



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 | Navodila za uporabo

R e t a i n f o r f u t u r e u s e Zachować do przyszłego użytku Сохраните 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 B e h o l d f o r s e n e r e b r u k 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 Pästrați acest manual pentru utilizare viitoare Conservar para futuras consultas Behall för framtida användning U ch ovejte pro další použití Hranite za prihodnjo uporabo

www.wood-mizer.eu



Safety, Setup, Operation & Maintenance Manual

LT15WB E15	
LT15WB G25	
LT15WB D17	

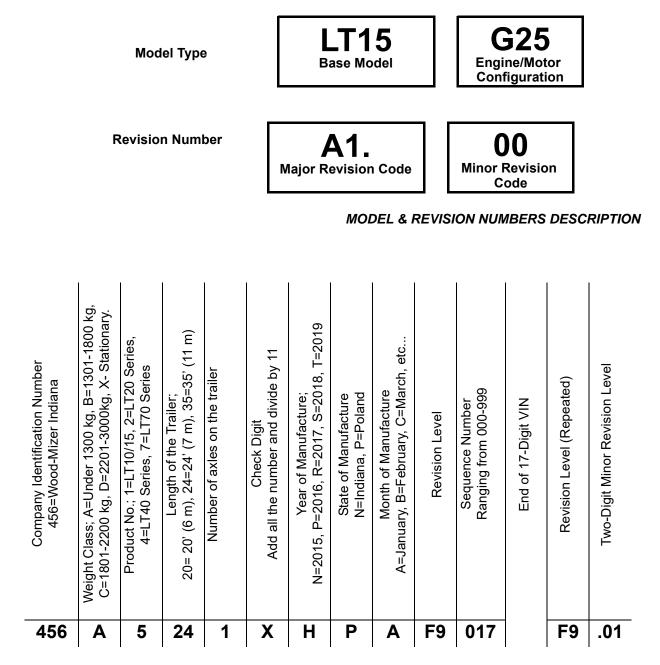
Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

rev. A1.00 rev. A1.00 rev.A1.00

Form #792

This is the original language for the manual.

Each Wood-Mizer LT15 sawmill is identified with a revision and VIN numbers.



V.I.N. DESCRIPTION

When you pick up your mill, you will receive a customer number. The VIN number, revision, and your customer number expedite our service to you. Please write these numbers below so you have quick, easy access to them.

Customer No.	Model Type	VIN No.	Revision Number

IMPORTANT! Read the entire Operator's Manual before operating the sawmill. 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.

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Getting Service

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.

General Contact Information

From Europe call your local distributor or our European Headquarters and Manufacturing Facility in Koło, Nagórna 114 St, Poland at **+48-63-2626000**. From the continental U.S., call our U.S. Headquarter 8180 West 10th St.Indianapolis, IN 46214, toll-free at **1-800-525-8100**. 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 the operation and maintenance of your machine. He also can schedule you for a service call.

Office Hours:

Country	Monday - Friday	Saturday	Sunday
Poland	7 a.m 3 p.m.	Closed	Closed
US	8 a.m 5 p.m.	8 a.m 12 p.m	Closed

Please have your vehicle identification number and your customer number ready when you call. Wood-Mizer will accept these methods of payment:

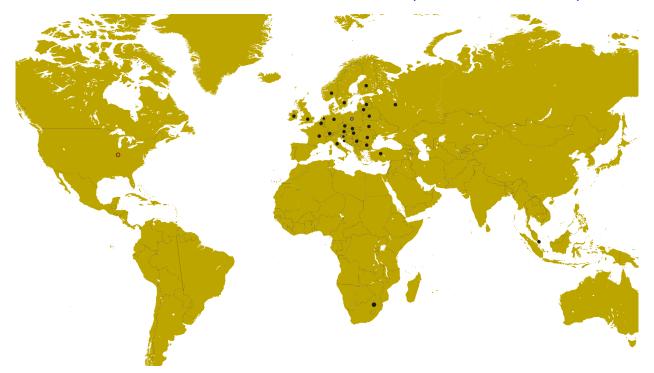
- Visa, Mastercard, or Discover
- COD
- Prepayment
- Net 15 (with approved credit)

Be aware that shipping and handling charges may apply. Handling charges are based on size and quantity of order.

Technical data are subject to change without prior notice.

Actual product may differ from product images. Some illustrations show machines with optional equipment.

Branches & Authorized Sales CentersWood-Mizer Locations (North and South America)



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Branches & Authorized Sales Centers

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SECTION 1 SAFETY & GENERAL INFORMATION

This symbol calls your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions. This symbol accompanies a signal word. The word **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 to persons or equipment. Read all safety instructions before operating this equipment and observe all safety warnings!

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.

Read and observe all safety instructions before operating this equipment! Also read any additional manufacturer's manuals and observe any applicable safety instructions including dangers, warnings, and cautions.

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! 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 sawmill. All Wood-Mizer mill owners are encouraged to become thoroughly familiar with these applicable laws and comply with them fully while using the mill.

Always properly dispose of all sawing by-products, including sawdust and other debris, coolant, oil, fuel, oil filters and fuel filters.

Safety instructions are listed in this section by the following operations:

- Blade Handling
- Sawmill Setup
- Sawmill Operation
- Sawmill Maintenance

1.1 Blade Handling



DANGER! Always disengage the blade and shut off the sawmill engine before changing the blade. Failure to do so will result in serious injury.



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.



1.2 Sawmill Setup

WARNING! Do not set up the mill on ground with more than a 10 degree incline. If setup on an incline is necessary, put blocks under one side of the mill or dig out areas for the legs to keep mill level. Setting up the mill on an incline could cause it to tip over, resulting in serious personal injury.

WARNING! Keep all persons out of the path of the saw head while loading and unloading the sawmill. Failure to do so may result in serious injury or death.

1.3 Sawmill Operation



IMPORTANT! The sawmill is intended for sawing wood only. <u>See Section Cutting Capacity</u> for log size capacities of the machine.

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



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

DANGER! Be sure the blade housing and pulley covers are in place and secured.

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

DANGER! Keep all persons out of the path of moving equipment and logs when operating sawmill or loading and turning logs. Failure to do so will result in serious injury.

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

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



WARNING! Always disengage the clutch/brake mechanism whenever the sawmill is not cutting. Failure to do so may result in serious injury.

WARNING! Always wear eye, ear, respiration, and foot protection when operating the sawmill. Failure to do so may result in serious injury.



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

WARNING! Always make sure log is clamped securely before sawing. Failure to do so may result in serious injury or death.

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.

CAUTION! Be sure the log clamps are all the way down before loading a log onto the bed. Failure to do so may result in machine damage.

CAUTION! Before loading a log, be sure the cutting head is moved far enough forward so the log does not hit it. Failure to do so may result in machine damage.

CAUTION! Do not try to force the saw head beyond its upper and lower travel limits. Damage to the up/down system may result.

CAUTION! Be sure to stop the blade when returning the carriage. This will not only prevent the blade from being pulled off and ruined by a wood sliver, but also will increase the life of the blade.

CAUTION! Never clean the blade or the blade wheels with a brush or a scraper during sawmill operation.

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! The blade should be replaced every two hours of sawmill operation.

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

CAUTION! If the blade breaks during sawmill operation, push the EMERGENCY STOP button to stop the blade engine and wait 10 seconds before opening the blade housing cover.

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



1.4 Sawmill Maintenance

CAUTION! Reinstall the track wiper so that it lightly touches the track bar. If the wiper presses too firmly against the bar, it can cause the power feed to bind.

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

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.

1.5 Safety Instructions

IMPORTANT! The sawmill is intended for sawing wood only. The sawmill 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 sawmill 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 sawmill. 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 sawmill. The sawmill 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 sawmill. All Wood-Mizer sawmill 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 sawmill. 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 sawmill.



Keep sawmill And Area Around sawmill Clean



DANGER! Maintain a clean and clear path for all necessary movement around the sawmill 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 sawmill Before Operation



DANGER! Make sure all guards and covers are in place and secured before operating the sawmill. 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 sawmill. 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 sawmill operation.





WARNING! Consider all electrical circuits energized and dangerous.

WARNING! Disconnect and lock out power supply before servicing the sawmill! 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 sawmill. 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 sawmill 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 sawmill operation, push the EMERGENCY STOP button to stop the blade motor and wait 10 seconds before you open the blade housing cover.

CAUTION! The sawmill'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 LT15.

TABLE 1-1

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



	099221	CAUTION! Keep all persons a safe distance away from work area when operating the machine.
	086099	CAUTION! Hot elements, keep your distance!
Image: state of the	098176	CAUTION! Keep away from debarker blade!
096321	096321	Blade movement direction

TABLE 1-1



TABLE 1-1

	TABLE 1-1
S12004G	CAUTION! Always wear safety goggles when operating the sawmill!
S12005G	CAUTION! Always wear protective ear muffs when operating the sawmill!
501465	CAUTION! Always wear safety boots when operating the sawmill.
501467	Lubrication point
P11789/PL	Aligning the blade on the wheels



ΤA	BL	Ε	1-1

Type F(m) E(m) psi bar 275 1.07 32 1015-1088 70-75 375 1.14 32 1088-1160 75-80 2735 1.07 35 1160-1233 80-85	510643	Setting the blade tension indicator
CE	P85070	CE safety certification
ССС- ССС- АЯО4 09401	099401	Russian safety certification
3600 RPM 520097A	S20097A	3600 RPM - engine rotation direction

1.6 Blade Sizes

See Table 1-2.

Sawmill	Blade Length
LT15WB	4,47m
	TABLE 1-2

See The Blade Handbook for blade hook angle, tooth height, and tooth set specifications.

doc071918

1.7 Cutting Capacity

	Max. Diameter	Max. Length ¹
LT15 S3	91 cm	5.4 m
LT15 S2	91 cm	3.5 m
LT15 M2	91 cm	5.2 m
LT15 M3	91 cm	7.9 m
		TADLEA

See Table 1-3. The log size capacities of the LT15WB sawmills are listed below.

TABLE 1-3

¹ Each additional bed frame segment adds approximately 195 cm (6' 5") to the length capacity.

1.8 Engine/Motor Specifications

See Table 1-4. The power options available for the LT15 sawmill are listed below.

Engine/Motor Type	Manufacturer	Model No.	Specifications
E10 HP Electric Motor	Lincoln		Power: 10HP, 7.5KW
25HP Gasoline Engine	Kohler	CH740	Displacement: 725 ccm, Power J1940: 23,5HP Peak Torque: 53.1Nm Dry Weight: 43kg Oil Capacity: 1.9l
17HP Diesel Engine	Kohler	KDW702	Displacement: 686 ccm, Power J1940: 15.4HP, Peak Torque: 34Nm Dry Weight: 66kg Oil Capacity: 1.6l

TABLE 1-4

1.9 Noise Level

See Table 1-5. The average level of noise is given in the table below¹².

Sawmill	Noise Level
LT15E11	
LT15G25	78 dB (A)
LT15D17	96-103 dB (A)

TABLE 1-5

^{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. Value for associated uncertainty K=4dB.



1.10 Dust Extractor Specifications

See Table 1-1. Specifications of the dust extractors used on the resaw for each saw head are listed below.¹

Airflow	1200 m ³ /h 3937ft ³ /h
Inlet diameter	100 mm (5.9")
Motor power	1.5 kW
Number of sacks	1 pc
Sack capacity	0,25 m ³ (8.8 ft) ³
Weight	110 kg (242.5 lb)
Pressure drop	1,5 kPa (0.22 psi) ¹
Recommended conveying air velocity in the duct	20 m/s 65.6 ft/s

TABLE 1-1

¹ The pressure drop between the inlet of the capture device and the connection to the CADES should be maximum 1,5 kPa (for the nominal air flow rate). If the pressure drop exceeds 1.5 kPa the machine might not be compatible with conventional CADES.



IMPORTANT! The dust extractor hoses must be grounded or made with materials not accumulating electrostatic charge.



CAUTION! Always turn on the dust extractor before starting the machine



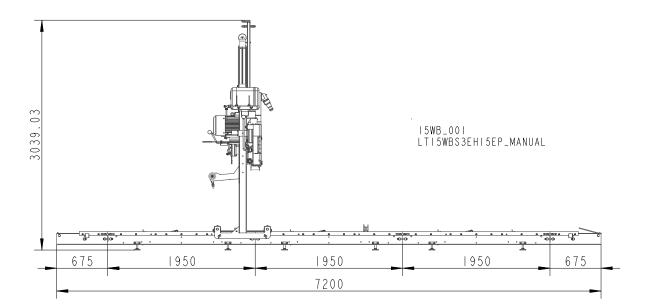
IMPORTANT! The total value of hand-arm vibration the operator may be exposed to does not exceed 2.5 m/s². The highest root mean square value of weighted acceleration to which the whole operator's body is subjected does not exceed 0.5 m/s^2 .

^{2.} The figures quoted are emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure of the workforce include the characteristics of the work room and the other sources of noise etc. i.e. the number of machines and other adjacent processes. Also the permissible exposure level can vary from country to country. This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.

^{1.} External chip and dust extraction equipment with fixed installations are dealt with in 12779:2016-04.

1.11 Overall Dimensions

See Figure 1-2. The overall dimensions of the LT15WB sawmills are shown below.



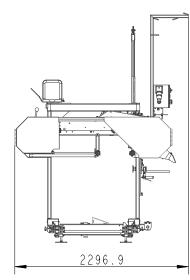


FIG. 1-1



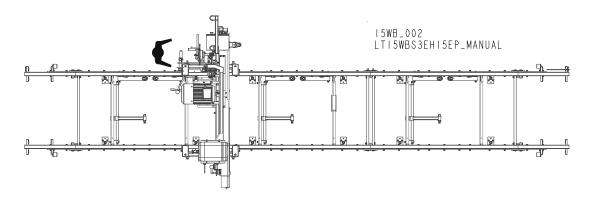


FIG. 1-2

1.12 Components

The major components of the Wood-Mizer LT15WBS3EH15 are shown below.

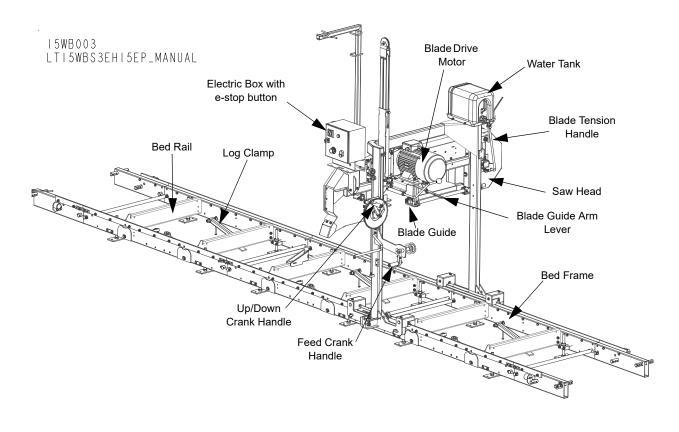
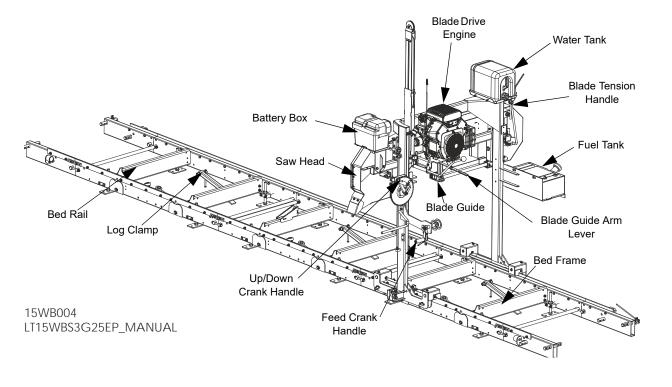


FIG. 1-3



The major components of the Wood-Mizer LT15WBS3G25 are shown below.





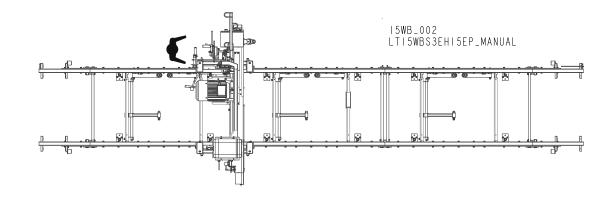
SECTION 2 SETUP & OPERATION

2.1. Sawmill Setup



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

- Set up the sawmill on firm, level ground and level the sawmill. Secure the sawmill to the ground to prevent moving during operation. A concrete foundation or pads (rated to support 31 T/m² at each sawmill foot position) and 16mm anchored bolts are recommended.
- ■Under roof, the sawmill should always be operated with the sawdust collection system.
- The sawmill can't be operated outdoor when it is raining/snowing and in case of rain/snow the sawmill must be stored under roof or indoor.
- ■The sawmill can be operated in temperature range from -15^o C to 40^o C only.
- The illumination at the operator's position should be at least 300lx¹.
- The sawmill 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 below.

3-Phase Volts	Fuse disconnect	Suggested Wire Size
400 VAC	16 A	2,5 mm ² to length of 15m



IMPORTANT! When starting the machine for the first time, check that main motor rotation direction is as indicated by the arrow located on

1.. The light source can not cause stroboscopic effect.

the motor body (fan guard). If the rotation direction is incorrect, invert the phases in the phase inverter in the power socket (electric box). Setting the phases in the phase inverter correctly will ensure correct rotation directions of all sawmill motors.



WARNING! In case of a blade or drive belt brake, wait until all rotating parts are completely stop. Failure to do so may result in serious injury.



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

2.2 Replacing The Blade



DANGER! Always disengage the blade and shut off the sawmill motor before changing the blade. Disconnect the power supply using the main switch. Failure to do so will result in serious injury.



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, uncoiling, carrying or changing a blade. Failure to do so may result in serious injury.

- **1.** Open both blade housing covers.
- 2. Turn the blade tension handle until the wheel is pulled in and the blade is loose in the blade housing.
- 3. Lift the blade out of the blade housing.
- **4.** Install the new blade.

When installing a blade, make sure the teeth are pointing the correct direction. The teeth should be pointing toward the operator side of the mill when you are looking at the blade below the blade guides.

- **5.** Position 1 1/4" wide blades on the wheels so the gullet is 1/8" (3.0 mm) out from the edge of the wheel.
- 6. Close the blade housing covers.
- 7. Use the tension handle to tension the blade correctly.



2.3 Tensioning The Blade

The blade tensioner is factory-set so proper blade tension is achieved when the rubber spring is compressed 3/16" (4.8 mm). An indicator bolt is provided to indicate when the rubber spring has been compressed properly. To tension the blade, turn the blade tension handle up until it locks in place.



WARNING! Use both hands to operate the blade tensioner handle. Failure to follow this may result in injury.

1. Use the scalloped disk to turn the tensioner shaft.

See Figure 2-1.

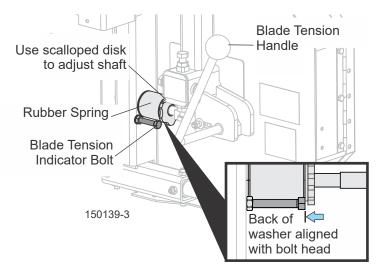


FIG. 2-1

- 2. Tension the blade.
- **3.** Recheck the alignment of the rubber spring washer with the indicator bolt head.
- 4. Check the blade tension occasionally when adjusting the cant control or while cutting.As the blade and belts heat up and stretch, the blade tension will change.
- **5.** Adjust the tensioner shaft as necessary to maintain proper blade tension.

2.4 Tracking The Blade

- 1. Make sure the blade housing covers are closed and all persons are clear of the blade.
- 2. Start the motor/engine for a moment until the blade positions itself on the wheels.



WARNING! Do not spin the blade wheels by hand. Spinning the blade wheels by hand may result in serious injury.

3. Turn off the motor/engine and check the position of the blade on the blade wheels.

See Figure 2-1. Position 1 1/4" wide blades so the gullet is 1/8" (3.0 mm) out from the edge of the blade wheel (±1/32 [.75 mm]).

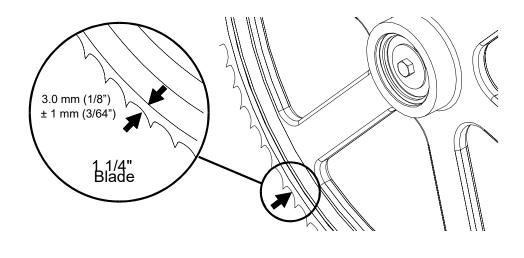


FIG. 2-1

See Figure 2-2. To adjust where the blade travels on the blade wheels, use the cant control bolt.

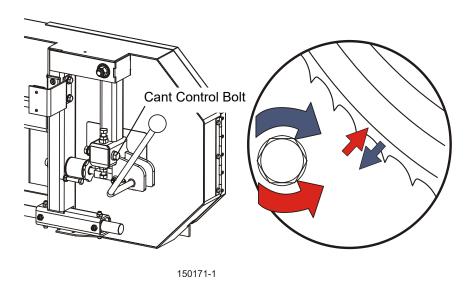


FIG. 2-2

If the blade is too far out, back the blade onto the wheel by turning the cant control counterclockwise. If the blade is too far in, turn the cant control clockwise until the gullet of the blade is the correct distance from the front edge of the wheel.

- **4.** Adjust the blade tension if necessary to compensate for any changes that may have occured while adjusting the cant control.
- **5.** Close the blade housing covers.

DANGER! Make sure all guards and covers are in place and



secured/closed before operating the sawmill. Failure to do so may result in serious injury.

IMPORTANT! After aligning the blade on the wheels, always double-check the blade guide spacing and location. (See <u>6.1</u> for more information.)

2.5 Starting The Motor

See the appropriate manual supplied with your specific motor configuration for starting and operating instructions.

IMPORTANT! When starting the machine for the first time, check that 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 sawmill motors.



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

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



WARNING! Always wear eye, ear, respiration, safety clothing and foot protection when operating the sawmill. Failure to do so may result in serious injury.

2.6 Loading, Turning, And Clamping Logs

To Load Logs

1. Move the cutting head to the front end of the frame.



CAUTION! Before loading a log, be sure the cutting head is moved far enough forward so the log does not hit it. Failure to do so may result in machine damage.

2. Adjust the log clamps all the way down and move them toward the loading side of the sawmill frame.



CAUTION! Be sure the log clamps are all the way down before loading a log onto the bed. Failure to do so may result in machine damage.

- 3. Raise the side supports on the sawmill bed to prevent the log from falling off the side of the bed.
- **4.** Position the log at the foot of the ramps.

- **5.** Use a cant hook to roll the log up the ramps and onto the sawmill bed. Position the log against the side supports.
- **6.** Remove the log ramps and set aside.



CAUTION! The saw head will hit the spring-loaded ramp stops when adjusted for low cuts. Remove the loading ramps before sawing to prevent damage to the saw head and/or blade guide arm.

If you did not purchase the optional loading ramps, use boards for ramps or use log loading equipment to load the log on the sawmill bed.

To Turn Logs

1. Use a cant hook to spin the log against the side supports until it is turned the way you want it for the first cut.

To Clamp Logs

1. Position the clamps against the log, far enough down so they are below your cuts on a given side of the log. Using the clamp handles move the log firmly against the side supports.

See Figure 2-3.

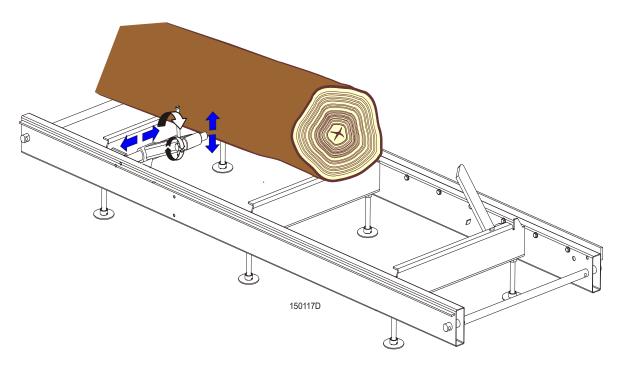


FIG. 2-3

2. Be sure to leave crank in the bottom position to avoid damage to the blade.



See Figure 2-4.

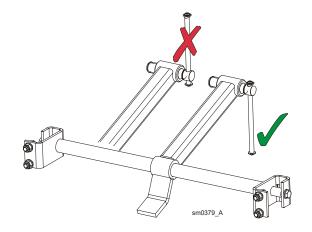


FIG. 2-4

3. Make sure the side supports are positioned low enough for the blade to pass over them. If they are not, back the clamps off slightly and push the side supports down until they are positioned below the height of your last cut on a given side of the log.

To Level A Tapered Log

Use shims or the optional wedge to raise either end of a tapered log, if desired.

Shim one end of the log until the heart of the log measures the same distance from the bed rails at each end of the log.

See Figure 2-5.

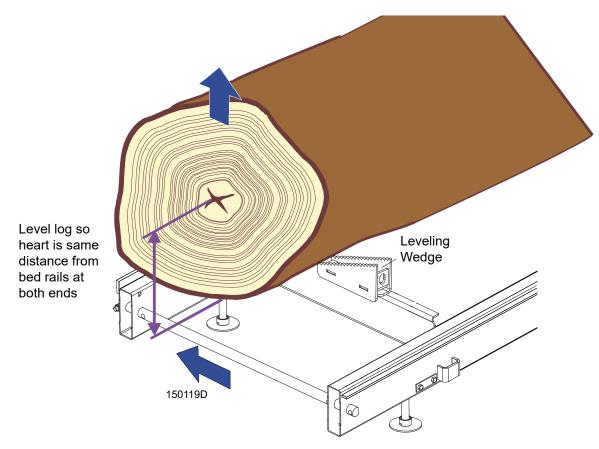


FIG. 2-5

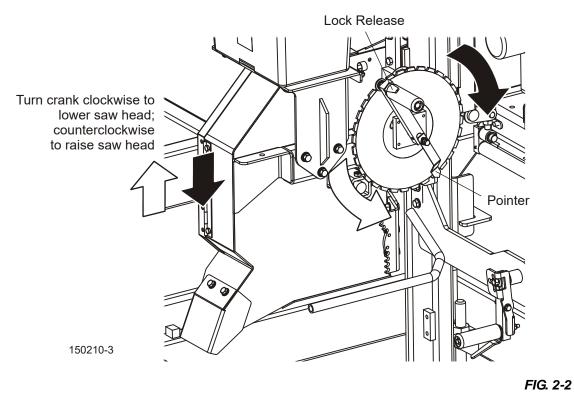
2.7 Up/Down Operation

- **1.** Install a blade, if needed, and check for correct blade tension. (<u>See Section 2.3</u>.)
- **2.** Set the cutting head to the desired height. (The blade height scale shows the height of the blade above the bed rails.)
- **3.** Use the up/down crank to raise or lower the cutting head.
- **4.** Press the handle lock and turn the crank clockwise to lower the saw head or counterclockwise to raise the saw head.

Each notch in the crank wheel will move the blade 1/16" (1.6mm). A complete revolution of the wheel is 4" (100mm) (2" (50mm) for gas engine options only).

- 5. Release the handle lock to lock the saw head in place.
- 6. Use the pointer and the round up/down blade height scale for quick reference when cutting.

See Figure 2-2.





CAUTION! DO NOT try to force the carriage above the 27" (68 cm) mark or below the 1" (2.54 cm) mark. Damage to the up/down system may result.

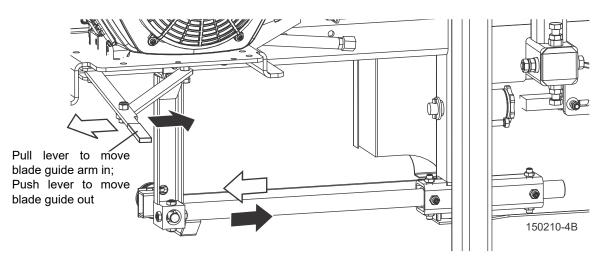
2.8 Blade Guide Arm Operation

1. Estimate the maximum width of the log.

The outer blade guide should be adjusted to clear the widest section of the log by less than 1" (25.4 mm).

- 2. Use the blade guide arm lever to adjust the outer blade guide as necessary.
- 3. Pull the lever toward you to move the arm in; push the lever away from you to move the arm out.

See Figure 2-6.

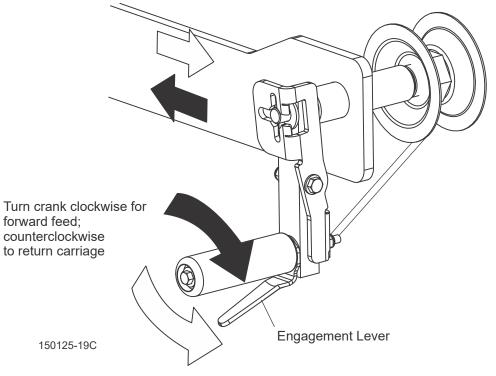




2.9 Feed Operation

1. Use the feed crank handle to move the saw carriage forward.

See Figure 2-3. Squeeze the engagement lever and rotate the feed crank clockwise.





HINT: To get a straight cut in the first part of the board, feed the blade into the log at a slow speed. This stops the blade from flexing and dipping up or down. Use a slow speed until the whole width of the blade has entered the cut. Then increase the feed rate as desired. Maximum feed rate varies



with width and hardness of the wood. Over-feeding results in engine and blade wear, and also produces a wavy cut.

2. Stop the carriage at the end of the cut. Raise the clutch lever up to stop the blade and drop the engine to idle. Remove the board from the top of the log. Always disengage the blade before returning the carriage for the next cut.



CAUTION! Be sure to stop the blade when returning the carriage. This will not only prevent the blade from being pulled off and ruined by a wood sliver, but also will increase the life of the blade.

- **3.** Make sure that the blade does not catch on the end of the log. Raise the carriage slightly to make sure the blade clears the log when returned.
- **4.** To move the carriage backward, squeeze the engagement lever and rotate the feed crank counterclockwise or pull the saw head back using the carriage push/pull handle .

HINT: Try to stop the blade while the heel of the blade is still on the log. Then bring the carriage back without adjusting the blade up. This lets you keep the blade at the current height setting so you can make the next blade height adjustment more quickly.

2.10 Clutch Operation

- 1. Clear any loose objects from the area of the blade, motor, and drive belt.
- 2. Make sure the clamps and side supports are adjusted below the level of your first few cuts.
- 3. Start the engine as instructed in the option manual.



DANGER! Keep all persons out of the path of moving equipment and logs when operating sawmill or loading and turning logs. Failure to follow this will result in serious injury.

Be sure the blade housing and pulley covers are in place and secure before starting the engine or motor. Use the rubber latches to fasten the blade housing covers shut.

See Figure 2-4. The clutch lever is located next to the engine.

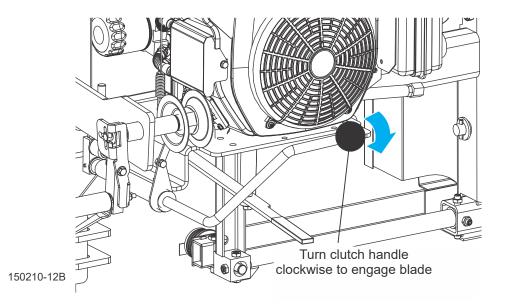


FIG. 2-4

- **4.** To engage the blade, pull the clutch lever clockwise until it locks in the down position. This engages the drive mechanism and increases the engine speed to full throttle.
- **5.** To disengage the blade, raise the clutch lever to the up position. This disengages the drive belt and returns the engine to idle.

2.11 Cutting The Log

The following steps guide you through normal operation of the Wood-Mizer sawmill.

- **1.** Once the log is placed where you want it and clamped firmly, position the blade close to the end of the log.
- Use the blade height scale to determine where to make your first cut (<u>See Section 2.13</u>). The blade height scale will help you to do this. Set the blade to the desired height with the up/down buttons. Make sure that the blade will clear all side supports and clamps. Adjust the outer blade guide to clear the widest section of the log by moving the blade guide arm handle. (<u>See Section 2.8</u>.)
- **3.** Make sure all covers and guards are in place and secured. Start the engine.
- 4. Start the water lube if necessary to prevent sap buildup on the blade. See Section 2.14.
- 5. Feed the blade into the log slowly. (<u>See Section 3.10</u>.) Once the blade completely enters the log, increase the feed rate as desired. Always try to cut at the fastest speed you can while keeping an accurate cut. Cutting too slowly will waste blade life and lower production!
- **6.** As you get to the end of the log, slow down the feed rate. When the teeth exit the end of the log, release the safety button on the control box. Remove the slab that you have just cut from the log.



- 8. Repeat until the first side of the log is cut as desired. Set aside the usable flitches (boards with bark on one or both sides). You can edge them on the mill later.
- **9.** Remove the leveling wedge if it was used. Release the clamps and turn the log 90 or 180 degrees. Make sure the flat on the log is placed flat against side supports if turned 90 degrees. Make sure it is placed on bed rails if turned 180 degrees. If the log was turned 90 degrees and you are using the wedge to compensate for taper in the log, use the wedge again to adjust the heart of the log parallel with the bed.
- **10.** Repeat the steps used to cut the first side of the log until the log is square. Cut boards from the remaining cant by adjusting the blade height for the thickness of boards that you want.

Example: Remember that the blade cuts a 1/16 - 1/8" (1.6 - 3.2 mm) wide kerf. If you want 1" (25 mm) thick boards, lower the carriage 1 1/16 - 1 1/8" (27 - 29 mm) for each board.

2.12 Edging

The following steps guide you through edging boards on the Wood-Mizer sawmill.

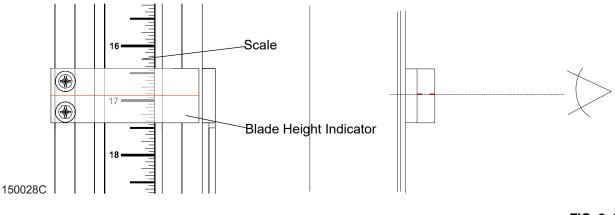
- **1.** Raise the side supports to 1/2 the height of the flitches, or the boards that need to be edged.
- **2.** Stack the flitches on edge against the side supports.
- **3.** Clamp the flitches against the side supports halfway up the flitch height. (Wider flitches should be placed to the clamp side. When they are edged, flip them over to edge the second side without disturbing the other flitches or without having to pull them from the middle of the stack.)
- **4.** Adjust the blade height to edge a few of the widest boards.
- 5. Loosen the clamps and turn the edged boards over to edge the other side.
- 6. Repeat steps 2-4.
- **7.** Loosen the clamps and remove the boards that have good clean edges on both sides. Clamp the remaining flitches and repeat steps 2-5.

2.13 Blade Height Scale

See Figure 2-7. The blade height scale is mounted on the vertical mast. It includes:

• a blade height indicator

centimeter scale (or quarter inch scale).





Blade Height Indicator

The blade height indicator has two horizontal, red lines on both sides. Readings should be taken with eyes level with the indicator, when the two red lines are in line. This will allow to avoid the parallax error (different scale readings depending on the angle of vision).

The Scale

The horizontal red line on the blade height indicator shows how many centimeters the bottom of the blade is above the bed of the mill. If you know the height of your blade at each cut, you can determine the thickness of lumber you are sawing.

Example: You want to cut 25 mm random width boards from a log. Position the blade for the first cut. Move the carriage to an even measurement on the scale. Make a trim cut. Return the carriage for the second cut and lower it 29 mm below the original measurement. (The extra 3 mm allows for saw kerf and shrinkage of the lumber.)

The yellow area on the scale identifies where the blade could encounter a side support or log clamp. Check that these items are below the blade level before sawing.

The Quarter Scale

See Table 2-1. The quarter scale contains four sets of marks. Each set represents a specific lumber thickness. Saw kerf and shrinkage allowance are included, but actual board thickness will vary slightly depending on blade thickness and tooth set.

To choose which scale to use, determine what finished thickness you want to end up with. The Grade Hardwood Quarter Scale provides thicker finished boards usually required by commercial buyers. The Standard Quarter Scale allows for kerf and shrinkage of finished boards suitable for most custom applications. Always check with your customer before you saw to determine what actual finished thickness is required.

Standard Quarter Scale			
Scale	Actual Board Thickness		
4/4	1" (25 mm)		
5/4	1 1/4" (32 mm)		
6/4	1 1/2" (38 mm)		
8/4	2" (51 mm)		

Grade Hardwood Quarter Scale			
Scale	Actual Board Thickness		
4/4	1 1/8" (29 mm)		
5/4	1 3/8" (35 mm)		
6/4	1 5/8" (41 mm)		
8/4	2 1/8" (54 mm)		

TABLE 2-1

To use the quarter scale, look at the blade height indicator.Example: You want to cut 1" (25 mm) (4/4) random width boards from a log. Position the blade for the first cut. Make a trim cut. Return the carriage for the second cut. Now, instead of having to measure down 1 1/8" (29 mm) on the inch scale, you can simply lower the blade so the indicator is aligned with the next 4/4 mark on the quarter scale. Turn the log 90 degrees and repeat.

2.14 Water Lube Operation

The optional 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.

See Figure 2-5. Install the water bottle bracket at the top of the saw head mast. **NOTE:** The D17/D19/G25 water tank tray also includes the fuel tank, but mounts to the mast in the same manner.

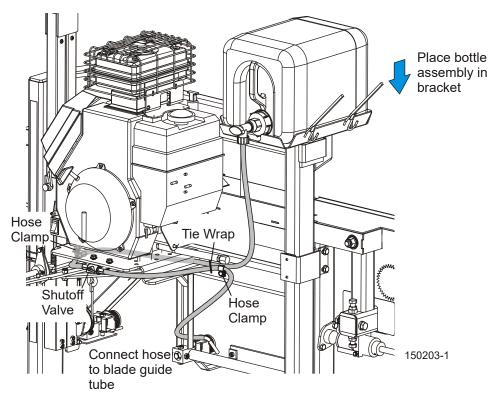


FIG. 2-5

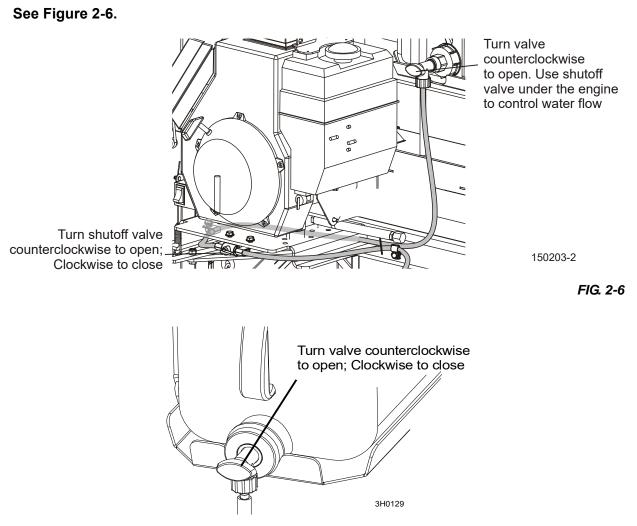


FIG. 2-6

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.

Before removing the blade, engage the blade. Let the blade spin with water running on it for about 15 seconds to clean the blade of sap buildup. Wipe the blade dry with a rag before storing or sharpening.

For further lubrication benefits, add one 12oz. (0.35L) bottle of Wood-Mizer Lube Additive to 5 gallons (18.9 liters) of water. Wood-Mizer Lube Additive enables some difficult timbers to be cut by significantly reducing resin buildup on the blade, heat buildup, wavy cuts, and blade noise. This biodegradable and environmentally-friendly pre-mix includes a water softener additive to work with hard water.



WARNING! Use ONLY water and Wood-Mizer Lube Additive with the water lube accessory. Never use flammable fuels or liquids such as diesel fuel. If these types of liquids are necessary to clean the blade, remove it and clean with a rag. Failure to follow this can damage the equipment and may result in serious injury or death.

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



2.15 Transporting the Sawmill

The assembled sawmill can be manually loaded into and transported in an appropriately equipped pickup truck:



WARNING! A minimum of three people (four recommended) is required to safely load or unload the sawmill from a pickup truck. Failure to follow this may result in serious injury or death.

The sawmill weighs 1100 lbs. (500Kg). The center of gravity of the carriage is off-center toward the operator side. The higher the saw head from the bed frame, the more easily the mill can be tipped toward the operator side.



WARNING! Ensure the carriage lock pins are properly engaged. Failure to follow this may result in serious injury or death.

To prevent the carriage from unexpectedly sliding on the rails, the pin at the end of the sawmill **must engage the hole in the bed frame**. The other pin must be left in the operation position.

1. Remove the leg assemblies or adjust them above the bottom of the bed frame.

See Figure 2-7. <u>See Section 3.5</u> for a detailed description of carriage lock pin operation.

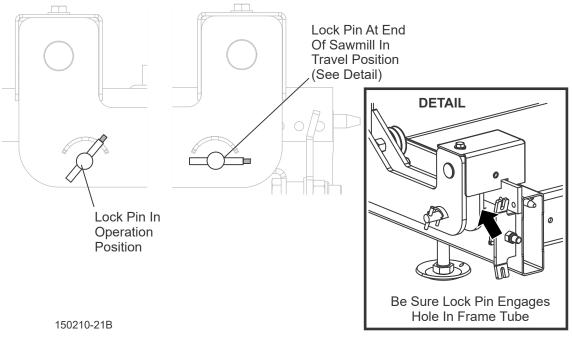


FIG. 2-7

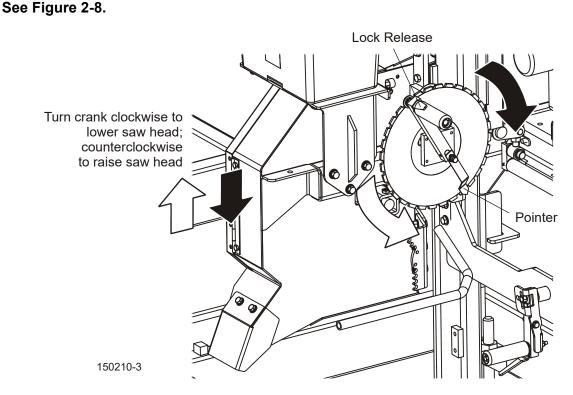


FIG. 2-8



CAUTION! Adjust the saw head up just far enough so it will clear the sides of your truck bed when loaded.

NOTE: For most pickup trucks, a minimum of 18" (460mm) between the blade and bed frame cross members should be adequate. Do not adjust the saw head so high that the sawmill will tip easily while being loaded.

- 2. Move the carriage to one end of the mill.
- 3. Rotate and release the lock pin closest to the end of the mill.



CAUTION! Be sure the lock pin engages the hole in the bed frame to secure the saw carriage in place. The other lock pin remains in the operation position.

- 4. Remove the tailgate from your truck to eliminate the possibility of damage and/or injury,
- 5. Position the bed of the truck at the end of the frame **opposite the carriage**.



WARNING! Keep all persons out of the area between the frame rails while loading and unloading the sawmill. Failure to follow this may result in serious injury or death.



WARNING! Do not lift the sawmill onto the truck using ropes, cables, or chains, etc.; the sawmill can easily rotate and tip over when lifted. Failure to follow this may result in serious injury or death.

6. Position two people (for lifting) about two feet inward from the end of the frame.



7. As they lift the frame, the third person should back the truck slowly under the sawmill until the end of the frame is resting firmly on the bed of the truck.

IMPORTANT! The operator side is heavier than the opposite side.

- 8. Position two people on either side of the saw head to hold the sawhead while a third person pulls and rotates (releases) the lock pin from the locked position to the operation position.
- 9. Push the saw carriage up the bed frame to the opposite side of the bed frame (on the truck).

NOTE: More people may be required to help push as the saw head gets more difficult to push up the incline.

10. Engage the lock pin at the end of the sawmill to secure the carriage.



CAUTION! Be sure the lock pin engages the hole in the bed frame to secure the saw carriage in place. The other lock pin remains in the operation position.

- **11.** Use three or more people to lift the end of the mill still on the ground and slide the sawmill into the truck bed.
- **12.** Secure the sawmill to the truck bed to prevent the sawmill from shifting while it is being transported. If the sawmill extends beyond the truck bed, attach a red warning flag to the end of the sawmill.

SECTION 3 MAINTENANCE

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

See the <u>Maintenance chart</u> located after this section for a complete list of maintenance procedures and intervals. Keep a log of machine maintenance by recording in the machine hours and the date you perform each procedure.

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

Be sure to refer to option and engine manuals for other maintenance procedures.

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 sawmill 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	400 hours	
Blade Guide Rollers	1000 hours	
Drive Belt	1250 hours	

TABLE 3-1

3.2 Blade Guides



WARNING! Turn the key switch to the OFF (#0) position and remove the key prior to performing service near moving parts such as blades, pulleys, motors, belts, or chains. Failure to follow this may result in serious injury or death.

1. Check the rollers for performance and wear every blade change. Make sure the rollers are clean and spinning freely. If not, replace them. Replace any rollers which have worn smooth or have become cone shaped.

3.3 Sawdust Removal



WARNING! Turn the key switch to the OFF (#0) position and remove the key prior to performing service near moving parts such as blades, pulleys, motors, belts, or chains. Failure to follow this may result in serious injury or death.

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



WARNING! Keep clear of exiting sawdust. Keep hands, feet and any other objects away from the sawdust chute when operating sawmill. Failure to follow this may result in serious injury.



WARNING! Ensure the steel fingers inside the sawdust chute are in place before operating the sawmill. The steel fingers have been designed to help prevent a broken blade or some other object from becoming a projectile and exiting the sawdust chute. Failure to have these fingers in place may result in serious injury.

Remove sawdust buildup from rope feed pulleys and up/down chain sprockets as necessary.

3.4 Carriage Track, Wiper & Scrapers



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the key switch to the OFF (#0) position and remove the key. Failure to follow this may result in serious injury or death.

Properly maintaining the sawmill carriage track is critical in preventing corrosion that can cause pitting and scaling on the rail surfaces. Pitted and scaled surfaces can, in turn, cause rough cuts or jerky feed movement.

1. Clean track rails to remove any sawdust and sap buildup every eight hours of operation. $\frac{8}{2}$

Use a light-grade sandpaper or emery cloth to sand off any rust or other adhering particles from the rails.



CAUTION! Keep track rails free of rust. Formation of rust on the track rail in the areas where the cam bearings roll can cause rapid deterioration of the track rail's surface.

Lubricate the rails by wiping them with Dexron III ATF transmission fluid. Lubrication will help protect the rails from corrosive elements such as acid rain and/or moisture from nearby bodies of saltwater (if applicable). This lubrication is essential to maintain the integrity of the track rails and track rollers and to achieve long service life.

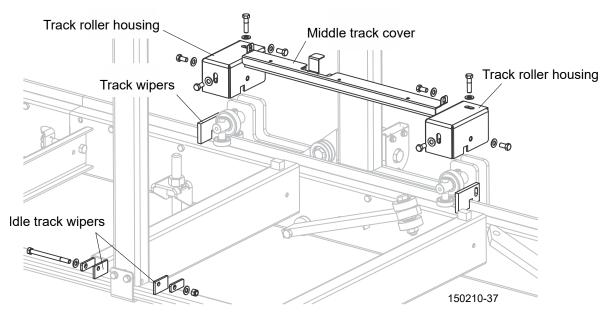
2. Remove sawdust from the track roller housings and lubricate the felt track wiper every twenty-five hours of operation.

Remove the track roller housing covers and brush any sawdust buildup from the housings.

Clean and lubricate the felt track wipers. Unbolt the middle track cover and idle track wipers, remove from the sawmill and remove any sawdust buildup. Soak the felt wiper with Dexron III transmission fluid.

Check the track scrapers as needed. Make sure the scrapers fit firmly against the rail. If a track scraper needs to be adjusted, loosen the screw, push the scraper downward until it fits firmly against the rail, and retighten the screw.

See Figure 3-1.



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FIG. 3-1
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3.5 Vertical Mast Rails



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the key switch to the OFF (#0) position and remove the key. Failure to follow this may result in serious injury or death.

Clean the vertical mast rails every 50 hours of operation.

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

3.6 Miscellaneous



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the key switch to the OFF (#0) position and remove the key. Failure to follow this may result in serious injury or death.

1. Oil all chains with Dexron III ATF every fifty hours of operation. 50



CAUTION! Do not use chain lube. It causes sawdust buildup in chain links.

- **2.** Grease the clamps and side support pivots with a NLGI No. 2 grade lithium grease every fifty hours of operation.
 - 3. Check the mill alignment every setup (See Section SECTION 7).



 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.

3.7 Blade Wheel Belts



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the key switch to the OFF (#0) position and remove the key. Failure to follow this may result in serious injury or death.

Rotate the blade wheel belts and check them for wear. Rotating the belts every 50 hours will provide longer belt life. Replace belts as necessary. Use only B57 belts supplied by Wood-Mizer.

3.8 Drive Belt Adjustment



WARNING! Disconnect and lockout power before performing any service to the electrical system. For battery-powered equipment, disconnect the negative battery terminal cable.Failure to follow this may result in injury and/or electrical system damage.



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the key switch to the OFF (#0) position and remove the key. Failure to follow this may result in serious injury or death.



WARNING! Do not adjust the engine drive belts or belt support bracket with the engine running. Failure to follow this may result in serious injury or death.

See Table 3-2. See the table below for drive belt tension specifications for your model sawmill. Measure the belt tension with a gauge. **NOTE:** Wood-Mizer offers a belt tension gauge (Part No. 016309) that will let you accurately measure the belt tension.

	New Belt Installation/New Sawmill Operation			Subsequent Adjustment			
Engine/ Motor	Deflection Inches (mm)	Installation Force Ibs. (kg)	Check After First	Acceptable Force Ibs. (kg)	Then Check Every	Deflection Inches (mm)	Force Ibs. (kg)
ALL	1/2" (13mm)	14 lbs. (6.35kg)	20 hrs	14 lbs. (6.35kg)	50 hrs	1/2" (13mm)	14 lbs. (6.35kg)

TABLE 3-2

ADJUST THE DRIVE BELT TENSION

1. Loosen the drive belt jam and hex nuts. Turn the jam nut counterclockwise (as viewed from the top) to tighten the belt.

See Figure 3-2.

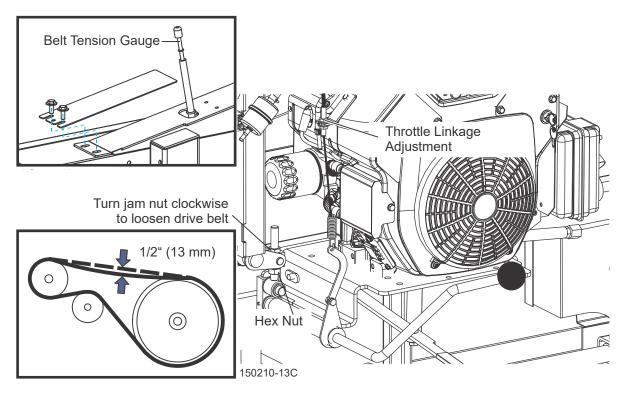


FIG. 3-2

2. GAS OPTION ONLY: After tensioning the drive belt, check the throttle linkage and adjust if necessary.

NOTE: With the clutch handle engaged, the throttle linkage should move the throttle lever to full speed. To adjust, loosen the throttle linkage adjustment screw and slide the throttle linkage down. Retighten the screw.

AR Periodically check the drive belt for wear. Replace any damaged or worn belts as needed.

ADJUST THE DRIVE BELT SUPPORT

The drive belt support is designed to extend belt life. The bracket should be adjusted to NOT touch the drive belt when the clutch handle is engaged (down position), AND to hold the drive belt away from the engine pulley when the clutch handle is disengaged (up position).

See Figure 3-3.

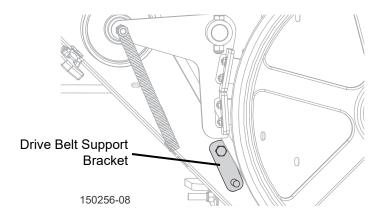


FIG. 3-3



Adjust the drive belt support as needed.

- **1.** Loosen the adjustment bolt.
- 2. Position the bracket so that the prong is close to, but **does not touch**, the drive belt with the clutch handle engaged.
- **3.** Retighten the adjustment bolts 25-27 pound feet (34-37 newton meters).



CAUTION! Do not over-tighten the drive belt. Damage to the engine may result.

3.9 Up/Down System



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the key switch to the OFF (#0) position and remove the key. Failure to follow this may result in serious injury or death.



ADJUST THE UP/DOWN CHAIN TENSION AS NEEDED.

1. Measure chain tension with the head all the way to the top of the vertical mast.



WARNING! Always secure the saw head with a chain with at least 1000lbs. working load capacity before adjusting the up/down chain. The cutting head may fall, causing severe injury or death.

- 2. Locate the chain adjusting bolt at the bottom of the mast.
- **3.** Loosen the nut on the sprocket bolt and move the sprocket down until there is about 1" (2.5 cm) total deflection in the center of the chain with a 5 lb. (2.3 Kg) deflection force.



A chain tension adjustment bracket/bolt is provided on the sprocket assembly. Loosen the jam nut and tighten the adjustment bolt to pull the sprocket down and tension the chain. Retighten the jam nut and sprocket nut after tensioning the chain.

See Figure 3-4.

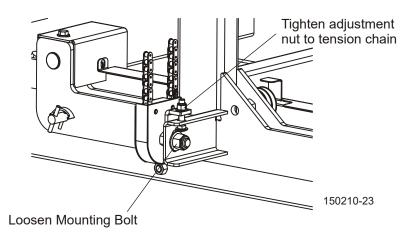
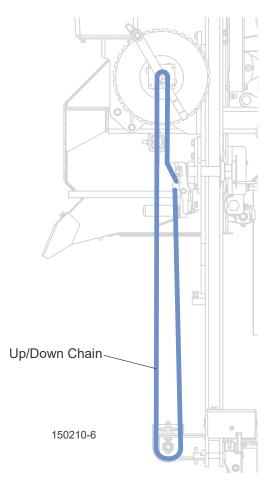


FIG. 3-4

Check the up/down lift assist cables daily or between shifts for cuts, cracked coating, fraying, defective cables, or other hazards. Replace as necessary.

Failure to follow this may result in serious injury or death.



See Figure 3-5. Refer to the following diagram for up/down chain routing instructions.

FIG. 3-5

See Figure 3-6. Lubricate the up/down crank handle bearings every 200 hours with a NLGI No. 2 grade lithium grease. Apply the grease to the fitting on the handle bracket tube.

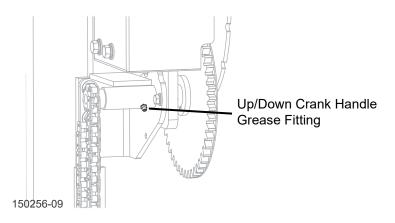


FIG. 3-6



3.10 Maintenance chart

MAINTENANCE LOG (Check <i>Engine</i> And <i>Option Manuals</i> for additional maintenance procedures)	MANUAL REFERENCE	MAINTENANCE INTERVAL
Clean sawdust from, battery box lid & track cover	See Section 3.3	8 hours
Clean and lubricate track	See Section 3.4	8 hours
Inspect lift assist cables	See Section 3.9	8 hours
Check blade guide roller wear	See Section 3.2	8 hours Every blade change
Remove excess sawdust from blade wheel housings and sawdust chute	See Section 3.3	8 hours Every blade change
Inspect fingers inside sawdust chute	See Section 3.3	8 hours Every blade change
Remove sawdust from upper track roller housings	See Section 3.4	25 hours
Clean & lube mast rails	See Section 3.5	50 hours
Grease pivot points and bearings/oil chains	See Section 3.6	50 hours
Rotate drive/idle blade wheel belts/check for wear	See Section 3.7	50 hours
Check belt tensions	See Section 3.8	50 hours
Check up/down chain tension	See Section 3.9	50 hours
Lubricate Up/Down Crank Handle Bearings	See Section 3.9	200 hours

SECTION 4 TROUBLESHOOTING GUIDE

4.1 Sawing Problems



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the key switch to the OFF (#0) position and remove the key. Failure to follow this may result in serious injury or death.

PROBLEM	CAUSE	SOLUTION
Blades Dull Quickly	Dirty logs	Clean or debark logs, especially on entry side of the cut
	When grinding teeth, heating too much and causing teeth to soften	Grind just enough metal to restore sharpness to the teeth. Use water/coolant while sharpening blade
	Poor sharpening techniques	Make sure the tip is being sharpened completely: Read the instructions with your blade sharpening equipment carefully
Blades Break Prematurely	Poor sharpening techniques	Read the instructions with your blade sharpening equipment carefully
	Rubber belts on blade wheels worn to a point that blade con- tacts metal pulley - look for shiny spots on edge of wheels	Change blade wheel belts (B-57)
	Tension too tight	Tension blade to recommended speci- fications
Blade Does Not Track Right on Drive Wheel	Cant adjustment is incorrect	Readjust
Blade Guides Do Not Spin While Cutting	Frozen bearings	Replace bearings
Drive Belts Wear Prematurely or Jump	Engine/motor and drive pul- leys out of alignment	Align pulleys



PROBLEM	CAUSE	SOLUTION
Boards Thick Or Thin On Ends Or Middle Of Board.	Stress in log which causes log to not lay flat on the bed.	After log has been squared, take equal cuts off opposing sides. Take a board off the top. Turn the log 180 degrees. Take a board off. Repeat, keeping the heart in the middle of the cant, and making it your last cut.
	Set in teeth.	Resharpen and reset blade.
	Bed rails misaligned.	Realign sawmill.
Height Adjustment Jumps or Stutters When Moving Up or Down.	Up/down chain improperly adjusted.	Adjust up/down chain.
	Vertical wear pads are too tight.	Adjust pads.
Lumber Is Not Square	Vertical side supports not square to bed	Adjust side supports.
	Blade not parallel to bed rails	Adjust bed rails parallel to blade.
	Sawdust or bark between cant and bed rails	Remove particles
	Tooth set problems	Resharpen and reset blade
Sawdust Builds Up On Track	Excessive oiling	Do not oil track
	Track wipers worn	Adjust wipers to firmly contact track
	Track is sticky	Clean track with solvent and apply sil- icone spray
Wavy Cuts	Excessive feed	Slow feed rate
	Improperly sharpened blade (This will be the problem 99% of the time!)	Resharpen blade, following the sharp- ener's instructions carefully
	Blade guides improperly adjusted	Adjust blade guides.
	Sap buildup on blade	Use Water Lube.
	Tooth set problem	Resharpen and reset blade

SECTION 5 SAWMILL ALIGNMENT

Two alignment procedures are available to realign the sawmill if necessary. The Routine Alignment instructions should be performed as necessary to solve sawing problems not related to blade performance. The Complete Alignment procedure should be performed approximately every 1500 hours of operation (sooner if you regularly transport the sawmill over rough terrain).

5.1 Routine Alignment Procedure

Level the frame and adjust the saw head as described in Section 3.

Blade Installation

- 1. Remove the blade and check the blade wheel belts. Remove any sawdust buildup from the surface of the belts. Replace worn belts if they do not keep the blade from contacting the blade wheel.
- **2.** Install a clean blade and apply the appropriate tension (<u>See Section 4.5</u>).
- 3. Adjust the idle-side cant control to track the blade (<u>See Section 4.6</u>).
- 4. Close the blade housing cover and make sure all persons are clear of the saw head.
- 5. Start the engine.
- 6. Engage the blade, rotating the blade until the blade positions itself on the wheels.



WARNING! Do not spin the blade wheels by hand. Spinning the blade wheels by hand may result in serious injury.

7. Disengage the blade. Turn the engine off.

Saw Head Tilt

As the blade enters a wide log or cant, the outside of the saw head will drop down slightly. To compensate for the drop, the saw head is adjusted 1/16" (1.5 mm) higher at the outside.

- **1.** Move the saw carriage so the blade is positioned over a bed rail. Adjust the blade guide arm to 1/2" (15 mm) from full open.
- **2.** Raise the saw head so the bottom of the blade measures 14 3/4" (375 mm) from the top surface of the bed rail near the inner blade guide assembly.
- **3.** Measure from the blade to the bed rail near the outer blade guide assembly. This measurement should be 1/16" (1.5 mm) higher than the inner measurement or 14 13/16" (376.5 mm).

See Figure 5-1. Turn the saw head tilt adjustment nut clockwise to raise the outside of the sawhead. Turn the nut counterclockwise to lower the outside of the saw head. After the saw head is



adjusted parallel to the bed rail, check the space between the uppermost mast bearing and mast rail. Adjust as necessary so the space is 1/32" - 1/16" (0.8 - 1.6mm).

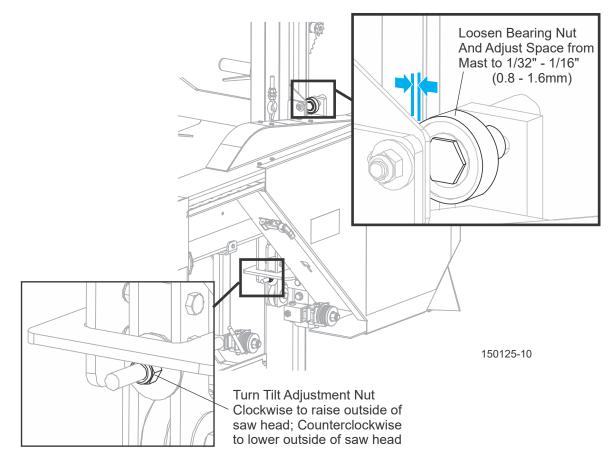


FIG. 5-1

Blade Guide Arm Alignment

The blade guide arm moves the outer blade guide in and out. If the arm becomes loose, the blade guide will not deflect the blade properly, causing inaccurate cuts. A loose blade guide arm can also cause blade vibration.

1. Adjust the blade guide arm out to 1/2" (13 mm) from fully open.

See Figure 5-2. Use the inside top and bottom screws to adjust the arm up until the slide pad touches the saw head brace tube. Tighten the jam nuts.

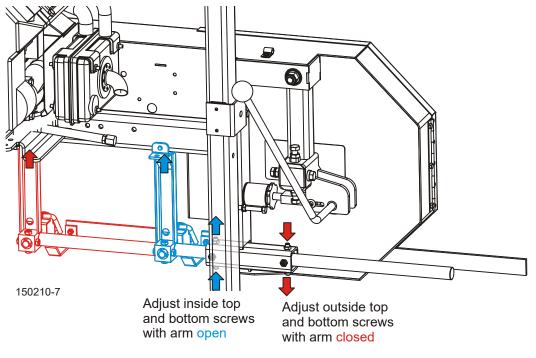
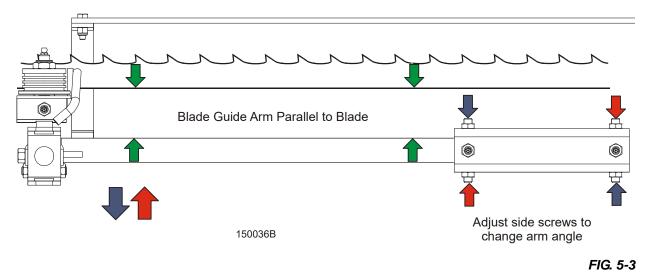


FIG. 5-2

- **2.** Adjust the blade guide arm in all the way toward the other blade guide.
- **3.** Use the outside top and bottom screws to adjust the arm up until the slide pad touches the saw head brace tube. Tighten the jam nuts.

NOTE: When adjusting the blade guide arm screws, be careful not to tighten the screws too much or put the arm in a bind. Operate the blade guide arm to ensure the arm moves easily in and out.

See Figure 5-3. With the blade guide arm still all the way in toward the other blade guide, tighten all the side screws until they touch the arm. Back the screws off 1/4 turn and tighten the jam nuts.



- 4. Measure the distance between the blade guide arm and back edge of the blade. Adjust the appropriate side screws on the blade guide arm housing so the arm is measures the same distance from the blade at both ends of the arm.
- **5.** To move the blade guide end of the arm toward the front of the sawmill, loosen jam nuts on the front inside screw and the rear outside screw. Turn the screws counterclockwise one full turn and tighten the jam nuts. Loosen the jam nuts on the front outside screw and the rear inside screw. Turn the screws clockwise until they touch the arm, back off 1/4" turn, and tighten the jam nuts.
- 6. To move the blade guide end of the arm toward the rear of the sawmill, loosen jam nuts on the front outside screw and the rear inside screw. Turn the screws counterclockwise one full turn and tighten the jam nuts. Loosen the jam nuts on the front inside screw and the rear outside screw. Turn the screws clockwise until they touch the arm, back off 1/4" turn, and tighten the jam nuts.

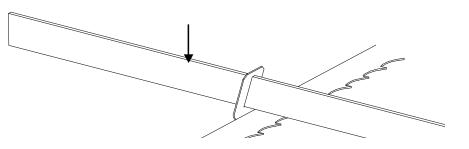
Blade Guide Vertical Tilt Alignment

The blade guides should be adjusted properly in the vertical plane. If the blade guides are tilted vertically, the blade will try to travel in the tilted direction.

A Blade Guide Alignment Tool (BGAT) is provided to help you measure the vertical tilt of the blade.

- **1.** Open the adjustable blade guide arm 1/2" (13 mm) from full open.
- 2. Clip the alignment tool on the blade. Position the tool close to the outer blade guide assembly. Be sure the tool does not rest on a tooth or burr, and is lying flat against the bottom of the blade.

See Figure 5-4.



- **3.** Move the carriage so that the front end of the tool is positioned above the bed rail. Measure the distance from the bed rail to the bottom edge of the tool.
- **4.** Move the carriage so that the back end of the tool is positioned above the bed rail. Measure the distance from the bed rail to the bottom edge of the tool.
- **5.** If the measurement from the tool to the bed rail is not equal within 1/32" (.75 mm), adjust the vertical tilt of the outer blade guide roller.
- 6. Loosen one set screw at the side of the blade guide assembly.

See Figure 5-5. Loosen the jam nuts on the top and bottom vertical tilt adjustment screws. To tilt the roller up, loosen the bottom screw and tighten top screw. To tilt the roller down, loosen the top screw and tighten the bottom screw. Tighten the jam nuts and recheck the tilt of the blade.

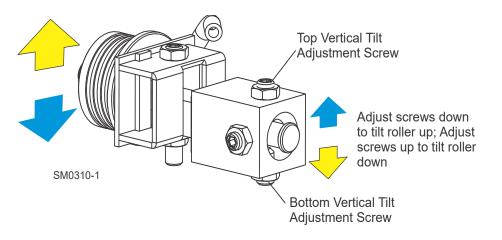


FIG. 5-5

7. Move the blade guide alignment tool close to the inner blade guide roller assembly and repeat the above steps. Adjust the vertical tilt of the inner blade guide if necessary.

Blade Guide Horizontal Tilt Adjustment

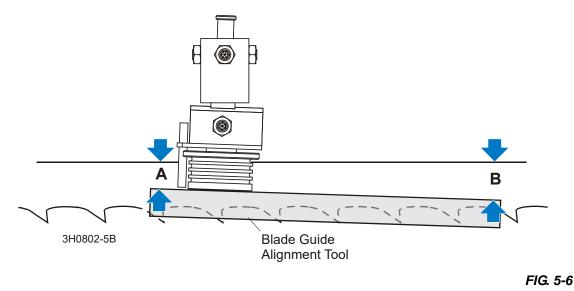
If the blade guides are tilted in the wrong direction horizontally, the back of the blade may contact the flange as the roller is spinning down, causing it to push the blade away from the guide roller.

8. Remove the blade guide alignment tool from the blade and adjust the blade guide arm halfway in.



9. Remove the clip from the blade guide alignment tool. Place the tool against the face of the outer blade guide roller.

See Figure 5-6.



- **10.** Measure between the back edge of the blade and the tool at the end closest to the inner blade guide ("B").
- **11.** Measure between the back edge of the blade and the other end of the tool ("A").

The roller should be tilted slightly to the left ('A' 1/8" [3 mm] less than 'B' ±1/8" [3 mm]).

See Figure 5-7. Loosen the jam nuts on the horizontal tilt adjustment screws. To tilt the roller left, loosen the right screw and tighten left screw. To tilt the roller right, loosen the left screw and tighten the right screw. Tighten the jam nuts and recheck the tilt of the blade.

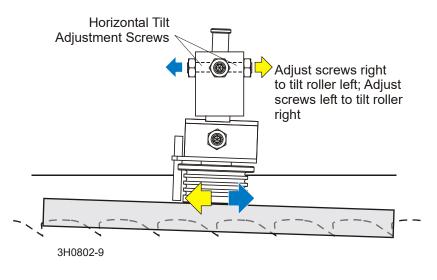


FIG. 5-7

12. Repeat the above steps for the inner blade guide roller assembly.

NOTE: Once the blade guides have been adjusted, any cutting variances are most likely caused by the blade. <u>See Blade Handbook, Form #600.</u>

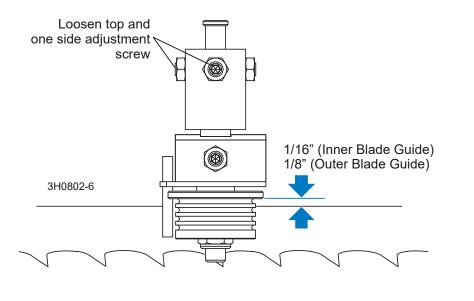
Blade Guide Flange Spacing

Each blade guide must be adjusted so the roller flange is the correct distance from the back edge of the blade. If the flange is too close to or too far from the blade, the sawmill will not cut accurately.

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 adjustment screws are retightened.

1. Measure the distance between the flange on the outer blade guide roller to the back edge of the blade. This distance should measure 1/8" (3.0 mm). Adjust the roller back or forward if necessary.

See Figure 5-8. Loosen the top and one side screw shown. Tap the blade guide forward or backward until properly positioned. Retighten the screws and jam nuts.



- FIG. 5-8
- Measure the distance between the flange on the inner blade guide roller to the back edge of the blade. This distance should measure 1/16" (1.5 mm). Adjust the roller back or forward if necessary.

Side Support Alignment

Logs and boards are clamped against the side supports when sawing. The sides supports must be square to the bed to ensure square lumber.

- 1. Place a flat board across the bed rails. Swing a side support up so that it is vertical.
- 2. Pull back at the top of the support to eliminate slack as if a log were being clamped against it.

3. Place a square against the face of the side support. The side support should be square or slightly tilted forward 1/32" (0.8 mm). Adjust the vertical tilt of the side support if necessary.

See Figure 5-9. Loosen the top adjustment bolt, adjust the side support, and retighten the bolt. Turn the adjustment bolt counterclockwise to tilt the top of the side support forward.

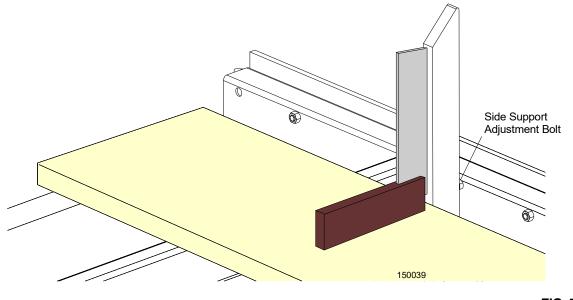


FIG. 5-9

4. Repeat the vertical check for the remaining side supports and adjust as necessary.

Blade Height Scale Adjustment

After the entire sawmill has been aligned and all adjustments made, check that the blade height scale indicates the true distance from the blade to the bed rails.

- 1. Move the saw carriage so the blade is positioned directly above one of the bed rails. Measure from the bottom edge on a down-set tooth of the blade to the top of the bed rail, near the inner blade guide assembly.
- **2.** View the blade height scale with eyes level with the indicator. The scale should indicate the actual distance from the blade to the bed rail. Adjust the indicator if necessary.

See Figure 5-10. Loosen the indicator bracket mounting nut. Adjust the bracket up or down until the indicator is aligned with the correct mark on the scale (+0 -1/32 [0.8 mm]). Retighten the indicator mounting nut.

For example, if the measurement from the down-set tooth of the blade to the bed rail was 14 3/4" (375 mm), make sure the indicator reads 14 3/4" (375 mm) on the scale.

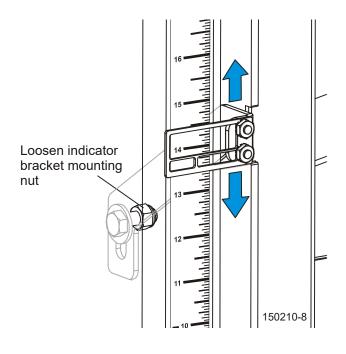


FIG. 5-10

5.2 Complete Alignment Procedure

Frame Setup

Before performing the following alignment procedures, setup the mill on firm, level ground.

Level the frame and adjust the saw head as described in <u>Section 4.1</u> Sawmill Setup.

Blade Installation

- 1. Remove the blade and replace the blade wheel belts. New blade wheel belts are required to perform the complete alignment procedure.
- 2. Blow sawdust off of the blade guide assemblies. Remove sawdust from the blade housings.
- **3.** Remove the blade guide assemblies.

NOTE: To remove the blade guide assemblies and maintain the tilt adjustments, only loosen one side screw and the top screw. Leaving the other side screw and bottom screw in position will insure you will return the rollers to their original tilt adjustment.

- **4.** Adjust the outer blade guide arm in or out until the outer blade guide is approximately 24" from the inner blade guide.
- 5. Install a new blade and apply the appropriate tension (<u>See Section 4.5</u>).
- 6. Close the blade housing covers and make sure all persons are clear of the saw head.

- 7. Start the engine.
- 8. Engage the blade, rotating the blade until the blade positions itself on the wheels.



WARNING! Do not spin the blade wheels by hand. Spinning the blade wheels by hand may result in serious injury.

9. Disengage the blade. Turn the engine off.

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 bottom of the blade.

See Figure 5-11.

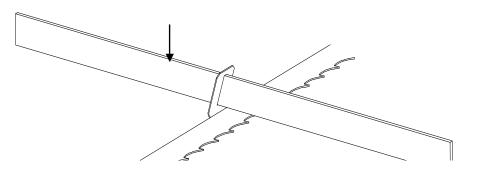
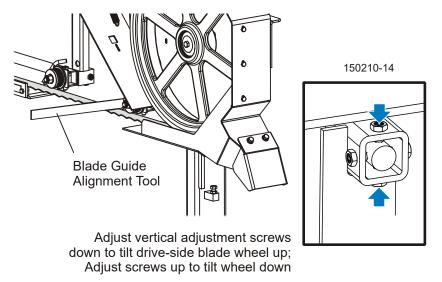


FIG. 5-11

- **2.** Move the saw carriage so the front end of the tool is positioned over the first bed rail. Measure from the bottom of the tool to the top surface of the bed rail.
- **3.** Move the saw carriage so the rear of the tool is positioned over the bed rail. Again, measure from the bottom of the tool to the bed rail.
- **4.** If the two measurements differ by more than 1/16" (1.5 mm), adjust the vertical tilt of the drive-side blade wheel.

See Figure 5-12. Use the vertical adjustment screws to adjust the drive-side blade wheel.

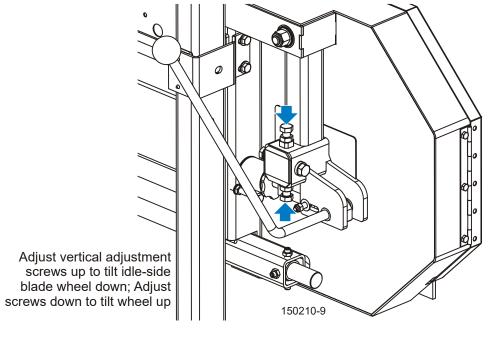




To tilt the wheel down, loosen the top adjustment screw one quarter turn. Loosen the jam nut on the bottom adjustment screw and tighten the screw. Tighten the top and bottom jam nuts.

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.

- **5.** 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 bed rail (within 1/16" [1.5 mm]).
- 6. Remove the tool from the blade and reattach it near the outer blade guide assembly.
- **7.** Measure from the tool to the bed rail at both ends of the tool. If the measurements at the front and rear ends of the tool differ by more than 1/16" (1.5 mm), adjust the vertical tilt of the idle-side blade wheel.



See Figure 5-13. Use the vertical adjustment screws to adjust the idle-side blade wheel.

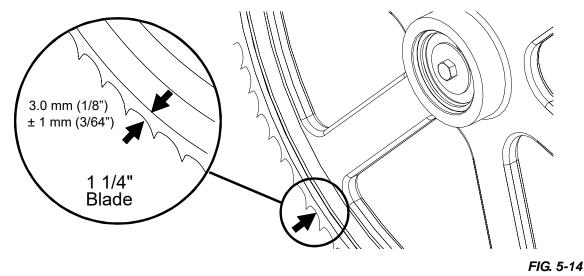
To tilt the wheel up, loosen the bottom adjustment screw one quarter turn. Loosen the jam nut on the top adjustment screw and tighten the screw. Tighten the top and bottom jam nuts.

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.

- **8.** 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 bed rail (within 1/16" [1.5 mm]).
- **9.** Check the position of the blade on the idle-side blade wheel.

FIG. 5-13

See Figure 5-14. The horizontal tilt of the blade wheel should be adjusted so that the gullet of an 1-1/4" blade is 1/8" (3 mm) out from the front edge of the wheel ($\pm 1/32$ [0.75 mm]).



See Figure 5-15. 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.

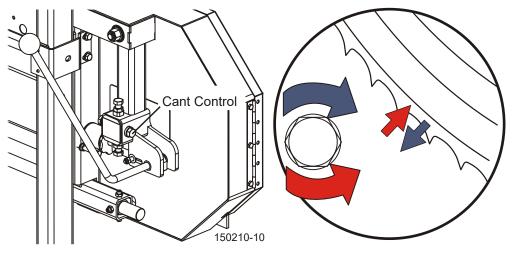


FIG. 5-15

10. 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 5-16. Use the horizontal adjustment screws to adjust the drive-side blade wheel.

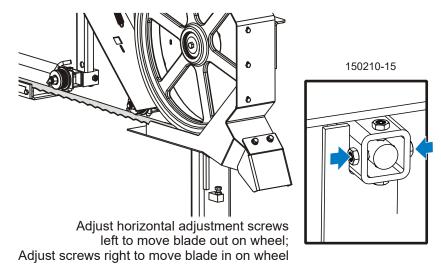


FIG. 5-16

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.

Blade Guide Installation

Each Wood-Mizer sawmill has two blade guide assemblies that help the blade maintain a straight cut. The two blade guide assemblies are positioned on the saw 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 saw 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 saw head. It is referred to as the "outer" assembly and is adjustable for various widths of materials to be processed.

NOTE: Before installing the blade guide assemblies, 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.

- **1.** Install the outer blade guide assembly (with waterlube tube) to the mounting block on the blade guide arm. Position the assembly so the roller flange is 1/8" (3.0 mm) from the blade.
- **2.** Install the inner blade guide assembly to the mounting block on the saw head. Position the assembly so the roller flange is 1/16" (1.5 mm) from the blade.

See Figure 5-17. Tighten the two previously-loosened tilt adjustment screws to secure the blade guide assembly.

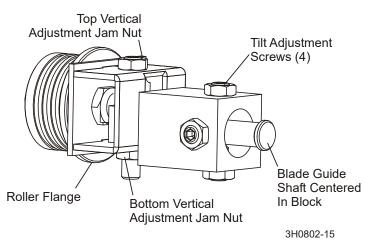


FIG. 5-17

Loosen the top vertical adjustment jam nut and tighten the bottom vertical adjustment jam nut to adjust the blade guide roller up so it does not touch the blade.

Blade Guide Arm Alignment

The blade guide arm moves the outer blade guide in and out. If the arm becomes loose, the blade guide will not deflect the blade properly, causing inaccurate cuts. A loose blade guide arm can also cause blade vibration.

See Figure 5-18. Use the inside top and bottom screws to adjust the arm up until the slide pad touches the saw head brace tube. Tighten the jam nuts.

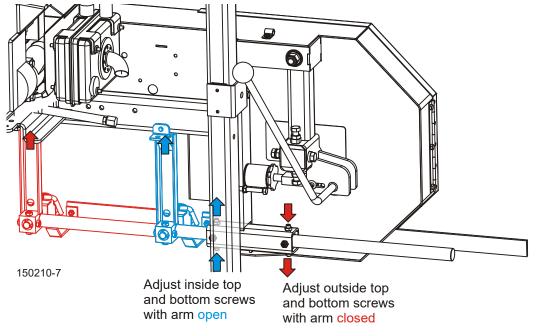
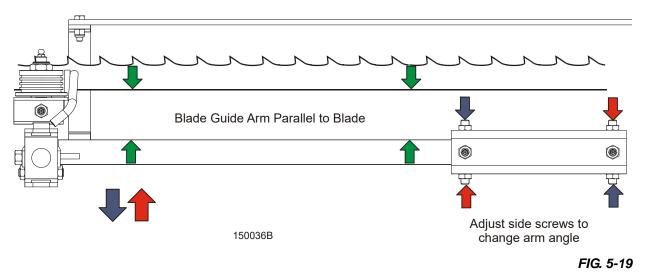


FIG. 5-18

- **1.** Adjust the blade guide arm out to 1/2" (13 mm) from fully open.
- 2. Adjust the blade guide arm in all the way toward the other blade guide.
- **3.** Use the outside top and bottom screws to adjust the arm up until the slide pad touches the saw head brace tube. Tighten the jam nuts.

NOTE: When adjusting the blade guide arm screws, be careful not to tighten the screws too much or put the arm in a bind. Operate the blade guide arm to ensure the arm moves easily in and out.

See Figure 5-19. With the blade guide arm still all the way in toward the other blade guide, tighten all the side screws until they touch the arm. Back the screws off 1/4 turn and tighten the jam nuts.



- 4. Measure the distance between the blade guide arm and back edge of the blade. Adjust the appropriate side screws on the blade guide arm housing so the arm is measures the same distance from the blade at both ends of the arm.
- 5. To move the blade guide end of the arm toward the front of the sawmill, loosen jam nuts on the front inside screw and the rear outside screw. Turn the screws counterclockwise one full turn and tighten the jam nuts. Loosen the jam nuts on the front outside screw and the rear inside screw. Turn the screws clockwise until they touch the arm, back off 1/4" turn, and tighten the jam nuts.
- 6. To move the blade guide end of the arm toward the rear of the sawmill, loosen jam nuts on the front outside screw and the rear inside screw. Turn the screws counterclockwise one full turn and tighten the jam nuts. Loosen the jam nuts on the front inside screw and the rear outside screw. Turn the screws clockwise until they touch the arm, back off 1/4" turn, and tighten the jam nuts.

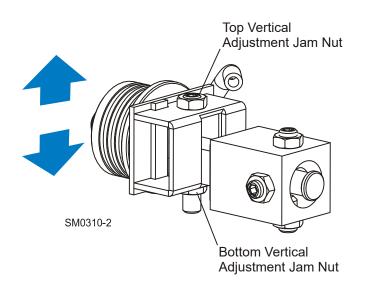
Blade Guide Deflection

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

- 1. Raise the saw head until the blade is 15" (375 mm) above a bed rail. Measure the actual distance with a tape from the top of the rail to the bottom of the blade.
- **2.** Make sure the two vertical adjustment set screws are threaded into the blade guide shaft until they touch each other.

See Figure 5-20.

Loosen the bottom jam nut and tighten the top jam nut until the blade guide deflects the blade down until the bottom of the blade measures 14 3/4" (370 mm) from the bed rail.



3. Repeat for the other blade guide.

NOTE: Be sure that the blade guide deflector rod clears the blade on both guide assemblies. The rod on the outer guide assembly should be checked with the arm all the way in and all the way out.

Blade Guide Vertical Tilt Alignment

The blade guides should be adjusted properly in the vertical plane. If the blade guides are tilted vertically, the blade will try to travel in the tilted direction.

A Blade Guide Alignment Tool (BGAT) is provided to help you measure the vertical tilt of the blade.

- **1.** Open the adjustable blade guide arm 1/2" (13 mm) from full open.
- **2.** Clamp the alignment tool on the blade. Position the tool close to the outer blade guide roller. Be sure the tool does not rest on a tooth or burr, and is lying flat on the blade.

FIG. 5-20



See Figure 5-21.

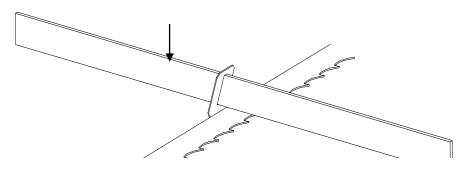


FIG. 5-21

- **3.** Move the carriage so that the front end of the tool is positioned above the bed rail. Measure the distance from the bed rail to the bottom edge of the tool.
- **4.** Move the carriage so that the back end of the tool is positioned above the bed rail. Measure the distance from the bed rail to the bottom edge of the tool.
- **5.** If the measurement from the tool to the bed rail is not equal within 1/32" (.75 mm), adjust the vertical tilt of the outer blade guide roller.
- 6. Loosen one set screw at the side of the blade guide assembly.

See Figure 5-22. Loosen the jam nuts on the top and bottom vertical tilt adjustment screws. To tilt the roller up, loosen the bottom screw and tighten top screw. To tilt the roller down, loosen the top screw and tighten the bottom screw. Tighten the jam nuts and recheck the tilt of the blade.

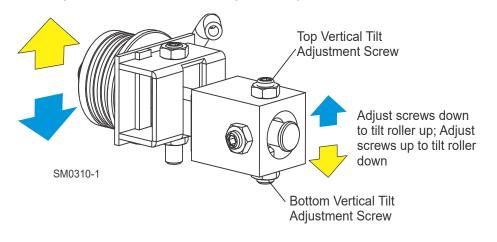


FIG. 5-22

- **7.** Move the blade guide alignment tool close to the inner blade guide roller assembly and repeat the above steps. Adjust the vertical tilt of the inner blade guide if necessary.
- **8.** After adjusting the vertical tilt of the blade guides, recheck the blade deflection and adjust if necessary.

Blade Guide Horizontal Tilt Adjustment

If the blade guides are tilted in the wrong direction horizontally, the back of the blade may contact the flange as the roller is spinning down, causing it to push the blade away from the guide roller.

- 1. Remove the blade guide alignment tool from the blade and adjust the blade guide arm halfway in.
- **2.** Remove the clip from the blade guide alignment tool. Place the tool against the face of the outer blade guide roller.

See Figure 5-23.

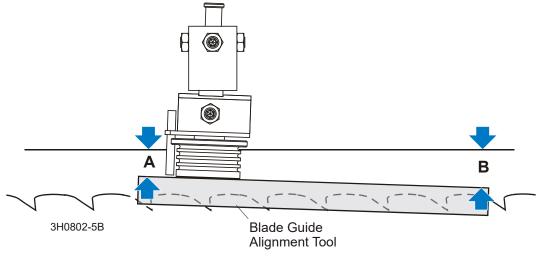


FIG. 5-23

- **3.** Measure between the back edge of the blade and the tool 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 tool ("A").

The roller should be tilted slightly to the left ('A' 1/8" [3 mm] less than 'B' ±1/8" [3 mm]).



See Figure 5-24. Loosen the jam nuts on the horizontal tilt adjustment screws. To tilt the roller left, loosen the right screw and tighten left screw. To tilt the roller right, loosen the left screw and tighten the right screw. Tighten the jam nuts and recheck the tilt of the blade.

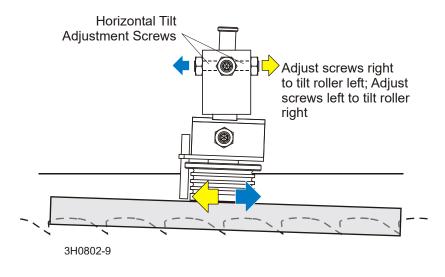


FIG. 5-24

5. Repeat the above steps for the inner blade guide roller assembly.

NOTE: Once the blade guides have been adjusted, any cutting variances are most likely caused by the blade. <u>See Blade Handbook, Form #600.</u>

Blade Guide Flange Spacing

Each blade guide must be adjusted so the roller flange is the correct distance from the back edge of the blade. If the flange is too close to or too far from the blade, the sawmill will not cut accurately.

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 adjustment screws are retightened.

 Measure the distance between the flange on the outer blade guide roller to the back edge of the blade. This distance should measure 1/8" (3.0 mm). Adjust the roller back or forward if necessary.

See Figure 5-25. Loosen the top and one side screw shown. Tap the blade guide forward or backward until properly positioned. Retighten the screws and jam nuts.

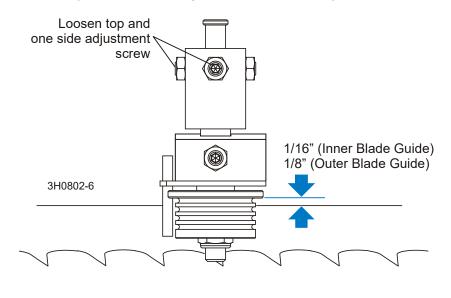


FIG. 5-25

2. Measure the distance between the flange on the inner blade guide roller to the back edge of the blade. This distance should measure 1/16" (1.5 mm). Adjust the roller back or forward if necessary.

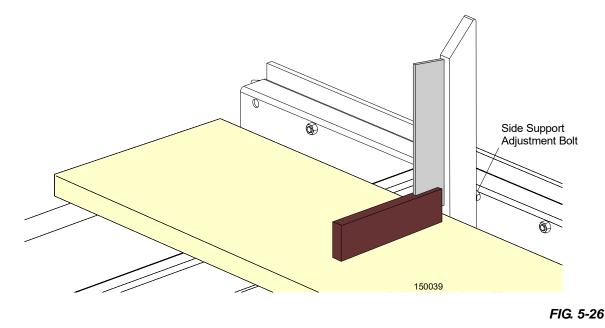
Side Support Alignment

Logs and boards are clamped against the side supports when sawing. The sides supports must be square to the bed to ensure square lumber.

- 1. Place a flat board across the bed rails. Swing a side support up so that it is vertical.
- 2. Pull back at the top of the support to eliminate slack as if a log were being clamped against it.
- **3.** Place a square against the face of the side support. The side support should be square or slightly tilted forward 1/32" (0.8 mm). Adjust the vertical tilt of the side support if necessary.



See Figure 5-26. Loosen the top adjustment bolt, adjust the side support, and retighten the bolt. Turn the adjustment bolt counterclockwise to tilt the top of the side support forward.



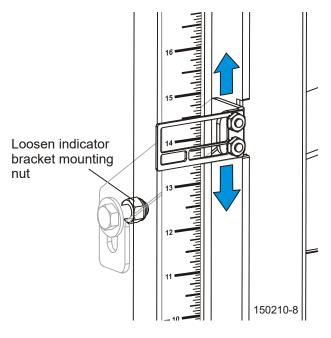
4. Repeat the vertical check for the remaining side supports and adjust as necessary.

Blade Height Scale Adjustment

After the entire sawmill has been aligned and all adjustments made, check that the blade height scale indicates the true distance from the blade to the bed rails.

- 1. Move the saw carriage so the blade is positioned directly above one of the bed rails. Measure from the bottom edge on a down-set tooth of the blade to the top of the bed rail, near the inner blade guide assembly.
- 2. View the blade height scale with eyes level with the indicator. The scale should indicate the actual distance from the blade to the bed rail. Adjust the indicator if necessary.

See Figure 5-27. Loosen the indicator bracket mounting nut. Adjust the bracket up or down until the indicator is aligned with the correct mark on the scale (+0 -1/32 [0.8 mm]). Retighten the indicator mounting nut.





Example: if the measurement from the down-set tooth of the blade to the bed rail was 14 3/4" (375 mm), make sure the indicator reads 14 3/4" (375 mm) on the scale.



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:	SAWMILL
Model:	LT15
TYPE:	
Serial Number:	
VIN Number:	
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 1807-2:2013-08 PN-EN ISO 13849-1:2016-02 PN-EN 60204-1:2018-12
Notified Body according to annex IV:	Sieć Badawcza Łukasiewicz INSTYTUT TECHNOLOGII DREWNA Centrum Weryfikacji Wyrobów Przemysłu Drzewnego ul. Winiarska 1, 60-654 Poznań
Notification No.:	1583
EC type-examination certificate no.	0719/2019
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Place/Date/Authorized Signature:	Koło, 19.09.2019 Adams
Title:	Engineering Manager