Sander

Model 6301

Owner's Manual

For Models Manufactured Since 12/2023

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

info@olivermachinery.net
WWW.OLIVERMACHINERY.NET

Stock Number: 6301.001
Manual Version: 1.0.0

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

FOLLOW THE INSTRUCTIONS AND THINK SAFETY!

THE OWNER OF THIS MACHINE IS SOLELY RESPONSIBLE FOR THE SAFETY OF ANYONE USING THIS MACHINE. SUCH RESPONSIBILITY INCLUDES BUT NOT LIMITED TO:

- **PROPER ASSEMBLY, OPERATION, INSPECTION, MAINTENANCE, AND RELOCATION OF THE MACHINE.**
- **PROPER TRAINING FOR THE OPERATORS AND ENSURES THIS MANUAL IS AVAILABLE AT ALL TIMES.**
- **USAGE AUTHORIZATION.**
- **USAGE OF SAFETY AND PROTECTION DEVICES.**

OLIVER MACHINERY DISCLAIMS ANY LIABILITY FOR MACHINES THAT HAVE BEEN ALTERED OR ABUSED. OLIVER MACHINERY RESERVES THE RIGHT TO EFFECT AT ANY TIME, WITHOUT PRIOR NOTICE, THOSE ALTERATIONS TO PARTS, FITTINGS, AND ACCESSORY EQUIPMENT WHICH THEY MAY DEEM NECESSARY FOR ANY REASON WHATSOEVER.

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

PROP 65 NOTICE

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

Some examples of these chemicals are:

- 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/or other safety devices for personal protection.

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

Table of Contents

Introduction

Thank you for choosing Oliver! This manual contains important information on how to safely set up, operate, and maintain this machine. Please take the time to read through this manual, and make sure you completely understand the instructions.

While this manual may provide tips on optimizing the result of your workpiece, the manual is not intended as a substitute for formal woodworking training. If you need to know how to safely complete a woodworking task, please consult knowledgeable and qualified sources before proceeding further.

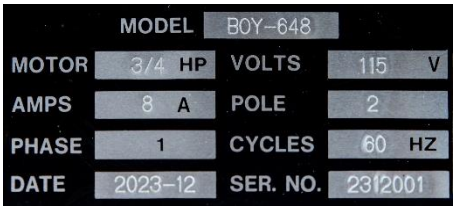
We made every effort to keep this manual up-to-date. Instructions, specifications, drawings, and photographs in this manual should match the machine delivered. If you find any differences or anything that seems confusing in this manual, please check our website for an updated version:

WWW.OLIVERMACHINERY.NET/MANUALS

Alternatively, you can contact our technical support for help:

1-800-559-5065

Before calling, please note down the manufacture date and the serial number of the machine. You can find the information on a nameplate located on the base of the sander. This information is needed to provide proper technical support and to determine if an updated manual is available for your machine.



Please let us know how well this manual serves you. If you have any suggestions, please call the number above or email us at:

info@olivermachinery.net

We love to hear from our customers and make improvements.

Specifications

Quick View

Model	6301 Sander
Stock Number	6301.001
Power Requirement	115V, 1Ph, 60Hz
Motor	TEFC 3/4 HP, 115V, 1Ph
Sanding Belt Size	6” x 48”
Sanding Belt Tilt	0° - 90°
Dimensions	29-3/8” (W) x 21”(D) x 23”(H)
Footprint	20-5/8”(W) x 11-1/2”(D)
Fully Assembled Weight	73 lbs.
Warranty	1 Year (Motor and electronics) 2 Years (All other parts)

Product Dimensions

Width x Depth x Height (Fully Assembled)	29-3/8” (W) x 21”(D) x 23”(H)
Footprint	20-5/8” (W) x 11-1/2”(D)
Fully Assembled Weight	73 lbs.

Shipment Info

Packaging	Cardboard Box
Content	Sander with Included Accessories
Dimensions	23”(L) x 29”(W) x 20”(H)
Weight	82 lbs.
Approx. Assembly Time	30 Minutes
Must Ship Upright	YES
Stackable	NO

Electricals

Power Requirement	115V, 1Ph, 60Hz
Prewired Voltage	115V
Full Load Current Rating	8A
Recommended circuit size	15A
Power Switch Type	ON/OFF Toggle Switch
Connection Type	NEMA 5-15 Plug with 7’ 16AWG Cord

Motor

Motor Type	TEFC
Horsepower	3/4 HP
Power Requirement	115V, 1Ph, 60Hz
Full Load Current Rating	8A
Speed	3420 RPM
Power Transfer Mechanism	Direct Drive
Bearing type	Permanently Sealed Ball Bearing

Sander

Sanding Belt Size	6” x 48”
Sanding Belt Speed	1063FPM
Sanding Belt Tilt	0° - 90°
Sanding Belt Drum Material	Aluminum
Platen Construction	Steel with Graphite Coating
Platen Dimensions	17-3/4” x 6-5/8”

Table

Material	Precision Ground Cast Iron (Main Table) Aluminum (Contour Sanding Table)
Main Table Dimensions	17-11/16“(W) x 10”(D)
Main Table Height from Bench Top	12-5/8” – 15-1/4”
Miter Slot Type	U-Shape Slot (Standard Size)
Miter Slot Size (W x H)	3/4” x 3/8”
Contour Sanding Table Dimensions	11-3/4”(W) X 8-1/4”(D)
Contour Sanding Table Height from Bench Top	12” – 14”

Miter Gauge

Angle Range	-30° to 30°, with positive stops at -45°, 90°, 45°
Miter bar Length	8-3/4”

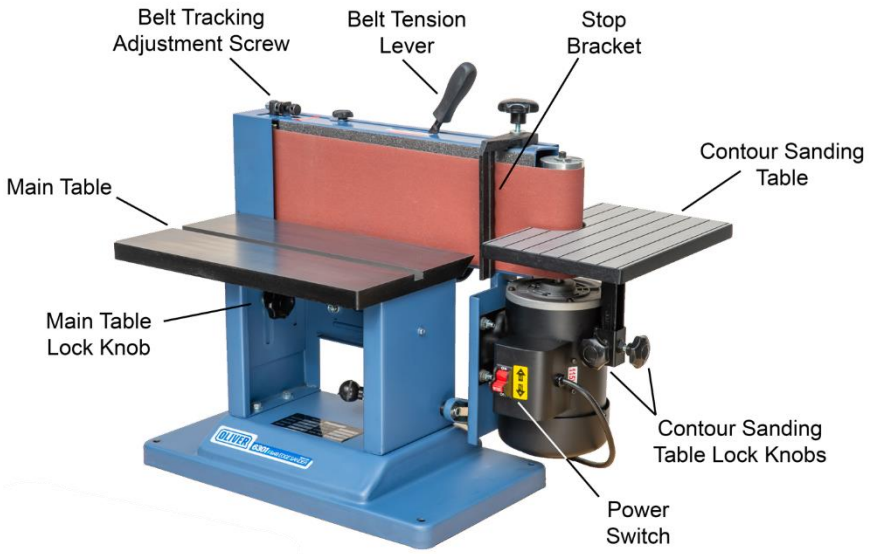
Safety

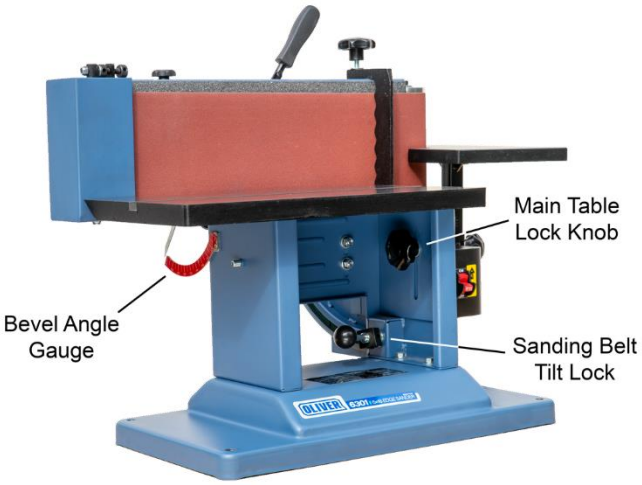
Number of Dust Ports	1
Dust Port Size	2-5/16 O.D. (Fits 2-1/2” Hose)
Minimum CFM Required	300 CFM
Sound Rating @ 2’ distance	98 dB

Others

Serial Number Location	On machine stand.
Country of Origin	Taiwan

Identification





Safety

Oliver Machinery has made every attempt to provide a safe, reliable, easy-to-use piece of machinery. Safety, however, is ultimately depending on the individual machine operator. **Before operating this machine, please become familiar with the following safety labels and guidelines.**

DANGER	This indicates an imminently hazardous situation which, if not avoided, **WILL** cause death or serious injury.
WARNING	This means if the warning is not taken seriously, it **CAN** cause death or serious injury.
CAUTION	This means if the precaution is not taken, it **MAY** cause minor or moderate injury.
IMPORTANT	This is a tip for properly operating the machine to avoid machine damage.

General Safety Guidelines

1. **FAMILIARIZE** yourself with all safety instructions found in this manual. Know the limitations and hazards associated with this machine. Do not operate/service this machine until you are properly trained.

2. **ELECTRICAL GROUNDING**, when done properly, reduces the risk of electrocution, shocks, and fire. Make certain that the machine frame is electrically grounded and that a ground lead is included in the incoming electrical service. In cases where a cord and a plug are used, make certain that the grounding plug connects to a suitable ground. Follow the grounding procedure indicated in the electrical code of your area.

3. **DISCONNECT** the machine from power before performing any service, maintenance, adjustments, or when changing cutters. A machine under repair should be RED TAGGED to show it should not be used until the maintenance is complete.

4. **EYE PROTECTION**: Always wear an approved safety face shield, goggles, or glasses that comply with ANSI Z87.1 and CSA Z94.3 standards. Common eyeglasses are not safety glasses, and may not provide adequate protection.

5. **EAR PROTECTION**: Use hearing protective devices where the noise exceeds the level of exposure allowed in Section 1910.95 of the OSHA Regulations. When in doubt, use it.

6. **OTHER PERSONAL PROTECTION**: Before the operation, remove tie, rings, watch, and other jewelry. Roll up sleeves above elbows. Remove all loose outer clothing and confine long hair. Protective footwear should be used. Do not wear gloves unless it is instructed to perform a particular step(s) in the manual.

7. **GUARDS**: Keep machine guards in place for all applicable operations. If any guards are removed for maintenance, DO NOT OPERATE the machine until all guards are reinstalled. Check clearance between the guards and the cutter before starting the machine.

8. **WORKPLACE SAFETY**: Keep the floor around the machine clean. Scrap material, sawdust, oil, and other liquids increase the risk of tripping or slipping. Be sure to clean up the table before starting the

machine. Make certain the work area is well-lighted and that a proper exhaust system is used to minimize dust. Use anti-skid floor strips on the floor area where the operator normally stands and mark off the machine work area. Provide adequate workspace around the machine.

9. **ACCESS CONTROL** should be enforced so only trained personnel can access the work area and operate the machine. Use a childproof power switch when applicable.

10. **STAY ALERT** at all times. Do not operate this machine while under the influence of drugs/alcohol, or when not feeling well.

11. **NEVER STAND ON THE MACHINE.** This prevents injuries from tipping-related accidents and accidental contact with cutters.

12. **REPLACEMENT PARTS:** Use only genuine Oliver Machinery replacement parts and accessories recommended for this machine. Generic parts made by other manufacturers may create a safety hazard and WILL void the factory warranty and other guarantees.

13. **PROPER USE:** Do not use this machine for anything other than its intended use. If used for other purposes, Oliver Machinery disclaims any real or implied warranty and holds itself harmless for any injury or damage which may result from that use.

14. **ADDITIONAL SAFETY INFORMATION:**

    - National Safety Council – *Accident Prevention Manual for Business and Industry:* https://shop.nsc.org/apm-admin-program-14ed
    - ANSI 01.1: https://webstore.ansi.org/standards/wmma/ansio12013
    - OSHA 1910.213: https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.213

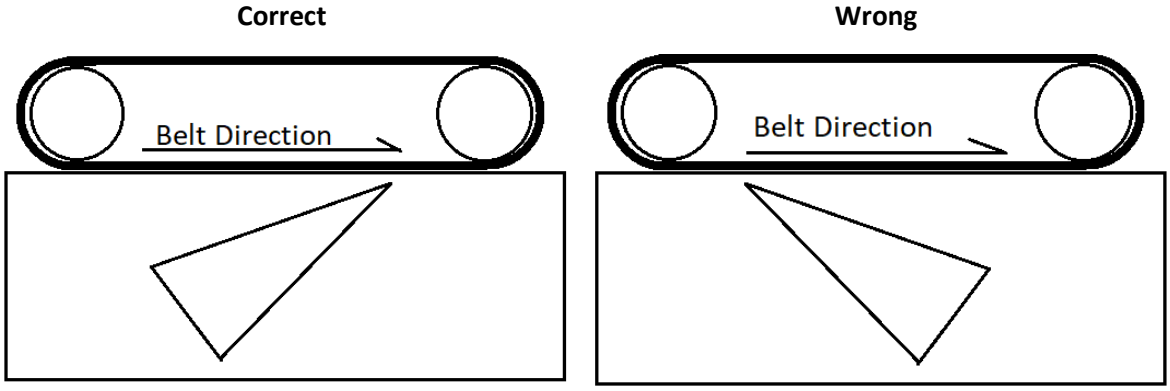
Safety Guidelines Specific to Sander

Before Work Begins:

1. Inspect the sanding belt for signs of failure. Replace damaged, overstretched, or worn sanding belts.
2. Ensure the sanding belt is tensioned.
3. Inspect the workpiece. Do not process workpieces with loose parts and/or containing dangerous chemicals. Do not sand wood with high moisture content.
4. Ensure the table is positioned at least 1/16” above the bottom edge of the sanding belt.
5. Ensure the sanding belt guard and the table are locked into position.

When Sanding:

1. Maintain control of the workpiece. Hold the workpiece firmly with both hands and apply light pressure against the sanding belt. Use the sander table, miter gauge, or backstop to support the workpiece in different operations.
2. Keep hands away from the sanding belt and other moving parts. Use special jigs to hold down small workpieces as needed.
3. To avoid kickback and sanding belt damage, do not feed the workpiece with sharp corners pointing against the moving direction of the sanding belt.



After Operation

1. STOP THE MACHINE when the operator leaves the machine for any reason.
2. WAIT until the motor comes to a complete stop.
3. CLEAN UP before departure.

Electricals

WARNING

Faulty electrical work can cause electrocution and is a fire hazard. Make sure the voltage of your power circuit matches the power requirement of this machine, and that the circuit is sized to supply power to the sander.

All electrical work must be completed by a licensed electrician and must meet the local electrical code in your area. Otherwise, the warranty is void.

Minimum Circuit Size Required for Model 6301 Sander

Stock Number	Voltage	Minimum Circuit Size Required
6301.001	115V	15A

Please ensure the electrical circuit for this machine meets the minimum circuit size requirement. The minimum circuit size requirement applies to a dedicated circuit that provides power to one 6301 Sander. If more machines are sharing the same circuit, consult a licensed electrician to ensure the designated circuit is properly sized for safe operation.

If a circuit is available, but not meeting the minimum circuit size requirement listed above, a new circuit must be installed for this machine.

Grounding

WARNING

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

Proper grounding reduces the risk to the operator in the event of electrical malfunction or breakdown. This machine must be connected to the grounding conductor when available, and all grounding connections must meet or exceed the electrical code requirements in your area. Furthermore, all grounds must be verified and must meet or exceed the electrical requirement of the machine. If grounding is not available, consider the use of a GFCI protection device as an alternative, if this complies with the electric code in your area.

Electrical Wiring

This machine is pre-wired for 115V, with a cord and a NEMA 5-15 plug. Avoid using extension cords whenever possible. If you need to use an extension cord to connect to a power source, select a durable cord type with a high-temperature rating (90C° or above). Use the minimum amount of extension cord as needed.

Minimum cord size (AWG) required based on amperage draw and length of the cord:

Amps	**Power 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

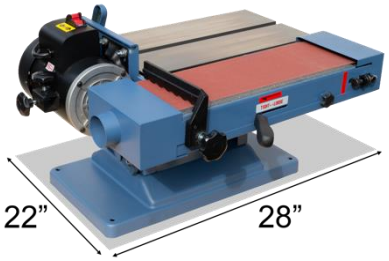
WARNING **Use properly sized wires that meet or exceed the power requirement of your machine. Using undersized wires may cause overheating and increase the risk of fire and machine damage.**

Setup

Shop Preparation

Space Requirement

The dimensions of this machine are 29-3/8" (W) x 21"(D). You will need additional space for manipulating your workpiece, electrical connection, and dust collection.



TIP: It is advised to position this sander in a spot that allows you to access the backside of the machine. This will make it easier to change the sanding belt and sanding workpieces with the belt in the horizontal position. Mounting this sander on a sturdy tool stand with lockable casters can be helpful for workshops with limited space.

Load Limits

This machine has a shipping weight of 82 lbs., and a net weight of 73 lbs. Please ensure all lifting tools and building structures have adequate load capacity, for transporting and supporting the total weight of this machine, the operator, and related items.

Electricals

Make sure a properly sized circuit and electrical outlet are available near the machine. Please refer to section "Electricals" on page 11 for details regarding electrical requirements.

Lighting

Adequate lighting is needed for operating this machine. Overhead, non-glare lighting should be installed.

Safety Labels

If this machine introduces a new safety hazard to your workplace. Please display proper warning signs in highly visible locations.

Dust Collection

Wood dust created by this sander is a health hazard. High-quality dusk masks should be available for using the sander.

Connect this machine to a dust collection system. Check air suction strength 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 that is rated above 300 CFM at the dust port. Doing so improves air quality in the workplace, and prevents the machine from jamming.**

Receiving

Your shipment should come in one box. Upon receiving your shipment, check for any significant damages before signing the delivery confirmation.

IMPORTANT	If items are damaged, please call us immediately at **1-800-559-5065**

⚠ **CAUTION**	**Always wear safety goggles and gloves when removing straps for securing your package. Straps may spring back violently when released and cause injury.**

Machine Lifting and Placement

Your machine will be delivered by freight service, and it will be left outside of your workshop by default. On the day of delivery, please be sure help is available to move the machine to its final location.

⚠ **WARNING**	**6301 Sander has a gross weight of 82 lbs. and a net weight of 73 lbs.** **Safe moving techniques and proper lifting equipment are required, or serious personal injury may occur.**

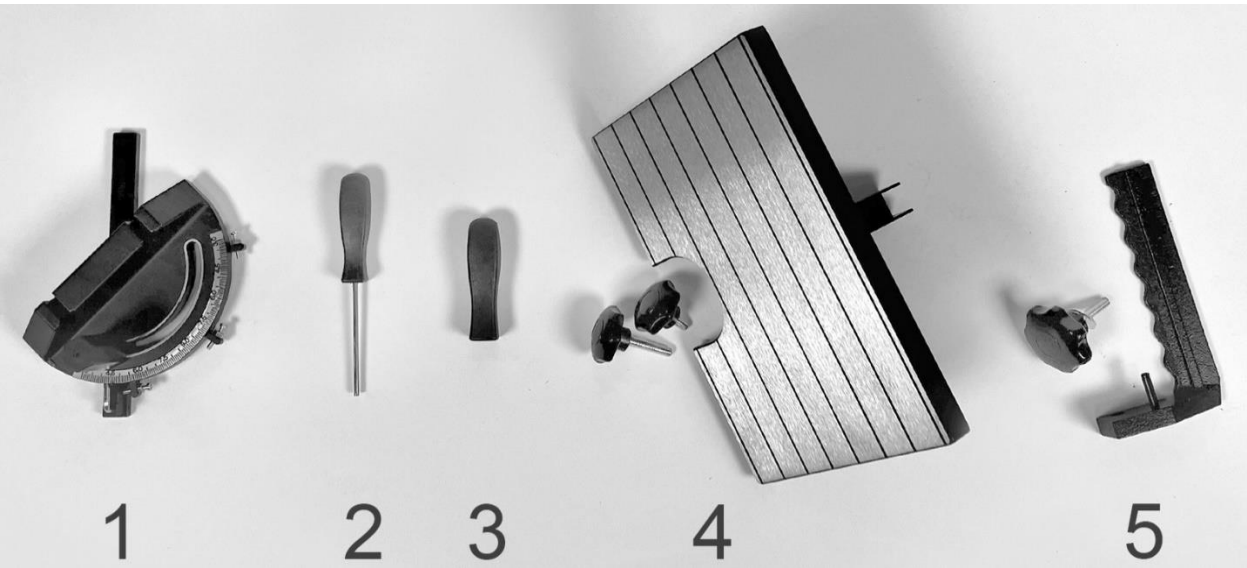
⚠ **WARNING**	**Your machine may be secured by the straps. Do not lift your shipment by the strap. They are not designed to hold the total weight of your shipment. They may snap without warning and cause serious injury and machine damage.**

Unboxing

You should find the sander and other parts packed inside the box.

Inventory

Carefully unwrap the packaging and make sure all components are included in the shipment. Inventory all items received and put them in groups.



Item	Description	Quantity
1	Miter Gauge	1
2	Belt Tracking Adjustment Tool	1
3	Belt Tension Lever Handle	1
4	Contour Sanding Table and Lock Knobs	1
5	Stop Bracket, Lock Knob, and Washer	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 section "**Parts List**" 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 Needed for Machine Assembly

Item	***Purpose***
Safety glasses	Protection
Disposable gloves	Protection
Paper Towel	Cleaning
WD-40	Cleaning
Rust Inhibitor	Cast iron table top rust protection.

Cleaning

To prevent rusting during shipment, the unpainted cast iron tabletops are covered with rust protectant and plastic film. Remove the plastic film and wipe off the rust protectant with paper towels. Using WD-40 can help to dissolve the rust protectant and make it easier to remove.

Once all rust protectant is removed, routinely coat the tabletops with rust preventive such as Boeshield® T-9 or paste wax. Do not use rust preventives that contain silicone, which is known to interfere with certain finishes and glues.

Assembly

Belt Tension Lever Handle Installation

1. Install the belt tension lever handle. Use a mallet to gently tap the handle to secure it on the lever.

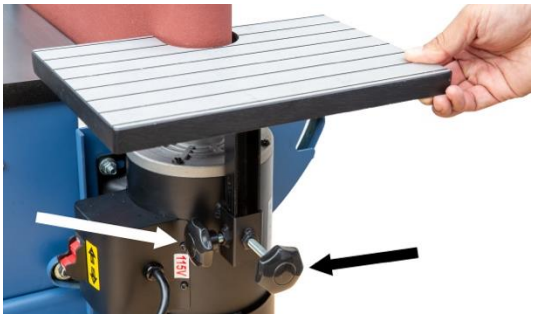
Stop Bracket Installation

1. The stop bracket provides support to the workpiece and prevents the workpiece from getting dragged into the dust hood. It should be installed while the machine is in use.
2. The stop bracket mounting holes are located on top of the platen near the drive drum. Insert the stop bracket pin into the hole as shown in the picture.

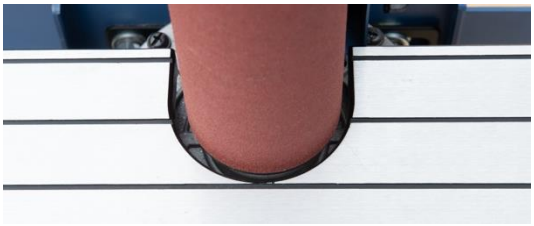
3. Secure the bracket with the lock knob and washer.

Set Up Contour Sanding Table

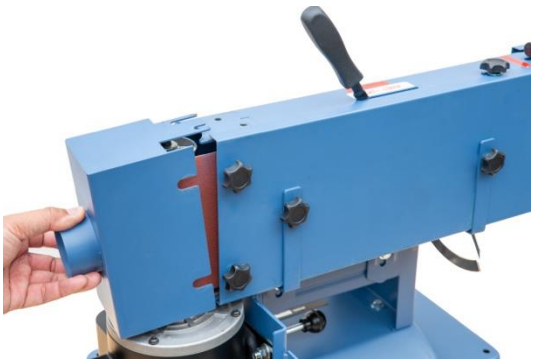
1. Install the countour sanding table. Mount the locking knobs to secure the table. Use the knob with the long stem on the side, and the one with the short stem on the front side of the machine.



2. Ensure the table is not catching the sanding belt, and the table surface is positioned at least 1/16” above the bottom edge of the sanding belt.



3. When not using the contour sanding table, remove the table and keep the dust hood installed to prevent accidental contact with the drum.



Dust Collection

This sander can generate a lot of dust. Connect this machine to a dust collection system. The dust port of this sander accepts a 2-1/2” dust collection hose. Adaptors may be needed to connect this sander to a shop vacuum hose.

The minimum CFM requirement for this sander is 300 CFM at the dust port, which means the dust collection system should have a rating greater than 300 CFM, as air friction and leakage can 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 may damage the machine and cause other hazardous situations. Check your dust collection system regularly to make sure it is not jammed or filled up.**

Test Run

After completing the assembly steps, the sander is ready for a test run.

1. Before connecting the sander to a power source, flip the power switch to the “OFF” position to prevent the machine from starting unintentionally.
2. Make sure the platen is locked into position.
3. Make sure all lock knobs are tightened.
4. Check belt tension. Make sure the sanding belt is not catching the guard and other stationary parts.
5. Connect the machine to power.
6. Turn on the machine. The sanding belt should track within the top and bottom edges of the belt drums. If the sanding belt is not tracking properly, **TURN OFF MACHINE IMMEDIATELY.** Go to section “Inspect / Adjust Belt Tracking” on page 25 and adjust belt tracking before continuing.
7. 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. Remove the graphite flakes with a vacuum cleaner.
8. Turn off the sander to complete the test run.

Congratulations! You have completed the test run. If you discover any issues from the tests, refer to the troubleshooting section and maintenance section to diagnose issues and make adjustments.

Operation

Preparation before Sanding

Material Selection and Inspection

This machine is primarily designed for sanding good quality natural wood materials. Avoid cracked stock, and boards with loose knots can break apart. These can cause severe kickbacks, which can lead to severe injuries and machine damage. Using this sander for other material types may damage the sanding belt or shorten its lifespan, and may cause other 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 will spread dust that contains such 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 on the workpiece can gum up the sanding belt. Scrape off all excess glue before sanding.

Workpiece Support

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.

To reduce the chance of a workpiece getting pulled out of your hand, and to avoid accidental contact with the moving sanding belt, create special jigs to hold down workpieces that are less than 6” long.

Support large workpieces with an auxiliary table to prevent the sander from tipping over and resulting in injuries.

Personal Protection Devices

Always wear high-quality dust masks and safety glasses/goggles when operating the sander.

Clear the Work Area

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

Adjustments

Platen Angle Adjustment

The platen can be set vertically, horizontally, or in any position in between.

1. To adjust the platen angle, unlock the platen by pushing the lock lever towards the rear of the machine.
2. Set the platen to the desired angle using a woodworking square, protractor, or the bevel angle gauge located below the table.
3. Lock the platen by pulling the lock lever back to the locked position.

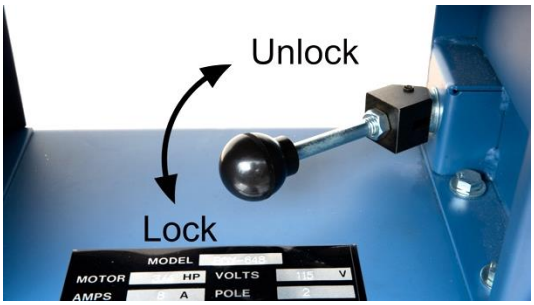


Table Height Adjustment

To set the height of the main table:

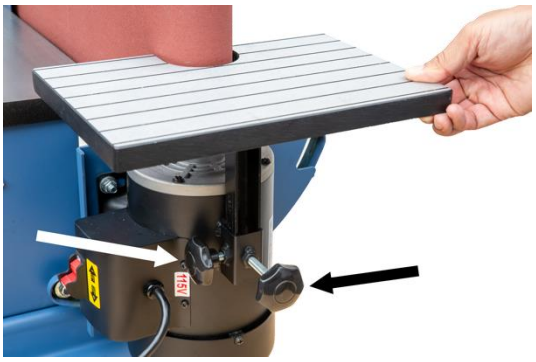
1. Loosen the two lock knobs that are below the main table.

2. Adjust the table height and tighten the lock knobs. Make sure the table is positioned at least 1/16” above the bottom edge of the sanding belt and is level with the sanding belt’s travel direction.

   TIP: Occasionally adjust the table height and make use of various sections of the sanding belt. This helps to even out the wearing of the sanding belt and extend its life.

To set the height of the contour sanding table:

1. Loosen the lock knobs on the table bracket.



2. Adjust the table height. Make sure the table does not touch the abrasive surface and is positioned at least 1/16” above the bottom edge of the sanding belt, then tighten the lock knobs.

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.**

Edge Sanding

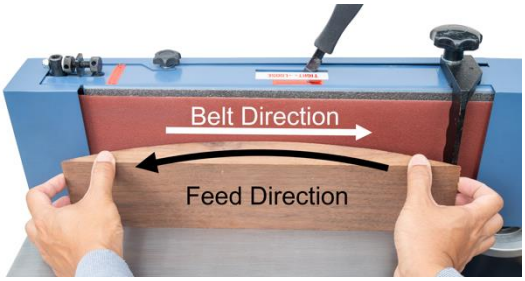
1. Adjust the platen to the desired angle and verify the setup with a square or protractor.

2. Install the stop bracket if it is not previously installed.

3. Adjust the table height as needed.
4. Use the miter gauge to create a miter joint. Set the miter angle and tighten the lock handle. Make sure to re-check the miter angle against the sanding belt before use.

5. Before starting the sander, clear the table and turn on the dust collection system.
6. Turn on the sander.
7. Hold the workpiece firmly on the table. Feed the workpiece gently to the sanding belt. When sanding with the miter gauge, hold the miter gauge on the table.

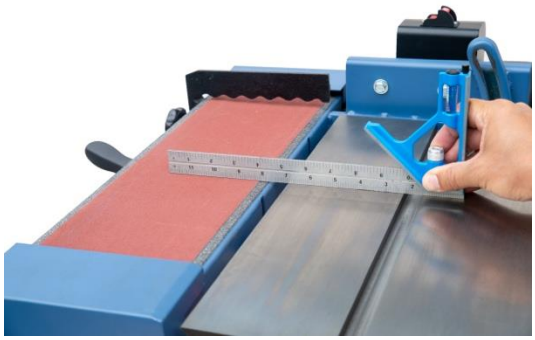
8. To sand a curved surface, feed the workpiece against the direction of the sanding belt.



9. **CAUTION:** Avoid feeding a sharp corner against the travel direction of the sanding belt. Doing so increases the risk of the workpiece pulling away from the operator's hand. This may result in injuries and machine damage.

Horizontal Sanding

1. Move the platen to the horizontal position.
2. Raise the main table so it is level and coplanar with the sanding belt. Doing so provides a surface to support the workpiece.



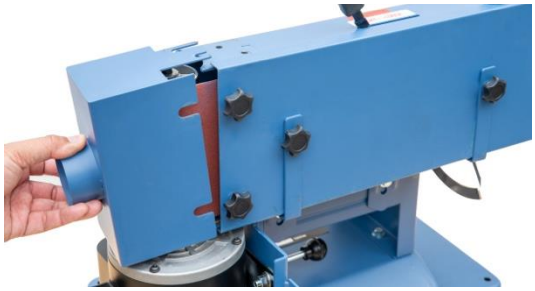
3. Install the stop bracket if it is not previously installed.
4. Turn on the dust collection system and the sander.
5. Feed the workpiece to the sanding belt.

6. Remain in full control of the workpiece and keep hands away from the sanding belt. Use the stop bracket to provide additional support when applicable.
7. If it is necessary to perform free-hand sanding with the sanding belt in the horizontal position, hold the workpiece firmly and sand the workpiece gently on the sanding belt.

Contour Sanding

1. Remove the stop bracket.

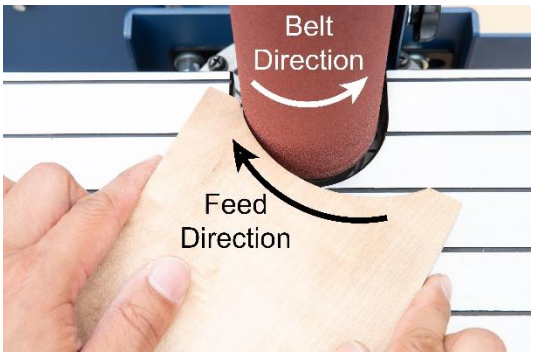
2. Remove the dust hood.



3. Install and secure the contour sanding table.

4. Ensure the table is not catching the sanding belt, and the table surface is positioned at least 1/16” above the bottom edge of the sanding belt.

5. To sand a curved surface, feed the workpiece against the direction of the sanding belt.



6. Remove the contour sanding table and reinstall the dust hood when the operation completes.

⚠ **WARNING**

Avoid sanding edges with curvature closely matching the abrasive surface. Failure to comply increases the risk of a catch, which can cause severe injuries and damage to the workpiece.

IMPORTANT

Only remove the dust hood and install the contour sanding table while performing contour sanding. Keep the dust hood installed at most times and use a dust collection system to extract the dust. The dust hood also reduces the risk of accidental body contact with the sanding surface and other moving parts.

Accessories

Touchup Paint

Keeping all painted surfaces in good condition not only makes your machine look nice but also keeps rust away. Oliver Machinery has pre-mixed spray paint available in Oliver-Blue for purchase.

Accessories are available on our website: **OLIVERMACHINERY.NET**

To order by phone, please call us at **1-800-559-5065.** We are available Monday through Friday, 7:30 AM - 4 PM Pacific Time. You can also email us at **PARTS@OLIVERMACHINERY.NET** to purchase accessories.

Please visit our website at **OLIVERMACHINERY.NET** for additional recommended accessories.

WARNING **Using unapproved accessories may cause the machine to malfunction, which can result in serious injury and/or machine damage. Only use accessories recommended for this machine.**

Maintenance

Routine maintenance keeps your sander in optimal condition. Please follow the maintenance schedule below, and use the maintenance record worksheet in this manual to document all tasks completed.

NOTICE: Maintenance schedule may vary for individual users due to different situations and safety requirements.

Task	Frequency
Inspect the power switch, cord, and plugs for signs of failure.	Every day before using the machine.
Inspect the sanding belt for signs of failure.	Every day before using the machine.
Clean sanding belt with belt cleaning stick.	When the sanding belt is clogged.
Remove dust accumulated on the machine.	Weekly
Apply rust protectant on cast iron tables.	Monthly
Inspect and clean sanding belt drums.	Monthly

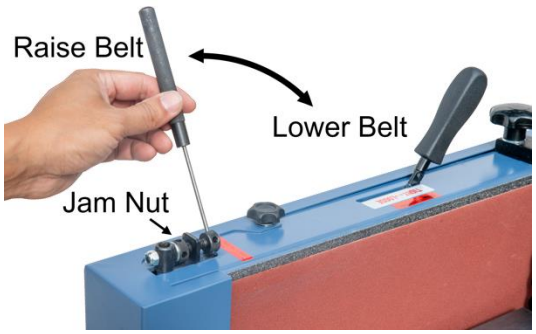
WARNING **Disconnect the machine from the power source before any maintenance work is performed. After servicing the sander, remove all tools before restarting the machine. Failure to comply can cause serious injury!**

Inspect / Adjust Belt Tracking

Run the sander for 5-10 seconds to observe the tracking of the sanding belt. The sanding belt should track in between the upper and the lower edges of the drums.

If adjustment is needed:

1. Turn off the sander.
2. Use the provided adjustment tool to loosen the jam nut and adjust the belt tracking adjustment screw.
3. Rotate the belt tracking adjustment screw towards the back of the machine to raise the belt on the drum, and vice versa.

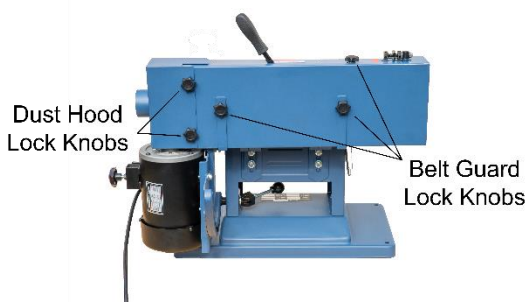


4. Adjust belt tracking by rotating the bolt 1/4 turn at a time. Tighten the lock nut and turn on the machine to verify the adjustment.
5. Repeat steps 1-4 as needed.

Changing Sanding Belt

1. **Disconnect the machine from the power source.**
2. Move the platen to the vertical position and lock it in place. See “Platen Angle Adjustment” on page 20 for details.
3. Remove the stop bracket.

4. Remove the dust hood and belt guard lock knobs, then remove the dust hood and belt guard.



5. Move the belt tension lever to the “Loose” position.
6. The sanding belt runs counterclockwise. When using sanding belts that are designed to run in a single direction, make sure the arrows on the back of the sanding belt align with the direction indicator.

7. Slip the belt evenly onto both drums. Make sure the belt is sitting between the top and bottom edges of the drums.
8. Tighten the sanding belt by moving the belt tension lever back to the “Tight” position. When the sanding belt is properly tensioned, it should not slip off from the drums.

9. Reinstall the belt guard, dust hood, and stop bracket. Tighten all lock knobs.
10. Refer to the previous section to recheck the belt tracking before using the sander for work.

Troubleshooting

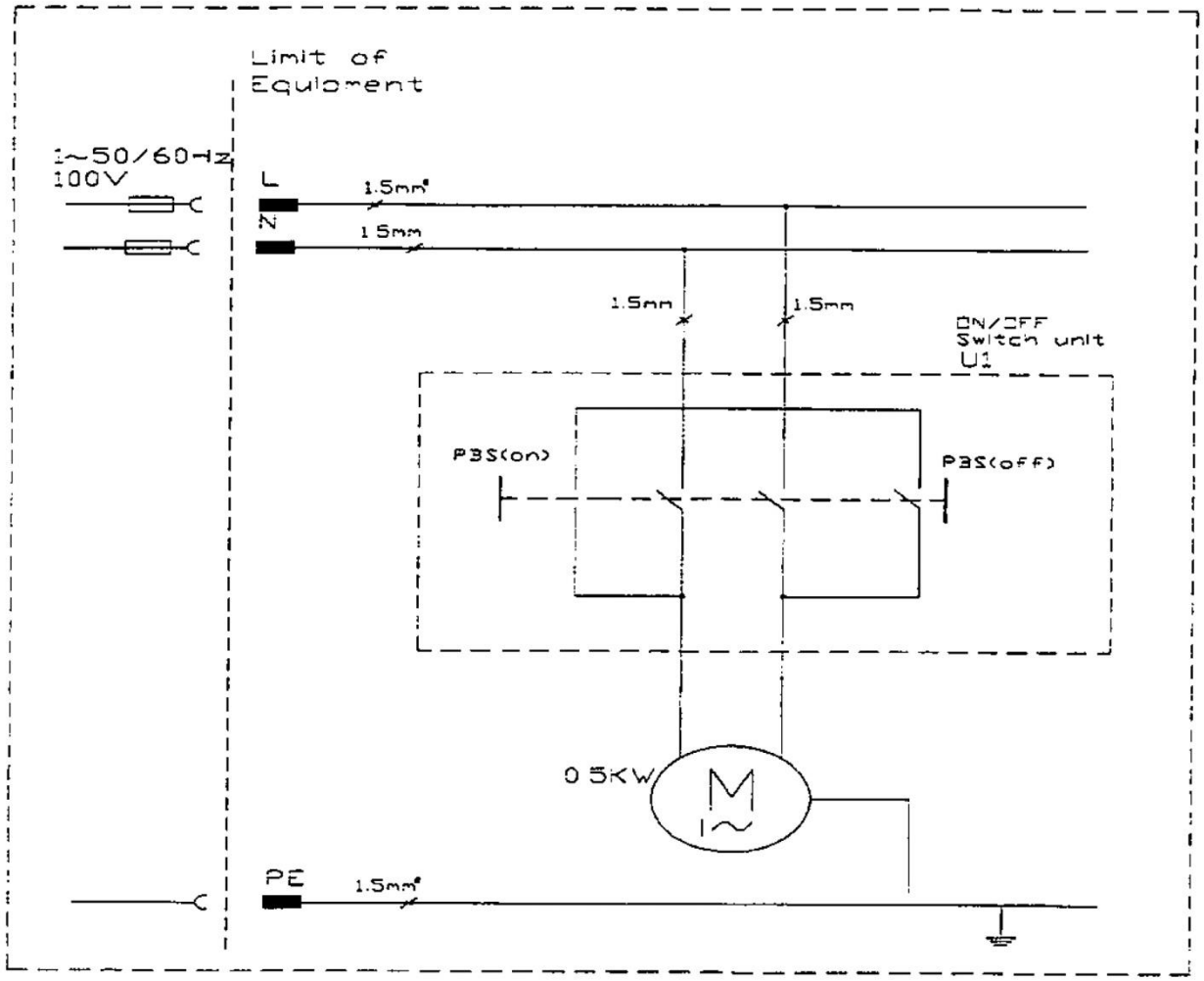
Mechanical / Electrical Issues

Problem	Possible Cause	Solution
Machine will not start.	Not connected to a power source.	Make sure the machine is plugged in.
		Check the electrical panel for a tripped circuit breaker or a blown fuse.
		Ensure all electrical connections have good contacts.
	Low voltage/current.	Have a licensed electrician check/repair the power circuit.
	Faulty switch/motor/ capacitor.	Contact customer service for further assistance.
Machine stopped during the operation.	Tripped circuit breaker or blown fuse.	Reconnect circuit. Reduce feed pressure.
Circuit breaker trips frequently.	Feeding stock too aggressively.	Reduce feed rate and pressure.
	Extension cord is too light or too long.	Use a shorter / heavier cord that meets this machine's electrical requirements.
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.
	Feeding pressure is too high.	Reduce feed pressure.
	Motor/capacitor issue.	Contact customer service for further assistance.
Machine vibrates excessively	Machine stands on an uneven surface.	Reposition the machine on a flat, level surface.
	Low sanding belt tension.	Move the tension lever to the "Tight" position.
		Replace the tension spring as needed.
	Worn/broken sanding belt.	Replace the sanding belt.
	Improper motor/component mounting.	Check, adjust, and tighten motor/component mounting.
	Motor bearing issue.	Contact customer service for further assistance.

Operation / Quality-Related Issues

Problem	Possible Cause	Solution
Work pulled from hand.	Inadequate stock support.	Hold the work firmly against the sanding belt.
		Use the stop bracket or miter gauge as support.
		Use special jigs to support the short or irregular-shaped stock.
Sanded edge is not square.	Sanding belt is not perpendicular to the table.	Adjust the sanding belt tilt.
	Improper stock feeding.	Ensure stock is pressed firmly against the table when feeding.
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.
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.
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 temperature and humidity which may cause the belt to fail prematurely.
		Do not fold or smash the sanding belt as it may disintegrate the bonding material on the belt.

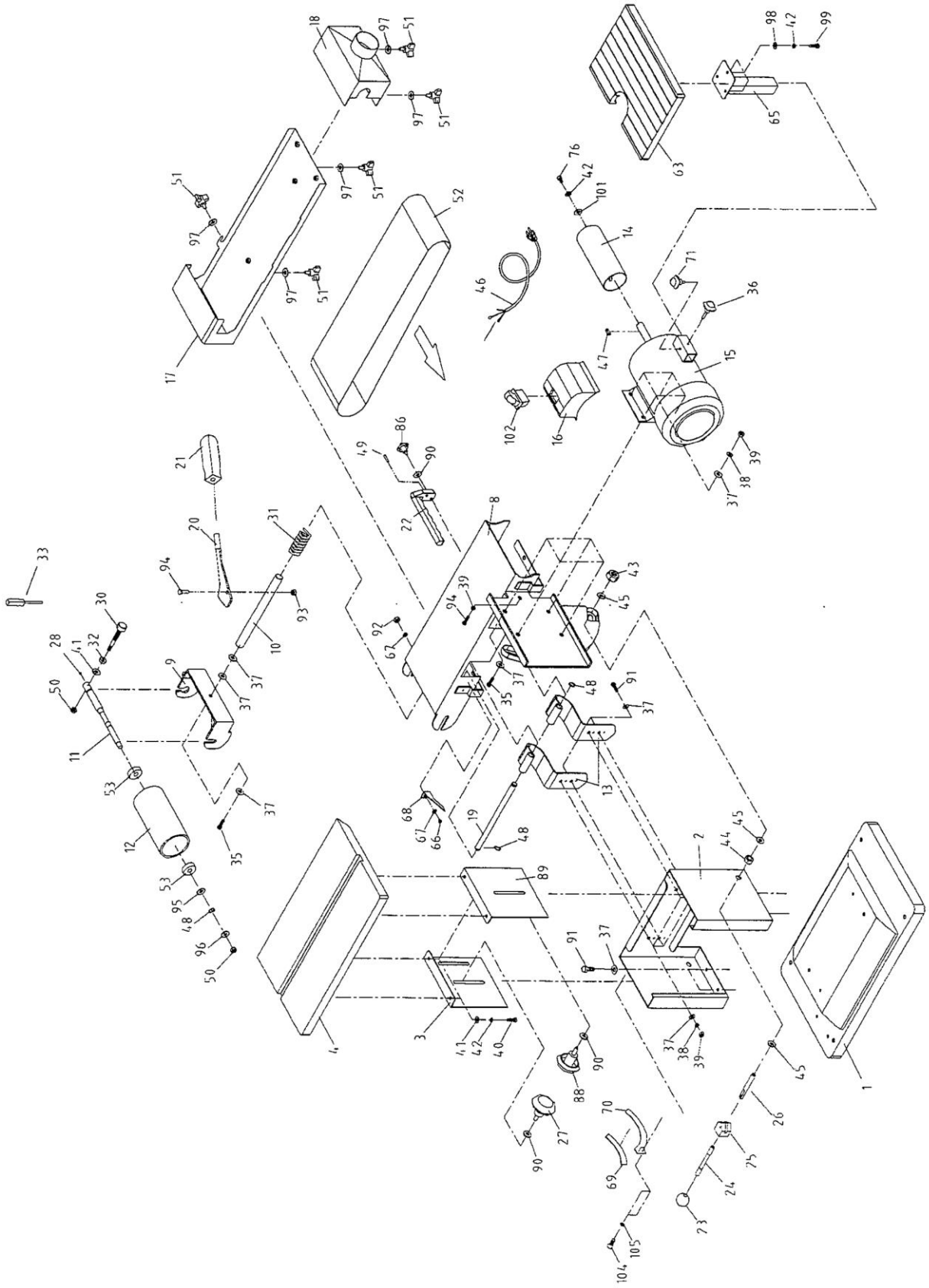
Wiring Diagrams



DANGER	**Deenergize the electrical circuit before touching any enclosed, electrified parts. Touching an electrified part WILL result in serious personal injury or death.**

WARNING	**All electrical work must be done by a licensed electrician and must meet the electrical code in your area. Otherwise, the warranty is void.**

Parts List



Index	Part Number	Descriptions	QTY
1	21100001C	BASE	1
2	21100002	CABINET	1
3	21100031	UP-DOWN PLATE	1
4	30500002C	TABLE	1
8	21100008	SANDING CLOTH PLATFORM	1
9	21100009	DRIVEN ROLLER BRACKET	1
10	21100010	SHAFT	1
11	21100011	ARBOR	1
12	21100012	DRIVEN ROLLER	1
13	21000010	BRACKET	2
14	21100013	MOTOR ROLLER	1
15	M2110001	MOTOR	1
16	21100016	SWITCH BOX	1
17	21100043	BELT COVER	1
18	21100042	DUST CHUTE	1
19	21100017	SHAFT	1
20	20101031	BELT TENSION ARM	1
21	20101032a	HANDLE	1
22	20101040A	BRACKET	1
23	10102023	HAND KNOB	1
24	10102024	BOLT	1
25	20101007	CAM ECCENTRIC	1
26	20101005	ADJUSTING SCREW	1
27	20101015	KNOB BOLT	1
28	20103029B	MICRO-ADJUSTING BALL	1
30	21000007	MICRO-ADJUSTING SCREW	1
31	21100018	SPRING	1
32	20103029A	MICRO-ADJUSTING NUT	1
33	20103044	BELT TENSION DRIVER	1
35	S0020501	HEX. SCREW	5
36	21000027	SCREW KNOB	1
37	S0210500C	FLAT WASHER	23
38	S0230506	SPRING WASHER	12
39	S0110500	NUT	13
40	S0020410	HEX. SCREW	4
41	S0210403a	FLAT WASHER	5
42	S0230400	SPRING WASHER	8
43	S0120380	NUT	1
44	20101055	SPACER	1
45	S0210623a	FLATE WASHER	3

Index	Part Number	Descriptions	QTY
46	L0000088	POWER CABLE	1
47	S0400525	KEY 5 X 5 X 25	1
48	S0520012	C RING	3
49	S0310640	PIN	1
50	S0120200	NUT	2
51	K2110001	KNOB	5
52	21100029	SANDING BELT	1
53	C1106201	BEARING	2
63	21100025	EXTENSION TABLE	1
65	21100027	SUPPORTING ROD	1
66	S0030306	SCREW	1
67	S0230300	SPRING WASHER	2
68	21000024	POINTER	1
69	J21000028	SCALE LABEL	1
70	21000029	SCALE LABEL	1
71	21000031	KNOB SCREW	1
72	J21000032	WARNING LABEL	1
73	I2000009	WARNING LABEL	1
74	J21000034	WARNING LABEL	1
76	S0010403	HEX. SCREW 1/4" * 20UNC *1 1/2"	1
86	20101039	KNOB SCREW	1
87	S0020529	HEX. SCREW	1
88	20101024	KNOB SCREW	1
89	20101002	UP-DOWN PLATE	1
90	S0210501	FLAT WASHER	3
91	S0020512	HEX. SCREW	8
92	S0110300	NUT	1
93	S0120201	NUT	1
94	S0020520	HEX. SCREW	2
95	S0253014	WASHER	1
96	S0210402	FLAT WASHER	1
97	S0210403	FLAT WASHER	5
98	S0210401a	FLAT WASHER	3
99	S0020408	HEX. SCREW	3
101	S0210404	FLAT WASHER	1
102	W0000001	SWITCH	1
103	J21000036	WARNING LABEL	1
104	S0040410M	COUNTERSUNK FLAT HEAD PHILLIPS SCREWS	2
105	S0220400M	WASHER	2

Maintenance Record

Date	Task	Operator

Notes

Warranty and Service

Oliver Machinery makes every effort to assure that its equipment meets the highest possible standards of quality and durability. All products sold by Oliver Machinery are warranted to the original customer to be free from defects for a period of two (2) years on all parts excluding electronics and motors which are warranted for one (1) year from the date of shipment. Oliver Machinery's obligation under this warranty shall be exclusively limited to repairing or replacing products or parts or components, at its sole option, determined by Oliver Machinery to be defective. Oliver Machinery shall not be required to provide other form of indemnity or compensation including but not limited to compensatory damages.

This warranty does not apply to defects due to direct or indirect misuse, abuse, negligence, accidents, unauthorized repairs, alternation outside our facilities, lack of maintenance, acts of nature, or items that would normally be consumed or require replacement due to normal wear and tear.

OTHER TERMS

To obtain and exercise the warranty right, please call 800-559-5065 or fill out warranty request form online at www.olivermachinery.net.
Warranty parts are shipped via Parcel or Ground. Additional charges will occur and charge to customers if express shipping is required.

DISCLAIMER

Under no circumstances shall Oliver Machinery be liable for death, personal or property injury, or damages arising from the use of its products.

Oliver Machinery reserves the right to make changes without prior notice to its products to improve function or performance or design.

FOR MORE INFORMATION

If you need assistance or have questions beyond what is covered in the scope of this warranty information, please call 800-559-5065 or email us at info@olivermachinery.net.

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. **