

from forest to final form



user manual

Instrukcja obsługi | Руководство полъзователя Manuel de l'Utilisateur | Betriebsanweisung Bruksanvisning | Manual del Usuario Betjeningsvejledning | Gebruikershandleiding Käyttöohjeet | Manual de utilizare | Bruksanvisning Manuale d'uso | Příručka uživatele

Retain for future use Zachować do przyszłego użytku Coхраните для последующего и с п о л ь з о в а н и я A conserver pour une utilisation future Für zukünftige Benutzung aufbewahren Behold for senere bruk Säilytä nämä käyttöohjeet tulevaa tarvetta marten Opbevar manualen til fremtidig brug Bewaren voor gebruik in de toekomst Conservare il presente manuale a l'uso futuro Pästraţi acest manual pentru utilizare viitoare Conservar para futuras consultas Behall för framtida användning Uchovejte pro další použití Hranite za prihodnjo uporabo

Single Horizontal Saw SHS

Safety, Operation, Maintenance & Parts Manual

SHSEH15S-LC	rev.A1.00
SHSEH20S-LC	rev. A1.00
SHSEH25S-LC	rev.A1.00



Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

Form #1019

able of Co	ntents	Section-Page
SECTION	1 SAFETY	1-1
1.1	Safety Symbols	1-1
1.2	Safety Instructions	
	Observe Safety Instructions	
	Wear Safety Clothing	
	Keep Resaw And Area Around Resaw Clean	
	Dispose Of Sawing By-Products Properly	
	Check Resaw Before Operation	
	Keep Persons Away	
	Keep Hands Away	
	Use Proper Maintenance Procedures	
	Keep Safety Labels In Good Condition	
SECTION	2 OPERATION	2-1
2.1	General Information	2-1
	If You Need To Order Parts:	
	If You Need Service:	
2.2	Control Overview	2-4
2.3	Saw Setup	2-6
2.4	Replacing The Blade	2-10
2.5	Tensioning The Blade	2-11
2.6	Tracking The Blade	2-12
2.7	Saw Height Adjustment	2-13
2.8	Tilt	2-14
2.9	Blade Guide Arm Adjustment	2-15
2.10	Machine Start	
2.11	Water Lube Operation	2-19
2.12	Operation Procedure	2-20
SECTION	3 MAINTENANCE	3-1
3.1	Wear Life	3-1
3.2	Blade Guides	3-2
3.3	Sawdust Removal	3-2
3.4	Vertical Mast	3-2
3.5	Miscellaneous Lubrication	3-3
3.6	Belts	3-3
3.7	Drive Belt Adjustment	
3.8	Feed Track Chain Tension.	
3.9	Up/Down System	3-8
3.10	Safety Devices Inspection	
SECTION	4 ALIGNMENT	4-1
4.1	Alignment Procedures	4-1

SW-07doc091217Table of Contents

Table of Contents

abl	e of C	ontents	Section-Page
	4.2	Blade Installation And Tracking	4-2
	4.3	Blade Wheel Alignment	4-4
	4.4	Saw Head Adjustment	4-9
	4.5	Blade Guide Arm Vertical Adjustment	4-10
	4.6	Blade Guide Arm Horizontal Adjustment	4-11
	4.7	Aligning the Blade Guides	4-13
	4.8	Blade Deflection	4-14
	4.9	Blade Guide Vertical Tilt Adjustment	4-15
	4.10	Blade Guide Spacing	4-17
	4.11	Blade Guide Horizontal Tilt Adjustment	4-18
	4.12	Blade Height Scale Adjustment	4-19
SE	ECTION	N 5 SPECIFICATIONS	5-1
	5.1	Overall Dimensions	5-1
	5.2	Cutting Capacity	5-2
	5.3	Blades	
	5.4	Blade Motor Specifications	
	5.5	Noise Level	
	5.6	V-Belt Sizes	5-4
	5.7	Dust Extractor Specifications	
SE	ECTION	N 6 DC ELECTROMAGNETIC BRAKE (CE	ONLY), SIEMENS MOTORS 6-1
	6.1	Design and Principle of Operation	6-1
	6.2	Service	



SECTION 1 SAFETY

1.1 Safety Symbols

The following symbols and signal words call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.



DANGER! indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING! suggests a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION! refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury or damage to equipment.



IMPORTANT! indicates vital information.

NOTE: gives helpful information.

Warning stripes are placed on areas where a single decal would be insufficient. To avoid serious injury, keep out of the path of any equipment marked with warning stripes.

1.2 Safety Instructions



IMPORTANT! The Resaw is intended for sawing wood only. The resaw must not be used for other purposes such as cutting ice, metal or any other materials. <u>See Section 5.2</u> for log size capacities of the machine.

IMPORTANT! The operator of the resaw should get adequate training in the operation and adjustment of the machine.

NOTE: ONLY safety instructions regarding personal injury are listed in this section. Caution statements regarding only equipment damage appear where applicable throughout the manual.

Observe Safety Instructions



IMPORTANT! Read the entire Operator's Manual before operating the resaw. Take notice of all safety warnings throughout this manual and those posted on the machine. Keep this manual with this machine at all times, regardless of ownership.

Also read any additional manufacturer's manuals and observe any applicable safety instructions including dangers, warnings, and cautions.

Only adult persons who have read and understood the entire operator's manual should operate the resaw. The resaw is not intended for use by or around children.

IMPORTANT! It is always the owner's responsibility to comply with all applicable federal, state and local laws, rules and regulations regarding the ownership and operation of your Wood-Mizer resaw. All Wood-Mizer resaw owners are encouraged to become thoroughly familiar with these applicable laws and comply with them fully while using the machine.



Wear Safety Clothing



WARNING! Secure all loose clothing and jewelry before operating the resaw. Failure to do so may result in serious injury or death.

WARNING! Always wear gloves and eye protection when handling bandsaw blades. Changing blades is safest when done by one person! Keep all other persons away from area when coiling, carrying or changing a blade. Failure to do so may result in serious injury.





WARNING! Always wear eye, ear, respiration, and foot protection when operating or servicing the resaw.



Keep Resaw And Area Around Resaw Clean



DANGER! Maintain a clean and clear path for all necessary movement around the resaw and lumber stacking areas. Failure to do so will result in serious injury.

Dispose Of Sawing By-Products Properly



IMPORTANT! Always properly dispose of all sawing by-products, including sawdust and other debris.

Check Resaw Before Operation



DANGER! Make sure all guards and covers are in place and secured before operating the resaw. Failure to do so may result in serious injury.



Keep Persons Away



DANGER! Keep all persons out of the path of moving equipment and lumber when operating the resaw. Failure to do so will result in serious injury.

DANGER! Always be sure all persons are out of the path of the blade before starting the motor. Failure to do so will result in serious injury.



WARNING! Allow blade to come to a complete stop before opening the blade housing cover. Failure to do so will result in serious injury.

Keep Hands Away



DANGER! Always shut off the blade motor before changing the blade. Failure to do so will result in serious injury.

DANGER! Motor components can become very hot during operation. Avoid contact with any part of a hot motor. Contact with hot motor components can cause serious burns. Therefore, never touch or perform service functions on a hot motor. Allow the motor to cool sufficiently before beginning any service function.

DANGER! Always keep hands away from moving bandsaw blade. Failure to do so will result in serious injury.

DANGER! Always be aware of and take proper protective measures against rotating shafts, pulleys, fans, etc. Always stay a safe distance from rotating members and make sure that loose clothing or long hair does not engage rotating members resulting in possible injury.



WARNING! Use extreme caution when spinning the blade wheels by hand. Make sure hands are clear of blade and wheel spokes before spinning. Failure to do so may result in serious injury.

Use Proper Maintenance Procedures



DANGER! Make sure all electrical installation, service and/or maintenance work is performed by a qualified electrician and is in accordance with applicable electrical codes.

DANGER! Hazardous voltage inside the electric boxes and at the motor can cause shock, burns, or death. Disconnect and lock out power supply before servicing! Keep all electrical component covers closed and securely fastened during resaw operation.



WARNING! Consider all electrical circuits energized and dangerous.

WARNING! Disconnect and lock out power supply before servicing the resaw! Failure to do so may result in serious injury.

WARNING! Never assume or take the word of another person that the power is off; check it out and lock it out.

WARNING! Do not wear rings, watches, or other jewelry while working around an open electrical circuit.

WARNING! Remove the blade before performing any service to the motor or resaw. Failure to do so may result in serious injury.

DANGER! Never clean the blade or blade wheels using the hand-held brush or scraper whilst the resaw blade is in motion.

CAUTION! Before installation of the blade, inspect it for damage and cracks. Use only properly sharpened blades. Always handle the blade with extreme caution. Use suitable carrier equipment for transporting the blades.



CAUTION! Always wear gloves when handling the blade. Never grab the blade with bare hands!

CAUTION! If the blade breaks during resaw operation, push the EMERGENCY STOP button to stop the blade motor and wait 10 seconds before you open the blade housing cover.

CAUTION! The resaw's work-stand should be equipped with a 4 kg or bigger dry powder extinguisher.

Keep Safety Labels In Good Condition



IMPORTANT! Always be sure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

IMPORTANT! If replacing a component which has a safety decal affixed to it, make sure the new component also has the safety decal affixed.



See Table 1-1. Pictogram decals used to warn and inform the user about danger in the resaw.

TABLE 1-1

Decal View	W-M No.	Description
096317	096317	CAUTION! Read thoroughly the manual before operating the machine. Observe all safety instructions and rules when operating the resaw.
099220	099220	CAUTION! Close all guards and covers before starting the machine.
- C+	099219	Blade tension. Turning the bolt clockwise will increase the blade tension and turning the bolt counterclockwise will decrease the tension.

TABLE 1-1

→ → → → → → → → → →	099221	CAUTION! Keep all persons a safe distance away from work area when operating the machine.
099222	099222	CAUTION! Sawdust outlet. Protect eyes!
096321	096321	Blade movement direction
	S12004G	CAUTION! Always wear safety goggles when operating the resaw!

TABLE 1-1

	S12005G	CAUTION! Always wear protective ear muffs when operating the resaw!
	501465	CAUTION! Always wear safety boots when operating the resaw
	512107	CAUTION! Always wear safety gloves when operating the resaw
and the second s	501467	Lubrication Point
P11789b	P11789	Aligning the blade on the wheels

TABLE 1-1

CE	P85070	CE sign
C A A A A A A A A A A	099401	Russian safety certification sign
S20097	S20097	Motor rotation direction
d 257mm 18 m/s 231mm 20 m/s 197mm 24 m/s	509025	Blade drive wheel diameter-blade linear speed
1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	505346	Tensioner Valve Handle Placement, TVS
Type F[mm] E[mm] psi bar 275 1,07 32 830-850 57-59 376 1,14 32 745-765 51-53 2735 1,07 35 805-825 55-57 576 1,27 38 715-735 49-51	505348	Blade Tension Values



SECTION 2 OPERATION

2.1 General Information

Thank you for choosing Wood-Mizer wood processing equipment!

Wood-Mizer is committed to providing you with the latest technology, best quality and strongest customer service available on the market today. We continually evaluate our customers' needs to ensure we're meeting current wood-processing demands. Your comments and suggestions are welcome.

This manual includes information on preparing, using, servicing and repairing the machine.

The SHS saw is designed for sawing wood only. The machine must not be used for other purposes, such as cutting ice, metal or other materials.

Using the machine correctly, you will obtain a perfectly smooth surface and a high degree of accuracy.

The SHS saw should be operated only by adults who have read and understood the entire operator's manual.

The machine is built to be durable and easy to operate and maintain.

See Figure 2-1. The figure below shows major components of the SHS saw.

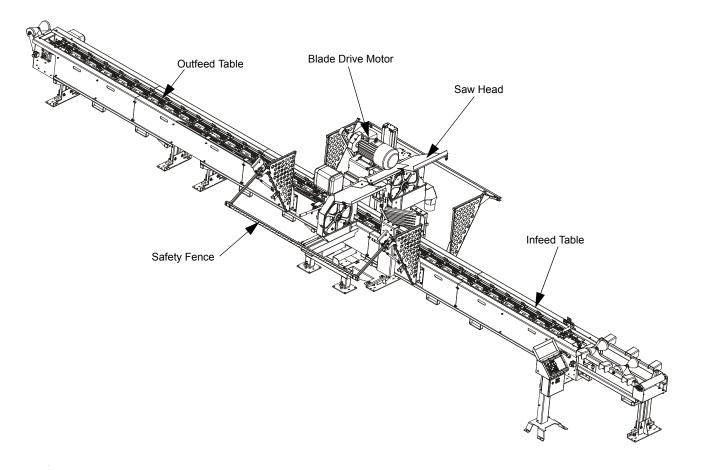


FIG. 2-1 SHS MAIN COMPONENTS

If You Need To Order Parts:

From Europe call your local distributor or our European Headquarters and Manufacturing Facility in Kolo - Poland, Nagórna 114 St at **+48-63-2626000**. Please have the machine identification number and your customer number ready when you call. Wood-Mizer will accept these methods of payment:

- Visa, Mastercard, or Discover
- COD
- Prepayment
- Net 15 (with approved credit)

Be aware that shipping and handling charges may apply. Handling charges are based on size and quantity of order. In most cases, items will ship on the day they are ordered. Second Day and Next Day shipping are available at additional cost.

2-2 MHdoc091217

If You Need Service:

From Europe call your local distributor or our European Headquarters and Manufacturing Facility in Kolo - Poland, Nagórna 114 St at **+48-63-2626000**. Ask to speak with a Customer Service Representative. Please have your machine identification number and your customer number ready when you call. The Service Representative can help you with questions about alignment of your saw, blade sharpening, or cutting a particular species of wood. He can also schedule you for a service call.

Office Hours:

Country	Monday - Friday	Saturday	Sunday
Poland	7 ⁰⁰ -15 ⁰⁰	Closed	Closed

MHdoc091217 2-3

2.2 Control Overview

1. Control Panel

See Figure 2-2. The control panel includes switches to start and stop the feed track and the saw head.

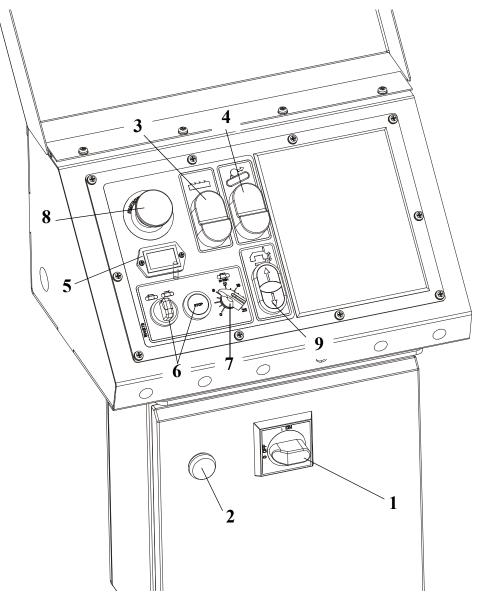


FIG. 2-2 CONTROL PANEL COMPONENTS

2-4 MHdoc091217

1. Main Power ON Switch

Turns on and off the power for the machine.

2. Power ON indicator lamp

3. Blade Drive

To start the blade motor, press START button. To stop the blade motor, press STOP button.

4. Loading Ramp (Optional)

To start the log loading ramp press START button. To stop the loading ramp, press STOP button.

5. Hour Meter

6. Feed Track

To start spinning the feed track forward or backward, turn the switch left or right. To stop the feed track press the STOP button

7. Feed Track Speed Adjustment



The feed track speed switch controls the speed at which the feed track moves. Turn the switch clockwise to increase the speed, counterclockwise to reduce the speed.

8. Emergency Stop

Push the emergency stop button to stop the blades and the track feed motor. Turn the emergency stop clockwise to release the stop. The saw will not restart until the emergency stop is released.

9. Saw Head Electric Up/Down System (Optional)

If the machine is equipped with electric up/down system, buttons enable adjusting the saw heads height.

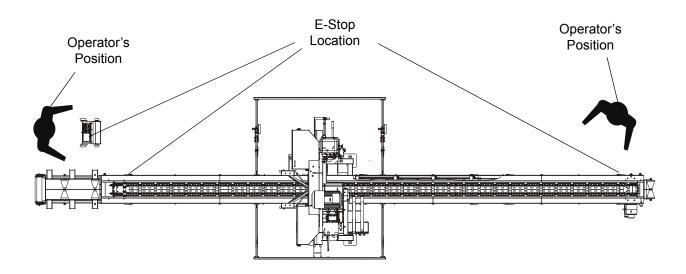
Operation Saw Setup

2.3 Saw Setup



IMPORTANT! Before starting to use the saw you have to meet the following conditions:

- Set up the saw on firm and level ground. Secure the saw to the ground to prevent moving during operation. A concrete foundation or pads and anchored bolts are recommended.
- ■The saw can be operated with the sawdust collection system only.
- ■The saw can be operated under roof only.
- ■The saw can be operated in temperature range from -15° C to 40° C (5°F to 104°F) only.
- The illumination at the operator's position should be at least 300lx¹.
- ■The machine operator's position is shown below.



■ Have a qualified electrician install the power supply (according to EN 60204 Standard). The power supply must meet the specifications given in the table

2-6 MHdoc091217

^{1.} The light source can not cause stroboscopic effect.

below.

See Table 2-1.

Model	3-Phase Volts	Total Rated Cur- rent	Fuse Disconnect	Suggested Wire Size
SHSEH15S	400 VAC	28 Amps	32 Amps	11 AWG / 4 mm ² , up to 15 m/ 49 ft long
SHSEH20S	400 VAC	36 Amps	40 Amps	9 AWG / 6 mm ² , up to 15 m/ 49 ft long
SHSEH25S	400 VAC	42 Amps	50 Amps	7 AWG / 10 mm ² , up to 15 m/ 49 ft long

TABLE 2-0



IMPORTANT! When starting the machine for the first time, check that the main motor rotation direction is as indicated by the arrow located on the motor body (fan guard). If the rotation direction is incorrect, invert the phases in the phase inverter located in the power socket (electric box). Setting the phases in the phase inverter correctly will ensure correct rotation directions of all saw motors.



IMPORTANT! When starting the machine for the first time, let it run without any load for 1-2 hours. It will let the infeed and outfeed tables drive components to grind in.



DANGER! It is recommended that a 30mA Ground Fault Interrupter (GFI) be used.

The saw and the infeed/outfeed tables can be lifted using a forklift only. The forklift must be rated for at least 2500kg. The saw is equipped with forklift pockets. Insert

MHdoc091217 2-7

OperationSaw Setup

the forks into the pockets shown on the picture below.

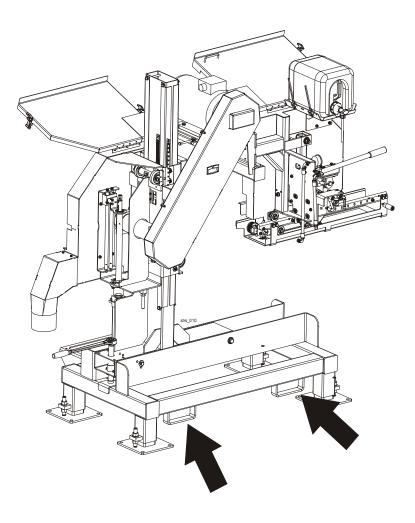


FIG. 2-3

2-8 MHdoc091217

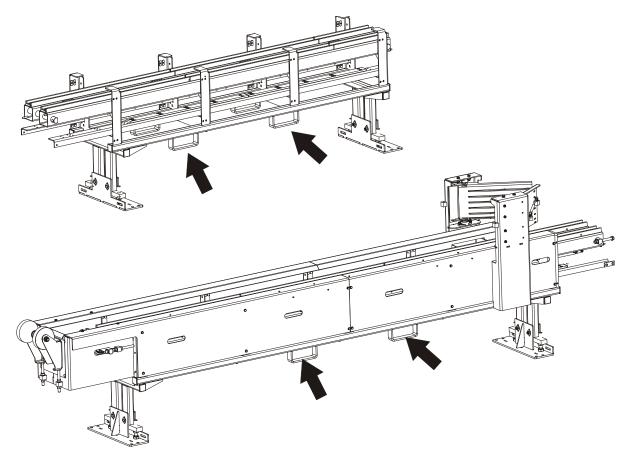


FIG. 2-4

2.4 Replacing The Blade

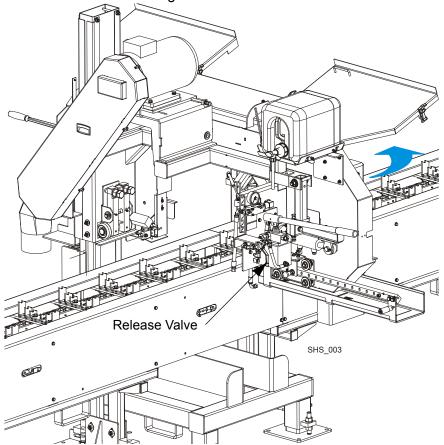


DANGER! Always shut off the saw motor before changing the blade. Failure to do so may result in serious injury.



WARNING! Always wear gloves and eye protection whenever handling bandsaw blades. Changing blades is safest when done by one person! Keep all other persons away from work area when changing blades. Failure to do so may result in serious injury.

Raise the blade housing cover. Set the release valve to "0" position to release the blade tension until the wheel is pulled in and the blade is lying loose in the blade housing. Lift the blade out of the blade housing.



Install a new blade around the two blade wheels so that the teeth located between the blade guide assemblies point to the drive side of the machine. Make sure the teeth are pointing the correct direction.

Position 1 1/4" wide blades on the wheels so the gullet is 3.0 mm (0.12"), (\pm 1.0 mm (0.04")) out from the front edge of the wheel.

2-10 MHdoc091217

Close the blade housing cover.

Next, tension the blade as described in the following instructions.

2.5 Tensioning The Blade

See Figure 2-5. Place the provided handle in the blade tensioner socket and secure with a screw. Set the tensioner valve to position "1". Move the tensioner handle up and down to tension the blade. Depends on the installed blade type, tension the blade to the value shown on the decal located below blade tension valve. Values "F" and "E" are: blade thickness and blade width. Check the blade tension occasionally when adjusting the cant control or while cutting and adjust if necessary. As the blade and belts heat up and stretch, the blade tension will change. Also, ambient temperature changes can cause tension to change. To release the blade tension set the tensioner valve to "0" position.

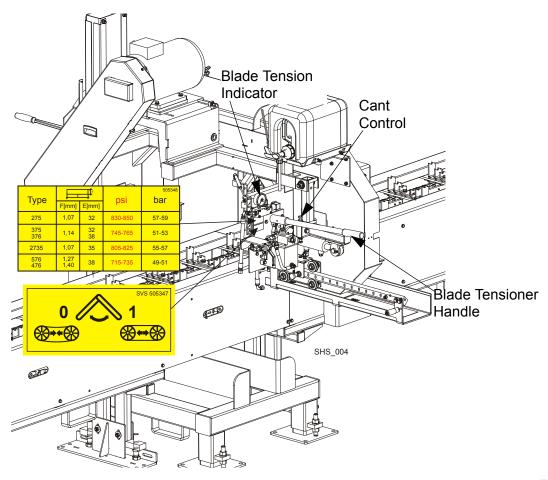


FIG. 2-5

CAUTION! Release the blade tension when the saw is not in use.

MHdoc091217 2-11

Operation Tracking The Blade

2.6 Tracking The Blade

- 1. Open the blade housing cover.
- **2.** Turn the key switch (located on the electric box) to the "H" position.



- 3. Manually spin one of the blade wheels until the blade positions itself on the blade wheels.
- **4.** Check that the blade is properly positioned on the blade wheels.

See Figure 2-6. 1 1/4" wide blades should be placed on the blade wheels so that the

Blade

FIG. 2-6

gullet is 3.0 mm $(0.12") \pm 1.0$ mm (0.04") out from the front edge of the wheel.

5. Use the cant adjustment bolt, shown in **Figure 2-5**, to adjust where the blade travels on the blade wheels.

To move the blade out on the blade wheel, turn the cant adjustment bolt clockwise. To move the blade in on the blade wheel, turn the bolt counterclockwise.

- **6.** Adjust the blade tension if necessary to compensate for any changes that may have occurred while adjusting the cant control.
- 7. Close the blade housing cover.



CAUTION! Make sure all guards and covers are in place and secured before operating or towing the saw. Failure to

2-12 MHdoc091217

do so may result in serious injury. Be sure the blade housing cover is in place and secured.

NOTE: After aligning the blade on the wheels, always check the blade guide spacing and location.

2.7 Saw Height Adjustment

You can raise or lower the saw head to determine the thickness of the material.

- 1. Install a blade if needed and check for correct blade tension. (See Section 2.5)
- **2.** Set the saw head at the desired height. (The blade height scale shows the height of the blade above the feed track.)

See Figure 2-7. To raise or lower the saw head, use the screw as shown in the figure. Turn the screw clockwise to raise the saw head, counterclockwise to lower the saw head.

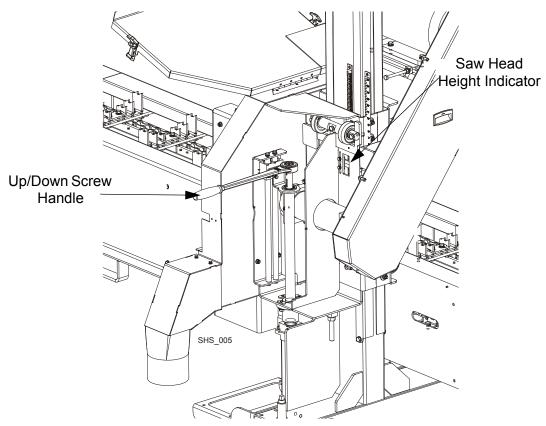


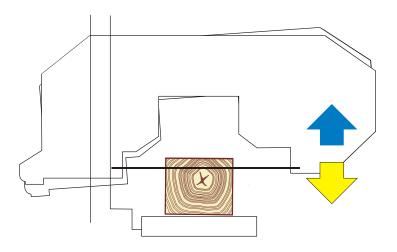
FIG. 2-7

NOTE: When adjusting the saw head height lower than 20mm, adjust blade guide arm so it doesn't touch the feed

chain.

2.8 Tilt

See Figure 2-8. The saw head may be tilted to produce siding. Loosen the locking bolt. Turn the tilt adjustment screw clockwise to tilt the saw head downward or counterclockwise to tilt the saw head upward.



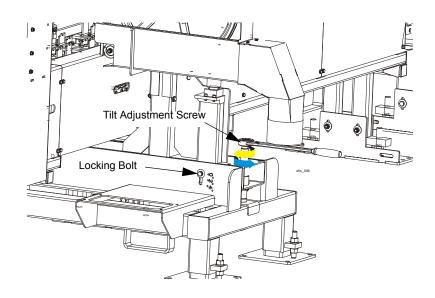


FIG. 2-8

NOTE: The saw head can be set at an angle ranging from 0° to 4°

2.9 Blade Guide Arm Adjustment

The outside blade guide arm can be adjusted in or out depending on the width of the material to be cut. The arm should be adjusted about 25 mm (1") wider than the material to be cut.

Example: If the material to be cut is 150 mm (5.9") wide, adjust the blade guide arm so the area between the blade guides is 175 mm (6.9") wide.

See Figure 2-9. To move the blade guide arm, unlock the safety pin and slide the arm in or out. Lock the lock pin.

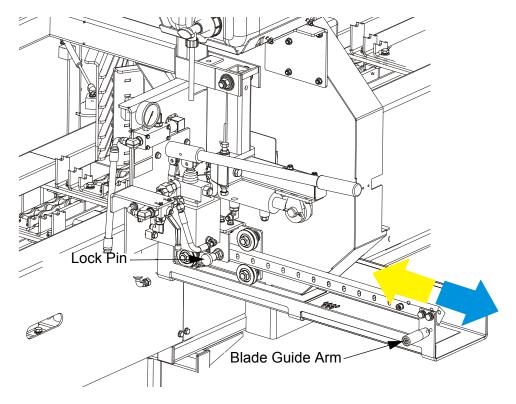


FIG. 2-9

Operation Machine Start

2.10 Machine Start



DANGER! Before starting the saw, perform these steps to avoid injury and/or damage to the equipment:

- Close the blade housing cover and replace any guards removed for service.
- Check the feed track and remove all loose objects such as tools, wood, etc.
- Check that the blade is properly tensioned.
- Make sure all persons are at a safe distance from the machine.
- Check that the emergency stops are released.
- Turn on dust extraction system

NOTE: The saw will not start if either of the emergency stops is on.

See Figure 2-10. Start the blade motor. To do this, turn the main power switch to the "ON" position and then press the START button on the control panel (see the figure below). The motor should start and the blade should start spinning.

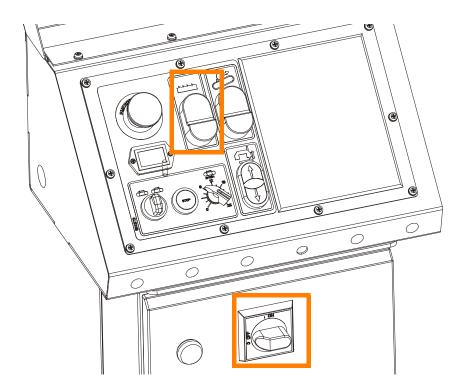


FIG. 2-10

To stop the blades motors, press the STOP button shown in the figure above. The blade motor also may be stopped by pushing either of the emergency stop buttons.

If either of the emergency stops has been used to stop the blade motor, rotate the switch clockwise before restarting the saw head. The saw head cannot be restarted until the emergency stop button is released.

See Figure 2-11. After the saw head has been successfully started, the feed track can be started. To start the track feed forward, turn left the Track switch shown in Figure below.

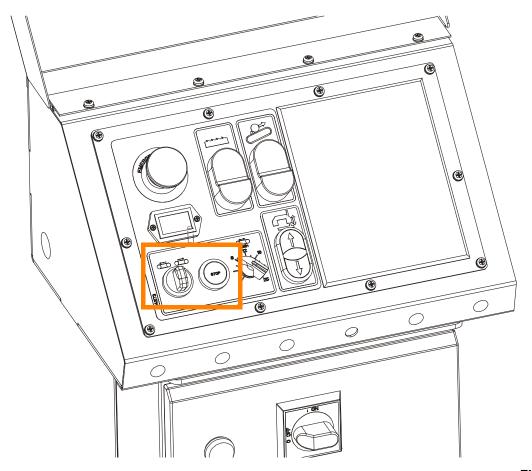


FIG. 2-11

The feed track can be stopped either by pressing the STOP button, or one of the emergency stop buttons. The emergency stop will also stop the blade motor.

NOTE: The feed track cannot be started if the blade motor is not started.



See Figure 2-12. The speed at which the feed track moves is adjustable. The feed track

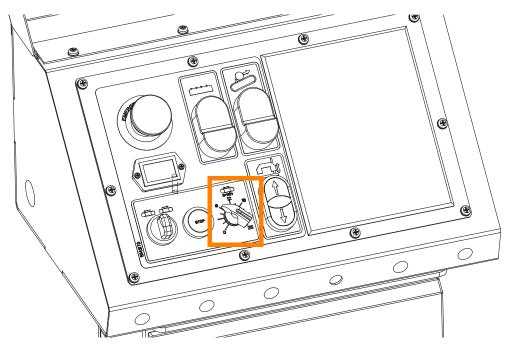


FIG. 2-12

speed switch, located on the control panel, allows the operator to adjust the feed rate from 0 to ca. 25 m (82 ft) per minute.

Turn the switch clockwise to increase the feed rate, counterclockwise to slow the feed rate down.

Factors that will determine what feed rate you can use include:

- Width of material to be cut. 200mm (7.9") material will require a slower feed rate than 100mm (3.9") material.
- Hardness of material to be cut. Some woods that are seasoned or naturally very hard will require slower feed rates.
- Sharpness of blades. Dull or improperly sharpened blades will require slower feed rates than sharp and properly maintained blades.
- Off-bearing capability. Your ability to feed end-to-end will also determine what feed rate you can use.

2.11 Water Lube Operation

See Figure 2-13. The Water Lube System keeps the blade clean. Water flows from a 5-gallon (18.9 liter) bottle through a hose to the blade guide where the blade enters the log. A valve in the bottle cap controls the amount of water flow.

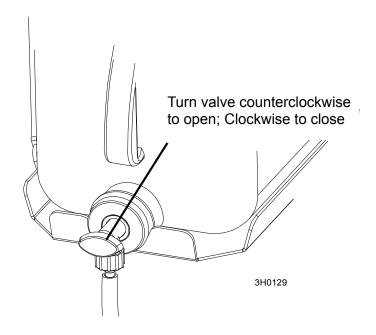


FIG. 2-13

Not all types of wood require the use of the Water Lube System. When it is needed, use just enough water to keep the blade clean. This saves water, and lowers the risk of staining the boards with water. Usual flow will be 1-2 gallons (3.8-7.6 liters) per hour (on average, the bottle content is sufficient for 4-hour-long cutting). A squirt of liquid dishwashing detergent in the water bottle will help clean the blade when cutting wood with a high sap content. Before you start cutting, check the water level in the bottle.



WARNING! Use ONLY water with the water lube accessory. Never use flammable fuels or liquids. If these types of liquids are necessary to clean the blade, remove it and clean with a rag. Failure to do so may result in serious injury or death.

Before removing the blade, start the blade motor with the START button. Let the blade spin with water running on it for about 15 seconds. This will clean the blade of sap buildup. Wipe the blade dry with a rag before storing or sharpening.

If you are sawing in freezing temperatures, remove the water lube bottle from the saw when done sawing and store it in a warm place. Blow any remaining water from the water lube hose.

2.12 Operation Procedure

1. Install a blade if necessary.



WARNING! Always wear gloves and eye protection when handling bandsaw blades. Changing blades is safest when done by one person! Keep all other persons away from area when coiling, carrying or changing a blade. Failure to do so may result in serious injury.

- 2. Close the blade housing cover.
- 3. Tension the blade as described in <u>See Section 2.5</u>.
- 4. Spin the blade wheel by hand.



WARNING! Use extreme caution when spinning the blade wheel by hand. Make sure hands are clear of blade and wheel spokes before spinning. Failure to do so may result in serious injury.

- **5.** Check alignment of the blade on the blade wheels and blade guides. Adjust as necessary.
- **6.** Raise or lower the saw head to the desired setting.



DANGER! Make sure all guards and covers are in place and secured before operating the saw. Failure to do so may result in serious injury.

- **7.** Start the blade motor.
- **8.** Perform pre-start check (blade motors rotation direction).
- **9.** Using the feed track speed switch, set the feed rate as desired.



DANGER! Always be sure all persons are out of the path of the blade before starting the motor. Failure to do so will result in serious injury.



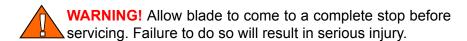
WARNING! Always wear eye, ear, respiration and foot protection when operating or servicing your saw.

10. Place the test material on the feed track and start the feed track.

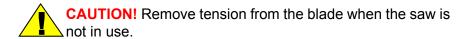


DANGER! Always be aware of and take proper protective measures against rotating shafts, pulleys, fans, etc. Always stay a safe distance from rotating members and make sure that loose clothing or long hair does not engage rotating members resulting in possible injury.

- 11. Shut off the blade and feed track. Measure the finished material and adjust the saw heads up or down as necessary. Repeat with the test material until the desired finished dimension is obtained.
- 12. Restart the blade and feed track.
- **13.** Place material on the infeed table. Return unfinished material to be re-fed into the saw, i.e. place it on the return table.
- **14.** Monitor blade tension as operation continues. Adjust blade tension if required.
- **15.** If material jam occurs, stop the blades motors and feed track.



- **16.** After operation is complete, shut off the blade motor and feed track.
- 17. Release blade tension if done sawing for the day.



SECTION 3 MAINTENANCE

This section lists the maintenance procedures that need to be performed.

WARNING! Disconnect and lock out power supply before servicing the saw! Failure to do so may result in serious injury.

This symbol identifies the interval (hours of operation) at which each maintenance procedure should be performed.

Be sure to refer to the motor manual for maintenance procedures concerning the blade motor.

3.1 Wear Life

See Table 3-1. This chart lists estimated life expectancy of common replacement parts if proper maintenance and operation procedures are followed. Due to the many variables which exist during saw operation, actual part life may vary significantly. This information is provided so that you may plan ahead in ordering replacement parts.

Part Description	Estimated Life
B57 Blade Wheel Belts	500 hours
Blade Guide Rollers	1000 hours
Drive Belt	1250 hours

TABLE 3-1

3.2 Blade Guides

1. Check the rollers for performance and wear every blade change. Make sure the rollers are clean and spinning freely. If not, rebuild them. Replace any rollers which have worn smooth or have become cone shaped. See the Parts manual for blade guide rebuild kits and complete roller assemblies.

3.3 Sawdust Removal

1. Remove the excess sawdust from the blade wheel housing and sawdust chute every blade change.

3.4 Vertical Mast

Clean the vertical mast angles, wipe them dry and lubricate with a WD40 oil every 50 hours of operation.



CAUTION! Never use grease on the mast angles as it will collect sawdust.

3.5 Miscellaneous Lubrication

- 1. Apply a thin film of a lithium grease to the blade guide arm to help prevent it from rusting.
- 2. Lubricate the feed track chain with an easily penetrating oil such as WD-40.

CAUTION! Never apply grease to the feed track chain. It causes sawdust buildup in chain links.

- **3.** Make sure all safety warning decals are readable. Remove sawdust and dirt. Replace any damaged or unreadable decals immediately. Order decals from your Customer Service Representative.
- 4. Lubricate the acme screws (screws for saw head tilting and raising or lowering) with a lithium grease every 50 hours of operation.

See Figure 3-1.

3.6 Belts

- 1. Check the blade wheel belts for wear every 50 hours of operation. Replace as needed.
- **2.** Periodically check all belts for wear. Replace any damaged or worn belts as needed.

3.7 Drive Belt Adjustment



WARNING! Do not for any reason adjust the drive belt with the motor running. Doing so may result in serious injury.

See Table 3-2. Check the drive belt tension after the first 20 hours, and every 50 hours thereafter. See the table below for drive belt tension specifications for your saw.

Motor	Belt Tension
E11, E15	7/16" (11mm) deflection with 16 lbs. (7.2 KG) of deflection force

TABLE 3-2

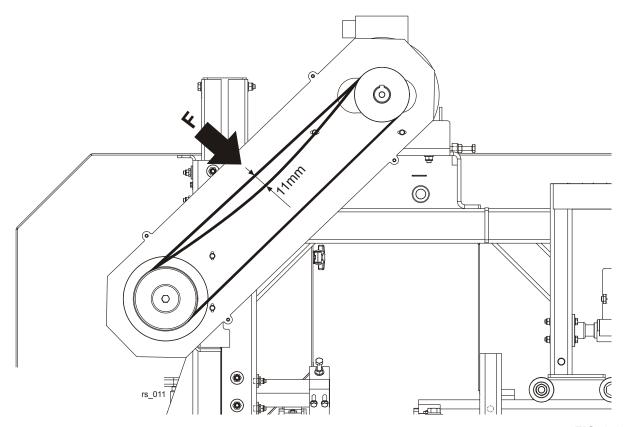


FIG. 3-2

To adjust the drive belt tension:

- **1.** Remove the drive belt guard.
- 2. Loosen the four motor mounting bolts (see Figure 3-3).
- 3. Loosen one of the adjustment bolts, shown in Figure 3-3, and turn the other until the belt has proper deflection. (To increase the belt tension, you must loosen the right bolt and turn appropriately the left one.) NOTE: Be sure to adjust the bolts evenly so the motor remains in alignment.

4. Tighten the four motor mounting bolts.

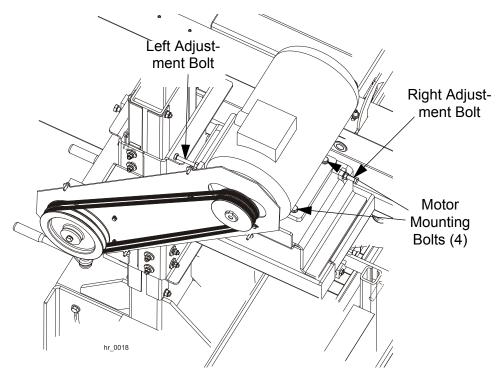


FIG. 3-3

Periodically check the belt for wear. Replace if damaged or worn.

AR

See Figure 3-4. Keep the motor and drive pulleys aligned to prevent premature belt wear. To align the motor pulley to the drive pulley, loosen the set screw in the motor pulley groove and slide the motor pulley on the shaft until it is in line with the drive pulley.

After performing the alignment, make sure the drive belt tension has not been changed.

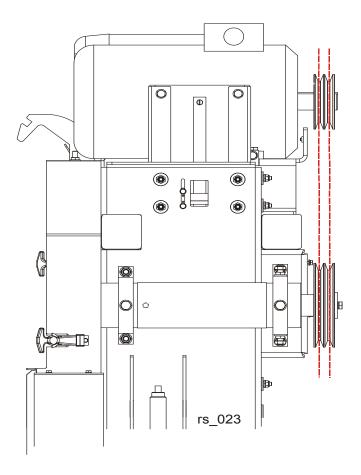


FIG. 3-5

3.8 Feed Track Chain Tension

See Figure 3-6. If necessary, use the adjustment bolts shown below to adjust the feed track chain tension. **NOTE:** The bolts must be adjusted evenly.

See Figure 3-7.

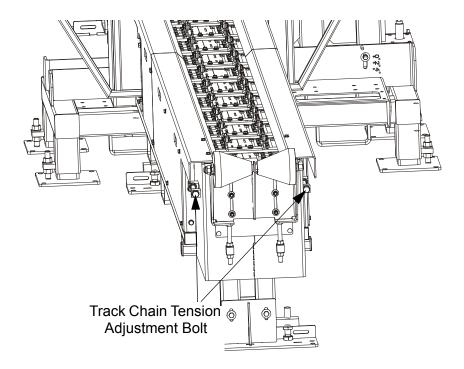


FIG. 3-8

3.9 Up/Down System

1. Lubricate the two acme screws, shown below, with a lithium grease every fifty hours of operation, but at least once a week.

See Figure 3-9.

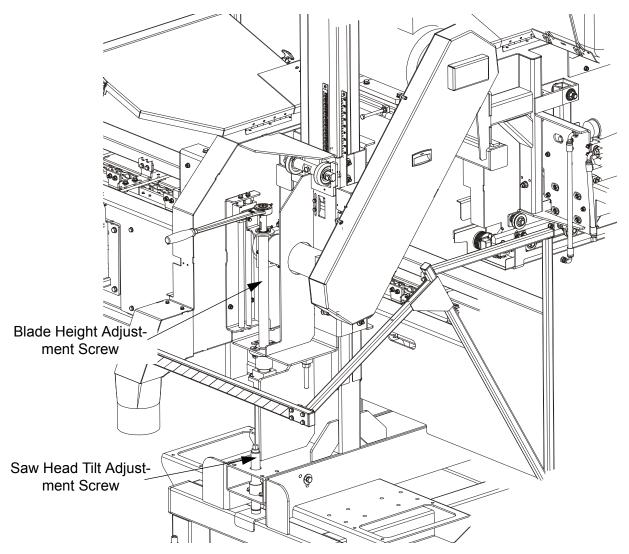


FIG. 3-10

3.10 Safety Devices Inspection

SHS Safety Devices Inspection

Before beginning a shift, the following safety devices of the SHS saw should always be checked:

- E-STOP button circuit control box
- E-STOP button circuit frame
- Safety switch circuit 1-6 saw heads
- Motor brake and its circuit

1. Control box E-STOP circuit inspection

- Start the main motor;
- Push the E-STOP button located on the control box. The motor should stop. It should not be possible to restart the motor until the E-STOP is released.

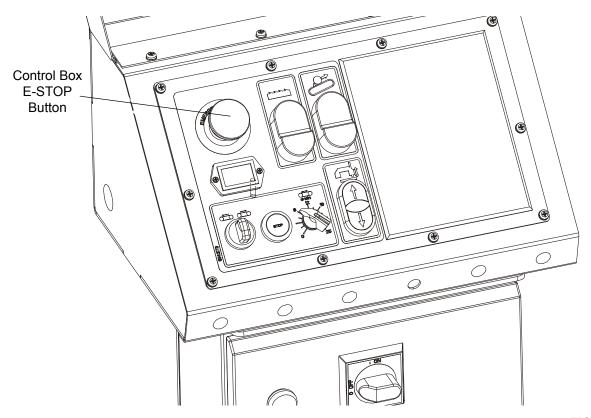


FIG. 3-11

2. Electric Box E-STOP circuit inspection

- Start the main motor;
- Push the E-STOP button located on the electric box. The motor should stop. It should not be possible to restart the motor until the E-STOP is released.

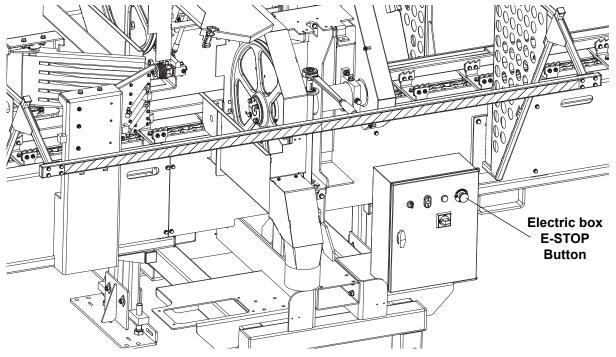


FIG. 3-12

3. Safety switch fence and its circuit inspection

- Start the main motor;
- Raise the safety fence;
- The main motor of the saw head should stop;
- Try to start the motor of the saw head using the START button. The motor cannot be started.
- Lower the safety fence;

■ The motor should remain turned off.

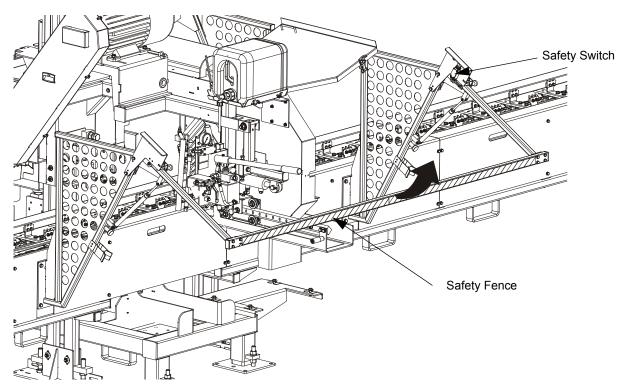


FIG. 3-13

4. Safety switch circuit inspection

- Start the main motor;
- Open the blade housing cover;
- The main motor of the saw head should stop;
- Try to start the motor of the saw head using the START button. The motor cannot be started.
- Close the blade housing cover;

■ The motor should remain turned off.

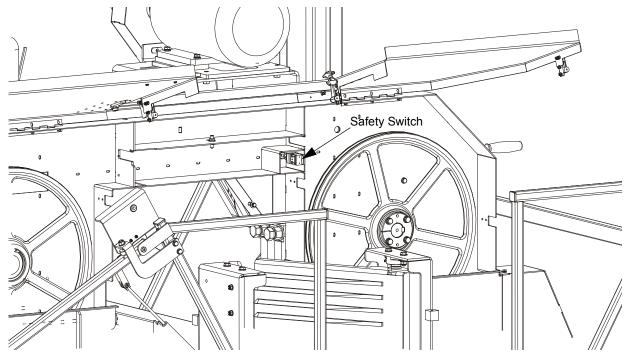


FIG. 3-14

5. Main motor brake and its circuits

- Start the main motor of the saw head. Then stop the motor by pushing the STOP button. Measure the braking time.
- Start the main motor of the saw head. Then turn the key switch to the "0" position to stop the motor. Measure the braking time.
- Start the main motor of the saw head. Then stop the motor by turning the key switch to the "H" position. Measure the braking time.

The motor braking time should be shorter than 10 seconds. If it is longer, adjust or replace the brake linings. (See the motor manual.)

SECTION 4 ALIGNMENT

4.1 Alignment Procedures

The Wood-Mizer saw is factory aligned. This section includes instructions on how to realign the saw completely. Be scrupulous when performing all alignment steps as saw alignment determines the accuracy of your cuts. The alignment procedure should be performed approximately every 1500 hours of operation.

Routine Alignment Procedure:

- **1.** Install and track the blade (<u>See Section 4.2</u>).
- 2. Check and adjust the vertical alignment of the blade guide arm (<u>See Section 4.5</u>).
- 3. Check and adjust the horizontal alignment of the blade guide arm (See Section 4.6).
- **4.** Check and adjust the vertical angle of the blade guides (See Section 4.9).
- 5. Check and adjust the horizontal angle of the blade guides (See Section 4.11).
- **6.** Check and adjust the spacing between the blade guide flanges and the back of the blade (<u>See Section 4.10</u>).
- **7.** Check that the blade height scale accurately displays the actual distance from the bottom of the blade to the feed track and adjust if necessary (<u>See Section 4.13</u>).

Complete Alignment Procedure:

Perform all steps in this section to completely realign the saw.

4-1 MHdoc091217

4.2 Blade Installation And Tracking

See Figure 4-1. Install a blade and apply the proper tension as shown below. <u>See Section 2.4</u>

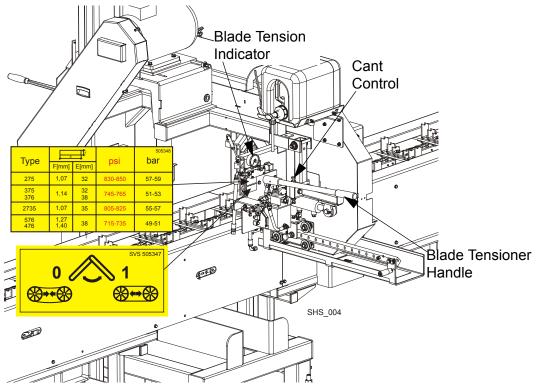


FIG. 4-1

1. Turn the key switch to the "H" position.



- **2.** Open the blade housing cover.
- 3. Manually spin one of the blade wheels until the blade positions itself on the wheels.

See Figure 4-2. The blade wheels should be adjusted so that the gullet of 1 1/4" blades rides 3.0 mm (0.12") out from the front edge of the wheels (\pm 1.0 mm [0.04"]). The gullet of 1 1/2" blades should ride 4.5 mm (0.18") from the front edge of the wheels (\pm 1.0 mm

MHdoc091217 4-2

[0.04"]). Do not let the teeth ride on the belt.

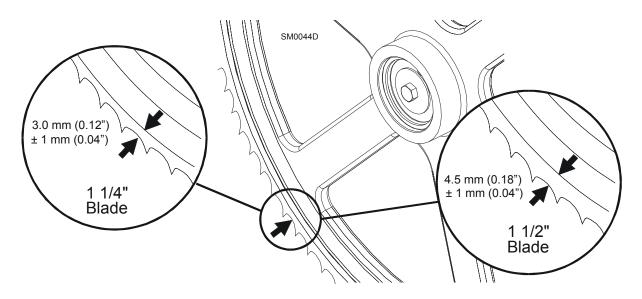


FIG. 4-2

To adjust where the blade travels on the idle-side blade wheel, use the cant control shown in **Figure 4-7**.

To move the blade out on the blade wheel, turn the cant adjustment bolt clockwise. To move the blade in on the blade wheel, turn the bolt counterclockwise.

Some adjustment in blade tension may be needed to compensate for adjustments made with the cant control.

Adjustment with the cant control is usually all that is required to track the blade properly on both blade wheels. The drive-side blade wheel will usually not have to be adjusted. If necessary, the drive-side wheel can be adjusted as follows:

Locate the nuts and the clamping screws located on the drive-side of the cutting head. If the blade is too far forward on the wheel, turn the screw located on the inside of the head counterclockwise and turn the screw located on the outside of the head clockwise. Make sure to tighten the nuts against the shaft housing when adjustment is complete.

4-3 MHdoc091217

4.3 Blade Wheel Alignment

The blade wheels should be adjusted so they are level in the vertical and horizontal planes. If the blade wheels are tilted up or down, the blade will want to travel in the tilted direction. If the blade wheels are tilted horizontally, the blade will not track properly on the wheels.

1. Use the blade guide alignment tool to check the vertical alignment of each blade wheel. Attach the tool to the blade near the inner blade guide mount. Be sure the tool does not rest on a tooth or burr, and is lying flat against the blade.

See Figure 4-3.

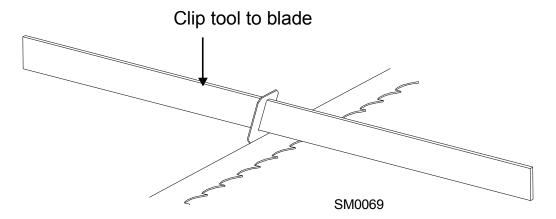


FIG. 4-3

- **2.** Measure from the bottom of the tool to the top of the feed track.
- **3.** If the two measurements differ by more than (± 1.0 mm (0.04")), adjust the vertical tilt of the drive-side blade wheel.

See Figure 4-4. Use the vertical adjustment screws (marked with the blue and yellow arrows in the figure below) to adjust the drive-side blade wheel. Before adjusting the wheel, loosen the drive belt using the adjustment bolts marked with the orange arrows in the figure. Loosen the jam nut and the hex socket head screw marked with the red arrow in the figure and adjust the wheel with the vertical adjustment screws. To tilt the wheel down, loosen the top adjustment screw one quarter turn. Loosen the jam nut on the bottom adjustment screw and tighten the screw. Tighten the top and bottom jam nuts. To tilt the wheel up, loosen the bottom adjustment screw one quarter turn. Loosen the jam nut on the top adjustment screw and tighten the screw. Tighten the top and bottom jam nuts. Tension the drive belt properly (See Section 3.8).

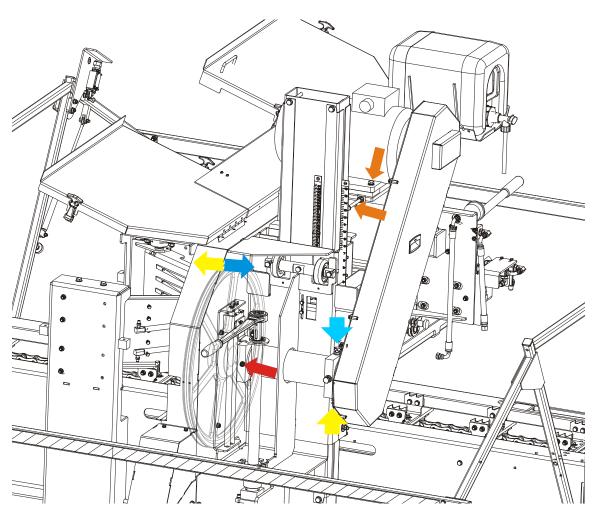


FIG. 4-4

4-5 MHdoc091217

- **4.** Recheck the vertical tilt of the drive-side blade wheel with the blade guide alignment tool. Readjust the blade wheel as necessary until the front and rear of the tool are the same distance from the feed track (± 1.0 mm (0.04")).
- **5.** Remove the tool from the blade and reattach it near the outer blade guide assembly.
- **6.** Measure from the tool to the feed track at both ends of the tool. If the measurements at the front and rear ends of the tool differ more than (± 1.0 mm (0.04")), adjust the vertical tilt of the idle-side blade wheel.

See Figure 4-5. Use the vertical adjustment screws to adjust the idle-side blade wheel. To tilt the wheel up, loosen the bottom adjustment screw one quarter turn. Loosen the jam nut on the top adjustment screw and tighten the screw. Tighten the top and bottom jam nuts.

To tilt the wheel down, loosen the top adjustment screw one quarter turn. Loosen the jam nut on the bottom adjustment screw and tighten the screw. Tighten the top and bottom jam nuts.

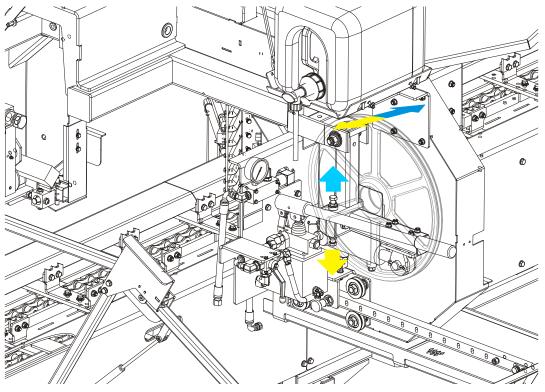


FIG. 4-5

7. Recheck the vertical tilt of the idle-side blade wheel with the blade guide alignment tool. Readjust the blade wheel as necessary until the front and rear of the tool are the same distance from the feed track.

MHdoc091217 4-6

8. Check the position of the blade on the idle-side blade wheel.

See Figure 4-6. The horizontal tilt of the blade wheel should be adjusted so that the gullet of an 1-1/4" blade is 3.0 mm out from the front edge of the wheel (± 1.0 mm (0.04")).

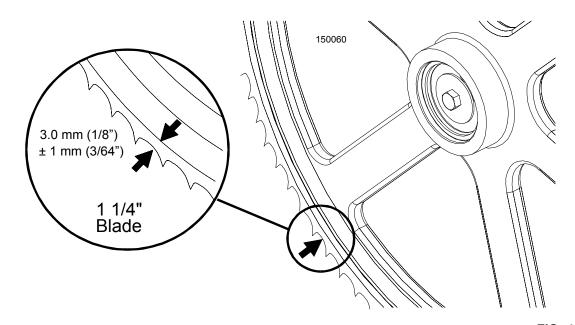


FIG. 4-6

See Figure 4-7. Use the cant control adjustment to adjust the idle-side blade wheel. If the blade is too far forward on the wheel, turn the cant control counterclockwise. If it is too far back on the wheel, turn the cant control clockwise.

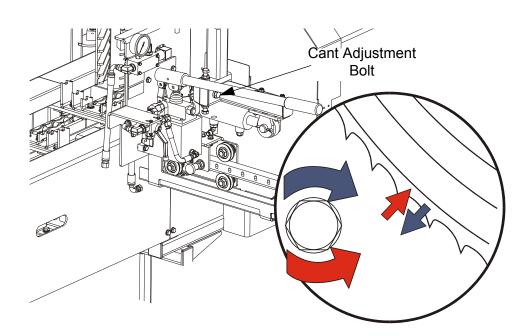


FIG. 4-7

4-7 MHdoc091217 **9.** Check the position of the blade on the drive-side blade wheel. The blade should be positioned on the wheel as described for the idle-side blade wheel. Adjust the drive-side blade wheel if necessary.

See Figure 4-8. Use the horizontal adjustment screws (marked with the blue and yellow arrows on the figure below) to adjust the drive-side blade wheel. Before adjusting the wheel, loosen the drive belt using the adjustment bolts marked with the orange arrows in the figure.

To move the blade back on the wheel, loosen the right adjustment screw one quarter turn. Loosen the jam nut on the left adjustment screw and tighten the screw. Tighten the left and right jam nuts.

To move the blade out on the wheel, loosen the left adjustment screw one quarter turn. Loosen the jam nut on the right adjustment screw and tighten the screw. Tighten the left and right jam nuts. When the adjustment is complete, tension the drive belt properly (<u>See Section 3.8</u>).

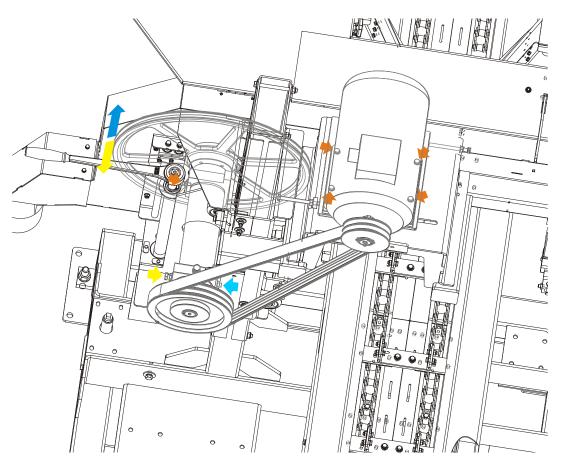


FIG. 4-8

MHdoc091217 4-8

4.4 Saw Head Adjustment

See Figure 4-9. The saw head should be set perpendicular to the vertical mast. Using the two adjustment screws shown below, you can adjust the saw head in relation to the mast. To raise or lower the outside of the saw head, loosen the locking nuts on either of the screws. Then turn the adjustment screws clockwise to lower the ouside of the saw head or counterclockwise to raise the outside of the saw head. **NOTE:** Be sure to adjust the screws evenly so the main vertical tube of the saw head is parallel to the mast tube.

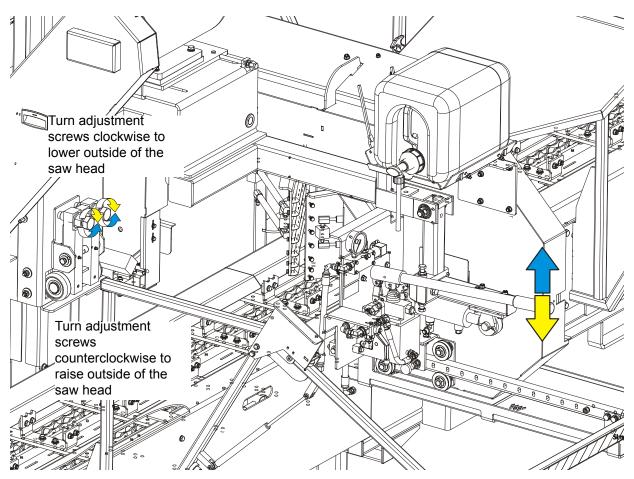


FIG. 4-9

4-9 MHdoc091217

4.5 Blade Guide Arm Vertical Adjustment

- 1. Adjust the blade guide arm out to within 1/2" (15 mm) of full open.
- 2. Measure the distance from the top surface of the feed track to the arm.

See Figure 4-10.

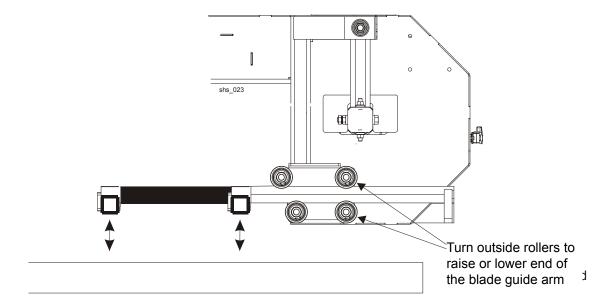


FIG. 4-10

- **3.** Adjust the blade guide arm in to within 1/2" (15 mm) of full closed. Measure again the distance between the arm and the feed track.
- **4.** Adjust the arm so that the measurement from the top of the track feed to the arm in the closed position is the same as the measurement from the top of the track feed to the arm in the open position.

If the arm is too low in the closed position, loosen the lower outside roller and tighten the upper outside roller. (See Step 5.)

If the arm is too high in the closed position, loosen the upper outside roller and tighten the lower outside roller. (See Step 5.)

5. The rollers are mounted on cam bolts that raise or lower the arm when turned.

To adjust the rollers, locate the cam bolt inside the housing and turn until the arm is lowered or raised as needed. Recheck the arm in both, open and closed positions. Repeat adjustments until the arm is the same distance from the track feed in the open

MHdoc091217 4-10

and closed position.

6. The blade guide arm should be snug, but not too tight, in the rollers. You should be able to move it in and out with firm hand pressure. There should be no side-to-side play.

4.6 Blade Guide Arm Horizontal Adjustment

- 1. Put the blade guide assembly back in the arm (if you took it out). Put the assembly back so that the flanged collar on the roller is about 3.0 mm (0.04") from the back of the blade when the arm is 15 mm (0.6") from full open.
- 2. Close the throat to within 15 mm (0.6") from fully closed. Check to see that the flange is the same distance from the back of the blade.

See Figure 4-11.

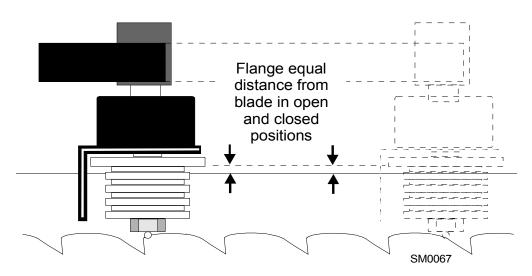


FIG. 4-11

3. If adjustment is needed, the guide rollers can be adjusted in or out on the threaded mounts to open or close the gap.

4-11 MHdoc091217

See Figure 4-12.

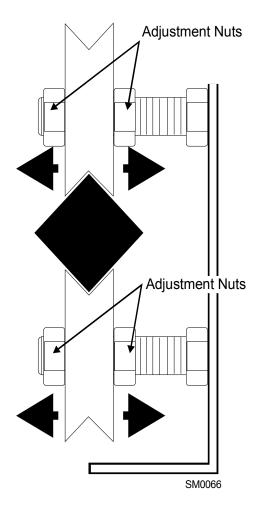


FIG. 4-12

- **4.** Adjusting the outside two rollers inward will cause the flange to move away from the blade.
- 5. Adjusting the two outside rollers outward will cause the flange to move toward the blade.
- **6.** Adjust until the roller flange is the same distance from the back of the blade in the open and closed position.

MHdoc091217 4-12

4.7 Aligning the Blade Guides

Each Wood-Mizer saw has two blade guide assemblies that help the blade maintain a straight cut. The two blade guide assemblies are positioned on the cutting head to guide the blade on each side of the material being cut.

One blade guide assembly is mounted in a stationary position on the drive side of the cutting head. This assembly is referred to as the "inner" blade guide assembly.

The other blade guide assembly is mounted on the idle side of the cutting head. It is referred to as the "outer" assembly and is adjustable for various widths of materials to be processed.

Blade guide alignment includes four steps:

- Blade Deflection,
- Blade Guide Vertical Tilt,
- Blade Guide Flange Spacing,
- Blade Guide Horizontal Tilt.

Perform the blade guide alignment after you have aligned the blade on the wheels. After blade guide alignment, check the scale indicator to make sure it is adjusted properly (<u>See Section 4.13</u>).

NOTE: During blade guide alignment, remove the blade guide adjusting screws and apply a lubricating oil such as 10W30 or Dexron III to each screw. This will prevent the screws and threaded holes from corroding and make screw adjustments easier.

4-13 MHdoc091217

4.8 Blade Deflection

Perform the following steps to achieve proper blade deflection with the blade guides.

- **1.** Raise the carriage until the blade is 200 mm (7.9") above the feed track. Measure the actual distance with a tape from the top of the track to the bottom of the blade.
- 2. Install the blade guides. Make sure the two set screws shown are threaded into the blade guide shaft until they touch each other.

See Figure 4-13.

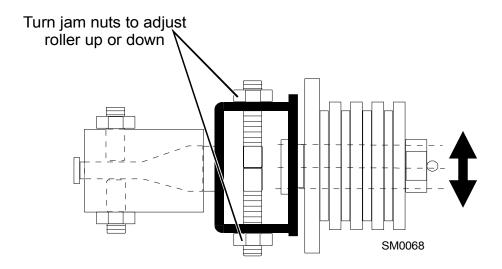


FIG. 4-13

4-14

- 3. Loosen the bottom jam nut and tighten the top jam nut until the blade guide deflects the blade down 6.0 mm (0.24").
- **4.** Repeat for the other blade guide.

NOTE: Be sure that the blade guide touches the blade in both guide assemblies. The outer blade guide should be checked with the arm all the way in and all the way out.

4.9 Blade Guide Vertical Tilt Adjustment

Check that the blade guide does not tilt the blade up or down. A Blade Guide Alignment Tool (BGAT) is provided to help you measure the vertical tilt of the blade.

- **1.** Open the blade guide arm 15 mm (0.6") from full open.
- **2.** Clamp the alignment tool on the blade. Position the tool close to a blade guide roller. Be sure the tool does not rest on a tooth or burr, and is lying flat on the blade.

See Figure 4-14.

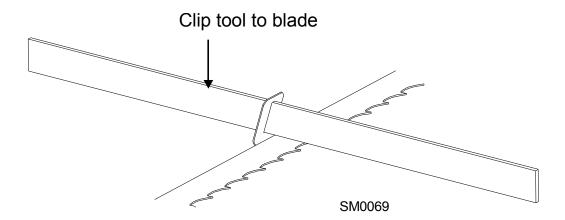


FIG. 4-14

- **3.** Measure the distance from the bottom of the tool to the feed track chain at the center of the tool and then at the front end of the tool.
- **4.** The two distances should be equal. If they differ, adjust the vertical tilt of the blade guide using the adjustment screws shown in the figure below.

See Figure 4-15. Loosen the jam nuts on the top and bottom vertical tilt adjustment screws. To tilt the roller up, loosen the bottom screw and tighten the top screw. To tilt the roller down, loosen the top screw and tighten the bottom screw. Tighten the jam nuts and

4-15 MHdoc091217

recheck the tilt of the blade.

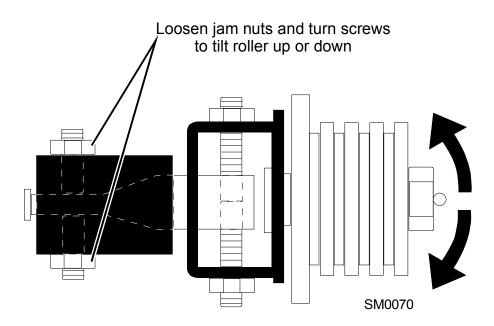


FIG. 4-15

- **5.** Measure the distance from the bottom of the tool to the top of the feed track chain at the rear end of the tool. If the measurement does not equal the other two measurements taken, readjust the vertical tilt of the blade guide.
- **6.** Move the blade guide alignment tool close to the other blade guide and repeat the above steps. Adjust the vertical tilt of this guide if necessary.

NOTE: If major adjustments to blade guide tilt were made, measure the distance between the blade and the feed track chain again to ensure the correct 6.0 mm (0.24") blade guide deflection. Adjust if necessary.

MHdoc091217 4-16

4.10 Blade Guide Spacing

HINT: When adjusting blade guide spacing, loosen the top set screw and one side set screw only. This will ensure horizontal and vertical tilt adjustments are maintained when the set screws are retightened.

- **1.** Adjust the inner blade guide so the blade guide flange is approximately 1.5 3.0 mm (0.06 0.12") from the back of the blade.
- **2.** Loosen one side and one top set screw shown. Tap the blade guide forward or backward until properly positioned.

See Figure 4-16.

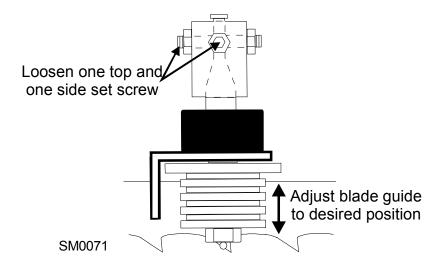


FIG. 4-16

- **3.** Retighten the two set screws.
- **4.** Adjust the outer blade guide in the same way so the blade guide flange is approximately 1.5 3.0 mm (0.06 0.12) from the back of the blade.

4-17 MHdoc091217

4.11 Blade Guide Horizontal Tilt Adjustment

1. Finally, both blade guides must be tilted horizontally. Adjust the blade guide arm halfway in.

See Figure 4-17.

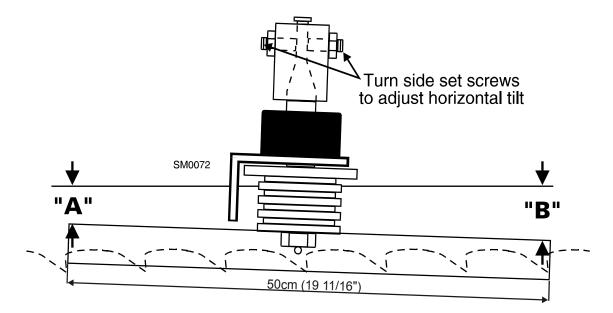


FIG. 4-17

- 2. Place the Blade Guide Alignment Tool against the face of the outer blade guide roller.
- **3.** Center the tool on the roller and measure between the back edge of the blade and the ruler at the end closest to the inner blade guide ("B").
- 4. Measure between the back edge of the blade and the other end of the ruler ("A").
- The roller should be tilted slightly to the left (A = B 6.0 mm [0.24"]).
- **6.** Use the side set screws to adjust the horizontal tilt of the roller.
- **7.** Repeat steps 3-7 for the inner blade guide roller.

NOTE: Once the blade guides have been adjusted, any cutting variances are most likely caused by the blade. **See the Wood-Mizer® Blade Handbook, Form #600.**

MHdoc091217 4-18

4.12 Blade Height Scale Adjustment

After the entire saw has been aligned and all adjustments made, check that the blade height scale indicates the true distance from the blade to the feed track chain.

1. Measure from the bottom edge on a down-set tooth of the blade to the top of the feed track chain.

See Figure 4-18.

2. View the blade height scale with eyes level with the indicator.

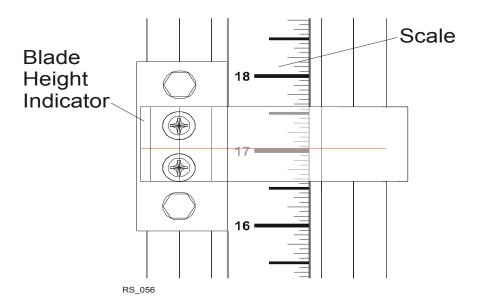


FIG. 4-18

3. Loosen the indicator bracket mounting bolts and adjust the bracket until the indicator is aligned with the correct mark on the scale. Retighten the bracket mounting bolts.

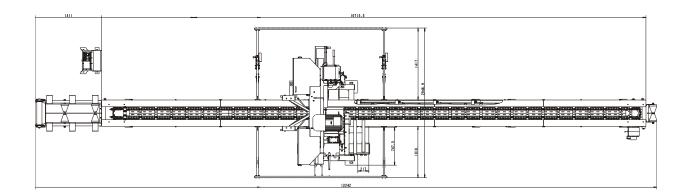
For example, if the measurement from blade to feed track chain was $100 \text{ mm} (3.9^{\circ})$, make sure the indicator reads $100 \text{ mm} (3.9^{\circ})$ on the scale.

4-19 MHdoc091217

SECTION 5 SPECIFICATIONS

5.1 Overall Dimensions

See Figure 5-1. The major dimensions of the saw are shown below (all dimensions are in millimeters).



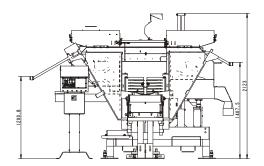


FIG. 5-1

See Table 5-1. The overall dimensions of the saw are listed in the table below.

Weights	
Height	2123mm
Width	2947mm
Length	12242mm

TABLE 5-1

5.2 Cutting Capacity

See Table 5-2. The material size and performance capacities of the saw are given below.

Cutting Length	0.9 - 3.6 m (3-11.8 ft)
Material Height	10-400 mm (0.4 - 16")
Material Width	100-450 mm (4-17.5")
Feed Speed	0-25m (0- 82ft)/min
Blade Linear Speed	Standard: 20m/s (65 ft/sec) Optional: 18 m/s (59 ft/sec) or 24 m/s (78 ft/sec)
Minimum Cutting Height	10 mm (0.39")
Maximum Cutting Height	400 mm (15.7")

TABLE 5-2

5.3 Blades

See Table 5-3. Wood-Mizer offers three types of blades to provide efficient sawing. The type of wood you saw should determine which blade you choose for optimum performance.

Recommended Blade Type ¹					
Softwood	Medium Hardwood	Frozen Timber or Dense Hardwood			
.042 x 7/8 x 1 1/4"x184"	.042 x 7/8 x 1 1/4 "x184"	.045 x 7/8 x 1 1/4" F1x184"			

¹ SHS resaw is working with a blade with a length of 4.67 m

5.4 Blade Motor Specifications

See Table 5-4. See the table below for blade motor specifications for your saw model.

Machine Type	Manufacturer	Model	Power	Other Specifications
SHSEH15S-LC	Indukta	PSg-132 S2	11kW	400 V/50Hz; 28 Amp; 1500 r.p.m.
SHSEH20S-LC	Indukta	2SIE-160 L4	15kW	400 V/50Hz; 30 Amp; 1500 r.p.m.
SHSEH25S-LC	Indukta	PSg-160 L4	18,5kW	400 V/50Hz; 37 Amp; 1500 r.p.m.

TABLE 5-4

5.5 Noise Level

See Table 5-5. The noise levels of the saw are listed below 12 .

	Noise level
SHSEH20S	L _{EX8} = 92 dB (A)

TABLE 5-5

^{1.} The noise level measurement was taken in accordance with PN-EN ISO 3746 Standard . The noise exposure level given above concerns an 8-hour work day.

5.6 V-Belt Sizes

See Table 5-6. Belt sizes for the saw are shown.

Belt Description	Belt Size	Wood-Mizer Part No.
Drive Belt (E15)		
Blade Wheel Belt	B72.5	017922

TABLE 5-6

5.7 Dust Extractor Specifications

See Table 5-7. Specifications of the dust extractors used on the saw for each saw head are listed below.

Airflow	1200 m ³ /h 3937ft ³ /h
Inlet diameter	150 mm (5.9")
Motor power	1,5 kW
Number of sacks	1 pcs
Sack capacity	0,25 m ³ (8.8 ft) ³
Weight	110 kg (242.5 lb)
Recommended conveying air velocity in the duct	20 m/s 65.6 ft/s

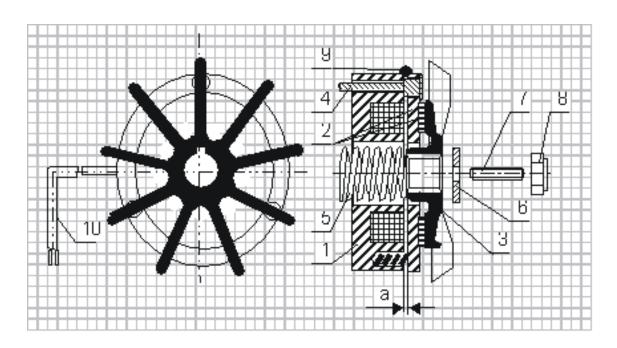
TABLE 5-7



IMPORTANT! The dust extractor hoses must be grounded or made with materials not accumulating electrostatic acharge. The dust extractor system should be made in accordance with EN 12779:2004 Standard.

^{2.} The measured values refer to emission levels, not necessarily to noise levels in the workplace. Although there is a relation between emission levels and exposure levels, it is not possible to determine with certainty if preventives are needed or are not needed. The factors affecting a current level of noise exposure during work are inter alia room characteristics and characteristics of other noise sources, e.g. number of machines and machining operations nearby. Also, the permissible exposure level value may vary depending on country. This information enables the machine's user to better identify hazards and a risk.

SECTION 6 DC ELECTROMAGNETIC BRAKE (CE ONLY), SIEMENS MOTORS



- 1 Electromagnet,
- 2 Armature complete with brake linings,
- 3 Fan,
- 4 Retaining bolt
- 5 Central spring,
- 6 Special washer,
- 7 Set screw,
- 8 Self-locking nut,
- 9 Sealing ring,
- 10 Output cable.

6.1 Design and principle of operation

The DC electromagnetic brake type H consists of 3 main subassemblies:

- electromagnet (1),
- armature complete (2)
- cast iron fan (3).

Electromagnet (1) energised: The DC voltage from the motor applied via the rectifying circuit causes the attraction of the armature (2) releasing the brake and thus the fan (3) is free to rotate.

Electromagnet (1) de-energised: The electromagnet stops to attract the armature (2) and spring

DC Electromagnetic Brake (CE Only), Siemens motors Service

presses the armature with brake linings (2) against the fan and the brake is thus applied.

6.2 Service

During normal operation and at the routine inspections verify the air gap and check if all screws are tight. In case when any symptoms of inefficient braking are observed, then use the self-locking nut (8) to re-adjust the air gap to the value corresponding to Table 1.

Such readjustment may be repeated until the brake linings are completely worn out. When this will occur, a complete armature with brake linings (2) must be replaced.

If the air gap of the brake is correctly adjusted and despite of it the brake does not operate properly (the brake fails to release), it may be caused by:

- the electromagnet (1): burned coil or defected output cable (10),
- rectifying circuit (installed in the electric motor terminal box).

The above mentioned subassemblies should be checked and defected part replaced.

Table 1:

TYPE	H-63	H-71	H-80	H-90	H-100	H-112	H-132	H-160
Nominal	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gap "a"	±0,05	±0,05	±0,05	±0,05	±0,1	±0,1	±0,1	±0,1



EC declaration of conformity

according to EC Machinery Directive 2006/42/EC, Annex II, 1.A

Manufacturer:

Wood-Mizer Industries sp. z o.o. Nagórna 114, 62-600 Koło; Poland Tel. +48 63 26 26 000

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Following machine in our delivered version complies with the appropriate essential safety and health requirements of the EC Machinery Directive 2006/42/EC based on its design and type, as brought into circulation by us. In case of alteration of the machine, not agreed by us, this declaration is no longer valid.

We, the undersigned herewith declare, that:

Designation of the machine:	Single Horizontal Saw
TYPE:	SHS
Models	
No. of manufacturer:	
Is in conformity with the following EC directives:	EC Machinery Directive 2006/42/EC EC Electromagnetic Compatibility Directive 2014/30/EU
And is in conformity with the following Harmonized Standards:	PN-EN ISO 12100:2012 PN-EN 1807-2:2013-08 PN-EN ISO 13849-1:2016-02 PN-EN 60204-1:2010 PN-EN ISO 13857:2010 PN-EN ISO 14120:2016-03

Responsible for Technical Documentation: Piotr Adamiec / Engineering Manager

Wood-Mizer Industries Sp. z o.o. 62-600 Koło, Nagórna 114, Poland

Tel. +48 63 26 26 000

Place/Date/Authorized Signature: Koło, 12.02.2015 Adduction

Title: Engineering Manager