Edge Sander

Model 6318

Owner's Manual

For Models Manufactured Since 11/2025

175370

Oliver Machinery
1-800-559-5065
921 Thomas Ave SW,
Renton, WA 98057

info@olivermachinery.net
www.olivermachinery.net

Stock Number: 6318.001
Manual Version: 1.0.0

READ AND UNDERSTAND ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO ASSEMBLE OR OPERATE THIS MACHINE.

FOLLOW ALL INSTRUCTIONS AND OBSERVE SAFE OPERATING PRACTICES AT ALL TIMES.

THE OWNER OF THIS MACHINE IS SOLELY RESPONSIBLE FOR THE SAFETY OF ALL PERSONS WHO OPERATE OR WORK NEAR THE MACHINE. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO:

- **PROPER ASSEMBLY, OPERATION, INSPECTION, MAINTENANCE, AND RELOCATION OF THE MACHINE.**
- **ENSURING OPERATORS ARE PROPERLY TRAINED IN THE SAFE OPERATION OF THE MACHINE.**
- **ENSURING THIS MANUAL IS AVAILABLE TO OPERATORS AT ALL TIMES.**
- **AUTHORIZING AND SUPERVISING MACHINE USE.**
- **ENSURING THE PROPER USE OF ALL SAFETY GUARDS, PROTECTION DEVICES, AND ANY OTHER PERSONAL PROTECTIVE EQUIPMENT.**

OLIVER MACHINERY DISCLAIMS ANY LIABILITY FOR MACHINES THAT HAVE BEEN ALTERED, MODIFIED, OR ABUSED.

OLIVER MACHINERY RESERVES THE RIGHT TO MAKE CHANGES AT ANY TIME, WITHOUT PRIOR NOTICE, TO PARTS, FITTINGS, OR ACCESSORY EQUIPMENT AS DEEMED NECESSARY FOR PRODUCT IMPROVEMENT OR OTHER REASONS.

***** SAVE THIS MANUAL FOR FUTURE REFERENCE. *****

PROP 65 NOTICE

WARNING: Drilling, sawing, sanding, or machining wood and wood products can expose you to wood dust and other chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Examples of these chemicals include:

- Lead from lead-based paints
- Crystalline silica from bricks, cement, and other masonry products
- Arsenic and chromium from chemically treated lumber

Avoid inhaling wood dust and other harmful chemicals. Use a dust mask and other appropriate personal protective equipment.

For more information go to http://www.P65Warnings.ca.gov/wood

Table of Contents

Introduction

Thank you for choosing Oliver Machinery. This manual contains important information regarding the safe setup, operation, maintenance, and service of this machine. Read this manual carefully before operating the machine and keep it available for future reference.

This manual should be considered a permanent part of the machine and should remain with the machine if it is resold, relocated, or transferred to another operator.

This manual is intended to provide instructions for the safe and proper operation of the machine. It is not a substitute for formal training in woodworking machinery operation. If you are unfamiliar with the proper use of this machine or a particular woodworking procedure, consult qualified training materials or experienced personnel before operating the machine.

Every effort has been made to ensure the accuracy and completeness of the information contained in this manual. Specifications, photographs, illustrations, and technical information were current at the time of publication; however, due to ongoing product improvements, changes may occur without notice.

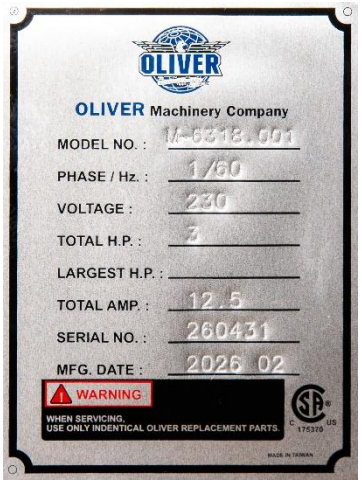
If you find any portion of this manual unclear, incorrect, or incomplete, please refer to the latest version available on our website:

www.olivermachinery.net/manuals

For technical support or replacement parts assistance, contact:

1-800-559-5065

Before contacting technical support, record the machine model number, serial number, and manufacturing date from the machine nameplate. This information will help us provide faster and more accurate assistance. The nameplate is located on the left side of the machine cabinet.



We value customer feedback and continuously work to improve our products and documentation. If you have suggestions regarding this manual, please contact us at the number above or email:

info@olivermachinery.net

Your feedback helps us continue improving our products and documentation.

Specifications

Quick View

Model	6318 Edge Sander
Stock Number	6318.001
Power Requirement	230V 1Ph, 60Hz
Motor	TEFC 3 HP
Sanding Belt Size	9” x 108”
Sanding Belt Tilt	0° - 90°
Sanding Belt Oscillation Speed	OFF, 22-48 cycles/min
Dimensions	56”(L) x 30”(W) x 44”(H)
Footprint	33-1/4”(L) x 21-3/4”(W)
Fully Assembled Weight	397 lbs.
Warranty	1 Year (motor and electronics) 2 Years (all other parts)

Machine Dimensions

Sander Fully Assembled	56”(L) x 30”(W) x 44”(H)
Footprint	33-1/4”(L) x 21-3/4”(W)
Fully Assembled Weight	397 lbs.

Shipment Information

Type	Wood crate with pallet base
Content	Sander with included accessories
Dimensions	61”(L) x 34”(W) x 48”(H)
Weight	533 lbs.
Approximate Setup Time	30 minutes
Must Ship Upright	Yes
Stackable	No

Sanding System

Sanding Belt Size	9” x 108”
Sanding Belt Speed	3800 FPM
Sanding Belt Tilt	0° - 90°
Sanding Belt Oscillation Stroke	5/8”
Oscillation Per Minute	OFF, 22-48 cycles/min
Sanding Belt Drive Wheel	8-1/2” Aluminum
Sanding Belt Idler	4-3/4” Aluminum
Platen Construction	Precision ground cast iron with graphite coated backing
Platen Dimensions	35-1/4” x 10”

Table

Material	Precision ground cast iron
Main Table Dimensions	31-1/2”(W) x 12”(D)
Main Table Height from Floor	33-3/4” – 37-3/4”
Main Table Vertical Travel	4”
Main Table Horizontal Travel	1”
Side Table Dimensions	14-5/8”(W) X 5-1/2”(D) - Fan shaped
Side Table Height from Floor	34” – 40-1/2”
Contour Sanding Drum Radius	8-1/2”

Miter Gauge

Angle Range	-60° to 60°
Miter Fence Length	12-3/4”

Electrical

Power Requirement	230V, 1Ph, 60Hz
Full Load Current Rating	12.5A
Minimum Circuit Size Required	15A
Power Switch Type	Magnetic power switch with emergency stop buttons.
Connection Type	NEMA 6-15 plug with 6’ AWG 14 power cord.

Drive Motor

Motor Type	TEFC
Horsepower	3 HP
Power Requirement	230V, 1Ph, 60Hz
Full Load Current Rating	12.5A
Speed	1720 RPM
Efficiency / Power Factor	81% / 95.68%
Power Transfer Mechanism	Direct drive
Bearing type	Permanently sealed ball bearing

Oscillation Motor

Motor Type	DC Universal Motor
Horsepower	1/30 HP
Power Requirement	200V DC
Full Load Current Rating	0.27A
Speed	44 RPM

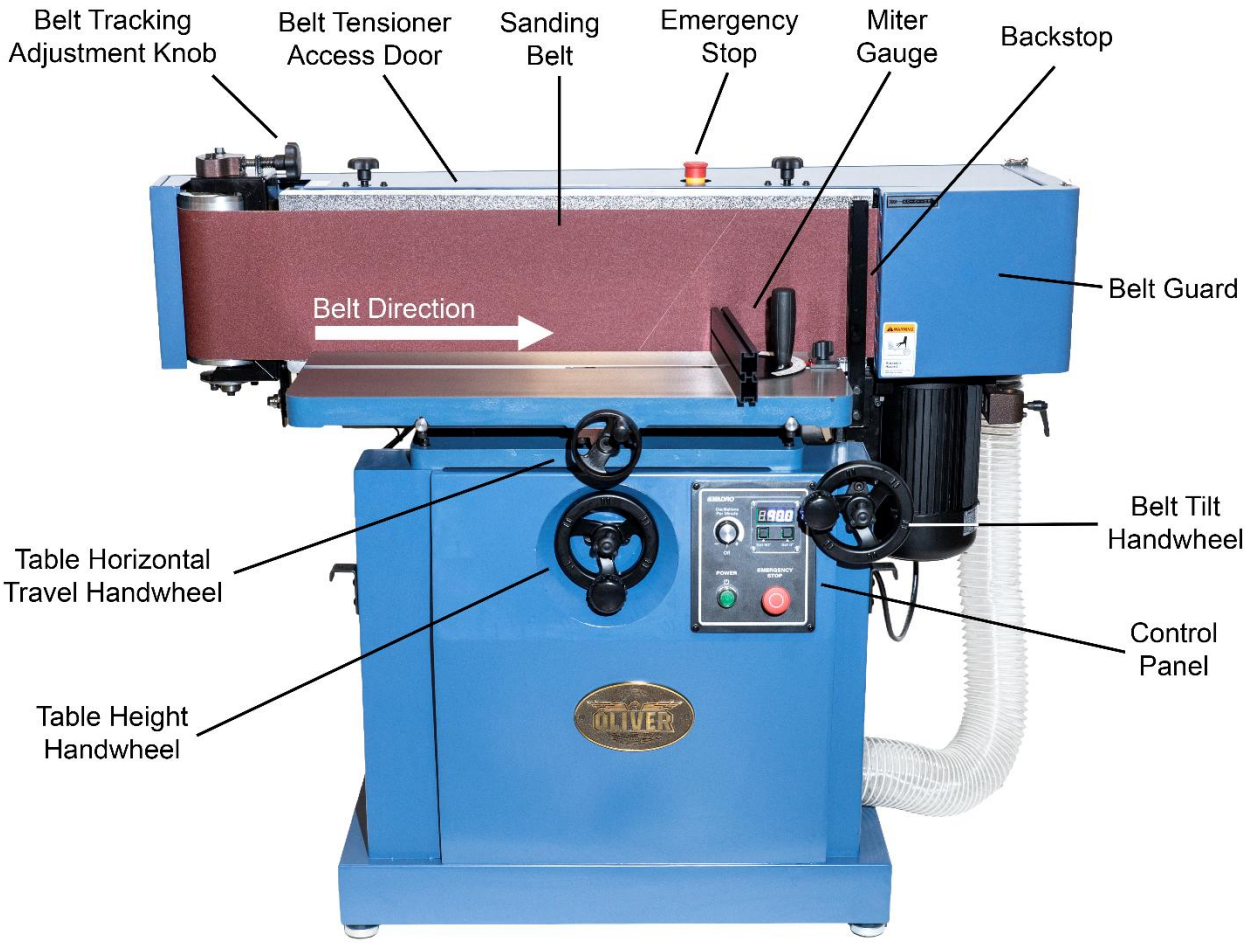
Safety

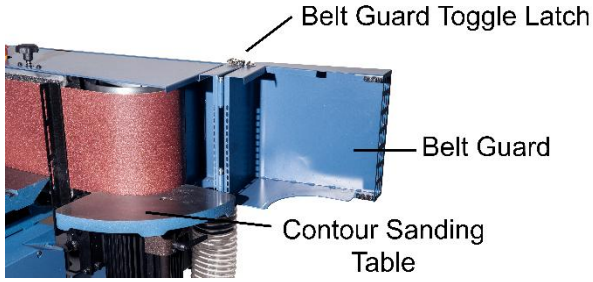
Number of Dust Ports	1
Dust Port Size	4”
Minimum CFM Required	650 CFM
Sound Pressure Level (No Load) at 2’ Distance	100 dB

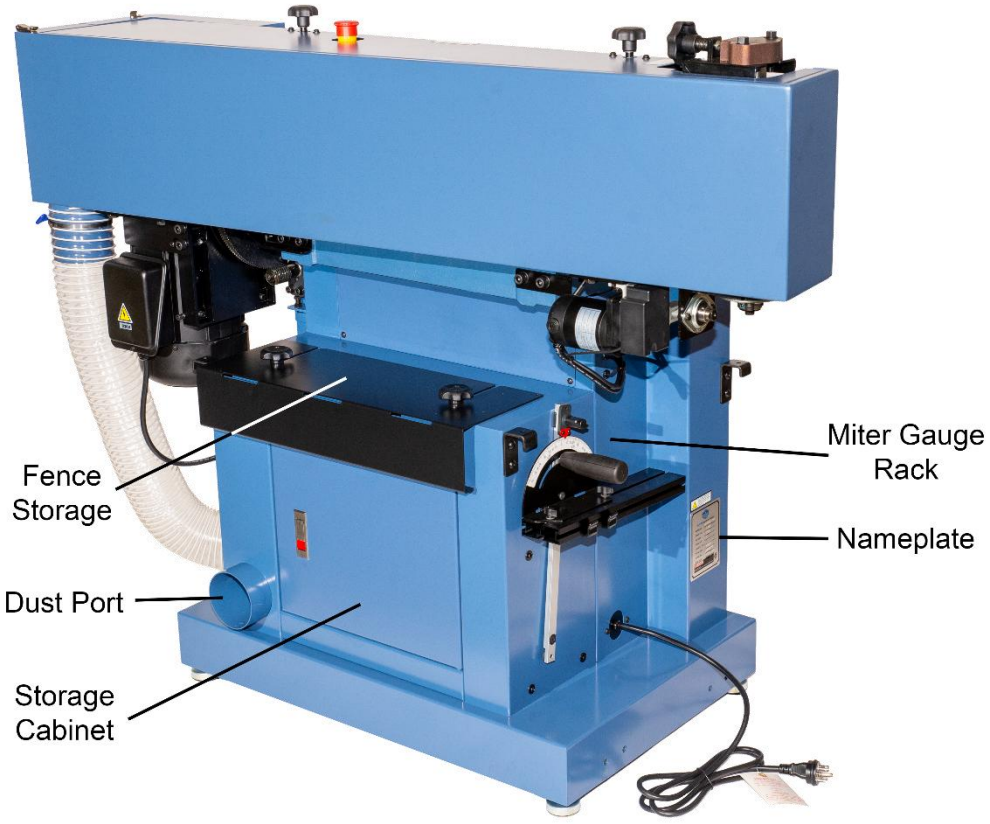
Others

Serial Number Location	On the left side of machine cabinet.
Certification	CSA 175370
Country of Origin	Taiwan

Identification






Miter Gauge
Rack
Fence
Storage
Nameplate
Dust Port
Storage
Cabinet

Safety

Oliver Machinery has made every effort to design and manufacture a safe, reliable, and easy-to-use machine. However, safety ultimately depends on the individual machine operator. **Before operating this machine, become familiar with the safety labels and guidelines contained in this manual.**

DANGER	Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.
WARNING	Indicates a hazardous situation which, if not avoided, **COULD** result in death or serious injury.
CAUTION	Indicates a hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.
IMPORTANT	Indicates information related to the proper operation of the machine or prevention of machine damage.

General Safety Guidelines

1. **FAMILIARIZE YOURSELF WITH THE MACHINE**

   Read and understand all safety instructions in this manual. Know the machine's limitations and hazards. Do not operate or service this machine unless you have received proper training.

2. **ELECTRICAL GROUNDING**

   Proper grounding reduces the risk of electrical shock or fire. Ensure the machine frame is properly grounded and that a grounding conductor is included in the electrical supply. If a cord and plug are used, ensure the grounding plug is connected to a properly grounded outlet. Follow all applicable local electrical codes.

3. **DISCONNECT POWER**

   Disconnect the machine from the power source before performing service, maintenance, adjustments, or changing cutters/abrasives. Machines undergoing maintenance should be properly tagged to prevent accidental startup.

4. **EYE PROTECTION**

   Always wear approved eye protection such as a face shield, safety goggles, or safety glasses that comply with ANSI Z87.1 or CSA Z94.3 standards. Regular eyeglasses are not safety glasses.

5. **HEARING PROTECTION**

   Use hearing protection when noise levels exceed those permitted under OSHA Regulation 29 CFR 1910.95. When in doubt, wear hearing protection.

6. **RESPIRATORY PROTECTION**

   Wood dust created by sanding operations may cause allergic reactions, respiratory irritation, or long-term health effects. Always use adequate dust collection and wear a properly fitted respirator or dust mask when necessary.

7. **OTHER PERSONAL PROTECTION MEASURES**

   Before operating the machine, remove ties, necklaces, rings, watches, and other jewelry. Roll sleeves above the elbows. Remove loose clothing and secure long hair. Wear protective footwear. Do not wear gloves unless specifically instructed for a particular operation.

8. **GUARDS**

   Keep all machine guards in place and properly adjusted during operation. If guards are removed for maintenance, **DO NOT OPERATE** the machine until they are reinstalled. Check clearance between guards and cutters/abrasives before starting the machine.

9. **WORKPLACE SAFETY**

   Keep the floor and work area around the machine clean and free of debris. Scrap material, sawdust, oil, and other liquids increase the risk of slipping or tripping. Ensure the workspace is well-lit and properly ventilated. Use dust collection or exhaust systems to minimize airborne dust. Use anti-skid floor strips on the area where the operator normally stands and mark off the machine work area. Provide adequate workspace around the machine.

10. **ACCESS CONTROL**

    Only trained and authorized personnel should operate this machine. Use a lockable or childproof power switch where applicable.

11. **STAY ALERT**

    Never operate machinery while under the influence of drugs or alcohol, or when fatigued or impaired.

12. **NEVER STAND ON MACHINE**

    Standing on the machine may cause falls or accidental contact with moving or sharp components, resulting in serious injury.

13. **REPLACEMENT PARTS**

    Use only genuine Oliver Machinery replacement parts and accessories recommended for this machine. Parts from other manufacturers may create safety hazards and WILL void the factory warranty and other guarantees.

14. **PROPER USE**

    This machine is designed for sanding wood and wood-based materials only. Oliver Machinery disclaims all warranties, expressed or implied, for applications other than its intended use and shall not be held liable for any resulting injury or damage.

15. **ADDITIONAL SAFETY INFORMATION**

    For further information on woodworking safety, consult the following resources:

    - National Safety Council – *Accident Prevention Manual for Business and Industry*
      https://shop.nsc.org/apm-admin-program-14ed

    - ANSI O1.1 – Woodworking Machinery Safety Requirements
      https://webstore.ansi.org/standards/wmma/ansio12013r2023

    - OSHA 29 CFR 1910.213 – Woodworking Machinery Requirements
      https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.213

Safety Guidelines Specific to Edge Sander

Before Operation

1. **Install the Sanding Belt Correctly**
   Install sanding belts in the correct direction as indicated by the arrows printed on the belt and machine.
2. **Inspect Belt**
   Inspect the sanding belt for signs of damage or excessive wear. Replace belts that are damaged, overstretched, or severely worn.
3. **Check Belt Tension**
   Ensure the sanding belt is properly tensioned before operating the machine.
4. **Check Table Position**
   When sanding with the belt in an upright or near-upright position, ensure the table surface is at least 1/16” above the bottom edge of the oscillating sanding belt. This reduces the risk of the workpiece being pinched between the table and the sanding belt.

   Adjust the table’s horizontal position as needed to minimize the gap between the table and the sanding belt. Maintain a 1/16” gap to prevent large objects from becoming trapped while preserving safe clearance.
5. **Secure All Locks and Guards**
   Ensure all guards, tables, and adjustments are securely locked before starting the machine.
6. **Secure the Work Support Tools**
   When using the miter gauge, fence, or auxiliary work support, ensure it is securely locked before operation.
7. **Check Belt Tracking**
   Ensure the sanding belt is properly tracked within the drive drum and idler drum before sanding.
8. **Inspect the Workpiece and Avoid the Following:**
   - Workpieces with loose components or embedded objects.
   - Workpieces that contain hazardous chemicals.
   - Workpieces with high moisture content.
9. **Prohibited Materials**
   Never sand magnesium, metal, or other spark-producing materials on this machine.

When Sanding:

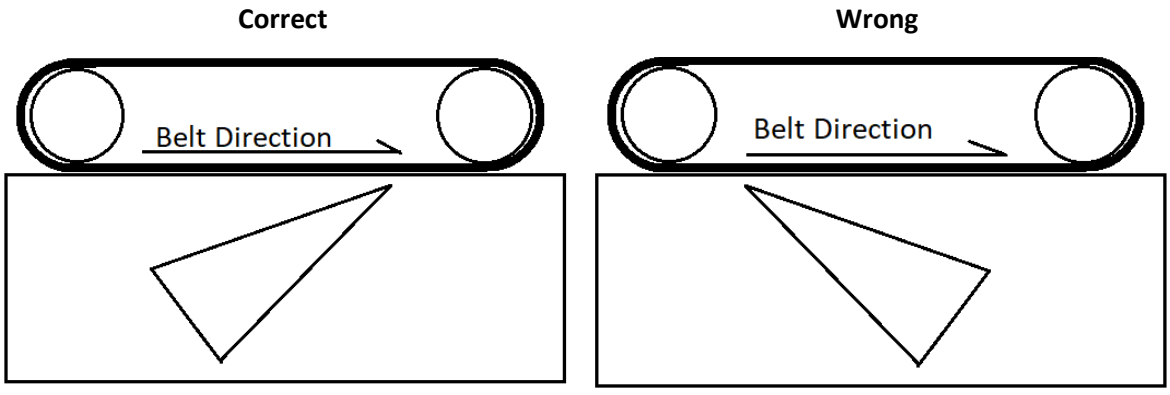
1. **Use Dust Collection**
   Sanding wood creates fine dust that may present a fire hazard. ALWAYS operate the machine with an adequate dust collection system connected. Inspect the dust chute and hose regularly to ensure proper performance and prevent buildup. The entire dust collection system should be properly grounded to prevent sparks generated by static electricity.

2. **Use Proper Feeding Techniques**
   - Maintain control of the workpiece.
   - Hold the workpiece firmly with both hands and apply light pressure against the sanding belt.
   - Feed the workpiece against the direction of belt travel.
   - Do not force the workpiece against the sanding belt. Excessive pressure may damage the sanding belt, reduce sanding performance, or cause loss of workpiece control.
   - Use the table, miter gauge, and fence to properly support the workpiece whenever applicable.

3. **Keep Hands Clear**
   Keep hands away from the sanding belt and other moving parts. Do not hand-hold small workpieces that cannot be safely controlled. Use special jigs to hold down small workpieces as needed.

4. **Support Large Workpiece**
   Provide proper support for long or wide workpieces using additional tables or roller stands.

5. **Minimize Kickback Risks**
   - NEVER start the machine with anything contacting the sanding belt.
   - NEVER feed stock until the machine reaches full operating speed.
   - To avoid kickbacks and sanding belt damage, do not feed the workpiece with sharp corners pointing against the moving direction of the sanding belt.



After Operation

- Stop the machine before leaving it unattended.
- Wait for the sanding belt to come to a complete stop.
- Lock out the power switch to prevent accidental startup.
- Clean the machine and surrounding area.

Electrical

WARNING

Faulty electrical work can cause electric shock, electrocution, or fire.

All electrical work must be performed by a licensed electrician and must comply with all applicable local electrical codes and regulations. Failure to comply with these requirements will void the machine warranty.

Electrical Specifications and Minimum Circuit Size Requirements

Machine Model	**6318 Edge Sander**
Stock Number	6318.001
Voltage	230V
Phase	1Ph
Full Load Current Rating	12.5A
Minimum Circuit Size Required	15A
Plug Type	NEMA 6-15
Power Cord	6’ AWG 14 power cord

This machine is designed to operate on a 230V single-phase power supply. Verify that the supply voltage and phase match the information listed on the machine nameplate before connecting the machine to power.

A dedicated branch circuit supplying power only to this machine is required. If multiple machines must share the same electrical circuit, consult a licensed electrician to ensure the circuit is properly sized for safe operation.

If an existing circuit does not meet the minimum circuit size requirement, a new circuit must be installed before operating the machine.

Grounding

WARNING

Improper grounding can cause electric shock, fire, or equipment damage.

This machine must be connected to a properly installed grounding conductor. Grounding provides a path of least resistance for electrical current in the event of a malfunction or electrical fault, reducing the risk of electric shock.

All grounding connections must comply with local electrical codes and must be verified before operating the machine.

Do not operate the machine if a proper grounding connection is not available. Have a licensed electrician install a properly grounded outlet if necessary.

Indoor Use Only

This machine is designed for indoor use only.

Operating the machine outdoors or in damp environments increases exposure to moisture, which can significantly increase the risk of electric shock or equipment damage.

Always operate the machine in a dry, well-ventilated indoor environment.

Power Connection

This machine is pre-wired for 230V operation and is supplied with a power cord and a NEMA 6-15 plug.

Do not modify the plug provided with the machine. If the plug does not fit the available outlet, have a proper outlet installed by a licensed electrician.

Avoid using extension cords whenever possible. Extension cords may reduce motor performance and increase the risk of overheating.

If an extension cord must be used:

- Use a heavy-duty extension cord rated for 90°C (194°F) or higher.
- Use the shortest cord length possible.
- Ensure the cord is properly rated for the machine's electrical load.

Minimum copper conductor sizes (AWG) for extension cords:

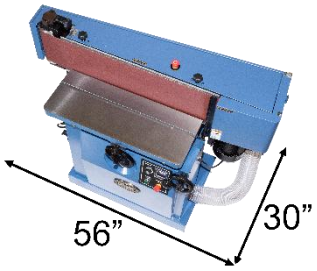
Amps	**Extension Cord Length**			
	25 feet	50 feet	75 feet	100 feet
8 to 12	14	14	12	10
12 to 15	12	12	10	10
15 to 20	10	10	10	NR
21 to 30	10	NR	NR	NR

*NR: Not Recommended

WARNING **Use electrical wiring and extension cords that meet or exceed the power requirements of this machine. Undersized wiring can overheat and may cause fire, equipment damage, or electrical failure.**

Setup

Shop Preparation



Space Requirement

The dimensions of this machine are 56”(L) x 30”(W) x 44”(H). Provide a minimum of 36 in. clearance around the machine for maintenance and operator movement. Additional clearance may be required depending on workpiece size and machine configuration.

Load Limits

This machine has a shipping weight of 533 lbs., and a net weight of 397 lbs. Ensure that all lifting equipment and building structures can safely support the combined weight of the machine, operator, and any additional equipment used during setup.

Electrical

Make sure a properly sized circuit and electrical outlet are available near the machine. Please refer to the section “Electrical” on page 15 for details regarding electrical requirements.

Lighting

Adequate lighting is required for safe machine operation. Install overhead lighting that provides clear visibility of the work area without glare or shadows.

Safety Labels

If this machine introduces new hazards to your workplace, install appropriate warning signs in visible locations.

Dust Collection

Wood dust generated by sanding operations may pose respiratory health risks. NIOSH-approved dust masks or respirators should be available when operating the sander.

Connect this machine to a dust collection system. Check dust collection airflow regularly to ensure dust and shavings are effectively removed.

⚠ **CAUTION**	**Air resistance and leakage in a dust collection system impact its effectiveness. Use a dust collection system capable of delivering at least 650 CFM at this machine’s dust port. Doing so improves dust evacuation and reduces internal buildup.**

Inspecting Your Shipment

Your shipment should arrive in one crate. Upon delivery, carefully examine the crate for any noticeable damage. In the event that you discover any damage:

- Contact Oliver Machinery immediately at **1-800-559-5065.**
- Take clear photographs of the affected areas.
- Document all damage on the Bill of Lading before signing the paperwork and accepting the shipment.

Retain all packaging materials until the machine has been fully assembled, inspected, and tested.

IMPORTANT	If any items are damaged, please call us immediately at 1-800-559-5065 Freight damage must be reported directly to the transport carrier immediately at the time of delivery. Failure to document freight damage on the signed Bill of Lading may result in denial of the freight claim.

⚠ **CAUTION**	**Wear safety goggles and gloves when removing straps. Straps may spring back violently when released and cause injury.**

Moving the Machine

Freight carriers typically deliver machinery to curbside or dockside locations only. On the day of delivery, please be sure help is available to move the machine to its designated location.

⚠ **WARNING**	**6318 Edge Sander has a shipping weight of 533 lbs. and a net weight of 397 lbs.** **This is a large machine and requires two or more people to move. Safe moving techniques and proper lifting equipment are required, or serious personal injury may occur.**

⚠ **WARNING**	**Your machine may be secured by the straps. Do not lift your shipment by the straps. They are not designed to hold the total weight of your shipment. They may snap without warning and cause serious injury and machine damage.**

Unboxing

The shipment contains a sander that is mostly assembled. There is also a cardboard box that contains loose parts and accessories. The miter gauge and fence are preinstalled in the designated storage locations.



Inventory Check

Carefully remove the packaging and verify all accessories included in the shipment before beginning assembly:

Item	*Description*	*Quantity*
	Contour Sanding Table	1
	Sanding Belt	1

NOTICE: If you cannot find an item in the list above, please check if it is still attached to the packaging. Occasionally the item may have been pre-installed in the factory. See "**Parts List**" on page 44 to check if a component is included or installed.

NOTICE: This machine comes with various standard-sized, non-proprietary parts. If any of these parts are missing, we are happy to deliver them to you. To have the machine up and running as soon as possible, you can also find these parts at your local hardware store.

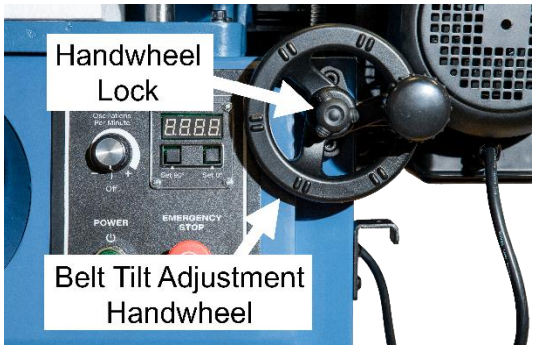
Additional Items Recommended for Machine Setup

Item	*Purpose*
Safety glasses	Protection
Disposable gloves	Protection
Paper Towels	Cleaning
Rust Preventive	Cast iron tabletop rust protection.

Removing Machine from Pallet

1. When all items are ready for machine setup, remove the shipping brackets that secure the sander on the pallet.

2. Release the handwheel lock and use the belt tilt handwheel to move the sanding head to the upright position.



3. Attach the lifting slings to the designated lifting hooks to lift the machine from the pallet.

   WARNING: The right side of the machine with the main motor is heavier. Ensure the load is balanced when moving the machine with the sling.

WARNING

6318 Edge Sander has a net weight of 397 lbs. and is a large machine. It requires proper lifting tools and multiple people to move the machine, or serious personal injury and machine damage may occur.

Do not lift or move the machine using the tables, guards, handwheels, or adjustment handles.

Cleaning

To prevent rust during shipping, the cast iron main table and the contour sanding table are coated with machine oil and wrapped in plastic film. It is important to thoroughly clean the sander before beginning assembly.

After completing the initial cleaning, regularly coat the unpainted cast iron surfaces with a rust preventive product such as Boeshield® T-9 or paste wax. Avoid using rust preventives containing silicone, as silicone can interfere with finishes and glues applied to your workpieces.

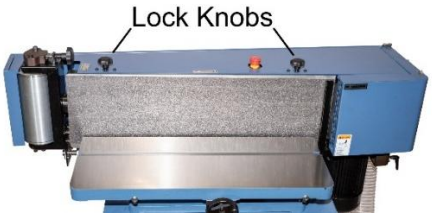
Assembly

This sander is mostly assembled in the factory. There are a few more steps to complete before the machine is ready for a test run. It takes approximately 30 minutes to set up the sander.

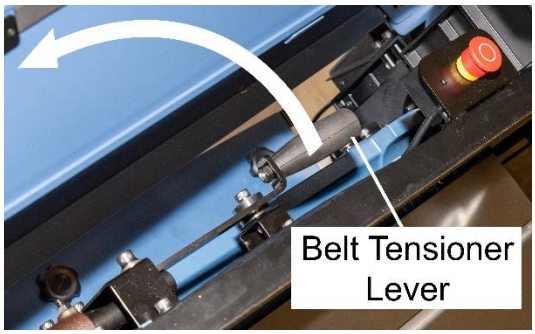
> **WARNING** **Do not connect the machine to the power source until all setup and assembly steps are complete.**

Sanding Belt Installation

1. Loosen the lock knobs and open the belt tensioner access door.



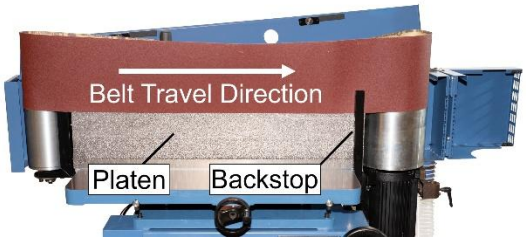
2. Lift the belt tensioner lever to disengage the belt tensioner.



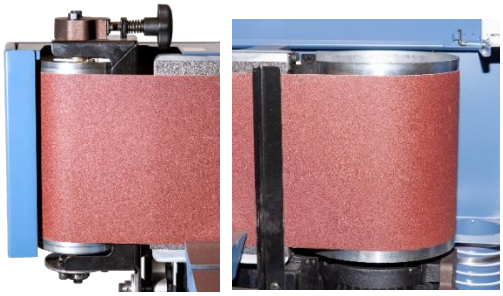
3. Open the belt guard.

4. The sanding belt runs in a counterclockwise direction. Make sure the arrows on the back of the sanding belt align with the belt's running direction.

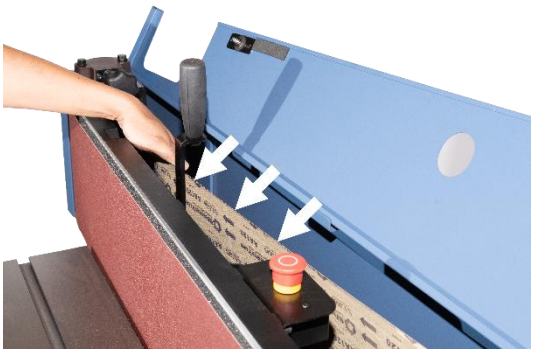
5. Install the belt. Ensure the sanding belt passes between the backstop and graphite platen.



6. Ensure the belt is centered on both the idler drum and drive drum.



7. The actual length of sanding belts may slightly differ from their nominal length. If a sanding belt has too much slack and becomes difficult to stay in place during installation, tension the belt by hand while positioning the belt. This sander accepts sanding belts up to 108-1/2" long.

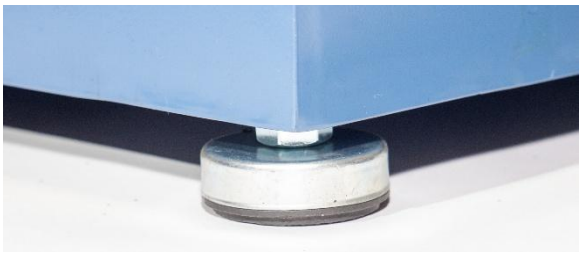


Sanding Belt Installation (continued...)

8. Lower the belt tensioner lever to tighten the sanding belt.
9. Close the belt guard.
10. Close and secure the belt tensioner access door. The locking knob is spring-loaded and must be pressed inward while tightening.

Leveling Machine

Before operating the sander, make sure it is set on a level and stable floor. If the floor is not perfectly flat, use the sander's leveling feet to compensate.



Dust Collection

This sander can generate a lot of wood dust. Connect a dust collection system to this machine. Whenever possible, operate the sander with the belt guard closed to maximize dust collection efficiency.

The minimum CFM requirement for this sander is 650 CFM at the dust port, which means your dust collection system should have a rating greater than 650 CFM, as air friction and leakage reduce effective CFM at the dust port.

IMPORTANT

Running this sander without a dust collection system, or using a dust collection system with inadequate suction, will cause dust and shavings to accumulate inside the sander. This can damage the machine and cause other hazardous situations. Check your dust collection system regularly to make sure it is not clogged or overfilled.

Controls and Components

Power Switch and Emergency Stops

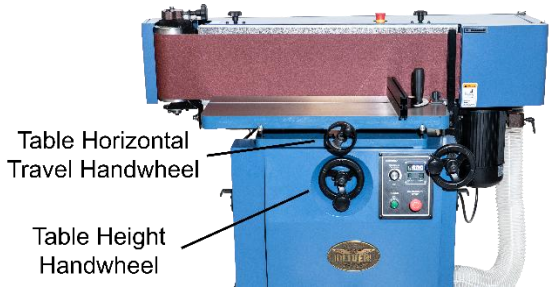
To start the machine, press the green START button.

To stop the machine, press the Emergency Stop button. There are two Emergency Stop buttons. One is located at the top of the machine and the other is on the control panel. Both Emergency Stop buttons must be released to start the machine. To release, rotate the Emergency Stop button clockwise.

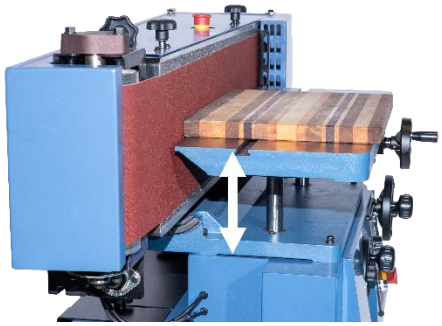
This sander features a magnetic power switch. In the event of power outage, the machine will not restart automatically when power resumes. To restart the machine, press the green START button again.

Table Adjustment

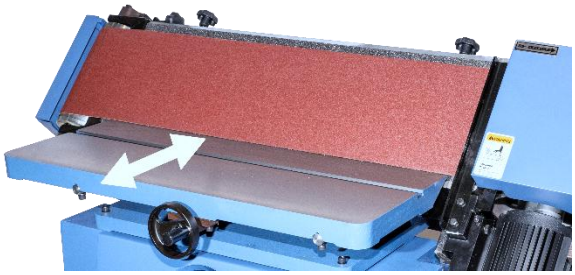
The height and horizontal position of the main table is adjustable. Make sure the table surface is positioned at least 1/16" above the bottom edge of the sanding belt to reduce the risk of workpiece getting pinched by the edge of sanding belt.



To ensure even wear of the belt, adjust the height of the table regularly to make use of both the upper and lower portions of the sanding belt.



When operating the sanding head in the horizontal position or at an angle, adjust the horizontal table position to minimize the gap between the table and the sanding belt.



Belt Oscillation Speed Adjustment

The Belt Oscillation Adjustment Knob allows the operator to set the oscillation frequency between 22-48 oscillations per minute, or to turn off oscillations altogether.

Belt Tilt Adjustment

This sander can operate with the platen in vertical or horizontal positions and any angles in between. Use the Belt Tilt Handwheel to adjust the tilt angle of the sanding belt for various kinds of operations. The handwheel can be locked to maintain the selected tilt angle during operation.

The Digital Readout (DRO) shows the current inclination of the sanding belt. The DRO automatically saves the displayed value after the tilt angle remains unchanged for two seconds.

The DRO has two reset buttons, allowing users to quickly reset the readings back to 0 or 90 degrees after recalibrations.

Belt Tracking Adjustment

Slight variations in sanding belt construction may affect tracking. Check belt tracking whenever installing a new sanding belt. The Belt Tracking Adjustment Knob enables users to keep the sanding belt properly centered on the drums.

After changing the sanding belt, check and adjust the tracking immediately.

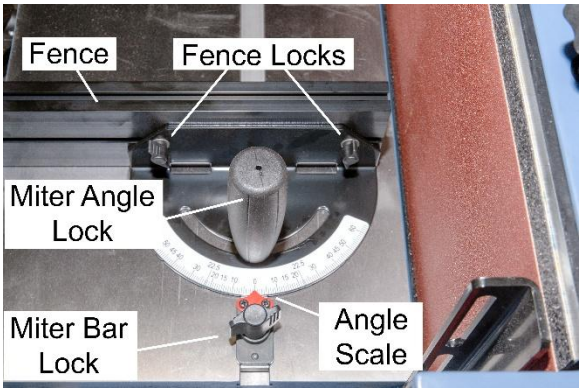
⚠CAUTION⚠

Poor sanding belt tracking can result in belt damage, machine damage, or personal injury.

Keep hands clear of the moving sanding belt and drums when adjusting belt tracking.

Miter Gauge

The miter gauge allows the user to square up a workpiece or create a miter. Ensure all locks are tightened before sanding operations.



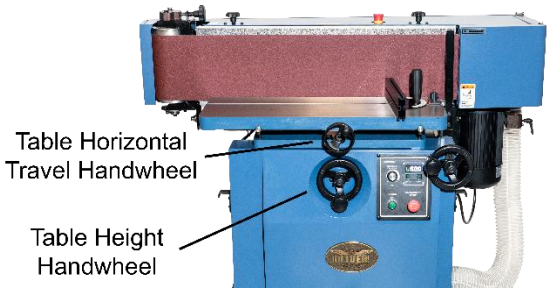
Test Run

Before using the sander for the first time, complete this test run to become familiar with the machine and ensure all key components are functioning properly.

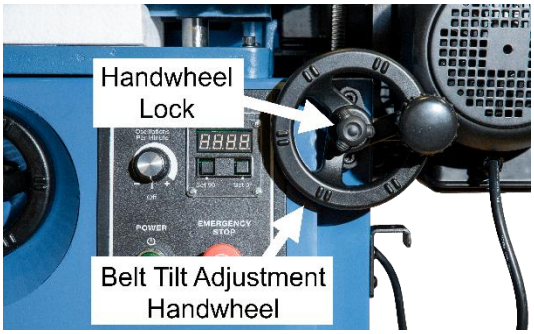
Mechanical Parts Inspection

1. Disconnect the machine from power before inspection.
2. Ensure the belt tensioner access door is secured and the side belt guard is closed.
3. Make sure the sanding belt is tensioned and it is not catching the guard, miter gauge, backstop, and table.
4. Set the miter gauge to 0° so the fence of the miter gauge is perpendicular to the sanding belt, then check the setting with a square.

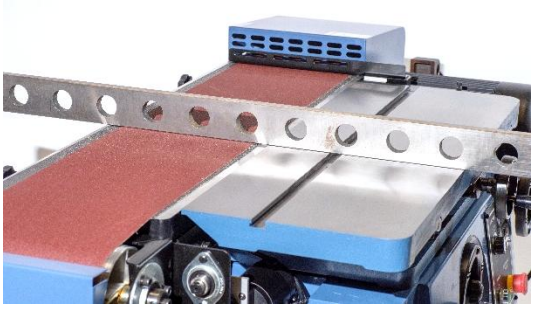
5. Use the Table Height Handwheel to raise the table to its highest position.



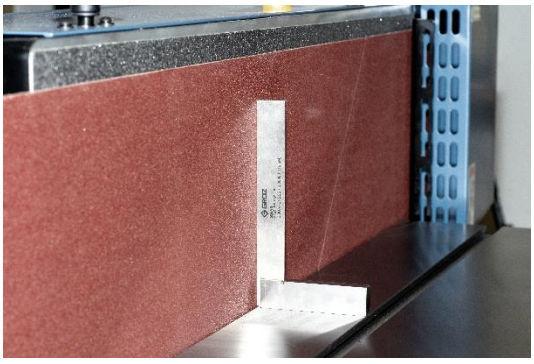
6. Use the Belt Tilt Adjustment Handwheel to change the platen to horizontal position.



7. Lower the table so it is level with the sanding belt.
8. Use the Table Horizontal Travel Handwheel to move the table towards the platen.
9. Use a straightedge to ensure the platen is coplanar with the table.



10. Move the table away from the platen.
11. Change the platen back to the upright position. Make sure the platen is perpendicular to the table.



Electronic & Electrical Components Testing

1. Put on safety goggles and hearing protection.
2. Verify that the electrical circuit provides single-phase, 230V power.
3. Before connecting the machine to power, press the Emergency Stop button on the control panel to prevent the machine from starting unintentionally. The top Emergency Stop button should be released.
4. Connect the machine to power.
5. The DRO should display the current tilt angle of the sanding belt, and the value should update when changing the inclination of the sanding belt.
6. Use the Belt Oscillation Adjustment Knob to set oscillation speed to 0.
7. Attempt to turn on the machine by pressing the green START button. The motors should not start as there is one Emergency Stop button not released.
8. Turn the Emergency Stop button on the control panel clockwise until it pops up and releases.
9. Press the START button, and the motor should start.
10. Immediately check the tracking of the sanding belt. The belt should be centered between the tracking grooves on the idler drum. If the sanding belt is not tracking properly, TURN OFF THE SANDER IMMEDIATELY. See “Adjust Belt Tracking” on page 36 to adjust belt tracking.

11. If tracking looks good, increase the oscillation speed and continue to observe the movement of the sanding belt. The sanding belt should oscillate smoothly while remaining properly centered on the drums. The bottom edge of the sanding belt must be at least 1/16” below the table surface.
12. Allow the machine to run for a minute. During the initial run, a small amount of loose graphite may fall off from the platen. That is part of the break-in process and it is expected. Vacuum the graphite flakes after the test run.
13. If excessive vibration, unusual noise, or burning odor is detected, stop the machine immediately and correct the problem before operation.
14. While the machine is running, interrupt and restore power at the disconnect or circuit breaker to verify the magnetic switch prevents automatic restart. Ensure the sander motor does not start automatically and the DRO value persists. Press the START button to restart the motor.
15. Press the top Emergency Stop button to stop the main motor.
16. Try to start the sander again without releasing the top Emergency Stop button, and the machine should not start.
17. Release the top Emergency Stop button and press the START button to restart the machine.
18. Turn off the sander and clean up.

Congratulations! You have completed the test run. If any issues are detected, refer to the Troubleshooting and Maintenance sections before operating the machine.

Operation

Preparation before Sanding

Material Selection and Inspection

This machine is primarily designed for sanding good quality wood materials. Avoid cracked stock or boards with loose knots. These can break apart during sanding and can cause sudden workpiece movement, which can lead to serious injury and machine damage. Using this sander for other material types may damage the sanding belt, shorten its lifespan, or create hazardous situations. For example, sanding ferrous metals can create sparks, and that can ignite flammable materials nearby.

Do not sand treated lumber or anything that contains harmful chemicals, as this may produce hazardous dust containing harmful chemicals.

Carefully inspect the workpiece for foreign objects. Nails, staples, rock chips, and other objects embedded on the wood surface can damage the sanding belt. Clean the workpiece with a stiff brush as needed.

Glue, paint, and moisture on the workpiece can gum up the sanding belt. Make sure the stock is dry and remove glue and paint before sanding if possible. Switch to a coarse-grit sanding belt and clean the belt frequently if necessary.

The workpiece should have at least one flat surface so it can be pushed firmly against the table for feeding. Materials that do not have a flat surface should have the support surface flattened or be handled with a special jig that stabilizes the workpiece for feeding.

Support Large Workpiece

Support large workpieces with auxiliary tables or roller stands to improve safety and maintain a consistent finish.

Safety Devices

Always wear a NIOSH-approved dust mask or respirator and use the dust collector when operating the sander.

Clear the Work Area

Before turning on the sander, ensure the sander table is free of debris and the workpiece is not engaging the sanding belt.

WARNING

Position the table at least 1/16” above the bottom edge of the sanding belt. Doing so prevents materials or body parts from getting caught between the table and the belt, which can cause serious injury.

WARNING

Serious injury can result from accidental contact with the sanding belt or sudden workpiece movement during operation. Follow these safety rules to reduce risks for all sanding operations:

- **Lock the sanding head, guards, table, miter gauge, and fence before starting the sander.**
- **Allow the sanding belt to reach full operating speed before sanding.**
- **Feed the workpiece with a stable surface against the table.**
- **Feed the workpiece against the direction of belt travel.**
- **Avoid freehand sanding. Support the workpiece with the table whenever possible.**
- **Keep hands at least 3” away from the sanding belt.**
- **Do not hand-hold small workpieces that cannot be safely controlled.**
- **Do not feed the workpiece with excessive pressure to reduce the risk of heat buildup and maintain control.**
- **Beware of pinching hazards. The sanding belt can pull the workpiece and operator into the gap formed by the table, backstop, and the miter gauge, causing serious injury.**
- **Wear appropriate eye, hearing, and respiratory protection.**
- **Never leave the machine running unattended.**

CAUTION

Ensure the dust collection system is functioning properly and wear a NIOSH-approved dust mask. Inhaling harmful airborne particles can cause serious long-term health issues.

IMPORTANT

Adjust the table position regularly to utilize the full width of the sanding belt. This promotes even wear and extends belt life.

IMPORTANT

Gravity helps keep the sanding belt centered on the drums. When the belt tilt angle changes, the belt may begin to drift. If this occurs, adjust the belt tracking as needed.

Edge Sanding

1. Use the digital readout to set the sanding belt tilt angle for square or beveled edge sanding.
2. Gravity helps keep the sanding belt centered on the drums. When the belt tilt angle changes, the belt may begin to drift. If this occurs, adjust the belt tracking as needed.
3. Adjust the table height as needed to ensure the entire height of the workpiece is sanded.

   When sanding with the belt in an upright or near-upright position, ensure the table surface is at least 1/16" above the bottom edge of the oscillating sanding belt. This reduces the risk of the workpiece being pinched between the table and the sanding belt.

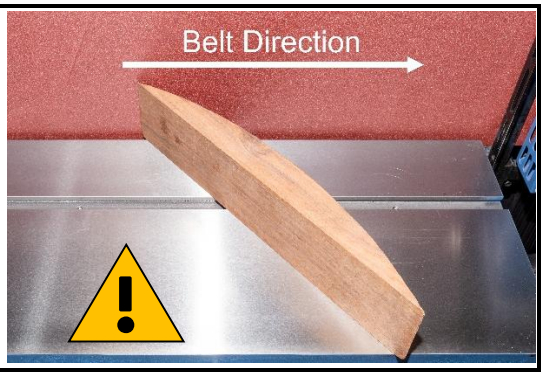
   TIP: To ensure even wear of the belt, adjust the height of the table regularly to make use of both upper and lower portions of the sanding belt.
4. Adjust the table's horizontal position as needed to minimize the gap between the table and the sanding belt. When possible, maintain approximately a 1/16" gap to reduce the risk of workpieces or debris becoming trapped while maintaining safe operating clearance.
5. Before starting the sander, clear the table and turn on the dust collection system.
6. Start the sander, allow the belt to reach full speed, then adjust the belt oscillation speed as needed.
7. Hold the workpiece firmly against the table and feed it lightly into the sanding belt.

8. To sand a convex edge or to round a corner, begin the operation from a relatively flat section.

Then continue sanding toward the trailing end of the workpiece.

WARNING

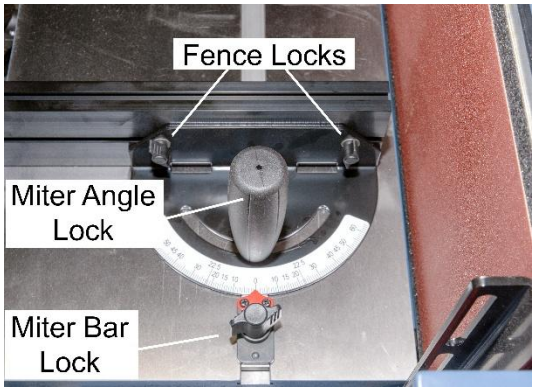
Do not feed sharp corners into the direction of belt travel. Doing so increases the risk of the workpiece pulling away from the operator, which may cause serious injury or machine damage.



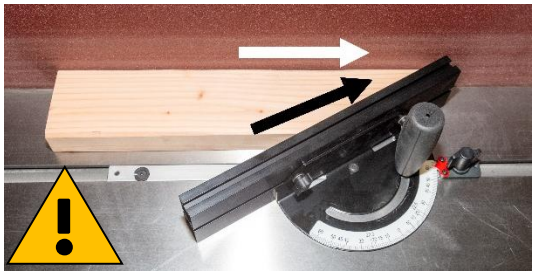
Sanding with Miter Gauge

1. The miter gauge provides additional support for the workpiece and allows sanding of square or mitered ends.

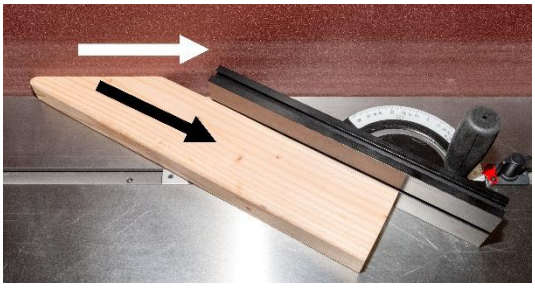
2. Tighten all locks of the miter gauge before starting the sander.



3. ⚠ **WARNING:** Set up the miter gauge carefully when sanding mitered ends. As the angle between the sanding belt and miter gauge fence becomes more acute, the risk of the workpiece becoming wedged between the sanding belt and fence increases. This can pull the workpiece unexpectedly and cause injury or machine damage.



4. When sanding acute miters, position the miter gauge fence away from the sanding belt as shown below. This setup reduces the risk of trapping the workpiece between the sanding belt and miter gauge.



Horizontal Sanding

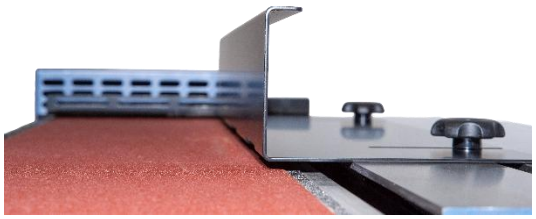
Horizontal sanding is useful for workpieces wider than the sanding belt or when table support is not practical. The operator must guide the workpiece across a fast-moving belt and maintain a secure grip at all times. Whenever possible, use the backstop and fence to support and stabilize the workpiece during feeding. Only sand workpieces that can be controlled safely throughout the operation.

Gravity helps keep the sanding belt centered on the drums. When the belt tilt angle changes, the belt may begin to drift. If this occurs, adjust the belt tracking as needed.

1. Move the platen to the horizontal position and lock the belt tilt adjustment handwheel.
2. Adjust the main table height so it is slightly above the abrasive surface.
3. Remove the locking knobs and the fence from the storage area.

4. Install the fence. Locate the screw holes on the miter slot. Align the fence with the screw holes and secure the fence with the lock knobs.

5. Ensure the fence is not in contact with the sanding belt. Adjust the table height and fence position as necessary.



6. Remain in full control of the workpiece and keep hands away from the abrasive surface. Use the fence and stop bracket to provide additional support whenever applicable.

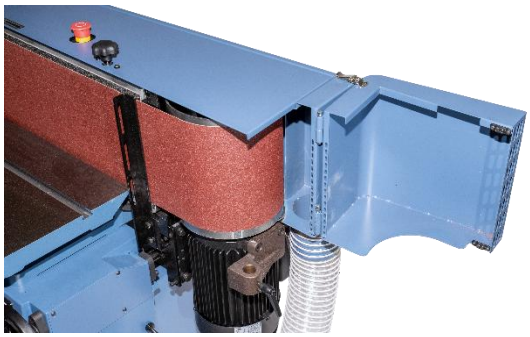
7. When sanding a surface wider than the belt, use a light, continuous sweeping motion across the full width to keep the surface flat and uniform.

⚠ WARNING ⚠

Do not sand thin or narrow boards in horizontal mode, as this can bring the operator's hands too close to the sanding belt.

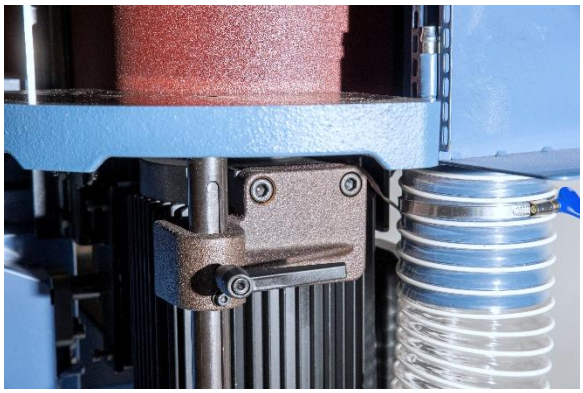
Contour Sanding with Side Table

1. To maximize dust collection efficiency, only install the side table for contour sanding work.
2. Open the belt guard.

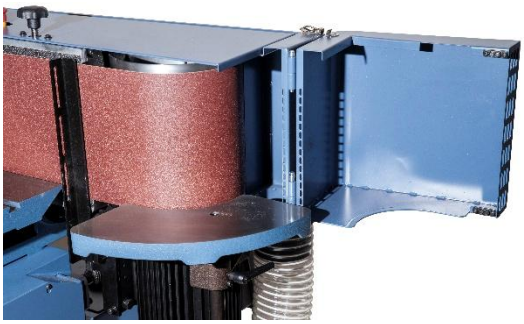


3. Use the toggle latch on top of the sanding belt guard to keep the guard in the open position.

4. Insert the side table post into the mounting bracket. Align the groove of the post with the lock lever.



5. Ensure the table does not contact the sanding belt and that the table is positioned at least 1/16” above the bottom edge of the sanding belt. Tighten the lock lever to secure the table.



6. This sander can sand concave edges with a radius of 8-1/2” or greater.

7. After using the side table, remove it from the sander. Close and lock the sanding belt guard.

IMPORTANT

Only remove the belt guard and install the side table while performing contour sanding. The belt guard improves dust collection efficiency and reduces the risk of accidental contact with the sanding belt and drive drum.

Apply pressure only on the supported section of the sanding belt for contour sanding. A section of the sanding belt is unsupported between the drive drum and the platen. Sanding on the unsupported section can damage the machine and the workpiece may become difficult to control.

Accessories

Oliver Machinery offers a selection of accessories designed to improve the performance, durability, and convenience of your machine.

Accessories are available on our website at:

www.olivermachinery.net.

To order by phone, please call us at **1-800-559-5065**. We are available Monday through Friday, **6:30 a.m. to 3:00 p.m. (Pacific Time)**.

You can also email us at **info@olivermachinery.net** for ordering information or to place an order.

Touchup Paint

Maintaining painted surfaces helps preserve the appearance of the machine and prevent rust. Oliver Machinery offers pre-mixed spray paint in Oliver Blue to match the original factory finish.

WARNING **Using unapproved accessories or replacement parts may cause machine malfunction and could result in serious injury or equipment damage. Use only accessories recommended for this machine.**

Maintenance

Routine maintenance helps keep your sander operating safely and efficiently. Follow the maintenance schedule below and record completed tasks using the maintenance record worksheet provided in this manual.

NOTICE: Maintenance frequency may vary depending on operating conditions and machine usage.

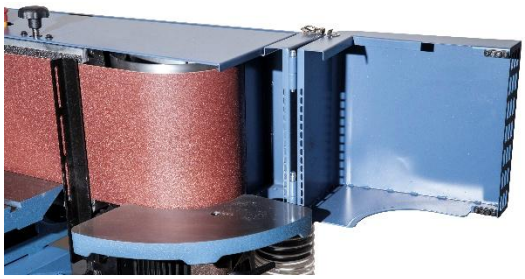
> **WARNING** **Disconnect the machine from the power source before performing any maintenance. After servicing, remove all tools, wrenches, and loose parts before restarting the machine. Failure to comply may result in serious injury.**

Maintenance Schedule

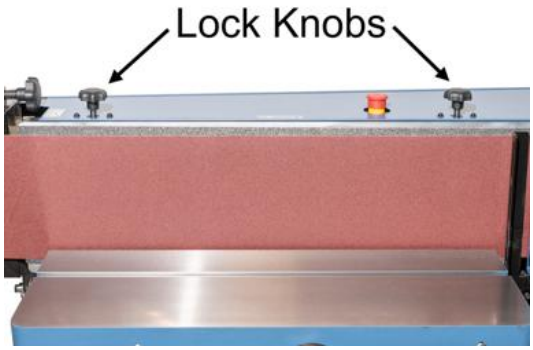
Task	Frequency
Inspect power switch, cord, and plug for damage.	Before each use.
Inspect the sanding belt for signs of failure.	Before each use.
Remove dust buildups from the sander and dust collection system.	Every 40 hours of operation or as needed.
Clean sanding belt with belt cleaning stick.	When the sanding belt is clogged.
Apply rust protectant to unpainted cast iron surfaces.	Every 40 hours of operation.
Clean and lubricate gears and shafts.	Yearly, or when the sander becomes difficult to adjust.
Inspect the graphite platen backing with a straightedge for excessive wear or damage. Replace if worn through or damaged.	Yearly, or when the sander cannot form a straight and flat edge.
Replace oscillation motor carbon brush.	Every 1000 hours of operation.
Bearings	Bearings are permanently sealed and lubricated and do not require additional maintenance.

Change Sanding Belt

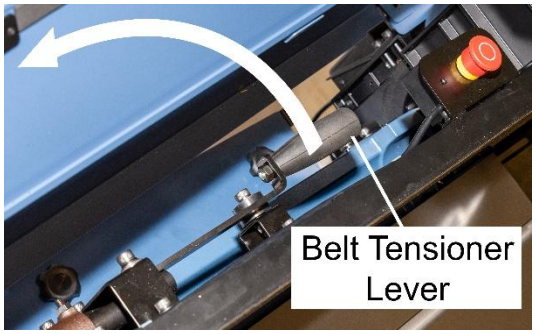
1. **Disconnect the machine from power.**
2. Open the belt guard.



3. Loosen the lock knobs and open the belt tensioner access door.

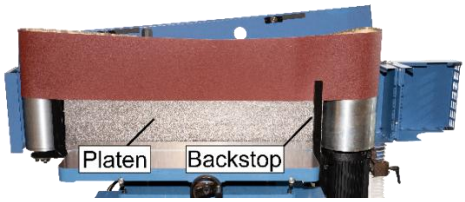


4. Lift the belt tensioner lever to disengage the belt tensioner.

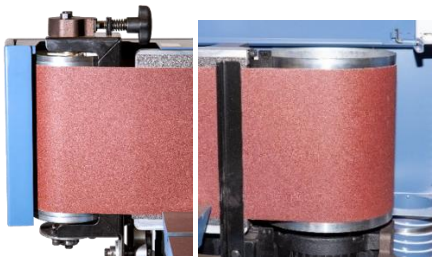


5. Remove the existing sanding belt.
6. Before installing the replacement sanding belt, check the running direction of the belt. Ensure the arrows on the back of the belt match the belt's running direction.

7. Install the belt. Ensure the sanding belt passes between the backstop and graphite platen.



8. Ensure the belt is centered on both the drive drum and idler drum.



9. The actual length of sanding belts may slightly differ from their nominal length. If a sanding belt has too much slack and becomes difficult to position on the drums, tension the belt by hand while positioning the belt. This sander accepts sanding belts up to 108-1/2" long.

10. Lower the belt tensioner lever to tighten the sanding belt.
11. Close the belt guard, then close and secure the belt tensioner access door. The locking knob is spring-loaded and must be pressed inward while tightening.
12. Run the sander with the new sanding belt for 20-30 seconds to make sure the new belt tracks within the platen. If the sanding belt is not tracking properly, TURN OFF THE SANDER IMMEDIATELY. See "Belt Tracking Adjustment" on page 36 if belt tracking needs to be adjusted.

Clean Sanding Belt

Frequent cleaning of the sanding belt helps extend abrasive life and maintain consistent sanding performance.

Rubber abrasive cleaning sticks are available from local woodworking supply store. The cleaning stick can remove loose debris trapped on the abrasive surface and prevent the belt from clogging.

To clean the sanding belt:

1. Start the sander.
2. Gently rub the cleaning stick against the sanding belt until the sanding belt is clean.

If a rubber abrasive cleaning stick is not available, compressed air can also remove some debris from the sanding belt. Ensure the dust removed from the sanding belt is safely extracted by a dust collection system. Use compressed air cautiously and always wear eye and respiratory protection. Avoid directing airborne dust toward yourself or others.

Adjust Belt Tracking

Run the sander for 20-30 seconds to observe the tracking of the sanding belt. The sanding belt should remain centered on the idler and drive drums. If the sanding belt is not tracking properly, **TURN OFF THE SANDER IMMEDIATELY.**

If adjustment is needed:

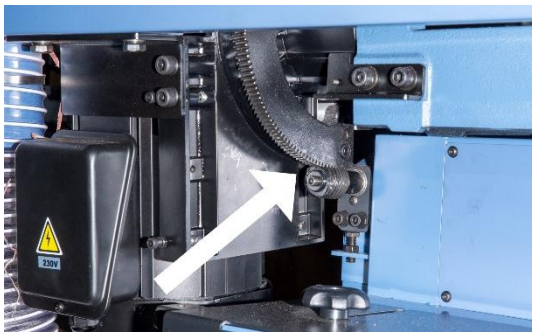
1. Turn off the sander.
2. If the sanding belt has moved beyond the edge of the drums, or is contacting any machine parts other than the drums, follow the instructions in “Change Sanding Belt” on page 35 to reinstall the sanding belt before proceeding.
3. Rotate the belt tracking control knob. Turn the knob clockwise to shift the belt upward; counterclockwise moves the belt downward. Make small, incremental adjustments by rotating the knob 1/10 turn at a time.

4. Set belt oscillation speed to zero before testing the new setting.
5. Turn on the machine and run the sander for 20-30 seconds without belt oscillation. If the belt is still not tracking, **TURN OFF THE SANDER IMMEDIATELY.** Restart from step 1.
6. Otherwise, slowly increase the oscillation speed and ensure the belt is still tracking within the drums at the oscillation speed with maximum belt oscillation. Make small, incremental adjustments to center the belt and allow the belt time to respond before making additional adjustments.

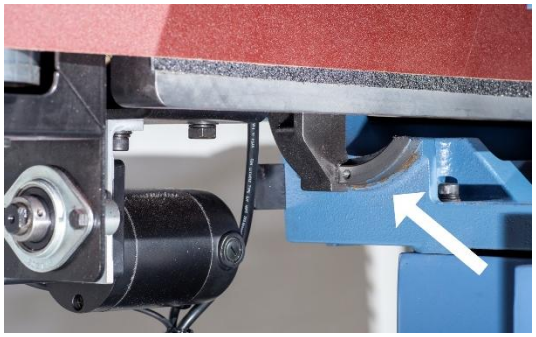
Lubricate Machine

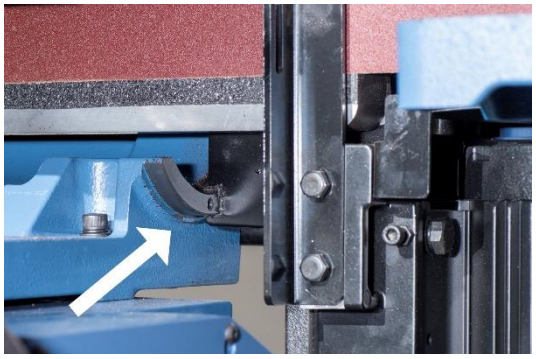
The gears and shafts of the sander should be cleaned and lightly lubricated regularly. Relubricate these components with self-cleaning dry lube, paste wax, or lithium grease. Avoid over lubrication, as this can attract dust.

1. Worm gear.

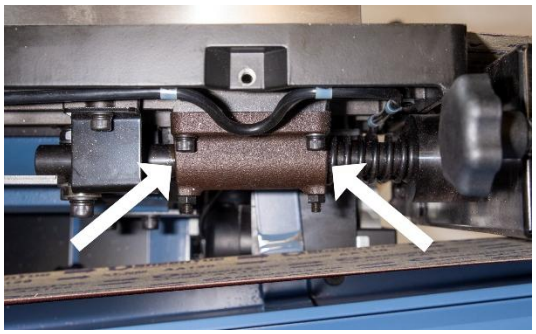


2. Rotating shafts.

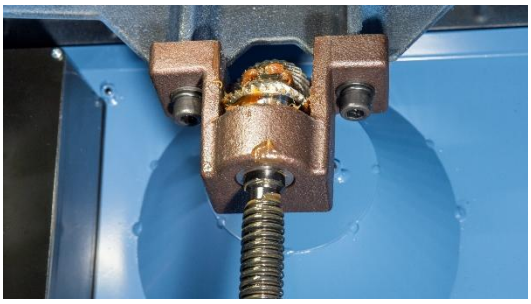




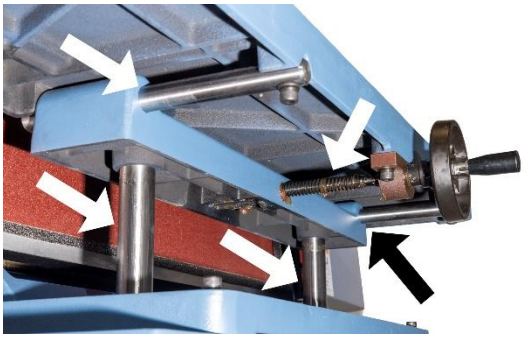
3. Belt tensioner tie rod shaft.



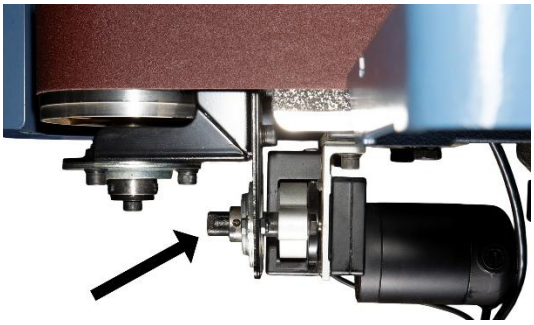
4. Table height gear and shaft (inside the cabinet).



5. Table shafts.



6. Oscillation shaft.

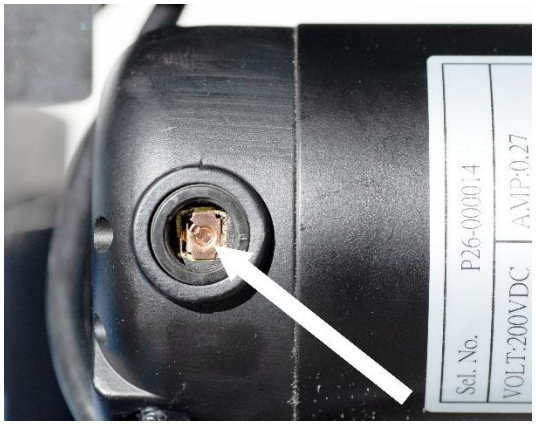


Replace Oscillating Motor Carbon Brushes

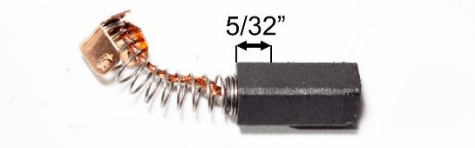
The sanding belt oscillation motor has a pair of carbon brushes, which are consumable parts. When the carbon brushes are worn and the motor fails to function properly, contact Oliver customer service to order carbon brushes. The carbon brushes must be replaced as a pair.

1. **Disconnect the machine from power.**
2. Remove the threaded cap to remove the old carbon brush. There are two carbon brushes for the motor, and they are located on opposite sides of the motor.

3. Use a small pick tool or screwdriver to remove the old carbon brushes.



4. Remove and inspect each carbon brush. If a carbon brush is worn to less than 3.75 mm (approx. 5/32”) in length, replace both brushes as a set.



5. Install the new brush. Ensure the brush moves freely in its holder and the spring is properly seated and applying pressure.
6. Reinstall the brush caps securely.
7. Repeat the process for the second carbon brush before operating the machine. The carbon brushes must be replaced as a pair.
8. Ensure the belt guard is closed and the table is cleared.
9. Reconnect the sander to power, then run the sander with no load for 3–5 minutes to allow the carbon brushes to break in.

Troubleshooting

Troubleshooting procedures in this section are limited to routine operator adjustments and maintenance. Internal electrical repairs and major mechanical service should only be performed by qualified service personnel.

> ⚠ **WARNING** **Disconnect the machine from power before inspecting, adjusting, or servicing the sander unless a procedure specifically requires the machine to be running. After servicing, remove all tools, wrenches, and loose parts before restarting the machine. Failure to comply may result in serious injury.**

Mechanical / Electrical Issues

Problem	Possible Cause	Possible Solution
Machine does not start.	Machine is not connected to a power source.	1. Make sure the machine is plugged in. 2. Check the electrical panel for a tripped circuit breaker or a blown fuse. 3. Ensure all electrical connections have good contacts.
	Emergency stop button engaged.	Release both Emergency Stop buttons. Turn the button clockwise until it releases.
	Low voltage/current.	Have a licensed electrician inspect the circuit.
	Faulty switch/motor/ carbon brush.	Contact customer service.
Machine stopped during the operation.	Tripped circuit breaker or blown fuse.	Reconnect circuit. Reduce feed pressure.
	Overload protection mechanism triggered.	1. The overload protection mechanism resets automatically. 2. Wait 1 minute for the motor to cool down before resuming operation. 3. Reduce feed pressure.
Machine stalls or does not come up to speed.	Extension cord is too light or too long.	Use a shorter / heavier cord that meets this machine's electrical requirements.
	Low voltage	Verify the machine is connected to a 1Ph, 230V circuit.
	Feed pressure is too high.	Reduce feed pressure.
	Motor/capacitor issue.	Contact customer service for further assistance.

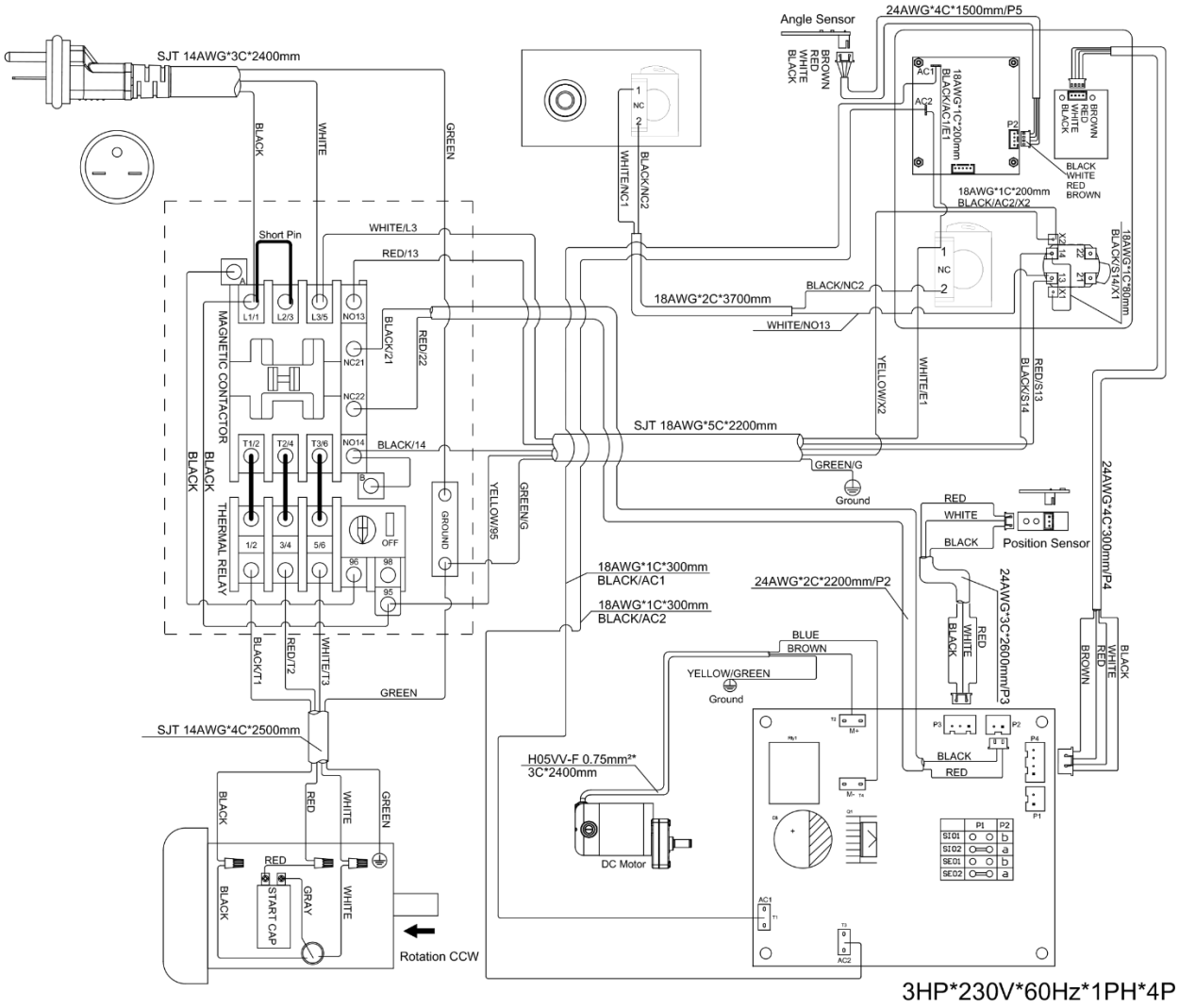
Problem	Possible Cause	Possible Solution
Machine trips circuit breaker or blows fuse.	Machine is overloaded.	Reduce feed pressure.
	Too much load on a circuit.	Make sure the power circuit is sized for this machine. If the circuit is shared, ensure it is sized to supply power for all items in the circuit.
	Motor issue.	Contact customer service for further assistance.
Machine vibrates excessively	Machine stands on uneven floor.	Reposition the machine on a flat, level surface.
	Low sanding belt tension.	Make sure the belt tensioner lever is fully lowered and the belt tensioning mechanism is not obstructed.
		Replace broken tension spring as needed.
	Worn/damaged sanding belt or sanding belt seam.	Replace the sanding belt.
	Improper motor/component mounting.	Check, adjust, and tighten motor/component mounting.
	Motor bearing issue.	Contact customer service for further assistance.
Sanding belt does not track properly	Belt installed incorrectly	Reinstall belt and verify directional arrows match belt travel direction.
	Belt damaged or stretched	Replace sanding belt.
	Belt not centered on drums during installation	Reinstall and center belt before tensioning.
	Tracking adjustment incorrect	Adjust tracking knob in small increments.
	Max. oscillation range not tested during adjustment.	Re-adjust belt tracking and verify the belt is centered on the drums at various oscillation speeds.
Belt does not oscillate	Oscillation speed is set to 0	Increase the oscillation speed setting.
	Oscillation linkage obstructed by dust buildup	Clean and lubricate oscillation linkage components.
	Oscillation motor carbon brushes worn	Replace carbon brushes as a pair.
	Oscillation motor failure	Contact Oliver Machinery service department.
Poor dust collection	Dust collector airflow insufficient	Verify system provides minimum 650 CFM at dust port.
	Belt guard left open during edge sanding	Close belt guard during standard sanding operations.
	Dust hose clogged	Inspect and clean dust hose and dust port.
	Excessive air leakage in system	Inspect duct connections and blast gates.

Operation / Quality-Related Issues

Problem	Possible Cause	Solution
Work pulled from hand.	Inadequate stock support.	Hold the workpiece firmly against the table and feed it gradually into the sanding belt.
		Use the miter gauge for additional support.
		Use special jigs to support the short stock.
Sanded edge is not square.	Sanding belt is not perpendicular to the table.	Adjust the sanding belt tilt.
	Digital readout not zeroed.	Set the sanding belt in the upright position and reset the digital readout.
	Improper stock feeding.	Ensure stock is pressed firmly against the table when feeding.
Unable to form a straight edge.	Improper stock feeding.	Apply even and consistent pressure on the entire edge when feeding.
	Uneven belt wear.	Adjust table height periodically to use different portions of the belt.
	Worn graphite backing.	Use a straight edge to check the flatness of the platen with the graphite backing. Replace worn graphite backing as needed.
	Sanding on unsupported section of belt	Sand only on the platen-supported section of the belt.
Stock burns	Sanding grit is too fine.	Use a sanding belt with a coarser grit.
	Clogged/worn sanding belt.	Use the sanding belt cleaner to unclog the belt. Replace the sanding belt as needed.
	Feed pressure is too high.	Lower feed pressure.
	Heat buildup on workpiece.	Reduce pressure and keep workpiece moving steadily.
Sanding belt clogs easily	Sanding softwood or wood with high resin content.	Clean/replace the belt more frequently.
	Sanding wet stock.	Dry stock before sanding.
	Sanding non-wood materials.	Some materials may melt easily when heated. Sand with light pressure and keep it cool when sanding.

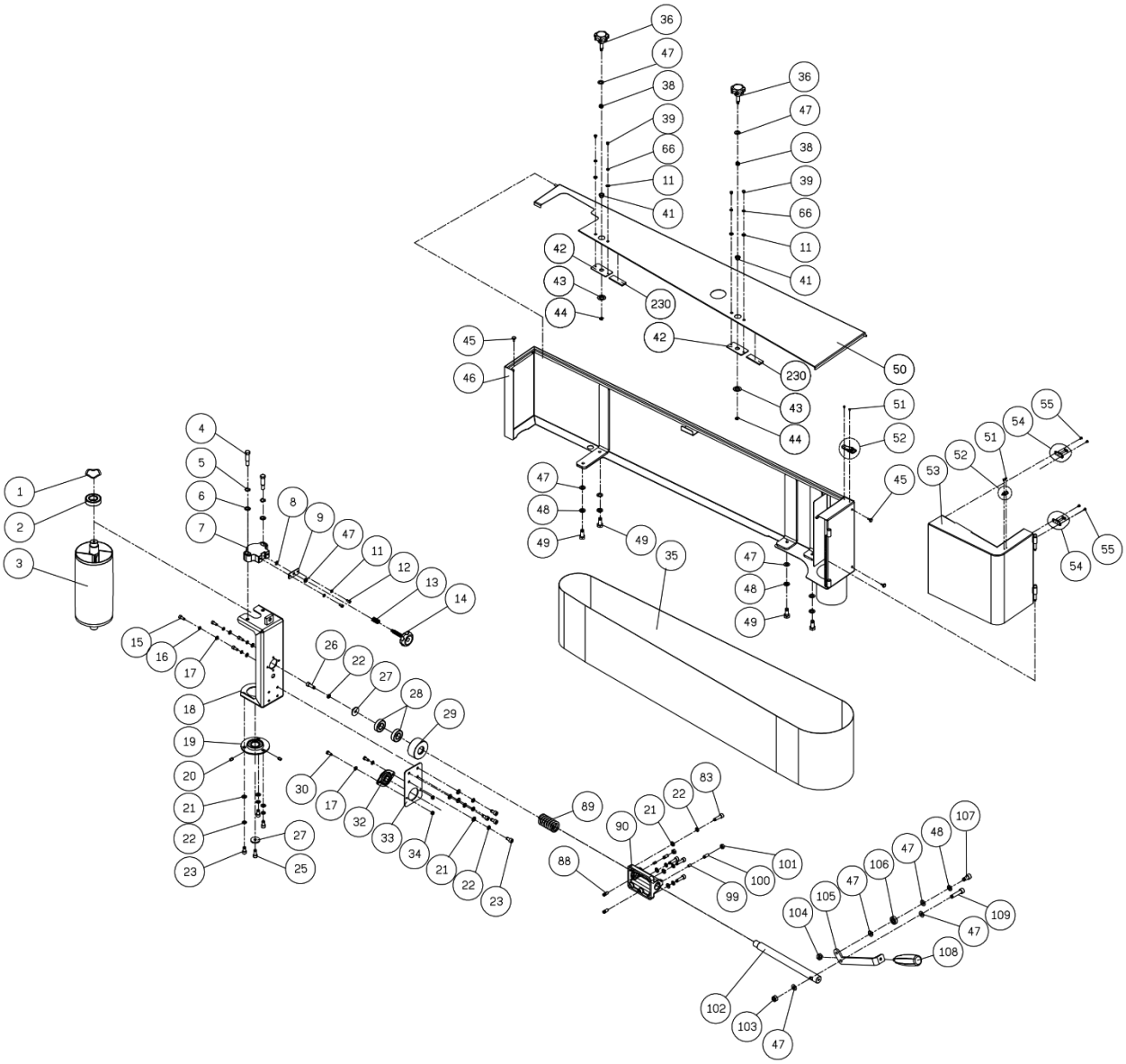
Problem	Possible Cause	Solution
Deep sanding marks on the workpiece	Sanding belt grit is too coarse.	Use a finer grit sanding belt.
	Dirty/contaminated sanding belt.	Clean sanding belt. Replace as necessary.
	Too much feeding pressure and/or abrupt feeding.	Reduce feeding pressure and allow more time for the abrasive surface to work on the workpiece.
Abrasive materials rub off the belt easily	Aged sanding belt.	Avoid storing sanding belts in extreme temperatures and humidity, which may cause the belt to fail prematurely.
		Do not fold, crease, or store sanding belts under heavy objects, as this can damage the abrasive bond.

Wiring Diagram



Parts List

Sanding Head (1)



Sanding Head (2)

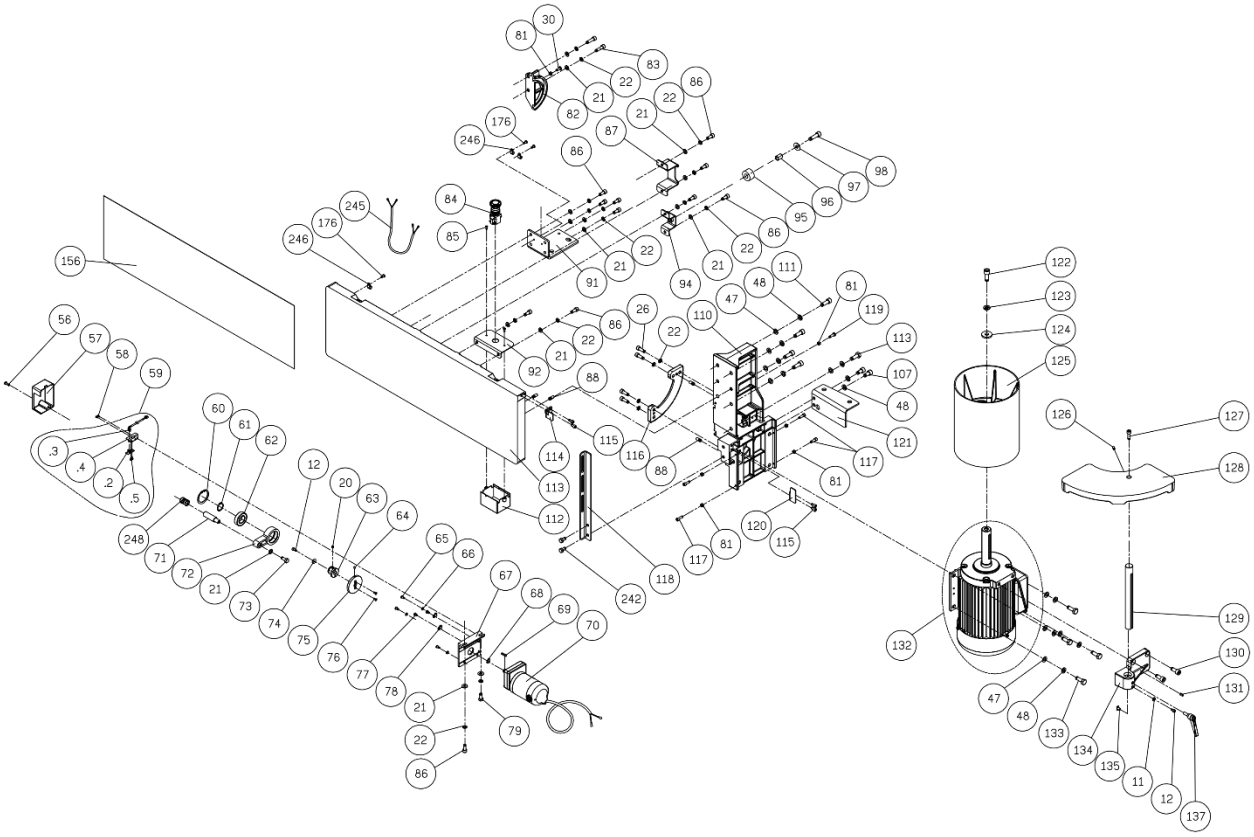
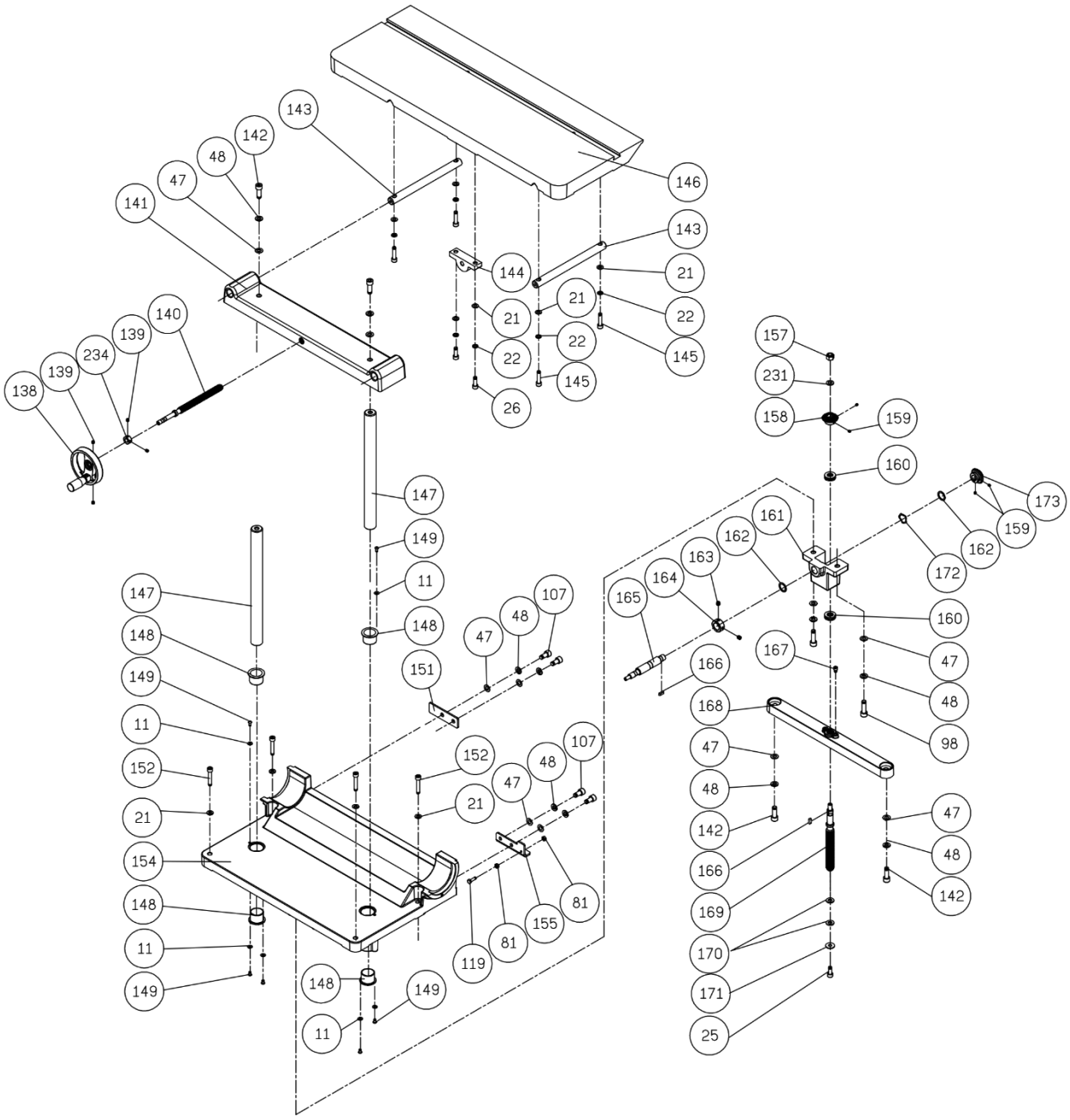
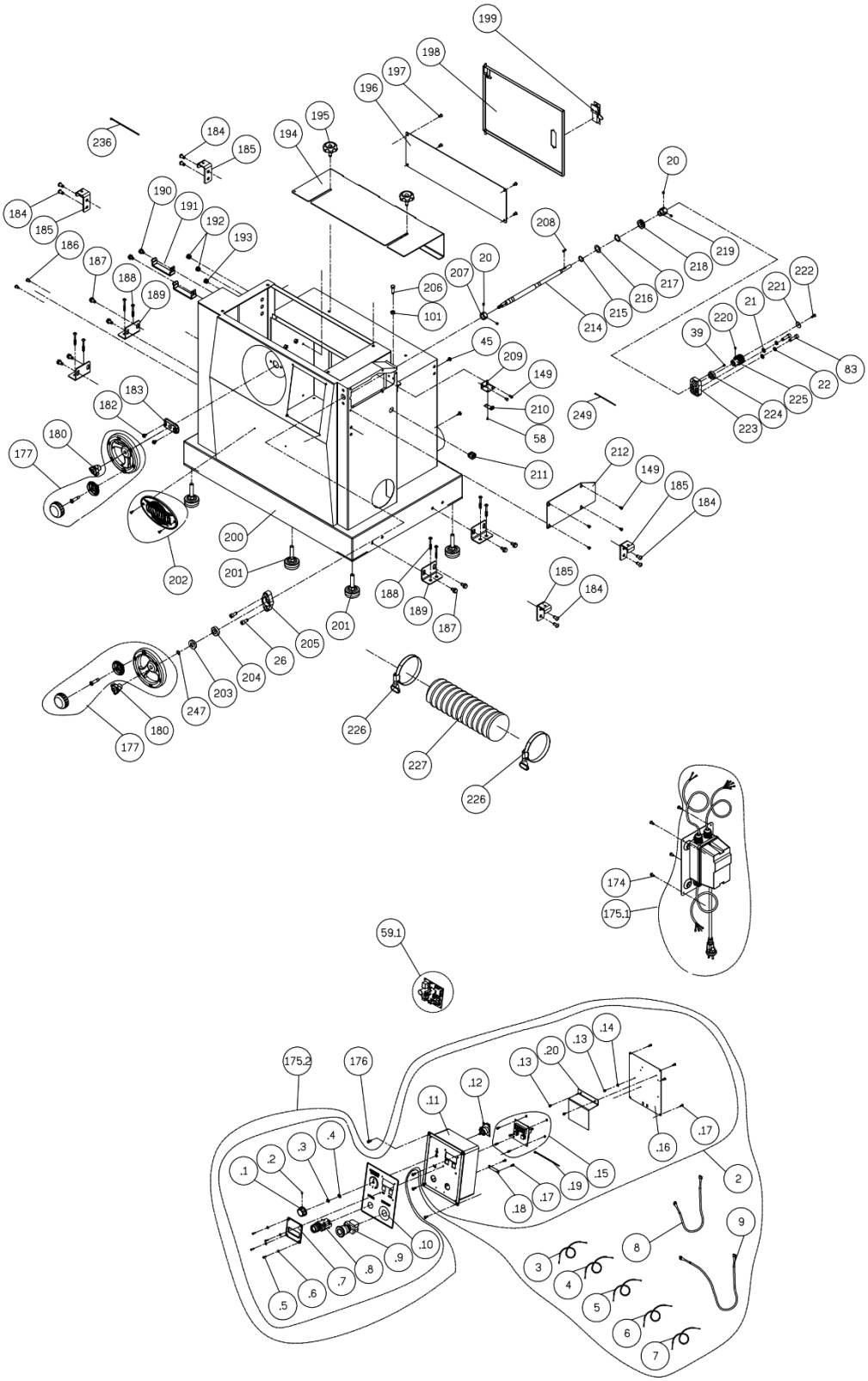


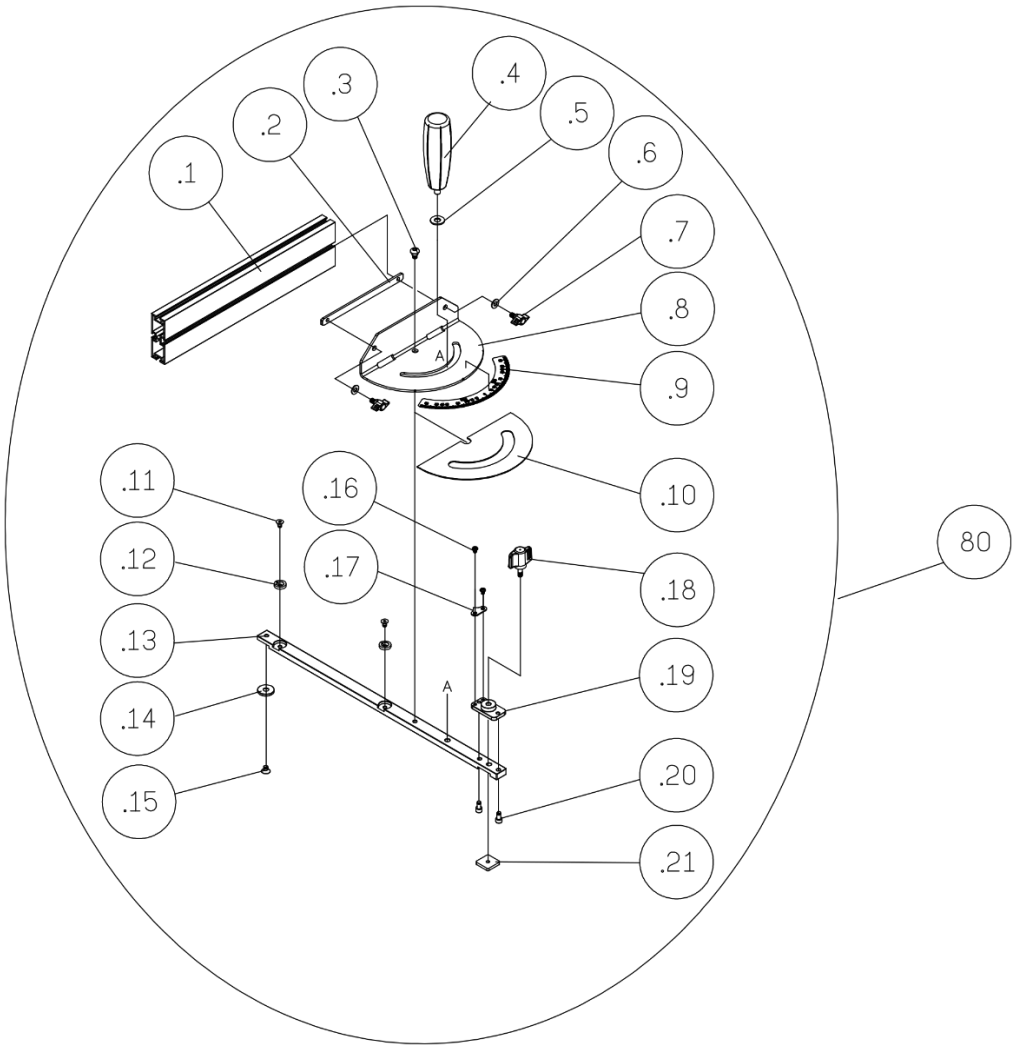
Table Assembly



Cabinet and Control Panel



Miter Gauge



Key	Part Number	Descriptions	Specification	QTY
1	006730-100	Wave Washer	BWW-6205	1
2	030209-000	Ball Bearing	6205	1
3	925208-000	Abrasive Belt Drum Assembly		1
4	290009-902	Shoulder Screw		2
5	006704-100	Wave Washer	WW-12	2
6	006001-089	Flat Washer	12.1*18.7*1.0t	2
7	130435-903	Block		1
8	010026-000	Retaining Ring	STW-9	1
9	175143-904	Clamper Support		1
11	006001-010	Flat Washer	5.2*12*1.5t	13
12	000102-103	Cap Screw	M5*0.8P*10	4
13	280293-901	Spring		1
14	230449-000	Knob		1
15	000103-106	Cap Screw	M6*1.0P*16	4
16	006303-100	Spring Washer	6.5*10.5	4
17	006001-115	Flat Washer	6.2*13*1.5t	6
18	175393-904	Idler Bracket		1
19	034601-002	Bearing	SBPF205	1
20	001902-109	Set Screw	M6*1.0P*6	7
21	006001-049	Flat Washer	8.5*16*2.0t	36
22	006305-100	Spring Washer	8.2*13.7	38
23	000104-104	Cap Screw	M8*1.25P*16	4
25	002601-102	Pan Head Lock Screw	M8*1.25P*20	2
26	000104-108	Cap Screw	M8*1.25P*25	9
27	006001-040	Flat Washer	8*30*3.0t	2
28	030103-002	Ball Bearing	6004	2
29	381531-901	Bearing Housing		1
30	000002-103	Hex. screw	M6*1.0P*16	3
32	034602-002	Bearing	SBPFL 203	1
33	175382-904	Idler Bracket		1
34	008304-100	Anti-loose Nut	M6*1.0P(10B*6H)	2
35	660344-000	Abrasive Belt	9"(230mm)x108"(2743.2mm),#120	1
36	230450-000	Knob		2
38	280300-901	Spring		2
39	000804-104	Round Head Screw	M5*0.8P*6	5

Key	Part Number	Descriptions	Specification	QTY
41	130434-903	Bushing Sleeve		2
42	175395-904	Fixed Plate		2
43	010305-000	Retaining Ring	SPN-12	2
44	010204-000	Retaining Ring	ETW-7	2
45	340007-615	Spacer		5
46	175388-127	Safety Guard		1
47	006001-068	Flat Washer	10*20*2.0t	30
48	006307-100	Spring Washer	10.2*18.5	26
49	000004-102	Hex. screw	M10*1.5P*25	4
50	175390-127	Safety Cover		1
51	000404-101	Flat Head Screw	M3*0.5P*6	4
52	230429-905	Line Latches	C-12-A-B	1
53	175389-127	Dust Hood		1
54	925386-001	Bracket with Magnet		1
55	000805-101	Round Head Screw	M4*0.7P*6	4
56	000303-205	Pan Head Screw	M5*0.8P*15L	1
57	251547-615	Cover		1
58	000301-201	Pan Head Screw	M3*0.5P*6	3
59	950892-001	PC Board Assembly		1
59.1	950934-000	PC Board		1
59.2	491248-000	Sensor	MH253	1
59.3	473048-009	Connect Cord	24AWG*3C*2600mm	1
59.4	175227-000	Bracket		1
59.5	000301-201	Round Head Phillip Screw	M3*0.5P*6	2
60	010107-000	Retaining Ring	RTW-47	1
61	010011-000	Retaining Ring	STW-25	1
62	030201-002	Ball Bearing	6005	1
63	381490-901	Bushing		1
64	660220-000	Magnetic Iron	N35	1
65	000804-107	Round Head Screw	M5*0.8P*12	3
66	006302-100	Spring Washer	5.1*9.3	7
67	310603-909	Fixed Plate		1
68	010003-000	Retaining Ring	STW-12	1
69	012201-002	Key	4*4*20	1
70	499024-000	Geared Motor	1/30HP*200VDC*0.27A*44RPM	1

Key	Part Number	Descriptions	Specification	QTY
71	361488-901	Shaft		1
72	310592-909	Crank		1
73	000003-102	Hex. screw	M8*1.25P*16	1
74	006001-137	Flat Washer	5.3*16*1.5t	1
75	381491-904	Fixing Plate		1
76	000705-104	Socket Hex. Screw	M4*0.7*10	2
77	000303-102	Pan Head Screw	M5*0.8P*8	2
78	021107-100	Wire Holder	UC0.5BK	2
79	000003-104	Hex. screw	M8*1.25P*20	1
80	925409-000	Miter Gauge Assembly		1
80.1	310500-911	Fence		1
80.2	175449-000	Fixing Plate		1
80.3	290094-901	Screw		1
80.4	230141-615	Handle		1
80.5	006001-052	Flat Washer	8.5*19*1.5t	1
80.6	006003-022	Flat Washer	6.3*13*1.0t	2
80.7	250705-000	Wing Screw	M6*1.0P	2
80.8	175447-904	Miter Gauge Plate		1
80.9	575984-000	Scale		1
80.10	575985-000	Wear-Resistant Sheet		1
80.11	000701-101	Socket Hex. Screw	M5*0.8P*8	2
80.12	251566-615	Adjust Block		2
80.13	310606-909	Slot Bar		1
80.14	130380-903	Round Guide		1
80.15	000403-101	Flat Head Screw	M6*1.0P*8	1
80.16	000302-116	Pan Head Screw	M4*0.7P*5	2
80.17	175448-156	Pointer		1
80.18	251011-000	Wing Screw		1
80.19	130436-903	Pointer Fixing Block		1
80.20	000102-102	Cap Screw	M5*0.8P*8	2
80.21	175450-901	Fixing Plate		1
81	008005-100	Hex Nut	M6*1.0P(10B*5H)	8
82	051572-000	Trunnion		1
83	000104-110	Cap Screw	M8*1.25P*30	8
84	491153-000	Stop Switch	NPB22-H01R(600V/10A)-1b	1

Key	Part Number	Descriptions	Specification	QTY
85	000302-103	Pan Head Screw	M4*0.7P*10	2
86	000104-106	Cap Screw	M8*1.25P*20	14
87	175383-904	Fixing Bracket		1
88	360355-901	Pin		6
89	280299-901	Spring		1
90	051559-901	Rod Seat		1
91	175384-904	Guard Fixing Bracket-L		1
92	175405-904	Switch Fixing Bracket		1
94	175392-904	Fixing Bracket		1
95	340140-000	Crash Pad		1
96	190339-901	Spacer		1
97	006001-081	Flat Washer	10.5*27*2.0t	1
98	000105-104	Cap Screw	M10*1.5P*35	3
99	330073-000	Bushing		2
100	000204-105	Set Screw	M8*1.25P*20	2
101	008006-100	Hex Nut	M8*1.25P(13B*6.5H)	3
102	361557-901	Connect Bar		1
103	008308-100	Anti-loose Nut	M10*1.5P(17B*12H)	1
104	008007-100	Hex Nut	M10*1.5P(17B*8H)	1
105	175385-904	Handle		1
106	030111-001	Ball Bearing	6000	1
107	000105-101	Cap Screw	M10*1.5P*20	7
108	230301-615	Handle		1
109	000105-112	Cap Screw	M10*1.5P*45	1
110	090416-000	Motor Bracket		1
111	000105-103	Cap Screw	M10*1.5P*30	5
112	250479-615	Switch Box		1
113	090415-000	Fence		1
114	175386-904	Upper Magnet Fixing Bracket		1
115	000103-103	Cap Screw	M6*1.0P*12	4
116	051562-000	Gear Rotary Plate		1
117	000103-107	Cap Screw	M6*1.0P*20	4
118	175391-904	Stop Plate		1
119	000002-104	Hex. screw	M6*1.0P*20	1
120	175394-904	Lower Magnet Fixing Bracket		1

Key	Part Number	Descriptions	Specification	QTY
121	175402-904	Guard Fixing Bracket-L		1
122	000106-110	Cap Screw	M12*1.75P*30	1
123	006308-100	Spring Washer	12.2*21.6	1
124	172285-905	Flat Washer	13*35*5.0t	1
125	090417-000	Drive Roller		1
126	000203-104	Set Screw	M6*1.0P*12	1
127	002601-107	Pan Head Lock Screw	M8*1.25P*25	1
128	051561-127	Contour Table		1
129	361480-901	Column		1
130	000105-102	Cap Screw	M10*1.5P*25	2
131	001902-105	Set Screw	M6*1.0P*12	1
132	901417-001	Motor Assembly	3HP*230V*60HZ*1PH*4P	1
132.1	496329-000	Start Capacitor	300MFD/250VAC(LAI)(45*90)	1
132.2	496258-000	Run Capacitor	50UF/350VAC(LAI)(45*86)	1
133	000004-103	Hex. screw	M10*1.5P*30	5
134	051560-901	Support Rod Seat		1
135	361527-901	Pin		1
137	230421-000	Lock Handle	M8*1.25P	1
138	240098-000	Folding Handwheel	W401-100-B10-GS	1
139	000203-101	Set Screw	M6*1.0P*6	4
140	361560-901	Lead Screw		1
141	051578-127	Clamper Support		1
142	002604-104	Pan Head Lock Screw	M10*1.5P*30	4
143	361562-000	Table Column		2
144	051506-901	Spreader Bracket		1
145	000104-111	Cap Screw	M8*1.25P*35	4
146	051558-127	Table		1
147	361559-000	Column		2
148	034502-000	Self-Lubricating Bearing	GFM-3034-26	4
149	000804-103	Round Head Screw	M5*0.8P*10	12
151	175403-904	Left Positioning Plate		1
152	000104-113	Cap Screw	M8*1.25P*45	4
154	051557-127	Rotating Base		1
155	175401-904	Right Positioning Plate		1
156	660345-000	Graphite Sheet		1

Key	Part Number	Descriptions	Specification	QTY
157	008307-100	Anti-loose Nut	M10*1.25P(17B*12H)	1
158	380767-000	Bevel Gear		1
159	001901-101	Set Screw	M5*0.8P*5	4
160	031005-001	Ball Bearing	51102	2
161	051503-901	Elevation Bracket		1
162	006006-106	Flat Washer	19.1*25.4*1.6	2
163	004403-103	Set Screw	5/16”-18NC*5/16”	2
164	360376-901	Fix Ring		1
165	361561-901	Transmission Shaft		1
166	012003-005	Key	5*5*16	2
167	000103-101	Cap Screw	M6*1.0P*8	1
168	090418-000	UP-Down Fixed Seat		1
169	361558-901	Height Adjustment Lever		1
170	006006-120	Flat Washer	20*10.2±0.1*2±0.1	2
171	006001-056	Flat Washer	8.5*23*2.0t	1
172	006712-100	Wave Washer	BWW-6001	1
173	380768-000	Bevel Gear		1
174	002402-703	Round Head Phillip Lock Screw w/Washer	M5*0.8P*10-5*10*1.0t	4
175	950960-001	Switch Assembly	3HP*230V*1PH	1
175.1	938233-001	Magnetic Switch Assembly	3HP*230V*1PH	1
175.2	950962-000	Control Panel Assembly		1
175.2.1	230389-615	Speed Knob		1
175.2.2	000201-101	Set Screw	M4*0.7P*6	1
175.2.3	008039-200	Hex Nut	M8*0.75P(11B*2H)	1
175.2.4	006002-211	Flat Washer	8.1*13*0.5t	1
175.2.5	000301-202	Pan Head Screw	M3*0.5P*12	4
175.2.6	006002-139	Flat Washer	3*8*1.0t	4
175.2.7	250839-620	DRO Transparent Cover		1
175.2.8	490183-000	Illuminated Start Switch	(220V)	1
175.2.9	491153-000	Emergency Stop Switch	NPB22-H01R(600V/10A)1b	1
175.2.10	575920-000	Control Panel Label	OLIVER	1
175.2.11	251552-615	Switch Box		1
175.2.12	491209-000	Variable resistor group	10KΩ	1
175.2.13	000302-201	Pan Head Screw	M4*0.7P*6	3
175.2.14	006501-100	Tooth Washer	4.3*8.5(BW-4)	1

Key	Part Number	Descriptions	Specification	QTY
175.2.15	950963-000	Angle Sensor Assembly	L:1500mm	1
175.2.16	175429-904	Switch Box Cover		1
175.2.17	001201-603	Self-Tapping Screw	M4*1.41P*10	6
175.2.18	175431-904	Fixed Plate		1
175.2.19	021010-000	Wire Holder	ALT-150M-B	1
175.2.20	175485-000	Baffle		1
175.3	471037-130	Connect Cord	18AWG*1C*300mm(AC1\AC1)	1
175.4	471037-131	Connect Cord	18AWG*1C*80mm(X1\S14)	1
175.5	471037-132	Connect Cord	18AWG*1C*300mm(AC2\AC2)	1
175.6	471037-134	Connect Cord	18AWG*1C*200mm(AC1\E1)	1
175.7	471037-194	Connect Cord	18AWG*1C*200mm(AC2\X2)	1
175.8	474048-020	Connect Wire	24AWG*4C*300mm	1
175.9	474048-026	Connect Wire	24AWG*4C*1600mm	1
176	000303-803	Pan Head Screw	M5*0.8P*10	9
177	925408-000	Handwheel Assembly		2
180	920703-000	Fixing Knob		2
182	001603-102	Pan Head Screw w/Washer	M6*1.0P*10/6*13.2*1.0t	2
183	250407-615	Worm Support Seat		1
184	000802-101	Round Head Screw	M8*1.25P*16	8
185	175359-901	Lifting Hook		4
186	000304-102	Pan Head Screw	M6*1.0P*10	2
187	049201-101	Hex. Screw w/Flat Washer	M8*1.25P*16/(13B*6.5H)	8
188	003905-002	Wood Screw	1/4”-20NC*2”	8
189	175312-000	Fixing Plate		4
190	049201-102	Hex. Screw w/Flat Washer	M8*1.25P*12/(13B*5.5H)	2
191	175396-904	Miter Gauge Holder		2
192	020008-000	Strain Relief	SBR5-2	2
193	020013-000	Strain Relief	SB5M-2	1
194	175387-308	Fence		1
195	230451-000	Bolt	M8	2
196	175399-127	Rear Cover		1
197	000801-101	Round Head Screw	M6*1.0P*10	4
198	175398-127	Door		1
199	230134-000	Latch		1
200	175397-127	Cabinet		1

Key	Part Number	Descriptions	Specification	QTY
201	230403-000	Foot		4
202	572094-000	Logo	OLIVER	1
203	160079-903	Bushing		1
204	030112-001	Ball Bearing	6002	1
205	130433-903	Worm Support Seat		1
206	000003-105	Hex. screw	M8*1.25P*25	1
207	381532-901	Spacer		1
208	012002-006	Key	4*4*16	1
209	175400-000	Angle Sensor Fixed Plate		1
210	491221-000	Angle Detector Substrate		1
211	020005-000	Strain Relief	SB8R-3	1
212	175404-127	Fixed Plate		1
214	361563-901	Rotating Worm Shaft		1
215	010009-000	Retaining Ring	STW-18	1
216	006001-203	Flat Washer	18*28*1t	1
217	006706-100	Wave Washer	WW-18	1
218	660229-000	Magnetic Ring		1
219	381463-901	Fixed Bushing		1
220	000202-101	Set Screw	M5*0.8P*5	1
221	006001-026	Flat Washer	6.4*20*3.0t	1
222	002602-103	Pan Head Lock Screw	M6*1.0P*16	1
223	130432-903	Clamper Support		1
224	030113-001	Ball Bearing	6001	1
225	320427-901	Rotating Worm		1
226	042605-000	Clamp	4"	2
227	042620-020	Tube	4*1500mm	1
230	200118-615	Foam		2
231	006001-069	Flat Washer	10*20*3.0t	1
234	381533-901	Spacer		1
236	021010-000	Wire Holder	ALT-150M-B	9
242	028301-102	Hex. Screw W/Spring Washer	M8*1.25P*16/(13B*5H)/8.2*13.7	2
245	472001-080	Connect Wire	SJT18AWG*2C*3700mm	1
246	021101-000	Wire Holder	ACC-2	7
247	006708-100	Wave Washer	BWW-626	1
248	280307-901	Spring		1
249	021006-000	Wire Holder	ALT-102S-B	1

Maintenance Record

Date	Task	Operator

Notes

Warranty and Service Policy

Limited Warranty

Oliver Machinery ("Oliver") warrants to the original purchaser that its products will be free from defects in materials and workmanship under normal use and service for a period of two (2) years from the date of purchase by the original customer.

Motors, electronic components, and electrical systems—including but not limited to variable frequency drives (VFDs), circuit boards, switches, sensors, and controllers—are warranted for a period of one (1) year from the date of purchase.

This warranty applies only to the original purchaser and is not transferable.

Oliver's sole obligation under this warranty shall be, at its option, to repair or replace any product, component, or part determined by Oliver to be defective in material or workmanship.

Replacement parts may be new or refurbished components of equal performance.

Warranty Coverage

This warranty covers defects in materials and workmanship occurring under normal operating conditions and proper maintenance.

Unless otherwise agreed in writing, warranty coverage includes replacement parts only. Labor, service travel, installation, and diagnostic costs are not included unless specifically authorized by Oliver in writing.

Items Not Covered

This warranty does not cover the following:

- Normal wear and consumable items, including but not limited to:
    - Belts
    - Blades
    - Cutters
    - Sanding media
    - Brushes
    - Bearings subject to normal wear
    - Lubricants and filters
- Damage resulting from:
    - Misuse or abuse
    - Negligence
    - Improper installation
    - Operation outside recommended specifications
    - Lack of routine maintenance
    - Unauthorized modifications or repairs
    - Use of non-approved parts or accessories
    - Electrical supply issues including power surges, improper voltage, or phase imbalance
    - Accidents, fire, flood, or other acts of nature
    - Cosmetic damage that does not affect machine operation
- Freight damage occurring during shipping – see below:

  Freight damage must be reported directly to the transport carrier immediately at the time of delivery and must be noted on the signed copy of the delivery Bill of Lading (BOL) paperwork otherwise a freight claim may not be claimed.

Warranty Claim Procedure

To obtain warranty service, the customer must:

1. Contact Oliver Machinery technical support at **800-559-5065** or submit a warranty request through https://olivermachinery.net/warranty
2. Provide:
    - Proof of purchase
    - Machine model number
    - Serial number
    - Description of the issue
    - Supporting photos or videos if requested

Oliver may require troubleshooting steps prior to authorizing replacement parts.

Warranty parts will be shipped using standard ground shipping methods. Expedited shipping may be requested by the customer at additional cost.

Oliver reserves the right to require the return of defective parts for inspection before issuing warranty replacements.

Limitation of Liability

To the fullest extent permitted by law, Oliver Machinery shall not be liable for any indirect, incidental, special, or consequential damages, including but not limited to:

- Loss of production
- Loss of profits
- Business interruption
- Installation or removal costs
- Loss of use of equipment

Oliver's total liability under this warranty shall not exceed the original purchase price of the product.

Disclaimer of Other Warranties

Except for the limited warranty expressly stated above, Oliver Machinery disclaims all other warranties, express or implied, including but not limited to:

- the implied warranty of merchantability
- the implied warranty of fitness for a particular purpose

Some jurisdictions do not allow limitations on implied warranties, so certain limitations may not apply in those areas.

Product Safety

All Oliver Machinery equipment must be installed, operated, and maintained in accordance with the owner's manual and applicable safety standards.

Removal or modification of safety devices, guards, or electrical systems will void this warranty.

Product Changes

Oliver Machinery reserves the right to improve, modify, or change product designs and specifications without obligation to retrofit previously manufactured equipment.

Governing Law

This warranty shall be governed by and interpreted in accordance with the laws of the State of Washington, United States.

Customer Support

For questions regarding warranty coverage, service, or replacement parts, please contact:

Oliver Machinery

Phone: **800-559-5065**
Email: **info@olivermachinery.net**
Website: **www.olivermachinery.net**

Appendix

US Standard – Metric Conversion Chart

Fractions	Decimal In.	Millimeters
1/64	.0156	.396
1/32	.0312	.793
3/64	.0469	1.190
1/16	.0625	1.587
5/64	.0781	1.984
3/32	.0937	2.381
7/64	.1094	2.778
1/8	.125	3.175
9/64	.1406	3.571
5/32	.1562	3.968
11/64	.1719	4.365
3/16	.1875	4.762
13/64	.2031	5.159
7/32	.2187	5.556
15/64	.2344	5.953
1/4	.25	6.350
17/64	.2656	6.746
9/32	.2812	7.143
19/64	.2969	7.540
5/16	.3125	7.937
21/64	.3281	8.334
11/32	.3437	8.731
23/64	.3594	9.128
3/8	.375	9.525
25/64	.3906	9.921
13/32	.4062	10.318
27/64	.4219	10.715
7/16	.4375	11.112
29/64	.4531	11.509
15/32	.4687	11.906
31/64	.4844	12.303
1/2	.5	12.700

Fractions	Decimals In.	Millimeters
33/64	.5156	13.096
17/32	.5312	13.493
35/64	.5469	13.890
9/16	.5625	14.287
37/64	.5781	14.684
19/32	.5937	15.081
39/64	.6094	15.478
5/8	.625	15.875
41/64	.6406	16.271
21/32	.6562	16.668
43/64	.6719	17.065
11/16	.6875	17.462
45/64	.7031	17.859
23/32	.7187	18.256
47/64	.7344	18.653
3/4	.75	19.050
49/64	.7656	19.446
25/32	.7812	19.843
51/64	.7969	20.240
13/16	.8125	20.637
53/64	.8281	21.034
27/32	.8437	21.431
55/64	.8594	21.828
7/8	.875	22.225
57/64	.8906	22.621
29/32	.9062	23.018
59/64	.9219	23.415
15/16	.9375	23.812
61/64	.9531	24.209
31/32	.9687	24.606
63/64	.9844	25.003
1.0	1.	25.400

Oliver Machinery is always adding new Industrial Woodworking products to the line.

For complete, up-to-date product information, visit us online at:

WWW.OLIVERMACHINERY.NET

or call toll-free 1-800-559-5065

** SAVE THIS MANUAL FOR FUTURE REFERENCE. **