an explosive atmosphere (around paint, flammable liquids etc.). Avoid dangerous environments.
19. If the tool begins to make an abnormal noise, or produce excessive vibrations, smoke or burning odour, turn the tool off immediately and do not operate, until repaired.

EXTRA PRECAUTIONS FOR BELT/DISC SANDERS

1. **ALWAYS** wear ear protectors/defenders when using this machine.
2. **ALWAYS** wear a dust mask when using this machine. Be aware that harmful or toxic dusts could be produced when sanding some woods.
3. **ALWAYS** use the table to support the workpiece.
4. **ALWAYS** check to ensure the table and attachments are secure before starting.
5. **ALWAYS** maintain a clearance of 2-3mm between table and sanding disc.
6. **ALWAYS** hold the workpiece firmly so that it cannot be torn from your hands.
7. **ALWAYS** feed the workpiece against the direction of rotation of the disc. i.e the LEFT side of the disc.
8. **ALWAYS** keep the mains cable well away from the machine and ensure an adequate electrical supply is close at hand so that the operation is not restricted by the length of the cable.
9. **ALWAYS** use a dust extraction device, properly connected to the dust extraction port.
10. **ALWAYS** ensure that nails or foreign objects have been removed from a workpiece beforehand. Nails etc. will destroy the belt or disc.
11. **NEVER** allow the ventilation slots in the motor to become blocked.
12. **NEVER** sand pieces which cannot be held firmly by hand.

OVERVIEW



Sanding operations are inherently dusty. It is strongly recommended that users use a dust-collection system when using this belt & disc sander. The use of a mask or respirator is still recommended even when a dust-collection system is in use.

ASSEMBLY

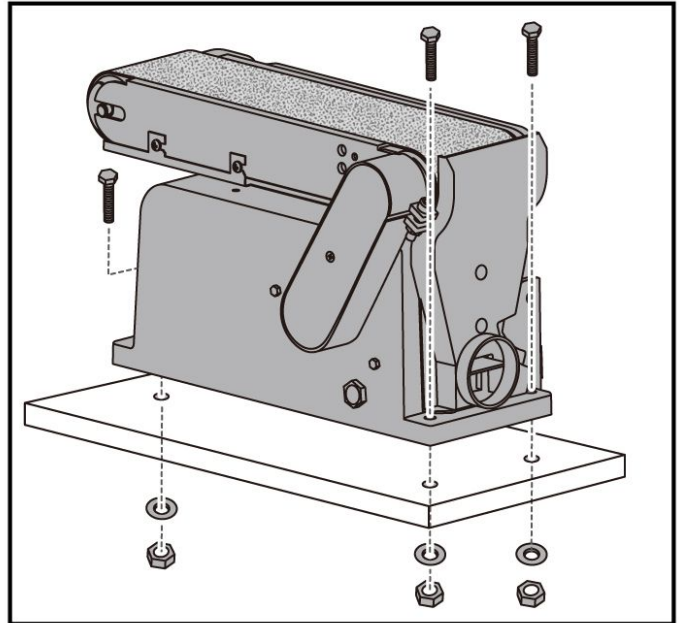


CAUTION: THE SANDER MUST ASSEMBLED BEFORE USE. DO NOT PLUG UNIT INTO POWER SOURCE UNTIL THE UNIT HAS BEEN COMPLETELY ASSEMBLED.

MOUNTING THE SANDER TO A WORKBENCH

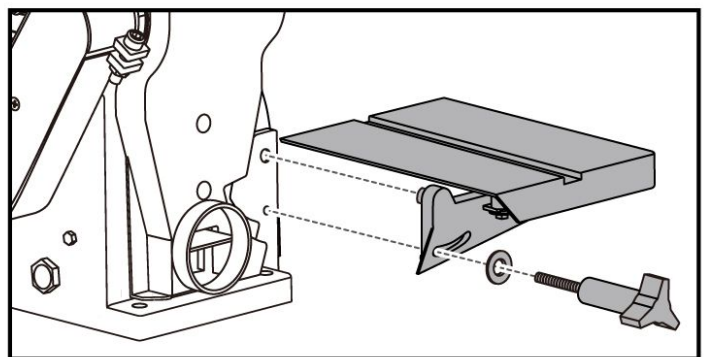
Before attempting to use this sander, it should be properly mounted to a workbench or stand

1. Position the sander on the workbench where you intend to use it.
2. Mark the workbench through the mounting holes located in the sander base. Drill holes in the workbench at the marks.
3. Use long bolts, spring washers and nuts (not supplied), to secure the sander to the workbench as shown.



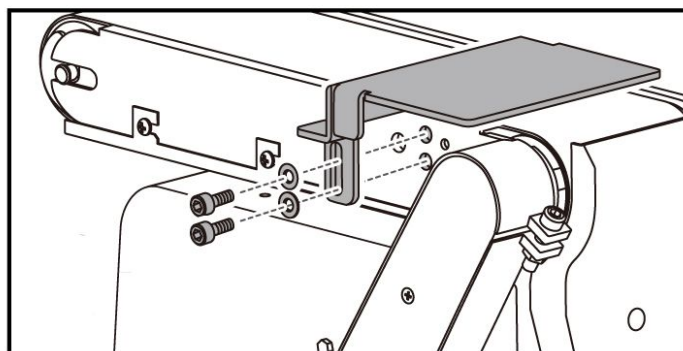
MOUNTING THE TILTING WORK TABLE ASSEMBLY

1. Position table-support bracket so that the "pivot pin" fits into the corresponding hole on the sander frame and the radius slot aligns with the threaded hole in the frame.
2. Place washer on threaded shaft of knob, insert through radius slot, and tighten into threaded hole.
3. Adjust table to angle desired for sanding task.
4. To avoid trapping the workpiece or your fingers between the table and disc, adjust the position of the table on it's mounting bracket to maintain a gap of no more than 2 mm.



INSTALLING THE BACKSTOP

1. Position the backstop against the belt frame so that the slot aligns with threaded hole in frame.
2. Secure the backstop to frame with 2 x socket head screws, washers as shown. Do not overtighten.
 - The gap between the sanding belt and the backstop should be no more than 2mm.



CHANGING THE SANDING DISCS

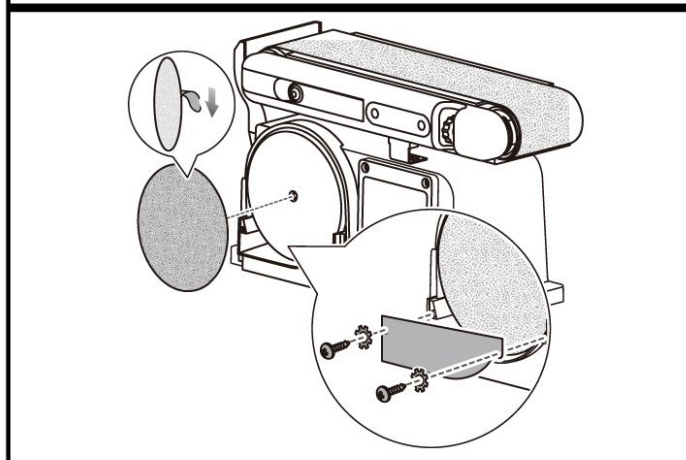
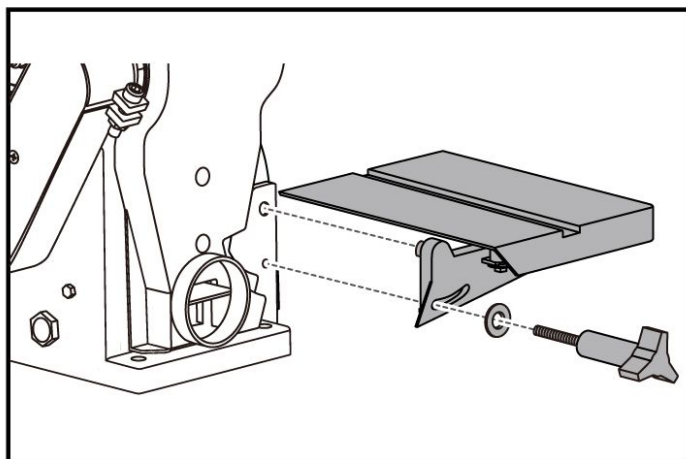


WARNING: TURN THE POWER OFF AND REMOVE THE PLUG FROM THE OUTLET BEFORE CHANGING THE ACCESSORIES.



CAUTION: 'HOOK & LOOP' SANDING DISCS CANNOT BE USED WITH THIS SANDER!

1. Remove mitre gauge and work table assembly.
2. Remove the disc guard screws and disc guard.
3. Remove sanding disc from disc plate. Sanding discs are attached to the plate using a pressure-sensitive adhesive
4. Ensure the disc plate is clean.
5. Peel backing away from the new sanding disc.
6. Align perimeter of disc with plate and press disc firmly into position on plate, leaving no loose edges.
7. Replace the disc guard, disc guard screws and work table.

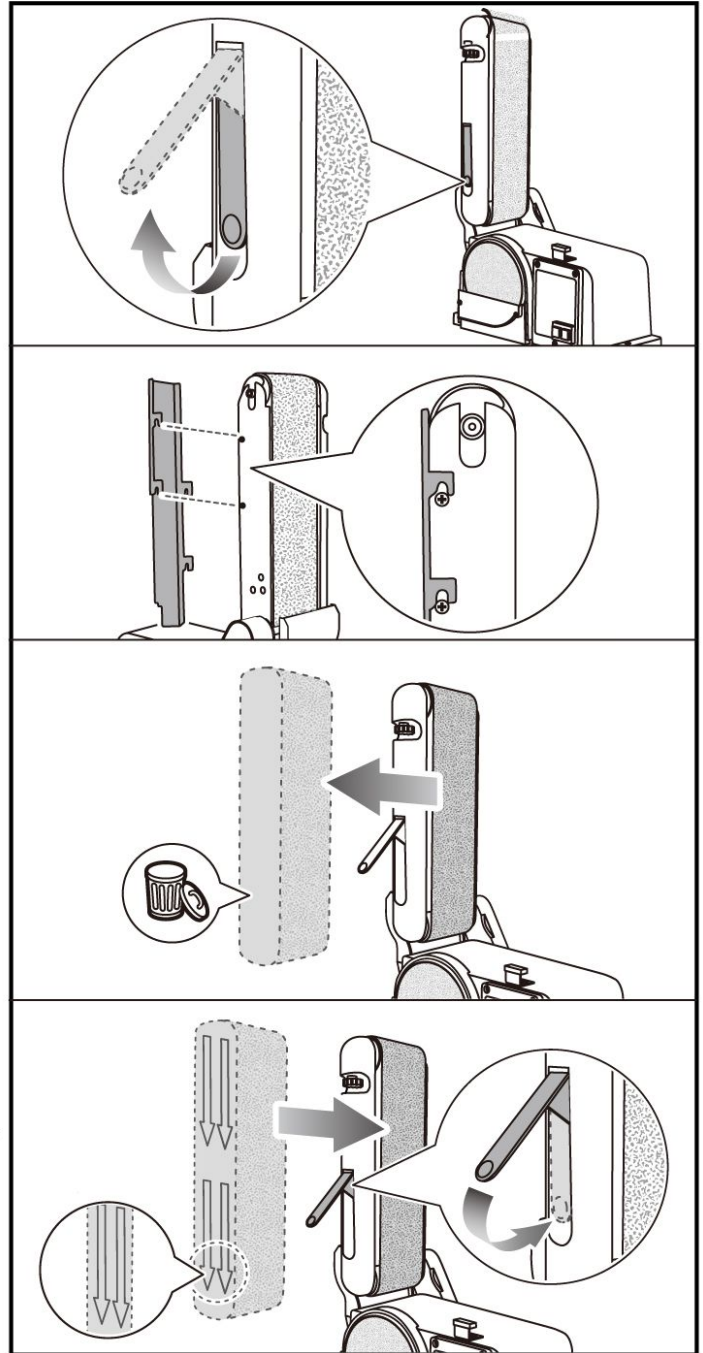


CHANGING THE SANDING BELTS



CAUTION: CHECK THE INSIDE OF THE BELT FOR A "DIRECTION ARROW". IF PRESENT, INSTALL THE BELT WITH THE ARROW POINTING IN THE SAME DIRECTION AS THE DIRECTION INDICATOR ON THE HOUSING.

1. Loosen the socket head screw using the 6 mm hex wrench provided.
2. Raise the belt sanding arm as shown.
3. Slide out one end of the tension lever as shown to release belt tension.
4. Remove the tray located on the bottom of the belt sanding arm by loosening the two screws on the back of the belt sanding arm.
5. Slide the sanding belt off of the drive and idler drums.
6. Slide new sanding belt over the drive and idler drums. Ensure the belt is centred on both drums and is the right way round.
7. Return the tension lever into its original position to apply tension to the belt.
8. Replace the tray and tighten the two screws on the back of the belt sanding arm.
9. Lower the belt sanding arm and tighten the socket head screw using the 6mm hex wrench provided.
10. Before using, check belt tracking as described in the next section and adjust as necessary.



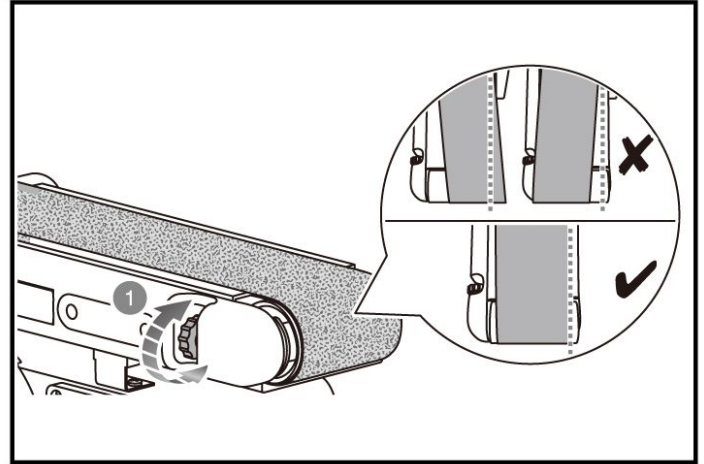
BELT TRACKING

The belt-tracking adjustment is set at the factory so that the abrasive belt will run true on the drums. If, however, the belt should track to one side or the other, an adjustment can be made by turning the tracking knob.

- Turning the knob clockwise will cause the belt to track to the right (towards the disc sander).
- Turning the knob counter-clockwise will cause the belt to track to the left side of the machine.

TO TRACK THE SANDING BELT

1. Rotate the sanding arm to the desired position and tighten socket head screw to secure.
2. Turn power switch ON,
3. Note whether the belt tends to wander off its track, and to which side (left or right) of the sander.



- If the sanding belt does not move to either side, it is tracking properly.
 - If the sanding belt moves to the right (disc side of the sander), turn the tracking knob counter clockwise $\frac{1}{4}$ turn.
 - If the sanding belt moves to the left (away from the disc), turn the tracking knob clockwise $\frac{1}{4}$ turn.
4. Readjust tracking knob another $\frac{1}{4}$ turn, as necessary.

OPERATION



WARNING: NEVER TOUCH THE SANDING DISC OR BELT WHILE IT IS MOVING, DO NOT TOUCH THE WORK PIECE AFTER SANDING, IT COULD BE VERY HOT.

WARNING: ALWAYS WEAR SAFETY GLASSES WHEN OPERATING THE SANDER

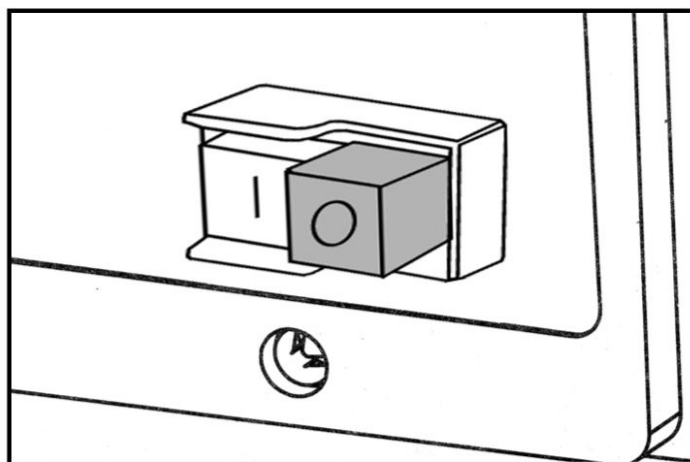


CAUTION: ALWAYS MAKE SURE THE WORK TABLE AND BACKSTOP ARE PROPERLY ADJUSTED AND SECURE BEFORE USE.

ON/OFF BUTTONS

The On/Off buttons are located on the front of the sander.

1. Press the GREEN button (I) to turn the sander on.
2. Press the RED button (O) to turn the sander off.
 - If the power supply is interrupted for any reason, the unit will automatically switch off. When power is restored, simply press the GREEN button to resume work.



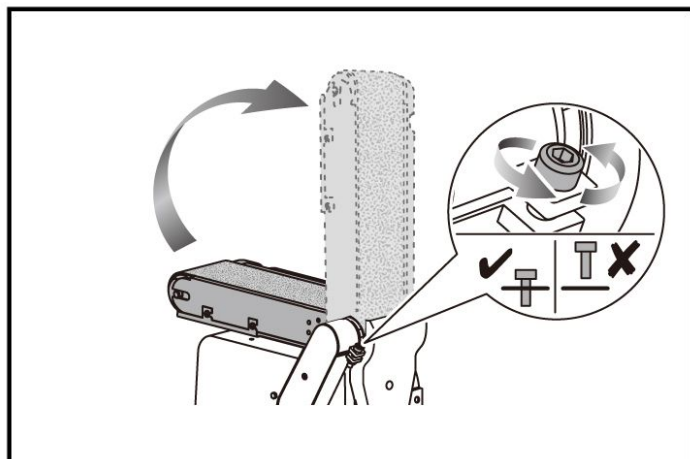
BELT SANDING

HORIZONTAL AND VERTICAL SANDING

The sanding belt can be used in the vertical or horizontal position, depending on operator needs and the workpiece.

To change from one position to the other:

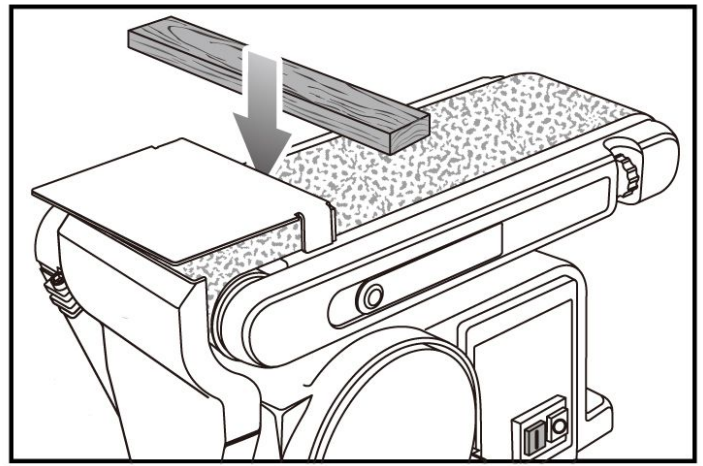
1. Loosen the socket head screw using the 6 mm hex wrench provided.
2. Manually move the sanding belt to the desired angle and retighten the socket head screw.



SURFACE SANDING ON THE BELT

When sanding flat broad surfaces on the belt hold the workpiece firmly on the surface of the belt and against the backstop, keeping fingers away from the sanding belt. Consider using a push or hold-down stick.

- Use extra caution when sanding very thin pieces, and when sanding extra long pieces, remove the backstop.



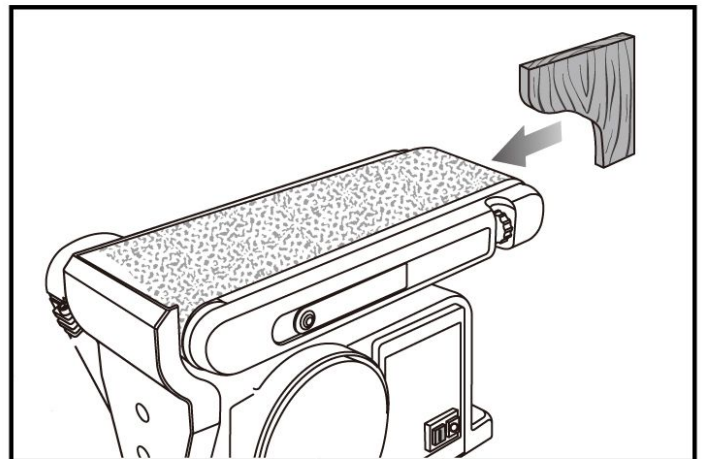
NOTE: When using the sander without the backstop, ensure that you have a firm hold on the workpiece at all times and take extra care.

- Apply only enough pressure to allow the sanding belt to remove material.

SANDING CURVED PIECES

When sanding inside-curves on the belt sander, always sand on the idler drum end of the belt.

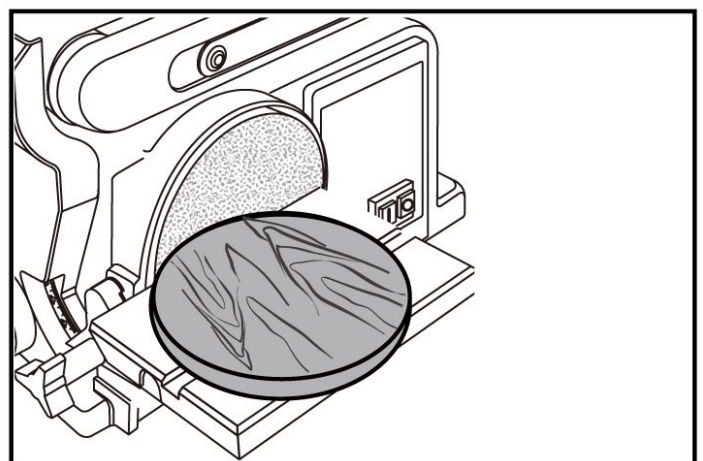
1. Hold the workpiece firmly, keeping fingers away from the sanding belt. Keep the curve pressed firmly against the idler drum, moving the work evenly back and forth across the drum.



SANDING DISC

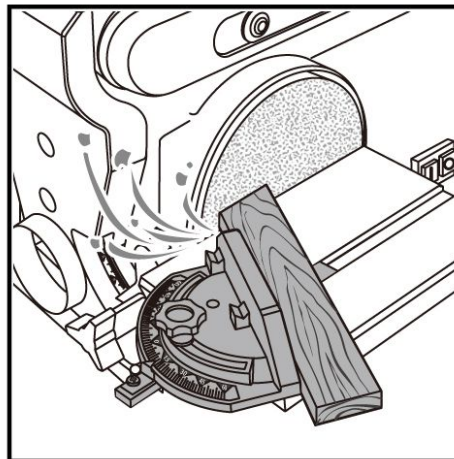
SANDING OUTSIDE CURVES

Always sand outside curves using the sanding disc and moving the workpiece from the left side of centre, as shown. Keep the curve pressed firmly against the sanding disc, moving the work evenly from the left side of the sanding disc. Be sure to hold the workpiece firmly against the surface of the table.



MITRE GAUGE - DISC SANDER

A mitre gauge can be used on the work table, as shown. The mitre gauge head can be set anywhere up to 60° (right or left) by loosening the lock-knob, setting the mitre gauge head to the desired angle, and tightening the lock-knob.



SANDING SMALL SURFACES USING THE MITRE GAUGE

Use of the mitre gauge is recommended for sanding small end surfaces on the sanding disc.

NOTE: Always move the workpiece across the left side (dust chute end of machine) of the sanding disc and be sure to hold the workpiece down tightly onto the table surface.

MAINTENANCE



WARNING: ALWAYS DISCONNECT TOOL FROM POWER SOURCE BEFORE MAKING ANY ADJUSTMENTS, INSTALLING OR PERFORMING MAINTENANCE.



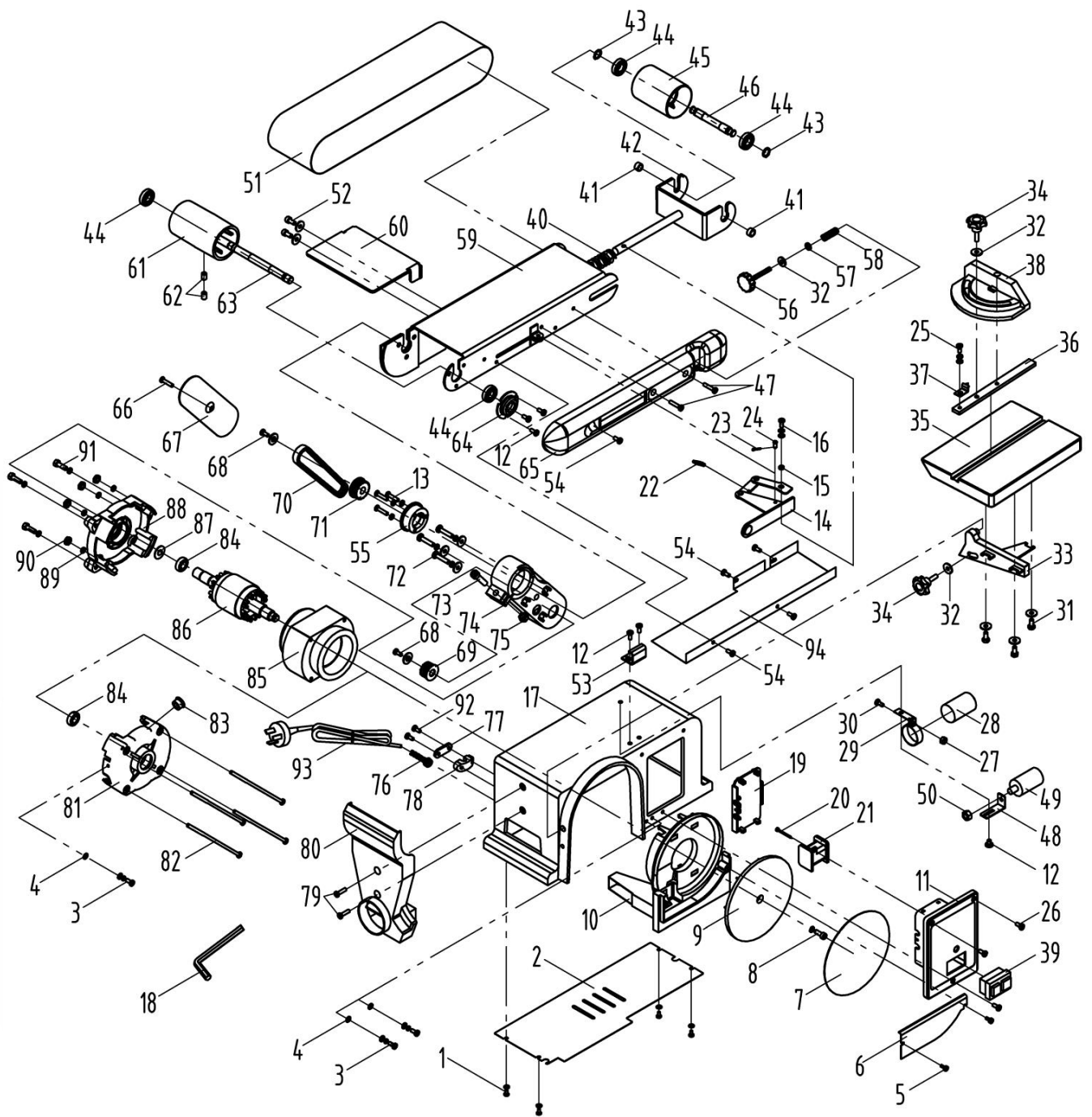
CAUTION: TOOL SERVICE MUST BE PERFORMED ONLY BY QUALIFIED REPAIR PERSONNEL. SERVICE OR MAINTENANCE PERFORMED BY UNQUALIFIED PERSONNEL COULD RESULT IN A RISK OF INJURY. WHEN SERVICING A TOOL, USE ONLY IDENTICAL REPLACEMENT PARTS. FOLLOW INSTRUCTIONS IN THE MAINTENANCE SECTION OF THIS SERVICE MANUAL. USE OF UNAUTHORISED PARTS OR FAILURE TO FOLLOW MAINTENANCE INSTRUCTIONS MAY CREATE A RISK OF ELECTRIC SHOCK OR INJURY.

1. Clean the machine, belt and disc after each use.
2. Keep the machine dry, clean and free from oil and grease.
3. Store the tool in a safe and dry place, out of reach of children.
4. During normal use, sanding belts and disc can become loaded with sanding debris. Use a stick belt cleaner (available at most hardware stores) to remove build-up.

SPECIFICATIONS

Mains Voltage	230-240V/50Hz
Power	370W
Belt Speed	7.5m/s
Belt Size	100 X 910mm
Belt Tilt	0 - 90 degree
Disc Size	150mm
Disc Speed	2850rpm
Table Size	225 X 158mm
Table Tilt	0 - 45 degree

EXPLODED DIAGRAM & PARTS LIST



EXPLODED DIAGRAM & PARTS LIST

No.	Description	No.	Description
1	Phillips screw + flat washer	30	Phillips screw (white)
2	Base plate	31	Hex head bolt +Big Flat Washer(Black)
3	Phillips Screw +spring washer +flat washer Assembly	32	Big flat washer(black)
4	Toothed lock washer	33	Work table support
5	Self tapping screw (Black)	34	Mitre gauge handle
6	Disc cover	35	Work table
7	Disc paper	36	Mitre gauge bar
8	Inner hex screw + Toothed lock washer(Black)	37	Mitre gauge angle point
9	Disc	38	Mitre gauge
10	Sanding disc plastic guard	39	Switch
11	Switch plastic guard	40	Spring
12	Phillips screw(black)	41	Bushing
13	Phillips Screw +spring washer (White)	42	Belt tension assembly
14	Tension lever Assembly	43	Block retaining ring for shaft
15	Screw sleeve	44	Bearing
16	Phillips Screw +Toothed lock washer+Big Flat Washer(Black)	45	Idler roller assembly
17	Base	46	Idler shaft
18	Inner hex wrench	47	Phillips screw
19	Wire Connection box cover	48	Capacitor support II
20	Self tapping screw (Black)	49	Capacitor
21	Relay	50	Hex nut (white)
22	Spring	51	Sanding belt
23	Pin	52	Inner hex screw + Flat Washer (Black)
24	Pin shaft	53	Belt support
25	Phillips Screw +spring washer +flat washer (White)	54	Phillips screw(black)
26	Phillips screw(black)	55	Bearing base
27	Hex nut	56	Belt Tracking knob
28	Capacitor	57	Rubber washer
29	Capacitor support I	58	Tracking spring

EXPLODED DIAGRAM & PARTS LIST

No.	Description	No.	Description
59	Frame assembly	77	Strain relief assembly II
60	Work pieces stop	78	Strain relief assembly III
61	Drive roller	79	Phillips screw (black)
62	Inner hex screw (Black)	80	Dust cover
63	Drive shaft	81	Front end bell
64	Bearing cap	82	Phillips screw(white)
65	Frame cocer	83	Bushing washer
66	Ph Hd screw M5x10	84	Bearing
67	Cog Belt guard cover	85	Stator
68	Ph Hd screw +Lock washer(Black)	86	Rotor
69	Driving pulley	87	Wave washer Ø35
70	Cog belt	88	Rear End Bell
71	Idler wheel	89	Spring washer Ø6
72	Phillips Screw +spring washer +flat washer(Black)	90	Hux Net (White)
73	Inner Hex head bolt	91	Hex head bolt+Spring washer (Black)
74	Drive belt cover	92	Phillips Screw (Black)
75	Hex nut (black)	93	Power Cord
76	Strain relief assembly I	94	Protective board

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