# SuperVax.8

# 16-32 Drum Sander Owner's Manual



Lagunatools.com



#### **CONGRATULATIONS:**

Thank you for investing in a 16-32 SuperMax by Laguna Tools drum sander. This drum 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

#### **MODEL IDENTIFICATION:**

Your 16-32 drum sander is one of a family of machines from Laguna Tools designed to help you achieve results comparable to industrial-size sanders at a fraction of the cost. For future reference, find the model, stock and serial numbers on the back of machine base and write them in below.

Model:	Date Purchased:
Stock Number:	Distributor:
Serial Number:	

#### IMPORTANT KEEP THIS MANUAL HANDY:

Please read this manual first. It was designed to help you get the most from your 16-32 drum sander. Before unpacking or using the machine, familiarize yourself with its components, features, and basic adjustments by reviewing the following pages. You will find it an invaluable aid in setting up, operating and servicing your machine. If, after reviewing this manual, you still have a problem you can't solve, please call your SuperMax Tools distributor.

#### **LATEST MANUAL:**

Below is a QR code which will direct you to the latest version of the 16-32 manual on the Laguna Tools website. The online manual may have updates and information published after the printed copy was released. Scan the code with your smartphone to be directed to the latest manual.





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#### **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.
- **3.** 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.
- **5.** KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
- **6.** MAKE WORKSHOP CHILD PROOF with padlocks, master switches, or by removing starter keys.
- 7. 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 number, 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.
- **13.** 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.
- 18. 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.
- **20.** 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.

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.

#### **CONSIGNES DE SÉCURITÉ**

- MAINTENEZ TOUS LES PROTECTEURS en place et bon état de marche.
- 2. RETIREZ LES CLÉS ET OUTILS. Prenez pour habitude de
- MAINTENIR VOTRE LIEU DE TRAVAIL PROPRE. Un endroit de travail mal entretenu est source d'accidents.
- 4. NE JAMAIS UTILISER DANS UN ENVIRONNEMENT DAN-GEREUX. N'utilisez jamais d'outils électriques dans les endroits humides; ne les exposez jamais à la pluie. Gardez le lieu de travail bien éclairé.
- 5. ÉLOIGNEZ LES ENFANTS et les visiteurs de l'endroit de travail lorsque la machine est en marche
- EMPECHEZ LES ENFANTS D'UTILISER VOS OUTILS à l'aide de cadenas, d'interrupteurs électriques principaux et d'interrupteurs à clés.
- ritaire si vous utilisez un outil pour effectuer ce pour quoi il a été conçu.
- 8. UTILISEZ LE BON OUTIL DE TRAVAIL. Ne forcez pas un
  - pas été conçu.
- 9. UTILISEZ UNE RALLONGE ÉLECTRIQUE ADÉQUATE. Assurez-vous que la rallonge est en bon état et que son ampérage est adapté à la machine. Une rallonge sous-calibrée entraîne une chute de tension, causant perte de puissance et surchauffe. Le tableau A (voir page suivante) indique l'ampérage adéquat en fonction de la longueur du câble et de l'ampérage nominal indiqué sur la plaque signalétique de la machine. En cas de doute, utilisez un câble d'ampérage immédiatement supérieur.
- 10. PORTEZ DES VÊTEMENTS APPROPRIÉS. Ne pas porter de vêtements amples, de gants, de bracelets, de colliers et autres bijoux pouvant être happés par les parties mobiles de la machines. Portez des chaussures antidérapantes et rassemblez et couvrez les cheveux longs pour évitez que ceux-ci se prennent dans les parties mobiles de la machine.
- II. PORTEZ TOUJOURS DES LUNETTES DE SÉCURITÉ. Portez toujours un masque de protection du visage ou respiratoire si la poussière est abondante. Les lunettes de vue ne sont pas des lunettes de sécurité et

- ne sont pas conçcues pour résister aux impacts.
- 12. TRAVAIL SÉCURITAIRE. Utilisez des serres ou un étau pour maintenir la pièce en place lorsque c'est pratique. Plus sécuritaire, cela vous pemet aussi de garder les mains libres pour manier un outil s'il y a lieu.
- ÉVITEZ DE TRAVAILLER dans une position incommode ou instable. Gardez les deux pieds au sol en tout temps.
- 14. ENTRETENIR VOS OUTILS AVEC SOINS. Pour une meilleure performance et plus de sécurité, veillez à la propreté
  - tion et le changement d'accessoires, suivez toujours les instructions fournies.
- DÉBRANCHEZ TOUJOURS LA PONCEUSE avant de changer des accessoires comme les lames, forets, couteaux ou autres.
- 16. REDUIRE LE RISQUE DE DÉMARRAGE NON INTENTIO-NEL. Assurez-vous que l'interrupteur est en position "OFF" avant de brancher la machine à une source électrique.
- 17. UTILISEZ SEULEMENT LES ACCESSOIRES RECOMMAN-DÉS. Consultez votre manuel les accessoires recommandés. L'utilisation de pièces et d'accessoires non recommandés augmente les risques de blessures.
- **18.** NE MONTEZ JAMAIS SUR LA PONCEUSE. Vous risquez de subir de graves blessures si celle-ci bascule ou est mise en marche par mégarde.
- 19. INSPECTEZ BIEN LES PIÈCES ENDOMMAGÉES avant utilisation. Les protecteurs et pièces endommagés de
  - des pièces en mouvement, les obstacles, bris, montures et points d'attache affectant l'opération sécuritaire de la machine. Un protecteur ou une pièce endommagé devrait être immédiatement remplacé.
- DIRECTION DE L'ALIMENTATION. Passez la pièce de travail dans la ponceuse contre le sens de rotation du tambour.
- 21. NE LAISSEZ JAMAIS LA MACHINE EN FONCTION SANS SURVEILLANCE. METTEZ-LA HORS TENSION. Attendez qu'elle soit complètement arrêtée avant de quitter l'endroit de travail.

## Certaines particules issues des opérations de ponçage, sciage, meulage, perçage ou d'autres procédés de fabrication contiennent des composés chimiques connus pour être à l'origine de cancers, de malformations congénitales et de troubles de la santé reproductive. Ces composés chimiques peuvent être:

- Le **plomb** contenu dans certaines peintures à base de plomb.
- La sillice cristalline contenue dans les briques, le ciment et les matériaux de maçonnerie.
- L' arsenic et le chrome issus du traitement chimique des planches de bois.

Les risques encourus dépendent de la fréquence d'exposition à ces composés chimiques. Pour réduire l'exposition à ces com-

les masques respiratoires ou antipoussières spécialement conçus pour empêcher l'inhalation de micro-particules.

#### TABLE A MINIMUM GAGE FOR CORD

AMPERAC	GE RATING	VOLTS TOTAL LENGTH OF CORD (IN FEET)				
-	-	120	25	50	100	150
-	-	240	50	100	200	300
MORE THAN	NOT MORE THAN	MINIMUM GAUGE FOR CORD				
0	6	-	18	16	16	14
6	10	-	18	16	14	12
10	12	-	16	16	14	12
12	16	-	14	12	Not recor	nmended

#### I. All grounded, cord-connected tools:

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

- Do not modify the plug provided if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
- Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, DO NOT CONNECT the equipment-grounding conductor to a live terminal.
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3 pole receptacles that accept the tool's plug.
- · Repair or replace damaged or worn cord immediately.

## 2. Grounded, cord-connected tools intended for use on a supply circuit having a nominal rating less than 150 V:

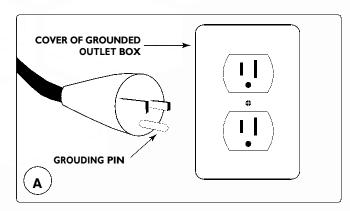
• This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in sketch A in Fig. I. The tool has a grounding plug that looks like the plug illustrated in sketch A in Fig. I. A temporary adapter, which looks like the adapter illustrated in sketch B and C, may be used to connect this plug to a 2 pole receptacle as shown in sketch B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. This adapter is not permitted in Canada. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

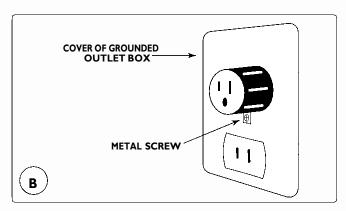
## 3. Grounded, cord-connected tools intended for use on a supply circuit having a nominal rating between 150 – 250 V, inclusive:

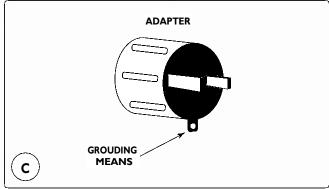
• This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in sketch **D**. The tool has a grounding plug that looks like the plug illustrated in sketch **D**. Make sure the tool is connected to an outlet having the same configuration as the plug. No adapter is available or should

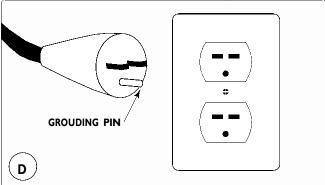
be used with this tool. If the tool must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after reconnection, the tool should comply with all local codes and ordinances.

#### **GROUNDING METHODS**









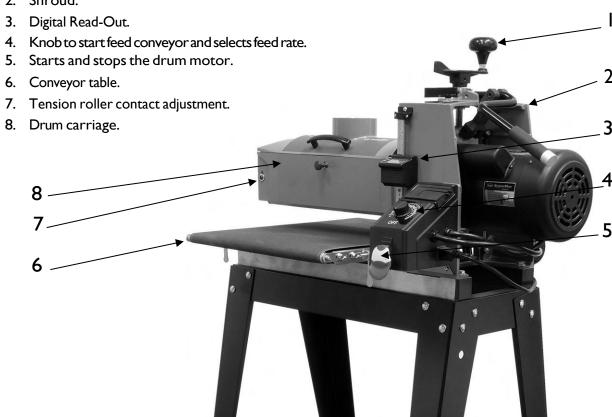
#### **SPECIFICATIONS**

Maximum Width	32" (2 passes)
Minimum Length	2-1/4"
Maximum Thickness	3"
Minimum Thickness	1/32"
Drum Dimensions	5"×16"
Drum Speed	1740 RPM
Dust port diameter	4"
Conveyor Speed	0 - 10 fpm
Drive Motor	I-1/2 HP
Power Requirements	I I OV, I Ph, (20 Amp Service)
Shipping Weight	I 58lbs.

#### **ABOUT THE DRUM SANDER:**

This manual is designed to help familiarize you with your SuperMax Tools drum sander, and to help you take advantage of its exclusive features. By understanding its major components, and how they work together, you will be able to get the most from your investment.

- 1. Height adjustment handle of the drum.
- 2. Shroud.



#### **UNPACKING:**

The 16-32 drum sander has been shipped mostly assembled from the factory. If any damage has occurred as a result of shipment, notify the transportation company as soon as possible and ask them to make an immediate inspection. Ask for a damage or loss report. Also notify your distributor of any loss or damage during shipment. See enclosed Warranty Statement.

Note: Before setting up make sure that the space is adequate for your new equipment. We also recommend that there is more than one person available for lifting and initial set up procedures.

#### **SETTING UP THE 16-32 QR CODE VIDEO:**

Below is a QR code which links to a set-up video for the 16-32 sander. Scan the QR code with your smartphone to be directed to the video at LagunaTools.com.

#### **PACKAGE CONTENTS**

Machine (not shown)	I
_	
Short lower cross braces	
Long top cross braces	2
Short top cross braces	
•	
	Long top cross braces

8.	Wrench 12 - 14 mm	. I
9.	Allen key 4 & 5 mm	. 2
ΙΟ.	Bolt 3/8"	. 4
П.	Flat washer 3/8"	. 4
12.	Knob	. I

Batteries not included



#### ASSEMBLING THE DRUM SANDER

Note: For initial stand assembly secure all fasteners finger tight to start. This will allow for easier levelling after the sanding unit is installed on the stand.



Assemble the stand by securing two legs to the outside of each of the two short top cross braces using the supplied carriage bolts and flange nuts.



Secure the two long top rails inside of the legs and on top of the short rails.

Note: To avoid incorrect leg positioning, the holes in the legs are spaced so that the short and long top braces will only line up from one face of each leg.



Note: Long rail on top of short rail and both rails inside of legs.



Connect the second leg sub-assembly to the top long rails.



Attach the lower cross braces to the legs – again, the longer cross braces should sit on top of the short ones.



Thread a hex nut onto each of the leveling feet attach a leveling foot to the bottom of each leg with the hardware order as shown (not required if installing optional caster set #98-0130).

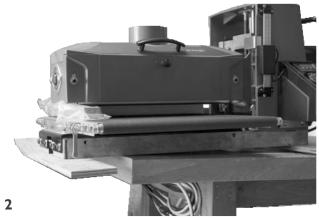
Note: After final assembly and sander installation, adjust the nuts on the threads as needed to level the stand.

#### INSTALLING THE DRUM SANDER

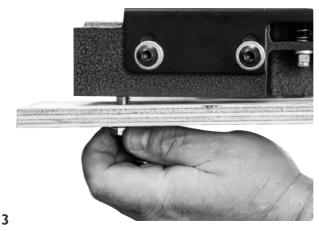
5



For easier access to remove the unit from the box, peel back the plastic liner, cut the box at the corners, and fold down the 4 sides of the box.



Then with the help of an assistant carefully lift the unit and set it down on a workbench with one end hanging slightly over the edge.



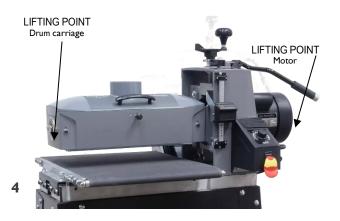
Unscrew the bolts holding the wooden packing support to the underside of the unit and then carefully swing the unit around on the bench and repeat for the wooden support at the opposite end (these bolts can be re-used to secure the unit to the stand in step #5; extra bolts are also provided for this with the machine).



5

Using the supplied 14 mm wrench bolt the machine to the stand from underneath using one of the supplied hex bolts and flat washers in each corner.

Note: With the unit properly secured, level the stand and tighten all its fasteners with a 1/2" or 13 mm socket.



With the help of an assistant place the unit on its stand taking care to line up the mounting holes in the top of the stand with the holes in the underside of the unit's base, and then remove the Styrofoam and wooden support block from under the sanding head.



6

Screw the height adjustment knob into the handle and tighten it down with the supplied 14 mm wrench. Assembly continued on next page.

#### WARNING SAFETY FIRST:

When maintaining and operating this machine, always put safety first. For your own safety, read and understand this owner's manual before operating this machine. Always heed and follow all normal safety precautions, including the following:

- a. Always wear eye protection while operating sander.
- b. Always feed boards against the drum rotation.
- c. Tighten all locks before operating.
- d. Keep hands and clothing away from operating drum.
- e. Do not operate sander with dust cover opened.
- f. Do not operate sander without dust collector connected to the dust cover.
- g. Always maintain control of boards to avoid kickback (know how to prevent it).
- h. Always disconnect power before servicing or adjusting.



Plug the short power cord from the conveyor motor into the outlet on the control box. This cord will provide switched power for the conveyor motor when the machine is plugged into the power source.



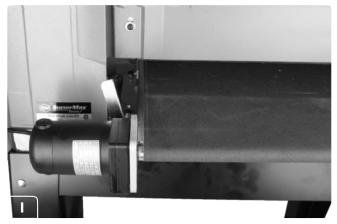
Check your power supply to make sure that it is adequate (110V, 15 A, 20 Amp service required) but do not plug the machine into the power supply until it is fully set-up.

#### **SETTING-UP**

The 16-32 sander should now be in place and ready for the final set-up. The sander was adjusted and aligned at the factory. However simple alignment checks will ensure that everything is in perfect order. Problems can be avoided if these essential checks and set-up procedures are performed prior to operation.

#### **CHECKING DRUM ALIGNMENT**

During initial set-up only, checking the alignment before using the sanding drum is necessary to make sure that the drum is parallel.



Before checking drum alignment make sure that the fast lever between the conveyor motor and the unit is in the up position.

The conveyor table bolts on the inboard side should not be so tight that the Fast Lever does not rotate — see first note on page 20.



Remove the abrasive from the drum. This is necessary to make sure that the adjustment is as accurate as possible and the texture on the abrasive will make the adjustment imprecise. 3



Use a flat, uniform piece of wood as a thickness gauge. Set it between the conveyor belt and the drum on the inboard (right) side of the machine.



Raise the head of the sander by rotating the height adjustment handle up exactly one full turn.



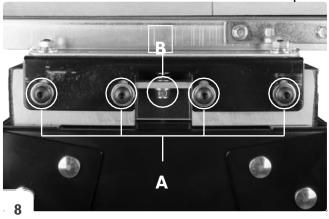
Check the height of the drum in relation to the piece of wood. It the drum is aligned it will just make contact with the wood as it did on the inboard side. If you cannot turn the handle one full turn, or if there is a gap between the drum and the wood, proceed to the following alignment procedure.



The tension rollers are set just below the drum enough so that items cannot pass easily underneath. Use the height adjustment handle as necessary to lower the head of the sander until the drum just makes contact with the piece of wood. Turn on the DRO and take note of the thickness indicated on the display.



After the height has been adjusted move the piece of wood over to the outboard side (left) and lower the head by turning the handle down exactly one full turn until the DRO thickness matches what was noted in step #4.



If the drum is not parallel, loosen the 4 socket head screws A along the outboard (left) side of the conveyor belt and raise or lower the conveyor with the adjustment nut B to achieve parallel alignment. Then tighten the four socket head screws

#### **CONNECTING DUST COLLECTORS**

Dust collection is necessary for the 16-32 drum sander. The sander comes equipped with a 4" diameter dust exhaust port at the top of the cover. Check to make sure that the minimum dust requirements are sufficient. To attach to your collection system, install 4" hose from your collector. The minimum recommended dust collector capacities is 600 CFM. For best results, follow the recommendations of the manufacturer of your dust collection equipment. When connecting dust collection, straight pipe is preferred because it is the least restrictive for airflow. If straight pipe is not possible Y's and elbows are preferred because they are less restrictive to airflow than T's.

Note: Some applications will require more dust collection than the recommended minimum.

#### **POWER AND ELECTRICAL SAFETY**

The I 6-32 drum sander requires I I OV, single-phase 20 amp service. After the dust collection system is in place and the drum alignment is checked your machine should be ready to be powered up and operated.

#### **ABRASIVE SELECTION GUIDE**

To attach a strip to the drum, follow the procedure below.

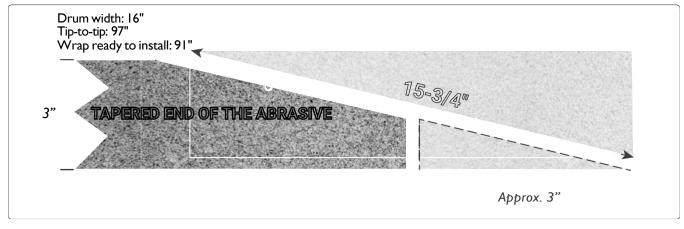
#### **GRIT COMMON APPLICATION**

36 GRIT	Abrasive planing, surfacing rough-sawn boards, maximum stock or glue removal
60 GRIT	Surfacing and dimensioning boards, trueing warped boards
80 GRIT	Light dimensioning, removal of planer ripples
100 GRIT	Light surfacing, removal of planer ripples
120 GRIT	Light surfacing, minimal stock removal
I 50 GRIT	Finish sanding, minimal stock removal
180 GRIT	Finish sanding only, not for stock removal
220 GRIT	Finish sanding only, not for stock removal

Note: See page 23 for complete list of pre-cut abrasives offered for this specific unit.

#### **INSTALLING AND WRAPPING ABRASIVES**

Accurate attachment of the abrasive strip to the drum is critical to achieving the top performance from the 16-32 drum sander. Abrasive strips do not have to be pre-measured. The end of the roll is first tapered and attached to the outboard (left) side of the drum. Then the strip is wrapped around the drum, and the second taper is made for attachment to the inboard (right) side of the drum.



Note: Pre-cut wraps have been factory tapered to the specific width of your drum. If you are cutting your own abrasive, use the wrap that came on the drum as a template (abrasive side up).

#### **INSTALLING AND WRAPPING ABRASIVES (CONTINUED)**

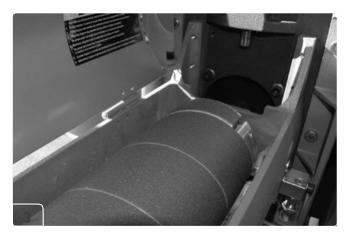


Start on the left (outboard) side of the drum. Pinch or squeeze the clip lever and insert the tapered end of the paper through the slot and into the fastener so that it uses most of the width of the slot. Release the clip lever to securely hold the end in the fastener.

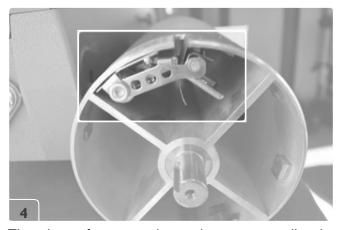


Wind the wrap around the drum, being careful not to overlap the windings. The tapered cut of the wrap end should follow the edge of the drum.

Continue to wrap the abrasive in a spiral fashion by rotating the drum with your left hand and guiding the wrap with your right hand. Successive windings of the wrap should be flush with previous windings without any overlap.



Pinch or squeeze the clip lever to open the clip, and pull the take-up lever to the top. Insert the tapered end through the slot in the inboard (right) end of the drum.



The take-up fastener is designed to automatically take up any slack caused by stretching of the abrasive wrap. If during use the abrasive wrap stretches enough to allow the take-up lever to reach its lowest position and no longer maintain tension on the wrap, see "Abrasive wrap tension adjustment" for corrective measures.

Note: Take notice that for detail only the drum was removed to show the inboard (right) take-up fastener.

#### PROPER ABRASIVE WRAP POSITION

Position the abrasive wrap in the slot with sufficient room between the inside of the slot and the tapered end of the wrap to allow it to be pulled into the drum as needed (see opposite picture). If enough space is not left between the wrap and the inside of the slot the take-up fastener will not operate properly.

#### ABRASIVE WRAP TENSION ADJUSTMENT

The abrasive wrap may stretch enough in use to allow the take-up lever to reach its lowest position. If this occurs then tension is no longer maintained on the abrasive wrap. To fix this reset the take-up lever by raising it, pushing the abrasive wrap into the slot and then releasing the clip lever.



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#### **MAXIMIZING ABRASIVE LIFE**

A sandpaper cleaning stick may be used to remove deposits and help extend the life of the abrasive.

- 1. To use the cleaning stick, operate the sanding drum with the dust cover open and dust collection on.
- 2. Hold the cleaning stick against the rotating drum and move it along the drum surface.
- 3. Use a shop brush to remove any cleaning stick remnants from the drums before resuming sanding operations.

#### **OPERATING THE 16-32 DRUM SANDER**

#### DRUM DEPTH OF CUT

Determining the depth of cut is the most important operating procedure decision. It may take some experimentation to determine the proper depth of cut. We recommend practicing on a scrap of wood prior to sanding a project.

#### Digital Read-Out

For added convenience a digital read out (DRO) for sanding thickness is included as standard equipment with this unit. A DRO offers the most precise reading of sanded thickness and allows for accurate repeatability of a thickness. This is great when making parts that must be an exact thickness or when matching a thickness.

#### **DRO Specifications:**

**Resolution:** Decimal = .005 in.

Fraction = 1/32 in.

Metric = 0.1 mm

**Accuracy:** Decimal =  $\pm$  - .0025 in.

Fraction= +/- 1/500 in.

Metric = +/-.05 mm



#### **DRO Specifications. cont.**

Battery: 2 AAA (not included)

**Functions:** - Constant memory retains calibration even

when OFF

- Incremental measuring mode

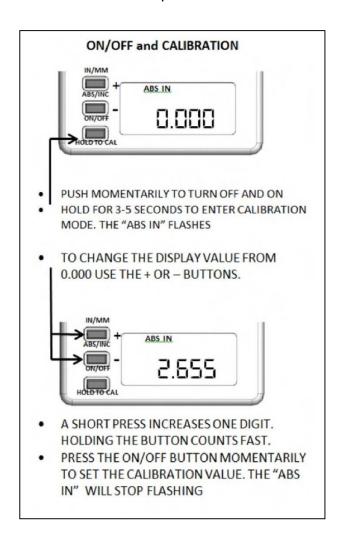
- Absolute measuring mode

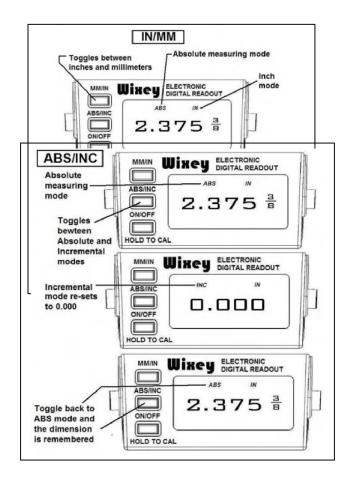
- Millimeter, Inch and Fraction readout

- Auto shut off

#### **Button Reference and Use**

It is helpful to familiarize these buttons and their purpose with the Wixey DRO





#### **DRO Calibration**

There are three typical variations of calibration. The first variation (Type 1) is for the DRO to show the sanded thickness of the material. The second variation (Type 2) is to show how much stock is being removed with each pass of the sander. Another method (Type 3) to show the amount of material being removed per pass without recalibrating the Type 1 setting.

#### **Type I Calibration ABS:**

Calibration for the DRO to show sanded thickness (Type I). Calibration is quick and easy and requires no extra measuring device. Make sure the machine is turned OFF and power is disconnected!

- 1. Wrap the sanding drum with the desired grit abrasive.
- 2. Lower the sanding drum until it lightly touches the conveyor belt.
- 3. Turn "ON" the DRO.
- 4. Hold the "CAL" button 3 seconds until "0.00" appears.



#### **Type 2 Calibration ABS:**

Calibration for the DRO to show stock removed per sanding pass (Type 2). Calibration is quick and easy and requires no extra measuring device. Make sure the machine is turned OFF and power is disconnected after the first step!

1. Sand a test piece of stock until it is flat and uniform on both sides.



- 2. Turn the Sander OFF and disconnect power to sander.
- 3. Position the sanding drum (with abrasive still wrapped on drum) on the test piece until the drum is lightly touching the test piece.

4. Press and hold the "CAL" button for 3 seconds until "0.00" appears.



#### **Type 3 Calibration INC:**

This method allows saving the original calibration from Type I and confirming the amount of material being removed per pass.

- 1. Make one pass sanding your stock. Without changing the drum height press the "ABS/INC" button to read "0.00". This changes the readout from "ABS" to "INC" and zero's the readout on top of the just sanded piece. Now the readout will show the amount of stock removed per sanded pass in "INC" mode.
- 2. To change back to the original (Type I) calibration press the "ABS/INC" button to change back to "ABS" mode.

**NOTE:** When changing the abrasive wrap to a different grit the DRO must be recalibrated for the change of drum diameter with the new grit abrasive!

**NOTE:** When setting the depth of cut, never exceed the thickness of the grit for stock removal.

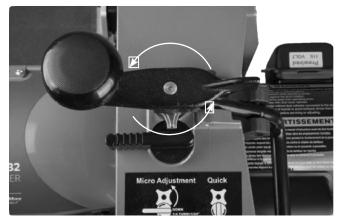
#### Depth of cut/Sanding

**TIP:** With the sander turned OFF, place the stock to be sanded under the drum (wrapped with abrasive of choice) and lower the drum until the drum contacts the workpiece and the drum can be rotated with hand pressure. This is a good test for maximum stock removal as you are becoming familiar with setting the sander for proper stock removal.

#### **OPERATING THE 16-32 DRUM SANDER (CONTINUED)**

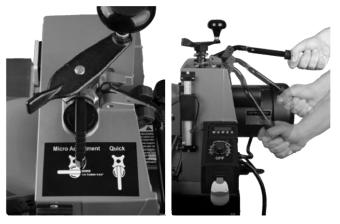
#### Drum Head Height Adjustments

The drum height can be adjusted using one of two methods determined by the position of the height adjustment selector.



In the micro adjustment position turning the main height adjustment handle controls the height of the drum. Clockwise for Up and counter-clockwise for Down.

Note: One full turn of the handle raises or lowers the head approximately 1/16" (each quarter turn = 1/64")



With the selector in the quick lever position the main handle is disengaged and the head will float freely. Quick large-scale adjustments of up to 3" can then be made by pulling up or down on the Quick Lever.

Note: After completing height adjustments in quick lever mode always return the selector back to micro adjustment mode to lock the head in place.

#### **CONVEYOR AND SPEED RATE**

After the depth of cut has been determined, selecting the proper feed rate is essential. For finish sanding the best finish is usually achieved with a slow to moderate feed rate. This allows for the most revolutions of the drum per inch of sanding. Faster feed rates can be used as long as the machine is not over-stressed.

When finish sanding with grits finer than 80, the best finish can usually be obtained if INTELLISAND does not engage. If INTELLISAND does slow the conveyor when finish sanding, it is best to make another sanding pass without changing the thickness setting and sand again.

Note: INTELLISAND will automatically adjust the conveyor feed rate if an excess load is detected. This prevents excessive gouging, reduces the risk of burning and protects the machine from overload or stalling. The red light by the adjustment knob will come on when INTELLISAND is operating. When the load is decreased, INTELLISAND will automatically increase the feed rate to the pre-selected speed.

#### STOCK FEEDING OPERATION

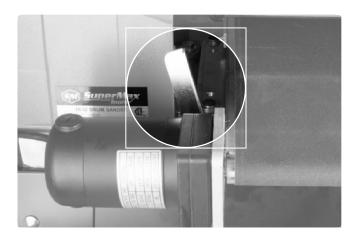
To feed stock through the sander rest the stock and hold the stock to be sanded on the conveyor table. Allow the conveyor to carry the stock into the drum. Once the stock is halfway through, reposition yourself to the outfeed side of the machine to receive and control the stock as it exits the unit.

#### STOCK FEEDING MAXIMUM PERFORMANCE

The built-in versatility of the SuperMax Tools 16-32 drum sander allows it to be used for a wide range of tasks. Learning to use the multiple controls to make adjustments will allow you to fine tune the machine for maximum results no matter what the job. The best results come from experimenting with different machine adjustments to best fit the job at hand.

#### Sanding stock wider than the drum

When sanding stock wider than the drum the fast lever will be very useful (see picture). Wide stock requires extra space between the drum and conveyor on the outboard (left) edge. The extra space prevents overlap ridge lines from developing along the part that extends beyond the drum. Adjust the fast lever 45 degrees from the vertical position to slightly shift the drum position without changing initial drum alignment. Before sanding always test on a scrap piece. If a line or ridge is still visible, adjustments can be made to the drum alignment. Always return the lever to the upright position when wide stock sanding is completed.



Note: The fast lever raises the inboard side of the table .003. Upon first use, you may notice that the conveyor table bolts have been set be too tight at the factory not allowing the Fast Lever to be moved. This was done to keep the unit secure for shipping. The conveyor table bolts may need a slight loosening to allow for proper Fast Lever movement. Never tighten the table bolts all the way. Tighten the bolts enough to still allow the fast lever to be moved between the up and down positions.

#### Sanding multiple pieces simultaneously

When sanding multiple pieces at once, make sure to stagger or step the pieces across the width of the conveyor belt. This position provides better contact with the tension rollers. It is best to only process multiple pieces that are all of a similar thickness. If there is a thickness difference the thinner pieces may not come in contact with the tension rollers and may slip on the conveyor belt

#### Sanding Imperfect or Tall Stock

To avoid bodily injury, take special care when sanding stock that is twisted, bowed or otherwise varied in thickness from end to end. If possible, support such stock as it is being sanded to keep it from slipping or tipping. Use extra roller stand, assistance from another person, or hand pressure on the stock to minimize potentially hazardous situations. When sanding high or tall stock special attention is necessary to prevent tipping or slippage. Extra care may be needed as the stock exits the machine.

#### Stock Feeding Position and Angle

Positioning the stock at an angle will allow the most effective stock removal and least loading on the abrasives. Feeding stock straight through yields the widest sanding capacity and least noticeable scratch pattern. Some pieces because of their dimensions will need to be fed into the sander at a 90-degree angle, which will be perpendicular to the drum. However, even a slight offset angle of the stock can provide for more effective sanding. Final pass sanding should be done following the grain pattern.

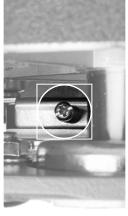
#### **TENSION ROLLER PRESSURE**

The tension roller pressure is factory set and should be adequate. However, the pressure of each roller can be adjusted as needed.

To increase the tension turn the tension adjusting screw clockwise I/4 revolution at a time. To decrease tension turn the adjusting screw counter-clockwise I/4 revolution at a time (see opposite picture).

Note: Too little pressure can result in slippage of stock on conveyor belt or kick-back. Too much tension can cause snipe when drum sanding.





#### TENSION ROLLER CONTACT ADJUSTMENT

The tension rollers are factory set for the most versatile use.

- If necessary, to adjust tension roller contact, loosen the four socket head screws holding the tension roller brackets (two per side; front and back – shown in opposite picture).
- 2. Have abrasive wrapped on drum.
- **3.** With machine unplugged, lower sanding drum until it rests on conveyor belt.
- 4. Raise drum 2 to 3 revolutions.
- **5.** Tighten the four socket head screws (two per side; front and back).
- 6. Raise drum up, off of the conveyor belt.
- 7. Set drum for proper sanding height and process stock.



Insufficient belt tension will cause slippage of conveyor belt on the drive roller during sanding operation. The conveyor belt is too loose if it can be stopped by hand pressure applied directly to the top of the conveyor belt.

Excessive belt tension can result in bent rollers, premature wearing of the bronze bushings or conveyor belt

To adjust the tension of the conveyor belt, first adjust the take-up screw nut on both sides of the conveyor to obtain approximately equal tension on both sides of the belt when taut (see opposite picture).





#### **CONVEYOR BELT TRACKING**

Belt tracking adjustments are made while the conveyor belt is running.

After the proper belt tension is obtained turn the conveyor unit on and set it at the fastest speed setting. Watch for a tendency of the conveyor belt to drift to one side of the conveyor.

To adjust the belt tracking, tighten the take-up screw nut on the side the belt is drifting toward, and loosen the take-up screw nut on the opposite side.

Adjusting the take-up screw nuts on either side of the conveyor allows belt-tracking adjustments to be made without affecting belt tension.



Note: Adjust the take-up screw nuts only 1/4 turn at a time. Then allow time for the belt to react to the adjustments before proceeding further. Avoid over-adjustments.

#### **MAINTENANCE**

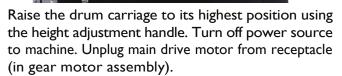
#### **MONTHLY MAINTENANCE CHECKLIST**

- · Lubricate conveyor bushings and check for wear.
- Lubricate with a dry lubricant spray all of the moving parts, such as threaded rods and washers.
- · Clean dust from conveyor belt.
- · Check all set screws for tightness.
- · Clean drum and abrasives if necessary.

#### **REPLACING CONVEYOR BELTS**

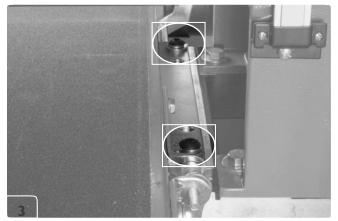
To replace the conveyor belt, the conveyor assembly must be removed from the machine.



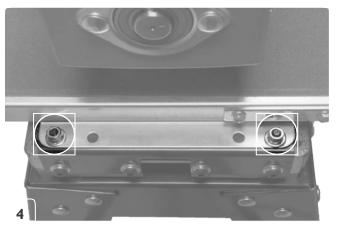




Loosen the conveyor take-up screws to relieve belt tension and slide the drive roller fully inward.



Remove the two Allen head bolts on the inboard (right) side that attach the conveyor assembly to the base.



Remove the two nuts and washers from outboard (left) side. Lift the conveyor and remove it from the sander. Set conveyor on motor side. Avoid tearing the belt on any edges underneath the conveyor bed during removal. Reverse the procedure for re-installation. Re-install the conveyor bed to sander.

#### **CLEANING THE MACHINE**

The sander may need to be cleaned more frequently depending upon frequency of use. The drum and the conveyor belt need to be clean. Allowing excess build-up of dust and debris can adversely affect performance and increase the likelihood of slippage on the conveyor belt. Sweep the conveyor belt clean after all operations. When cleaning dust from the drum leave the dust collection system on.

#### SUPPLY CHECKLIST

#### **OPTIONAL ACCESSORIES**

59120



Abrasive Cleaning Stick



Caster Set, heavy duty, roll & swivel lock (used with open stand)



875600

98-0130



Expandable Roller Conveyor

#### **CONVEYOR BELTS**

60-0316 (Type I)	100 grit abrasive surface with reinforced backing (standard equipment)
61-1001 (Type 2)	Polyurethane textured surface with monofilament backing

#### **DRUM ABRASIVES**

<u>60-6036</u>	<u>36 Grit</u>	SuperMax Tools 16-32 - 4-Wraps in Box
<u>60-6060</u>	60 Grit	SuperMax Tools 16-32 - 4-Wraps in Box
<u>60-6080</u>	<u>80 Grit</u>	SuperMax Tools 16-32 - 4-Wraps in Box
<u>60-6100</u>	100 Grit	SuperMax Tools 16-32 - 4-Wraps in Box
<u>60-6120</u>	<u>120 Grit</u>	SuperMax Tools 16-32 - 4-Wraps in Box
<u>60-6150</u>	<u>150 Grit</u>	SuperMax Tools 16-32 - 4-Wraps in Box
<u>60-6180</u>	180 Grit	SuperMax Tools 16-32 - 4-Wraps in Box
<u>60-6220</u>	<u>220 Grit</u>	SuperMax Tools 16-32 - 4-Wraps in Box
<u>60-6000</u>	Assorted box (36/80/80/120 grit)	SuperMax Tools 16-32 - I each in Box

#### **TROUBLE SHOOTING**

Any operating issues with the drum sander will likely occur most often during the period that you are becoming familiar with its components and their adjustments. If you are experiencing an issue affecting the machine's performance, check the following listings for potential causes and solutions; it may also pay to review the previous sections in this manual on setting up and operating your machine.

#### TROUBLESHOOTING GUIDE: MOTORS

<u>ISSUE</u>	POSSIBLE CAUSE	SOLUTION
	Main power cord unplugged from receptacle.	Plug in primary power cord.
	Drum motor cord unplugged	Plug in drum motor cord at
MOTOR DOES NOT START	from receptacle near power-	receptacle on machine if so
	feed motor.	equipped.
	Circuit fuse blown or circuit	Replace fuse or retrip breaker
	breaker tripped.	(after determining cause).
	Inadequate circuit.	Check electrical requirements
BRUSH MOTOR OVERLOADS	Machine overloaded	Use slower feed rate; reduce
		depth of cut.
CONVEYOR MOTOR	Motor not properly aligned.	Loosen housing bolts and Allen screw holding the cou- pler to drive roller.
OSCILLATES	Shaft collar or bushing worn.	Replace shaft collar or bushing.
	Drive roller bent.	Replace drive roller.
DRUM MOTOR OR CONVEYOR GEAR MOTOR STALLS	Excessive depth of cut.	Reduce depth of cut; reduce feed rate.

#### TROUBLESHOOTING GUIDE: CONVEYOR

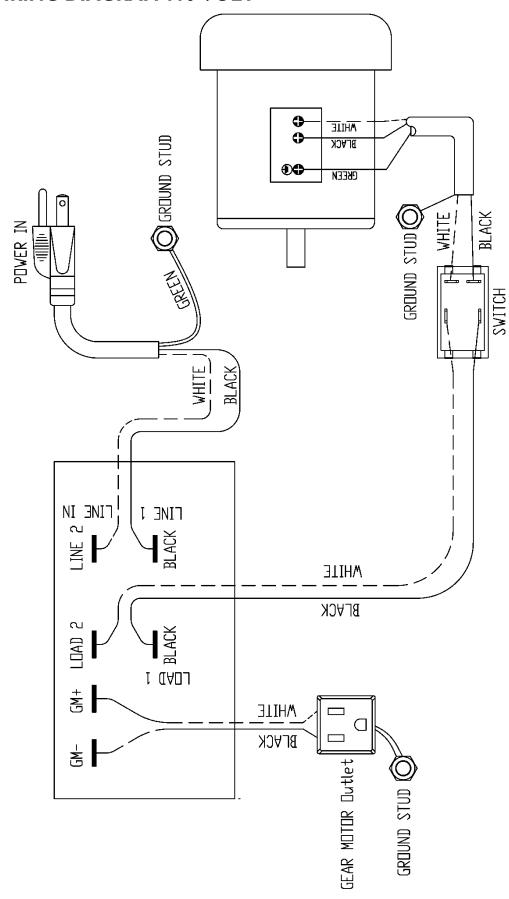
<u>ISSUE</u>	POSSIBLE CAUSE	<u>SOLUTION</u>
CONVEYOR DRIVE ROLLERS RUN INTERMITTENTLY	Shaft coupling loose.	Align shaft flats of gear motor and drive roller; tighten shaft coupling set Screws.
CONVEYOR BELT SLIPS ON	Improper conveyor belt tension.	Adjust belt tension.
DRIVE ROLLER	Excessive depth of cut.	Reduce depth of cut and or reduce feed rate.

<u>ISSUE</u> <u>POSSIBLE CAUSE</u>		SOLUTION	
	Excessive depth of cut	Reduce depth of cut	
STOCK SLIPS ON CONVEYOR BELT CAUSING	Tension rollers too high Excessive feed rate	Lower tension rollers Reduce feed rate	
GOUGING	Dirty or worn conveyor belt	Clean or replace conveyor belt	
	Belt out of adjustment	Readjust belt	
CONVEYOR MOTOR STALLS	Roller bushings elongated due to excessive wear	Replace bushings	

#### TROUBLESHOOTING GUIDE: MACHINE

<u>ISSUE</u>	POSSIBLE CAUSE	SOLUTION
DRUM HEIGHT ADJUST- MENT WORKS IMPROPERLY	Improper adjustment of height control.	Readjust height control.
KNOCKING SOUND WHILE RUNNING	Bearing worn.	Replace bearing Contact distributor.
SNIPING OF WOOD (GOLL	Inadequate support of stock.	Use roller stands to sup- port stock
SNIPING OF WOOD (GOU- GING NEAR END OF BOARD)	Conveyor drive or driven rollers higher than conveyor bed.	Readjust roller.
	Excessive tension roller pressure.	Adjust roller.
BURNING OF WOOD OR	Feed rate too slow.	Increase feed rate
MELTING OF FINISH	Excessive depth of cut	Reduce depth of cut.
	Conveyor belt is too loose	Adjust belt tension
CONVEYOR MOTOR STALLS	Excessive depth of cut.	Reduce depth of cut.
	Wood slipping on conveyor due to lack of contact.	Use alternate feeding procedure.

## WIRING DIAGRAM 110 VOLT

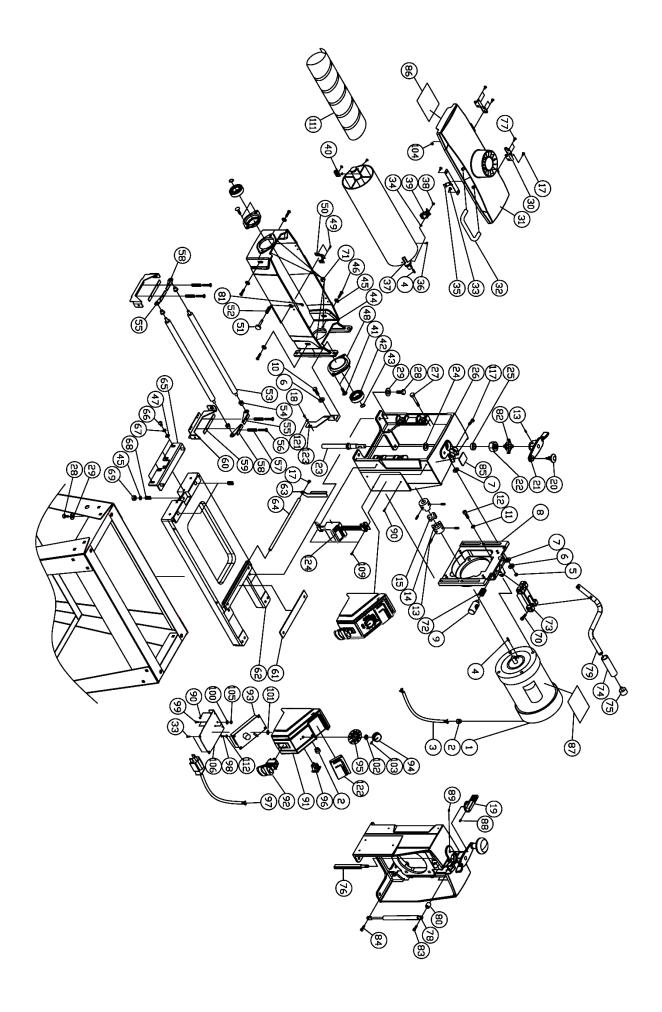


### Parts List: Sanding Head Assembly

No.	Part No.	Description	Size	Qty.
1	71632-101	Motor	1-1/2HP, 115VOLT w/ cord	l 1
2	480BS-102	Strain Relief, motor	7P-2	3
		Main Cord, Motor to Control Box		
4	480BS-104	Key	3/16"SQx3/4"	2
		Nylon Insert Lock Nut		
6	480BS-106	Flat Washer	5/16"	8
7	480BS-107	Oilite Washer	5/16"	8
8	71632-108	Motor Plate		1
		Stud		
10	71632-110	Hex Cap Screw	5/16"-18x1"	4
		Lock Washer		
12	71632-112	Socket Head Cap Screw	3/8"-16x3/4"	4
13	480BS-113	Set Screw	1/4"-20x1/4"	5
14	480BS-114	Coupling		2
		Coupling Spider		
17	480BS-117	Phillips Pan Head Screw	M4x0.7x6	5
18	71632-118	Phillips Pan Head Screw	M3x0.5x8	1
19	71632-119	Switch Knob		1
20	480BS-120	Knob		1
		Height Adjustment Handle		
22	480BS-122	Nylon Insert Lock Nut	5/8"-11	1
		Height Adjustment Screw		
		Washer, Wave		
		Thrust Bearing		
		Shroud		
		Stud		
		Hex Cap Screw		
		Flat Washer		
		Hinge		
		Dust Cover		
		Handle		
		Pan Head Machine Screw		
		Lock Washer		
-		Dust Cover Latch		
		Phillips Flat Head Screw		
		Sanding Drum		
		Hex Nut		
	480DS-139			
	480DS-140	Outboard Abrasive Fastener		
		Carriage Bolt		
	71632-141			
		Bearing		
		C-Ring		
		Drum Carriage		
		Flat Washer		
		Round Socket Head Cap Screw		
		Flat Washer		
	480DS-148	3		
		Hex Cap Screw w/ Washer		
		Dust Cover Catch		
		Stud		
		Spring		
		Tension Roller		
		Oilite Bushing		
55	480BS-180	Tension Roller Bracket, Inner Left		2

No.	Part No.	Description	Size	Qty.
56	480BS-156	Screw	5/32"-32x1"	4
57	480BS-157	Tension Roller Spring		4
		Tension Roller Bracket, Inner Right		
		Tension Roller Bracket Pad		
60	71632-160	Bracket		2
61	480BS-161	Plate		1
62	71632-162	Base		1
		Quick Adjusting Lever		
		Adjusting Rod		
		Height Adjusting Plate		
66	71632-166	Round Socket Head Cap Screw	5/16"-18v3/4"	
67	480BS-167	Lock Washer	5/16"	
		Spring		
60	490BS-160	Nylon Insert Lock Nut	1/4" 20	3
70	71622 170	Socket Head Cap Screw	1/4 -20 	۱
		Flange Nut		
		Spring		
		Linkage		
		Rubber Sleeve		
		Cap		
		Rod		
		Pan Head Phillips Screw		
		Cylinder		
		Quick Handle		
		Spacer		
81	480BS-181	E-Ring	E5	1
82	71632-182	Nut		1
83	71632-183	Socket Head Cap Screw	M6x1.0x30	1
		Socket Head Cap Screw		
		Micro Adjustment/Quick Label		
		Maintenance Label		
		Warning Label		
88	71632-188	Set Screw	1/4"-20x3/8"	1
		O-Ring		
		Screw		
		Control Box		
		ON/OFF Switch		
		Controller		
		Knob		
		Speed Adjustment Label		
		Receptacle		
		Power Cord		
		Self-Tapping Pan Head Screw		
		Screw		
		Int. Tooth Lock Washer		
		Flat Washer		
		Hex Nut		
		Slotted Set Screw		
		Hex Nut		
		Hex Nut		
106	71632-1106	Cover, Base-Control Housing		1
109	72550-197	Phillips Pan Head Screw	M4x0.7x10	2
		Abrasive		
		Nylon Washer		
		Socket Head Cap Screw		
		Flat Washer		

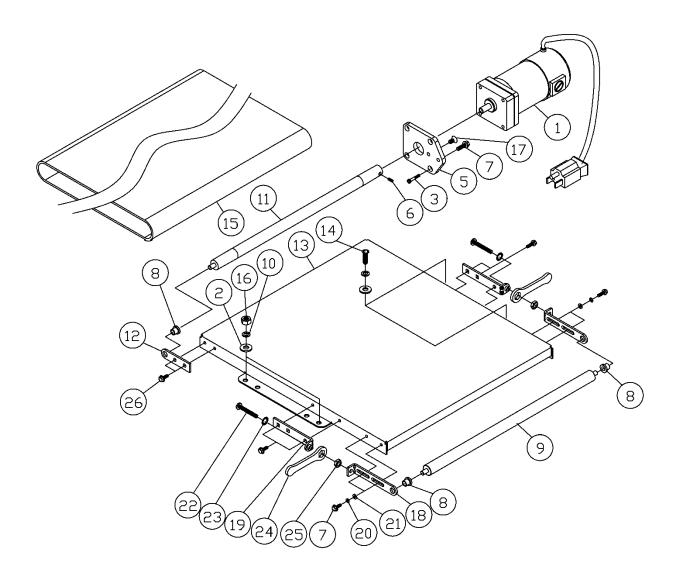
122	71632-1122	.Tool Storage	1
		.DRO Mounting Plate	
124	71632-1124	.Digital Readout Assembly	1



#### **Parts List: Conveyor and Motor Assembly**

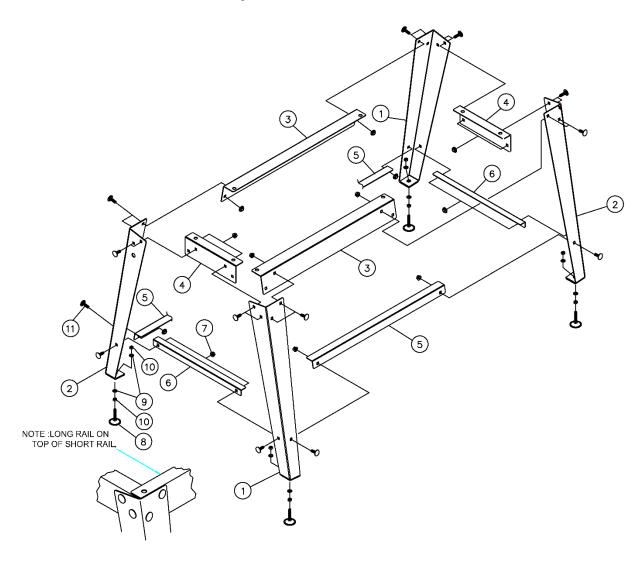
No.	Part No.	Description	Size	Qty.
1	71632-201	Conveyor Motor	90 VDC	1
2	480BS-204	Flat Washer	5/16"	4
3	480BS-205	Socket Head Cap Screw	#10-32x1/2"	4
5	71632-205	Motor Mounting Plate		1
6	480BS-113	Set Screw	1/4"-20x1/4"	2
7	480BS-224	Hex Cap Screw	1/4"-20x3/4"	5
8	480BS-154	Oilite Bushing		3
9	71632-209	Roller, Driven		1
10	480BS-167	Lock Washer	5/16"	4
11	71632-211	Roller, Drive		1
12	480BS-237	Drive Roller Support Bracket		1
13	71632-213	Conveyor Bed		1
14	71632-166	Round Socket Head Cap Screw	5/16"-18x3/4"	2
15	71632-215	Conveyor Belt, Abrasive		1
16	480BS-245	Hex Nut	5/16"-18	2
17	71632-217	Flat Head Phillips Screw	1/4"-20x3/4"	1
18	480BS-227	Take Up Slide Bracket		2
19	480BS-234	Take Up Base Bracket		2
		Wave Washer		
		Flat Washer		
22	480BS-233	Round Head Slotted Screw	1/4"-20x1-3/4"	2
23	480BS-232	Int. Tooth Lock Washer	1/4"	2
		Wrench		
		Hex Nut		
26	480BS-247	Hex Cap Screw w/ Washer	1/4"-20x1/2"	6

### **Conveyor and Motor Assembly**



#### **Parts List: Open Stand Assembly**

No.	Part No.	Description	Size	Qty
1	480BS-501	Leg, Left		2
2	480BS-502	Leg, Right (with tool holder)		2
3	71632-303	Top Cross Brace, Long		2
4	71632-304	Top Cross Brace, Short		2
5	71632-305	Lower Cross Brace Rail, Long		2
6	71632-306	Lower Cross Brace Rail, Short		2
		Flange Nut		
8	480BS-508	Leveling Foot		4
9	480BS-129	Flat Washer	3/8"	8
10	480BS-509	Hex Nut	3/8"-16	8
11	480BS-506	Carriage Bolt	5/16"-18x5/8"	24



## 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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