

SuperBrush 49 x 2



SUPMX-93497-2

Thank you for investing in a SuperMax SuperBrush by Laguna Tools. This brush sander is one of a family of unique machines proudly offered by Laguna Tools. Every Laguna machine is engineered for years of dependable service. Please feel free to contact Laguna Tools if you have a question or suggestion. We appreciate working with you and your choice of a Laguna Tools machine for your shop.

Regards, Torben Helshoj President & Founder Laguna Tools

This manual applies to the SuperBrush 49 \times 2. Enter the model number and serial number below for quick reference when ordering accessories, supplies or parts. NOTE: The model and serial number plate can be found on the cross rail, below the conveyor, when viewed from the infeed/front of the machine.

Model:
Serial:
Date of purchase:
Place of purchase:

Laguna Tools Grand Prairie

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www.lagunatools.com

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LATEST MANUAL:

Below is a QR code which will direct you to the manual reference page, where the latest version of the SuperBrush 49x2 manual is located on the Laguna Tools website. The online manual may have updates and information added after the printed copy was released. Scan the code with your smartphone or copy the URL link to be directed to the latest manual page to reference your specific machine and model.

https://lagunatools.com/resources/product-manuals/#classic





SUPERBRUSH 49x2

STOCK NO. 93497-2 POWER. 230V, 3Ph, 56.8A, 60Hz SERIAL NO.

Taiwan TCP

SAFETY

READ AND UNDERSTAND THIS MANUAL AND ALL INSTRUCTIONS BEFORE USING THIS EQUIPMENT. Failure to follow all instructions may result in electric shock, fire and/or serious personal injury or property damage! Electronic copies of this manual are available at www.lagunatools.com.

SAFETY GUIDELINES - DEFINITIONS

This manual contains information that is important for you to know and understand. This information relates to protecting YOUR SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the symbols below. Please read the manual and pay attention to these sections.



Indicates an imminently hazardous situation which, if not avoided, <u>will</u> result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, <u>could</u> result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, <u>may</u> result in minor or moderate injury.



(Used without the safety alert symbol) indicates a potentially hazardous situation which, if not avoided, **may** result in property damage.

Woodworking, metalworking, composites, etc. (and similar materials) can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the machine. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, push sticks, hold-downs, featherboards, goggles, dust masks and hearing protection can reduce the potential for injury.

Even the best guard will not make up for poor judgement, carelessness or inattention. *Always use common sense* and exercise caution in the workshop. If a procedure feels dangerous, do not try it. Figure out an alternative procedure that is safer. **REMEMBER:** Your personal safety is your responsibility.

IMPORTANT SAFETY INSTRUCTIONS



This machine was designed for certain applications only. We strongly recommend that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted the manufacturer to determine if it can or should be performed on the product.

SAFETY RULES:

- I. KEEP GUARDS IN PLACE and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- DON'T USE IN DANGEROUS ENVIRONMENT.
 Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
- KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
- MAKE WORKSHOP CHILD PROOF with padlocks, master switches, or by removing starter keys.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- 8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
- 9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table A (on the next page) shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage nu-mber, the heavier the cord.
- 10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- II. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.

- 12. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
- DON'T OVERREACH. Keep proper footing and balance at all times.
- 14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories
- 15. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
- 16. REDUCE THE RISK OF UNINTENTIONAL STA-TING. Make sure switch is in off position before plugging in.
- 17. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- 19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
- 21. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

Proposition 65 Warning

Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

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

Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as face or dust masks that are specifically designed to filter out microscopic particles.

- Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
- 2. Replace the warning labels if they become obscured or removed.
- 3. This SuperBrush is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of this type of machine, do not use until proper training and knowledge have been obtained.
- 4. Do not use this machine for other than its intended use. If used for other purposes, **LAGUNA TOOLS INC.**, disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
- 5. Always wear approved safety glasses/face shields while using this machine.
- 6. Before operating this machine, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended.
- 7. Wear ear protectors (plugs or muffs) during extended periods of operation.
- 8. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: (next page)
 - Lead from lead based paint.
 - Crystalline silica from bricks, cement and other masonry products.
 - Arsenic and chromium from chemically treated lumber. Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as face or dust masks/respirators that are specifically designed to filter out microscopic particles.
- 9. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
- 10.Make certain the switch is in the **OFF** position before connecting the machine to the power source.
- 11. Make certain the machine is properly grounded.
- 12. Make all machine adjustments or maintenance with the machine unplugged from the power source.
- 13. Form a habit of checking to see that all extra equipment such as adjusting keys, wrenches, scrap, stock, and cleaning rags are removed away from the machine before turning on.
- 14. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately when maintenance is complete.

- 15. Make sure the dust collector is on a flat even surface and the wheels locked in place before use.
- 16.Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 17. Provide for adequate space surrounding work area and non-glare, overhead lighting.
- 18. Keep the floor around the machine clean and free of scrap material, oil and grease.
- 19. Keep visitors a safe distance from the work area. **Keep children away.**
- 20. Make your workshop child proof with padlocks, master switches or by removing starter keys.
- 21. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
- 22. Maintain a balanced stance at all times so that you do not fall or lean against the dust collector. Do not overreach or use excessive force to perform any machine operation.
- 23.Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and safer.
- 24.Use recommended accessories; improper accessories may be hazardous.
- 25. Maintain machinery with care. Follow instructions for lubricating and changing accessories.
- 26. Turn off the machine before cleaning. Use a brush or compressed air to remove dust or debris do not use your hands.
- 27.Do not stand on the machine. Serious injury could occur if the machine tips over.
- 28. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
- 29. Never operate or run the machine without closing the drum up against the lid. Failure to do so will result in the machine amperage increasing and may trip your circuit.

Familiarize yourself with the following safety notices used in this manual:

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GENERAL SAFETY RULES



FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS INJURY.

FOR YOUR OWN SAFETY, READ AND UNDERSTAND THE INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE. Learn the unit's application and limitations as well as the specific hazards peculiar to it.

KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.

DON'T USE IN DANGEROUS ENVIRONMENT. Don't use this unit in damp or wet locations, or expose it to rain. Keep work area well-lighted.

KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.

DISCONNECT UNIT before servicing.

CHECK DAMAGED PARTS. Before further use of the unit, properly repair or replace any part that is damaged.



FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS INJURY.

ADDITIONAL SAFETY INFORMATION

Intended use. This machine is intended for the applications discussed and approved by Laguna/SuperMax. Do not use this machine for non-approved applications or flammable, combustible, or hazardous materials.

Hazardous dust. Dust created while using machinery may cause cancer, birth defects, or

long-term respiratory damage. Be aware of dust hazards associated with each work piece material, and always wear a NIOSH-approved respirator to reduce your risk.

Dust allergies. Dust from certain woods and other materials may cause an allergic reaction in people and animals. Make sure you know what type of dust you will be exposed to in case there is a possibility of an allergic reaction.

Wear respirator. Fine dust that is too small to be caught in the filter may be introduced into the ambient air during operation. Always wear a NIOSH-approved respirator during operation and for a short time after to reduce your risk of permanent respiratory damage.

Disconnecting power supply. Turn the switch off, disconnect from the power supply, and allow machine to come to a complete stop before leaving the machine unattended or doing any service, cleaning, maintenance, or adjustments.

Suspended dust particles and ignition sources. Do not operate in areas were explosion risks are high. Areas of high risk include, but are not limited to, areas near pilot lights, open flames, or other ignition sources.

Fire suppression. Only operate in locations that contain a fire suppression system or have a fire extinguisher nearby.

Static electricity. Plastic dust lines generate high amounts of static electricity as dust chips pass through them. Although rare, sparks caused by static electricity can cause explosions or fire. To reduce this risk, make sure all dust lines are thoroughly grounded by using a grounding wire.

Regular cleaning. Regularly check the machine for excessive dust and debris and clean. Make sure to regularly clean the surrounding area where the machine is operated—excessive dust buildup on overhead lights, heaters, electrical panels, or other heat sources will increase the risk of fire.

SAVE THESE INSTRUCTIONS. Refer to them often and use them to instruct others.

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.



DO NOT EXPOSE THE MACHINE TO RAIN OR OPERATE THE MACHINE IN DAMP LOCATIONS.

MOTOR SPECIFICATIONS

The typical main motor is 10 HP and is wired for 208-230 Volt, Three-Phase, 60 HZ, AC current. Confirm your motor(s) electrical configuration before connecting power! Before connecting the machine to the power source, make sure the starter and switches are in the "OFF" position. Power Cord and "plug" are NOT included. These must be installed by a qualified technician/electrician to meet all applicable codes.



Confirm electrical configuration (Voltage & Phase) of brush machine before connecting to power source!

GROUNDING INSTRUCTIONS



THIS MACHINE MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

1. This machine must be connected to a grounded metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance.

The installer, such as a qualified electrician, shall cut (or bend over) and insulate the grounding conductor from a field wiring supply cable.

In the event of certain types of malfunctions or breakdowns, grounding provides a path of least resistance for electric current—in order to reduce the risk of electric shock.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Full Load Amperage Draw; 208V 3 Phase 57 Amps

Power Supply Circuit Requirements

The power source circuit for your machine must be grounded and rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. If you are unsure about the wiring codes in your area or plan to connect your machine to a shared circuit, consult a qualified electrician.



IN ALL CASES, MAKE CERTAIN THE RECEPTACLE OR DISCONNECT IS PROPERLY GROUNDED. IF YOU ARE NOT SURE, HAVE A QUALIFIED ELECTRICIAN CHECK THE RECEPTACLE OR DISCONNECT.

UNPACKING

Your SuperBrush comes packed in a single box attached to a pallet. Before attempting to assemble this machine, follow these directions:

- 1. Carefully cut the banding straps and remove them from the box.
- 2. Remove the box covering the machine.
- 3. Remove the plastic cover from the machine.
- 4. Remove the small box, with casters and hardware, from the pallet.
- 5. Remove the bolts securing the machine to the pallet.
- 6. Using the picture below, ensure that all parts are present and in good condition.



Figure 1: Inventory

NOTE: Electrical cord and plug are *not* included.

DESCRIPTION (QUANTITY)

- A. Box (4 Casters & hardware)
- B. Owner's Manual (1)
- C. CR-2032 Batteries (2)
- D. Key, 1/4x1/4x1-3/8'' (2)
- E. Hex Wrench, 2.5mm (1)



Figure 2: Casters, Hardware & Misc.

Report any missing or damaged parts to your dealer or distributor. Prior to machine assembly and use, read this manual thoroughly to familiarize yourself with proper assembly, maintenance, and safety procedures.

ASSEMBLY



This step requires a forklift. The SuperBrush 49 x 2 is heavy, be careful when lifting and handling it with a forklift! Failure to comply may cause serious injury and/or damage to the machine and/or property!

Tools/items Required:

9/16" wrench 1/2" wrench 5mm hex wrench

Power Cord and Plug (unless hard wiring into a disconnect)

To assemble your SuperBrush 49 x 2, follow these steps:

For your own safety, do not connect the machine to the power source until the machine is completely assembled. Please also make sure that you read and understand the entire manual.

1. Make sure the eight locking set screws in the Table Support Castings are tight. Unbolt machine from pallet. Using a forklift, lift the SuperBrush from the pallet. The forks should lift from under the conveyor support cross members. Be careful when placing the forks not to damage other areas or wiring, Fig. 3 & 5.



Figure 3: Table Support Set Screws

2. Attach the four casters to the legs of the machine by using the included bolts and washers through each hole of the caster (from the bottom-up) into the leg of the machine, Fig. 4. "Start" all four bolts and washers before tightening the bolts.



Figure 4: Attaching casters

3. Lower the machine to the floor.

Table Support Set Screws (4 each side,

8 total)

4. Loosen the four nuts then the four set screws locking the table support casting, Fig. 5. Finger-tighten these same set screws. Hold the set screw with a Hex wrench and tighten the nut. Note, these set screws are brass tipped and are designed to lightly rub on the column.



Figure 5: Table Support Set Screws

5. Loosen the two set screws in each of the two motor support castings, Fig. 6. Important: Loosen these set screws before attempting to raise or lower motor for brush head installation!

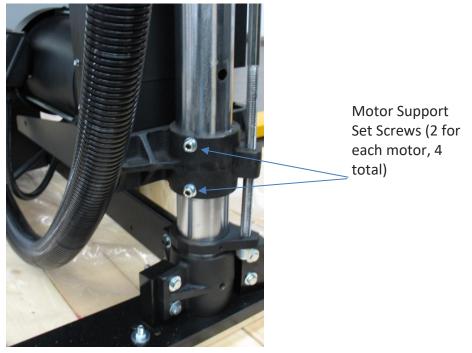


Figure 6: Motor Lock Set Screws

6. Check tightness of all hardware.

NOTE: shipping can loosen nuts, bolts and set screws.

- 7. Remove shipping arbors (2) from brush machine, Fig. 7;
 - A. Loosen drive belt by raising motor with motor tension handle on top of the column near drive belt.
 - B. Slide drive belt off pulley.
 - C. Remove two bolts from each bearing.
 - D. Remove shipping arbor from brush sander.
 - E. Loosen set screws in each bearing and driven pulley.
 - F. Slide pulley and bearings off shaft for use with the brush heads.

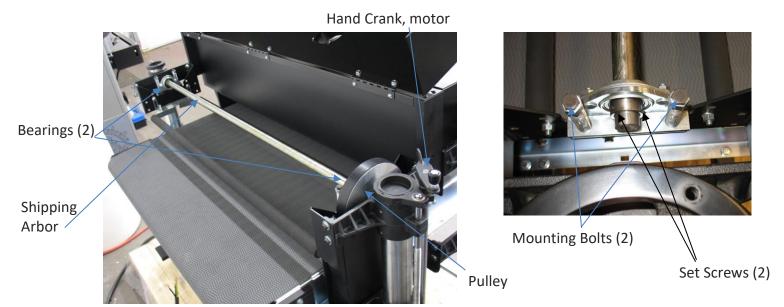


Figure 7A & B: Shipping Arbor and Bearings

- 8. Installing brush heads (same process for both brush heads);
 - A. Install brush heads (if not already installed) by removing brush head from shipping box.
 - B. Slide one bearing (from Shipping Arbor) on each end of the brush shaft. Do not yet tighten the set screws for the bearing collar, Fig. 7B.
 - C. Place the shaft key into the key slot of the drive shaft of the brush head.
 - D. Slide the pulley, Fig. 7A (from Shipping Arbor) onto the drive shaft over the key.
 - E. Raise the main motor by using the hand crank, Fig. 7A, at the top of the column to lift the motor.
 - F. Place the brush head into the brush machine while holding the drive belt out-of-the-way.
 - G. Center the brush head over the conveyor and install Mounting Bolts, Fig. 7B, from the flange of the bearing into the mating bracket of the brush machine. Tighten the bearing mounting bolts.
 - H. Tighten the two set screws, Fig. 7B, in each bearing collar to secure the brush head shaft to the bearings.
 - I. Align the pulley of the brush head with the drive pulley of the main motor. Secure by tightening the set screw(s) in the driven pulley.
 - J. Lower the main motor for proper tension of the drive belt. Proper tension is slight deflection of the drive belt when pressed from the side.
 - K. Make sure all bolts and set screws are tight.

- 9. <u>Check alignment (parallelism)</u> of the brush heads to the conveyor. Measure from the bottom of the brush bristles to the top of the conveyor belt on the right and left side. If the brush head is not parallel;
 - A. loosen the two bearing bolts (that secure the bearing to the machine) on the lower side of the brush, Fig. 8.
 - B. Raise the bearing on the low side by using a hex wrench in the center of the bearing stud and rotate both equally until the brush head is parallel.
 - C. Tighten the bolts attaching the bearing to the machine bracket.

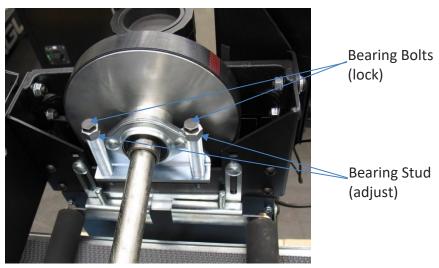


Figure 8: Aligning Brush Head

Dust Collection, Connection/Assembly

1. Connect dust collection hose to each 4" port on machine. Minimum of *600 CFM per port.

*NOTE: The CFM requirement can vary depending on brush head, application(s) and material.



Figure 9: Six Dust Ports

COMPONENTS



Figure 10: Main Components of SuperBrush 49 x 2

NOTE: Assembly is continued in next section "Power Supply"

POWER SUPPLY

Power Supply Circuit Requirements

The power source circuit for your machine must be grounded and rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. If you are unsure about the wiring codes in your area or plan to connect the machine to a shared circuit, consult a qualified electrician.

Circuit Size (208-230V, 3 Phase)**60 Amp** minimum



IN ALL CASES, MAKE CERTAIN THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE, HAVE A QUALIFIED ELECTRICIAN CHECK THE RECEPTACLE.

MOTOR SPECIFICATIONS

The typical main motors are 10 HP and are typically wired for 208-230 Volt, Three Phase, 60 HZ, AC current. Confirm your motor electrical configuration before connecting power! Before connecting the machine to the power source, make sure the starter and switches are in the "OFF" position. Cord and "plug" are NOT included. These must be installed by a qualified technician/electrician to all applicable codes.

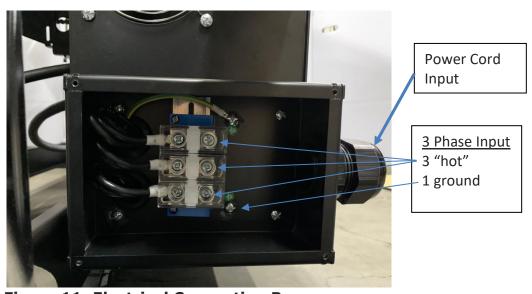


Figure 11: Electrical Connection Box

Connecting Power

NOTE: A "plug" and cord are NOT included and must be installed by a qualified technician/electrician, or the power cable connected (hard wired) to an appropriate disconnect according to local codes.



A qualified electrician should do the connection. When completed, the machine must conform to the National Electric Code and all local codes and ordinances.

FUNCTION, Control Panel Front



Figure 12: Control Box Components

FUNCTION, Control Panel Back

Fuse, conveyor operation

Conveyor, Low

Speed Adjustment

Motor Height Adjustment (2) (for changing brush heads)

Figure 13: Control Panel Components (*Back*)

NOTE: The speed of "Low Speed" Conveyor lifting can be adjusted on the back of the control panel with a rotating stud.

WIRING DIAGRAMS

POWER CONNECTIONS

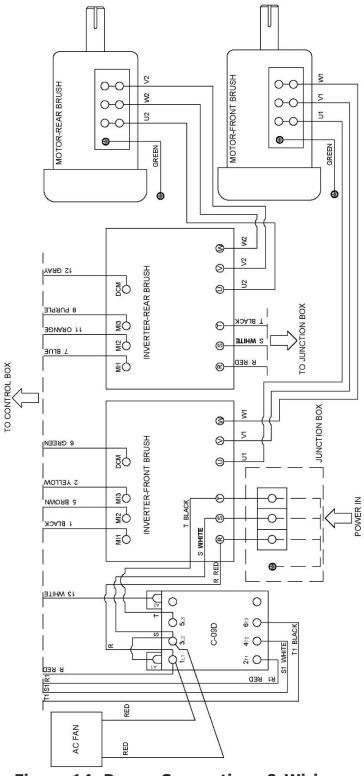


Figure 14: Power Connections & Wiring

INTERNAL WIRING

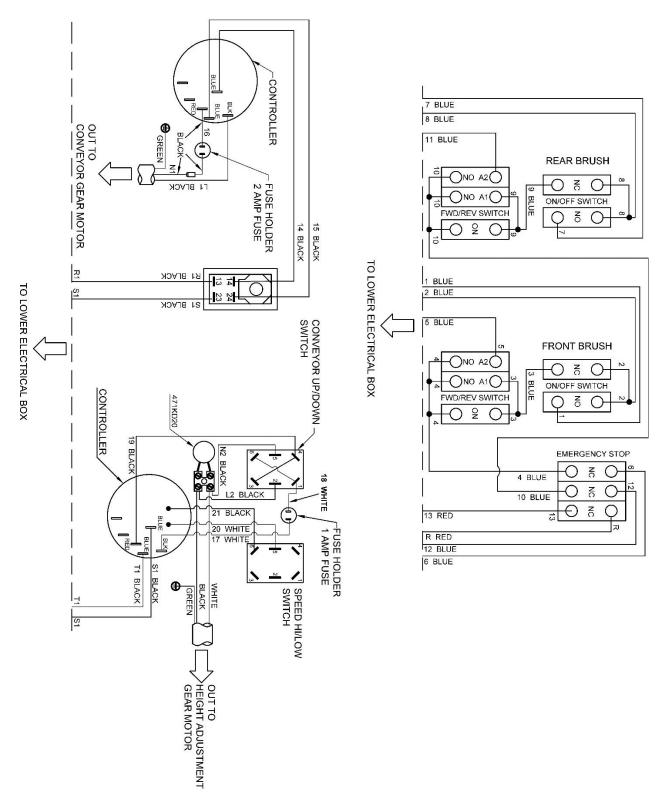


Figure 15: Internal Wiring

OPERATION

- 1. Confirm brush head is parallel to conveyor bed. See "Checking Parallelism" to adjust if necessary.
- 2. Confirm the electrical supply is correct and connected to the machine.
- 3. Make sure no one is working on or doing maintenance to the machine.
- 4. Adjust contact of brush head onto material to be processed by either turning the height adjustment handle (1 revolution equals 3/32"), or by pressing the UP/DOWN switch on the control panel. NOTE: brush contact will vary with application(s), material and brush head configuration. Confirm correct contact with sample testing information or your salesperson.

Manual Height Adj.



Electronic Height Adj.

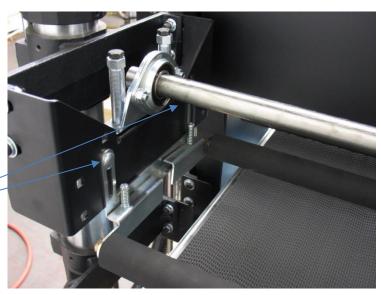
Figure 16: Height Control Adjustments



Electronic Height Adjustment —

Figure 17: Height Control Adjustment, electronic

5. Confirm correct contact of hold-down (pressure) rollers. Adjust contact by loosening the roller bracket in each corner and raising or lowering to provide proper tension. Correct tension is achieved when material feeds through brush properly without slipping on the conveyor belt.



Tension Roller Adj (2 each side)

Figure 18: Tension (Hold-Down) Roller Adjustment

6. DRO:

Install two CR-2032 batteries (included) by pulling the DRO from the Control Box and removing the battery cover from the back and installing the batteries.

DRO Calibration; the typical method to use the DRO is to read the bristle penetration into stock being processed.

- A. With machine "OFF", place stock under the brush head.
- B. Adjust conveyor table (up or down) until the tip of the longest bristles are just about touching the material.
- C. Press "ON" to turn the DRO on, Fig. 19.
- D. Press "ZERO" to zero out the DRO, Fig. 19.
- E. Press "in/mm" to select desired inch or millimeter setting, Fig. 19.
- F. Remove material from under brush.
- G. Raise conveyor to desired setting/bristle penetration. See sample letter or confirm appropriate bristle penetration with salesperson.

NOTE: Appropriate bristle penetration will change with various applications, materials and brush wear. Adjust accordingly.



Excessive bristle penetration will prematurely shorten brush life!



Figure 19: DRO calibration

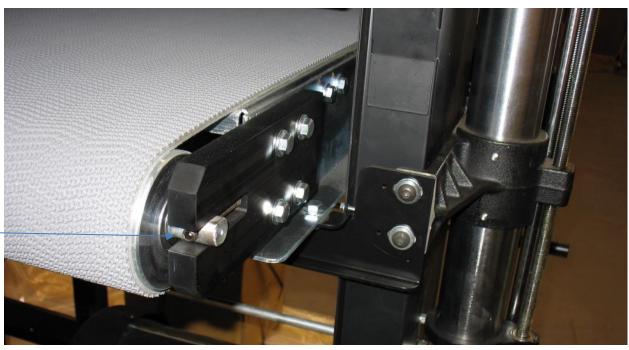
- 7. To start brush, press the "FRONT BRUSH" "ON" button on the front of the Control Panel, (Fig. 19 & 39). Confirm brush rotation is correct for application and material. If not correct, press OFF button, wait for machine to stop. Change rotation with rotation switch with "Front Brush". Turn ON brush.
- 8. Staring Conveyor;
 - A. To start conveyor, press "CONVEYOR" "ON" button, Fig 20:
 - B. Adjust speed of conveyor with "CONVEYOR SPEED" dial, 0-100%.



Figure 20: Brush & Conveyor controls

NOTE: Conveyor belt will require (periodic) adjustment to maintain proper tacking on conveyor bed. Adjust by tightening the adjustment stud, Fig. 21, with a **5mm Hex Wrench**) on the side the belt is drifting toward and loosen the opposite side an equal rotation.

NOTE: Make adjustments before conveyor belt rubs on side of conveyor bed.



Tracking Stud (2)

Figure 21: Conveyor Tracking

9. Adjust RPM of brush head by rotating knob on "VFD", Fig. 12 (Variable Frequency Display) adjustment panel on top of main control panel. Confirm correct RPM with sample testing information or your salesperson. RPM reads out on display.

CAUTION

Excessive RPM will prematurely shorten brush life!

- 10. Start dust collector (open blast gates if so equipped).
- 11. Place material on conveyor and maintain control of stock until the tension roller is holding stock properly.
- 12. To stop, press the "OFF" buttons for the brush and conveyor, Fig. 20. Press the "E-STOP" button if there is an Emergency, Fig. 20! To reset the E-STOP button, twist and pull back on the button.



The EMERGENCY STOP button should only be used for an Emergency! It disconnects all power to the machine during an Emergency. It should not be used as the normal shut down procedure and it should not be used when conducting maintenance. Power should be positively disconnected to the machine for maintenance or repairs.

MAINTENANCE

Conveyor Belt

Keep conveyor belt centered on conveyor bed. Adjust tracking stud as needed.

Keep conveyor belt clean to help prevent slippage of material.

Dust Collection

To ensure proper operation and longest brush life of the SuperBrush it is important to maintain full air flow of your dust collection system. Make sure the filter media is clean and there are no obstructions in the ducting.

TROUBLESHOOTING

Symptom	Possible Cause	Possible Solution
Machine does not	Power supply switched OFF or is faulty.	Confirm power supply is ON and has the correct voltage.
start or a breaker trips.	Wall fuse/circuit breaker is blown/tripped.	Ensure adequate circuit size; install inlet restrictor, replace weak breaker.
	Faulty power switch.	Replace switch.
	Motor is at fault.	Test/repair/replace.

Exploded Views

STAND ASSEMBLY (1of 2) (83) (F)

Figure 22: Stand Assembly STAND ASSEMBLY (2 of 2) hgt. adj.

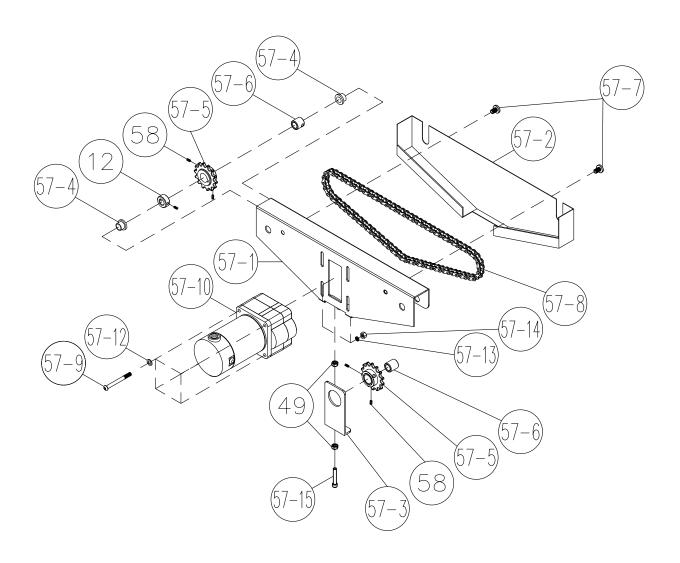


Figure 23: Stand Assembly height adj.

Stand Assembly Parts List

Ref.	Part			
No.	No.	Description	Size	Qty.
1	. 31-0020	. HANDLE, SWIVEL ASSY		2
2	. 20-0772	. ROLL PIN	. 3/16"X1"	2
3	. 50-3080	OILITE WASHER	. 5/8" I.D	4
		. E-RING		
		. SUPPORT, ADJUSTING SCREW		
		. SET SCREW		
7	. 30-1240	. SCREW, INBOARD HEIGHT ADJ. FOLLOW		
	. 93497-2-108			4
9	. 20-1101-1	. GEAR, MITER HEAVY DUTY		8
		OILITE ROUND BUSHING		
		. SUPPORT BLOCK		
		. SHAFT COLLAR		
		. TUBE, COLUMN		
		. SCREW, RPM, MOTOR		
		. MOUNT, MOTOR		
		. HEX NUT		
		. FLAT WASHER		
		. SET SCREW, BRASS TIPPED		
		. HEX CAP SCREW		
		. FLAT WASHER		
		. SOCKET HEAD BUTTON SCREW		
		NYLON WASHER		
_		. CASTER		
		. SCREW, OUTBOARD HEIGHT ADJ. MAIN		
		FLANGE LOCK NUT		
		. BASE, COLUMN		
		BASE SUPPORT BRACKET		
		NYLON INSERT LOCK NUT		
		. SET SCREW		
		. ROD, TRANSFER . SUPPORT BRUSH		
		. SPACER		
		BASE		
		. WASHER, OILITE		
		. HEX CAP SCREW		
		FLAT WASHER		
<i>31</i>	. 31201-140	. FLAT WASHER	. 5/0 730731	∠

Ref.	Part			
No.	No.	<u>Description</u>	Size	Qty.
38	. 80- 4015	. CAP, PLASTIC COLUMN TUBE	. 	4
39	. 10-2903	. SET SCREW	. 5/16"-18X3/8"	16
40	. 40-0106	. MOTOR MOUNT		2
		. SUPPORT, INBOARD TABLE		
42	. 40-0049	. BRACKET, TABLE MOUNT		2
43	. 30-1208HR	. SCREW, OUTBOARD HEIGHT ADJ. FOLLOW		1
44	. 31-0027	. HANDLE, SWIVEL, LARGE		1
45	. 30-1112-0	. SUPPORT, ADJUSTING SCREW, W/BEARING		8
46	. 93497-2-146	. SOCKET HEAD BUTTON SCREW	. 3/8"-16X1"	24
		. SET SCREW, BRASS TIPPED		
		. FLAT WASHER		
		. HEX NUT		
		. LOCK WASHER		
		. BRACKET, TABLE MOUNT		
		. SPROCKET BRACKET		
		. CARRIAGE BOLT		
		.BEARING		
55	. 93267-2-155	. SPACER		2
		. SET SCREW		
		. SPROCKET ASSEMBLY		
		. BRACKET, CHAIN		
		. GUARD, CHAIN		
		. BRACKET, IDLER TENSION		
		OILITE ROUND BUSHING		
		. SPROCKET		
		. SPACER		
		. SCREW		
		. CHAIN, CONNECTING LINK		
		. SOCKET HEAD CAP SCREW		
		. DC GEAR MOTOR		
		. FLAT WASHER		
		. LOCK WASHER		
		. HEX NUT		
		. SOCKET HEAD CAP SCREW		
		. SET SCREW		
59	. 480BS-167	. LOCK WASHER	. 5/16"	12

HEAD ASSEMBLY

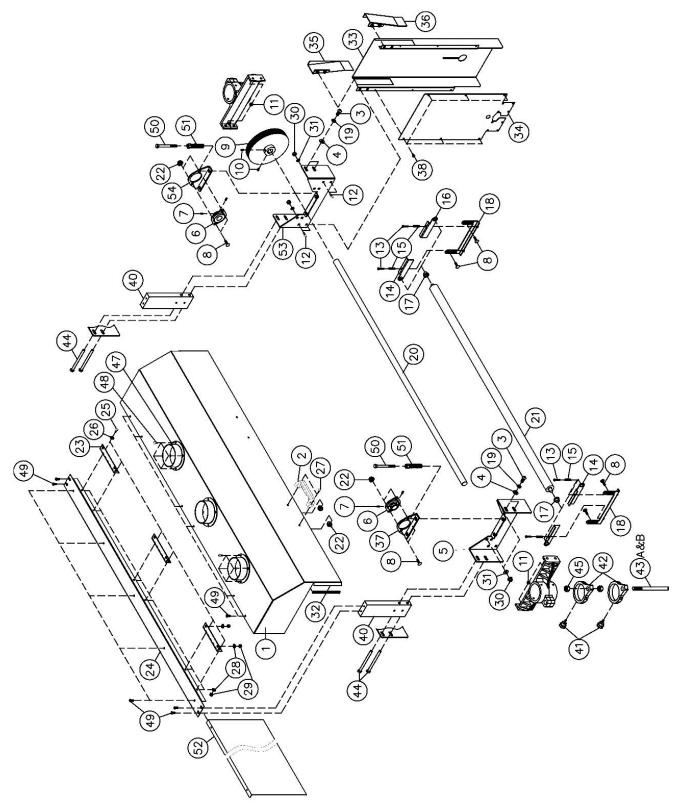


Figure 24: Head Assembly (1/2, without brush)

Head Assembly Parts List

Ref. Part			
No. No.	Description	Size	Qty.
141-3649	DUST COVER		
	HANDLE, DUST COVER		
	SOCKET HEAD BUTTON SCREW		
411-0104	FLAT WASHER	3/8"X20X2t	8
	BRACKET, BEARING MOUNTING		
650-3067	BEARING		4
7480BS-142	SET SCREW	1/4"-20X1/4"	8
	CARRIAGE BOLT		
	PULLEY		
	SET SCREW		
	FLANGE LOCK NUT		
1291267-212	SOCKET HEAD BUTTON SCREW	5/16"-18X3/8" .	8
1310-3213	SCREW	1/4"-20X1-3/4"	8
1440-0323	BRACKET, LEFT SUSPENSION		4
	SPRING, TENSION ROLLER		
	BRACKET, RIGHT SUSPENSION		
	OILITE ROUND BUSHING		
1840-0322	BRACKET. SUSPENSION BASE		4
19480BS-111	LOCK WASHER	3/8"	8
2093497-2-220	ROD		2
2130-5218	ROLLER TENSION		4
	FLANGE LOCK NUT		
	HINGE		
	BRACKET, DUST COVER MOUNTING		
	SCREW		
	INTERNAL TOOTH LOCK WASHER		
	SCREW		
2811-0205	FLAT WASHER	1/4"X16X2t	24
	HEX NUT		
	HEX NUT		
3111-0505	INTERNAL TOOTH LOCK WASHER	5/16"	8
3340-0009	GUARD, BELT COVER		2
	GUARD, BELT, PLATE		
3591267-235	GUARD, RIGHT BELT COVER		2
	GUARD, LEFT BELT COVER		
	BEARING SET		
3810-3803	SLOTTED HEX HEAD SCREW	#10-24X3/8"	12
4030-1310	SPACER, HEAD		2
4181-3132W	KNOB, LOCKING W/SET SCREW		2
	SUPPORT, ADJUSTING SCREW		
	DEPTH GAUGE ROD		
43B94-1654	DECAL, SCALE		1
4410-9209	SOCKET HEAD CAP SCREW	3/8"-16X4-1/2"	4
	HEX NUT		
	DUST PORT		
48635DS-135	SCREW	1/4"-20X3/8"	24
4993267-2-249	SOCKET HEAD BUTTON SCREW	1/4"-20X1/2"	21
	HEX CAP SCREW		
	ADJUSTMENT NUT		
	DUST PLATE		
5393497-2-253	BRACKET, BEARING MOUNTING		2
	BEARING SET		

CONVEYOR ASSEMBLY

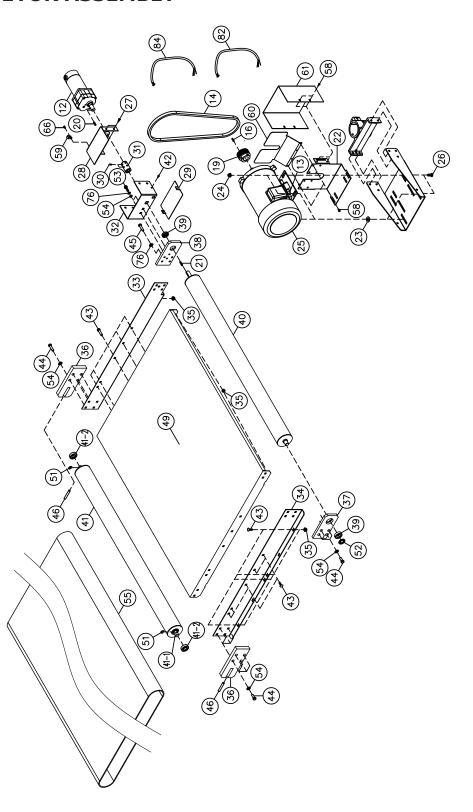


Figure 25: Conveyor Assembly

CONTROL PANEL ASSEMBLY (Incl. w/Conveyor Parts)

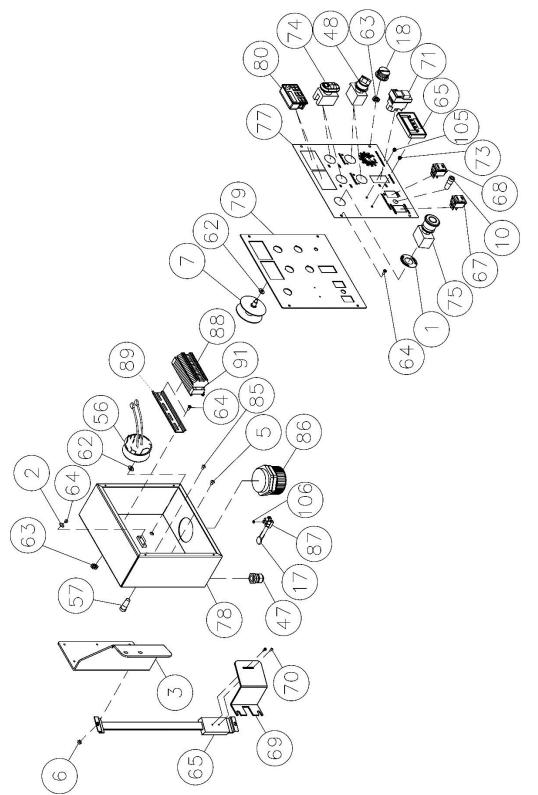


Figure 26: Control Panel Assembly (Included with Conveyor parts list)

VFD & POWER-IN ASSEMBLY (Incl. w/Conveyor Parts)

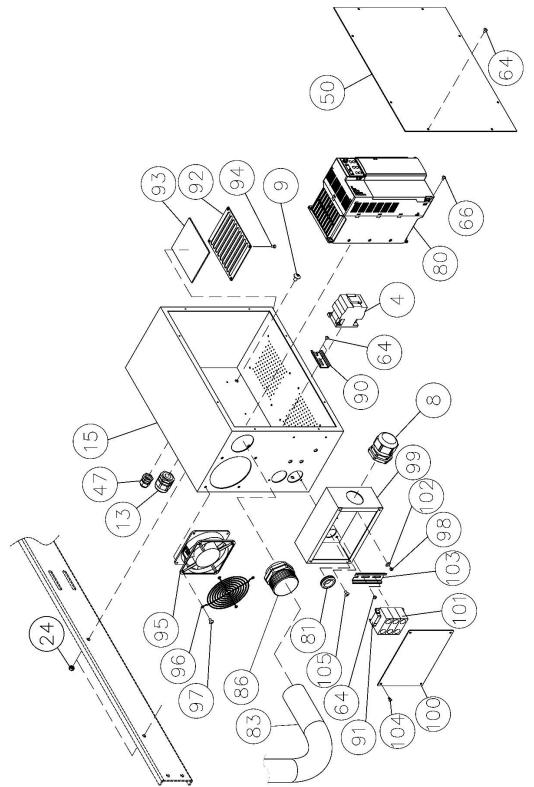


Figure 27: VFD & Power-In Assembly (included with Conveyor parts list)

Conveyor Assembly Parts List, includes Control Panel & VFD

Ref.	Part			
<u>No.</u>	No.	<u>Description</u>	<u>Size</u>	Qty.
1	635DS-361	. EMERGENCY STOP LABEL	. 	
2	93267-2-302	. EXTERNAL TOOTH LOCK WASHER	. M4	2
3	93497-2-303	. CONTROL BOX SUPPORT BRACKET		1
4	93497-2-304	. CONTACTOR		1
5	93267-2-305	. SOCKET HEAD BUTTON SCREW	. M5X0.8X8	5
6	93267-2-306	. HEX NUT	. M5X0.8	1
7	72-1260	. CONTROLLER, 180 VDC, VARIABLE SPEED, CONVEYOR		1
8	93497-2-308	. STRAIN RELIEF	. PG-36	1
9	93497-2-309	. SCREW	. 5/16"-18X5/8" .	2
10	93267-2-310	. FUSE HOLDER		1
12	93497-2-312	. DC GEAR MOTOR	. 180VDC	1
13	93497-2-313	. STRAIN RELIEF	. PG-21	4
14	93497-2-314	. POLY-V BELT		2
15	93497-2-315	. LOWER CONTROL BOX		1
16	93497-2-316	. KEY	. 8x7x60	2
17	93267-2-317	. ZINC OXIDE VARISTOR		1
18	72-6106-01A	. KNOB		1
19	93497-2-319	. PULLEY, DRIVE		2
20	20-0763	. KEY	. 3/16"X3/16"X3/	′4" 1
21	93267-2-321	. KEY	. 3/16"X3/16"X1-	1/4"1
22	40-1000	. LOWER, INNER BELT GUARD		2
23	93267-2-323	. FLAT WASHER	. 5/16"X18X2t	4
24	12-0207	. FLANGE LOCK NUT	. 5/16"-18	10
25	93497-2-325	. MOTOR	. 10 HP. TEFC, TI	HREE
	SE			
26	635DS-234	. CARRIAGE BOLT	. 5/16"-18X1"	8
		. HEX CAP SCREW		
		. CONTROL HOUSING		
		. CONTROL BOX BOTTOM COVER		
		. SET SCREW		
		. COUPLER		
		. BRACKET, CONTROL HOUSING		
		. RAIL, BED RH		
		. RAIL, BED LH		
35	12-0209	. FLANGE LOCK NUT	. 3/8"-16	36
		. BRACKET, DRIVEN ROLLER SUPPORT		
		. BRACKET, DRIVE ROLLER SUPPORT LH		
		. BRACKET, DRIVE ROLLER SUPPORT RH		
		. BEARING, DRIVE ROLLER		
		. ROLLER, DRIVE		
		. ROLLER, DRIVEN		
		. SCREW		
		. CARRIAGE BOLT		
44	10-9207	. HEX CAP SCREW	. 3/8"-16X1-3/4"	12
		. SOCKET HEAD BUTTON SCREW		
_		. SET SCREW		
		. STRAIN RELIEF		
		. FWD/REV SWITCH		
		. CONVEYOR BED		
50	93497-2-350	. LOWER CONTROL BOX COVER		1

Ref.	Part			
No.	No.	Description	Size	Qty.
<u>51</u>	<u>20-</u> 0753	<u>Description</u> E-RING	E-15	2
		. STARKLOCK		
53	480BS-177	HEX CAP SCREW	3/8"-16X3/4"	2
54	11-0104	FLAT WASHER	3/8"X20X2t	14
55	61-1017	BELT, CONVEYOR POLYURETHANE		1
56	93267-2-356	CONTROLLER, 180 VDC, VARIABLE SPEED, CONVEYOR		1
		FUSE HOLDER		
58	10-3803	SLOTTED HEX HEAD SCREW	#10-24X3/8"	6
		CORD HOLDER		
60	40-0012	. GUARD, BELT ANGLED		2
61	40-0011	GUARD, BELT LOWER		2
62	72-1270-3	FLAT WASHER	5/16" I.D. THIN	2
		. JAM NUT		
64	PLAREVO1836-1152	. SCREW	M4X0.7X6	20
65	93267-2-365	LCD MONITOR		1
		. SCREW		
		. SIWTCH, HIGH/LOW		
		. SWITCH, UP/DOWN		
		DRO MOUNTING PLATE		
		SCREW		
71	.72-2004E	ON/OFF SWITCH, CONVEYOR		1
		EXTENSION CORD (NOT SHOWN), INVERTER		
		SCREW		
		ON/OFF SWITCH, DRUM		
		EMERGENCY STOP		
		LOCK WASHER		
77	93497-2-377	CONTROL PANEL LABEL		1
		UPPER CONTROL BOX		
		UPPER CONTROL BOX COVER		
		INVERTER		
		RUBBER BUSHING		
		MOTOR CORD, FRONT MOTOR		
		POYFLEX-CORRUGATED PIPES		
		MOTOR CORD, REAR MOTOR		
		SOCKET HEAD BUTTON SCREW		
		FIEXIBLE CONDUIT ADAPTOR		
		TERMINAL BLOCK		
		FEED-THRUOGH TERMINALS		
		DIN RAIL		
		DIN RAIL		
		END BRACKET		
		FILTER SPONGE PLATE		
		FILTER SPONGE		
		HEX CAP SCREW		
-		AC FAN		_
		METAL FAN GUARDS		
		SCREW		
		SCREW		
		JUNCTION BOX		
		JUNCTION BOX COVER		
		RAIL-MOUNT TERMINAL BLOCKS		
		EXTERNAL TOOTH LOCK WASHER		
102		EXTERNAL TOOTH LOOK WAOHER		∠

Ref.	Part			
<u>No.</u>	No.	<u>Description</u>	<u>Size</u>	Qty.
103	93497-2-3103	. DIN RAIL		1
104	93497-2-3104	. SOCKET HEAD BUTTON SCREW	. M4X0.7X8	4
105	93497-2-3105	. SCREW	. M3X0.5X20	1
106	93497-2-3106	HEX NUT	. M3X0.5	1

Specifications: SuperBrush 49x2

SUPMX-93497-2

Main Motor:	10 HP each/ 1750 RPM
Electrical:	208V - 230V / 60Hz / 3PH
Circuit:	60 Amp (min.) at 208V, 3PH
Air Volume:	600 CFM per port (min.)
Inlet:	Six 4" ports
Switch:	ON/OFF for main motors, Conveyor & Lift, E-STOP
Packing Size:	86.75" x 52" x 62.75" appx.
$(L \times W \times H)$	(2200 x 1320 x 1590 mm)
Machine weight:	1152 lbs. (524 kg.)
Shipping weight:	1535 lbs. (698 kg.)

SUPPLIES:

Conveyor Belt Various brush heads # 61-1017 # varies

Contact Laguna Tools for supplies:

800-234-1976

www.lagunatools.com

WARRANTY & REGISTRATION

THANK YOU

Welcome to the Laguna Tools® group of discriminating woodworkers.

We understand that you have a choice of where to purchase your machines and appreciate the confidence you have in the Laguna Tools® brand.

Through hands-on experience, Laguna Tools® is constantly working hard to make innovative, precision products. Products that inspire you to create works of art, are a joy to operate, and encourage your best work.

> Laguna Tools® Imagination, Innovation, and Invention at Work

WARRANTY & REGISTRATION

Every product sold is warranted to be free of manufacturers' defective workmanship, parts, and materials. For any questions about this product, the intended use or what it was designed for, customer service, or replacement parts, please contact our customer service department:

Laguna Tools® Customer Service
744 Refuge Way, Grand Prairie, Texas 75050, USA
1-800-234-1976
customerservice@lagunatools.com
www.lagunatools.com/why/customer-service/
8AM. to 5PM PST, Monday through Friday

For warranty claims or to report damage upon receiving – please reach out to our warranty department:

Laguna Tools® Warranty Service
744 Refuge Way, Grand Prairie, Texas 75050, USA
1-800-332-4049
customerservice@lagunatools.com
www.lagunatools.com/rpolicies/warranty
8AM to 5PM PST, Monday through Friday

REGISTRATION

To prevent voiding this warranty, all products sold must be registered within thirty (30) days of receiving the product. Registering the product will enable the original purchaser to receive notifications about important product changes, receive customer service, and be able to file a warranty claim against defective workmanship, parts, or materials.



WHO IS COVERED

The applicable warranty covers only the initial purchaser of the product from the date of receiving the product. To file such claims, the original purchaser must present the original receipt as proof of purchase.

WHAT IS COVERED

The warranty covers any defects in the workmanship of all parts and materials that make up the machine unless otherwise specified. Any part, determined by Laguna Tools®, to have a defect will be repaired or replaced (and shipped), without charge. The defective item/part must be returned to Laguna Tools® with the complaint and proof of purchase in the original packaging that it was received in. In the event the item/part is determined to be not covered by this warranty, the customer will be responsible for the cost to replace the item/part and all related shipping charges.

WARRANTY LIMITATIONS

This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, or lack-of inadequate dust collection. The warranty may be voided against proof of misuse/abuse, damage caused where repair or alterations have been made or attempted by others, using the product for purposes other than those described as intended use (unless with consent by Laguna Tools®), modification to the product, or use with an accessory that was not designed for the product. It is the responsibility of the user to understand basic woodworking machinery settings and procedures and to properly maintain the equipment in accordance with the standards provided in this manual.

LENGTH OF WARRANTY

All new machines and optional accessories sold through an authorized dealer carry a two-year warranty effective the date of receiving the product. Machines sold for either commercial or industrial use have a one-year warranty. Wearable parts like throat plates, bandsaw guides, etc., have a ninety-day warranty.

Table A-1 Warranty Lengths

2 Year - New Machines Sold Through an Authorized Dealer

2 Year - Accessories Sold as Machine Options (excluding blades)

1 Year - Machines Sold for Commercial or Industrial Use

1 Year - Blades and Accessories outside of Machine Options

90 Days - Wearable Parts

Aside from being free of defects upon receiving, consumable parts, like cutters and abrasives, are not covered by this warranty unless otherwise stated by Laguna Tools®. These parts are designed to be used at the expense of the operator and are available for replacement or inventory purchase. The determination of a consumable part will be made on a case-by-case basis by Laguna Tools®.

SHIPPING DAMAGE

Laguna Tools® is not responsible for damage or loss caused by a freight company or other circumstances not in the direct control of Laguna Tools®. All shipping-related claims for loss or damage goods must be made to Laguna Tools within twenty-four hours of delivery.

HOW TO RECEIVE SUPPORT

To file a warranty-claim please contact the warranty department at 1-800-234-1976. To receive customer service or technical support please contact the customer service department at 1-800-332-4049. Parts, under warranty, are shipped at the expense of Laguna Tools® either by common carrier, FedEx ground services or similar method. Technical support to install replacement parts is primarily provided by phone, fax, email, or the Laguna Tools Customer Support Website.



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LAGUNA TOOLS

744 Refuge Way Suite 200 Grand Prairie TX 75050 Ph: 800.234.1976

www.lagunatools.com